FINAL ENVIRONMENTAL IMPACT STATEMENT (FEIS)

for

BRIDGEHAMPTON TO BUELL NEW 69 KV UNDERGROUND TRANSMISSION CABLE

Suffolk County, New York

Lead Agency: Long Island Power Authority
Board Of Trustees
333 Earle Ovington Blvd
Suite 403
Uniondale, New York

Prepared by: PSEG Long Island as Agent for the Long Island Lighting Company d/b/a LIPA, a wholly owned subsidiary of the Long Island Power Authority
175 East Old Country Road
Hicksville, New York 11801

Nelson, Pope & Voorhis, LLC. (*Environmental Planning & Analysis)*
Nelson & Pope (*Civil Engineering)*
70 Maxess Road
Melville, New York 11747
Contact: Carrie O'Farrell, AICP
631.427.5665
COFarrell@nelsonpope.com

GEI (*Cultural Resources Analysis*)
1000 New York Avenue, Suite B
Huntington Station, New York 11746
Contact: Mary Beth Billerman
631.759.2979
mbillerman@geiconsultants.com

TRC (*Noise Analysis*)
404 Wyman Street
Suite 375
Waltham, Massachusetts 02451
Contact: Mike Ernsting
781.419.7719
mernsting@trccompanies.com

Burns & McDonnell EGS, P.C. (*Project Design and Civil Engineering*)
9400 Ward Parkway
Kansas City, MO 64114
Contact: LeLand Rowse
913.526.7698
lrowse@burnsmcd.com

PaleoWest, LLC, dba Chronicle Heritage *(Cultural Resources)*
Buffalo Branch Office
2390 Clinton Street
Buffalo, New York 14227
Contact: Mark A. Steinback, M.A., MBA
716.821.1650
MSteinbeck@chronicleheritage.com

KAG Engineering, PLLC (*Traffic Analysis*) 210
Suydam Lane
Bayport, NY 11705
Contact: Bill Blanchard, PE, PTOE
631.241.4121
bb@kagepc.com

Date of Acceptance by Lead Agency: _____

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1. Introduction

1.1 Purpose of this Document

This document is the Final Environmental Impact Statement (FEIS) for the installation of a new underground 69-kilovolt (kV) transmission cable from the Bridgehampton Substation located on Bridgehampton-Sag Harbor Turnpike in the Town of Southampton to the Buell Substation located on Cove Hollow Road in the Town of East Hampton (the "Proposed Action"). This FEIS is part of the official record under the New York State Environmental Quality Review Act (SEQRA) process outlined in Title 6 of the New York Code of Rules and Regulations (6 NYCRR) Part 617, with statutory authority and enabling legislation under Article 8 of the New York State Environmental Conservation Law. The Long Island Power Authority (LIPA) is the Lead Agency for the Proposed Action.

This document responds to comments received during the public review of the Draft Environmental Impact Statement (DEIS) for the Proposed Action. The LIPA Board of Trustees accepted the DEIS on May 18, 2022, and was the subject of a public hearing on June 28, 2022, at LTV Studios in Wainscott, New York. The public comment period for the DEIS was held open until July 12, 2022.

The DEIS was made available to the public online and in hard copy at the LIPA offices (333 Earle Ovington Boulevard, 4th Floor, Uniondale, New York), the Rogers Memorial Public Library (91 Coopers Farm Road, Southampton, New York), and the East Hampton Public Library (159 Main Street, East Hampton, New York). A public hearing notice was also duly published in the local newspapers of record, the East Hampton Star (May 26, 2022) and The Southampton Press (May 26, 2022), as well as the Environmental Notice Bulletin (ENB), on May 25, 2022, in accordance with SEQRA requirements. All persons in attendance at the public hearing on June 28, 2022, were welcome to provide verbal and/or written comments or questions. All comments at the hearing were recorded, and a transcript of the meeting was generated. The public comment period remained open through July 12, 2022, in compliance with the minimum 10-day requirement of SEQRA, so anyone wishing to submit written comments after the hearing would have the opportunity to do so. The public review period for the DEIS, from the Notice of Acceptance published in the ENB to the close of the written comment period on July 12, 2022, totaled 48 days, therefore exceeding the minimum 30-day requirement of SEQRA.

As required by SEQRA, this FEIS addresses all substantive comments provided by the public, involved agencies, and other interested parties at the hearing and in writing through the end of the DEIS comment period. In addition, the FEIS also addresses all substantive comments provided by the public, involved agencies, and other interested parties that were provided up until the submittal of the FEIS. Also, as provided for in SEQRA, this FEIS incorporates by reference the DEIS so that the combination of these two documents constitutes the entire Environmental Impact Statement for the Proposed Action. Hard copies of the DEIS and FEIS are available for public review at the LIPA Offices, located at 333 Earle Ovington Boulevard, 4th Floor, Uniondale, New York, the Rogers Memorial Public Library (91 Coopers Farm Road, Southampton, New York), the East Hampton Public Library (159 Main Street, East Hampton, New York), and the John Jermain Memorial Library (210 Main Street, Sag Harbor, New York), and online at the Proposed Action's website: https://www.psegliny.com/reliability/bridgetobuell.

All substantive comments on the DEIS received at the public hearing or submitted in writing during the public comment period for the DEIS are summarized and responded to in **Section 4.0** of this FEIS, "Comments and Responses." Updates, including graphics and plan revisions since the preparation of the DEIS, are provided in **Sections 2.0 and 3.0** of the FEIS, as necessary, in response to these comments.

After receiving comments during the public review period for the DEIS, the Proposed Action was re-evaluated by PSEG Long Island (PSEGLI) planning, engineering, and construction, and the design of the Proposed Action has been revised. More specifically, for the purposes of this FEIS, the Proposed Action has been revised to Alternative 2 presented in the DEIS, with a slight variation[1], hereafter referred to as the "Preferred Alternative." Upon completion of the public hearing and review of the public comments received, minor modifications were made to the routing for Alternative 2 and revisions to engineering and construction methodologies. Alternative 2 was determined to be the most feasible means of implementing the Proposed Action.

As with the Proposed Action presented in the DEIS, the Preferred Alternative involves the installation of a new underground 69-kV transmission cable from the Bridgehampton Substation to the Buell Substation. As discussed in **Section 2.1** of this FEIS, almost the entire length of the new underground cable for the Preferred Alternative is proposed to be installed below grade beneath existing paved roadways. Additionally, the proposed cable will be installed in a limited area primarily disturbed on the north side of both substations and beneath the Long Island Rail Road (LIRR) tracks north of the Buell Substation.

The cable route for the Preferred Alternative will span approximately 7.6 miles. This compares to the previously proposed routing of approximately 5.4 miles through the LIPA right of way (ROW) between the two substations discussed in the DEIS.

In addition to the proposed underground cable, fifteen manhole vaults will be installed along the Preferred Alternative route.

Preparation of this FEIS is the penultimate step in the SEQRA process and provides the foundation for the Lead Agency to prepare its SEQRA Findings Statement. Each of the other involved agencies, including the New York State Department of Environmental Conservation (NYSDEC), Suffolk County Division of Planning and the Environment, Town of East Hampton, Town of Southampton, Village of Sag Harbor, New York State Department of Transportation (NYSDOT), Suffolk County Department of Public Works (SCDPW), and the Metropolitan Transit Authority, having discretionary approval authority will have to prepare its own Findings Statement upon completion of the FEIS. The FEIS also provides involved/interested agencies and the public with:

- descriptive information about the Preferred Alternative;
- documentation of the SEQRA process and consistency of the review conducted by the Lead Agency with that process;
- a summary of comments received during the public review period for the DEIS;

[1] Under Alternative 2 as presented in the DEIS, the cable route would have continued eastward on Jermain Avenue until intersecting with New York State (NYS) Route 114. However, this routing includes the frontage of Pierson Middle/High School on the south side of Jermain Avenue, between Division Street and Montauk Avenue. In consideration of the Sag Harbor Union Free School District, the routing for the Preferred Alternative was adjusted to avoid the frontage of the school property by directing the cable southward on Madison Street and eastward on Harrison Street to its intersection with NYS Route 114.

- the source and manner of delivery of each comment (e.g., verbal comments during the hearing, letters, emails, etc.);
- responses to all substantive comments received during the public comment period for the DEIS;
- any necessary corrections, amendments, or modifications to the DEIS;
- additional analyses of the potential environmental effects of the Preferred Alternative to augment the information in the DEIS and provide the lead and involved agencies with further basis for decision-making; and

Elaboration on the strategies and techniques identified for mitigating the anticipated impacts of the Preferred Alternative. Four other alternatives to the Proposed Actions were considered, and analyzed within Section 5.0 of the DEIS, with a version of Alternative 2 being the Preferred Alternative. Alternative 1 was the no-action scenario, in which the existing facilities remain in place with no improvements, and the Proposed Action does not proceed. However, the goal of both the Proposed Action and the Preferred Alternative were deemed necessary to address transmission constraints resulting from projected increased load demands from customers on the South Fork of Long Island.

Alternative 3 was the southern underground route, mainly installed along Montauk Highway. Alternative 3 was similar to the Preferred Alternative, as it would mainly be installed within paved roadways, with no permanent impacts to any resources analyzed within the FEIS. However, the vast majority of the construction would have been along Montauk Highway, which is the main arterial roadway for the South Fork of Long Island.

Alternative 4 was the northern hybrid route, which would follow the same route as the Preferred Alternative, with all areas outside of the Village of Sag Harbor being installed as an overhead transmission circuit. Alternative 5 would have followed the same route as the Proposed Action within the existing LIPA ROW, however it would be installed as an overhead transmission circuit. Although Alternatives 4 and 5 differ in location, there would have been certain land use impacts associated with the overhead transmission circuits in areas where no such overhead infrastructure exists, which is avoided with the Preferred Alternative's underground design. Alternative 5 would also have involved significant vegetation clearing within the ROW, a portion of which traverses the Long Pond Greenbelt.

Once the LIPA Board of Trustees accepts the FEIS, it will be circulated to involved agencies, the public, and other interested parties in the same manner as occurred for the DEIS. A minimum 10-day period is provided for public/agency consideration of the information in the FEIS before the Findings Statement can be adopted and a final decision can be rendered. The Findings Statement will outline the SEQRA process that was conducted for the Proposed Action, attest that all necessary SEQRA procedures and requirements for decision-making have been met, and identify the social, economic, and environmental considerations that have been weighed in rendering a decision to approve or disapprove the Preferred Alternative. The Findings Statement will also outline identified impacts, required mitigation techniques and strategies, and discuss the alternatives that were considered. Finally, pursuant to 6 NYCRR §617.11(d)(5) of the SEQRA regulations, the Findings Statement will:

> *…certify that consistent with social, economic, and other essential considerations from among the reasonable alternatives available, the action is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable.*

1.2 Organization of this Document

As indicated above in **Section 1.1**, after receiving comments during the public review period for the DEIS, the Proposed Action was re-evaluated by PSEGLI planning, engineering, and construction, and the design of the Proposed Action was revised to the Preferred Alternative presented herein. Therefore, in addition to responding to comments that were received during the public review of the DEIS in **Section 4.0**, this FEIS contains a description of the Preferred Alternative in **Section 2.0** and a comparative analysis of the Preferred Alternative is provided in **Section 3.0** to ensure that there is an adequate technical basis to support the ultimate decision.

Comments on the DEIS were provided verbally at the public hearing and submitted in writing during the public comment period. **Appendix A** of this FEIS contains the transcript from the public hearing on the DEIS held on June 28, 2022. **Appendix B** includes the written comments on the DEIS submitted by members of the public during the public comment period through July 12, 2022. **Appendix C** contains the written comments on the DEIS received from government agencies. Correspondence submitted by government agencies and/or their representatives at the public hearing is included in **Appendix A** as part of the public hearing record. As stated in 6 NYCRR 617.9(8), a FEIS must include a response to all "substantive comments" received during the DEIS comment period. Accordingly, each individual substantive comment in the documents included in **Appendices A through C** has been labeled and sequentially numbered: comments received during the public hearing are identified with the prefix "PH," comments received from individual members of the public in writing are identified with the prefix "IC," and comments received from government agencies are identified with the prefix "AC" (except agency correspondence submitted at the public hearing).

In total, 343 separate comments on the DEIS were received: 86 comments were received at the public hearing and are included in **Appendix A**; 207 comments from individual members of the public were received in writing during the public comment period and are included in **Appendix B**; and 50 comments were received in writing from government agencies and are included in **Appendix C**.

2. Description of the Preferred Alternative

2.1 Preferred Alternative Routing

The Preferred Alternative involves the installation of a new 69-kV underground transmission cable from the Bridgehampton Substation to the Buell Substation, spanning a total distance of approximately 7.6 miles. Except for short segments in the vicinity of the two substations totaling about 0.1 mile (approximately 1.5 percent of the entire 7.6±-mile length), the proposed cable will be installed in conduit below grade beneath the existing paved roadways, with a limited amount of disturbance occurring within the adjacent maintained pervious (vegetated) areas directly adjacent to the roadway ROWs. Most of the cable length outside the roadway ROWs will be within previously disturbed areas directly north of both the Bridgehampton Substation and the Buell Substation. Additionally, a short segment of the cable to the north of the Buell Substation will be installed within a LIPA-owned parcel and within a new easement to be established through an adjoining New York State-owned parcel (see **Figure 2-16**).

In addition to the proposed underground cable, fifteen manhole vaults will be installed along the Preferred Alternative route. This primarily accounts for the small disturbance in the roadway ROWs that will extend outside pavement areas. Each vault will be 16 feet by 8 feet and 15 feet deep, with an excavation area of approximately 240 square feet.

A new termination structure will be constructed adjacent to existing substation steel structures in the northeast portion of the Bridgehampton Substation to provide an interconnection point for the cable into the existing substation. Similarly, the cable will enter the northeast side of the Buell Substation and will connect to a new termination structure to be located adjacent to existing substation steel structures in the northeast corner of the substation. The termination structures will be of a similar height to the other termination and steel structures within the substations. As described above, the locations of the Preferred Alternative activities are collectively referred to herein as the Preferred Alternative Area.

As illustrated in **Figure 1** and **Figures 2-1 through 2-16**, under the Preferred Alternative, the new 69-kV underground transmission cable will have the following routing from west to east:

- The cable will exit from the north side of the Bridgehampton Substation and travel 250± feet northeast to Bridgehampton-Sag Harbor Turnpike.
- The cable will continue north along Bridgehampton-Sag Harbor Turnpike (which becomes Main Street at the entrance to the Village of Sag Harbor) for 1.34± miles before turning east on Jermain Avenue.
- The cable will continue east on Jermain Avenue for 0.49± mile.
- The cable will turn south onto Madison Street for 0.28± mile.
- The cable will turn east onto Harrison Street for 0.55± mile.
- At the intersection of Harrison Street and Hampton Street (NYS Route 114), the cable will turn south and follow the latter roadway for 4.93± miles (as Hampton Street progresses south, it becomes East Hampton-Sag Harbor Turnpike).
- At the intersection of NYS Route 114 and Cove Hollow Road, the cable will cross the latter roadway ROW, travel across adjacent parcels owned by NYS and LIPA, and then pass beneath the LIRR tracks and enter the north side of the Buell Substation, a distance of 300± feet.

The specific routing of the proposed cable within the roadway ROW under the Preferred Alternative has been determined primarily to avoid conflicts with existing subsurface utilities, as depicted in the engineering drawings in **Appendix D** of this FEIS.

The Limits of Disturbance (LOD) discussed in this FEIS encompasses all areas along the proposed cable route under the Preferred Alternative that may undergo direct disturbance of the land surface or may otherwise be utilized for miscellaneous construction uses such as laydown or equipment staging (see **Figures 2-1 through 2-16**). The LOD includes the full pavement width of all roadways along the proposed cable route. That accounts for areas to be trenched and excavated for the fifteen manhole vaults, as well as areas affected by any design changes that are required to be made in the field in order to address unknown field conditions, along with pavement areas that will not be excavated but will undergo restorative milling. Incidental disturbance areas within the unpaved portion of the ROWs that will be used for laydown and staging are also included in the LOD. Overall, the Preferred Alternative Area, encompassing the full extent of the LOD, is 44.53± acres, of which 36.08± acres will experience direct ground disturbance (i.e., excavation, grading, clearing, pavement milling, etc.), with an additional 8.45± acres of incidental disturbance.

The proposed cable will be installed almost entirely within public roadway ROWs, which consist of paved roadways and maintained roadside areas owned by three governmental agencies: NYSDOT, SCDPW, and Village of Sag Harbor. Additionally, cable routing under the Preferred Alternative will traverse four tax parcels owned by LIPA and one owned by NYS. The agencies having jurisdiction over the lands along the cable route for the Preferred Alternative are summarized below in **Table 2.1**, from west to east.

Table 2.1: Preferred Alternative Parcel Information

Location	**Tax Map #** (District-Section-Block-Lot)
Bridgehampton Substation LIPA Parcel	900-39-01-27
Bridgehampton Substation LIPA Parcel	900-39-01-26
Bridgehampton-Sag Harbor Turnpike ROW – SCDPW	N/A
Jermain Avenue ROW – Village of Sag Harbor	N/A
Madison Street ROW – Village of Sag Harbor	N/A
Harrison Street ROW – Village of Sag Harbor	N/A
Route 114 ROW – NYSDOT	N/A
State of New York/NYSDOT Parcel	300-185-01-32
Long Island Lighting Company (Predecessor of LIPA) Parcel	300-01-16-1
Buell Substation LIPA Parcel	300-185-02-37

2.2 Preferred Alternative Design and Layout

2.2.1 Overview

Construction of the Preferred Alternative consists of several major components, including conduit installation, manhole vault installation, cable pulling, cable splicing, and site restoration. Manhole vaults are typically placed before the conduits, but this can vary based on logistical considerations. The vaults and conduits must be set before cable pulling can proceed, followed by splicing, with site restoration

always being the final step at a given location. Construction can proceed in parallel at multiple locations, with the possibility of different stages of the work in progress at any given time.

2.2.2 Installation Methods

It is proposed that installation of the cable and conduit for the Preferred Alternative be undertaken entirely via open trenching construction methods, with the definite exception of three locations. This includes the segment crossing the LIRR ROW just north of the Buell Substation, which will be installed using jack-and-bore method to route the cable/conduit underneath the railroad tracks (see **Figure 2-16)**, and approximately 200 feet of horizontal directional drilling (HDD) to install conduit beneath culverts in two areas (see **Figures 2-4 and 2-9** and as shown in the engineering plans in **Appendix D**). The final design of the Preferred Alternative will be subject to review and approval by the agencies having jurisdiction of the roadways and other lands along the proposed cable route, as identified in **Table 2.1**, who may request the use of HDD in other areas.

The open trench excavation for the Preferred Alternative will have dimensions of approximately four feet in width and a minimum depth of 42 inches below grade, corresponding to the same basic design profile for the Proposed Action presented in the DEIS. After the cable/conduit has been installed, the trench will be backfilled to the original grade, and any excess excavated material will be transported off-site for disposal at a suitable, approved facility in accordance with applicable regulations. Typical trenching work can progress at a rate of 200 feet per day or more when occurring on paved surfaces. Pickup trucks will help deliver personnel and small equipment to the Preferred Alternative Area, and larger equipment, such as cable reels and conduit, will be delivered via 18-wheeler truck and trailer, or similar equipment.

Trenching under the Preferred Alternative will generally be similar to what would have occurred with the Proposed Action presented in the DEIS, using standard excavating and earth-moving equipment. However, construction of the Proposed Action design in the LIPA ROW was complicated by significant variations in topography, including areas of steep gradients, requiring temporary slope stabilization to create a construction access roadway to allow access by heavy equipment. In contrast, the public roadway ROWs and previously disturbed areas adjacent to the two substations where the cable will be installed under the Preferred Alternative have minimal slope gradients, which are not expected to require grading, thereby minimizing disturbance and facilitating access and construction.

In addition to the approximately 200 feet of HDD to install conduit beneath the culverts in two areas, if it is determined that additional HDD is necessary for cable/conduit installation under portions of the Preferred Alternative, it is expected that the duration of drilling and length of the HDD segment(s) would be shorter (i.e., on the order of a few days, and potentially crossing under a roadway or intersection, for example), in comparison, to the use of HDD as required by the Proposed Action. The use of HDD for the Proposed Action to install the cable in the LIPA ROW would have entailed much more extensive use of HDD, operating over a period of two to four months, involving a 3,450±-foot segment in the Long Pond Greenbelt and an 845±-foot segment beneath the LIRR tracks near the Buell Substation.

As was the case with the Proposed Action presented in the DEIS, HDD drilling activities, would require the use of water for the creation of a slurry that serves to stabilize the borehole. This water would be supplied from one or more hydrants, permission for which will be obtained from the Suffolk County Water Authority (SCWA). If applied to the Preferred Alternative, the HDD method would differ substantially from what was contemplated for the cable segment under the Long Pond Greenbelt in the Proposed Action

presented in the DEIS. In particular, as noted above, the length of the borehole would be much shorter (i.e., in segments likely to be less than 100 feet, as opposed to 3,450± linear feet in two segments previously proposed beneath the Long Pond Greenbelt). Due to the shorter length of the borehole, smaller equipment can be deployed and would operate at decreased drilling fluid pressures. This would reduce water use significantly below the 15,000-gallon per day maximum that was estimated for the Proposed Action in the DEIS, while also significantly reducing the potential for the occurrence of a "frac-out" event.[1] Wastewater generated during HDD drilling activities that cannot be reused/recycled would be collected in frac tanks located within the work area and subsequently would be transported and disposed of at an approved disposal facility licensed to accept this type of waste. As with the Proposed Action presented in the DEIS, no operational use of water will occur in association with the Preferred Alternative.

To accommodate jack-and-bore installation beneath the LIRR tracks, launching and receiving pits will be excavated on the north and south sides of the railroad tracks, respectively, with the excavated material stockpiled nearby to backfill the pits upon the completion of this construction. The specialized jack-and-bore drilling equipment will be lowered into the launching pit and mounted onto temporary rails. The horizontal drill bit will create a borehole into the railroad embankment, with the material removed from the borehole and delivered to the launching pit. The jack-and-bore machine will install the conduit within the borehole one section at a time while moving forward on the rail. Upon completing the installation of a section of the conduit, the machine will be moved backward on the rails to allow another section of conduit to be installed. This process will be repeated until the drill bit and conduit emerge from the other side of the embankment. At that point, the equipment will be removed from the launching pit, the conduit segment through the railroad embankment will be connected to conduit sections to the north and south installed by trenching, and the two pits will be backfilled. Installation of the cable segment beneath the railroad tracks is expected to take approximately 2-3 weeks. Unlike HDD, jack-and-bore is a dry augur method which does not utilize drilling fluid for borehole stabilization, thereby eliminating the need for water use, and reducing the potential for borehole collapse or the creation of a void around the borehole.

Fifteen precast manhole vaults will be installed along the Preferred Alternative route, with the distance between these structures generally varying between approximately 1,600 feet and 2,500 feet. The installation of each vault will take two to three work shifts (anticipated to occur overnight – see further discussion below in **Section 2.2.6** regarding the Maintenance and Protection of Traffic), with the excavation (to a depth of approximately 15 feet) occurring during the first shift, and the vault placement (via crane) and conduit/cable work occurring during subsequent shifts. The proposed vault locations, as depicted in the engineering plans (see **Appendix D**), are identified below in **Table 2.2**:

[1] As discussed in Section 2.2.2.1 of the DEIS, a "frac-out" event can occur if drilling fluid escapes from the HDD drill hole through fractures in the soil. Significant frac-out events are not common, but they can occur if the downhole pressures exceed the restraining forces of the surrounding formation, particularly during the pilot hole drilling operations when the pressures are the highest. The HDD entry and exit locations are most vulnerable to such effects, but they can occur at any location along the drill path.

Table 2.2: Manhole Vault Locations

Vault #	Approximate Station Location	Roadway
1	32-80	Bridgehampton-Sag Harbor Turnpike (CR 79)
2	57-50	Bridgehampton-Sag Harbor Turnpike (CR 79)
3	84-10	Jermain Avenue
4	108-80	Madison Street
5	134-20	Harrison Street
6	159-90	Hampton Street (NYS Route 114)
7	184-70	East Hampton-Sag Harbor Turnpike (NYS Route 114)
8	210-70	East Hampton-Sag Harbor Turnpike (NYS Route 114)
9	235-50	East Hampton-Sag Harbor Turnpike (NYS Route 114)
10	260-80	East Hampton-Sag Harbor Turnpike (NYS Route 114)
11	289-40	East Hampton-Sag Harbor Turnpike (NYS Route 114)
12	309-50	East Hampton-Sag Harbor Turnpike (NYS Route 114)
13	333-30	East Hampton-Sag Harbor Turnpike (NYS Route 114)
14	358-10	East Hampton-Sag Harbor Turnpike (NYS Route 114)
15	384-80	East Hampton-Sag Harbor Turnpike (NYS Route 114)

Material removed from excavations for manhole vaults will temporary be staged in designated areas within the ROW adjacent to the roadway, as described below in **Section 2.2.3**. If suitable, excavated material will be used in backfill. Any excess excavated material that cannot be utilized as backfill will be transported off-site daily to a suitable, approved disposal location in accordance with all applicable regulations.

2.2.3 Staging and Laydown

To facilitate the installation of the new 7.6±-mile cable and fifteen manhole vaults, the Preferred Alternative includes temporary construction staging and laydown areas. These areas would not undergo excavation or other direct land disturbance, but would be subject to "incidental disturbance" from other construction activities and are included in the overall LOD as delineated on the engineering plans (see **Appendix D**) and discussed in this FEIS. Staging/laydown activities involving the short-term storage of equipment (e.g., excavators, bulldozers, and front-end loaders) between work shifts and materials (conduit segments, cable reels, etc.) for work activities that may span a few days will occur within the already-disturbed, unpaved roadway shoulder areas, along the outer edges of the public roadway ROWs. Additionally, excavated materials (e.g., soil and asphalt) will be temporarily stockpiled in these areas for ready availability to backfill the excavations and restore the roadway pavement once the subsurface work has been completed. Use of the laydown/staging areas will occur in a manner that does not interfere with driveways and other points of access between the roadways in the Preferred Alternative Area and adjacent developed parcels. Similar laydown/staging activities will occur immediately outside the LOD to the north of both substations.

As indicated above, it is expected that on-site staging and laydown will involve limited quantities of materials for a few days and will not be used for periods of extended storage. The construction contractor will be responsible for procuring one or more suitable, nearby locations for the storage of larger quantities of materials to serve the longer-term needs of the construction work in order to ensure the timely completion of the proposed new 69-kV underground transmission cable installation. Staging along the

route will be limited to only when working in those areas; the LIPA Shoreham facility will be used as the main staging area, with materials delivered on an as-needed basis. If additional locations are required, then substations will be utilized.

2.2.4 Vehicle Access

From west to east, the public roadways along the proposed cable route include Bridgehampton-Sag Harbor Turnpike (Suffolk County Road 79, under the jurisdiction of SCDPW), three local roadways in the Village of Sag Harbor (Jermain Avenue, Madison Street, and Harrison Street, under the jurisdiction of the Village Highway Department), Hampton Street/East Hampton-Sag Harbor Turnpike (NYS Route 114, under the jurisdiction of NYSDOT), and a local roadway in the Town of East Hampton (Cove Hollow Road, under the jurisdiction of the Town Highway Department)[2].

Based on initial input received from NYSDOT, as well as other agencies with jurisdiction over the affected roadways, it is anticipated that upon completion of the installation of the Preferred Alternative, the full width of the roadways will undergo restoration, with the exception of Bridgehampton-Sag Harbor Turnpike, which will receive partial restoration. Therefore, the design of the Preferred Alternative contemplates full-width pavement restoration for all roadways along the proposed cable route, with the exception of Bridgehampton-Sag Harbor Turnpike, which will only receive partial restoration. This restoration work includes new pavement in excavation areas (for the trench and manhole vaults), as well as milling to refurbish the asphalt surface of the remaining areas of pavement. Continuing consultation will occur with the involved roadway agencies to determine the restoration requirements for any given section of roadway.

Continuous vehicle access points during construction will be provided from the roadways within the Preferred Alternative Area. Access to the Bridgehampton Substation will be provided primarily from the existing dirt access road connecting to the open area on the north side of the substation, which will be used during construction for laydown and staging, as well as the paved access driveway on the south side of the substation, which leads to the fenced enclosure surrounding the substation. Access to the Buell Substation will occur via the paved access driveway from Cove Hollow Road on the west side of the substation. Stabilized construction entrances will be installed at the existing dirt access road on the west side of Bridgehampton-Sag Harbor Turnpike, north of the Bridgehampton Substation, and at the location of the jack-and-bore location on the north side of the LIRR tracks, north of the Buell Substation.

2.2.5 Other Construction Considerations

Coverage is required under the NYSDEC State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities (GP 0-20-001) since the proposed ground disturbance for the Preferred Alternative exceeds one acre, as was the case for the Proposed Action presented in the DEIS. This regulatory provision includes the requirement for the preparation of a Stormwater Pollution Prevention Plan (SWPPP) and accompanying Erosion and Sediment Control Plan. Since the Preferred Alternative entails the installation of an underground linear utility, the General Permit requires only sediment and erosion controls during construction; no new or modified measures for post-

[2] The section of the proposed cable to be installed via trenching on the two substation properties and via jack-and-bore method beneath the LIRR tracks just north of the Buell Substation will not affect roadway ROWs.

construction stormwater management are required or proposed in association with the Preferred Alternative.

Construction is proposed to occur during eight-hour shifts between 8 a.m. and 4 p.m. and between 10 p.m. and 6 a.m. on weekdays in order to minimize potential traffic disruptions during the morning and afternoon peak periods. Weekend work during these hours may be required on an as-needed basis.

The construction time frame for the Preferred Alternative is estimated to be approximately 9 to 12 months (not including any seasonal work closures that may apply, which may limit or eliminate construction in the summer season, for example). Based on experience with similar recent projects in the area, it is anticipated that a construction hiatus will apply between Memorial Day weekend and Labor Day weekend, although some flexibility may be possible if the involved roadway agencies determine that the work can be accomplished in a manner that does not significantly impact local traffic conditions during the peak-volume conditions of the summer season. Appropriate accommodations will be made by closely coordinating with representatives of adjacent and nearby properties to minimize disruption of scheduled activities and events, including, but not limited to, Pierson Middle/High School on Jermain Avenue, Mashashimuet Park at the intersection of Main Street and Jermain Avenue, and Sag Harbor Golf Course/Barcelona Neck Natural Resources Management Area on NYS Route 114.

The anticipated 9-12 month completion of the work on an accelerated schedule as described above, as compared to the 18-month estimated timeframe specified in the DEIS for Alternative 2, is based on concurrent construction with crews operating at more than one location along the cable route, rather than in a single linear sequence. For example, multiple crews may work on trenching and conduit installation at the same time in two or more locations along the cable route, and/or different functions may be performed in parallel at different locations, including vault installation, cable pulling, cable splicing and site restoration, in addition to trenching/conduit installation. The overall schedule, as well as the performance of construction simultaneously at multiple locations in the Preferred Alternative Area, will depend on the timeliness of permit issuance by the various involved agencies and the conditions that may be imposed by these agencies for such permits. Completion of the proposed cable installation on an accelerated schedule will help to reduce any construction-related impacts to a shorter duration than would have been the case under the Proposed Action's original schedule as discussed in the DEIS.

The total cost of the Preferred Alternative is estimated at approximately $65 million, which is about 21 percent lower than the initial $78.6 million estimate for the total cost of Alternative 2 in the DEIS. This decrease is due to the Preferred Alternative estimate being developed with a more definitive level of engineering, which included a reduced construction schedule, and fewer manholes. The estimated cost of the Preferred Alternative is about 41 percent higher than the total estimated cost of approximately $46 million for the Proposed Action presented in the DEIS.

2.2.6 Maintenance and Protection of Traffic

As discussed previously, the Preferred Alternative involves installation of the proposed new 69-kV underground transmission cable along a 7.6±-mile route between the Bridgehampton Substation and Buell Substation, primarily in public roadway ROWs. Construction in these ROWs is proposed to consist mainly of the installation of the conduit and cable via the excavation of a trench in the roadway pavement, and associated excavation that may extend slightly into the adjacent unpaved portion of the ROWs for the placement of 15 manhole vaults.

Close coordination with the appropriate roadway agencies (see **Section 2.2.4** above) will be undertaken to minimize congestion and community impacts by maintaining acceptable levels of service as close as possible to preconstruction levels. These objectives will be implemented by means of a Maintenance and Protection of Traffic Plan (MPT), which will be subject to review and approval by the roadway agencies as part of their permitting process. The individual agencies review the proposed design and traffic plans and provide feedback in order to minimize impacts to roadways and surrounding areas.

Based on the current design of the Preferred Alternative, it is anticipated that the maintenance of two lanes of traffic flow may be feasible during trench installation along NYS Route 114, pending review and approval by NYSDOT. With the cable/conduit trench being excavated along the west/south edge of the pavement (as depicted in the engineering plans – see **Appendix D**), rows of traffic cones will be used to temporarily shift the traffic lanes to the east/north side of the pavement, including the approximately 10-foot-wide paved shoulder.

The other roadways along the proposed cable route (Bridgehampton-Sag Harbor Turnpike/Main Street, Jermain Avenue, Madison Street, Harrison Street, and Cove Hollow Road) do not have sufficient width to maintain concurrent two-way traffic flow during trenching and will be subject to alternating one-way traffic flow, which will employ flaggers at either end of the work zone to control traffic. In this MPT scenario, one travel lane is delineated on the roadway via the temporary placement of rows of traffic cones, and while a flagger allows traffic at one end of the work zone to proceed, traffic is stopped at the other end of the work zone by a second flagger. After the first flagger stops the traffic flow and the traffic in that direction clears the work zone, the second flagger allows traffic to proceed in the opposite direction, and this alternation of traffic flow in either direction continues through the work shift.

The installation of manhole vaults in the roadway ROWs requires a larger excavation footprint than the trenching and will not retain sufficient pavement width even to accommodate alternating one-way traffic flow, and therefore will necessitate roadway closures. In order to minimize the impacts on local traffic conditions, it is anticipated that this work will be conducted during the overnight period, when traffic volumes are much lower than during the daytime. The installation of each of the 15 vaults will take two to three nights[3], with excavation occurring on the first night and the vault placement and conduit/cable work occurring on the subsequent nights. For the two vaults on Bridgehampton-Sag Harbor Turnpike and nine vaults on NYS Route 114, alternative north-south arterial routes will be selected in consultation with the involved roadway agencies. Either of these two roadways can serve as a detour route when construction closes the other route; additionally, Sagg Road and Townline Road, which are classified by NYSDOT as a minor arterial and a major collector roadway, respectively, may be considered to serve as temporary detour routes.

As indicated in **Table 2.2**, a single manhole vault will be installed in each of the three Village of Sag Harbor roadways along the Preferred Alternative route (Jermain Avenue, Madison Street and Harrison Street). Coordination will be undertaken with the Village Public Works Department to select the best detour routes while this construction is in progress.

For all the work outlined above, temporary restoration of excavations will occur at the end of each work shift, involving backfilling and temporary asphalt or the placement of metal plates, with traffic cones

[3] Additionally, night work may be required to accommodate dewatering. All necessary permits will be obtained prior to commencing dewatering.

removed to return traffic flow to in-lane, two-way conditions during the period between work shifts. MPT measures altering traffic flow will only be in effect during periods of active construction. Temporary restoration will remain in place and will be properly maintained, until permanent pavement restoration occurs upon the completion of the excavation work.

As noted previously, the design of the Preferred Alternative contemplates full-width pavement restoration for all roadways along the proposed cable route, with the exception of Bridgehampton-Sag Harbor Turnpike, which will only receive partial restoration, even though trenching and manhole vault installations will result in the excavation of only a portion of the pavement area. This pavement restoration work will be performed along one side of the roadway at a time and alternating one-way traffic flow will be implemented as described above during construction shifts, with temporary surface restoration at the end of each work shift to allow a return to two-way traffic flow conditions during the period between work shifts.

2.3 Need, Objective and Benefits of the Preferred Alternative

The DEIS (Section 1.1) provides a detailed explanation of the need, objective and benefits of the Proposed Action involving the installation of a new 69-kV underground transmission cable from the Bridgehampton Substation to the Buell Substation. Although that discussion was prepared in reference to the previously proposed routing of the cable via the LIPA ROW between the two substations, which already contains overhead transmission infrastructure, these same considerations pertain equally to the current Preferred Alternative routed along public roadway ROWs. The Preferred Alternative fulfills the same need and objective as the Proposed Action, and produces the same benefits as the Proposed Action, while avoiding or significantly reducing many of the potential environmental concerns associated with the Proposed Action, which were the subject of significant public comment. The following discussion considers, in relation to the Preferred Alternative, some of the key points of information on this topic addressed in the DEIS.

The public need for the Preferred Alternative relates to LIPA's objective of providing safe and reliable electric service to the East End of Long Island. This area has been growing in terms of electrical demand at an average rate of about 1.75 percent since 2009. The forecasted net average annual electric load growth for that area for the next 10 years is approximately 1.7 percent per year. This anticipated load growth will result in various thermal and voltage constraints on this portion of LIPA's Transmission and Distribution (T&D) System, resulting in the need for various transmission improvement projects in order to continue to provide reliable electric service. The installation of a new 69-kV underground transmission cable between the Bridgehampton and Buell Substations is included among these projects.

The current configuration of existing transmission circuits in the LIPA ROW between the Bridgehampton and Buell Substations is such that the loss of the existing overhead transmission wires would result in a single 69-kV supply to portions of the North Fork and areas east of the Bridgehampton Substation on the South Fork. The two existing circuits in the LIPA ROW are not independent, and the loss of power in either circuit, whether intentional (e.g., for scheduled maintenance or repairs) or not (e.g., resulting from storm impacts), will also incapacitate the other circuit. In 2025, under forecasted electric load conditions, such a loss of the existing Bridgehampton-to-Buell cable would result in the remaining 69-kV supply exceeding its thermal capability, which poses an unacceptable risk of damaging T&D System equipment and can

result in significant customer outages. The Preferred Alternative will provide an additional transmission supply to the area and maintain and mitigate the risk to equipment in the T&D System and to customers.

In addition, in the event that a double circuit becomes inoperable, a Transient Voltage Recovery limitation is created. Transient Voltage Recovery is the ability of the T&D System to return to a set voltage threshold following a system disturbance such as the loss of the double circuit. Implementation of the Preferred Alternative will reinforce the T&D System on the East End of Long Island and will help mitigate potential Transient Voltage Recovery limitations.

While ongoing efforts have been undertaken to upgrade the transmission system on Long Island's South Fork, the existing transmission circuits do not have sufficient capacity to meet future needs. The objective of the Preferred Alternative continues to be the prevention and mitigation of customer outages, enhancement of the voltage profile of the South Fork system during times of heavy load, and improvement of the power quality experienced by customers. The Preferred Alternative is part of LIPA's overall long-range expansion plans to meet the demands of eastern Suffolk County and to reduce dependence on local generation by the implementation of an increase in the use of renewable energy sources and the necessary improvements to the T&D System to allow for the connection of those sources.

The Preferred Alternative will have the benefit of addressing the T&D System constraints on the South Fork of Long Island. The existing T&D System, built in the early 1900s, was not originally designed to meet the current projections of electric demand, and therefore a new 69-kV underground transmission cable between the Bridgehampton Substation and Buell Substation is needed to support forecasted electric load growth. While ongoing efforts have been undertaken to upgrade the T&D System on the South Fork, the existing transmission circuits do not have sufficient capacity to meet future needs under peak conditions. Installation of a new cable will relieve overload conditions in the event of the loss of a double circuit on the existing transmission circuits currently serving the East End of Long Island, thereby providing improved system reliability and resiliency.

In summary, the Preferred Alternative will benefit both the T&D System and customers on the East End of Long Island by relieving potential overload conditions and minimizing customer outage risk, while also supporting future forecasted load growth and reducing LIPA's dependence on local generation.

2.4 Summary of Preferred Alternative Existing Site Conditions

The 44.53± -acre Preferred Alternative Area encompasses both the conduit/cable installation area, the staging and laydown area necessary for cable and conduit installation, and the construction areas necessary for the connections within the two substations.

The majority of the Preferred Alternative Area is located within Critical Environmental Areas (CEAs) identified as the Town of Southampton Aquifer Overlay District and Town of East Hampton Water Recharge Overlay District; the proposed cable route also adjoins but does not extend into, the Long Pond CEA (see **Section 3.6.1** for further discussion, as well as a map depicting these CEAs in **Figure 14**). Residential developments are present within this area, as well as scattered commercial uses. Mashashimuet Park, an open space that provides recreational activity, is located at the intersection of Main Street and Jermain Avenue. As the route of the Preferred Alternative turns east on Jermain Avenue and progresses through the Village of Sag Harbor, the surrounding land uses consist mainly of residential properties. As the Preferred Alternative exits the Village of Sag Harbor, the Little Northwest Creek tidal

wetland area abuts the roadway on the northeast side and an additional, unnamed, open space abuts the roadway to the southwest. The majority of the Preferred Alternative along NYS Route 114 contains mixed land uses, primarily consisting of residential and open space lands. Agricultural land uses occur adjacent to the roadway towards the southernmost portions of the route. A more detailed discussion of Open Space and Recreation and CEAs is provided in **Sections 3.**5 and **Section 3.**6, respectively.

Currently, with the exception of the areas directly north of each substation, the entirety of the Preferred Alternative Area consists of paved roadways and maintained roadside shoulders. As such, most of the unpaved portions of the Preferred Alternative Area are vegetated with low-growing herbaceous species. A limited amount of tree clearing is necessary on the north side of the Buell Substation to facilitate the use of jack-and-bore construction methodologies for cable installation beneath the LIRR tracks. A more in-depth discussion and analysis of the habitats currently present within the Preferred Alternative Area is included in **Section 3.3**. **Table 2.3** below quantifies existing and proposed land use components or cover types within the Preferred Alternative Area.

Table 2.3: Preferred Alternative Action Area and Disturbance

Land Use or Cover Type	Preferred Alternative Area Existing Conditions (acres)
Roads, Buildings, Substations and other paved or impervious surfaces	35.83±
Mowed Roadside/ Mowed Lawn	7.86±
Forested	0.49±
Non-vegetated	0.35±
Total	**44.53±**

The Preferred Alternative will not result in a change to land uses or cover types within the Preferred Alternative Area. Upon the completion of construction, all disturbed areas will be restored in-kind.

2.5 Permits and Approvals Required

Table 2.4 identifies the permits and approvals that will be required to implement the Preferred Alternative.

Table 2.4: Permits and Approvals Required

Regulatory Authority	Permit or Approval Type
LIPA Board of Trustees	Project Approval and Funding; SEQRA Lead Agency
LIRR	Crossing Permit
Village of Sag Harbor, Harbor Committee*	Coastal Consistency in accordance with their New York Department of State-approved Local Waterfront Revitalization Plan
NYSDEC	Article 24- Freshwater Wetlands (IP# 1-9901-00011/00035); General Permit GP -0-20-001 for Stormwater Discharge from Construction Activities and Approval of SWPPP
United States Army Corp of Engineers (U.S. ACE)	Nationwide Permit #57 for Electric Utility Lines and Telecommunications Activities
NYSDOT*	Road Work Permit – Hampton Street/East Hampton-Sag Harbor Turnpike (NYS Route 114); Easement for cable routing across parcel at intersection of NYS Route 114 and Cove Hollow Road (SCTM 300-185-01-32)
SCDPW	Roadway Opening Permits

* These agencies were not identified as approval agencies for the Proposed Action presented in the DEIS.

See **Section 3.0** for a discussion and analysis of the anticipated impacts and proposed mitigation with respect to the permits and approvals for the Preferred Alternative identified above in **Table 2.4**.

3.0 Impact Analysis for Preferred Alternative

This section of the FEIS examines existing conditions within the limits of disturbance for the Preferred Alternative Area, which involves the installation of a new 69-kV underground transmission cable between the Bridgehampton Substation and the Buell Substation, primarily within public roadways that span between the two substations. This section also analyzes the anticipated environmental impacts associated with the proposed cable routing, as well as measures that will be implemented to avoid or minimize such impacts. As discussed in **Sections 1.0 and 2.0** of this FEIS, the Preferred Alternative is a variation of Alternative 2 in the DEIS, with a slight modification to the routing along local roadways in the Village of Sag Harbor. Alternative 2 was discussed and analyzed in Section 5.2 of the DEIS.

The organization of the discussion below parallels the presentation in the DEIS for the previously proposed routing of the cable through the LIPA ROW, covering the same environmental impact topics addressed in the DEIS for the Proposed Action under consideration at that time. As appropriate, reference is made to general information on the various topics in the DEIS to avoid unnecessary repetition, and updates are provided to reflect the change in the routing of the Proposed Action and modification of the construction methods under the Preferred Alternative as compared to the previous proposal. This discussion/analysis also expands upon the information in the DEIS regarding Alternative 2, examining anticipated impacts and proposed mitigation in more detail, while also accounting for the slight modification in the cable routing for the Preferred Alternative as compared to Alternative 2 in the DEIS.

3.1 Soils and Topography

3.1.1 Existing Conditions

3.1.1.1 Soils

The percentages of the Preferred Alternative Area in various soil types identified in the Suffolk County Soil Survey ("Soil Survey") are summarized in **Table 3.1**, below and depicted in **Figures 3-1 through 3-16**.

Table 3.1: Existing Soils

Soil Type	Acreage	% of Preferred Alternative Area
Bridgehampton silt loam, 0-2 % slopes (BgA)	3.3± acres	11.2± %
Bridgehampton silt loam, 2-6 % slopes (BgB)	1.1± acres	3.6± %
Carver and Plymouth sands, 0-3 % slopes (CpA)	6.7± acres	23.0± %
Carver and Plymouth sands, 3-15 % slopes (CpC)	8.7± acres	29.7± %
Carver and Plymouth sands, 15-35 % slopes (CpE)	0.4± acre	1.4± %
Cut and fill land, gently sloping (CuB)	2.5± acres	8.6± %
Deerfield loamy fine sand, 0-3 % slopes (De)	1.0± acre	3.3± %
Haven loam, thick surface layer, 0-3 % slopes (He)	0.1± acre	0.4± %
Montauk loam, 8-15 % slopes (MkC)	<0.1 acre	0.2± %

Soil Type	Acreage	% of Preferred Alternative Area
Plymouth loamy sand, 0-3 % slopes (PIA)	4.4± acres	15.1± %
Plymouth loamy sand, 3-8 % slopes (PIB)	0.4± acre	1.3± %
Riverhead sandy loam, 0-3 % slopes (RdA)	0.4± acre	1.4± %
Wareham loamy sand (We)	0.2± acre	0.7± %
Total	29.3± acres	100% *

* Sum of individual percentages does not add to 100% due to rounding.

The following descriptions of the soil types found in the Preferred Alternative Area are based on information in the Soil Survey:

Bridgehampton silt loam, 0-2 % slopes (BgA) – This gently sloping soil is on outwash plains on large, moderately undulating areas or on side hills between broad flats and intermittent drainage ways. The hazard of erosion is moderate for this Bridgehampton soil. The erosion hazard and soil tendency to crust on drying are the main concerns for management. Measures need to be taken to control runoff. This soil type, comprising about 11.2 percent of the Preferred Alternative area, is found in a few locations at the eastern end of the Preferred Alternative area (see **Figures 3-14, 3-15 and 3-16**).

Bridgehampton silt loam, 2-6 % slopes (BgB) – This gently sloping soil is on the outwash plains on large, moderately undulating areas or on side hills between broad flats and intermittent drainage ways. The hazard of erosion is moderate on this soil. The erosion hazard and soil tendency to crust on drying are management's main concerns. Measures need to be taken to control runoff. Most of this soil has been cleared and farmed for many years, but a few areas near the larger villages are used for small housing developments. This soil type, comprising about 3.6 percent of the Preferred Alternative area, is found in a few locations near the eastern end of the Preferred Alternative area (see **Figures 3-14, 3-15 and 3-16**).

Carver and Plymouth sands, 0-3 % slopes (CpA) – These soils are mainly on outwash plains; however, they are also on some flatter hilltops and intervening draws on moraines. A small part of this mapping unit is slightly undulating. The hazard of erosion is slight on the soils in this unit. These soils are droughty. Natural fertility is low. This soil type, comprising about 23.0 percent of the Preferred Alternative Area, is found throughout (see **Figures 3-2, 3-3, 3-5, 3-6, 3-7, 3-8, 3-9, 3-10, 3-11, 3-13 and 3-14**).

Carver and Plymouth sands, 3-15 % slopes (CpC) – These soils are mainly on rolling moraines; however, they are also on the side slopes of many drainage channels on the outwash plains. Individual areas of this mapping unit are large on the rolling topography of the Ronkonkoma moraine, and in these areas slopes are complex. On the outwash plain, this unit is in long, narrow strips parallel to drainage ways. Small areas of these soils on moraines are as much as 25 percent gravel throughout, especially along the crests of low ridges. In the bottom of many closed

depressions, these soils have siltier accumulations from adjoining hillsides; and in some places silty lenses are deep into the substratum. The hazard of erosion is slight to moderate on the soils in this unit. These soils are droughty, and natural fertility is low. In some places, slope is a limitation to use. This soil type, comprising about 29.7 percent of the Preferred Alternative Area, is found throughout (see **Figures 3-1, 3-2, 3-4, 3-5, 3-6, 3-7, 3-9, 3-10, 3-11, 3-12, 3-14 and 3-16**).

Carver and Plymouth sands, 15-35 % slopes (CpE) – These soils are almost exclusively on moraines, except for a few steep areas on side slopes along some of the more deeply cut drainage channels on outwash plains. On morainic landforms these areas are large, and slopes generally are complex, especially on the Ronkonkoma moraine. On the outwash plains the areas are in long, narrow strips parallel to the drainage channels. The hazard of erosion is moderate to severe for the soils in this unit. These soils are droughty and natural fertility is low. Moderately steep to steep slopes are a limitation to use. This soil type, comprising about 1.4 percent of the Preferred Alternative Area, is found in a few locations near the western end of the Preferred Alternative area (see **Figures 3-1 and 3-2**).

Cut and fill land, gently sloping (CuB) – This series is comprised of areas that have been cut and filled for nonfarm uses. The areas generally are large, but some areas are about five acres in size. This soil type is comprised of moderately sloping areas that have been graded for building sites. Slopes range from 1 to 8 percent. This soil type, comprising about 8.6 percent of the Preferred Alternative Area, is found at scattered locations at and near the western end of the Preferred Alternative area (see **Figures 3-1, 3-4, 3-5 and 3-6**).

Deerfield loamy fine sand, 0-3 % slopes (De) – This series consists of deep, moderately well drained, coarse-textured soils that formed in sand or loamy sand materials over deep layers of sand or sand and gravel. This nearly level soil is throughout the county in depressional areas, or it is adjacent to wetter soils that form the borders around lakes, ponds, or tidal marshes. It is primarily on outwash plain. Deerfield soils have very low available moisture capacity in the surface layer and upper part of the subsoil; however, deeper rooted plants can draw moisture from the water table. Permeability is rapid throughout the surface layer and subsoil. A seasonal high water table is at a depth of about 18 to 24 inches. Natural fertility is low. This soil type, comprising about 3.3 percent of the Preferred Alternative area, is found at a few locations along NYS Route 114 just outside of the Village of Sag Harbor (see **Figures 3-7, 3-8 and 3-9**).

Haven loam, thick surface layer, 0-3 % slopes (He) – This soil is mainly on outwash plains throughout the county. It occupies the bottom of the larger drainage channels or closed depressions where silty material has accumulated from surrounding areas. Slope is less than 3 percent. Areas of this soil generally are quite small. They are mostly long and narrow, but in closed depressions the areas are nearly round. This soil has the profile described as representative of the series, except that the content of organic matter in the surface layer increases with depth, and the surface layer ranges from about 12 to 30 inches in thickness. Also, in most places the surface layer contains more silt than the soil described as representative of the series, and in some places the subsoil is loam or silt loam. The hazard of erosion is slight on this Haven soil, except where the soil receives large amounts of water from adjoining sloping soils. Summer crops in closed depressions are damaged if heavy rain falls during the growing season. This soil type, comprising about 0.4 percent of the Preferred Alternative area, is found at one location on NYS Route 114 near the eastern end of the Preferred Alternative area (see **Figure 3-15**).

Montauk loam, 8-15 % slopes (MkC) – This soil is on rolling moraines where many kettle holes or closed depressions dot the landscape. It is mainly in the area between Montauk and Montauk Point. Slopes are complex in many places. Areas of this soil are medium to large in size. The hazard of erosion is moderately severe on this Montauk soil. If this soil is cultivated, measures are needed to help to control erosion. This soil type, comprising about 0.2 percent of the Preferred Alternative area, is found in one location on Harrison Street in the Village of Sag Harbor (see **Figure 3-6**).

Plymouth loamy sand, 0-3 % slopes (PIA) – This soil has the profile described as representative of the series. It is mainly on outwash plains south of the Ronkonkoma moraine. It is also on flat hilltops and in drainageways on morainic deposits. The areas generally are nearly level, but they are somewhat undulating in some places. Areas on outwash plains are large and uniform, and areas on the moraine are small and irregular. The hazard of erosion is slight for this Plymouth soil. This soil type, comprising about 15.1 percent of the Preferred Alternative Area, is found at scattered locations at and near the western end and near the eastern end of the Preferred Alternative area (see **Figures 3-1, 3-3, 3-4, 3-12, 3-13 and 3-14**).

Plymouth loamy sand, 3-8 % slopes (PIB) – This soil is on moraines and outwash plains. Slopes are undulating, or they are single along the sides of intermittent drainageways. The undulating areas generally are large. The areas along intermittent drainageways are narrow and long, and they follow the course of the drainage channels. The hazard of erosion is slight on this Plymouth soil. This soil tends to be droughty. This soil type, comprising approximately 1.3 percent of the Preferred Alternative Area, is found at a few scattered locations (see **Figures 3-4, 3-6 and 3-12**).

Riverhead sandy loam, 0-3 % slopes (RdA) – This soil has the profile described as representative of the series. It generally is on outwash plains, and the areas are large and uniform. Where this soil occurs on outwash plains, it generally has slope characteristics of this landform. Slopes are undulating in places. A few small, irregular areas are on moraines. The hazard of erosion is slight for this Riverhead soil. This soil is limited only by moderate droughtiness in the moderately coarse textured solum. It tends to develop a plow pan if it is intensively farmed. This soil type, comprising about 1.4 percent of the Preferred Alternative Area, is found at one location on NYS Route 114 (see **Figure 3-12**).

Wareham loamy sand (We) – This is the only Wareham soil mapped in the county. It is along the margins of tidal marshes and creeks or in low-lying positions around marshes and ponds. Slopes are 3 percent or less. Areas are small and are long and narrow in most places. They are between areas of very poorly drained marshy soils and well-drained upland soils. The hazard of erosion is slight on this Wareham soil. Drainage is poor on this soil, and artificial drainage is needed if it is used for farming. Permeability is rapid. This soil is ponded for a short time during prolonged wet periods. Natural fertility is low. Almost all of this soil is wooded. This soil type, comprising about 0.7 percent of the Preferred Alternative area, is found at one location on Main Street/Bridgehampton-Sag Harbor Turnpike near the southern end of the Village of Sag Harbor (see **Figure 3-4**).

Table 3.2 presents a list of soil features that may affect development activities associated with the Preferred Alternative, as well as soil limitations that may constrain development. It is noted that the Soil Survey also provides information regarding a range of soil features that may affect development activities, and soil limitations that may constrain development, which are not relevant to the Preferred Alternative, including those relating to irrigation, building foundations, sewage disposal, agricultural suitability, home sites, streets and parking lots, sanitary landfills, camp areas, picnic grounds, and athletic fields.

As summarized in **Table 3.2**, according to the Soil Survey, some soils in the Preferred Alternative Area have only slight limitations, which indicates that these soils have few or no limitations for a particular use(s) or that any limitations that are present can be overcome at little cost. A rating of moderate indicates a limitation that is more difficult and/or costly to correct. A rating of severe indicates that the use of the given soil is severely limited by one or more soil characteristics that are difficult and/or costly to overcome. A severe rating does not mean that a soil cannot be used for the specific use, but points out the soil's limitations that must be overcome through engineering design.

Table 3.2: Soil Limitations Within the Preferred Alternative Area

Soil Type*	Soil Features Affecting Drainage	Limitations for		
		Lawns and Landscaping**	Pipeline Locations	Paths and Trails
Bridgehampton silt loam, 0-2 % slopes (BgA)	Well drained to moderately well drained; poor stability	Slight	Slight	Slight
Bridgehampton silt loam, 2-6 % slopes (BgB)	Well drained to moderately well drained; poor stability	Slight	Slight	Slight
Carver and Plymouth sands, 0-3 % slopes (CpA)	Excessively drained	Severe: sandy surface layer	Severe: stability	Severe: sandy surface layer
Carver and Plymouth sands, 3-15 % slopes (CpC)	Excessively drained	Severe: sandy surface layer	Severe: stability	Severe: sandy surface layer
Carver and Plymouth sands, 15-35 % slopes (CpE)	Excessively drained	Severe: slopes; sandy surface layer	Severe: stability	Severe: sandy surface layer; slopes
Deerfield loamy fine sand, 0-3 % slopes (De)	Seasonal high water table; limited outlets; unstable cut slopes.	Moderate: seasonal high water table	Severe: stability	Severe: sandy surface layer
Haven loam, thick surface layer, 0-3 % slopes (He)	Well-drained; not applicable	Slight	Moderate: stability	Slight
Montauk loam, 8-15 % slopes (MkC)	Well drained to moderately well drained; difficult to excavate below a depth of about 2 feet	Severe: sandy surface layer	Slight	Moderate: sandy surface layer
Plymouth loamy sand, 0-3 % slopes (PIA)	Excessively drained	Severe: sandy surface layer	Moderate: stability	Moderate: sandy surface layer
Plymouth loamy sand, 3-8 % slopes (PIB)	Excessively drained	Severe: sandy surface layer	Moderate: stability	Moderate: sandy surface layer
Riverhead sandy loam, 0-3 % slopes (RdA)	Well drained	Slight	Moderate: stability	Slight

Soil Type*	Soil Features Affecting Drainage	Limitations for		
		Lawns and Landscaping**	Pipeline Locations	Paths and Trails
Wareham loamy sand (We)	Seasonal high water table; limited outlets; poor stability in cut slopes.	Severe: sandy surface layer	Severe: seasonal high water table	Moderate: seasonal high water table

1* Cut and fill land, gently sloping (CuB) is not included in this Table, as this soil type is comprised of areas that have been cut and filled, therefore specific soil limitations can vary based on fill qualities.

** The Soil Survey does not provide a category for limitations for native plant restoration. Limitations for Lawns and Landscaping provide the closest analogous category.

A site-specific *Geotechnical Investigation Report* (the "Geotechnical Report"), by POZ Engineering & Environmental Consulting, P.C., dated May 16, 2024, was prepared to characterize subsurface conditions along the cable route for the Preferred Alternative. See **Appendix E** of this FEIS for the full report, which is summarized below.

The investigation conducted for the Geotechnical Report included collection of data from 17 soil borings completed within the Preferred Alternative Area, and laboratory analysis of these 17 samples to determine soil properties. The descriptions in the Geotechnical Report are based on the subsurface conditions encountered during field investigations, which were performed in two phases (see the borehole location map in **Appendix E**):

- Phase 1 – Soil borings #1 through #5 and #17 were collected in January-February 2024 along the westerly segment of the proposed cable route (Bridgehampton-Sag Harbor Turnpike and local roadways in the Village of Sag Harbor), as well as the easterly terminus in the area of the Buell Substation.
- Phase 2 – Soil borings #6 through #16 were collected in March 2024 along the easterly segment of the cable route (exclusively along NYS Route 114).

The results of the geotechnical investigation delineated the expected conditions for glacial deposits as described in the reference literature. Most of the boreholes recovered coarse angular sand of various colors (orange, brown, gray, and black), with gravel or pebbles and silt. In two boreholes, clay was encountered, but in small pockets or deposits. The boreholes ranged in depths between 14 and 62 feet below the existing ground surface. The field engineer recorded blows counts, logged the soil conditions and soil types encountered, and retrieved bulk and undisturbed soil samples from within the borings as conditions dictated. Soil samples were collected at the designated depths for the purposes of measuring thermal resistivity, and for soil physical analysis. Testing focused on gradation, classification, moisture content, and compressive strength.

The recorded groundwater levels did not agree with the average U.S. Geological Survey (USGS) measurements, which could be due to a high groundwater table as a result of the precipitation or snow melt. The laboratory analysis of the soil samples verified the observations of the soil conditions in the field. The soil groups are well-drained, consisting mostly of glacial parent material, which is mostly fine- to coarse-grained sand and gravel either stratified or unstratified.

3.1.1.2 Topography

Since the Preferred Alternative Area is used as a public roadway ROW and two electrical substations, ground elevations have been altered from their natural state, with slopes generally being gentler than the surrounding terrain, including the previously proposed route for the cable through the LIPA ROW between the two substations.

As illustrated in **Figures 4-1 through 4-16** and detailed in the engineering drawings for the Preferred Alternative (see **Appendix D**), the roadway elevation within the Preferred Alternative Area ranges from a low of 10± feet above mean sea level (amsl) in the vicinity of Otter Pond (Station 84-00, as identified in the engineering drawings[1]) to a high point of 102± feet amsl at the Bridgehampton Substation (Station 10-00). The elevation profile of existing grade along the route of the Preferred Alternative is illustrated in the engineering drawings, as summarized below:

- The roadway elevation generally decreases gradually from the high point of 102± feet amsl in the vicinity of the Bridgehampton Substation in a northward direction along Bridgehampton-Sag Harbor Turnpike, to the low point of 10± feet amsl near Otter Pond.
- Continuing eastward along the proposed cable route, the elevation increases gently along Jermain Avenue reaching 35± feet amsl on Madison Street (Station 114-00±), then gently decreases to 16± feet amsl on Madison Street (Station 120-00±), followed by a moderate increase to 57± feet amsl onto Harrison Street (Station 127-50±).
- The high point on Harrison Street is 97± feet amsl (Station 143-00±), and thereafter the roadway slopes downward to 43± feet amsl at the NYS Route 114 intersection (Station 150-00±).
- Proceeding south on NYS Route 114, the elevation first rises to 59± feet amsl (Station 156-50±), then decreases to 11± feet amsl (Station 177-00±, in the area of wetlands associated with Little Northwest Creek).
- Continuing south on NYS Route 114, elevation remains fairly level, with a gradual increase to 25± feet amsl (Station 243-00±), then elevation increases at a slightly higher rate to 84± feet amsl (Station 279-00±), before gradually decreasing again to 45± feet amsl (Station 323-00±).
- Along most of the remaining length of the cable segment on NYS Route 114 (to Station 39800±, as shown in the engineering drawings in **Appendix D**), the topography exhibits gentle undulations, with the elevation generally varying in the range of 45-55± feet amsl (to Station 40100±); thereafter, elevation decreases to 38-39± feet (Station 40700±) to the foot of the LIRR embankment, with the railroad tracks at elevation 46± feet amsl and the Buell Substation property on the south side of the tracks at elevation 40± feet amsl.

As indicated from the information above, due to the cable route for the Preferred Alternative primarily being installed within a public roadway ROW, the main work area within the pavement does not exhibit steep slopes. Although some slope areas occur along the unpaved shoulders of the roadways within the ROW, these areas will mostly be used for equipment and materials staging/laydown, which will not be subject to excavation or other direct disturbance. At locations where direct disturbance will extend into the pervious areas outside the roadway pavement, which pertains to the installation of some of the 15 manhole vaults, appropriate measures will be implemented to mitigate potential impacts due to erosion and sediment transport, as specified in the draft Stormwater Pollution Prevention Plan (SWPPP) and associated Erosion & Sediment Control Plan (see **Appendix F**).

[1] All station locations are approximate.

3.1.2 Anticipated Impacts

3.1.2.1 Soils

The Preferred Alternative involves the installation of a new 69-kV underground transmission cable along a 7.6±-mile route primarily within public roadway ROWs as described in detail in **Section 2.1**. Except for the short segment to be installed by jack-and-bore method beneath the LIRR embankment just north of the Buell Substation, it is proposed that the cable be installed underground via standard trenching along its entire route, unless HDD is required, as reflected for the two culvert crossings. In addition to excavation for the cable installation along the trenched segments of the cable route, soil disturbance will also be necessary for the installation of 15 manhole vaults. Each vault will be 16 feet by 8 feet and 15 feet deep, with an excavation area of approximately 240 square feet. The LOD also includes pavement restoration outside the cable trench; this work, involving milling of the existing pavement, will not penetrate the underlying soil. The LOD also accounts for any design changes that are required in the field in order to address unknown field conditions. The roadway ROW area for temporary laydown and staging will not require clearing, grading or excavation.

As noted above, the installation of the short cable segment under the LIRR just north of the Buell Substation will be undertaken by jack-and-bore method, which involves the excavation of a 40 by 15 foot "distribution" (entry) pit on the north side of the LIRR and a 15 by 15 foot receiving pit on the south side of the LIRR. Soil also will be disturbed within the horizontal borehole that will be drilled between these pits under the railroad tracks. However, this area will be restored to pre-construction conditions upon the completion of the work.

The trench that will be used to install the majority of the length of the proposed transmission cable (i.e., totaling 7.5± miles of the 7.6±-mile cable route, not including the segment to be installed via jack-and-bore) will be a minimum of 42 inches below-grade and four feet in width. The twelve inches that occupy the greatest depth of the trench will contain the cable and associated conduits. Larger excavations (approximately 240 square feet) will be needed for each of the 15 manhole vaults to be installed along the proposed cable route. This excavation work will primarily occur within the existing pavement area of the roadway ROWs which, as discussed previously, is not characterized by significant slopes and, therefore, will have minimal potential for soil erosion and transport. In contrast, the cable route for the Proposed Action presented in the DEIS would have necessitated the disturbance of steep slope areas within the LIPA ROW, thereby, involving an increased potential for soil erosion and transport.

Excess material from the installation of the 15 manholes, and associated subsurface equipment for the Preferred Alternative, at approximately 42 cubic yards (CY) per manhole, will total 630± CY. This excavated material will be temporarily stored in the incidental disturbance areas along the roadway shoulders within the limits of the Preferred Alternative Area and, to the degree possible, will be replaced back into the excavations upon the completion of the cable installation. However, since excavation will primarily occur within areas of paved roadway, as well as some adjacent areas of stabilized roadway shoulder, it is not expected that it will be practicable for all excavated material to be reused on-site as fill. Therefore, excess material will be transported to a suitable, approved disposal location in accordance with all applicable regulations. If long-term staging of excess soils is required prior to disposal, the material will be taken to a temporary staging locations; staging of excess soils will not occur on public ROWs.

The information in the Soil Survey indicates that on-site soils have some limitations for development due to sandy surface layer, stability, slopes and a seasonal high-water table. However, modern engineering

design and construction methods are effective in overcoming these limitations, such that significant adverse impacts related to soils are not expected to result from implementation of the Preferred Alternative. In particular, a site-specific SWPPP and associated Erosion & Sediment Control Plan have been developed (see **Appendix F**), which are designed to provide stabilization, and to otherwise prevent or minimize soil erosion during construction, including measures to address potential sediment transport resulting from both the action of water and wind. Only a small area of the proposed cable route, between Cove Hollow Road and the Buell Substation, contains woodland vegetation that will require vegetation removal to install the proposed cable. This area will be stabilized via revegetation as soon as practicable to minimize the potential for erosion and sediment transport. Impacts to the soils in this area will be mitigated by implementation of the SWPPP, and associated Erosion and Sediment Control Plan, as presented in **Appendix F** and summarized in **Section 3.1.3** below. This includes the installation of temporary barriers to protect any trees to be retained, as well as the underlying soils, that are situated in proximity to the work area. This area will be restored with appropriate native vegetation upon the completion of construction.

Upon completion of the Preferred Alternative and re-establishment of vegetative cover in disturbed areas, the roadway ROWs containing the new underground transmission cable will have equivalent long-term stability with regard to soil erosion and sediment transport as applies under existing conditions, with the generally coarse-grained characteristics of these soils helping to promote rapid infiltration and moderating the generation of surface runoff, and restoration plantings providing soil stabilization and stormwater control outside the pavement area.

Overall, the Preferred Alternative has been designed to avoid significant adverse impacts to soils (see **Section 3.1.3**). Potential impacts would be minimal and appropriately mitigated through the above measures.

3.1.2.2 Topography

Installation of the proposed cable is planned to predominantly occur via the excavation of a four-foot-wide trench (and 15 associated manhole vaults) over a total length of 7.5± miles, with the remaining 0.1± mile segment of the cable being installed via jack-and-bore in a horizontal borehole beneath the LIRR. The Preferred Alternative also potentially may include short segments via HDD installation, if determined to be necessary. Currently HDD is proposed under the twin culverts at Ligonee Brook, over the span of approximately 250 linear feet. After the cable has been placed, the excavations (for the trench, the manhole vaults, and jack-and-bore and HDD launching and receiving pits) will be backfilled to the original grade. Therefore, implementation of the Preferred Alternative will not impact existing topographic conditions.

The Proposed Action would have necessitated temporary topographic adjustments, in the form of regrading and stabilization, to accommodate the installation of a temporary construction access road, with a maximum 7 percent gradient, to allow for access by the HDD drilling equipment, crane and delivery vehicles for the installation of the manhole vaults. It was proposed that the required temporary stabilization for vehicle access utilize recycled concrete aggregate (RCA), to be placed atop geotextile fabric. Although the intent upon the completion of cable installation would have been to restore the temporary access roadway to pre-construction conditions, permanent topographic adjustments were likely to be necessary in areas that originally had very steep slopes, to moderate final gradients in an effort to minimize the potential for long-term erosion. Because of the relatively low topographic relief and

existing paved roadways present along the cable route for the Preferred Alternative, ground surface stabilization will not be needed to accommodate construction access, thereby facilitating restoration upon the completion of construction as compared to what would have been required for the Proposed Action..

3.1.3 Proposed Mitigation

As discussed above in **Section 3.1.2**, the assessment of potential impacts of the Preferred Alternative with respect to soils and topography, indicates that no significant adverse impacts will occur. Furthermore, the Preferred Alternative will reduce the potential for impacts with respect to soil and topography in comparison to the Proposed Action, which would have involved the disturbance of native soils and involved construction in areas with steep topography.

The following is a summary of measures that will be implemented to avoid or mitigate adverse environmental impacts associated with soil disturbance during construction of the Preferred Alternative. Refer also to **Section 3.2.3** for a discussion of mitigation measures for the protection of water resources, which are closely related to mitigation with respect to soils and topography, including a detailed discussion of the SWPPP and associated Erosion and Sediment Control Plan for the Preferred Alternative.

- The Preferred Alternative will retain existing pervious surface coverage, and areas of vegetation disturbed by construction will be restored with appropriate native/adapted plant species.
- The use of native/adapted plant species in landscaping restoration also will avoid the need to use fertilizers, pesticides and other chemical treatments, thereby minimizing the potential for impacts to soils related to landscape maintenance practices.
- Excess material excavated within the construction area will be transported to a suitable disposal facility in accordance with applicable regulations.
- Upon the completion of construction, the topographic profile of the roadway ROW will be retained.
- The Preferred Alternative includes the implementation of a site-specific SWPPP, with an accompanying Sediment & Erosion Control Plan, which identifies a range of measures directed at avoiding or mitigating construction-related impacts to soils – see **Appendix F**. **Section 3.2.3** provides a detailed discussion on this topic in the context of mitigation measures with respect to water resources (e.g., potential stormwater-induced impacts), which also encompasses measures that will serve to mitigate potential impacts to soils and topography.

3.2 Water Resources

3.2.1 Existing Conditions

3.2.1.1 Surface Waters, Wetlands, and Stormwater Drainage

The Preferred Alternative will occur at the Bridgehampton Substation and Buell Substation and within public roadway ROWs to the north between the two substations over a distance of approximately 7.6 miles.

Designated freshwater and tidal wetlands and their associated regulated adjacent areas are situated at multiple locations within the Preferred Alternative Area, as depicted in **Figures 5-1 through 5-16**. From west to east:

- Freshwater wetlands (NYSDEC #SA-27) are located to the west of the Bridgehampton Substation, which are located to the west of the area depicted in Figure 5-1. Additional wetlands are located

approximately 500 feet to the east. No ground disturbance will occur within the associated regulated 100-foot adjacent areas (see **Figure 5-1**).

- The Lily Pond component of freshwater wetland SA-73 is located approximately 250 feet off the east side of Bridgehampton-Sag Harbor Turnpike and is surrounded by residential properties (see **Figure 5-2**). No ground disturbance will occur within its regulated 100-foot adjacent area.
- Additional freshwater wetlands are located to the east of the Preferred Alternative Area on Bridgehampton Sag Harbor Turnpike, north of Lily Pond Drive. No ground disturbance will occur within its associated regulated 100-foot adjacent area (see **Figure 5-3**).
- Freshwater wetlands associated with Ligonee Brook (NYSDEC #SA 3) are located on both sides of Main Street (County Road 79), spanning through the Preferred Alternative Area via a culvert (see **Figure 5-4**).
- Freshwater wetlands (NYSDEC #SA 59) are located to the southeast of Otter Pond, on the south side of Jermain Avenue, with the regulated 100-foot adjacent area extending into the Preferred Alternative Area (see **Figure 5-5**).
- Otter Pond is a tidal wetland on the north side of Jermain Avenue, with its regulated adjacent area extending to the northern edge of the roadway (see **Figure 5-5**).
- A small, isolated freshwater wetland (NYSDEC #SA 31) is located to the west of the Madison Street/Harrison Street intersection, with its regulated 100-foot adjacent area extending into the Preferred Alternative Area (see **Figure 5-6**).
- A small freshwater wetland (NYSDEC #SA 1) is located on the southwest side of NYS Route 114 (see **Figure 5-7**), with its regulated 100-foot adjacent area extending into the Preferred Alternative Area.
- Freshwater wetlands (NYSDEC #SA-1) associated with Rattlesnake Creek and Little Northwest Creek extends across both sides of NYS Route 114 (see **Figures 5-8 and 5-9**, respectively), with its regulated 100-foot adjacent area extending into the Preferred Alternative Area. Additionally, Little Northwest Creek spans through the Preferred Alternative Area via a culvert.
- SA-32 is associated with Little Northwest Creek is located on the north side of the paved roadway. No ground disturbance will occur within its associated regulated 100-foot adjacent areas (see **Figure 5-10**).

As discussed in **Section 3.3.1.4** of this FEIS, the freshwater wetlands located within the Preferred Alternative Area are channelized beneath the roadway via existing culverts for Ligonee Brook and Little Northwest Creek (see **Figures 5-4 and 5-9**, respectively).

3.2.1.2 Flood Zones

Refer to Section 2.2.1.2 of the DEIS for background discussion regarding the National Flood Insurance Program (NFIP), which establishes requirements for locations that are designated as Special Flood Hazard Areas (SFHAs) on the Federal Emergency Management Agency Flood Insurance Rate Maps, as well as the New York State Community Risk and Resiliency Act pertaining to future sea level rise.

As illustrated in **Figure 6**, no portion of the proposed cable route under the Preferred Alternative lies within the SFHA, or 100-year floodplain, which has a 1.0 percent annual chance of flooding. A small portion of the proposed cable route under the Preferred Alternative lies within or adjacent to the 500-year floodplain, which has a 0.2 percent annual chance of flooding, as follows:

- At the crossing of Ligonee Brook on Bridgehampton-Sag Harbor Turnpike (in the vicinity of Station 68-00±, as depicted on the Preferred Alternative engineering plans – see **Appendix D**).
- In the area of wetlands associated with Little Northwest Creek, adjacent to NYS Route 114 (in the vicinity of Station 177-00±).

The Preferred Alternative engineering plans indicate that the minimum elevation in the area of the proposed cable is approximately 10 feet amsl (see **Appendix D**). Therefore, even with the high estimate of 30 inches (2-½ feet), future projected sea level rise would remain well below the land surface in the Preferred Alternative Area through the end of the projection period in 2050.

3.2.1.3 Groundwater Resources

Refer to Section 2.2.1.3 of the DEIS for background discussion regarding Special Groundwater Protection Areas (SGPAs), groundwater hydrology/hydrogeology, and groundwater quality.[2]

The South Fork SGPA was designated as a CEA by the Long Island Regional Planning Board on April 18, 1993, to protect groundwater. The proposed cable route segments under the Preferred Alternative along Bridgehampton-Sag Harbor Turnpike and NYS Route 114 outside the Village of Sag Harbor are situated within this SGPA (see **Figure 7**).

According to the *Suffolk County Comprehensive Water Resources Management Plan* (2015), the Preferred Alternative Area is located within Groundwater Management Zone (GMZ) V. GMZ V is considered a deep recharge area, in which recharged water contributes to a deep groundwater flow system that replenishes the quantity and preserves the quality of the long-term water supply.

Based on USGS data, the depth to the groundwater table in the Preferred Alternative Area is less than 10 feet below grade surface (bgs) at several locations, primarily in areas at and near freshwater wetlands as identified in **Section 3.2.1.1**, including along Main Street in the westerly portion of the Village of Sag Harbor (which includes the area around Ligonee Brook crossing – see **Figure 8-4**), and along a 1.5±-mile segment of NYS Route 114 immediately east of the Village of Sag Harbor (which includes the area around Rattlesnake Creek and Little Northwest Creek – see **Figures 8-7, 8-8 and 8-9**). The greatest depth to groundwater in the Preferred Alternative Area is 75-100 feet bgs at the Bridgehampton Substation (see **Figure 8-1**). Typical groundwater depths in the Preferred Alternative Area, pertaining to about one-half of the length of the proposed cable route, are in the range of 30-75 feet bgs. It is noted that seasonal changes and fluctuations in precipitation rates can cause temporal variations in water table levels.

The majority of the Preferred Alternative Area (approximately 5-½ miles, extending eastward from the Bridgehampton Substation) lies to the north of the regional groundwater divide, whereby the flow in the aquifer is to the north, in the direction of the Sag Harbor Bay Complex and Peconic Bay. The easternmost segment (about two miles, extending westward from the Buell Substation) lies to the south of the groundwater divide, whereby the flow in the aquifer is to the south, in the direction of the Atlantic Ocean.

[2] The Village of Sag Harbor Transfer Station site (DEC Site Code 152047), which spans across the LIPA ROW that was the proposed cable route presented in the DEIS, does not lie within or adjacent to the Preferred Alternative Area. Therefore, the discussion regarding that site is no longer relevant to the Proposed Action as modified to the Preferred Alternative presented in this FEIS.

3.2.2 Anticipated Impacts

3.2.2.1 Surface Waters, Wetlands, and Stormwater Drainage

Section 3.2.1.1, above, notes that freshwater wetlands are within the Preferred Alternative Area; however, these wetlands are channelized beneath the roadway via existing culverts. Because these wetlands are contained within culverts in the area of the cable crossings, there will be no direct impact on the wetlands. Furthermore, implementation of the Preferred Alternative will comply with PSEGLI's NYSDEC Maintenance Permit (#1-9901-0011/00035 and 00037), which includes authorization for activities under Article 24 (New York State Freshwater Wetlands) jurisdiction, for limited locations along the proposed cable route within mapped wetlands. In addition, a SWPPP and associated Erosion & Sediment Control Plan will be implemented prior to any ground disturbance to ensure that construction will not result in any indirect stormwater or sediment transport impacts to the adjacent wetlands during construction (see **Appendix F**).

The Preferred Alternative will not increase the area of impervious surfaces within the roadway ROW, and existing vegetated areas disturbed for the proposed construction activities will be restored in-kind and in-place upon the completion of construction. Therefore, the volume of stormwater runoff generated on-site will not increase under the Preferred Alternative.

The Preferred Alternative will temporarily expose soils during construction, which potentially could cause erosion and sediment transport. However, such impacts will be avoided and mitigated through the implementation of a site-specific SWPPP (see SWPPP in **Appendix F**). The SWPPP includes an Erosion & Sediment Control Plan, which provides a comprehensive stormwater management strategy and a range of mitigation measures and best management practices, as discussed in **Section 3.2.3**.

Given the foregoing revegetation and erosion control measures, the Preferred Alternative will not increase the vulnerability of the area to long-term stormwater erosion during installation or operation of the new underground transmission cable. Proposed mitigation measures will ensure minimized impacts to surface waters, wetlands, and stormwater drainage (see **Section 3.3**). Therefore, implementation of the Preferred Alternative will not result in significant adverse impacts on these resources. In comparison, the potential impacts to surface waters, wetlands, and stormwater drainage would have been greater under the Proposed Action due to its route through the Long Pond Greenbelt, a NYSDEC CEA. The Preferred Alternative will avoid the Long Pond Greenbelt and its associated wetlands, eliminating the risk of impacts to this area.

3.2.2.2 Flood Zones

As discussed in **Section 3.2.1.2**, no portion of the Preferred Alternative Area is situated within the -100-year floodplain, with limited areas located within the 500-year floodplain. However, the Preferred Alternative will not cause an increase in impervious areas, and therefore will not cause or exacerbate flooding impacts and will not be susceptible to significant flooding impacts. In comparison, the potential impacts to flood zones between the Preferred Alternative and the Proposed Action would be similar in nature, as neither was to increase impervious area within designed floodplains.

3.2.2.3 Groundwater Resources

As discussed in **Section 3.2.1.3**, the Preferred Alternative Area is located in the South Fork SGPA. Therefore, the protection of groundwater resources in this area is critically important for ensuring the availability of the local potable water supply. The Preferred Alternative involves the installation of an

underground transmission cable, which will not generate hazardous materials or otherwise entail land use activities that create a potential for adversely affecting groundwater quality. The cable conduit and the cable insulation within the conduit will not include oils or other potentially deleterious substances that could be released into the ground in the event of a cable failure. Furthermore, any imported fill that may be needed for the Preferred Alternative (e.g., engineered fill if necessary to provide the required thermal resistivity properties to mitigate the potential for excessive ampacity reduction in the cable) will be tested prior to placement within excavations in order to ensure that the material is clean will not pose a potential impact to groundwater resources.

Portions of the Preferred Alternative Area containing existing vegetation that will be disturbed during cable installation will be restored upon the completion of construction (see **Section 3.3.2**). This replacement vegetation will consist of species that are well-adapted to local conditions and will not require irrigation or treatment with landscaping chemicals or fertilizers; and, thereby, will not place an ongoing demand on groundwater resources for irrigation or contribute to the loadings of nutrients and other chemicals to the aquifer. Additionally, the transmission cable and its appurtenances will operate without the need for water.

A SWPPP has been prepared in accordance with the requirements of the NYSDEC SPDES General Permit for Discharges from Construction Activities (No. GP-0-20-001) – see **Appendix F**. As a result, there is not a likelihood of flooding or on-site drainage issues during construction, as erosion and sediment controls (including silt fencing) will be implemented, which will help to protect water resources while the Preferred Alternative Area is disturbed by construction.

The Preferred Alternative involves the placement of an underground transmission cable within an approximately 5-foot deep trench along almost all its 7.6±-mile length, except for approximately 0.1 mile of jack-and-bore installation beneath the LIRR near the Buell Substation, as well as a few locations where the roadway crosses wetlands. Within the 7.5±-mile-long area proposed for trenching, the water table is anticipated to be more than five feet below the ground surface, such that dewatering is not expected to be required for the trenching operation. Although there are a few wetland crossings along the proposed cable route, as discussed in **Section 3.3.1.4,** these crossings are channelized within culverts, for which cable installation will be accomplished without the need for dewatering. However, it is expected that there will be limited locations where excavation will extend below the water table – e.g., for manhole vault excavation in the vicinity of Otter Pond (Station 8410±, as shown in the engineering drawings in **Appendix D**), where the roadway surface is at an elevation of about 10 feet amsl and the excavation will be to a depth of about 15 feet. Where dewatering is necessary, the required permit(s) will be obtained from NYSDEC, and all permit conditions and requirements will be complied with to ensure that this activity is conducted in a manner that does not adversely affect nearby wetlands and other sensitive environmental resources.

As discussed in **Section 3.1.2.1**, soil excavated during the trenching operation will be retained on-site during construction and reused as backfill during site restoration to the degree practicable. Thereby, given the permeable nature of the Upper Glacial deposits and surface soils in the Preferred Alternative Area, the native soils that will be reused within the disturbed areas will continue to promote groundwater recharge after completion of the Preferred Alternative.

When HDD is used for cable installation under the Preferred Alternative, it is expected to be limited in scope, with respect to both duration and spatial extent. Furthermore, the HDD drilling fluid consists of water and inert materials (e.g., naturally occurring bentonite clay), which would not pose a significant threat to groundwater resources.

As noted above, after construction has been completed, the Preferred Alternative will not place a demand on the aquifer or on the SCWA, as no water supply will be required for the cable operation or for the restored vegetation.

Since the Preferred Alternative has been designed to avoid potential impacts to groundwater resources, implementation of the Preferred Alternative will not result in significant adverse impacts on these resources. See further discussion below in **Section 3.2.3**. In comparison, the potential impacts to groundwater resources would have been greater under the Proposed Action due to its route through the Long Pond Greenbelt, a NYSDEC CEA. The Preferred Alternative will avoid the Long Pond Greenbelt and its associated wetlands, eliminating the risk of impacts to this area.

3.2.3 Proposed Mitigation

Based on the assessment of potential impacts with respect to surface waters, wetlands, stormwater drainage, flood zones, and groundwater resources, no significant adverse impacts on these important resources will occur from construction or operation of the Preferred Alternative.

The following is a summary of mitigation measures that are included in the Preferred Alternative to avoid or minimize any incidental environmental impacts to water resources.

- The Preferred Alternative will retain existing pervious surface areas, with areas of disturbed vegetation being restored with appropriate native/adapted plant species. This will result in no net increase in stormwater runoff generation.
- The use of native/adapted plant species for revegetation in disturbed areas will avoid the need for irrigation, and the completed transmission cable and appurtenances will operate without water consumption. Therefore, operation of the Preferred Alternative will not place a demand on local potable water supplies.
- Revegetation with native/adapted species will also avoid the need to use fertilizers, pesticides and other chemical treatments, thereby protecting the quality of surface water and groundwater resources.
- A SWPPP, including an associated Sediment and Erosion Control Plan, has been prepared for the Preferred Alternative, which will be implemented during construction to avoid or mitigate potential impacts related to stormwater runoff. The following is a summary of key provisions of the SWPPP (see **Appendix F** for the full SWPPP):
    - All contractors involved in the construction of the Preferred Alternative must comply with the requirements of the SWPPP and perform their operations in strict conformance with the SPDES General Permit (No. GP-0-20-001). All contractors performing earth-disturbing activities (e.g., clearing, grading, excavating, etc.) will be required to sign a Contractor's Certification acknowledging the SWPPP and agreeing to comply with its terms and conditions.
    - Temporary soil erosion and sediment control measures will be implemented in accordance with the SWPPP prior to initiating soil-disturbing activity.
    - Erosion and sediment control measures shall be inspected weekly by an independent inspector and be maintained until final stabilization is achieved on the site.

- Wherever conflicts arise with respect to previously placed erosion and sediment control measures, appropriate modifications shall be made to maintain regulatory compliance.
- Excavated soils shall be stockpiled within the specified LOD. Silt fencing shall be installed at the perimeter of the stockpiles.
- Temporary stabilization seeding (or mulch/approved equal in winter conditions) should be applied to any area or stockpile to remain inactive for 14 days or more.
- Throughout the construction sequence, accumulated sediment shall be removed from silt fences, inlet protection and other erosion control devices, as necessary to maintain intended functionality.
- All sediment tracked onto paved roadways will be removed and returned to the construction site as soon as practicable; however, in any case, such action shall occur no later than the conclusion of the work shift.
- Sediment barriers (i.e., compost filter socks and/or silt fencing) shall be used for perimeter control of sediment and water-borne pollutants on and around construction activities. Sediment barriers shall be installed in the following areas, as necessary:
    - Along the downhill edge of all disturbed areas (excluding trenching in paved areas);
    - Along the top of slope or top of bank of drainage ditches, channels, swales, etc.;
    - Along the top of all cut slopes and fill slopes in the construction area;
    - Along the edge of construction areas with slopes that lead into environmentally sensitive areas; and
    - Surrounding the base of all soil/sediment stockpiles.
- Storm drain inlet protection shall be provided for all inlets that potentially could receive drainage from the area of disturbance in the Preferred Alternative Area, to reduce flow velocities and reduce erosion, and filter out sediment from site-generated runoff. This protection shall consist of a temporary barrier with low permeability, installed around inlet openings to detain and temporarily pond sediment-laden runoff, allowing deposition of suspended solids prior to stormwater entry to the storm drain system. Filter sock check dams are an additional measure that may be utilized as appropriate. A filter berm may be used at the downstream end of swales to trap sediment prior to runoff leaving the Preferred Alternative Area.
- Geotextile filter bags shall be used as appropriate. These are portable devices through which sediment-laden water is pumped, thereby trapping, and retaining sediment before its discharge to upland locations or storm drain inlets. These devices may also be used to filter water pumped from any area of ponding or wetness that may occur due to soil limitations. Filter bags shall be located at least 50 feet from wetlands, streams, or other surface waters.
- To achieve soil stabilization within the limits of construction, cover material as specified in the restoration plans can be placed in disturbed areas, along with grass, mulch, straw, geotextiles, trees, rock, or shrubs, as appropriate. Vegetative cover serves to reduce the erosion potential by absorbing the energy of raindrops, promoting infiltration in-lieu-of runoff, and reducing runoff velocity. Temporary stabilization measures will be initiated as soon as practicable in portions of the site where construction activities have temporarily ceased. In roadway areas, stabilization shall include placement of temporary pavement, RCA, crushed rock or metal plating. Disturbed landscaped areas shall be restored to align with pre-construction conditions immediately following backfill. Temporary seeding shall be implemented to protect areas where final grading is complete, when preparing for any seasonal work shutdown or to provide cover when permanent seeding is likely to fail due to midsummer heat and/or drought.
- Seeding shall provide uniform application of seed to the area and shall result in good soil-to-seed contact. Temporary seeding areas shall be mulched with hay or straw at two tons per

acre. Mulch anchoring shall be performed where wind or areas of concentrated water flow are of concern. Wood fiber hydro-mulch or other sprayable products approved for erosion control (e.g., nylon web or mesh) may be used if applied according to manufacturer's specification.

- All areas disturbed during construction of the Preferred Alternative shall be stabilized as soon as practicable and appropriate; however, in any case, such action shall occur no later than the end of the work shift after all activities in these areas is completed.
- Construction of the Preferred Alternative shall seek to limit damage to existing vegetation to the extent practicable. Measures to protect vegetation throughout the Preferred Alternative Area can include the following:
  - Clearly mark construction limits to exclude equipment.
  - Field-identify and mark trees and other significant vegetation to be protected.
  - Avoid spills of petroleum products and other contaminants.
  - Obstructive and broken branches shall be properly pruned.
  - Where heavy compaction is anticipated over the roots of trees and shrubs, a three-to-four-inch layer of undecayed wood chips or two inches of No. 2 washed, crushed gravel shall be applied.

- Coverage under PSEGLI's NYSDEC Maintenance Permit (#1-9901-0011/00035 and 00037), includes authorization for activities under Article 24 jurisdiction for limited locations along the proposed cable route within mapped wetlands (see **Section 3.2.1.1**). As necessary, a permit will also be obtained from the USACE. This permitting process will ensure that potential impacts to surface waters and wetlands are mitigated to the extent practicable.
- Coverage under PSEGLI's NYSDEC Maintenance Permit (#1-9901-0011/00035 and 00037) also ensures that NYSDEC water quality certification is obtained, thereby assuring compliance with NYS water quality standards.
- When HDD is needed to install portions of the proposed cable, this activity will utilize a drilling fluid consisting of water obtained from the SCWA and inert materials (e.g., naturally occurring bentonite clay), while a similarly innocuous lubricant will be used to facilitate the pulling of the HDD conduit through the HDD borehole. These methods will not pose the potential for releasing hazardous substances into the environment.
- When HDD is needed to install portions of the proposed cable, this operation will recycle the water and drill fluid to the extent practicable. Specialized equipment to perform such recycling is standard for use in HDD installations. Wastewater generated during drilling activities, which cannot be reused, will be collected in frac tanks, transported, and disposed of at an approved disposal facility licensed to accept this type of waste.
- When HDD is needed to install portions of the proposed cable, the volume of water required for the drilling fluid would be greatly reduced as compared to the Proposed Action because of the significantly shorter drilling lengths and durations that would pertain to the Preferred Alternative.
- Any HDD under the Preferred Alternative will comply with the SCWA's seasonal constraints, which will limit water supply for the HDD drilling operation to the eight months of the year between October and May – see Section 2.2.2.3 of the DEIS. Follow-up coordination would occur with SCWA prior to the commencement of any HDD construction to finalize the details of the proposed water use, and to obtain a permit identifying the specific hydrant(s) or separate metered connection(s) to be used and other particulars of the approval.
- The fine particulate matter suspended in the drill fluid that would be used when HDD is needed to install portions of the proposed cable for the Preferred Alternative could potentially adversely affect nearby surface waters and wetlands if there is an inadvertent release from the HDD drilling

hole. However, when HDD is utilized, it is expected to apply to limited locations; and as discussed in **Section 3.2.1.1**, the occurrence of wetlands along the proposed cable route is very limited. Furthermore, a frac-out contingency plan (FCP) will be utilized, which establishes specific protocols to minimize impacts if a release does occur. A typical FCP was provided in Appendix J of the DEIS, which would be customized by the selected drilling contractor. The risk of a frac-out event with the Preferred Alternative is significantly reduced as compared to the Proposed Action. Construction materials that pose a potential contamination threat (e.g., petroleum products and hazardous materials) shall be managed to minimize exposure to stormwater. Such materials shall be kept in secure containers and properly labeled. All storage containers (including frac tanks) and motorized/mechanical equipment containing such materials (including generators) shall have secondary containment.

- Hazardous materials shall be used, stored, transported, and disposed of in the manner specified by the manufacturer and by applicable regulations. Contractors and subcontractors shall be made aware of this requirement and shall alert site personnel of this requirement.
- Copies of Safety Data Sheets shall be maintained on-site for hazardous materials.
- Solid and liquid waste shall be managed and disposed of properly, and in accordance with applicable State and Federal requirements. Construction and demolition waste shall be separated from soils, and both shall be disposed of at an approved disposal facility. All other wastes shall be disposed of separately. Waste material shall be collected and stored in secure containers and removed from the site. Waste containers shall be inspected regularly. No solid or liquid waste shall be disposed of (e.g., buried or poured) on-site. Excess construction materials, supplies or debris shall be inspected at the end of each work shift and managed or disposed of the same day or as soon as reasonably possible.
- Contractor(s) and subcontractor(s) shall comply with applicable regulations regarding portable toilets. Each contractor and subcontractor shall provide wastewater collection facilities for its crews at the site throughout construction activities. Sanitary facilities shall not be placed near drainage courses or in low areas and shall be positioned so they are secure and cannot be tipped over. Sanitary facilities shall be serviced regularly.
- Any ground disturbance within 535 feet of a known Eastern Tiger Salamander breeding pond will occur within the existing paved roadway (see further discussion in **Section 3.3.2.3**).
- Disturbance to wetlands is avoided through the implementation of a SWPPP and the minimization of disturbance to existing paved areas to the maximum extent practicable.

3.3 Ecology

3.3.1 Existing Conditions

3.3.1.1 Vegetation

The Preferred Alternative Area predominantly comprises paved roadways and portions of vegetated mowed roadside. Adjacent contiguous vegetation in the area can generally be found along portions of the Preferred Alternative Area on Bridgehampton-Sag Harbor Turnpike and NYS Route 114, while residential areas abut the Preferred Alternative Area, predominantly throughout the Village of Sag Harbor.

PSEGLI conducted three ecological investigations on March 6, April 15, and May 29, 2024. Qualifications of PSEGLI staff that conducted the investigation are included in **Appendix G**. During these surveys, the Preferred Alternative Area was walked by PSEGLI staff, and ecological surveys were conducted to determine overall habitat composition and quality. Habitat classifications are defined by the NYSDEC classifications outlined in *Ecological Communities of New York State* (**Edinger, 2014**). The habitats

encountered within the Preferred Alternative Area can best be described as Successional Southern Hardwood, maintained utility ROW, mowed roadside/pathway, mowed lawn/mowed lawn with trees, and unvegetated areas. Additional unvegetated areas are defined as developed lands and consist of the existing Bridgehampton Substation and Buell Substation, roadways, sidewalks, and bare soil. The New York Natural Heritage Program Element Ranks are also provided for each habitat type. The definition of each rank is provided in **Appendix H**. These ranks categorize each habitat type on both a state and global level. Generally, the lower the number, the rarer a habitat is. A habitat map of the Preferred Alternative Area is provided in **Figures 9-1 through 9-31**, and **Table 3.3** presents the quantity of each habitat encountered.

Table 3.3: Existing Habitat Quantities

Habitat Type	Existing Coverage (acres)
Successional Southern Hardwood	0.49
Maintained Utility ROW	0.01
Mowed Roadside/Pathway	5.92
Mowed Lawn/Mowed Lawn with Trees	1.93
Unvegetated*	**36.18**
Bare Soil	0.35
Roadway	35.44
Sidewalk	0.33
Substations	0.06
TOTAL	**44.53**

* "Unvegetated" acreage is the sum of Bare Soil, Roadway, Sidewalk, and Substations

Successional Southern Hardwood Forest is defined by **Edinger** (2014) as *"a hardwood or mixed forest that occurs on sites that have been cleared or otherwise disturbed. Characteristic trees and shrubs include any of the following: American elms (Ulmus americana), slippery elm (Ulmus rubra), white ashs (Fraxinus americana), red maples (Acer rubrum), box elders (Acer negundo), silver maple (Acersaccharinum), sassafrass (Sassafras albidum), gray birch (Betula populifolia), hawthorns (Crataegus spp.), eastern red cedar (Juniperus virginiana), and choke-cherrys (Prunus virginiana). Certain introduced species are commonly found in successional forests, including black locust (Robinia pseudo-acacia), tree-of-heaven (Ailanthus altissima), and buckthorn (Rhamnus cathartica). Any of these may be dominant or codominant in a successional southern hardwood forest. This is a broadly defined community, and several seral and regional variants are known."* This habitat type has a global conservation rank of G5 indicating that it is demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery, and a S5 state conservation status indicating it is demonstrably secure in New York State. Codominant species seen in these areas were sycamore maple, sassafras, white oak, and black oak. Consistent with the description above, the understory in this habitat within the Preferred Alternative Area is heavily impacted by invasive species, particularly large patches of mugwort and multiflora rose. This habitat type is found north of the LIRR tracks at the jack-and-bore pit location. This habitat is generally of lower quality and has more invasive species and evidence of previous disturbances.

Mowed Roadside/Pathway is defined by **Edinger** (2014) as *"a narrow strip of mowed vegetation along the side of a road, or a mowed pathway through taller vegetation (e.g., meadows, old fields, woodlands, forests), or along utility right-of-way corridors (e.g., power lines, telephone lines, gas pipelines). The*

vegetation in these mowed strips and paths may be dominated by grasses, sedges, and rushes; or it may be dominated by forbs, vines, and low shrubs that can tolerate infrequent mowing." This habitat type is an unranked cultural habitat. As presented in **Table 3.3,** this is the dominant vegetated habitat within the Preferred Alternative Area and predominately are areas of incidental disturbance that will be utilized as conduit laydown and staging area to facilitate construction activities.

Mowed Lawn and Mowed Lawn with Trees are found throughout the Preferred Alternative Area, particularly within the northern and eastern portions. These habitats are described as **Edinger** (2014) as follows: "*residential, recreational, or commercial land, or unpaved airport runways in which the groundcover is dominated by clipped grasses and there is less than 30% cover of trees. Ornamental and/or native shrubs may be present, usually with less than 50% cover. The groundcover is maintained by mowing and broadleaf herbicide application" and "residential, recreational, or commercial land in which the groundcover is dominated by clipped grasses and forbs, and it is shaded by at least 30% cover of trees. Ornamental and/or native shrubs may be present, usually with less than 50% cover. The groundcover is maintained by mowing and broadleaf herbicide application."* This habitat type is an unranked cultural habitat. This habitat type is largely present within the incidental disturbance of the Preferred Alternative Area and can be found predominately throughout the Village of Sag Harbor as well as portions of NYS Route 114.

Unvegetated areas also are present throughout the Preferred Alternative Area. A large patch of bare soil is present on the north side of the Bridgehampton Substation and sporadically throughout the Preferred Alternative Area. Additionally, the Bridgehampton Substation and the Buell Substation remain unvegetated and have a dolomite base. The majority of the Preferred Alternative Area, as well as approximately 79 percent of all ground disturbance, will occur within existing paved roadways which are classified as unvegetated areas.

A list of vegetation observed by PSEGLI staff during the three ecological investigations conducted on March 6, April 15, and May 29, 2024, is presented in **Table 3.4.**

Table 3.4 Vegetation Species

Common Name	Scientific Name
Herbaceous	
common yarrow	*Achillea millefolium*
garlic mustard	*Alliaria petiolate**
wild onion	*Allium canadense*
broom sedge	*Andropogon virginicus*
mugwort	*Artemisia vulgaris**
hairy bitter cress	*Cardamine hirsuta*
Pennsylvania sedge	*Carex pensylvanica*
mouse ear chickweed	*Cerastium fontanum*
chicory	*Cichorium intybus*
Queen Anne's lace	*Daucus carota*
deer tongue grass	*Dichanthelium clandestinum*

Common Name	Scientific Name
crab grass	*Digitaria spp*
lesser celandine	*Ficaria verna*
cleavers	*Galium aparine*
false baby's breath	*Galium mollugo*
wintergreen	*Gaultheria procumbens*
ground ivy	*Glechoma hederacea*
path rush	*Juncus tenuis*
daffodil	*Narcissus sp**
switchgrass	*Panicum virgatum*
plantain	*Plantago sp**
bamboo	*Pleioblastus sp**
common cinquefoil	*Potentilla simplex*
common self-heal	*Prunella Vulgaris*
bristly dewberry	*Rubus hispidu*
wood dock	*Rumex sanguineus*
common groundsel	*Senecio vulgaris*
fox tail	*Setaria spp*
Eastern skunk cabbage	*Symplocarpus foetidus*
common dandelion	*Taraxacum officinale**
white clover	*Trifolium repens**
turfgrass	*various*
common periwinkle	*Vinca minor*
wild violet	*Viola sororia*
Shrubs	
Japanese barberry	*Berberis thunbergii*
burning bush	*Euonymus alatus**
forsythia	*Forsythia spp**
black huckleberry	*Gaylussacia baccata*
bayberry	*Myrica pensylvanica*
great laurel	*Rhododendron maxima*
multiflora rose	*Rosa multiflora**
lowbush blueberry	*Vaccinium angustifolium*
Trees	
red maple	*Acer rubrum*
sycamore maple	*Acer pseudoplatanus*
American beech	*Fagus grandifolia*
American holly	*Ilex opaca*
eastern red cedar	*Juniperus virginiana*

Common Name	Scientific Name
pitch pine	*Pinus rigida*
black cherry	*Prunus serotina*
white oak	*Quercus alba*
black oak	*Quercus velutina*
Oriental bittersweet	*Celastrus orbiculatu**
English ivy	*Hedera helix**
Japanese honeysuckle	*Lonicera japonica**
mile-a-minute	*Persicaria perfoliata**
wineberry	*Rubus phoenicolasius**
common greenbrier	*Smilax rotundifolia*
greenbriar	*Smilax rotundifolia*
poison ivy	*Toxicodendron radicans*

* = Invasive

3.3.1.2 Wildlife

PSEGLI conducted three ecological investigations on March 6, April 15, and May 29, 2024. Few wildlife species were observed on site, although it is expected that a number of species common to suburban habitats would utilize the habitats on-site.

During field investigations PSEGLI staff encountered one mammal species (white-tailed deer); however, based on habitats recorded on site, the following additional mammals would be anticipated to utilize the site: raccoon, Norway rat, house mouse, meadow vole, Virginia opossum, red fox, Eastern gray squirrel, and various species of bats. **Table 3.5** provides a list of species observed on or that may be expected to utilize the Preferred Alternative Area.

Table 3.5: Mammal Species List

Common Name	Scientific Name
Virginia Opossum	*Didelphis virginiana*
Big Brown Bat	*Eptesicus fuscus*
Flying Squirrel	*Glaucomys Volans*
Eastern Red Bat	*Lasiurus borrelis*
Hoary Bat	*Lasiurus cinereus*
Silver-haired Bat	*Lasyionicterius noctivagans*
Woodchuck	*Marmota monax*
Eastern Meadow Vole	*Microtus pennsylvanicus*
House mouse	*Mus musclus*
Little Brown Bat	*Myotis lucifugus*
White-tailed deer	*Odocoileus virginianus**
Common Muskrat	*Ondatra zibethicus*
Tri-colored Bat	*Perimyotis subflavus*
White-footed Mouse	*Peromyscus leucopus*
Raccoon	*Procyon lotor*
Norway Rat	*Rattus norvegicus*

Eastern Mole	*Scalopus aquaticus*
Eastern Gray Squirrel	*Sciurus carolinensis*
Masked Shrew	*Sorex cinereus*
Eastern cottontail	*Sylvilagus floridanus*
Eastern Chipmunk	*Tamias striatus*
Red Fox	*Vulpes vulpes*

* - Species observed by PSEGLI within the Preferred Alternative Area

As described in **Section 3.3.1.1** above, the Preferred Alternative Area is comprised of various habitat types. Therefore, a variety of migratory and resident avian species would be expected to utilize the Preferred Alternative Area for nesting, breeding, feeding, migrating, and over-wintering. During ecological investigations conducted by PSEGLI staff, the following five avian species were encountered: Northern Cardinal, Blue Jay, Downy Woodpecker, American Robin, and Carolina Wren.

The Second Breeding Bird Atlas (BBA) is a detailed inventory of the breeding birds within the State of New York and provides a public data set of species observations. The BBA divided the state into 25 square kilometer survey blocks and reported observations recorded between 2000 and 2005. The Preferred Alternative Area extends across three BBA blocks. The BBA is currently in the data collection phase of the 2020-2024 Third BBA. The preliminary data is publicly available, and the Preferred Alternative Area intersects two BBA blocks within the new survey. A total of 159 species were observed across the 2000-2005 and 2020-2024 BBA blocks. A copy of the BBA for the five relevant blocks is provided as **Appendix I**. While many of the species on the BBA would be expected to utilize the Preferred Alternative Area, those that require habitats not encountered within the Preferred Alternative Area are not anticipated to utilize the site. **Table 3.6** gives a list of bird species observed on or expected to use the Preferred Alternative Area.

Table 3.6: Avian Species List

Common Name	Scientific Name
Cooper's hawk	*Accipiter cooperii [sc]*
red-winged blackbird	*Agelaius phoeniceus*
wood duck	*Aix sponsa*
blue-winged teal	*Anas discors*
mallard	*Anas platyrhynchos*
American black duck	*Anas rubripes*
gadwall	*Anas strepera*
eastern whip-poor-will	*Antrostomus vociferus[sc]*
ruby-throated hummingbird	*Archilochus colubris*
great egret	*Ardea alba*
eastern phoebe	*Ayornis phoebe*
tufted titmouse	*Baeolophus bicolor*
upland sandpiper	*Bartramia longicauda [t]*
cedar waxwing	*Bombycilla cedrorum*
Canada goose	*Branta canadensis*
great horned owl	*Bubo virginianus*
red-tailed hawk	*Buteo jamaicensis*
broad-winged hawk	*Buteo platypterus*

Common Name	Scientific Name
green heron	*Butorides virescens*
Chuck-will's-widow	*Caprimulgus carolinensis*
whip-poor-will	*Caprimulgus vociferus[sc]*
northern cardinal	*Cardinalis cardinalis**
house finch	*Carpodacus mexicanus*
turkey vulture	*Catharted aura*
veery	*Catharus fuscescens*
hermit thrush	*Catharus guttatus*
Swainson's thrush	*Catharus ustulatus*
brown creeper	*Certhia americana*
chimney swift	*Chaetura pelagica*
chimney swift	*Chaeture pelagica*
piping plover	*Charadrius melodus [e]*
killdeer	*Charadrius vociferus*
common nighthawk	*Chordeiles minor [sc]*
yellow-billed cuckoo	*Coccyzus americanus*
black-billed cuckoo	*Coccyzus erythropthalmus*
northern flicker	*Colaptes auratus*
northern bobwhite	*Colinus virginianus*
rock pigeon	*Columba livia*
eastern wood-pewee	*Contopus virens*
American crow	*Corvus brachyrhynchos*
common raven	*Corvus corax*
fish crow	*Corvus ossifragus*
blue jay	*Cyanocitta cristata**
mute swan	*Cygnus olor*
prairie warbler	*Dendroica discolor*
chestnut-sided warbler	*Dendroica pensylvanica*
yellow warbler	*Dendroica petechia*
pine warbler	*Dendroica pinus*
gray catbird	*Dumetella carolinensis*
grey catbird	*Dumetello carolinensis*
snowy egret	*Egretta thula*
least flycatcher	*Empidonax minimus*
willow flycatcher	*Empidonax traillii*
Acadian flycatcher	*Empidonax virescens*
rusty blackbird	*Euphagus caolinus*
merlin	*Falco columbarius*
peregrine falcon	*Falco peregrinus [e]*
American kestrel	*Falco sparverius*
common yellowthroat	*Geothlypis trichas*
house finch	*Haemorhous mexicanus*
purple finch	*Haemorhous purpureus*
bald eagle	*Haliaeetus leucocephalus [e]*
barn swallow	*Hirundo rustica*

Common Name	Scientific Name
wood thrush	*Hylocichla mustelina*
Baltimore oriole	*Icterus galbula*
orchard oriole	*Icterus spurius*
dark-eyed junco	*Junco hyemalis*
ring-billed gull	*Larus delawarensis*
great black-backed gull	*Larus marinus*
herring gull	*Larus smithsonianus*
Nashville warbler	*Leiothlypis ruficapilla*
Tennessee warbler	*Leiothypis peregrina*
hairy woodpecker	*Leuconotopicus villosus*
belted kingfisher	*Megaceryle alcyon*
eastern screech-owl	*Megascops asio*
red-bellied woodpecker	*Melanerpes carolinus*
red-headed woodpecker	*Melanerpes erythrocephalus [sc]*
wild turkey	*Meleagris gallopavo*
swamp sparrow	*Melospiza georgiana*
Lincoln's sparrow	*Melospiza lincolnii*
song sparrow	*Melospiza melodia*
northern mockingbird	*Mimus polyglottos*
black-and-white warbler	*Mniotilta varia*
brown-headed cowbird	*Molothrus ater*
great crested flycatcher	*Myiarchus crinitus*
black-crowned night-heron	*Nycticorax nycticorax*
osprey	*Pandion haliaetus [sc]*
northern parula	*Parula americana*
house sparrow	*Passer domesticus*
savannah sparrow	*Passerculus sandwichensis*
fox sparrow	*Passerella iliaca*
indigo bunting	*Passerina cyanea*
double-crested cormorant	*Phalacrocorax auritus*
ring-necked pheasant	*Phasianus colchicus*
rose-breasted grosbeak	*Pheucticus ludovicanus*
rose-breasted grosbeak	*Pheucticus ludovicianus*
downy woodpecker	*Picoides pubescens**
hairy woodpecker	*Picoides villosus*
eastern towhee	*Pipilo erythrophthalmus*
scarlet tanager	*Piranga olivacea*
summer tanager	*Piranga rubra*
black-capped chickadee	*Poecile atricapillus*
blue-gray gnatcatcher	*Polioptila caerulea*
vesper sparrow	*Pooecetes gramineus*
purple martin	*Progne subis*
boat-tailed grackle	*Quiscalus major*
common grackle	*Quiscalus quiscula*
Virginia rail	*Rallus limicola*

Common Name	Scientific Name
ruby-crowned kinglet	*Regulus calendula*
golden crowned kinglet	*Regulut satrapa*
bank swallow	*Riparia riparia*
eastern phoebe	*Sayornis phoebe*
American woodcock	*Scolopax minor*
ovenbird	*Seiurus aurocapilla*
northern parula	*Setophaga americana*
black-throated blue warbler	*Setophaga caerulescens*
bay-breasted warbler	*Setophaga castanea*
yellow-rumped warbler	*Setophaga coronata*
prairie warbler	*Setophaga discolor*
blackburnian warbler	*Setophaga fusca*
magnolia warbler	*Setophaga magnolia*
palm warbler	*Setophaga palmarum*
chestnut sided warbler	*Setophaga pensylvanica*
yellow warbler	*Setophaga petechia*
pine warbler	*Setophaga pinus*
American redstart	*Setophaga ruticilla*
blackpoll warbler	*Setophaga striata*
black-throated green warbler	*Setophaga virens*
eastern bluebird	*Sialia sialis*
red-breasted nuthatch	*Sitta canadensis*
white-breasted nuthatch	*Sitta carolinensis*
yellow-bellied sapsucker	*Sphyrapicus varius*
pine siskin	*Spinus pinus*
American goldfinch	*Spinus tristis*
clay-colored sparrow	*Spizella pallida*
chipping sparrow	*Spizella passerina*
field sparrow	*Spizella pusilla*
northern rough-winged swallow	*Stelgidopteryx serripennis*
common tern	*Sterna hirundo [t]*
least tern	*Sternula antillarum [t]*
European starling	*Sturnus vulgaris*
tree swallow	*Tachycineta bicolor*
Carolina wren	*Thryothorus ludovicianus**
brown thrasher	*Toxostoma rufum*
willet	*Tringa semipalmata*
house wren	*Troglodytes aedon*
American robin	*Turdus migratorius**
eastern kingbird	*Tyrannus tyrannus*
orange-crowned warbler	*Vermivora celata*
blue-winged warbler	*Vermivora cyanoptera*
blue-winged warbler	*Vermivora pinus*
yellow-throated vireo	*Vireo flavifrons*
warbling vireo	*Vireo gilvus*

Common Name	Scientific Name
white-eyed vireo	*Vireo griseus*
red-eyed vireo	*Vireo olivaceus*
blue-headed vireo	*Vireo solitarius*
mourning dove	*Zenaida macroura*
white-throated sparrow	*Zonotrichia albicollis*
white-crowned sparrow	*Zonotrichia leucophyrs*
eastern kingbird	*Tyrannus tyrannus*
orange-crowned warbler	*Vermivora celata*
blue-winged warbler	*Vermivora cyanoptera*
blue-winged warbler	*Vermivora pinus*
yellow-throated vireo	*Vireo flavifrons*
warbling vireo	*Vireo gilvus*
white-eyed vireo	*Vireo griseus*
red-eyed vireo	*Vireo olivaceus*
blue-headed vireo	*Vireo solitarius*
mourning dove	*Zenaida macroura*
white-throated sparrow	*Zonotrichia albicollis*
white-crowned sparrow	*Zonotrichia leucophyrs*

[e] = NYS Endangered Status
[t] = NYS Threatened Status
[sc] = NYS Special Concern
* - Species observed by PSEGLI within the Preferred Alternative Area

It is anticipated that the diversity of habitats within and adjacent to the Preferred Alternative Area would support a variety of reptile and amphibian species. No reptile and amphibian species were noted within the Preferred Alternative Area during field surveys conducted by PSEGLI. From 1990 to 1999, NYSDEC undertook the Herp Atlas Project which documented the distribution of reptiles and amphibians within the State (**NYSDEC 2007**). Species not seen by PSEGLI within the Preferred Alternative Area, but that may utilize the Preferred Alternative Area are noted in **Table 3.7.**

Table 3.7: Reptile and Amphibian Species List

Common Name	Scientific Name
Amphibians	
Spotted Salamander	*Ambystoma maculatum*
Marbled Salamander	*Ambystoma opacum [sc]*
Eastern Tiger Salamander	*Ambystoma tigrinum [e]*
Fowler's Toad	*Bufo fowleri*
Gray Treefrog	*Hyla versicolor*
Red-Spotted Newt	*Notophthalmus v. viridescens*
Northern Red-Backed Salamander	*Plethodon c. cinereus*
Northern Spring Peeper	*Pseudacris crucifer*
Bullfrog	*Rana catesbeiana*
Green Frog	*Rana clamitans melanota*
Wood Frog	*Rana sylvatica*

Eastern Spadefoot Toad	*Scaphiopus holbrookii [sc]*
Reptiles	
Common Snapping Turtle	*Chelydra s. serpentina*
Painted Turtle	*Chrysemys picta*
Spotted Turtle	*Clemmys guttata*
Northern Black Racer	*Coluber c. constrictor*
Northern Ringneck Snake	*Diadophis punctatus edwardsii*
Eastern Hognose Snake	*Heterodon platirhinos [sc]*
Eastern Milk Snake	*Lampropeltis t. triangulum*
Common Musk Turtle	*Sternotherus odoratus*
Eastern Box Turtle	*Terrapene c. Carolina[sc]*
Eastern Ribbon Snake	*Thamnophis sauritus*
Eastern Garter Snake	*Thamnophis sirtalis*
Red-eared Slider	*Trachemys scripta elegans*

[e] = NYS Endangered Status

[sc] = NYS Special Concern

3.3.1.3 Rare, Threatened or Endangered Species

The New York Natural Heritage Program (NYNHP) maintains records of observations of rare, threatened, and endangered species and communities reported within NYS. PSEGLI contacted NYNHP to determine if any records of rare, threatened, or endangered species or communities are present within the Preferred Alternative Area. Correspondence with NYNHP is included as **Appendix J**. NYNHP reported the presence of six animal species and eight plant species listed as rare, threatened or endangered in NYS recorded within or in the vicinity of the Preferred Alternative Area. Additionally, two communities that are of high-quality occurrence or are uncommon were noted as being within or in the vicinity of the Preferred Alternative Area. See **Table 3.8** for a list of these species and communities.

Table 3.8: Rare, Threatened, or Endangered Species List

Common Name	Scientific Name	NYS Status
Animals		
Eastern tiger salamander	*Ambystoma tigrinum*	endangered
Northern long-eared bat	*Myotis septentrionalis*	endangered
least tern	*Sternula antillarum*	endangered
scarlet bluet	*Enallagma pictum*	threatened
pine barren bluet	*Enallagma recurvatum*	threatened
bald eagle	*Haliaeetus leucocephalus*	threatened
Plants		
small white snakeroot	*Ageratina aromatica*	endangered
orange crested orchid	*Platanthera cristata*	endangered
large grass-leaved rush	*Juncus biflorus*	endangered
coastal goldenrod	*Solidago latissimifolia*	endangered
marsh straw sedge	*Carex hormathodes*	threatened
Stuve's bush clover	*Lespedeza stuevei*	threatened
narrow-leaved bush clover	*Lespedeza angustifolia*	threatened

reticulated nut sedge (netted nutsedge)	*Scleria reticularis*	threatened
Communities		
Coastal Oak-Heath Forest	-	Uncommon Community
Pitch Pine-Oak Forest	-	High Quality Occurrence

Eastern Tiger Salamander

Eastern Tiger Salamanders (*Ambystoma tigrium*) are a pond-breeding, burrowing salamander that utilizes permanent or seasonal ponds and surrounding terrestrial habitat for breeding and burrowing (**Levy 2001; Gibbs et al. 2007; Madison and Titus 2009**). The species utilizes forested habitats, preferably comprised of deciduous and mixed pine-deciduous species that feature a dense shrub understory for migration (**NYNHP 2021a**). Ponds utilized for breeding typically feature surrounding forested areas but remain open to sunlight. These ponds usually have limited to no predatory fish or feature shallow areas, which adults can utilize during breeding to avoid predation (**NYNHP 2021a: Madison and Farrand 1998**). Within NYS, Tiger Salamanders are only found on Long Island and consist of 48 known populations within 124 breeding locations (**NYNHP 2021a**). The NYSDEC reports that Tiger Salamanders face threats due to over-development and urbanization, disturbance and introduction/expansion of predatory species in to breeding ponds, degradation of upland habitat from development and off-road vehicles, and fragmentation of habitat (**NYSDEC 2010; NYNHP 2021a**).

The NYNHP reported four documented occurrences of the NYS-listed endangered Tiger Salamander adjacent to the Preferred Alternative Area. One occurrence is located approximately 840 feet east of Bridgehampton-Sag Harbor Turnpike, immediately to the east of the Bridgehampton Substation; a second area is located to the west of the Bridgehampton Substation; the remaining two locations are on the east side of Bridgehampton-Sag Harbor Turnpike approximately 2,800 feet north of the Bridgehampton Substation. The NYSDEC regulates activities within 535 feet and 1,000 feet of known Tiger Salamander breeding ponds. Furthermore, NYSDEC works to preserve 100 percent of all upland forest habitat within 535 feet of the known breeding ponds. With the exception of the areas described above, the Preferred Alternative Area is greater than 535 feet from the known occurrences of Tiger Salamander occurrences. The areas within the buffers will be located within previously disturbed areas such as the Bridgehampton Substation, directly north of the Bridgehampton Substation, and along the paved roadway. No change to existing land uses, loss of habitat, or change in habitat will occur within Tiger Salamander buffer areas. Under the Proposed Action, work would have occurred in non-previously disturbed areas within the Tiger Salamander buffer areas and within 535 feet of a known Tiger Salamander breeding pond.

Scarlet Bluet, Pine Barrens Bluet

The Scarlet Bluet and Pine Barrens Bluet are flying insects that belong to the taxonomic order Odonata. These species share many life history qualities and will utilize vegetated ponds and lakes with many of them preferring the characteristics of acidic ponds typically associated with coastal plain ponds (**Nikula et al. 2003; NYNHP 2021b; NYNHP 2021c, NYNHP 2021d**). All of these species have aquatic larvae and require freshwater ponds/lakes for successful breeding. In addition to the ponds themselves, many of the species named above utilize the surrounding shoreline, nearby forested roadsides, clearings and open fields for foraging (**Nikula et al. 2003**). Habitat consistent with these species life history requirements occurs within the Long Pond Greenbelt, on the east side of Bridgehampton-Sag Harbor Turnpike, and are associated with the wetlands located to the west of the Bridgehampton Substation.

The Scarlet Bluet and Pine Barrens Bluet face a variety of conservation threats predominately related to degradation of existing habitats (**NYSDEC 2005**). Degradation can occur in a variety of ways including but not limited to chemical contamination, filling, eutrophication and nutrient loading, changes in hydrology, changes in dissolved oxygen concentrations, and development near their habitats (**NYSDEC 2005**). As under the Preferred Alternative, work will not occur within the Long Pond Greenbelt or west of the Bridgehampton Substation, which would have been required under the Proposed Action.

Northern Long-eared Bat

NYNHP reports records of summer occurrences of this species within one mile of the Preferred Alternative Area. The Northern Long-eared Bat is a medium sized bat, which can be distinguished from similar species by its long ears (**U.S. Fish and Wildlife Service (USFWS) 2015**). During the winter, this species utilizes hibernacula; hibernacula are typically abandoned mines or caves that offer consistent, cool temperatures with high humidity (**USFWS 2013**). During summer months individuals of this species commonly utilize mature interior forests and typically avoid edge habitats (**NYNHP 2021e**) often roosting during the day in dead or live trees under loose bark, or in cavities and crevices, and sometimes return to caves as night roosts (**USFWS 2013**).

The largest threat to this species is white-nose syndrome (**NYNHP 2021e**). This syndrome is caused by a fungus that interrupts hibernations and can lead to the bats burning through necessary fat reserves. In addition, the fungus can cause dehydration, and damage to the wing membrane leading to premature death (**NYNHP 2021e, USFWS 2013**). NYNHP also noted that the removal of occupied roost trees may pose a threat to this species.

Habitat for this species is present in the surrounding Preferred Alternative Area and along the western portions of the Preferred Alternative Area north of the Buell Substation. See Section 3.3.2.3 for a discussion of mitigation measures.

Least Tern

The least tern is the smallest tern species in North America. This shorebird nests in colonies typically located on sandy beaches or stretches of coastlines with high shell cover featuring sparse or absent vegetation. This small tern relies almost entirely on small fish they catch by diving in shallow water (**NYNHPa 2024**). Habitat for this species is not present in or adjacent to the Preferred Alternative Area.

Bald Eagle

This large raptor can be found mainly near large bodies of water that provide easy access to their primary food sources of waterfowl and fish (**NYNHP 2024b**). These birds require sturdy trees to support their heavy nests. While this species is known to breed throughout NYS, it is only in more recent years that this once extirpated species has returned to breed on Long Island. The largest threat to this species within NYS is the loss of habitat or habitat alteration, and high development pressures within their breeding and wintering range (**NYNHP 2024b**). Habitat for this species is not present in or adjacent to the Preferred Alternative Area.

Small White Snakeroot

Small White Snakeroot is an endangered plant species documented as occurring in or surrounding Long Pond. The species would prefer the sandy and mucky habitats the coastal plain pond shore provides

(**NYNHP 2024c**). This species was not encountered during site investigations conducted by PSEGLI, and no work is proposed within or immediately adjacent to coastal plain pond and coastal plain pond shore.

Orange Crested Orchid

This orchid species is endangered at the state level and is about 0.5 mile from the Preferred Alternative Area. Its preferred habitat is open, sandy soils that are commonly associated with pitch pine. Such habitats include dunes, open pine woods, marshes, prairies, and roadsides (**NYNHP 2024d**). This species was not encountered during site investigations conducted by PSEGLI.

Large Grass-Leaved Rush

The large grass-leaved rush is listed as endangered within NYS and has been documented historically along Little Northwest Creek. Preferring damp, mowed roadsides and natural wet areas in successional pitch pine barrens, this species typically grows in clumps (**NYNHP 2024e**). This species was not encountered during site investigations conducted by PSEGLI.

Stuve's Bush Clover

This perennial prefers dry upland woods and open habitat dominated by grasses and wildflowers within forested areas. As such, this species can be found along trails or roadsides that bisect dry upland woods and barrens (**NYNHP 2024f**). While select areas of incidental disturbance contain habitat consistent with the life history requirements of the species, Stuve's bush clover was not encountered during the site investigations conducted by PSEGLI.

Narrow-Leaved Bush Clover

This species of bush clover prefers sandy areas near the coast and habitat consistent with that of coastal plain pond shores (**North Carolina Botanical Garden 2024**). NYNHP reports indicate a historic record of this species within the roadside areas adjacent to a salt marsh on a tidal creek. Similar habitat is located within the northeast portions of the site along NYS Route 114; however, no narrow-leaved bush clover was encountered during the site investigations conducted by PSEGLI.

Wetland Plants: Coastal Goldenrod, Marsh Straw Sedge, Reticulated Nutsedge

Coastal goldenrod, marsh straw sedge and reticulated nutsedge are threatened or endangered plant species that have been documented as occurring within 0.25 mile of the Preferred Alternative Area. Additionally, all three species were recorded within or immediately adjacent to Little Northwest Creek and its associated freshwater wetlands which, as shown in **Figures 5-8 and 5-9**, is located to the north and south of the Preferred Alternative Area. The United States Department of Agriculture categorizes these three species as wetland "obligate" species. As such, they almost always occur in wetland areas. Under the Preferred Alternative no disturbance is proposed within wetland areas where habitat for these species would be found. Additionally, none of these species was encountered during the site investigations by PSEGLI.

3.3.1.4 Wetlands

Freshwater wetlands are intrinsically valuable ecological communities that are generally areas of high biodiversity and are more productive habitats than upland counterparts. As such, they receive protection on the Federal, State and local levels. The USFWS is tasked with providing the public with information on

the Nation's wetlands. This agency provides the publicly available National Wetlands Inventory (NWI) containing details on the distribution and characteristics of wetlands throughout the United States. Regionally, NYSDEC catalogs regulate freshwater and tidal wetlands throughout NYS. As shown in **Figures 5-1 through 5-16**, designated freshwater wetlands are located within or adjacent to the Preferred Alternative Area.

Freshwater wetlands and surface waters can be found immediately to the east of the Bridgehampton Substation, and adjacent to the paved roadway at various points along the Preferred Alternative Area. Additionally, Ligonee Brook, Rattlesnake Creek and Little Northwest Creek all cross beneath the existing paved roadways and, thus are within the Preferred Alternative Area, via culverts. These wetlands are regulated by the NYSDEC under Article 24 and are identified as freshwater wetland complexes SA-27, SA-73, SA-3, SA-59, SA-31, SA-1, and SA-32, are described below. Only wetlands located directly adjacent to the Preferred Alternative Area were evaluated for wetlands quality.

- Freshwater wetland SA-27 is located to the west of the Bridgehampton Substation, which is located to the west of the area depicted in Figure 5-1. Additional wetlands are located approximately 500 feet to the east. These wetlands are generally of high quality; however, greater signs of disturbance and use were observed, including maintained pathways along the southern side of the wetland (see **Figure 5-1**).
- The Lily Pond component of freshwater wetland SA-73 is located approximately 250 feet off the east side of Bridgehampton-Sag Harbor Turnpike and is surrounded by residential properties (see **Figure 5-2**).
- Additional freshwater wetlands are located to the east of the Preferred Alternative Area on Bridgehampton Sag Harbor Turnpike, north of Lily Pond Drive, and are surrounded by residential and commercial properties (see **Figure 5-3**).
- Freshwater wetland SA-3 is associated with Ligonee Brook and continues southeast as part of the Long Pond Greenbelt (see **Figure 5-4**). The portions of the wetland adjacent to the paved roadway within the Preferred Alternative Area show greater signs of disturbance.
- Freshwater wetlands (NYSDEC #SA 59) are located to the southeast of Otter Pond, on the south side of Jermain Avenue, with the regulated 100-foot adjacent area extending into the Preferred Alternative Area (see **Figure 5-5**).
- Otter Pond is a tidal wetland on the north side of Jermain Avenue, with its regulated adjacent area extending to the northern edge of the roadway (see **Figure 5-5**).
- Freshwater wetland SA-31 is located on the west side of the Preferred Alternative Area on Madison Avenue (see **Figure 5-6**). The portions of the wetland closest to the roadway show significant disturbance and generally are of a lower quality in this area.
- A small freshwater wetland (NYSDEC #SA 1) is located on the southwest side of NYS Route 114 (see **Figure 5-7**).
- Freshwater wetland SA-1 is associated with Rattlesnake Creek and extends across both sides of NYS Route 114 (see **Figures 5-8 and 5-9**). While the upland adjacent area features a generally lower quality habitat with signs of previous disturbance and a higher number of invasive species, the inner areas of the wetland, particularly to the east, are of higher quality.
- Freshwater wetland SA-32 is associated with Little Northwest Creek and is located on the north side of the paved roadway (see **Figure 5-10**). The wetland is generally of a higher quality, although past disturbances are evident.

3.3.2 Anticipated Impacts

The impacts to the ecological resources of the Preferred Alternative Area are generally a direct result of the clearing of natural vegetation, human activities and associated wildlife stressors. These anticipated impacts are further detailed below.

3.3.2.1 Vegetation

As the Preferred Alternative will be located beneath the existing paved roadway, the majority of the site is maintained as impervious area. There are no anticipated changes in habitat quantities of the overall Preferred Alternative Area, as listed in **Table 3.9**. As previously discussed in **Section 2.2**, the Preferred Alternative will require two types of disturbance: direct soil disturbance and incidental ground disturbance. As the use of the incidental disturbance area can be described as "passive," there is no expected change in vegetated cover within this area. At the completion of construction, there will be no increase in permanently unvegetated/impervious areas. Only the removal of vegetation on the north side of the Buell Substation to facilitate the jack-and-bore installation of the cable beneath the LIRR is expected to result in a change in the characteristics of the habitats on site during construction; and upon completion of construction, this area will be restored with appropriate native vegetation. As a result, the Preferred Alternative Area will continue to provide natural habitat for wildlife. In comparison, the potential impacts to vegetation would have been greater under the Proposed Action due to its route through the existing ROW, including the Long Pond Greenbelt, a NYSDEC CEA. The Preferred Alternative will be situated mainly within existing paved roadways, reducing the amount of vegetative clearing along the route.

Table 3.9: Existing & Proposed Habitat Quantities

Habitat Type	Existing Conditions		Preferred Alternative		Change (Acres)
	Coverage (acres)	Percent	Coverage (Acres)	Percent	
Successional Southern Hardwood Forest	0.49	1.1	0.49	1.1	0
Maintained Utility ROW	0.01	0.02	0.01	0.02	0
Mowed Roadside/Pathway	5.92	13.29	5.92	13.29	0
Mowed Lawn/ Mowed Lawn with Trees	1.93	4.33	1.93	4.33	0
Unvegetated	**36.18**	**81.26**	**36.18**	**81.26**	**0**
Bare Soil	0.35	0.79	0.35	0.79	0
Roadway	35.44	79.59	35.44	79.59	0
Sidewalk	0.33	0.74	0.33	0.74	0
Substations	0.06	0.14	0.06	0.14	0
TOTAL	**44.53**	**100**	**44.53**	**100**	**0**

3.3.2.2 Wildlife

There will be a temporary disturbance during construction of the Preferred Alternative. However, these areas of disturbance will be restored with appropriate native species upon the completion of construction. As there will be no increase in impervious areas and no loss of vegetated areas, long-term impacts to

wildlife are not anticipated. The vegetative clearing required for the jack-and-bore pit near the Buell Substation will be performed during the non-active season (December 1st-February 28th) in order to avoid disturbance to any vegetation utilized as roosting sites by the Northern Long-eared Bat as described in **Section 3.3.2.3**.

Most of the species that utilize the Preferred Alternative Area are those that are somewhat tolerant of human activity. While it is expected that some wildlife will be temporarily displaced during the construction phase of the Preferred Alternative, no displacement of wildlife will result from operation of the underground cable upon the completion of construction. This may lead to an increase in abundance of wildlife populations in nearby and adjacent lands during the construction phase of the Preferred Alternative. Wildlife that is mobile is expected to migrate to adjacent suitable habitat during construction but will return to the Preferred Alternative Area upon the completion of construction.

Competition both within the species and across other species already utilizing the resources of the adjacent suitable habitat may result in a net decrease in population size for some species. While a significant portion of the existing habitat will remain, site-specific populations may decrease from the temporary loss of successional habitat that certain species may prefer. If a population decrease is experienced, it will only be temporary in nature, as populations will likely rebound following the return of the Preferred Alternative Area to its pre-construction condition. No significant adverse impacts to wildlife populations are anticipated to result from construction or operation of the Preferred Alternative. In comparison, the potential impacts to wildlife would have been greater under the Proposed Action due to its route through the existing ROW, including the Long Pond Greenbelt, a NYSDEC CEA. The Preferred Alternative will be situated mainly within existing paved roadways, reducing the degree of disturbance to wildlife along the route.

3.3.2.3 Rare, Threatened or Endangered Species

As discussed in **Section 3.3.1.3** above, the NYNHP identified the occurrence of six animal species and eight plant species listed as rare, threatened or endangered in NYS recorded within or in the vicinity of the Preferred Alternative Area. No rare, threatened, or endangered species were identified during the three ecological field inspections undertaken by PSEGLI.

NYSDEC is tasked with regulating the incidental take of rare, threatened, and endangered species through 6 NYCRR Part 182. 6 NYCRR Part 182.11 states:

> *The department may, at its discretion, issue a permit that authorizes the incidental take of a species listed as endangered or threatened in this Part. An incidental take permit shall include an endangered or threatened species mitigation plan … that the department has determined will result in a net conservation benefit to the listed species and which has been approved by the department.*

NYSDEC enforces two regulatory buffers regarding the endangered Eastern Tiger Salamander: 535 feet and 1,000 feet. All soil disturbance proposed within 535-feet of a known Eastern Tiger Salamander breeding pond will occur within the existing paved roadway; no clearing or loss of vegetation is proposed within 535 feet of a known Eastern Tiger Salamander breeding pond. Select soil disturbance will occur within 1,000 feet of known breeding ponds, particularly on the north side of the Bridgehampton Substation. However, there will be no change in habitat type and all existing forested habitat within 1,000

feet of the known breeding pond will be maintained. Based on these considerations, the construction and operation of the Preferred Alternative is not anticipated to result in the incidental take of individuals of this species.

Habitat consistent with the life history requirements of the Northern Long-eared Bat is present surrounding the Preferred Alternative Area and along the western portions of the Preferred Alternative Area north of the Buell Substation. Per NYSDEC, the hibernation period for this species in Suffolk County extends from December 1st through February 28th. To ensure no roosting bats are impacted under the Preferred Alternative, all tree removals will occur between December 1st and February 28th when this species of bats is not found within the landscape.

The Preferred Alternative will have no significant impact on the bluet species identified by the NYNHP. These species utilize coastal plain ponds and coastal plain pond shorelines for breeding and foraging. No ground disturbance will occur within the coastal plain ponds or their associated shorelines. Therefore, no significant adverse impacts will occur to the rare, threatened or endangered plants identified as potentially occurring within this area.

The vast majority of the Preferred Alternative will be completed within the limits of the existing paved roadway, which does not contain suitable habitat for the least tern or the bald eagle. Furthermore, the Preferred Alternative is consistent with existing land uses along the route and will not result in the change of any habitat type, nor the loss of any breeding or foraging habitats for the species.

As stated in **Section 3.3.1.3**, narrow-leaved bush clover, coastal goldenrod, and marsh straw sedge are classified as wetland obligate species by the United States Department of Agriculture and typically require wetland habitats. As the Preferred Alternative is largely confined to the paved roadway and roadside and will not transverse any wetland areas, there will be no anticipated impacts to the rare, threatened or endangered species potentially found within these areas.

As mentioned above, disturbance will be limited to the paved roadway to the maximum extent practicable and will not impact the known occurrence of small white snakeroot, orange crested orchid, large grass-leaved rush, and Stuve's bush clover on the neighboring lands. No impacts to this species will occur as a result of the Preferred Alternative. In comparison, the potential impacts to rare, threatened, endangered species, would have been greater under the Proposed Action due to its route through the existing LIPA ROW, including the Long Pond Greenbelt, a NYSDEC CEA. The Preferred Alternative will be situated mainly within existing paved roadways, reducing the degree of disturbance to wildlife along the route.

3.3.2.4 Wetlands

The Preferred Alternative will install the underground transmission cable directly beneath or above three identified freshwater wetlands that bisect the paved roadway via existing culvert. As each wetland within the Preferred Alternative Area is contained within culverts in the area of the cable crossing, there are no anticipated impacts to turbidity or surface conditions of the wetlands. Additionally, implementation of the Preferred Alternative will comply with PSEGLI's NYSDEC Maintenance Permit (#1-9901-0011/00035 and 00037), which includes authorization for activities under Article 24 (New York State Freshwater Wetlands) jurisdiction, for limited locations along the proposed cable route within mapped wetlands; and

a SWPPP will be implemented prior to any ground disturbance to ensure that construction will not result in any impacts to adjacent wetlands during construction (see SWPPP in **Appendix F**).

Given the lack of disturbance to wetlands or regulated adjacent areas as a result of the proposed installation methods for the cable, no significant adverse impacts to wetlands will occur as a result of the Preferred Alternative. In comparison, the potential impacts to wetlands would have been greater under the Proposed Action due to its route through the existing ROW, including the HDD under the Long Pond Greenbelt, a NYSDEC CEA. The Preferred Alternative will be situated mainly within existing paved roadways, reducing the degree of disturbance to wetlands along the route.

3.3.3 Proposed Mitigation

- Disturbance will be minimized because of the construction installation methods utilized and the minimization of soil disturbance to the maximum extent practicable.
- All tree removal will occur between December 1st and February 28th, per NYSDEC guidance for locations in Suffolk County, which corresponds to the seasonal period during which Northern Long-eared Bats are not present in the landscape.
- Any ground disturbance within 535 feet of a known Eastern Tiger Salamander breeding pond will occur within the existing paved roadway.
- Implementation of the Preferred Alternative will comply with PSEGLI's NYSDEC Maintenance Permit (#1-9901-0011/00035 and 00037).
- Disturbance to wetlands will be avoided through the implementation of a SWPPP (see **Appendix F**) and the minimization of disturbance to existing paved areas to the maximum extent practicable.
- All disturbed areas will be restored with appropriate native plant species or restoration of impervious areas.
- No known invasive species will be utilized for restoration activities. Specifically, species listed in 6 NYCRR Part 575 will not be utilized.
- No debris, fill, sand, gravel or other materials will be placed within 150 feet of a wetland.

3.4 Cultural Resources

This section considers the potential of the Preferred Alternative to affect cultural resources, including historic resources. This analysis has been completed in accordance with SEQRA and Section 14.09 of the NYS Historic Preservation Act.

Historic resources are officially recognized cultural resources, including National Historic Landmarks (NHLs), resources listed in the National Register of Historic Places (NRHP), resources listed in the NYS Register of Historic Places (State Register), resources determined eligible for listing in the NRHP or the State Register, and locally designated resources. Such resources could consist of archaeological sites, buildings, structures, or objects considered significant in the history, architecture, archaeology, or culture of the nation, state, or locality. Known or previously inventoried historic resources were identified and considered in the DEIS for the original Proposed Action route, along with potential historic resources. Potential historic resources consist of cultural resources that appear to meet the NRHP or State Register eligibility criteria or the criteria for local designation.

3.4.1 Methodology

To assess the potential for the Preferred Alternative to result in impacts to significant cultural resources (historic resources), the area proposed for project-related disturbance was delineated. Thereafter, research and a survey were completed to identify cultural resources that may be present in the impact area, including archaeological and architectural resources. If present in the impact area, such resources would require evaluation for historic significance using the NRHP, State Register, and local designation criteria presented below. Then, an assessment could be made about the potential for the Preferred Alternative to result in impacts to cultural resources, including any resources considered historic resources for the purpose of SEQRA and Section 14.09 of the NYS Historic Preservation Act.

3.4.1.1 NRHP Evaluation Criteria

The NRHP is the nation's inventory of known historic resources administered by the National Park Service (NPS). The NRHP includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. The NRHP criteria and associated definitions are outlined in the National Register Bulletin *How to Apply the National Register Criteria for Evaluation* (**NPS 1997**). The following is a summary of that bulletin.

Properties (structures, sites, buildings, districts, and objects) more than 50 years of age can be listed in the NRHP provided they meet one of the evaluation criteria described below; however, properties less than 50 years of age that are of exceptional significance or are contributors to a district, that also meet the evaluation criteria, can be included in the NRHP. The NRHP uses four criteria under which a property can be considered significant for listing:

A. Properties associated with events that have made a significant contribution to the broad patterns of history;

B. Properties associated with the lives of persons significant in our past;

C. Properties that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and/or

D. Properties that have yielded or may likely yield information important in prehistory or history.

Properties can be listed individually or as contributors to a historic district.

Integrity

In addition to meeting one of the evaluation criteria, a property must also retain integrity to convey that significance. Although the evaluation of integrity is sometimes subject to judgement, it must always be grounded in an understanding of the property's physical features and how they relate to its significance. The NRHP recognizes seven aspects of integrity, which are listed below.

- *Location:* The place where the historic property was constructed or the place where the historic event occurred.

- *Design:* The combination of elements that create the form, plan, space, structure, and style of a property.
- *Setting:* The physical environment of a historic property.
- *Materials:* The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- *Workmanship:* The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- *Feeling:* A property's expression of the aesthetic or historic sense of a particular period of time.
- *Association:* The direct link between an important historic event or person and a historic property.

3.4.1.2 New York State Register of Historic Places (State Register) Evaluation Criteria

The criteria for listing in the State Register are presented in Section 427.3 of Section 14.09 of the NYS Historic Preservation Act. The criteria are listed below.

a. The quality of significance in American history, architecture, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

    1. That are associated with events that have made a significant contribution to the broad patterns of our history; or
    2. That are associated with the lives of persons significant in our past; or
    3. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
    4. That have yielded, or may be likely to yield, information important in prehistory or history.

b. Special Considerations.

Ordinarily, cemeteries, birthplaces, or graves of historic figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the State Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

1. A religious property deriving primary significance from architectural or artistic distinction or historical importance;
2. A building or structure removed from its original location, but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with an historic person or event;

3. A birthplace or grave of an historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life;
4. A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events;
5. A reconstructed building, when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived;
6. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or
7. A property achieving significance within the past 50 years if it is of exceptional importance.

3.4.1.3 Town of Southampton Landmarks and Historic Districts Evaluation Criteria

The criteria for designation as a Town of Southampton Landmark or Historic District is outlined in Town Code § 330-321(B). The criteria are presented below.

Town of Southampton Landmarks

The Town Board may designate an individual property as a Landmark if it meets one or more of the following criteria:

a. Possesses special character or historic or aesthetic interest of value as part of the cultural, political, economic, or social history of the locality, region, state, or nation;
b. Is identified with historic personages or is the site of an historic event in the Town, state, or nation;
c. Embodies the distinguishing characteristics of an architectural type, period, or style or contains elements of design, details, materials, or craftsmanship which represent a significant innovation;
d. Is the work of a designer, engineer, builder, artist, or architect whose work has significantly influenced an age; and/or
e. Because of a unique location or singular physical characteristic, represents an established and familiar visual feature of the neighborhood.

Town of Southampton Historic Districts

The Town Board may designate a group of properties as an Historic District after a public hearing if it:

a. Contains properties which meet one or more of the criteria for designation of a Landmark; and
b. By reason of possessing such qualities, it constitutes a distinct section of the Town of Southampton.

3.4.1.4 Town of East Hampton Historic Landmarks and Historic Districts Evaluation Criteria

The criteria for designation as a Town of East Hampton Historic Landmark or Historic District is outlined in Town Code § 255-7-25. The criteria are presented below.

Town of East Hampton Historic Landmarks

The Town Board may designate an individual lot and any buildings or structures thereon as a Historic Landmark or as a Special Historic Landmark if the property:

a. Possesses special character or historic or aesthetic interest or value as part of the cultural, political, economic, or social history of the Town;
b. Is identified with historic personages;
c. Embodies the distinguishing characteristics of an architectural style, building type, period, or method of construction;
d. Is the work of an architect, designer, or builder of local or regional importance; or
e. Because of a unique location or singular physical characteristic, represents an established and familiar visual feature of its neighborhood.

In addition, the Town Board may designate an individual building or structure as a Landmark if the building or structure:

a. Possesses special character or historic or aesthetic interest or value as part of the cultural, political, economic or social history of the Town;
b. Is identified with historic persons;
c. Embodies the distinguishing characteristics of an architectural style, building type, period, or method of construction; or
d. Is the work of an architect, designer, or builder of local or regional importance.

Town of East Hampton Historic Districts

The Town Board may designate any group of lots and the buildings and structures thereon as an Historic District if these properties:

a. Contain lots, lands, buildings or structures, some or all of which meet one or more of the criteria set forth in Subsection A (i.e., Town of East Hampton Historic Landmarks criteria); and
b. By reason of their spatial, visual, or architectural relation to one another, the properties constitute an historically distinct area of the Town.

3.4.1.5 Village of Sag Harbor Historic or Cultural Landmarks and Historic Districts

Historic or Cultural Landmarks and Historic Districts are defined in the Village Code § 300-2-2 and details about these resources are presented below:

Village of Sag Harbor Historic or Cultural Landmarks

Historic or Cultural Landmarks are a site recognized as having a quality of significance in American history, architecture, archaeology or culture as may be found in a district, site, building, structure or object of state and local importance that possesses integrity of location, design, setting, materials, workmanship, feeling, and association.

The authenticity of the Landmark must be acknowledged by the Village Board of Historic Preservation and Architectural Review and/or by the Village Historian or such other expert as may be designated by the Village Board of Trustees.

Village of Sag Harbor Historic Districts

Historic Districts are those areas of the Village of Sag Harbor which have a special character, historic or aesthetic interest or value, and represent various eras in the history of the Village and, as a result, constitute a distinct section of the Village and are designated as a Historic District.

3.4.1.6 Archaeological Resources

Archaeological resources are the physical remains of past human activity. These resources may be visible on the surface but are often located below ground. Archaeological sites may date to the precontact or the historic periods and may contain significant features, such as burials, midden deposits, hearths, storage pits, foundation remains, and shaft features related to wells, cisterns, and privies. Impacts to these types of cultural resources are considered when a project includes ground disturbance. Ground disturbance has the potential to impact known or previously identified archaeological resources, as well as archaeological resources which may be present within an area subject to future construction.

Description of the Archaeological Resources Study Area or Area of Potential Effects

The archaeological resources study area or Area of Potential Effects (APE) includes the entire area that could be subjected to ground disturbance in association with the Preferred Alternative. Such disturbances include the installation of the new underground cable, new manholes, new termination structures, vegetation clearing, grading, and equipment laydown and staging. The Preferred Alternative includes the installation of approximately 7.6 miles of cable. With the exception of short segments in the vicinity of the two substations totaling about 0.1 mile (approximately 1.5 percent of the entire 7.6 mile length), the proposed cable will be installed in conduit below grade beneath the existing paved roadways, with a limited amount of disturbance occurring within the adjacent maintained pervious (vegetated) areas directly adjacent to the roadway ROWs. In addition to the proposed underground cable, fifteen manhole vaults will be installed along the route and new termination structures will be constructed adjacent to the Bridgehampton Substation and the Buell Substation. These disturbances will occur within an area measuring 44.53± acres, of which 36.08± acres will experience direct ground disturbance (i.e., excavation, grading, clearing, pavement milling, etc.), with an additional 8.45± acres of incidental disturbance.

Vertical impacts associated with the Preferred Alternative will vary in depth from surface impacts for vegetation clearing to deeper excavations for the installation of the cable via trenching and excavations of about 240 square feet to accommodate each of the new manhole vaults. The APE considers the maximum horizontal and vertical extent of ground disturbing activities associated with the Preferred Alternative and measures approximately 44.53 acres (18.02 hectares), including areas of incidental disturbance. The APE is shown on an aerial photograph in **Figure 10**.

Identification of Archaeological Resources

The New York Cultural Resource Information System (NY CRIS) was consulted to determine the presence or absence of known and previously recorded archaeological resources. Based on information available from NY CRIS, no State Historic Preservation Office/Office of Parks, Recreation, and Historic Preservation (SHPO/OPRHP) archaeological resources are present in the APE. However, the APE traverses two Archaeological Sensitive Areas and five NYS Museum Areas, including NYS Museum Areas 4907, 4910, 4912, 5532, and 5533 (**NY CRIS 2024**).

Consultation was initiated with SHPO/OPRHP in late 2023 and a response was received on December 21, 2023 (see **Appendix K**). In the response letter, SHPO/OPRHP indicated that a Phase IA Literature Search and Sensitivity Assessment Survey was warranted because portions of the project area were located in archaeologically sensitive areas, with sections of the project area located in places known to contain Native American burial sites (**SHPO/OPRHP 2023**). The Phase IA investigation was intended to identify previously recorded archaeological sites and other cultural resources within or near the proposed project, to assess the archaeological sensitivity of the project area, to document previous ground disturbance, and to make recommendations regarding the potential need for Phase IB subsurface archaeological testing.

In May 2024, Chronicle Heritage (cultural resource management consultant) developed a testing strategy, and it was determined that a shovel test pit (STP) survey was necessary in the APE where below ground disturbance was likely to occur and for any laydown/staging areas that are located inside archaeologically sensitive areas as determined by the NY CRIS. This determination led to a discontinuous testing area, especially in the eastern portion of the APE (**Chronicle Heritage 2024**).

The Phase IB subsurface archaeological testing was completed by Chronicle Heritage in the summer of 2024. During the fieldwork, archaeologists completed 272 STPs. The STPs were completed at 15-meter maximum intervals, measured 30-centimeters in diameter, and extended up to one-meter in depth. All excavated soils were passed through ¼-inch screen to facilitate the recovery of artifacts. Some areas were excluded from testing because of existing underground utilities (**Chronicle Heritage 2024**).

No significant deposits or subsurface features were detected during the survey, and a total of 14 STPs were positive for historic artifacts. Most of the encountered artifacts date from the 19th century, and consisted of nails, ceramic sherds, and glass fragments. None of the artifacts constituted newly recorded archaeological sites. Overall, the survey showed that the APE has a low sensitivity for intact archaeological sites due to a lack of detected archaeological sites and the presence of disturbed soils from activities such as utility installation (**Chronicle Heritage 2024**).

The archaeological survey and technical report were completed in accordance with the guidelines outlined in *Phase I Archaeological Report Format Requirements* issued by SHPO (**SHPO 2005**) and *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State* prepared by the New York Archaeological Council (**NYAC 1994**).

3.4.1.7 Architectural Resources

Architectural resources typically consist of elements of the built-environment that are from the historic period (50 years or older in age). These types of resources are generally visible at the surface and may consist of buildings, such as residential, commercial, agricultural, or industrial buildings; structures, including bridges, dams, highways, and railroad grades; and objects, such as boundary markers, mileposts, and statuary (**NPS 1997**). Impacts to these types of cultural resources can include both direct physical impacts (e.g., demolition, alteration, or damage from construction on nearby sites) and indirect contextual impacts, such as the isolation of a property from its surrounding environment or the introduction of visual, audible, or atmospheric elements that are out of character with a property or that alter its setting.

Description of the Architectural Resources APE

The APE is meant to account for proposed construction activities that could physically alter architectural resources or be close enough to architectural resources to cause physical damage or account for potential visual or contextual impacts. In the case of the Preferred Alternative, the majority of the construction is proposed underground, and it introduces very limited above ground elements in the termination structures. Thus, the Preferred Alternative does not include significant changes to the existing visual or contextual setting. The architectural resources APE considers the maximum horizontal and vertical extent of ground disturbing activities associated with the Preferred Alternative. These disturbances will occur within an area measuring 44.53± acres, of which 36.08± acres will experience direct ground disturbance (i.e., excavation, grading, clearing, pavement milling, etc.), with an additional 8.45± acres of incidental disturbance. The APE is illustrated on an aerial photograph in **Figure 10**.

Identification of Architectural Resources

The NY CRIS was consulted to determine the presence or absence of known and previously recorded architectural resources in the APE. Based on information available from the NY CRIS, there are numerous NRHP listed and NRHP eligible architectural resources mapped immediately adjacent to the APE. Many of these resources are included in several NRHP listed or NRHP eligible Historic Districts that are traversed by the APE. Specifically, the APE intersects the NRHP listed Sag Harbor Village Historic District (94NR00635), Sag Harbor Hills, Azurest, and Ninevah Subdivisions (SANS) Historic District (18NR00103), and Sag Harbor Village District (90NR01941). In addition, the APE intersects the NRHP eligible Sag Harbor Historic District – Boundary Increase 2020 (10309.000869). Finally, one individual architectural resource is mapped in the APE (Vacation Cottages/10303.000851).

Consultation was initiated with SHPO/OPRHP for the project in late 2023 and a response was received on December 21, 2023 (see **Appendix K**). In the response letter, SHPO/OPRHP requested additional information for archaeological resources and did not indicate that studies were needed to address architectural resources.

3.4.2 Historic Overview[3]

The Preferred Alternative lies within the eastern portion of Long Island in the Atlantic Coastal Lowland physiographic province. The area is part of the Monmouth Group, Matawan Group, and Magothy Formation of Coastal Plain Deposits. This bedrock is formed from silty clay, glauconitic sandy clay, sand, and gravel. NYS was subjected to glaciation multiple times and the glacial deposits on Long Island were derived mostly from the Late Wisconsinan glaciation, from approximately 28,000 to 21,750 years ago.

3.4.2.1 Precontact Period

Long Island is situated in a strategic location at the confluence of the Hudson River and other rivers between New England and the Mid-Atlantic and it has been inhabited for at least 12,000 years. While some archaeological information has been lost due to sustained and often intensive development on Long Island, much has been learned about the people who lived there over time. To discuss the cultural

[3] The Historic Overview is adapted from *Phase I Investigation of Proposed Bridgehampton to Buell New 69kV Underground Cable, Suffolk County, New York*. Prepared by PaleoWest for GEI Consultants, Inc., P.C. on behalf of PSEG Long Island. PaleoWest Technical Report 21-253. September 2021.

sequence of Long Island, archaeologists use six general periods, though many different names have been applied to local traditions and cultural complexes. These general time periods are as follows:

- Paleoindian
- Archaic
- Transitional
- Woodland
- Contact
- Historic

Included in these general periods are several sub-periods, which are divided based on the presence or absence of certain types of artifacts or features at archaeological sites. These attributes and notable site names are summarized in **Table 3.10**, along with a brief summary of the major cultural periods in Long Island. The table begins with the earliest occupation and concludes immediately before modern times.

Table 3.10: Culture History of Long Island, New York[4]

Temporal Unit	Time Span (Years Before Present)	Culture or Tradition	Attributes and Site Names
Paleoindian	12,000?-10,000	Clovis	Lanceolate (sometimes fluted) projectile points
Early Archaic	10,000-8,000	-----	Corner and side notched projectile points, groundstone implements
Middle Archaic	8,000-6,000	Laurentian	Stony Brook I Garvie Point
Late Archaic	6,000-3,700	Laurentian	Sylvan Lake Garvie Point II Wading River Hematite, Steatite Vessels
Transitional	3,700-2,700	Orient	Baxter Solecki Jamesport Orient #2 Orient #1 Stony Brook II Sugar Loaf Hill
Early Woodland	2,700-2,000	Adena	Middlesex Denning Point Adena Plain Ceramics
Middle Woodland	2,000-1,000	Windsor	Windsor North Beach Matinecock Point
Late Woodland	1,000-400	Windsor/East River	Shantok Fort Corchaug

[4] Table 3.10 is adapted from Table 1: Culture History of Long Island, New York included in PaleoWest 2021.

			Pantigo Niantic Clasons Point Old Field Sebonac
Contact	400-300	Canarsie, Matinecock, Merrick, Rockaway	Wampum, European Trade Goods
Historic	300-100	Euro-American	-----

3.4.2.2 Historic Period

The lands that would become Suffolk County were purchased from the Native Americans in the mid-17th century by settlers primarily from England. Many of these purchases were overseen by Wyandanch, a sachem of the Montaukett Indians. The eastern end of Long Island was initially settled in 1653 as an independent colony; however, it was subsequently incorporated into the colony of Connecticut in 1662 and became part of the colony of New York in 1664 when the Dutch ceded control of their colony to the British. The Battle of Long Island took place on August 27, 1776, and the Island was occupied by the British army until their evacuation in 1783.

The Preferred Alternative is located within the Towns of Southampton and East Hampton. Permanent settlement of Southampton and East Hampton by the English began in 1640, when a group of colonists from Lynn, Massachusetts landed at North Sea. The English colonists carried a warrant from the Earl of Sterling granting them about 64-square miles of land, stretching from Shinnecock to Sagaponack.

Interaction between the Native American and Euro-American populations was marked by agreements, and later conflicts, concerning land use. Documents dating to as early as the late-17th century illustrate agreements with local Native Americans about the use of the land for their dwelling and agricultural purposes in exchange for agricultural goods, while the settlers claimed portions of the land for feeding and pasturage, timber, stone, and other uses.

While agriculture provided the subsistence base for the settlers, coastal resources like waterfowl, fish, and shellfish were also heavily utilized. Whaling played a vital role in the economy of the early Hamptons area and the value of whale oil and bone as trade goods generated the local industry which was active from 1640 until the mid-19th century.

Most of eastern Long Island was affected by British occupation during the American Revolution. Wharves, vessels, and naval stores were commandeered or destroyed in Suffolk County to halt American shipping and the British fleet stationed in Gardiners Bay was provisioned with East Hampton crops, wood, and livestock, seriously depleting local resources. Pre-war economic patterns gradually resumed during the early-19th century due to waterborne trade.

Around 1870, the Sag Harbor branch of the LIRR was constructed north of Montauk Highway. The coming of the railroad greatly facilitated the movement of New York City residents to country retreats and marked the start of a thriving summer tourist industry on the south shore of Suffolk County. The railroad fostered

the development of the Hamptons as a summer resort and soon summer cottages and hotels lined the streets and shores of the community. The establishment of golf clubs, private clubs, bathing stations, and large estates continued until World War I.

Following the war, Suffolk County experienced another real estate boom, especially in outlying areas. Growth slowed dramatically during the 1930s and 1940s with the Great Depression and World War II, but the second half of the 20th century witnessed renewed economic growth, especially in the 1950s and the 1990s. Today, the Hamptons host thriving vacation and summer home industries.

3.4.3 Existing Conditions

3.4.3.1 Archaeological Resources

No previously recorded SHPO/OPRHP Archaeology Sites are located in the APE and the APE traverses five NYS Museum Areas, including NYS Museum Areas 4907, 4910, 4912, 5532, and 5533 (**NY CRIS 2024**). The NRHP status of the NYS Museum Areas are currently undetermined, and the details of these resources are summarized in **Table 3.11**.

Table 3.11: Previously Recorded Archaeological Resources Located in the APE

Resource Number	Resource Name	Resource Type	NRHP Eligibility	Location in the APE
NYS Museum Area 4907	No Name	The general location of an extensive village reported in 1922.	Undetermined	Western Portion of the APE
NYS Museum Area 4910	No Name	The general location of a village reported in 1922.	Undetermined	Western Portion of the APE
NYS Museum Area 4912	Sachems Hole	A ceremonial place identified as an "Indian Ceremonial Place".	Undetermined	Central Portion of the APE
NYS Museum Area 5532	Otter Pond I: Mashashimuet	Reported location of midden and a burial.	Undetermined	Western Portion of the APE
NYS Museum Area 5533	Otter Pond II	Reported location of a burial.	Undetermined	Western Portion of the APE

Six SHPO/OPRHP archaeological resources are known within one-mile of the APE, including the Long Pond Site (10309.000208), the A. Edwards Historic Site (10309.000300), the Otter Pond I Site (10373.000012), the Otter Pond II Burial (10373.000013), the Round Pond Site (10373.000014), and the Store Site (10373.000020) (**NY CRIS 2024**). Three additional NYS Museum Areas are also located within one-mile of the APE and these resources consist of NYS Museum Areas 4908, 5528, and 8333. Finally, one NYS Museum Site identified as Round Pond is located within one-mile of the APE (NYS Museum Site 5534) (**NY CRIS 2024**). The details of these previously documented resources are summarized in **Table 3.12**.

Table 3.12: Previously Recorded Archaeological Resources Located in One-Mile of the APE

Resource Number	Resource Name	Resource Type	NRHP Eligibility	Distance from the APE
10309.000208	Long Pond Site	Precontact: Flakes (chipped stone) and two projectile points found 4 to 9-inches (10.2 to 22.9-centimeters) below the ground surface.	Undetermined	0.37-Mile
10309.000300	A. Edwards Historic Site	Historic: Site has yielded more than 900 historic period artifacts, including glass, ceramics, food remains, and coal.	Undetermined	0.28-Mile
10373.000012	Otter Pond I: Mashashimuet Site	Precontact: Site with reported human remains.	Undetermined	0.02-Mile
10373.000013	Otter Pond II Burial	Precontact: Site with reported human remains.	Undetermined	0.05-Mile
10373.000014	Round Pond Site	Precontact: Site with reported human remains.	Undetermined	0.30-Mile
10373.000020	Store Site	Historic.	Undetermined	0.14-Mile
NYS Museum Area 4908	No Name	An extensive village reported in 1922.	Undetermined	0.10-Mile
NYS Museum Area 5528	Little Hog Neck	Large site, including midden, with potentially undisturbed portions.	Undetermined	0.95-Mile
NYS Museum Site 5534	Round Pond	A possible camp/village (?).	Undetermined	0.42-Mile
NYS Museum Area 8333	Quannontowunk/ Fort Montauk	A fort, village, and burials.	Undetermined	0.64-Mile

The NY CRIS indicates that the APE traverses two Archaeological Sensitive Areas. These areas are found in the western and central portion of the APE as shown in **Figure 11**. Consultation was initiated with SHPO/OPRHP for the project in late 2023 and a response was received on December 21, 2023 (see **Appendix K**). In the response letter, SHPO/OPRHP indicated that a Phase IA Literature Search and Sensitivity Assessment Survey was warranted because portions of the project area were located in

archaeologically sensitive areas and in areas known to contain Native American burial sites (**SHPO/OPRHP 2023**).

3.4.3.2 Architectural Resources

Numerous NRHP listed and NRHP eligible architectural resources are known immediately adjacent to the APE and within 0.50-mile of the APE. Many of these resources are included in several NRHP listed or NRHP-eligible Historic Districts that are traversed by the APE. Specifically, the APE intersects the NRHP listed Sag Harbor Village Historic District (94NR00635), Sag Harbor Hills, Azurest, and Ninevah Subdivisions (SANS) Historic District (18NR00103), and Sag Harbor Village District (90NR01941). In addition, the APE intersects the NRHP-eligible Sag Harbor Historic District – Boundary Increase 2020 (10309.000869). Finally, one individual architectural resource is located in the APE. This resource consists of Vacation Cottages (10303.000851) that have not been evaluated for inclusion in the NRHP. The details of the previously recorded architectural resources intersected by the APE are summarized in **Table 3.13**.

Table 3.13: Previously Recorded Architectural Resources Intersected by the APE

Resource Number	Resource Name	Resource Type	NRHP Eligibility	Location in the APE
18NR00103 10303.000855	Sag Harbor Hills, Azurest, and Ninevah Subdivisions (SANS) Historic District	Historic	Listed in the NRHP	Western Portion of the APE
90NR01941	Sag Harbor Village District	Historic	Listed in the NRHP	Western Portion of the APE
94NR00635	Sag Harbor Village Historic District	Historic	Listed in the NRHP	Western Portion of the APE
10303.000851	Vacation Cottages	Historic	Undetermined	Central Portion of the APE
10309.000869	Sag Harbor Historic District – Boundary Increase 2020 (Overlaps portions of the Sag Harbor Village Historic District)	Historic	Eligible	Western Portion of the APE

3.4.4 Potential Impacts of the Preferred Alternative

3.4.4.1 Archaeological Resources

Phase IB subsurface archaeological testing was completed by Chronicle Heritage in August 2024. The fieldwork included 272 STPs and the locations and results of the STPs trending from west to east along the APE are shown in **Figures 12-1 through 12-10**. No significant deposits or subsurface features were detected during the survey, and a total of 14 STPs were positive for historic artifacts, with more having features, such as terracotta drainpipes and fill materials that were not collected. Most of the encountered

artifacts date from the 19th century, and consist of nails, ceramic sherds, and glass fragments. None of the artifacts constituted newly recorded archaeological sites (**Chronicle Heritage 2024**).

Overall, the survey showed that the APE has a low sensitivity for intact archaeological sites. This was evidenced by the lack of cultural features and sites detected during the survey and the presence of numerous disturbances in the APE, such as utilities, that render the APE unlikely to retain intact subsurface archaeological resources (**Chronicle Heritage 2024**). Thus, no NRHP or State Register listed or eligible resources or locally designated archaeological resources will be impacted by the Preferred Alternative. For these reasons, the Preferred Alternative is not anticipated to impact archaeological resources, including any archaeological resources that could be considered historic resources pursuant to SEQRA and Section 14.09 of the NYS Historic Preservation Act. In comparison, the potential impacts to archaeological resources between the Preferred Alternative and the Proposed Action would be similar in nature, as no cultural materials were encountered during the Phase 1B testing completed for the Proposed Action.

3.4.4.2 Architectural Resources

The APE intersects the NRHP listed Sag Harbor Village Historic District (94NR00635), Sag Harbor Hills, Azurest, and Ninevah Subdivisions (SANS) Historic District (18NR00103), and Sag Harbor Village District (90NR01941). In addition, the APE intersects the NRHP eligible Sag Harbor Historic District – Boundary Increase 2020 (10309.000869). While the APE traverses these districts, none of the associated buildings are mapped in the APE. Finally, one individual architectural resource is mapped in the APE. This resource consists of eight Vacation Cottages (10303.000851) that have not been evaluated for inclusion in the NRHP. While the resource is mapped in the APE in the NY CRIS, a review of aerial imagery indicates that the buildings are located outside of the APE. Thus, no NRHP or State Register listed or eligible resources or locally designated architectural resources will be directly impacted by the Preferred Alternative. Further, the Preferred Alternative will not introduce any changes to the existing viewshed or cultural context as the majority of the project is proposed underground. For these reasons, no NRHP or State Register listed or eligible resources or locally designated architectural resources will be indirectly impacted by the Preferred Alternative. Thus, the Preferred Alternative is not anticipated to directly or indirectly impact architectural resources, including any architectural resources that could be considered historic resources pursuant to SEQRA and Section 14.09 of the NYS Historic Preservation Act. In comparison, the potential impacts to architectural resources between the Preferred Alternative and the Proposed Action would be similar in nature, as neither was to introduce any changes to the existing viewshed or cultural context, as the project is proposed underground.

3.4.5 Measures to Avoid, Minimize and Mitigate Potential Impacts

The Preferred Alternative is not expected to result in impacts to cultural resources. Specifically, no impacts are anticipated to known historic resources or potential historic resources. As such, no mitigation is proposed for historic resources.

3.5 Open Space and Recreation

3.5.1 Existing Conditions

The Preferred Alternative Area comprises public roadway ROWs, which do not constitute open space or recreational resources. However, several such resources are located along these roadways, adjacent to the Preferred Alternative Area (see **Figure 13**), including:

- Mashashimuet Park and Otter Pond – Privately owned and operated by a not-for-profit organization at the intersection of Main Street and Jermain Avenue containing 85± acres, which includes a tidal pond, tennis courts, basketball court, sports fields (baseball, softball, and soccer, with ability to accommodate other sports), playground, walking paths, grandstand, and open grass areas;
- Barcelona Neck Natural Resources Management Area – 400± acres on NYS Route 114, which includes the Barcelona Neck Cooperative Hunting Area and opportunities for hiking; NYSDEC-issued permit required for access; and
- Sag Harbor Golf Course – Nine-hole, par 35, 2,732-yard public golf course on 49± acres owned/operated by the OPRHP; located within the Barcelona Neck Natural Resources Management Area discussed above.

3.5.2 Anticipated Impacts

Construction of the Preferred Alternative will be contained within the public roadway ROWs and will not directly impact any open space or recreational resources. However, there are three public open space/recreational resources either adjoining the Preferred Alternative Area or in the case of the Sag Harbor Golf Course, the access road to the golf course adjoins the Preferred Alternative Area, as identified above in **Section 3.5.1**, to which access may potentially be affected by the proposed construction in the roadway ROW. All such potential impacts will be temporary and will be minimized to the extent practicable, primarily through timely outreach to coordinate with the respective facility owners/operators, who will be notified approximately one to two weeks in advance of work adjacent to their property. Upon construction completion, the Preferred Alternative Area will be restored to pre-construction conditions, with no further effect on adjacent properties. In comparison, the potential impacts to open space resources would have been greater under the Proposed Action due to its route through the Long Pond Greenbelt, a NYSDEC CEA. The Preferred Alternative will avoid the Long Pond Greenbelt, eliminating the risk of impacts to this area.

3.5.3 Proposed Mitigation

- The staging/laydown areas have been configured to avoid interfering with the use of driveways and other points of access between the public roadways in the Preferred Alternative Area and adjacent properties, including those containing public open space and recreational resources.
- Outreach will be undertaken to inform the owners/operators of the public open space/recreational resources about the construction schedule and adjust this schedule as appropriate to minimize impacts regarding public access to these resources.
- Any effects on access to public open space/recreational resources related to the Preferred Alternative will be temporary, with access never fully blocked, and all access to any given resource being restored upon completion of construction at that location. At the construction rate of approximately 200 linear feet of cable per day, access to any location would not be interrupted for a period of more than two to three days.

3.6 Critical Environmental Areas

Refer to Section 2.2.1.2 of the DEIS for background discussion regarding CEAs.

3.6.1 Existing Conditions

As illustrated in **Figure 14**, the Preferred Alternative Area is located within three CEAs and is contiguous to a fourth CEA, all of which are recognized as CEAs per 6 NYCRR §617.14(g) of the SEQRA regulations, as follows:

South Fork SGPA (located in the Town of Southampton and Town of East Hampton) – This CEA, within which the Preferred Alternative Area is situated, was designated by the Long Island Regional Planning Board on March 19, 1993, for the protection of groundwater.

Aquifer Protection Overlay District (located in the Town of Southampton) – This CEA, within which the Preferred Alternative Area is situated, was designated by the Town of Southampton on June 20, 1983, for the preservation of water quality.

Long Pond Greenbelt (located in the Town of Southampton) – This CEA, which the Preferred Alternative Area adjoins to the west, was designated by Suffolk County on February 10, 1988, as it was recognized as a benefit to human health and to protect drinking water.

Water Recharge Overlay District (located in the Town of East Hampton) – This CEA, within which the Preferred Alternative Area is situated, was designated by the Town of East Hampton on February 12, 1988, for the protection of groundwater and drinking water.

As indicated above, all of these CEAs pertain to the protection of groundwater/drinking water, with the Long Pond Greenbelt CEA also pertaining to surface waters.

3.6.2 Anticipated Impacts

As noted above in **Section 3.6.1**, all four CEAs within or adjacent to the Preferred Alternative Area pertain to the protection of groundwater resources, with one (Long Pond Greenbelt CEA) also pertaining to surface water resources. Since the Preferred Alternative has been designed to minimize impacts to both surface water and groundwater resources – see discussion and analysis in **Section 3.2.2.1** and **Section 3.2.2.3**, respectively, as well as the related discussion of mitigation measures in **Section 3.2.3** – the Preferred Alternative is not anticipated to significantly impact the resources associated with these CEAs. In comparison, the potential impacts to CEAs would have been greater under the Proposed Action due to its route through the Long Pond Greenbelt, a NYSDEC CEA. The Preferred Alternative will avoid the Long Pond Greenbelt and its associated wetlands, eliminating the risk of impacts to this area.

3.6.3 Proposed Mitigation

See the discussion of proposed mitigation with respect to surface water and groundwater resources in **Section 3.2.3** of this FEIS, which also will provide mitigation regarding potential impacts to the CEAs within or adjacent to the Preferred Alternative Area, since all four of these CEAs were established to protect groundwater and/or surface water resources.

3.7 Noise

3.7.1 Existing Conditions

Overview

This section of the FEIS summarizes the Sound Impact Study performed by TRC (noise consultant) to assess potential construction sound-level impacts at receptors in the vicinity of the Preferred Alternative Area. As was the case with the cable routing through the LIPA ROW presented in the DEIS, the underground cable in the Preferred Alternative will not generate operational noise; and, therefore, it was not necessary to include a post-construction assessment in the analysis. TRC's full Sound Impact Study is provided as **Appendix L** of this FEIS.

As described in detail in **Section 2.1** of this FEIS, the Preferred Alternative consists of the installation of a new 69-kV underground transmission cable along a 7.6±-mile route between the Bridgehampton Substation and the Buell Substation. The proposed cable will primarily be placed within public roadway ROWs in the Towns of Southampton and East Hampton; the middle portion of the cable route is situated within public roadway ROWs in the Village of Sag Harbor, which spans between the two Towns.

As shown in **Figures 15-1 through 15-16**, there is a wide range of land uses along the proposed cable route under the Preferred Alternative. From west to east, these land uses generally can be summarized as follows:

- The Bridgehampton Substation at the westerly terminus;
- Between the Bridgehampton Substation and the Village of Sag Harbor – Mostly low and medium density residential neighborhoods, along with some open space/recreation lands and a solid waste management facility;
- Through the Village of Sag Harbor – Mostly medium density residential neighborhoods, along with some open space/recreation lands, with scattered commercial and institutional uses;
- Between the Village of Sag Harbor and the Buell Substation – Mixed residential neighborhoods (mostly low-density), open space/recreation and agricultural lands, with a small industrial development near the Buell Substation;
- The Buell Substation is at the easterly terminus.

TRC's analysis of construction sound associated with the Preferred Alternative conformed to NYSDEC and U.S. Environmental Protection Agency (USEPA) guidance and best practices. The study included measuring ambient sound levels to determine existing conditions and considers construction noise under the Preferred Alternative generated by three construction practices: (a) standard trenching method which is proposed for cable installation along essentially the entire route, with the exception of the jack and bore installation method near the Buell Substation; (b) cable installation via HDD, which will occur at the location of the two culverts intersecting the route as well as potentially occurring at selected locations at the direction of the involved roadway agencies; and (c) manhole vault installation at fifteen locations as specified on the engineering plans. Trenching will include an excavator and dump truck as the primary sound sources. A typical HDD equipment configuration includes a drilling rig, excavator, mud pump, mobile crane, mixer truck, and generator as major sound sources. Manhole vault installation will employ a mobile crane. Other sound sources of lesser intensity such as light plants, light-duty trucks, and small

generators may also be used in the Preferred Alterative Area but will not appreciably affect overall sound impact when operating nearby the other major sound sources assessed.

Concepts of Environmental Sound

Sound pressure levels are typically presented in community noise assessments utilizing the noise metrics described below and expressed in terms of A-weighted decibels (dBA).

- "L_{10}" is the sound level that is exceeded for 10 percent of the measurement period. This metric is a measure of the intrusiveness of short-duration noise events that occurred during the measurement period.
- "L_{50}" is the sound level that is exceeded for 50 percent of the measurement period.
- "L_{90}" is the sound level that is exceeded for 90 percent of the measurement period and is a measure of the background or residual sound levels in the absence of recurring noise events.
- "L_{EQ}" is the is the constant sound level which would contain the same acoustic energy as the varying sound levels during the time period and is representative of the average noise exposure level for that time period.
- "L_{MAX}" is the instantaneous maximum sound level for the time period.

It is necessary to combine the sound pressure levels from multiple sources. Because decibels are logarithmic quantities, it is not appropriate to simply add the values of the sound pressure levels together. For example, if two sound sources each produce 70 dB and they are operated together, their combined impact is 73 dB. Four equal 70 dB sources operating simultaneously result in a total sound pressure level of 76 dB. In fact, for every doubling of the number of equal sources, the sound pressure level goes up another three decibels. A tenfold increase in the number of sources makes the sound pressure level increase by 10 dB, while a hundredfold increase makes the level increase by 20 dB. Perceived changes in sound level can be slightly more subjective; the average person will not notice a change of 1-2 dB, a 3 dB increase is just barely perceptible, while a 5 dB change is clearly noticeable. A 10 dB increase is perceived as being twice as loud.

Applicable Noise Standards and Regulations

NYSDEC's *Assessing and Mitigating Noise Impacts* provides the following guidance on proposed sound level increases in ambient sound levels by a new source:

- A 0-3 dB increase is considered to have no appreciable effects on receptors.
- A 3-6 dB increase may have potential for adverse noise impact only in cases where the most sensitive receptors are present.
- A 6+ dB increase may require a closer analysis of impact potential depending on existing sound pressure levels and the character of the surrounding land use and receptors.
- A 10+ dB increase results in a perceived doubling of sound level and deserves consideration of avoidance and mitigation measures in most cases.

The NYSDEC guidance assumes a background sound level of 45 dBA for a quiet or rural setting. The NYSDEC guidance comments on the existence of pure tones but does not include quantitative pure tone limits. NYSDEC guidance is not intended to establish decibel limits where otherwise not required by regulation, such as for noise generated during construction activities. NYSDEC does establish Best Management

Practices (BMPs) for any noise-generating activity, including but not limited to setting time-of-day restrictions, maximizing setback distances where possible, enclosing equipment, and coordinating with local residents or other stakeholders to minimize disruption at sensitive locations or during sensitive date ranges. These BMPs and applicability are discussed further in **Sections 3.7.2 and 3.7.3**.

Short-term Sound Monitoring Results

TRC performed a pre-construction ambient sound survey along the route of the Preferred Alternative on March 19, 20 and 21, 2024, to characterize the existing sound environment (i.e., background conditions). These measurements were taken for approximately ten minutes at each location during multiple time periods. The sound level meter was calibrated before and after each monitoring period. The protocols of the American National Standards Institute were followed, including the positioning of the microphone in reference to the ground, large reflecting surfaces, and tall trees. Ambient sound levels were recorded on a weekday on a non-holiday week at 12 measurement stations. At all measuring stations, data was collected in the morning (8:00 AM to 10:00 AM) and evening (4:00 PM to 6:00 PM). At three locations, nighttime ambient sound level measurements were also collected at nighttime (7:00 PM to 9:00 PM). The 12 measurement stations included in the analysis are identified below (and as illustrated in Figure 1 in the Sound Impact Study in **Appendix L**):

- MP-1: Intersection of East Hampton-Sag Harbor Turnpike (NYS Route 114) and Cove Hollow Road
- MP-2: Intersection NYS Route 114 and Harness Lane
- MP-3: Intersection of NYS Route 114 and Goodfriend Drive
- MP-4: NYS Route 114 at Northwest Woods Trailhead entrance
- MP-5: Intersection of NYS Route 114 and Wainscott NW Road
- MP-6: NYS Route 114 at Temple Adas Israel Cemetery
- MP-7: Intersection NYS Route 114 and Lighthouse Lane
- MP-8: Madison Street, south of Marsden Street intersection
- MP-9: Main Street (County Road 79) at parking area for Mashashimuet Park
- MP-10: Bridgehampton-Sag Harbor Turnpike (County Road 79), near Goldberg's Bagels
- MP-11: Intersection of Bridgehampton-Sag Harbor Turnpike (County Road 79) and Clay Pit Road
- MP-12: Bridgehampton Sag Harbor Turnpike (County Road 79) at LIPA overhead ROW

Table 3.14 depicts the existing sound levels at each of the monitoring locations listed above along the route of the Preferred Alternative. Nighttime measurements were taken at three representative locations, which were used to approximate nighttime sound levels at the other measurement locations for the calculation of Day-Night sound level (L_{dn}). The L_{dn} is an average of daytime and nighttime ambient sound levels (using the LA_{90} metric), with an added 10 dBA "penalty" added to the nighttime measurements and is used by the USEPA to determine limits for protecting public health and welfare by accounting for higher sensitivity to noise exposure at night (between 10:00 PM and 7:00 AM).

Table 3.14: Ambient Noise Monitoring Results Summary (see monitoring station locations in Figure 1 in **Appendix L**)

Monitoring Location	Monitoring Location Description	L_d (dB)	L_n (dB)	L_{dn} (dB)
MP-1	Intersection of NYS Route 114 and Cove Hollow Road	52.8	32.2	50.9
MP-2	Intersection NYS Route 114 and Harness Lane	46.5	32.2[1]	45.3
MP-3	Intersection of NYS Route 114 and Goodfriend Drive	53.2	32.2	51.4
MP-4	NYS Route 114 at Northwest Woods Trailhead entrance	51.8	32.2	50.0
MP-5	Intersection of NYS Route 114 and Wainscott NW Road	51.2	35.0[2]	49.7
MP-6	NYS Route 114 at Temple Adas Israel Cemetery	52.4	35.0	50.8
MP-7	Intersection NYS Route 114 and Lighthouse Lane	54.2	35.0	52.5
MP-8	Madison Street, south of Marsden Street intersection	46.2	35.0	45.8
MP-9	Main Street (County Road 79) at parking area for Mashashimuet Park	50.2	30.8	48.4
MP-10	County Road 79, near Goldberg's Bagels	48.2	30.8[3]	46.6
MP-11	Intersection of County Road 79 and Clay Pit Road	50.9	30.8	49.1
MP-12	County Road 79 at LIPA overhead ROW	45.9	30.8	44.6

Notes: *[1]Nighttime measurement collected at MP-2 is representative of MP-1, MP-3, and MP-4.*
[2]Nighttime measurement collected at MP-5 is representative of MP-6, MP-7, and MP-8.
[3]Nighttime measurement collected at MP-10 is representative of MP-9, MP-11, and MP-1.

During the ambient noise measurements, TRC took note of persistent environmental or anthropogenic sounds that could reasonably be expected to influence sound measurements or create non-ambient conditions. Given the proximity to roadways, all sites had varying levels of noise from traffic, fluctuating with time of day. During the evening (4:00 PM to 6:00 PM) measurement at location MP-1, trains passing on the LIRR created elevated sound levels for long enough duration to be significant to the L_{90} results. Since this is a routine occurrence during the measurement period, this is not considered a non-ambient condition. No noise-generating activities from nearby construction projects were observed during the background measurement periods.

3.7.2 Anticipated Impacts

The following is a summary of the analysis that was performed to assess the anticipated noise impacts of the Preferred Alternative for the installation of the proposed new 69kV underground transmission cable between the Bridgehampton Substation and the Buell Substation. Refer to the full Sound Impact Study in **Appendix L** of this FEIS for additional information, including detailed tables quantifying the sound modeling results.

As noted previously, no long-term increase in ambient sound levels is anticipated once the Preferred Alternative is completed and operational, as the proposed cable installation does not include sound-generating equipment or facilities.

The public roadway ROWs comprising the Preferred Alternative Area is bordered by various noise-sensitive areas (NSAs). A total of 57 NSAs were identified, which mostly contain residential uses (48 NSAs), but also include some institutional uses (3 NSAs, including a school, church and cemetery), commercial use (5 NSAs) and industrial uses (1 NSA) – see Table 4.1 in **Appendix L**.

For the purposes of the sound impact assessment for the Preferred Alternative, the following distinct major sound-producing construction activities were considered: trenching (along almost the entire 7.6±-mile cable route), trenchless cable installation via jack-and-bore (for a short segment of the route beneath the LIRR just north of the Buell Substation), and manhole vault installation (at 15 discrete locations, at approximately equal intervals along the cable route). Each of these activities will utilize a different combination and configuration of sound-producing equipment, including excavators, mobile cranes, dump trucks, an auger drilling rig, a concrete truck, a vacuum truck, pumps, and generators. Two locations of culverts crossing the Preferred Alternative Area will involve HDD and it is also possible that HDD may be used to a limited extent, for example if determined to be necessary at the direction of an involved regulatory agency for a roadway or intersection crossing. As such, a typical HDD equipment configuration including a drilling rig, excavator, mud pump, mobile crane, mixer truck, and generator as major sound sources was utilized for analysis.

Cadna-A® noise modeling was used to predict future sound levels during the various construction activities. Due to the linear nature of the Preferred Alternative, representative locations along the proposed cable route were selected for modeling based on proximity of the proposed construction to NSAs. Installation activities taking place at specific locations, such as trenching and manhole installation, were modeled at these locations based on engineering design drawings provided by PSEGLI.

The Cadna-A® noise model provides an estimate of sound levels at distances from sources considering various factors, including sound power levels from stationary and mobile sources, the effects of terrain features including relative elevations of noise sources, intervening objects such as buildings and sound barrier walls, and ground effects due to pavement and unpaved surface. The existing topography was used to create a terrain model based on USGS topographic data. A search radius of 2,000 feet from each receptor was used in the model to ensure that all noise sources contributing to the predicted noise levels were modeled at each NSA.

Table 6.1 in **Appendix L** lists the modeled octave band sound power levels and activities for the proposed equipment, as identified above. For the model's purposes, the equipment was assumed to be continuously operating at full load, although it is likely that sound sources will only operate simultaneously for short durations and may be intermittently idling or shut off. Sound source levels, where provided as sound pressure levels at a specified distance, were converted to sound power levels for use in the modeling application.

Construction of the Preferred Alternative will result in a temporary increase in ambient sound levels along the entire route of the proposed cable installation. However, the effects at any given location will be limited in duration, since daily construction will occur in relatively small areas and will progress at a fairly rapid pace along the cable route and will not involve concurrent work along the entire 7.6±-mile Preferred Alternative Area for the full 9-to-12-month construction period. The most intensive construction activities are expected to be completed at any specific location in no more than a few days. In particular, as

discussed in **Section 2.2.2**, the trenching work typically will progress at a rate of 200 feet per day or more, and the installation of each of the 15 manhole vaults and HDD conduit installation (e.g., under an intersection or roadway, if determined to be necessary) typically will be completed in a few days.

Tables 6.2, 6.3 and 6.4 in **Appendix L** summarize the projected operational sound levels at each of the monitoring points and NSA locations, the total projected sound levels at each location, and the projected increase in the sound level at each location. The sound level increases calculated by the modeling analysis at NSA locations range from values considered by NYSDEC to be "intrusive" (5 to 10 dBA increase) to values considered "very objectionable" (greater than 20 dBA increase), indicating that the need for mitigation should be considered, as discussed below in **Section 3.7.3**.

To the degree practicable, construction will occur during daylight hours, which will help to mitigate noise impacts to nearby NSAs. However, it is anticipated that some activities, such the installation of manhole vaults, will need to occur in the overnight period to reduce interruptions to peak traffic flow during daytime hours. In comparison, the potential impacts to areas along the Preferred Alternative due to noise, will be distributed across a larger, more densely populated area than under the Preferred Alternative due to its route through more densely populated areas. However, the noise impacts will be temporary in nature, with maximum noise impacts being similar in nature to the Proposed Action, with no operational noise being generated.

3.7.3 Proposed Mitigation

As discussed above in **Section 3.7.2**, no long-term increase in ambient sound levels is anticipated once the Preferred Alternative is completed and operational, as the proposed cable installation does not include sound-generating equipment or facilities. Therefore, no noise mitigation is required for operation of the Preferred Alternative upon construction completion.

During construction of the Preferred Alternative, all contractors will be required to utilize BMPs to minimize impacts to the surrounding area, including sound control devices on their equipment that are no less effective than those provided by the manufacturer. Contractors will also be required to maintain equipment in accordance with manufacturers' recommendations. Equipment will have muffled exhausts and equipment idling will be kept to a minimum.

If work is expected to occur in a single area for an extended period, such as for the installation of a manhole or the use of HDD, and there are nearby noise receptors, temporary sound barriers may be installed. Sound barriers can be built of materials with different reflective or absorptive properties that can reduce sound propagation from construction equipment to the surrounding area.

The noise mitigating properties of sound barriers can be described using several different metrics. Sound Transmission Class (STC) describes how well a barrier blocks sound from passing through it. Noise Reduction Coefficient (NRC) describes how well a material absorbs sound, with 0 being fully reflective and 1 being fully absorptive. A reflective barrier material, like concrete, can have a high STC rating without absorbing much of the sound and may be less effective for small areas (like drilling pits), as sound can be reflected between the walls.

The physical sound mitigation barriers considered in this assessment are:

- Mitigation Case 1: 8-foot-high construction site sound blanket, STC-21, NRC 0.75

- Mitigation Case 2: 16-foot-high sound curtain, STC-33, NRC 0.75

In both cases, the barriers are assumed to be placed in a rectangle around the perimeter of the proposed activity, fully enclosing all noise-producing equipment.

The modeling results show that the use of acoustical barriers can reduce sound levels by up to 10-20 dBA, which represents a significant reduction in the perceived sound and associated impacts at nearby receptors. Additional BMPs recommended by NYSDEC that could be implemented during construction of the Preferred Alternative to further reduce noise impacts include limiting noise-generating activities to daytime hours where practicable and coordinating with abutters about the date and duration of work near sensitive receptors and around public areas and events.

As discussed in **Section 3.7.2**, construction of the Preferred Alternative will occur during daylight hours, to the degree practicable, which will help to mitigate noise impacts to nearby NSAs. However, it is anticipated that some activities, such the installation of manhole vaults, will need to occur during the overnight period to reduce interruptions to peak traffic flow during daytime hours. For such nighttime work, construction impacts will be mitigated by means of the installation of physical sound barriers as discussed above, and through close coordination with the involved roadway agencies, as well as targeted outreach to the occupants in the affected NSAs.

3.8 Coastal Zone

3.8.1 Existing Conditions

Refer to Section 3.5.1 of the DEIS for background discussion regarding the New York State Coastal Management Program (CMP), which establishes policies for actions undertaken within the coastal area boundary.

As shown in **Figure 16**, the segment of the proposed cable route within the Village of Sag Harbor is in the coastal zone boundary. Therefore, that portion of the Preferred Alternative is subject to an assessment of consistency with the Village's approved Local Waterfront Revitalization Program (LWRP). The remainder of the Preferred Alternative Area – along Bridgehampton-Sag Harbor Turnpike between the Village and the Bridgehampton Substation and along NYS Route 114 between the Village and the Buell Substation – is not located within the coastal area boundary; and, therefore, these segments of the proposed cable installation are not subject coastal consistency review either by the Town of East Hampton under its approved LWRP or by New York State Department of State (NYSDOS) for actions in the Town of Southampton which does not have an approved LWRP.[5]

[5] For the Proposed Action presented in the DEIS, with cable routing through the LIPA ROW, the only area within the Limits of Disturbance that was located in the coastal area boundary pertained to the segment in the Long Pond Greenbelt. This portion of the coastal area boundary is situated in the Town of Southampton, which does not have an approved LWRP; therefore, the requisite coastal consistency assessment would have been undertaken by NYSDOS, which oversees implementation of the State CMP. However, the Preferred Alternative will not traverse the Greenbelt, or any other area in a municipality without an approved LWRP; and the cable routing along Bridgehampton-Sag Harbor Turnpike is situated just outside the coastal area boundary. Therefore, NYSDOS will no longer be involved in the coastal consistency assessment under the Preferred Alternative as it would have been under Proposed Action.

3.8.2 Anticipated Impacts

As a portion of the Preferred Alternative Area is located within the coastal zone boundary, specifically within the Village of Sag Harbor section of this boundary, an assessment of consistency with the Village's LWRP is necessary. The Village's LWRP was originally approved in 1986. A Harbor Management Plan (HMP) component for the LWRP was approved in 1999; and an amendment to the LWRP/HMP was approved in 2006.

The provisions for the coastal consistency assessment with respect to the Village of Sag Harbor LWRP are set forth in Chapter 275 of the Village Code, titled Waterfront Consistency Review. The Village Harbor Committee undertakes this review, which evaluates the consistency of each Unlisted or Type I Action under SEQRA with 12 coastal policies specified in the LWRP. This review is based on information provided in a Coastal Assessment Form (CAF) completed by the applicant/project sponsor. A CAF was prepared for the Preferred Alternative as part of this FEIS, included as **Appendix M** and summarized below.

The Village's 12 LWRP policies cover a range of coastal issues, including land development, protection of ecology, marine resources, flooding and erosion, water quality, public access and recreation, historic and archaeological resources, air quality, and waste management. Therefore, there is substantial overlap between the topics addressed in the Village's coastal consistency assessment and content presented in other sections of this FEIS.

Overall, the Preferred Alternative will not have an adverse effect with respect to the coastal policies in the Village of Sag Harbor's LWRP[6]. Installation of the new 69-kV underground transmission cable will be confined within roadway ROWs through the Village, including Main Street (County Road 79), Jermain Avenue, Madison Street, Harrison Street and Hampton Street (NYS Route 114), involving temporary disturbance to excavate a four-foot-wide trench for cable placement, as well as four manhole vaults (each with an excavation area of 240± square feet) within which cable segments will be spliced. Additionally, there will be areas of incidental disturbance along the adjacent unpaved roadway shoulders (still within the roadway ROWs), outside the excavation footprint, which will be used for construction staging and laydown. All areas of disturbance will be restored in-kind upon the completion of construction, such that no-long-term impacts will result from the Preferred Alternative.

As discussed in **Section 3.8.1**, the Village of Sag Harbor is the only portion of the Preferred Alternative Area located within the coastal zone boundary. Therefore, the segments of the cable route between the Village and the two substations are exempt from coastal consistency review and are presumed by the relevant regulations not to pose the potential for adverse impacts to the designated coastal zone.

In comparison, the potential impacts to coastal zones between the Preferred Alternative and the Proposed Action will be similar in nature, as both would be consistent with the policies set forth in all coastal zone plans.

3.8.3 Proposed Mitigation

- Disturbance to the coastal zone associated with the Preferred Alternative predominantly will occur within areas of roadway pavement, in which trenching will occur during construction to install the new 69-kV underground transmission cable.

[6] Policy 12 of the Village LWRP pertains to the use and development of energy resources and is not addressed in the consistency review conducted by the Harbor Committee.

- Installation of the Preferred Alternative will not increase the extent of impervious surfaces in the coastal zone.
- Limited areas of disturbance in the coastal zone under the Preferred Alternative that extend outside existing pavement will be restored as soon as practicable upon the completion of construction using appropriate native plantings.
- All areas of the coastal zone disturbed under the Preferred Alternative will be subject to mitigation measures set forth in the site-specific SWPPP and associated Erosion and Sediment Control Plan (see **Appendix F**).
- Construction in the vicinity of Mashashimuet Park will be coordinated with the owner/operator to ensure that potential site access impacts to this recreational asset are avoided or properly mitigated. A path of ingress and egress will be maintained during the single day work will be performed near the entrance.

3.9 Construction-Related Impacts

Impacts related to construction of the Preferred Alternative may include noise, erosion and sediment transport, airborne dust, on-site vehicle/truck activity, and traffic on local roadways. Construction impacts are short term and intermittent in nature, largely contained on site, and will cease when construction is completed. The overall construction period is projected to be approximately 9-12 months (not including any seasonal work closures that may apply, which may limit or eliminate construction in the summer season, for example) and are to be completed in a single phase. As illustrated in the engineering drawings (see **Appendix D**), storage and staging of the construction equipment and materials will occur within the roadway ROW, immediately outside the LOD, in locations that do not interfere with driveways and other access to adjacent properties. Construction activities will typically occur Monday through Friday from 7:00 AM to 7:00 PM. Occasional Saturday work may be required. Simultaneous construction of the underground cable and manhole installation could potentially occur.

Potential impacts related to noise will be moderated primarily by limiting most construction activities to weekdays between the hours of 7:00 AM and 7:00 PM, with the exception of the NYS Route 114, which may require that work be performed between 10:00 AM and 3:00 PM, or overnight depending on the scope. The Preferred Alternative proposes installation via open trenching along the entire cable route, except for a short segment under the LIRR just north of the Buell Substation in which the jack-and-bore method will be used. Open trenching will generate intermittent and transient noise along the entire segment of open trenching, with the area affected at any given time gradually progressing along the route as the work is completed in small sections. The jack-and-bore method primarily will generate temporary noise due to construction activities in the entry and exit pits. Where HDD is used for portions of the Preferred Alternative as needed, there similarly would be an increase in sound levels primarily at the entry and exit pits.

In addition to maintaining regular construction hours, PSEGLI will conduct an enhanced outreach program to coordinate potential scheduling adjustments where possible and inform residents about the construction schedule and resultant increase in noise levels.

Erosion and sediment transport will be mitigated by adherence to the site-specific SWPPP (see SWPPP in **Appendix F**, including an erosion control plan prepared in accordance with the NYC Standards and Specifications for Erosion and Sediment Control (Blue Book). Measures such as silt fencing, inlet protection, slope stabilization measures, and other best management practices will be utilized to minimize erosion, sediment transport and airborne dust generation during construction. Dust control, which

includes the use of watering trucks, as needed, and limiting the extent of the area of disturbance at any given time, will reduce the potential for fugitive dust generation. The general topographic character of the Preferred Alternative Area, within public roadway ROWs, is level to gently sloping, which will moderate the magnitude of potential soil erosion as compared to construction in areas of steep slopes as previously pertained to the Proposed Action involving cable routing though the LIPA ROW.

Construction vehicle and truck activity during cable installation will be intermittent and dispersed. Limiting hours of operation primarily to weekdays between 7:00 AM and 7:00 PM for most construction, with the exception of the NYS Route 114 which may require that work be performed between 10:00 AM and 3:00 PM, or overnight depending on the scope will assist in minimizing potential impacts.

PSEGLI engaged KAG Engineering, PLLC to conduct a Traffic Impact Evaluation and Assessment for the Proposed Action for cable installation in the LIPA ROW as presented in DEIS Appendix V. The impact analysis and mitigation strategies provided in that study remain valid for the roadways along which the proposed cable will be installed under the Preferred Alternative.

The roadways along the cable route for the Preferred Alternative are identified in **Table 3.15**. Temporary work zone traffic controls will be required for various construction activities including trenching of the underground cables, manhole construction, and cable pull through when these activities directly intersect or are within proximity to these roadways.

Table 3.15: Preferred Alternative Roadway Routing

ROADWAY	NYSDOT CLASSIFICATION	POSTED SPEED LIMIT	AVERAGE ANNUAL DAILY TRAFFIC (AADT)*	ROADWAY CONFIGURATION
County Road 79 (Bridgehampton-Sag Harbor Turnpike/Main Street)	Principal Arterial	35 MPH	10,416/11,348	2-Lane, 2-Way
Jermain Avenue	Local	20 MPH	N/A	2-Lane, 2-Way
Madison Street	Minor Arterial	25 MPH	3,006	2-Lane, 2-Way
Harrison Street	Local	30 MPH	N/A	2-Lane, 2-Way
NYS Route 114 (Hampton Street/East Hampton-Sag Harbor Turnpike)	Principal Arterial	35-45 MPH	11,190	2-Lane, 2-Way
Cove Hollow Road	Local	30 MPH	2,340	2-Lane, 2-Way

* AADT is the total volume of vehicular traffic for a year divided by 365 days. All traffic volume information was provided by NYSDOT for 2022. AADT data are not provided by NYSDOT for Jermain Avenue or Harrison Street.

When working within roadways, approximately 200 feet of trench can be installed daily. Roadways will generally remain open with reduced lanes and traffic controls during active construction. At the end of each workday, the trench is typically closed, and temporary asphalt or steel plates are placed, allowing the roadway to remain fully opened until the subsequent workday. Maintenance and Protection of Traffic (MPT) signage will be installed on the roadway to alert the traveling public of trucks entering and exiting. MPT signage will be placed on the roadway in both travel directions approaching the construction zone. Signs will be placed based on the posted speed limit and as detailed in NYSDOT 619-11, Table 619-4, Advance Warning Sign Spacing (see Appendix V in the DEIS). In all areas where the construction activities

will occur within a lane of the roadway, the MPT will follow the NYSDOT 619-60 specification titled "Flagging Operation 2-Lane 2-Way Roadway Standard Detail," which typically consists of closing the roadway in one direction and using an Alternating, One Way Traffic MPT protocol with flaggers to move vehicles around the approximately 200-foot-long work area. When construction will occur within the center of the roadway and when manhole vaults are installed, it is expected that the roadway will be closed and the MPT will follow the NYSDOT 619-66 specification entitled "Road Closure with Off Site Detour 2-Lane, 2-Way Roadway."

The roadways in which work will occur under the Preferred Alternative are owned and maintained by various governmental agencies, as follows:

- Suffolk County Department of Public Works – Bridgehampton-Sag Harbor Turnpike/Main Street (County Road 79).
- Village of Sag Harbor Highway Department – Jermain Avenue, Madison Street, and Harrison Street.
- NYSDOT – NYS Route 114.

PSEGLI has commenced outreach to the involved roadway agencies and will continue with these agencies prior to commencing any work to ensure compliance with traffic safety standards and other agency requirements. Further, any work occurring within the portion of the ROW to the north of the Buell Substation owned by the LIRR will include a permit and coordination with that agency to ensure construction will safely be conducted in this area.

In comparison, the potential construction impacts between the Preferred Alternative and the Proposed Action would be similar in nature.

3.10 Cumulative Impacts

As detailed in Section 4.2 of the DEIS, PSEGLI has formulated a program of improvements to the South Fork T&D System consisting of multiple projects, which will yield cumulative benefits to the eastern end of Long Island by accommodating anticipated growth and development in the region, to ensure reliable electric service to LIPA customers. These future projects, along with installation and operation of the Preferred Alternative-, will mitigate customer outages and enhance the capability of the South Fork T&D System to meet system needs. This area has been growing in terms of electrical demand at a net average annual rate of about 1.75 percent since 2009. The forecasted net average annual electric load growth for that area for the next 10 years is approximately 1.7 percent per year. The modification of the Proposed Action to the current Preferred Alternative does not diminish this essential benefit, purpose and need, and entails fewer environmental impacts.

It is also important to highlight that the potential adverse effects associated with the Preferred Alternative pertain entirely to construction activities, with no long-term impacts associated with the operation of the completed 69-kV transmission cable. These circumstances avoid the potential for long-term cumulative impacts associated with a demand on environmental resources during the operational phase of a project, such as loss of wildlife habitat, water consumption, and increased need for community services; and there will be no post-construction noise or traffic generation resulting from implementation of the Preferred Alternative. Moreover, it is estimated that construction activities within the roadway ROW for the

Preferred Alternative will proceed at approximately 200 feet of underground cable installation per day; therefore, site disturbance and utility installation at interval locations are anticipated to be of short duration, on the order of a few days or less at any given location, as work progresses along the 7.6±-mile cable corridor. It is also important to recognize that the Preferred Alternative has been designed to minimize construction-related impacts to the degree practicable through the routing of the proposed cable within existing public roadway ROWs, limiting areas of disturbance, and other mitigation strategies described in this FEIS.

Section 4.2 of the DEIS identifies several PSEGLI projects that are anticipated to be under construction either preceding, at the same time as, or closely following, the construction period for the Preferred Alternative and include upgrades to the Bridgehampton and Buell Substations. However, as discussed therein, the other planned projects are not expected to result in a combined impact with construction activities associated with the proposed new 69-kV underground transmission cable. Combined with the Preferred Alternative, these other planned projects will yield cumulative benefits to the East End of Long Island by accommodating anticipated growth and development in the region, providing reliable electric service to customers, mitigating customer outages, and enhancing the capability of the South Fork T&D System to meet system needs.

The list of other PSEGLI projects that are proposed to meet the electrical needs of the South Fork through the year 2030 identified in Section 4.2 of the DEIS remains valid, although there have been some slight adjustments in the schedule (e.g., some projects have been completed and the anticipated completion date for some others has been extended). It is also noted that two additional projects have been completed which were not identified in the DEIS:

- Amagansett 23 kV Conversion to 33 kV, which was completed June 2023; and
- Navy Road 23 kV Conversion to 33 kV, which was completed June 2023.

3.11 Adverse Impacts that Cannot be Avoided

As detailed in the preceding sections of this FEIS, the Preferred Alternative will not result in significant adverse impacts, and to the extent that there are impacts, these will be temporary and minimized through mitigation techniques that will be implemented during construction. The Preferred Alternative involves the subsurface installation of a cable within public roadway ROWs and the in-kind restoration of areas of disturbance, therefore, there will be no long-term adverse impacts, and important public benefits will result with respect to the resiliency and reliability South Fork T&D System. Nonetheless, unavoidable adverse impacts may result from the Preferred Alternative which cannot be fully avoided or mitigated by applying reasonable mitigation methods and techniques, including the following:

- There will be a temporary increase in noise and vibration associated with excavation for the cable trench, installation of the manhole vaults and other construction activities. However, such impacts will be localized to the immediate proximity of the construction work and will quickly shift along the route of the Preferred Alternative as the cable installation progresses.
- Pervious areas will be disturbed at the two substations to install the proposed underground cable. However, these areas will be restored in-kind upon the completion of construction.
- Pervious surface areas along the out edges of the roadway ROWs will experience temporary, incidental disturbance to accommodate laydown/staging of equipment and materials. However,

these areas will not require any clearing, grading or excavation, and will be restored as necessary with appropriate native species upon completion of construction.

- Construction vehicle activity on local roadways will temporarily increase in the Preferred Alternative Area and on adjacent roadways.
- Temporary, localized noise and ground vibration will result from the operation of construction vehicles and equipment.
- There will be short-term traffic impacts due to lane closures during installation of the proposed underground transmission cable. However, appropriate MPT methods will be used to ensure continuity of traffic flow and minimize such impacts, including the use of Alternating, One-Way Traffic with flaggers to safely direct vehicles around the work area. Administrative controls, such as public notifications and correspondence through PSEGLI External Affairs, will also be implemented to ensure that the public is properly informed in advance of planned lane closures and detours.
- When working within roadways, excavations will be closed at the end of each workday, using temporary asphalt pavements or steel plates, so that the roadway is fully open until the ensuing workday.
- All necessary details for road closures and detours will be addressed in the applicable road opening permit requirements of the jurisdictional agencies involved.
- There will be a slight increase in worker vehicular traffic on area roadways at the start and conclusion of each work shift.
- For the two sections of the route that traverse culverts as well as if the need arises for the use of HDD to install portions of the proposed cable at the direction of the involved roadway agencies, a water supply will be needed to create the slurry for borehole stabilization. Water will be obtained from local hydrants, permission for which will be obtained from the SCWA. Water use for any HDD operations will be minimized via recycling to the maximum extent practicable, and any wastewater generated during drilling activities which cannot be reused will be collected in slurry tanks and transported for disposal at an approved facility licensed to accept this type of waste.
- Minor localized air quality impacts may temporarily result from fugitive dust generation during soil disturbance and emissions from petroleum-fueled construction equipment. Dust generation will be controlled to the degree practicable by implementing standard control measures, such as soil wetting. Equipment emissions will be minimized by proper maintenance practices.

These above-listed unavoidable impacts of the Preferred Alternative are all considered to be short-term, will be mitigated to the maximum extent practicable, and will be eliminated upon the completion of construction. No permanent unavoidable impacts will result from the operation of the Preferred Alternative.

3.12 Irreversible and Irretrievable Commitment of Resources

Certain resources, both natural and man-made, will be utilized in the construction and operation of the Preferred Alternative, including raw materials used in construction and manufacturer of the components of the proposed cable and related components (e.g., copper, aluminum, concrete, plastics, etc.), and energy used for construction and maintenance, such as nonrenewable fossil fuels (i.e., diesel fuel, gasoline, and motor oil for tools and equipment). These resources and materials are considered irretrievably committed as they will not be available for reuse.

As discussed previously, the Preferred Alternative Area predominantly comprises impervious roadway surfaces in which the cable will be installed via trenching; and, thereby, will not require a commitment of vegetative cover or plant or animal habitat for installation of the proposed cable. Limited areas of vegetated surfaces will be disturbed for the proposed cable installation. However, compensation for the commitment of existing ecological resources in these pervious areas of proposed disturbance will be achieved by restoration with appropriate native vegetation. This includes:

- Small areas of vegetation along the roadway shoulders will be disturbed for the installation of manhole vaults extending beyond the edge of pavement. However, these areas currently contain typical roadside vegetation having low habitat value, which is subject to mowing and other regular maintenance activities and will be replanted upon the completion of construction.
- Areas of incidental disturbance accommodating laydown/staging of equipment and materials during construction will not undergo clearing, grading or excavation. These areas also contain maintained roadside vegetation with low habitat value and will be replanted as necessary upon the completion of construction.
- The proposed LOD to the north of the Bridgehampton Substation has been previously disturbed. To the degree that the removal of existing vegetation is necessary to allow trenching, replanting/restoration will occur.
- The cable route to the immediate north of the Buell Substation extends through a small area of woodland between Cove Hollow Road and the LIRR. Excavation in this area under the Preferred Alternative includes a small segment of trenching and the entry pit for the jack-and-bore drilling operation. To the degree that tree removal becomes necessary, replanting with suitable native species will also occur in this area.
- Impacts to existing trees located outside, but in close proximity to the LOD will be avoided by the installation of temporary protective barriers.

As indicated above, although the temporary clearing of some vegetation will occur within the Preferred Alternative Area, installation of the proposed underground cable will not cause any permanent loss of vegetated areas, since all disturbed vegetated areas will be restored with appropriate native plant species. In comparison, Irreversible and Irretrievable Commitment of Resources would have been greater under the Proposed Action due to its route through the Long Pond Greenbelt which is a NYSDEC CEA, and its potential permanent impacts to this area. The Preferred Alternative will avoid the Long Pond Greenbelt and its associated wetlands, eliminating the risk of impacts to this area.

3.13 Effects on the Use and Conservation of Energy Resources

Refer to Section 4.5 of the DEIS for background discussion on this topic. In summary, as was true for the Proposed Action presented in the DEIS, the Preferred Alternative will contribute to the development of a robust and adaptable transmission and distribution grid that will ultimately help to facilitate the integration of renewable technologies consistent with New York's Clean Energy Standard, which is designed to address climate change, reduce harmful air pollution, and ensure a diverse and reliable low-carbon energy supply, as well as the Climate Leadership and Community Protection Act, which aims to achieve 100 percent zero-emission energy by 2040.

3.14 Growth-Inducing Aspects

Refer to Section 4.6 of the DEIS for background discussion on this topic. In summary, it is expected that the full-time residential population and overall development will increase within the entire East End, with or without the proposed new 69-kV underground transmission cable between the Bridgehampton Substation the Buell Substation. This growth will undoubtedly increase the demand on infrastructure, notably including energy supply. As such, implementation of the Preferred Alternative will not induce new growth in the area; rather, the new infrastructure is needed to serve such growth that is already anticipated, which is controlled by zoning and application review/approval authority of local municipalities. Furthermore, the need for the Proposed Action is demonstrated in Section 1 of the DEIS and **Section 2.3** of this FEIS, a circumstance that remains true for the Preferred Alternative.

3.15 Environmental Justice

The Preferred Alternative Area is within two Potential Environmental Justice Areas (PEJAs) designated by NYSDEC. A PEJA (Census Block 15000US361031907041) lies on both sides of Bridgehampton-Sag Harbor Turnpike between the Bridgehampton Substation and the Village of Sag Harbor; and a second PEJA (Census Block 15000US361032009026) adjoins the east side of NYS Route 114 between the Village of Sag Harbor and Stephen Hands Path.

NYSDEC states that, “Environmental Justice is the fair and meaningful treatment of all people, regardless of race, income, national origin or color, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies.” Environmental Justice was instituted by executive order of President Clinton in 1994 with the intent to “focus federal attention on the environmental and human health conditions of minority and low-income populations with the goal of achieving environmental protection for all communities.”

NYSDEC Commissioner Policy 29 outlines the means for incorporating Environmental Justice issues into NYSDEC’s environmental permit review process, enforcement program, grants program, and public participation process, as well as NYSDEC’s application of SEQRA so that minority and low-income populations are not disproportionately impacted by adverse environmental and health effects. Environmental Justice standards also seek to promote nondiscrimination in federal programs affecting health and the environment and to provide minority and low-income communities the opportunity to access public information and participate in decision-making activities that may affect their health and environment.

PEJAs are defined by NYSDEC as U.S. Census block groups with 250 to 500 households having populations that meet or exceed at least one of the following statistical thresholds:

1. At least 52.42 percent of the population in an urban area reported themselves to be members of minority groups;
2. At least 26.28 percent of the population in a rural area reported themselves to be members of minority groups; or
3. At least 22.82 percent of the population in an urban or rural area had household incomes below the federal poverty level.

According to the information on the NYSDEC PEJA website:

- Census Block 15000US361031907041 has a recorded total population of 586, with 46.73 percent considered to be minority and 2.71 percent below the poverty level
- Census Block 15000US361032009026 has a recorded total population of 301, with 29.54 percent considered to be a minority and 4.91 percent below the poverty level.

The implementing regulations of SEQRA, at 6 NYCRR Part 617, do not specify Environmental Justice standards, policies, recommendations, or procedures or any known mandate for local implementation.

The main issues pertaining to Environmental Justice include:

- potential environmental impacts that may disproportionately affect a low-income and/or minority community;
- the need to investigate, prevent and/or suitably mitigate such environmental impacts; and
- the need to take steps to assure that information is easily accessible to all members of the public, and ample opportunities are provided for public participation including low-income and/or minority communities.

This FEIS, in conjunction with the prior DEIS, thoroughly investigates potential environmental impacts associated with the Preferred Alternative with the goal of determining whether there will be any potentially significant adverse environmental impacts and how best to prevent or suitably mitigate them so there will be no significant harm to the surrounding community, while acknowledging the public benefits of the proposed new 69-kV underground transmission cable. These considerations support the conclusion that there will not be a disproportionate impact on disadvantaged individuals, particularly given that the Preferred Alternative involves an underground installation within public roadway ROWs which will have no long-term impacts upon the completion of construction. In comparison, the potential impacts to Environmental Justice Areas between the Preferred Alternative and the Proposed Action would be similar in nature, as both would traverse the same mapped Environmental Justice Areas.

Potential Environmental Justice Impacts

Federal guidance provided by the USEPA defines Environmental Justice as:[7]

> *the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved when everyone enjoys:*
>
> - *The same degree of protection from environmental and health hazards, and*
> - *Equal access to the decision-making process to have a healthy environment in which to live, learn, and work.*

The environmental review process and the usual public outreach for this type of application provide significant opportunities for public and agency input to ensure that environmental impacts are identified and avoided, minimized or mitigated to the maximum extent practicable. The primary responsibility for addressing the above criteria is typically with the decision-makers, who are guided by existing NYS, County and local regulations relating to land development, environmental reviews, and public outreach and participation.

[7] Website address: https://www.epa.gov/environmentaljustice

The information sharing and public outreach plan for the Proposed Action (as currently modified to the Preferred Alternative) has involved or will involve the following:

1. Inclusion of an Environmental Justice component for the impact analysis in this FEIS.
2. Holding of an initial public information session, in connection with the DEIS.
3. Holding of public hearing on June 28, 2022, at which the opportunity was provided for public comment on the DEIS.
4. Planning a follow-up public information session, to be scheduled, in connection with the issuance of this FEIS for public and agency consideration.
5. Distributing essential information to involved and interested agencies (e.g., lead agency coordination correspondence, DEIS, FEIS, and SEQRA Findings pursuant to SEQRA).
6. Other involved agencies have their own environmental reviews, hearings, and public outreach and participation requirements, and provide additional opportunities for oral or written comments.

The above steps in the SEQRA and public outreach processes have provided, and will continue to provide, various times, locations and methods for persons, organizations, agencies, and their respective representatives, including minority populations and persons of limited income, to receive information and review facts, data, studies and reports regarding the Proposed Action, and to provide input, identify issues and concerns, express opinions and make recommendations on the record for decision makers to consider. Moreover, applications, plans, SEQRA documents, resolutions, and other pertinent materials are readily available to the public for in-person review. SEQRA filings and notifications of associated hearings are also published in the NYSDEC's Environmental Notice Bulletin (ENB) to inform the public and involved and interested agencies of the status of projects. The SEQRA review process for the Proposed Action has already spanned several years (the Positive Declaration was issued in April 2021), with numerous opportunities for the public and local organizations and people of all backgrounds to reach out to public officials and staff, including planned future opportunities in connection with the completion of this FEIS.

In addition to the above, in accordance with the requirements of SEQRA, the Preferred Alternative must be reviewed, and project-related impacts must be identified and mitigated to the maximum extent practicable in order to receive a positive findings statement that would allow for project approval. This FEIS, in conjunction with the prior DEIS, provides a thorough review of numerous environmental topics to achieve this objective. The Preferred Alternative is consistent with the use of public roadway ROWs for utility installations of the type that is being contemplated under the Preferred Alternative discussed in this FEIS.

4.0 Public Comment and Response

Comments received during the public review of the DEIS for the Proposed Action have been categorized by topic, with similar comments grouped together, and summarized or excerpted for the purpose of providing responses, as described in **Section 1.2** of this FEIS. The comments received by the Lead Agency (LIPA), are sorted by topic in a manner similar to that employed in the DEIS and are presented below, along with the Lead Agency's responses. Note: Records of all comments received during the public review of the DEIS are numbered and are included as **Appendices A, B, and C**.

As discussed in the preceding sections of this FEIS, based on comments received during the public review period for the DEIS, the Proposed Action was re-evaluated by PSEGLI planning, engineering, and construction and the preferred cable route was revised to mitigate and avoid potential significant adverse environmental impacts. The Proposed Action presented in the DEIS, involving the installation of a new underground 69kV transmission cable between the Bridgehampton Substation and the Buell Substation routed within the existing LIPA ROW, has been replaced by the Preferred Alternative, which involves a slight modification (rerouting to avoid conflict with Pierson Middle/High School) of Alternative 2 presented in the DEIS with the cable to be installed within public roadway ROWs to the north of the two substations. To the degree that any given comment on the DEIS relates specifically to the LIPA ROW which was previously proposed for the cable routing, the response below points to the revision of the Proposed Action to the Preferred Alternative as directly addressing the comment. However, when a comment raises a broader issue of potential impacts on environmental resources (e.g., wetlands, groundwater resources, endangered and threatened species, archaeological resources, etc.), the response also addresses the issue in terms of whether the Preferred Alternative involves anticipated impacts to these resources within and adjacent to the area in which the cable routing currently is proposed.

4.1 SEQRA Process

Comments PH-4, PH-8, PH-9, IC-89, IC-91, and IC-104

> *These comments reflect the need for community engagement and public participation in the SEQRA process.*

Response: The SEQRA process for the Proposed Action has included multiple opportunities for public participation, in accordance with the requirements of the applicable regulations, including:

- Public comments were received on the Draft Scope, in accordance with 6 NYCRR §617.8(d) of the SEQRA regulations. These comments were considered in preparing the Final Scope, which defined the outline for the required content for the DEIS.
- A public hearing was held on June 28, 2022, to receive comments on the accepted DEIS. This hearing is optional under SEQRA, per 6 NYCRR §617.9(a)(4) of the regulations. A livestreaming option was provided for remote attendance and participation at this hearing.
- An additional opportunity for public engagement will be provided to discuss this FEIS and the Preferred Alternative which is currently being pursued in lieu of the Proposed Action that was presented in the DEIS.

As discussed in **Section 1.0** of this FEIS, based on input received through the community engagement and public participation process, which was undertaken during the review of the DEIS, the Proposed Action

was re-evaluated by PSEGLI planning, engineering, and construction, and the design of the Proposed Action was reconsidered to address public concerns regarding potential adverse impacts.

Comments AC-7 and AC-19

> *"… the County reserves the right to comment on the Proposed Action in the future and wants to be kept informed of all actions pursuant to the SEQRA Environmental Impact Statement and permitting process, and requests the opportunity to continue to participate in the review of the project as additional information becomes available through these processes."*

Response: Suffolk County was identified as an Involved Agency for the Proposed Action because easements from the County would have been required for the cable to be routed across certain parcels of County-owned land within the LIPA ROW between the Bridgehampton and Buell Substations. As required by SEQRA, Suffolk County has been informed during each step of the process, including notifications of a Positive Declaration (provided on April 13, 2021), during scoping (provided on May 12, 2021 and July 9, 2021), for publication of the DEIS, public hearing on the DEIS, and associated comment period for the DEIS (provided May 18, 2022). Additionally, meetings have been held with Suffolk County staff and officials regarding the Preferred Alternative. On December 4, 2023, PSEG Long Island External Affairs notified Assemblyman Fred Thiele, Southampton Town Supervisor Jay Schneiderman, Southampton Supervisor-elect Maria Z. Moore, East Hampton Supervisor Peter Van Scoyoc, East Hampton Supervisor-elect Kathee Burke-Gonzalez, Legislator Bridget Fleming, and Sag Harbor Mayor Thomas Gardella of the new proposed route, the Preferred Alternative. All were supportive of PSEGLI's efforts. The County will continue to be notified as required under SEQRA and will have the opportunity to review and consider all information and documentation as it is published, including this FEIS.

It is noted that Suffolk County's agency involvement has changed with the revision in the cable routing presented in this FEIS. The currently proposed routing under the Preferred Alternative follows public roadway ROWs between the Bridgehampton and Buell Substations, including the segment of Bridgehampton-Sag Harbor Turnpike and Main Street (County Road 79) extending northward from the Bridgehampton Substation into the Village of Sag Harbor. This roadway is under the jurisdiction of the Suffolk County Department of Public Works (SCDPW).[1] Because the DEIS proposal for cable routing along the LIPA ROW has been eliminated, the easement approvals within this ROW will not be necessary and the County agencies that previously had jurisdiction over the approval of these easements on County properties are no longer considered under SEQRA to be Involved Agencies under the Preferred Alternative. However, these agencies will continue to be included on the distribution list for SEQRA notices and document distribution (including this FEIS) in connection with the Preferred Alternative.

Comment AC-9

[1] As a courtesy, LIPA will obtain permits from and consult with SCDPW, as well as the Village of Sag Harbor Highway Department (for Jermain Avenue, Madison Street and Harrison Street) and the Town of East Hampton Highway Department (for Cove Hollow Road). However, LIPA is not subject to municipal regulations and formal approval from local roadway agencies is not required.

"The DEIS notes that a consultation was conducted with the State Historic Preservation Office (SHPO). We would also recommend that a consultation be conducted with the Tribal Historic Preservation Office (THPO). This consultation should be done to determine whether consultation rights of Indigenous and Tribal peoples, particularly the Shinnecock Indian Nation, over ancestral lands and natural resources may be triggered. We believe this THPO consultation is required as part of the Federal permitting process."

Response: The Preferred Alternative is funded, will be constructed, and is under consideration for approval by LIPA, a New York State Authority. No federal funding, use of federal lands, or individual federal approvals are required for this action; and no work will occur on or beneath lands held by any Tribal Nation. Although the Preferred Alternative is covered under the USACE Nationwide Permit #27, coverage under this permit does not trigger the federal review and approval process, as the National Environmental Policy Act (NEPA) was previously completed for the overall set of Nationwide Permits. As a result, consultation with THPO is not required for the Preferred Alternative.

Comment AC-13

"The DEIS states that "coverage under PSEG Long Island's NYSDEC General Wetlands permit (#1-9901- 0011/00032), which includes authorization for activities under Article 24 jurisdiction, as well as a permit from the USACE will be required for the proposed cable routing through the wetlands associated with Long Pond along the ROW segment to the east of Bridgehampton-Sag Harbor Turnpike, and for cable conduit laydown operations in the wetlands along the ROW to the west of the Bridgehampton Substation. This permitting process will ensure that potential impacts to surface waters and wetlands are mitigated to the extent practicable." Please keep Suffolk County updated regarding the status of these Permit applications."

Response: The locations for construction activities cited in this comment pertain to the routing of the new 69-kV underground transmission cable along the LIPA ROW under the Proposed Action presented in the DEIS. This cable routing is no longer being pursued and has been superseded by the currently proposed installation route, which follows public roadway ROWs between the two substations under the Preferred Alternative discussed in this FEIS. A benefit of the Preferred Alternative is that the wetlands associated with Long Pond along the LIPA ROW segment to the east of Bridgehampton-Sag Harbor Turnpike and the wetlands to the west of the Bridgehampton Substation will not be affected by the Proposed Action as currently configured under the Preferred Alternative. To the degree that wetland permitting is required for implementation of the Preferred Alternative, all required agency coordination and notifications will be performed, and the necessary permits will be obtained before construction commences in the regulated area.

4.2 EIS Content

Comment AC-47

> *"The Town's comments on the draft scope recommended that the DEIS describe, map, classify and rank the various natural community types within the Proposed Action area, consistent with the New York Natural Heritage Program's (NHP) natural community classification database. While the DEIS does map and identify the various community types, detailed community description and Conservation Status Rankings were not provided. For example, the coastal plain ponds of the Long Pond Greenbelt are given the rank of S2, G3G4, which indicates that this community type is imperiled in New York and at moderate risk of extinction worldwide."*

Response: The Proposed Action, which entailed routing the new 69-kV underground transmission cable within the LIPA ROW that traverses the Long Pond Greenbelt, is no longer being pursued and has been superseded by the Preferred Alternative, which does not traverse the Long Pond Greenbelt. Therefore, the ecological resources in the Long Pond Greenbelt, including those cited in this comment, will not be affected by the Preferred Alternative.

The proposed cable routing discussed in this FEIS is along public roadway ROWs between the two substations. The LOD for the Preferred Alternative Area will mostly be confined to roadway pavement areas within which trenching for the cable installation will be confined. Limited excavation for the manhole vaults will occur outside the edges of the pavement but will not extend beyond the maintained vegetated roadside areas within the ROWs and will not encroach into sensitive habitats. These unpaved areas within the roadway ROWs will also be subject to incidental disturbance for conduit laydown and staging to facilitate construction activities; however, these areas will not be subject to direct disturbance from grading or excavation and significant ecological resources are absent from these areas.

The proposed cable route will cross wetlands at a few locations, including Ligonee Brook (in the vicinity of Station 68-00±, as depicted on the Preferred Alternative Construction Plans – see **Appendix D**) and in the area of Little Northwest Creek (in the vicinity of Station 177-00±). However, these wetlands are channelized in culverts beneath the roadway and cable installation will not impact these culverts, which will not result in significant impacts to water resources.

Potential impacts to adjacent areas resulting from land disturbance under the Preferred Alternative will be avoided or effectively mitigated through the implementation of a SWPPP and associated Erosion & Sediment Control Plan (see **Appendix F**).

Comment IC-93

> *"I was wondering if either you or the people who work in your environmental projects had ever walked through the Long Pond Greenbelt area to see what you want to destroy. If you haven't, please do so. I am sure you will change your mind.!!!!!"*

Response: The Proposed Action, which entailed installation of the proposed new 69-kV underground transmission cable within the LIPA ROW and, traverse the Long Pond Greenbelt, is no longer being pursued., PSEGLI now proposes routing the cable along public roadway ROWs between the two

substations, under the Preferred Alternative discussed in this FEIS, the Long Pond Greenbelt area will not be impacted. See further discussion on this topic in the response above to **Comment AC-47**.

Comment IC-220

> *"Project Scoping was framed in a generic way without specificity to the location and unique resources present."*

Response: In accordance with the requirements of SEQRA, the scoping document is intended to provide an outline for the content of the DEIS. The scoping document was initially issued as a Draft Scope for public review and comment, and the Final Scope was prepared by revising the Draft Scope based on the input received. The scoping document is not intended to provide the level of informational detail suggested in this comment, such as specificity regarding the location and resources present within the proposed disturbance area. Instead, the DEIS is intended to, and in this case did, provide such details, as revised for the Preferred Alternative discussed in this FEIS.

Comment PH-2

> *"There's a whole encyclopedia of information about the area. But the critical part of any Environmental Impact Statement is the mitigative measures and the alternatives."*

Response: This comment pertains specifically to the Proposed Action evaluated in the DEIS and its proposed routing of the new 69kV underground transmission cable within the LIPA ROW, which traverses the Long Pond Greenbelt. - However, PSEGLI is no longer pursuing that route, and instead, proposes routing the cable along public roadway ROWs between the two substations under the Preferred Alternative. The Preferred Alternative is, with a slight variation, one of the four alternatives considered in the DEIS for purposes of mitigating the Proposed Action's potential adverse impacts. **Section 2.3** of this FEIS discusses the ecological resources within the Preferred Alternative Area, anticipated impacts on the resources associated with the Preferred Alternative, and measures that will be implemented to mitigate such impacts, expanding upon the information provided in Section 5.2.3 of the DEIS regarding Alternative 2.

Comment PH-47

> *"I'd like to also point out that the PSEG information -- I tried to read it to make sense of things -- was both unconvincing and difficult to understand. And I'm not an idiot. So there were things that I think your presentation could have been a lot more easy to understand. I don't know where it goes underground, I don't know how it gets through the areas within the Greenbelt."*

Response: These comments pertain specifically to the Proposed Action proposed in the DEIS, which entailed installation of the proposed new 69-kV underground transmission cable within the LIPA ROW, which traverses the Long Pond Greenbelt. PSEGLI is no longer pursuing that route. Instead, PSEGLI proposes routing the cable along public roadway ROWs between the two substations under the Preferred Alternative discussed in this FEIS (see **Figure 1**). Therefore, the questions raised in this comment regarding design details of the HDD work in the Long Pond Greenbelt area are not germane to the present proposal.

Comments IC-78 and AC-40

These comments indicate that a thorough analysis and vetting of the project is required.

Response: These comments pertain specifically to the Proposed Action presented in the DEIS, which would have entailed installing the proposed new 69kV underground transmission cable within the LIPA ROW that traverses the Long Pond Greenbelt. Instead, based on the vetting of the Proposed Action via the DEIS, including its public comment period and evaluation of alternatives, PSEGLI now proposes the Preferred Alternative which involves routing the cable along public roadway ROWs between the two substations. **Section 2.0** of this FEIS provides additional information on the Preferred Alternative regarding the resources in the proposed area of disturbance, anticipated impacts on these resources, and measures that will be implemented to mitigate such impacts, expanding upon the content of Section 5.2.3 of the DEIS regarding Alternative 2.

Comment AC-6

Additional information regarding the above-noted Suffolk County Parkland Parcels can be obtained from the Suffolk County Open Space Rating GIS program, which is available to the public at the following website: https://gisapps.suffolkcountyny.gov/openspacerating/ This GIS Program provides information on parcel acreage size, wetlands, Critical Environmental Areas and Federal and New York State Listings of Endangered/Threatened Species. The Suffolk County GIS program confirms that the above referenced Suffolk County owned Parkland parcels contain New York State Natural Heritage program elements, natural communities, endangered and threatened species and plant species.

Response: The Proposed Action which entailed installation of the new 69kV underground transmission cable within the LIPA ROW between the two substations, is no longer being pursued.; Instead, PSEGLI proposes routing the cable along public roadway ROWs under the Preferred Alternative. Therefore, the Suffolk County parkland parcels mentioned in this comment are no longer situated along the route of the proposed cable and will not be affected by its installation.

Comment AC-8

The proposed cable route also passes through a Potential Environmental Justice Area as indicated by the NYSDEC's ARCGIS Webmap of Potential Environmental Justice Areas. The NYSDEC Commissioner's Policy 29 (CP-29) provides guidance for incorporation environmental justice concerns into DEC environmental permit review process and the DEC application of the State Environmental Quality Review Act. We would recommend that PSEG review the NYSDEC guidance for incorporating Environmental Justice Concerns into the overall environmental review and permit processes, adequately engages and addresses the concerns of environmental justice communities. We would also recommend that PSEG include information on Environmental Justice concerns in the Environmental Impact Statement review process.

Response: Although the routing for the proposed new 69-kV underground transmission cable has been changed under the Preferred Alternative discussed in this FEIS, the public roadways along the current

route still lie within a Potential Environmental Justice Area (PEJA) as designated by NYSDEC. Therefore, a discussion on this topic is provided in **Section 2.15** of this FEIS.

Comments IC-92, IC-131, IC-132, IC-133 AC-15, AC-22, AC-36 and IC-214

> *These comments indicate that there are potential impacts to the Long Pond Greenbelt, including impacts to a variety of sensitive natural resources.*

Response: As discussed throughout this FEIS, the - Proposed Action, which entailed installation of the proposed new 69kV underground transmission cable within the LIPA ROW between the two substations, is no longer being pursued. Instead, PSEGLI proposes routing the cable along public roadway ROWs under the Preferred Alternative. Therefore, the impact issues identified in these comments with respect to the sensitive resources of the Long Pond Greenbelt are no longer germane to the Preferred Alternative.

4.3 Proposed Action Purpose and Need

Comment IC-126

> *"The Conservancy understands and appreciates the need for new electric transmission infrastructure as we transition to more renewable energy sources."*

Response: Comment noted.

Comments PH-13, PH-15, PH-43, PH-57, PH-72, IC-79, IC-239 and AC-38

> *These comments suggest that the need for the project is related to electrical load, and that due to the changing forecasts for load growth in the area, the project is no longer needed.*

Response: The need for the Proposed Action is substantiated in detail in the DEIS. Although the supporting information has been updated in **Section 2.3** of this FEIS to reflect a slight decrease in the future projections of the rate of electric demand increase on the South Fork of Long Island -there remains a well-established need. It is important to reiterate that the objective of the Proposed Action is to ensure the reliability of LIPA's Transmission and Distribution System ("T&D System") on the East End of Long Island, to mitigate customer outages, to enhance the voltage profile of the South Fork system during times of heavy load, and to improve the power quality experienced by customers. The Preferred Alternative, is part of LIPA's overall long-range expansion plans to meet the rising electrical demands of eastern Suffolk County, and to reduce dependence on local generation by the implementation of an increase in the use of renewable energy sources and the necessary improvements to the T&D System to allow for the connection of those sources.

Section 2.3 of this FEIS discusses that the two existing circuits in the LIPA ROW between the Bridgehampton and Buell Substations are not independent, such that the loss of power in either circuit, whether intentional (e.g., for scheduled maintenance or repairs) or not (e.g., resulting from storm impacts), would also incapacitate the other circuit. In 2025, under forecasted electric load conditions,

such a loss of the existing Bridgehampton-to-Buell cable would result in the remaining 69-kV supply exceeding its thermal capability, which poses an unacceptable risk of damaging T&D System equipment and can result in significant customer outages. The Preferred Alternative will provide an additional transmission supply to the area and maintain and mitigate the risk to equipment in the T&D System and to LIPA customers.

Comments PH-14 and PH-16

> *These comments suggest that energy efficiency measures in new construction and renewable energy have significantly reduced the load in the area of the project.*

Response: See the response above to **Comments PH-13 through AC-38** in this section of the FEIS for discussion of the continuing need the Preferred Alternative.

Renewable resources and energy efficiency have been incorporated into the planning of the LIPA grid and have been vetted as part of the project evaluation process. As a result, a Request-For-Proposals (2015 South Fork RFP) was issued in 2015 to solicit proposals from market participants on sufficient non-wire technologies to be installed on the South Fork to defer/eliminate the need for the Bridgehampton to Buell project. Eight different portfolios were created as a result of the qualitative and quantitative evaluations of the bids submitted in response to the 2015 South Fork RFP. Detailed evaluation resulted in the selection of a portfolio that consists of load reduction initiatives, emergency generators, battery storage, transmission projects, and an offshore wind interconnection. The new 69-kV underground transmission cable comprising the Preferred Alternative discussed in this FEIS, is part of the selected portfolio. The net cost of the recommended portfolio was the least cost option.

Comment IC-113

> *"Most horrible idea to destroy our water, drinking water and our beautiful village and town with an obsolete idea that will be out of date before it is even built."*

Response: The information and analysis presented in this FEIS demonstrate that the Preferred Alternative will not "destroy" any environmental resources. Any temporary impacts during cable installation will be avoided or mitigated by standard measures that will be implemented during construction; and there will be no continuing, long-term impacts to the environment upon the completion of construction. See the responses above to **Comments PH-13 through AC-38** and **Comments PH-14 and PH-16** for discussion of the continuing need for the Preferred Alternative, which substantiates that the new 69-kV underground transmission cable will not "be out of date before it is even built."

Comment PH-61

> *"Okay, so it will cost $40 million more. We're already paying the highest rates anywhere and it's not as if you're a small company and $40 million is half of your income. You can do it."*

Response: This comment was expressed in relation to the commenter's preference for an alternative involving installation of the proposed new 69-kV underground transmission cable along "established roadways" which would avoid routing through the Long Pond Greenbelt. The Preferred Alternative discussed in this FEIS is such an alternative, involving a slight variation of one of the four construction alternatives that were analyzed in the DEIS, specifically entailing underground routing of the proposed cable along public roadways to the north of the LIPA ROW (i.e., Alternative 2). The decision to reconsider the Proposed Action has been made based on the input received during the public review of the DEIS. Accordingly, the Proposed Action was re-evaluated by PSEG Long Island (PSEGLI) planning, engineering, and construction, and the Preferred Alternative is now proposed after giving due consideration to the cost differential when weighed against all the other relevant factors. It should be noted that with final engineering complete on the Preferred Alternative, the cost differential between the Proposed Action and the Preferred Alternative is approximately $11,000,000.

Comment PH-69

> *"It's interesting that as a connector for the wind farm to western power sources there is the potential here to have things go wrong and the -- I don't really like this word, but the optics of that for PSEG, I hope that you're considering that."*

Response: This comment appears to be related specifically to the DEIS proposal for the new 69-kV underground transmission cable to be routed within the LIPA ROW between the two substations. However, this proposed routing is no longer being pursued. Instead, the current proposal will route the cable along public roadway ROWs under the Preferred Alternative discussed in this FEIS.

The reference to "a connector for the wind farm to western power sources" and the meaning of the statement that "there is the potential here to have things go wrong" are unclear. A reading of the adjacent portions of the hearing transcript does not provide additional helpful context. In terms of the "optics" of the process, as discussed in the response to **Comments PH-4 through IC-104** in **Section 4.1** of this FEIS, the SEQRA process for the Proposed Action has included multiple opportunities for public participation, reflecting ample transparency in accordance with the requirements of the applicable regulations.

Comments PH-58, PH-68, and IC-49

> *These comments reflect the notion that additional solar projects would alleviate the need for the Proposed Action.*

Response: See the response to **Comments PH-14 and PH-16** in this section of the FEIS for discussion of the continued need for the Preferred Alternative, as well as recent renewable resources and energy efficiency planning for the LIPA grid.

4.4 Real Estate, Ownership, and Land Rights

Comment AC-28

> *"As decreed by the Dongan Patent of 1686, the Southampton Town Trustees are the owners of the bottomlands of the Town of Southampton, including the freshwater ponds and streams found within the Long Pond Greenbelt."*

Response: It is acknowledged that the Dongan Patent provides the Town of Southampton with ownership to the bottomlands of wetlands within its boundaries. However, the Proposed Action as presented in the DEIS would not have resulted in disturbance to the bottomlands of the Town, as HDD drilling beneath the wetlands was proposed along the route of the new 69-kV underground transmission cable at that time. Furthermore, as discussed throughout this FEIS, the routing for the cable within the LIPA ROW which was proposed in the DEIS is no longer being pursued and has been superseded by the currently proposed cable routing within public roadway ROWs between the two substations under the Preferred Alternative. Therefore, the wetlands associated with Long Pond within the LIPA ROW and other bottomlands within the Town of Southampton will not be affected by the Preferred Alternative.

Comments IC-134, AC-1, AC-21, and AC-25

> *These comments indicate that the parcels which the Proposed Action traverse are owned by a variety of public and private entities, some of which are protected under the Town of Southampton's Nature Preserve program.*

Response: As discussed throughout this FEIS, the routing for the proposed new 69-kV underground transmission cable within the LIPA ROW which was presented in the DEIS is no longer being pursued. The revised proposal for cable routing follows public roadway ROWs between the two substations under the Preferred Alternative. Therefore, the parcels within the LIPA ROW discussed in this comment will not be affected by the Preferred Alternative.

Comment AC-18:

> *"The Suffolk County Department of Health Services, Office of Ecology reviewed the DEIS for the Proposed Project. The Suffolk County Department of Health Services noted that the proposed project does not appear to require any Suffolk County Sanitary Code Article 6, 7 or 12 approvals and therefore the does not have any comments on the DEIS. The Suffolk County Department of Health also noted that that should the project scope change and require the installation of a wastewater disposal system or involve the storage of a hazardous material, the change may require Suffolk County Sanitary Code Article 6, 7, or 12 approvals."*

Response: Although the Proposed Action has been reconsidered, this only involves a change in the routing of the new 69-kV underground transmission cable, from the LIPA ROW as presented in the DEIS, to the northerly public roadway ROW route under the Preferred Alternative discussed in this FEIS. The Preferred Alternative routing still does not require the installation of a wastewater disposal system, nor does it involve the bulk storage of hazardous materials. Furthermore, as LIPA is a NYS Authority, Suffolk County

code requirements would not apply to actions undertaken by LIPA even for projects involving wastewater disposal and/or hazardous material bulk storage.

Comments IC-180, AC-24 and AC-39

> *These comments reference the Suffolk County Legislation passed which requires approval of the Suffolk County Legislature for any property rights needed for implementation of the Proposed Action on County lands.*

Response: The Proposed Action, which entailed installation of the proposed new 69kV underground transmission cable within the LIPA ROW between the two substations, is no longer being pursued. Instead, PSEGLI proposes routing the cable along public roadway ROWs under the Preferred Alternative. -. Therefore, the Suffolk County lands mentioned in this comment are no longer situated along the route of the proposed cable and will not be affected by its installation.

Comment AC-4

> *Suffolk County has acquired approximately 400 acres in the Long Pond Greenbelt area since its first acquisition in the area in 1975. The County recognizes the ecological importance of the Long Pond Greenbelt and it is still a priority acquisition area for open space preservation. The Long Pond Greenbelt is listed in Suffolk County's 2021 Master List with the County targeting acquisition of an additional 60 acres in the area.*

Response: The Proposed Action which entailed installation of the proposed new 69-kV underground transmission cable within the LIPA ROW that traverses the Long Pond Greenbelt is no longer being pursued. The Preferred Alternative discussed in this FEIS, will not affect properties within the Greenbelt that are targeted for acquisition by Suffolk County.

Comments IC-161 and IC-171

> *These comments state that LIPA must acquire underground rights to the land in order for the Proposed Action to be constructed in the ROW, as only overhead rights currently exist.*

Response: The Proposed Action, which entailed installation of the proposed new 69kV underground transmission cable within the LIPA ROW between the two substations, is no longer being pursued. Instead, PSEGLI proposes routing the cable along public roadway ROWs under the Preferred Alternative. -. Therefore, the question of whether it will be necessary to acquire underground rights perform HDD installation within the LIPA ROW is not germane to the present proposal.

4.5 Construction Methodology and Impacts

Comment IC-185

> *Shooting ±4,000 linear feet of line via HDD under the pond system does not eliminate the need to bring in large trucks and equipment and employees to get to the pond area. The proposal call for extensive digging and grading.*

Response: The Proposed Action, which entailed installation of the proposed new 69kV underground transmission cable within the LIPA ROW between the two substations, is no longer being pursued. Instead PSEGLI proposes routing the cable along public roadway ROWs under the Preferred Alternative. The Preferred Alternative discussed in this FEIS, will not involve construction activity within this ROW; and further, any large truck traffic and other heavy equipment activities that would have been associated with HDD in this ROW is not pertinent to the Preferred Alternative.

Comment IC-191

> *"…heavy cranes, 18-wheelers and large dump trucks will be used on a regular basis for 18-months; there is no indication of how many employees will be coming and going and parking all over…"*

Response: See the response above to **Comment IC-185**.

Comment IC-109

> *"…to even propose a ONE YEAR PROJECT to drill right through the Long Pond Greenbelt is absolutely unthinkable…"*

Response: The Proposed Action which entailed installation of the proposed new 69-kV underground transmission cable within the LIPA ROW that traverses the Long Pond Greenbelt, is no longer being pursued. Instead, PSEGLI proposes routing the cable along public roadway ROWs under the Preferred Alternative, which will avoid potential impacts to ecological resources in the Long Pond Greenbelt mentioned in this comment.

Comment IC-117

> *"The installation of a 3.9-mile road of RCA for machinery access, even if temporary, will undoubtedly negatively impact habitat and wildlife."*

Response: The Proposed Action which entailed installation of the proposed new 69-kV underground transmission cable within the LIPA ROW that traverses the Long Pond Greenbelt is no longer being pursued. Instead, PSEGLI proposes routing the cable along public roadway ROWs under the Preferred Alternative, which will avoid potential impacts to ecological resources in the Long Pond Greenbelt mentioned in this comment.

Comments AC-42 and AC-46

These comments indicate that a detailed plan for removal of the temporary access road to be stabilized by RCA is not provided in the DEIS.

Response: The Proposed Action which entailed installation of the proposed new 69-kV underground transmission cable within the LIPA ROW that traverses the Long Pond Greenbelt is no longer being pursued. Instead, PSEGLI proposes routing the cable along public roadway ROWs under the Preferred Alternative. Therefore, the question raised in this comment requesting details regarding the removal of the temporary access road from the LIPA ROW upon the completion of construction is not germane to the present proposal.

Comment AC-45

"The description indicates that approximately 5,125 cubic yards of fill, inclusive of RCA will be deposited along the project route, in order to modify and stabilize the existing grades by up to 15 feet. The DEIS does not describe potential impacts, to ground and surface waters, associated with leaching of contaminants associated with the RCA."

Response: The Proposed Action which entailed installation of the proposed new 69-kV underground transmission cable within the LIPA ROW between the two substations is no longer being pursued. Instead, PSEGLI proposes routing the cable along public roadways under the Preferred Alternative discussed in this FEIS. Therefore, the question raised in this comment requesting details regarding impacts associated with the grading of the temporary access road and the use of RCA for ground surface stabilization in the LIPA ROW is not germane to the present proposal.

Comment IC-189

"The DEIS states…hazardous materials will be used and stored along the way."

Response: The Proposed Action includes incidental storage and use of hazardous materials, regardless of the routing that is used for the proposed new 69-kV underground transmission cable. However, these substances (e.g., fuels, lubricants, etc.) are typical elements of construction activities, and standard mitigation procedures will be implemented for their proper management. As discussed in the DEIS (pages 2-36 and 2-37), the following mitigation measures will be implemented, which will continue to be applicable to the Preferred Alternative discussed in this FEIS:

- Construction materials that pose a potential contamination threat (e.g., petroleum products and hazardous materials) shall be managed to minimize exposure to stormwater. Such materials shall be kept in secure containers and properly labeled. All storage containers (including frac tanks for spent HDD drilling fluids, if applicable) and motorized/mechanical equipment containing such materials (including generators) shall have secondary containment.
- Hazardous materials shall be used, stored, transported, and disposed in the manner specified by the manufacturer and by applicable regulations. Contractors and subcontractors shall be made aware of this requirement and shall alert site personnel of this requirement.

- Copies of Safety Data Sheets (SDSs) shall be maintained on-site for hazardous materials.
- Solid and liquid wastes shall be managed and properly disposed, in accordance with applicable State and Federal requirements. Construction and demolition waste shall be separated from soils, and both shall be disposed at an approved disposal facility. All other wastes shall be disposed separately. Waste material shall be collected and stored in secure containers and removed from the site. Waste containers shall be inspected regularly. No solid or liquid wastes shall be disposed (e.g., buried or poured) on-site. Excess construction materials, supplies or debris shall be inspected at the end of each work shift and managed or disposed the same day or as soon as reasonably possible.

Furthermore, with regard to the long-term operation of the proposed cable upon the completion of construction, it is important to note that the cable conduit will be sealed, will not contain hazardous substances, and will not pose the potential for harmful discharges to groundwater or surface waters.

4.6 Horizontal Directional Drill Methodology

Comment PH-37

> *"So he took me down and showed me horizontal drilling along the surface area of the road and I was amazed. But when -- and I guess every 500 feet or so they made, they dug it down, and connected a chain and they dragged the pipe through. And I thought that was, as a previous science teacher, I thought that was pretty cool."*

Response: Comment noted and does not require additional response.

Comment IC-13 and IC-172

> *These comments indicate that HDD routinely encounters problems when utilized as a construction methodology and is not an installation method without impact.*

Response: These comments express concerns relating specifically to potential impacts of HDD for the Proposed Action presented in the DEIS with respect to the ecological resources in the Long Pond Greenbelt. However, the Proposed Action which entailed installation of the proposed new 69-kV underground transmission cable within the LIPA ROW that traverses the Long Pond Greenbelt is no longer being pursued. Instead, PSEGLI proposes routing the cable along public roadway ROWs under the Preferred Alternative.

Section 2.3 of this FEIS discusses the ecological resources in the Preferred Alternative Area, potential impacts on these resources associated with the installation of the proposed new 69-kV underground transmission cable under the Preferred Alternative, and measures that will be implemented to mitigate such impacts, expanding upon the information provided in Section 5.2.3 of the DEIS regarding Alternative 2.

It is noted that although HDD remains a possible construction method for the Preferred Alternative, any use of this technology is expected to be limited, if determined to be necessary based on decisions to be made by the involved roadway agencies. It is important to note that HDD is a standard construction technique that is widely utilized for underground utility installation. The use of HDD for the cable

installation for the Proposed Action presented in the DEIS would have involved longer drilling segments than is typical, in terms of both distance (i.e. the 3,450±-foot segment in the Long Pond Greenbelt) and duration (approximately two to four months). As discussed in **Section 2.2.2** of this FEIS, if HDD is determined to be necessary for the Preferred Alternative, based on input from the involved roadway jurisdiction agencies, the drilling is expected to be very limited, involving only short segments at selected locations (e.g., for a roadway or intersection crossing). The specifics of this design for the Preferred Alternative are not known at this time, as coordination with the involved roadway agencies is ongoing, but any such work will be in accordance with well-established protocols for this common method of construction.

Due to the shorter length of the borehole that would apply if the need arose for the use of HDD in the Preferred Alternative, smaller equipment can be deployed, operating at decreased drilling fluid pressures, which would virtually eliminate the potential for the occurrence of a "frac-out" event.

Comment IC-16

> *"A second problem that has occurred during HDD projects is that boreholes can become a conduit through different geologic deposits that can connect groundwaters of different qualities and introduce contaminants from an impacted geologic unit to a previously unimpacted aquifer. The potential for contaminant transport is present during pilot hole drilling, reaming, and pipe pull back. The potential for this to occur is influenced by the ability of the drilling mud to cake on bore hole walls and prevent fluid migration."*

Response: As discussed above in the response to **Comments IC-13 and IC-172**, the long-distance HDD runs through the LIPA ROW and Long Pond Greenbelt that was a component of the Proposed Action that is no longer being pursued. PSEGLI now proposes routing the cable along public roadway ROWs between the two substations under the Preferred Alternative. Therefore, the concern expressed in this comment regarding the creation of "a conduit through different geologic deposits" is not applicable due to the short drilling distances and durations that would be involved if it were determined that HDD is necessary for construction of the Preferred Alternative.

Comments IC-18 and IC-112

> *These comments indicate that should the borehole intersect contaminated groundwater, recycling of water will be difficult to handle and more expensive to deal with.*

Response: These comments pertain to the Proposed Action as presented in the DEIS, which would have involved HDD drilling in the area of the Village of Sag Harbor Transfer Station site (former landfill), which is located on the east side of Bridgehampton-Sag Harbor Turnpike, spanning across the LIPA ROW to the west of Long Pond, and is listed as a New York State Superfund site (NYSDEC Site Code 152047). However, the Proposed Action which entailed installation of the proposed new 69 kV underground transmission cable within the LIPA ROW, that traverses this area, is no longer being pursued. Instead, PSEGLI proposes to route the cable along public roadway ROWs under the Preferred Alternative discussed in this FEIS.

Therefore, the question raised in this comment regarding potential contamination of recycled HDD drilling fluid related to the Village of Sag Harbor Transfer Station site is not germane to the present proposal.

Comments PH-41, PH-46, IC-200, IC-212, and AC-10

These comments request the details of a frac-out risk analysis for the Proposed Action.

Response: As noted previously, the Proposed Action which entailed the installation of the new 69-kV underground transmission cable through the LIPA ROW that traverses the Long Pond Greenbelt is no longer being pursued and instead, PSEGLI proposes routing the cable along public roadway ROWs between the two substations under the Preferred Alternative as discussed in this FEIS. Therefore, the potential for impacts to sensitive environmental resources in the Long Pond Greenbelt due to the possible occurrence of an HDD frac-out event, which is raised as a concern in these and other comments, has been eliminated.

As discussed in **Section 2.2.2** of this FEIS, any HDD segment(s) that may be necessary for the Preferred Alternative, based on decisions to be made by the involved roadway agencies, would be expected to involve relatively short durations and segments (i.e., on the order of a few days, and potentially crossing under a roadway or intersection, for example), which will help to minimize the potential for impacts. In comparison, the prior proposal to install the cable in the LIPA ROW would have entailed much more extensive use of HDD, operating over a period of two to four months, involving a 3,450±-foot segment in the Long Pond Greenbelt. Due to the shorter length of the borehole that would apply if the need arose for the use of HDD in the Preferred Alternative, smaller equipment can be deployed, operating at decreased drilling fluid pressures, which would virtually eliminate the potential for the occurrence of a frac-out event.

Comments PH-70, IC-69, IC-121, IC-188, and AC-11

These comments request that a frac-out contingency plan be developed and provided for drilling activities associated with the Proposed Action.

Response: A sample Frac-out Contingency Plan was provided in Appendix I of the DEIS. However, as discussed above in the response to **Comments PH-41 through AC-10**, the potential use of HDD no longer includes routing of the proposed new 69-kV underground transmission cable through the LIPA ROW, which traverses the Long Pond Greenbelt as was planned for the Proposed Action presented in the DEIS. Instead, any HDD segment(s) that may be necessary under the Preferred Alternative discussed in this FEIS would be expected to involve relatively short durations and distances within the public roadway ROWs, which comprise the current proposed cable route. As discussed in **Section 2.2.2** of this FEIS, HDD is not currently proposed for use in the Preferred Alternative and will be undertaken only if required by the involved roadway jurisdiction agencies. Under these circumstances, the draft Frac-out Contingency Plan in Appendix I of the DEIS would be finalized as necessary to account for project/site-specific details for implementation of the Preferred Alternative prior to initiating any HDD work.

Comment IC-186

"Drilling contains sediments and fluids which may spill…"

Response: As discussed in several sections of the DEIS, the drilling fluid used in HDD consists of an inert mixture of natural bentonite clay and water, which does not contain hazardous substances. The potential for impacts to result from a spill of this fluid pertains solely to the discharge of fine-grained sediment onto the land surface, which could adversely affect the environment if such a discharge occurs in an area with sensitive resources such as wetlands. in the same manner as would be associated with inadequate erosion and sediment controls for a construction site. See the responses to **Comments PH-41 through AC-10** and **Comments PH-70 through AC-11** in this section of the FEIS for further discussion of the change from the Proposed Action to the Preferred Alternative, which avoids the potential for impacts to the Long Pond Greenbelt area.

As discussed in the response to **Comment IC-13 and IC-172** in **Section 4.6** of this FEIS, land disturbance under the Preferred Alternative will predominantly be confined to public roadway ROWs along the current route of the proposed new 69-kV underground transmission cable. The Preferred Alternative Area, consisting mostly of asphalt pavement, along with maintained roadside vegetation, does not constitute a noteworthy ecological resource that is susceptible to significant impacts during construction. Furthermore, HDD is not currently proposed under the Preferred Alternative and will only be employed if required by the involved roadway jurisdiction agencies; and under such circumstances, HDD would be expected to be of relatively short distance and duration (e.g., for a roadway or intersection crossing), involving decreased drilling fluid pressures, which would virtually eliminate the potential for the occurrence of a "frac-out" event if HDD is undertaken. Notwithstanding, the minimized potential for adverse impacts due to the inadvertent release of drilling fluid if HDD is undertaken for the Preferred Alternative, a Frac-out Contingency Plan would be prepared/finalized, based on the draft plan in Appendix I of the DEIS, to account for project/site-specific details, and would be implemented prior to initiating any HDD work.

Based on the foregoing, the presence of sediments in the drilling fluid associated with HDD that may occur under the Preferred Alternative does not pose the potential for significant environmental impacts.

4.7 Ecology and Natural Resources

4.7.1 Habitat Sensitivity

Comments PH-1, PH-11, PH-18, PH-53, PH-59, PH-64, PH-84, IC-1, IC-9, IC-22, IC-26, IC-39, IC-44, IC-52, IC-55, IC-64, IC-66, IC-73, IC-75, IC-88, IC-92, IC-96, IC-100, IC-111, IC-114, IC-129, IC-136, IC-140, IC-144, IC-155, IC-158, IC-166, IC-170, IC-182, IC-197, IC-201, IC-203, IC-207, IC-209, IC-216, IC-225, IC-227, IC-231, IC-235, IC-237, AC-2, AC-20, AC-29, and AC-35

These comments indicate that the Long Pond Greenbelt is a highly sensitive resource which contains rare plant and animal species, a variety of habitats, and is irreplaceable.

Response: As previously noted, the Proposed Action which entailed routing the proposed new 69-kV underground transmission cable through the LIPA ROW that traverses the Long Pond Greenbelt, is no longer being pursued. Therefore, ecological resources in the Long Pond Greenbelt identified in these

comments will not be impacted under the current proposal for construction of the Preferred Alternative along public roadway ROWs between the two substations.

Comments IC-175, IC-176, IC-177, IC-178, and IC-179

> *These comments provide background information regarding the Long Pond Greenbelt, including information from the USFWS, NYNHP, The Nature Conservancy, and other publicly available background information.*

Response: These comments are noted as providing additional background information regarding the Long Pond Greenbelt. However, as discussed above in the response to **Comments PH-1 through AC-35**, the Proposed Action which entailed routing the proposed new 69-kV underground transmission cable through the LIPA ROW, that traverses the Long Pond Greenbelt, is no longer being pursued. The resources highlighted in these comments will not be susceptible to potential impacts under the current proposal for construction of the Preferred Alternative along public roadway ROWs between the two substations.

Comments IC-38, IC-46, IC-225

> *These comments indicate that the Great Swamp and Mulvihill Preserve are highly sensitive resources.*

Response: Great Swamp and Mulvihill Preserve are located to the west of the area that would have been utilized for construction staging in the LIPA ROW adjacent to the Bridgehampton Substation under the Proposed Action presented in the DEIS. The work that was proposed in the segment of the LIPA ROW nearest to these preserve lands involved conduit laydown and fusing; there would have been no excavation, clearing or other direct disturbance of the land surface. The Proposed Action which entailed installation of the proposed new 69-kV underground transmission cable through the LIPA ROW that traverse areas containing sensitive environmental resources, is no longer being pursued. Therefore, the resources identified in these comments will not be impacted under the current proposal for construction of the Preferred Alternative along public roadway ROWs between the two substations.

Comment IC-41

> *"My dad wrote about his land: "The vernal pond is a crucible where only the fittest amphibian, insect or microbe survives to endow their progeny with their traits. Vernal ponds are critical havens for migrating amphibians that travel over land seeking new homes. For that reason alone they must be protected". Turtles need them in their search for egg-laying sites. Dragonflies that emerge from them nourish countless songbirds."*

Response: The Proposed Action which entailed installation of the proposed new 69-kV underground transmission cable within the LIPA ROW between the two substations, which traverses areas containing sensitive environmental resources such as those highlighted in this comment, is no longer being pursued.

Instead, PSEGLI proposes routing of the cable along public roadway ROWs under the Preferred Alternative discussed in this FEIS.

Comment AC-3

> *"The Long Pond Greenbelt's importance as an ecologically valuable resource was first recognized publically in the 1970 Master Plan for the Town of Southampton. As stated in the Master Plan, the greenbelt system would provide a park linkage between neighborhood, community and regional parks. These linkages by design generally follow natural drainage channels. As a result, they frequently incorporate a series of ponds in their alignment from the shore to the highlands of the moraine. Several other greenbelt areas were also cited in the Master Plan; but the Long Pond Greenbelt is by far the largest and most recognized for its esthetic and ecological importance."*

Response: The Proposed Action which entailed installation of the proposed new 69-kV underground transmission cable through the LIPA ROW, that traverses the Long Pond Greenbelt, is no longer being proposed. Instead, PSEGLI proposes routing the cable along public roadway ROWs between the two substations under the Preferred Alternative discussed in this FEIS. Therefore, the aesthetic and ecological resources cited in this comment will not be adversely affected and the question of consistency with the Town of Southampton Master Plan is not germane to the Proposed Action as currently configured.

Comments PH-3, PH-22, PH-34, IC-76, IC-80, IC-106, IC-127, IC-137, IC-198, IC-226, IC-232, AC-30, and AC-32

> *These comments reflect that any and all impacts to the Long Pond Greenbelt should be avoided where feasible.*

Response: Consistent with views expressed in these and other comments submitted during the public review of the DEIS, the Proposed Action which entailed installation of the proposed new 69-kV underground transmission cable through the LIPA ROW, that traverses the Long Pond Greenbelt, is no longer being proposed. Instead, PSEGLI proposes cable routing along public roadway ROWs between the two substations under the Preferred Alternative discussed in this FEIS.

4.7.2 General Ecological Impacts

Comment PH-76

> *"To think that work of this nature would be conducted through the Long Pond Greenbelt and along the -- what you claim to be the right-of-way where the overhead power line is disturbing to me because even if it is a right-of-way, even if there are already established infrastructure going through part of the route that you've outline, it still will be immensely disturbing to the natural ecology that's there today."*

Response: The Proposed Action, which entailed installation of the proposed new 69-kV underground transmission cable within the LIPA ROW, that traverses the Long Pond Greenbelt, is no longer being

proposed. Instead, PSEGLI proposes routing the cable along public roadway ROWs under the Preferred Alternative discussed in this FEIS.

Comment IC-36

> *"PSEG's plan to clear land in Great Swamp to facilitate drilling and installation of an underground transmission cable right through critical ecosystems is now creating a local emergency."*

Response: As discussed in the response to **Comments IC-38 through IC-225** in **Section 4.7.1** of this FEIS, the area of disturbance within the LIPA ROW under the Proposed Action presented in the DEIS would not have extended into the Great Swamp; and the construction activity in closest proximity to the Great Swamp would have entailed conduit laydown and fusing, without any land clearing. In any event, the Proposed Action has been reconsidered, with cable routing currently proposed along public roadway ROWs under the Preferred Alternative discussed in this FEIS.

Comment IC-119

> *"What are the impacts, even temporary of conduit laydown in Great Swamp?"*

Response: See the response above to **Comment IC-36**.

Comment IC-123

> *"While use of native plantings is appreciated, disturbance often allows for non-native species to colonize and despite best efforts to prevent the inadvertent introduction of non-native vegetation, it often occurs."*

Response: This comment pertains specifically to the potential for land disturbance in ecologically sensitive areas under the Proposed Action presented in the DEIS, including the Long Pond Greenbelt, to alter habitat conditions even when appropriate restoration is undertaken. However, the Preferred Alternative does not involve cable installation in the LIPA ROW between the two substations, including the portion of this ROW through the Long Pond Greenbelt, or other ecologically sensitive areas. Instead, PSEGLI proposes routing the cable along public roadway ROWs under the Preferred Alternative. As discussed in the response to **Comment AC-47** in **Section 4.2** of this FEIS, these roadway ROWs, consisting of areas of asphalt pavement and maintained roadside vegetation, do not comprise noteworthy ecological resources; and impacts to adjacent areas will be avoided or mitigated through the implementation of a SWPPP and associated Erosion & Sediment Control Plan (see **Appendix F**), as well as the preparation/finalization of a Frac-out Contingency Plan (a draft plan can be found in Appendix I of the DEIS) if HDD work becomes necessary at the request of the involved roadway jurisdiction agencies.

Comments PH-42, IC-29, IC-40, and IC-173

> *These comments indicate that restoration is not possible in a vernal pond should an impact occur, and that the planned disturbance presents and impact on the ecosystem.*

Response: The Proposed Action has been reconsidered, and PSEGLI no longer proposes installation of the new 69-kV underground transmission cable within the LIPA ROW, which traverses areas containing sensitive environmental resources. Instead, PSEGLI proposes routing the cable along public roadway ROWs under the under the Preferred Alternative discussed in this FEIS which will not affect vernal ponds.

Comment AC-43

> *"A detailed re-vegetation plan is not provided."*

Response: This comment pertains specifically to disturbance in areas of "natural habitat, inclusive of areas which have been listed as imperiled within New York" in reference to the resources within the LIPA ROW which was to serve as the cable route for the Proposed Action presented in the DEIS. However, installation in the LIPA ROW between the two substations is no longer being proposed and instead, cable routing will occur along public roadway ROWs under the Preferred Alternative discussed in this FEIS.

As discussed in the response to **Comment AC-47** in **Section 4.2** of this FEIS, land disturbance under the Preferred Alternative predominantly will be confined to public roadway ROWs, which do not constitute a noteworthy ecological resource that is susceptible to significant impacts during construction. The entire route of the trench for the proposed cable will be in pavement areas. Direct disturbance of vegetation within the Preferred Alternative Area will involve limited excavation for the manhole vaults, which will not extend beyond the maintained vegetated roadside areas within the ROWs; and a short (approximately 75foot) segment of direct land disturbance will occur for installation of the proposed cable through an area of natural vegetation, including some trees, to the immediate north of the Buell Substation (see further discussion in the response to **Comment IC-116** in **Section 4.7.3** of this FEIS). Incidental disturbance for conduit laydown and staging will occur in unpaved roadside areas within the ROW, but these areas will not be subject to direct disturbance from grading or excavation. All existing vegetated areas disturbed during implementation of the Preferred Alternative will be appropriately restored upon the completion of construction, including typical roadway plantings within the ROWs and native species in the area of existing natural vegetation near the Buell Substation.

Comment PH-73

> *"Number two. The need for -- sorry. Any kind of ground disturbance, no matter how minimal, is still going to be a ground disturbance. And a little ground disturbance will have an impact."*

Response: This comment pertains specifically to the potential for land disturbance in ecologically sensitive areas within the LIPA ROW under the Proposed Action presented in the DEIS. However, the Proposed Action has been reconsidered and PSEGLI now proposes routing the cable along public roadway ROWs under the Preferred Alternative. See further discussion above in the response to **Comment AC-43**.

4.7.3 Impacts on Wildlife

Comment PH-51, IC-219, IC-221, and IC-223

> *These comments indicate that the possible impacts of electromagnectic field (EMF) interference on wildlife are not discussed within the EIS. These comments are best reflected in the following comment (PH-51) "One of the things also that I would like to hear about is the future, if this project does go through, of what electromagnetic field interference will do to underground habitat. I don't think that people speak about that. And the hertz -- the hertz on the fauna that are positive in this particular preserve are not, you know, they don't usually hear noise and see things but they react to vibration and transmission cables and electricity, electromagnetic fields through a habitat like this."*

Response: These comments pertain specifically to the potential impacts of the Proposed Action presented in the DEIS, involving installation of the new 69-kV underground transmission cable within the LIPA ROW, which contains sensitive ecological resources. As discussed previously, the Proposed Action has been reconsidered and no longer involves installation in the LIPA ROW between the two substations; and PSEGLI now proposes cable routing along public roadway ROWs under the Preferred Alternative.

It should be noted that while standards have been promulgated for human exposure to EMFs, with which the Preferred Alternative will comply, there are no similar EMF standards for plants, animals or wildlife habitat. Furthermore, the LIPA ROW already contains active overhead electrical transmission lines; such that to the degree that ecological resources may be affected by EMFs from electrical infrastructure, these effects already are being experienced in this area. The public roadway ROWs that will be used for cable routing under the Preferred Alternative similarly have existing electrical transmission/distribution lines. Moreover, soil cover serves as an effective barrier for electric fields generated by underground cables, which is not true for overhead electric lines; and while magnetic fields generally are higher (by less than a factor of two) directly atop an underground cable than directly beneath an overhead transmission line of the same voltage, the strength of the magnetic field in the former case dissipates much more rapidly with distance than occurs in the latter case.[2]

Comment IC-116

> *"'While it is expected that wildlife will be temporarily displaced during the construction phase of the Proposed Action, no permanent displacement of wildlife will result from operation of the underground cable.' This may be true for many mammalian or avian species, but for some of the more sensitive species that are subsurface, permanent displacement or direct take is likely."*

Response: This comment pertains specifically to the potential impacts in ecologically sensitive areas within the LIPA ROW under the Proposed Action presented in the DEIS. However, the Proposed Action has been reconsidered and no longer involves installation in the LIPA ROW between the two substations. Instead, PSEGLI now proposes cable routing along public roadway ROWs under the Preferred Alternative.

[2] https://www.emf-portal.org/en/cms/page/home/technology/low-frequency/underground-cables.

The roadway ROWs to be used for cable routing under the Preferred Alternative Area consist of asphalt pavement and maintained roadside vegetation, which do not constitute noteworthy habitat and do not support significant wildlife populations. To the degree that wildlife uses the Preferred Alternative Area and will be displaced by the proposed construction activities, such displacement will be temporary, with no permanent impacts continuing after the vegetation cover has been restored to pre-construction conditions.

Wildlife in more natural habitat locations adjacent to the Preferred Alternative Area may also experience disruption due to equipment activities and associated noise during construction. However, this disruption also will be only a temporary condition and will be eliminated upon the completion of construction at the given location.

The Preferred Alternative route includes a short (approximately 75-foot) segment of direct land disturbance for installation of the proposed cable through an area of natural vegetation, including some trees, to the immediate north of the Buell Substation. This disturbance area includes a section of trenching (4± feet in width by 35± feet in length) southeastward off the edge of Cove Hollow Road, which leads into the excavation for the distribution pit (15± feet in width by 40± feet in length) for the jack-and-bore operation to install the conduit beneath the LIRR embankment. Upon the completion of construction in this area, the ground surface will be restored to original grade and appropriate native vegetation species will be planted to reestablish habitat similar to existing conditions. This replanting will not include any known invasive species as identified in 6 NYCRR Part 575.

Comment IC-192

> *"…with an 18 month construction period, wildlife breeding will definitely be disrupted."*

Response: See the response above to **Comment IC-116**.

4.7.4 Impacts on Rare, Threatened and Endangered Species

Comment AC-48

> *"The DEIS does identify some of the documented rare, endangered and threatened species… the area of disturbance should be identified for species of rare and/or special concern and a mitigative plan presented if applicable."*

Response: This comment pertains specifically to the ecological resources in the LIPA ROW, including the Long Pond Greenbelt, which would have been the route of the new 69-kV underground transmission cable for the Proposed Action presented in the DEIS. However, the Proposed Action is no longer being pursued and PSEGLI proposes cable routing along public roadway ROWs under the Preferred Alternative.

As discussed in **Section 3.3.1.3** of this FEIS, correspondence obtained from the New York Natural Heritage Program (NYNHP – see **Appendix J**) reports the presence of six animal species and eight plant species listed as rare, threatened or endangered in New York State recorded within or in the vicinity of the Preferred Alternative Area. However, as discussed in **Section 3.3.2.3**, most of these species will not be affected by implementation of the Preferred Alternative, as the limits of disturbance predominantly

encompass asphalt pavement and roadside vegetation in roadway ROWs, and a small area of upland vegetation to the northwest of the Buell Substation which does not provide suitable habitat for the identified species. More particularly:

- Implementation of the Preferred Alternative will not alter existing habitat; and, in any case, this habitat is not suitable for the NYS endangered least tern (*Sternula antillarum*) or the NYS threatened bald eagle (*Haliaeetus leucocephalus*).
- The NYS threatened bluet species identified by the NYNHP – scarlet bluet (*Enallagma pictum*) and pine barren bluet (*Enallagma recurvatum*) – utilize coastal plain ponds and coastal plain pond shorelines for breeding and foraging. These habitats do not occur in the Preferred Alternative Area.
- The NYS endangered species coastal goldenrod (*Solidago latissimifolia*) and NYS threatened species narrow-leaved bush clover (*Lespedeza angustifolia*) and marsh straw sedge (*Carex hormathodes*) were not identified onsite during the ecological investigations conducted by PSEGLI; nor are these plants expected to be found in the Preferred Alternative Area as they are classified as wetland obligate species and typically require wetland habitats.
- The NYS endangered small white snakeroot (*Ageratina aromatica*), orange crested orchid (*Platanthera cristata*) and large grass-leaved rush (*Juncus biflorus*), and NYS threatened Stuve's bush clover (*Lespedeza stuevei*) were not identified onsite during the ecological surveys conducted by PSEGLI; nor are these plants expected to occur in the maintained roadside areas which predominantly comprise the limits of vegetative disturbance under the Preferred Alternative.

Section 3.3.2.3 of this FEIS discusses in more detail the potential for the Preferred Alternative to impact two NYS endangered animal species identified by NYNHP, as summarized below:

- Eastern Tiger Salamander (*Ambystoma tigrinum*) – NYSDEC enforces two regulatory buffers around known breeding ponds for this species: 535 feet and 1,000 feet. All soil disturbance under the Preferred Alternative within the 535-foot buffer will occur in areas of existing paved roadway; no clearing or loss of vegetation is proposed in this buffer area. Select soil disturbance will occur within the 1,000-foot buffer area, particularly on the north side of the Bridgehampton Substation; however, there will be no change in habitat type and all existing forested habitat within this buffer area will be maintained. Based on these considerations, the construction and operation of the Preferred Alternative is not anticipated to result in the incidental take[3] of Eastern Tiger Salamanders.
- Northern long-eared bat (*Myotis septentrionalis*) – Habitat consistent with the life history requirements of this species is present surrounding the Preferred Alternative Area and in the westernmost portion of the Preferred Alternative Area north of the Buell Substation. Per NYSDEC,

[3] As discussed in **Section 3.3.2.3** of this FEIS, the regulations in 6 NYCRR Part 182 specify that NYSDEC may, "…at its discretion, issue a permit that authorizes the incidental take of a species listed as endangered or threatened in this Part. An incidental take permit shall include an endangered or threatened species mitigation plan … that the department has determined will result in a net conservation benefit to the listed species and which has been approved by the department."

the hibernation period Northern Long-eared Bat in Suffolk County extends from December 1 through February 28. To ensure no roosting bats are impacted under the Preferred Alternative, all tree removal activities will be limited to the window of December 1 through February 28 when this species of bats is not found within the landscape.

As indicated above, implementation of the Preferred Alternative will not result in adverse impacts to the endangered and threatened species that have been identified by the NYNHP as being potentially located within or adjacent to the limits of disturbance.

Comments AC-44 and AC-50

These comments state that impacts to the Northern Long Eared bat were not identified and evaluated in the DEIS.

Response: See **Sections 3.3.1.3 and 3.3.2.3** of this FEIS for a discussion and analysis of the Northern Long-eared Bat. As summarized above in the response to **Comment AC-48**, impacts to this species will be avoided by limiting any tree removal under the Preferred Alternative to the NYSDEC-designated window between December 1 and February 28.

Comments PH-10 and PH-45

These comments state that the project will impact species other than just the eastern tiger salamander.

Response: As summarized above in the response to **Comment AC-48**, **Sections 3.3.1.3 and 3.3.2.3** of this FEIS provide a discussion and analysis regarding endangered and threatened species that have been identified by the NYNHP as being potentially located within or adjacent to the Preferred Alternative Area. None of these species will be adversely impacted by implementation of the Preferred Alternative.

Comments PH-19, IC-3, IC-27, IC-68, IC-183, IC-195, IC-204, IC-211, and AC-29

These comments indicate that the NYNHP has identified a variety of rare, threatened, and endangered species and significant natural communities along the project route.

Response: This comment pertains specifically to the ecological resources in the LIPA ROW, which was the route of the new 69 kV underground transmission cable for the Proposed Action presented in the DEIS. However, PSEGLI no longer proposes to install the new cable in the LIPA ROW between the two substations and proposes cable routing along public roadway ROWs under the Preferred Alternative.

As summarized above in the response to **Comment AC-48**, **Sections 3.3.1.3 and 3.3.2.3** of this FEIS provide a discussion and analysis regarding endangered and threatened species that have been identified by the NYNHP as being potentially located within or adjacent to the Preferred Alternative Area. None of these species will be adversely impacted by implementation of the Preferred Alternative.

Comment PH-49

> *"I know I read something in an article that the PSEG was proposing to do this project 500 feet away from the vernal breeding pond. But in reality they utilize a thousand feet around their breeding ponds."*

Response: This comment pertains specifically to the Proposed Action, which involved routing of the new 69-kV underground transmission cable within the LIPA ROW between the two substations. However, the Proposed Action has been reconsidered and superseded by the Preferred Alternative, which proposes cable routing along public roadway ROWs. **Section 3.3.2.3** of this FEIS discusses the anticipated impacts of the Preferred Alternative on ecological resources, including setbacks from vernal ponds that provide breeding habitat for Eastern Tiger Salamanders as per the issue raised in this comment. In particular, as discussed in the response to **Comment AC-48** in this section of the FEIS, it is concluded that all soil disturbance under the Preferred Alternative within the 535-foot NYSDEC regulatory radius around any known Eastern Tiger Salamander breeding pond will occur within the existing roadway pavement; no clearing or loss of vegetation is proposed within this buffer area. Furthermore, although select soil disturbance will occur within 1,000 feet of known breeding ponds, particularly on the north side of the Bridgehampton Substation, there will be no change in habitat type and all existing forested habitat within this buffer area will be maintained. Based on these considerations, construction and operation of the Preferred Alternative is not anticipated to result in the incidental take of Eastern Tiger Salamanders and will not otherwise result in adverse impacts on this species.

Comments IC-115 and IC-167

> *"Species such as the tiger salamander, Ambystoma tigrinum, a New York State endangered species that only occurs in New York State on Long Island, spend most of their lifecycle below ground, often well over a 1000' from their breeding ponds, only surfacing to migrate for a short time to breed. Open trenching has the potential to result in significant direct take of this imperiled species."*

Response: See **Section 3.3.2.3** the response above to **Comment PH-48** regarding the impact analysis performed in this FEIS for the Preferred Alternative regarding the regulatory buffers around breeding ponds for Eastern Tiger Salamanders.

Comment AC-49

> *"However, additional mitigative measures to avoid impacts to tiger salamanders, such as cessation of work within 1,000 feet of the identified breeding pond during the breeding season should be included."*

Response: The Proposed Action involved installation of the new 69-kV underground transmission cable within the LIPA ROW spanning eastward from the Bridgehampton Substation and terminating at the Buell Substation. As discussed in Section 2.3.2.2 of the DEIS, select clearing and grading of Eastern Tiger Salamander habitat within 535 feet of a known Eastern Tiger Salamander breeding pond may have

resulted in the incidental take of individuals of this species. However, the Proposed Action has been reconsidered and currently entails cable routing along public roadway ROWs under the Preferred Alternative and will not affect the ecological resources in the LIPA ROW between the two substations. In contrast to the Proposed Action, the only disturbance under the Preferred Alternative within 535 feet of a known Eastern Tiger Salamander breeding pond will be within existing paved roadways; no clearing or loss of vegetation is proposed within this buffer area. Although select soil disturbance will occur within the wider 1,000-foot buffer, particularly on the north side of the Bridgehampton Substation, there will be no change in habitat type and all existing forested habitat within this buffer area will be maintained. See further discussion in **Section 3.3.2.3** and the response to **Comment AC-48** in this section of the FEIS.

Comment IC-124

> *"In order to obtain an Incidental Take Permit from the NYSDEC for the species, PSEG must show a net conservation benefit. As such, they have identified approximately 0.39 acres of sub-optimal habitat on the east side of Bridgehampton-Sag Harbor Turnpike owned by the Village of Sag Harbor to be restored to more suitable native habitat. Restoring the Village parcel does not ensure use by the aforementioned rare, threatened, and endangered species on or in the vicinity of the proposed project route."*

Response: As discussed in **Section 3.3.2.3** and the responses to **Comments PH-48 and PH-49** in this section of the FEIS, the current proposal for the new 69-kV underground transmission cable under the Preferred Alternative is not anticipated to result in the incidental take of Eastern Tiger Salamanders or otherwise cause adverse impacts to this species. This outcome is based on cable routing along public roadway ROWs that will result in no clearing or loss of vegetation within 535 feet of known Tiger Salamander breeding ponds; and although select soil disturbance will occur within 1,000 feet of known breeding ponds, there will be no change in habitat type and all existing forested habitat within this wider buffer area will be maintained.

4.8 Impacts on Hydrology

Comments PH-20, IC-194, and IC-236

> *"While much of the proposed work is subsurface, this project may impact the hydrology of this important freshwater system that many of these species are dependent upon."*

Response: These comments pertain specifically to the use of the LIPA ROW as the route of the new 69-kV underground transmission cable in the Proposed Action and potential impacts to fresh surface waters and associated groundwater resources within that area. However, the Proposed Action has been reconsidered. PSEGLI proposes cable routing along public roadway ROWs under the Preferred Alternative.

Comments IC-5, IC-120, IC-193, and IC-210

> *These comments suggest that the Proposed Action could impact groundwater and that such impacts would be irreparable.*

Response: These comments pertain specifically to the groundwater resources associated with the LIPA ROW that was the route of the new 69-kV underground transmission cable for the Proposed Action presented in the DEIS. However, the Proposed Action is no longer being pursued and the proposed cable route has shifted from installation in the LIPA ROW between the two substations to cable routing along public roadway ROWs under the Preferred Alternative. Furthermore, the long-distance HDD segment of the cable installation under the Proposed Action presented in the DEIS would have penetrated deep into the aquifer; whereas, in contrast, any penetration into groundwater under the Preferred Alternative, if HDD is determined to be necessary, would be shallow and limited in geographic scope and duration, thereby avoiding significant impacts to the aquifer.

As discussed in **Section 3.2.2.3** of this FEIS, it is not anticipated that dewatering will be required for the trenching operation to install the proposed cable between the two substations under the Preferred Alternative. However, it is expected that there will be limited locations where excavation for manhole vaults will extend below the water table, which will necessitate dewatering. Under such circumstances, the required permit(s) will be obtained from NYSDEC and all permit conditions and requirements will be complied with to ensure that this activity is conducted in a manner that does not result in significant adverse impacts on groundwater resources.

Comment PH-62

> *First to the west of the turnpike you're going to be affecting the Great Swamp. This is the hydrological area of the Long Pond Greenbelt. This feeds the Long Pond Greenbelt.*

Response: See the response to **Comments IC-38 through IC-225** in **Section 4.7.1** of this FEIS.

Comment PH-83

> *"I don't have to be a scientist but I see the immense amount of construction and I've seen ponds dry up, including Crooked Pond. We've had some issues there. And I think it's because there has been cement that has actually been put in everyone's backyard and that water has to go somewhere and that's where it's going."*

Response: Crooked Pond is located about 1,000 feet to the south of the LIPA ROW that was the route of the new 69-kV underground transmission cable in the Proposed Action presented in the DEIS. The flow from Crooked Pond is to the north, toward Long Pond, so that any potential effects on surface water resources associated with the previous proposal involving cable routing beneath Long Pond would have occurred down gradient from Crooked Pond.

As noted throughout this FEIS, the current proposal under the Preferred Alternative involves rerouting the cable to the north of the LIPA ROW, along public roadway ROWs between the two substations. The shortest distance between Crooked Pond and the Preferred Alternative Area, at the westerly end of the proposed cable route to the immediate north of the Bridgehampton Substation, is approximately 2,500 feet, which is more than double the distance down gradient from Crooked Pond as compared to the prior proposal presented in the DEIS.

The information above indicates that the proposal to install the new 69kV underground cable – both as previously proposed within the LIPA ROW under the Proposed Action and, to an even greater degree, as currently proposed in public roadway ROWs further to the north under the Preferred Alternative – would not adversely impact Crooked Pond.

Comment IC-20

> *"In December of 2021, I observed a small stream which emerged from the ground just downslope of the short gated spur road between the Bridgehampton Substation and the PSEG ROW. The water flowed in a channel for a while and then spread out on the forest floor and disappeared below ground before reaching Sag Harbor Turnpike. All of the area in the vicinity of the HDD Laydown is like this: groundwater at or near the surface,"*

Response: The area to the west of the Bridgehampton Substation cited in this comment was to be used as a laydown area for conduit staging and assembly in connection with the use of HDD to install the segment of the cable beneath the Long Pond Greenbelt for the Proposed Action presented in the DEIS. This HDD installation beneath the Long Pond Greenbelt and the associated conduit laydown activity are not part of the Preferred Alternative, which will not be routed through the Long Pond Greenbelt. Instead, under the Preferred Alternative cable will be installed between the two substations along public roadway ROWs.

Comments IC-122 and IC-152

> *These comments indicate that the Proposed Action will impact the Sole Source Aquifer and Critical Environmental Areas.*

Response: Contrary to the implication of these comments, the information and analysis in the DEIS indicate that the Proposed Action does not entail the potential for significant adverse impacts to groundwater resources. This conclusion remains valid under the Preferred Alternative, whereby the routing of the new 69-kV underground transmission cable is no longer proposed within the LIPA ROW between the two substations and, instead, will follow roadway ROWs as discussed in this FEIS. If anything, the modified routing currently proposed strengthens this conclusion because the water resources of the LIPA ROW, which traverses the Long Pond Greenbelt, are no longer situated along the path of the proposed cable.

As discussed in the response to **Comment IC-186** in **Section 4.6** of this FEIS, HDD drilling fluid, which may be used at limited locations under the Preferred Alternative depending on determinations to be made by the involved roadway agencies, consists of an inert mixture of natural bentonite clay and water, which does not contain hazardous substances and does not pose a threat to groundwater quality. Furthermore, as discussed in the response to **Comment IC-189** in **Section 4.5** of this FEIS, the cable conduit will be sealed, will not contain hazardous substances, and will not pose the potential for harmful discharges to groundwater; and although construction of the proposed cable will entail the incidental storage and use

of hazardous materials, these substances are typical elements of construction activities and standard mitigation procedures will be implemented for their proper management.

Based on the foregoing considerations, it is concluded that the Preferred Alternative in this FEIS, will not result in significant impacts to the Sole Source Aquifer or associated Critical Environmental Areas.

4.9 Impacts on Topography

Comment IC-187

> *"Grading will cause runoff issues with existing topography running from 14' to 130' and with 35% slopes."*

Response: The DEIS acknowledges that the Proposed Action presented therein would have necessitated temporary regrading and slope stabilization in areas of steep gradients in order to accommodate the installation of a temporary construction road for equipment access within the LIPA ROW, thereby posing the potential for soil/topographic impacts and requiring mitigation in the form of a SWPPP and associated Erosion & Sediment Control Plan. However, such topographic adjustments are not necessary under the Preferred Alternative due to the relatively low topographic relief and existing land cover with paved roadways along the current route proposed for the new 69-kV underground transmission cable. Notwithstanding this decreased potential for erosion and sediment transport under the Preferred Alternative, a SWPPP and associated Erosion & Sediment Control Plan have been prepared for to mitigate incidental impacts during construction (see **Appendix F**). See **Section 2.1.2.2** for further discussion of this issue.

4.10 Vegetation Maintenance Practices

Comment PH-86

> *"…come along Crooked Pond and clear some of the overgrowth so it doesn't interfere with the electrical lines, the aboveground electrical lines. And you so -- your guys so -- woman and guys -- so carefully trim those trees because it's a habitat. Because you can't, as a legal matter, disturb the habitat of this land that has been so carefully preserved.*
>
> *So the idea now that you are going to drill -- horizontal, vertically, whatever you're going to do -- is just one of those absurdities of life. You can't do it. The world is already on fire. We know that. And this is preserved land."*

Response: As discussed in Section 1.2 of the DEIS, vegetation management is regularly conducted along LIPA-owned and/or controlled ROWs which contain overhead transmission infrastructure, in accordance with standard protocols and practices, to ensure system reliability and public safety. The nexus suggested in this comment, between these maintenance activities and the proposed installation of a new 69-kV underground transmission cable, is not clear. However, as discussed throughout this FEIS, the Proposed Action has been superseded by the Preferred Alternative, which does not involve any cable installation via HDD through the LIPA ROW, which traverses the Long Pond Greenbelt; and instead, proposes routing

of the cable along public roadway ROWs between the two substations, which will not affect the Greenbelt or its associated resources.

4. 11 Impacts of Horizontal Directional Drilling on Natural Resources

Comment IC-135

> *"Another problematic item in the DEIS has to do with whether the project site adjoins property which is now or was at one time used as a municipal waste facility. The DEIS claims NO. But the Sag Harbor Village property that the right-of-way passes across was once the Sag Harbor Village dump and to date has not been remediated. A portion of the property is currently leased by Southampton Town and contains one of the town's transfer stations."*

Response: As discussed in the response to **Comments IC-18 and IC-112** in **Section 4.6** of this FEIS, the Proposed Action, which would have involved installation of the proposed new 69-kV underground transmission cable within the LIPA ROW which adjoins the Village of Sag Harbor Transfer Station site (former landfill, NYSDEC Site Code 152047) is no longer being pursued. Instead, PSEGLI proposes to route the cable along public roadways between the two substations under the Preferred Alternative discussed in this FEIS. Therefore, the question raised in this comment regarding the remediation status of the Sag Harbor Transfer Station is not germane to the present proposal.

Comments IC-17 and IC-154

> *"The HDD borehole route is in part downslope and adjacent to the old Sag Harbor Dump. Possibly, there is contaminated groundwater in the vicinity of the dump which was in operation for a long time. Unless the HDD procedure is unfolding flawlessly there is the potential for the borehole to serve as a shortcut to less impacted aquifers to the East south of Long Pond and to the exit point near Widow Gavits Road."*

Response: The Proposed Action, which would have involved installation of the new 69-kV underground transmission cable within this LIPA ROW is no longer being pursued. Instead, PSEGLI currently proposes to route the cable along public roadway ROWs between the two substations under the Preferred Alternative discussed in this FEIS. Therefore, the question raised in this comment regarding the potential for HDD drilling under the Proposed Action to facilitate the movement of contamination though the groundwater aquifer is not germane to the present proposal.

See further discussion relevant to this topic in the response to **Comment IC-16** in **Section 4.6** of this FEIS regarding the concern that HDD could potentially facilitate the dispersion of contamination in the groundwater aquifer.

Comments IC-160

> *"This effort by PSEG could possibly cause residents in the area to become ill. We don't need to expose the contents from previous waste disposal."*

Response: See the response above to **Comments IC-17 and IC-154** discussing the remediation status of the Sag Harbor Landfill, which does not indicate this facility poses a significant threat to public health and notes that the Proposed Action has been reconsidered and the Preferred Alternative -will not be routed within the LIPA ROW adjacent to the landfill site.

Comment IC-15

> *"Loose sandy soils can contribute to hydrofracturing. There are loose sandy soils along the proposed HDD borehole route."*

Response: The Proposed Action no longer entails placement of the proposed new 69-kV underground transmission cable within the LIPA ROW, including a 3,450±-foot segment that was to be installed via HDD in the Long Pond Greenbelt; and, instead, the current proposal will route the cable along public roadway ROWs between the two substations under the Preferred Alternative discussed in this FEIS. Therefore, the question raised in this comment regarding the suitability of the geophysical properties of the soils for HDD installation of the cable in the LIPA ROW is not germane to the present proposal.

As discussed in the responses to **Comments IC-13 and IC-172** in **Section 4.6** of this FEIS, HDD is not proposed under the Preferred Alternative, but may become necessary based on decisions to be made by the involved roadway jurisdiction agencies. However, any HDD work that may be performed would be much shorter in length and duration, thereby also reducing the fluid pressures involved and virtually eliminating the potential for hydrofracturing and the occurrence of a frac-out event.

Comment IC-19

> *"Finally, the execution of the drilling plan may be affected by the heterogeneity of the soils and geology along the borehole path from the HDD lay down to the exit point. The lands along the ROW in this area are morainal deposits laid down at the terminus of the last glacial advance . Morainal deposits can include layers of clay, sand, sand and gravel, cobbles, till, and boulders, which are often discontinuous horizontally, Therefore vertical boreholes drilled during geotechnical studies are not as valuable to drillers in guiding the pilot hole bit."*

Response: See the response above to **Comment IC-15** regarding the previously proposed HDD installation within the LIPA ROW.

Comments PH-38 and PH-39

> *"But drilling horizontally on the Long Pond Greenbelt, a preserve nature area of pond and woods, to install an electrical transmission cable is an attack on our environment. It's one thing drilling along Ocean Road. It's another going through a protected -- well, that's already been said."*

Response: The Proposed Action, which entailed installation of the proposed new 69kV underground transmission cable through the LIPA ROW, which transverses the Long Pond Greenbelt, is no longer being pursued. Instead, PSEGLI - proposes routing the cable along public roadway ROWs between the two

substations under the Preferred Alternative. Therefore, the Long Pond Greenbelt and its natural resources will not be affected.

Comments PH-54, IC-4, IC-10, IC-14, IC-67, IC-148, IC-218, and IC-222

> *These comments state that drilling would affect the water quality of Long Pond, and would subsequently negatively impact wildlife species that utilize the pond, result in a loss of wildlife, and would degrade the ecological communities present.*

Response: See the response above to **Comments PH-38 and PH-39**.

Comment IC-153

> *"There is no information available regarding the proposed slurry lubricant's ecotoxicity."*

Response: Contrary to the assertion in this comment, the DEIS provides the Material Safety Sheet for the HDD lubricant (in Appendix J), which is summarized by the following discussion in Section 2.1.2.1 of the DEIS (page 2-14):

> "The HDD drilling operation is also expected to utilize Polywater® J Lubricant, or equivalent, to facilitate the pulling of the conduit through the borehole. This product contains no hazardous components as defined under federal regulations and, therefore, like the drilling fluid, will not pose the potential for releasing hazardous substances into soils…".

Comments PH-44, PH-55, PH-63, IC-28, and IC-118

> *These comments state that drilling activities beneath the wetlands could potentially puncture the clay layer beneath the wetlands and drain the wetlands/waterbodies.*

Response: The Proposed Action, which entailed installation of the proposed new 69-kV underground transmission cable through the LIPA ROW, which traverses the Long Pond Greenbelt, is no longer being pursued. Instead, PSEGLI proposes routing the cable along public roadway ROWs between the two substations. Therefore, the hydrology of the Long Pond Greenbelt and the associated wetlands will not be affected by the Preferred Alternative discussed in this FEIS.

Comment IC-190

> *"…public water (which contains additives) to the tune of 15,000 gallons/day will be used."*

Response: As discussed in **Section 2.2.2** of this FEIS, the HDD component of the Proposed Action involved 3,450± linear feet of cable installation in two segments beneath Long Pond Greenbelt; and the estimated water consumption of 15,000± gallons per day for operation of the HDD equipment was a conservative, anticipated maximum flow, which would have fluctuated based on the ability to recycle some of the water during the drilling process. Although HDD drilling activities for the Preferred Alternative discussed in this

FEIS, if determined to be necessary based on decisions to be made by the roadway jurisdiction agencies, would also require water supply for the slurry that serves to stabilize the bore hole, this would differ substantially from what was contemplated for the cable segment under Long Pond. In particular, the daily flow would be reduced significantly because the length of the borehole for any HDD work under the Preferred Alternative would be much shorter (i.e., in segments likely to be less than 100 feet), thereby also reducing the fluid pressures involved and virtually eliminating the potential for the occurrence of a frac-out event. A draft Frac-Out Contingency Plan was included as Appendix I in the DEIS in order to mitigate any frac-out issues. Furthermore, any drilling fluid release under the Preferred Alternative would be of a much smaller volume, would be more easily manageable, and would not occur within LIPA ROW where it potentially could be discharged into the Long Pond system.

Comment IC-141

> "*My home is in the Greenbelt and this proposed plan would impact my well water supply and harm my quality of life."*

Response: As set forth in Section 2.2.2.3 of the DEIS, installation of the proposed new 69-kV underground transmission cable along the LIPA ROW, which crosses the Long Pond Greenbelt, would not have resulted in significant impacts to groundwater resources; and the remaining sections of the DEIS show that the Proposed Action presented in the DEIS would not have resulted in impacts to other environmental parameters that could contribute to a significant deterioration of quality of life for residents in the vicinity of the ROW. However, as discussed in **Section 1.1** of this FEIS, based on the comments received during the public review period for the DEIS, the Proposed Action has been reconsidered and the Preferred Alternative is now the preferred cable routing. The Preferred Alternative, as discussed in this FEIS, will not affect the aquifer or any other resources in the Greenbelt.

4.12 Archaeological Resources

Comment IC-184

> "*If that was not enough to stop this project, there are seven archaeological significant areas within close proximity to the proposed project, one being in the vicinity of the Long Pond Greenbelt and another in close proximity to Sachem's Hole, sacred to out Native American residents."*

Response: The Proposed Action has been reconsidered and PSEGLI no longer proposes to route the new 69-kV underground transmission cable within the LIPA ROW, which traverses the Long Pond Greenbelt. Instead, PSEGLI proposes to install the cable within roadway ROWs to the north of the LIPA ROW between the two substations under the Preferred Alternative. Therefore, the archaeological resources identified in this comment will not be affected by the Proposed Action as currently configured.

A new archaeological resource assessment has been performed for the Preferred Alternative Area, as presented in **Appendix K** and summarized in **Section 3.4** of this FEIS. As indicated, implementation of the Preferred Alternative will not result in significant adverse impacts to archaeological resources.

4.13 Open Space

Comments IC-159 and IC-165

These comments indicate that the Long Pond Greenbelt is utilized educationally and recreationally as open space.

Response: The Proposed Action which entailed routing of the proposed new 69-kV underground transmission cable through the LIPA ROW, which traverses the Long Pond Greenbelt, is no longer being pursued. Therefore, resources in the Long Pond Greenbelt that serve for education and recreation will not be impacted under the current proposal for construction of the Preferred Alternative along public roadway ROWs between the two substations.

Comments AC-5 and AC-34

The transmission cable passes through a number of Suffolk County owned Parkland parcels to the west of the Long Pond Greenbelt Area and to the north of the East Hampton Airport. Suffolk County Parkland in this area of proposed disturbance are governed by various Parkland designations, including the designation of "Nature Preserve." Please contact the Suffolk County Department of Parks to access specific management plans and refer to the Suffolk County Preserve Handbook.

Response: The Proposed Action which entailed the installation of the new 69-kV underground transmission cable within the LIPA ROW between the two substations is no longer being pursued.; Instead, PSEGLI proposes routing the cable along public roadway ROWs under the Preferred Alternative. Therefore, as noted in the response to **Comment AC-6** in **Section 4.2** of this FEIS, the Suffolk County parkland parcels mentioned in this comment are not situated along the current route proposed for the cable and will not be affected by its installation. See the response to **Comments AC-7 and AC-19** in **Section 4.1** of this FEIS for discussion of the effect of the Preferred Alternative on the County's status as an Involved Agency under SEQRA and its continuing role in the review process for the Preferred Alternative.

Comment AC-14

"Coordinate location of cable/manholes and construction specifics with Suffolk County Parks."

Response: The Proposed Action, which entailed the installation of the new 69-kV underground transmission cable within the LIPA ROW between the two substations, is no longer being pursued. Instead, PSEGLI proposes cable routing along public roadway ROWs under the Preferred Alternative. Therefore, as discussed in the response above to **Comments AC-5 and AC-34**, the Preferred Alternative will not affect parcels within the LIPA ROW that are owned by the County; and, as such, further coordination with the County Parks Department regarding cable and manhole locations in this area is not necessary with respect to the Proposed Action as presently configured. However, there will be continuing coordination with the County, specifically SCDPW, regarding the design and implementation of the segment of the Preferred Alternative within the County roadway ROW along Bridgehampton-Sag Harbor Turnpike/Main Street (CR 79).

See further discussion in the response to **Comments AC-7 and AC-19** in **Section 4.1** of this FEIS regarding the change in agency involvement for the Preferred Alternative.

Comment AC-17

> *"…explore with applicable municipalities whether the installation of the proposed cable through the designated Parkland Parcels requires Parkland Alienation Legislation."*

Response: See the response to **Comments AC-5 and AC-34** in this section of the FEIS. The new 69-kV underground transmission cable is no longer proposed for installation within the LIPA ROW and, therefore, will not affect County-owned parcels in this ROW.

4.14 Alternatives

Comments PH-5, PH-7, PH-12, PH-24, PH-26, and PH-33

> *These comments request that an additional analysis be provided of the alternatives, and that LIPA work with the community on selecting the alternative.*

Response: As discussed in **Section 1.0** of this FEIS, reconsideration of the Proposed Action has been prompted by the input that has been received through community engagement and public participation during the SEQRA process. The Proposed Action was re-evaluated by PSEG Long Island planning, engineering, and construction, and the design of the Proposed Action is no longer the preferred cable routing. The Proposed Action which consisted of routing the new 69-kV underground transmission cable within the LIPA ROW between the two substations, including a segment traversing the Long Pond Greenbelt as presented in the DEIS, is no longer being pursued. Instead PSEGLI proposes that the cable be installed along public roadway ROWs under the Preferred Alternative.

It is also important to recognize that SEQRA does not require a proposed action that is subject to an EIS review process to completely avoid or fully mitigate all impacts of a project. Instead, as discussed in **Section 1.1** of this FEIS, in the next and final step of the SEQRA process, the adoption of a Findings Statement, it will be necessary for the Lead Agency and other Involved Agencies to:

> "…certify that consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable."

Thus, completion of the review of the Preferred Alternative and subsequent decision-making will entail discretion in balancing a range of relevant considerations, including environmental impacts, as well as social and economic factors, to select the most appropriate alternative after reviewing the information and analyses presented in this FEIS, along with the content of the DEIS which is incorporated into this FEIS by reference.

Comments PH-23, PH-25, PH-27, PH-40, PH-79, PH-85, IC-8, IC-23, IC-30, IC-34, IC-37, IC-51, IC-53, IC-59, IC-63, IC-72, IC-81, IC-97, IC-102, IC-107, IC-110, IC-128, IC-142, IC-146, IC-149, IC-151, IC-157, IC-202, IC-242, IC-244, AC-16, AC-26, and AC-37

> *These comments provide support for constructing one of the alternatives instead of the Proposed Action.*

Response: Consistent with the sentiment expressed in these comments, as discussed throughout this FEIS, the routing for the proposed new 69-kV underground transmission cable within the LIPA ROW between the two substations which was presented as the Proposed Action is no longer being pursued. Instead, the current proposal for cable installation follows public roadway ROWs to the north of the LIPA ROW. This Preferred Alternative is a slight variation of DEIS Alternative 2, with a minor change in the cable routing to avoid construction on the Jermain Avenue frontage of Pierson Middle/High School, based on input received from Sag Harbor Union Free School District. See further discussion regarding the proposed cable routing under the Preferred Alternative in **Section 1.1** of this FEIS.

Comment PH-81

> "*And the thought of having it be disturbed in any way, it does feel appealing. Somebody else said that before. And, you know, I noticed one of your options is to not do it. So that's an option, too."*

Response: The first two sentences in this comment pertain specifically to the Long Pond Greenbelt. However, the Proposed Action which entailed installation of the proposed new 69-kV underground transmission cable through the LIPA ROW, which traverses the Long Pond Greenbelt is no longer being pursued. Instead, PSEGLI proposes routing of the cable along public roadway ROWs between the two substations under the Preferred Alternative. Therefore, consistent with the sentiment expressed in this comment, the Long Pond Greenbelt will not be affected by the Preferred Alternative.

The last two sentences in this comment appear to allude to the No Action Alternative, which involves maintaining a status quo condition of not implementing the proposed new 69-kV underground transmission cable in any configuration, suggesting this is something that could be considered by LIPA and the other Involved Agencies. As discussed in Section 5.1 of the DEIS:

> "…the alternative of taking no action is not considered feasible or reasonable as it would fail to meet the objectives of the sponsor of the Proposed Action… the Proposed Action will implement a range of measures directed at avoiding or mitigating potential impacts, thereby minimizing any apparent environmental advantages of maintaining the status quo under the No-Action Alternative, while also providing the necessary public benefits that will result from meeting the sponsor's objectives by undertaking the Proposed Action."

As discussed in the response to **Comments PH-13 through AC-38** in **Section 4.3** of this FEIS, the need for the a new 69 kV transmission cable is substantiated in detail in the DEIS; and although the supporting information has been updated in **Section 2.3** of this FEIS to reflect a slight decrease in future projections of the rate of electric demand increase on the South Fork of Long Island which will be served by the proposed new 69-kV underground transmission cable, there remains a well-justified need for the

Preferred Alternative, which dispels the notion that the No Action Alternative could be considered an appropriate option for decision-makers.

Comment IC-87

> *"In considering this issue, we acknowledge that the desired proposal is shorter in length than other alternatives, potentially less obtrusive to residences, and more cost effective than at least four of the other five construction alternatives."*

Response: Comment noted.

Comment IC-24

> *"No objection to the route of the proposed underground transmission cable east of Sagg Road."*

Response: Comment noted.

4.15 General Project Opposition and Support

Comments PH-28 and IC-82

> *These comments reflect opposition to Alternative 2 (Northern Underground Route).*

Response: Comments on a DEIS expressing general opposition (or general support) for a proposed action are not considered substantive under SEQRA, and do not require a response in the FEIS. However, as demonstrated in this FEIS, the Preferred Alternative described and analyzed herein, which is a slight variation of the cable routing for Alternative 2 presented in the DEIS, effectively avoids or minimizes adverse environmental impacts to the extent practicable and includes appropriate mitigation measures to assist in effectuating this outcome.

Comments PH-29, PH-48, PH-60, PH-65, PH-71, PH-77, PH-78, IC-8, IC-11, IC-45, IC-50, IC-56, IC-61, IC-70, IC-83, IC-95, IC-99, IC-101, IC-138, IC-168, IC-196, IC-213, IC-215, IC-228, IC-229, IC-230, IC-233,IC-238, IC-240, AC-27, and AC-33

> *These comments provide support for Alternative 3 (Southern Underground Route).*

Response: As discussed above in the response to **Comments PH-28 and IC-82**, expressions of general support (or general opposition) for a proposed action are not considered substantive comments under SEQRA, and do not require a response in the FEIS. These statements of support by some commenters do not provide a meaningful technical basis substantiating a preference for Alternative 3 over Alternative 2.

It is also important to note that the comparative analysis performed for this EIS does not indicate that Alternative 3 offers any significant advantages over the Preferred Alternative; and it appears that the installation of underground cable along a 5.0±-mile segment of Montauk Highway, the main arterial

roadway through the Towns of Southampton and East Hampton, would pose significant logistical and technical challenges for Alternative 3, involving an increased potential for adverse impacts, which would be more difficult to overcome than are anticipated for the Preferred Alternative. Therefore, based on these practical considerations, Alternative 3 was eliminated from further evaluation as a potential candidate for the Preferred Alternative in this FEIS.

Comments PH-30, IC-84 and AC-31

These comments acknowledge that there are challenges associated with Alternative 3 as compared to the Proposed Action presented in the DEIS.

Response: Comments noted and no additional response is required.

Comments PH-31 and IC-85

These comments reflect opposition to Alternative 4 (Northern Hybrid Route).

Response: Response: As discussed in the response to **Comments PH-28 and IC-82** in this section of the FEIS, expressions of general opposition (or general support) for a proposed action are not considered substantive comments under SEQRA, and do not require a response in the FEIS. In any case, however, it is noted that Alternative 4 presented in the DEIS – using the same route as Alternative 2, but with underground cable only along the segment in the Village of Sag Harbor and overhead lines along CR 79 and NYS Route 114 outside the Village – is not being considered for implementation, with the increased visual/aesthetic impact of overhead installation being a major factor in this determination.

Comments PH-32 and IC-86

These comments reflect opposition to Alternative 5 (Overhead Route within the LIPA ROW).

Response: Response: As discussed in the response to **Comments PH-28 and IC-82** in this section of the FEIS, expressions of general opposition (or general support) for a proposed action are not considered substantive comments under SEQRA, and do not require a response in the FEIS. In any case, however, it should be noted that Alternative 5 presented in the DEIS – following the same route as the Proposed Action presented in the DEIS, but with overhead lines instead of an underground cable – is not being considered for implementation, with the increased impacts to the resources in the Long Pond Greenbelt being a major factor in this determination.

Comments PH-17, PH-50 PH-52, PH-67, PH-75, PH-80, PH-82, IC-2, IC-6, IC-7, IC-12, IC-21, IC-25, IC-31, IC-32, IC-33, IC-42, IC-43, IC-47, IC-48, IC-54, IC-57, IC-58, IC-60, IC-62, IC-65, IC-71, IC-74, IC-77, IC-94, IC-98, IC-103, IC-105, IC-108, IC-130, IC-139, IC-143, IC-145, IC-147, IC-150, IC-156, IC-162, IC-163, IC-169, IC-174, IC-181, IC-199, IC-205, IC-206, IC-208, IC-217, IC-224, IC-234, IC-241, IC-243, AC-23, and AC-41

These comments reflect general project opposition.

Response: Once again, these types of expressions of general opposition (or general support) for a proposed action are not considered substantive comments under SEQRA, and do not require a response in the FEIS. However, as discussed in the response to **Comments PH-13 through AC-38** in **Section 4.3** of this FEIS, the need for the Proposed Action is substantiated in detail in the DEIS, as updated and reinforced in **Section 2.3** of this FEIS, which demonstrates that the proposed new 69kV underground transmission cable, in some configuration, is necessary to serve the public benefits that have been identified with respect to LIPA's objective of providing safe and reliable electric service to the East End of Long Island in light of a continuing increase in the power demand in this area. Furthermore, this FEIS establishes that the Preferred Alternative described and analyzed herein effectively avoids or minimizes adverse environmental impacts to the extent practicable and includes appropriate mitigation measures to assist in effecting that outcome.

4.16 Other Comments

Comments PH-35, PH-36, IC-90, and AC-12

> *These comments suggest that an environmental benefit fund or mitigation fund be created for use in the community.*

Response: These comments pertain to funding for the mitigation of potential impacts to sensitive environmental resources in the Long Pond Greenbelt associated with the routing of the new 69-kV underground transmission cable within the LIPA ROW. However, as discussed throughout this FEIS, this proposal is no longer being pursued and has been superseded by the current cable routing within public roadway ROWs between the two substations under the Preferred Alternative.

Because the Preferred Alternative will not route the proposed cable in an area of sensitive environmental resources as was the case of the Proposed Action, the scope of required mitigation has been substantially reduced as compared to the previous proposal. Therefore, while LIPA will continue to assume responsibility for funding and/or implementing all mitigation measures necessary for implementation of the Preferred Alternative, there no longer appears to be a practical basis for establishing an environmental benefit/mitigation fund as suggested in these comments.

Comments PH-66, IC-35, and IC-164

> *These comments suggest a tax district be created for an underground route that the community chooses.*

Response: These comments point to a possible mechanism to provide funding that could be used to finance an alternative that does not route the new 69-kV underground transmission cable within the LIPA ROW (and through the Long Pond Greenbelt) under the Proposed Action presented in the DEIS. However, this outcome has already been achieved, as the Proposed Action was re-evaluated by PSEGLI planning, engineering, and construction, and the Preferred Alternative is the preferred cable routing, based on the input received during public review of the DEIS and in reconsideration of the project goals.

Comments PH-6 and PH-21

These comments state that additional mitigation needs to be provided for the overall project.

Response: These comments pertain specifically to mitigation for potential impacts to the Long Pond Greenbelt related to the Proposed Action presented in the DEIS. However, as discussed throughout this FEIS, this proposal is no longer being pursued and has been superseded by the proposed cable routing along public roadway ROWs between the two substations under the Preferred Alternative.

Comment PH-74

"The mitigation which is offered is not a viable option because there's no way that we will know exactly what it's going to cost. And I don't want you to put more money into it than you need to for a mitigation factor, but I also don't want you putting in any less money than would be necessary. So I don't think it's even a consideration that you're offering mitigation because that will not be viable."

Response: This comment pertains specifically to mitigation for potential impacts associated with the Proposed Action presented in the DEIS involving routing of the new 69-kV underground transmission cable within the LIPA ROW. However, this proposal is no longer being pursued and has been superseded by the proposed cable routing along public roadway ROWs between the two substations under the Preferred Alternative. As was the case for the Proposed Action presented in the DEIS, all mitigation for the Preferred Alternative will be fully funded and is included in the overall estimated cost of construction.

Comment IC-125

"Besides agreements for restoration, PSEG needs to secure an agreement that the Village will maintain this parcel in perpetuity for the benefit of tiger salamanders and associated species."

Response: As indicated in this comment, the Proposed Action presented in the DEIS included Eastern Tiger Salamander habitat restoration to compensate for the anticipated incidental take of this species due to the encroachment of construction activities into regulated buffer areas around known breeding ponds. However, that prior proposal for cable routing is no longer under consideration; and, instead, the cable will be installed along public roadway ROWs under the Preferred Alternative. As discussed in **Section 3.3.2.3** and summarized in the response to **Comment PH-49** in **Section 4.7.4** of this FEIS, the current cable routing under the Preferred Alternative is not anticipated to result in the incidental take of Eastern Tiger Salamanders or otherwise result in adverse impacts on this species. On this basis, Tiger Salamander habitat restoration is not necessary and is not included in the Preferred Alternative. Therefore, the question raised in this comment, regarding the possible need for an agreement to ensure the proper, long-term maintenance of the habitat restoration project, is no longer relevant under the Preferred Alternative.