

PSEG LONG ISLAND LLC
on Behalf of and as Agent for the
LONG ISLAND LIGHTING COMPANY d/b/a LIPA

Southampton to Deerfield Transmission Project
Case 24-T-0113

ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN

Appendix P
Invasive Species Management Plan

TABLE OF CONTENTS

1	INTRODUCTION.....	1
1.1	PURPOSE AND GOALS	1
1.2	REGULATED AND PROHIBITED INVASIVE SPECIES UNDER NYCRR 575	2
1.3	INVASIVE SPECIES OBSERVATIONS.....	4
1.3.1	Review of Publicly Available Data.....	4
1.3.2	Field Reconnaissance.....	5
	<i>1.3.2.1 Field Reconnaissance Results.....</i>	<i>5</i>
	<i>1.3.2.2 Invasive Animal Species.....</i>	<i>7</i>
2	CONSTRUCTION BEST MANAGEMENT PRACTICES.....	9
3	SPECIES SPECIFIC MITIGATION	11
4	POST-CONSTRUCTION MONITORING.....	12
5	ADAPTIVE MANAGEMENT STRATEGY.....	13

LIST OF TABLES

TABLE 1-1. PROHIBITED AND REGULATED INVASIVE PLANT SPECIES IN NEW YORK	2
TABLE 1-2. NYNHP-IDENTIFIED INVASIVE PLANT SPECIES OBSERVATIONS NEAR THE PROJECT.....	5
TABLE 2-1. FIELD-IDENTIFIED INVASIVE PLANT SPECIES ALONG THE PROJECT	6
TABLE 2-2. POTENTIAL INVASIVE ANIMAL SPECIES NEAR THE PROJECT	7
TABLE 3-1. RECOMMENDED REMOVAL METHODS FOR INVASIVE PLANT SPECIES LOCATED WITHIN THE POTENTIAL AREA OF TRANSMISSION LINE DISTURBANCE	11

ATTACHMENTS

ATTACHMENT 1 – FIELD-IDENTIFIED HABITAT MAP FOR PSEG LONG ISLAND SOUTHAMPTON TO DEERFIELD TRANSMISSION PROJECT	1
ATTACHMENT 2 – IDENTIFICATION GUIDE FOR INVASIVE SPECIES PREVIOUSLY IDENTIFIED ALONG THE CERTIFIED ROUTE	1

1 INTRODUCTION

The Certificate Holder has prepared the Invasive Species Management Plan (ISMP) to identify methods that will be implemented during construction to minimize the potential for the introduction and spread of invasive plant and insect species associated with the Southampton to Deerfield Transmission Project (the Project). The ISMP has been prepared in accordance with the Invasive Species Management Plan Specifications issued by the New York State Department of Environmental Conservation (NYSDEC) for the Project. The Certificate Holder, as the SERVCO of the Long Island Power Authority has the assurance to complete the monitoring of, and disposition of invasive species identified within the limits of disturbance of the Project.

An “Invasive Species” is defined by the NYSDEC under 6 New York Codes Rules and Regulations Part 575.2(s) as “A species that is non-native to the ecosystem under consideration, and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.” The ISMP is compliant with 6 New York Codes Rules and Regulations Part 575 (NYCRR 575). The presence of invasive plant and animal species were documented along the Project route and in the vicinity of the Project during field reconnaissance in the summer of 2023 and 2024.

Based on the location of the Project primarily within existing public roadway rights-of-way (ROW), interaction with invasive plant species will be limited to the few areas where the Project centerline deviates from the roadway centerline, that are subject to tree clearing or to vegetation removal. Tree clearing and vegetation removal is described and shown within Appendix U – Vegetation and Tree Management and Restoration Plan and will be avoided to the extent practicable.

1.1 Purpose and Goals

The overall goal of invasive species management is to control the continued spread of invasive species within and outside the Project area. Invasive species are known to exist within the Project area, but because the Project will be primarily constructed within an existing roadway ROW, the Project is not expected to create any significant changes to the composition of the vegetation within the ROW. The ISMP provides information on invasive plant species known to occur in, and invasive insect species potentially occurring in, the Project area. Notwithstanding the presence of invasive species within the Project area, which may also be present on adjacent lands, the ISMP describes measures to minimize the potential for introduction or spread of invasive species as a result of the Project’s construction activities.

The ISMP describes the following:

- Methods used to identify which invasive species are present and where they are located within the Project area prior to the initiation of construction (i.e., baseline surveys);
- Methods that will be used to minimize the spread and expansion of invasive species within, and to minimize the introduction of new invasive species into, the Project area (i.e., construction best management practices “BMPs”);

- Methods that will be used to complete post construction monitoring;
- If needed, development of an Adaptive Management Strategy Plan to control changes in invasive species conditions post-construction;
- Field Identified Habitat Map depicting the location of invasive species and their relative abundance along the Certified Route (Attachment 1); and,
- Identification Guide for invasive species previously identified along the Certified Route (Attachment 2).

1.2 Regulated and Prohibited Invasive Species Under NYCRR 575

Invasive species designated under 6 NYCRR 575 are either prohibited or regulated. Prohibited Invasive Species cannot be knowingly possessed with the intent to sell, import, purchase, transport, introduce, or propagate. Regulated Invasive Species cannot be knowingly introduced into a free-living state or introduced by a means that one should have known would lead to such an introduction, although such species are legal to possess, sell, buy, propagate, and transport. A species is considered in a free-living state if it is introduced to public lands or lands connected to public lands, natural areas, and public waters or waters connected to public waters. Table 1-1 lists Prohibited (6 NYCRR 575.3) and Regulated Invasive Plant Species (6 NYCRR 575.4) in New York.

Table 1-1. Prohibited and Regulated Invasive Plant Species in New York

Scientific Name	Common Name
Prohibited Species	
<i>Acer pseudoplatanus</i> *	Sycamore Maple
<i>Achyranthes japonica</i>	Japanese Chaff Flower
<i>Alliaria petiolate</i> *	Garlic Mustard
<i>Ampelopsis brevipedunculata</i> *	Porcelain Berry
<i>Anthriscus sylvestris</i>	Wild Chervil
<i>Aralia elata</i> *	Japanese Angelica Tree
<i>Artemisia vulgaris</i> *	Mugwort
<i>Arthraxon hispidus</i>	Small Carpet Grass
<i>Berberis thunbergii</i> *	Japanese Barberry
<i>Brachypodium sylvaticum</i>	Slender False Brome
<i>Cabomba caroliniana</i>	Fanwort
<i>Cardamine impatiens</i>	Narrowleaf Bittercress
<i>Celastrus orbiculatus</i> *	Oriental Bittersweet
<i>Centaurea stoebe</i> (<i>C. biebersteinii</i> , <i>C. diffusa</i> , <i>C. maculosa</i> misapplied, <i>C. xpsammogena</i>)	Spotted Knapweed
<i>Cirsium arvense</i> (<i>C. setosum</i> , <i>C. incanum</i> , <i>Serratula arvensis</i>)	Canada Thistle
<i>Cynanchum louiseae</i> (<i>C. nigrum</i> , <i>Vincetoxicum</i>)	Black Swallow-wort

<i>nigrum</i>)	
<i>Cynanchum rossicum</i> (C. medium, Vincetoxicum medium, V. rossicum)	Pale Swallow-wort
<i>Dioscorea polystachya</i> (D. batatas)	Chinese Yam
<i>Dipsacus laciniatus</i>	Cut-leaf Teasel
<i>Egeria densa</i>	Brazilian Waterweed
<i>Elaeagnus umbellata</i> *	Autumn Olive
<i>Euphorbia cyparissias</i>	Cypress Spurge
<i>Euphorbia esula</i>	Leafy Spurge
<i>Ficaria verna</i> (Ranunculus ficaria)	Lesser Celandine
<i>Frangula alnus</i> (Rhamnus frangula)	Smooth Buckthorn
<i>Glyceria maxima</i>	Reed Manna Grass
<i>Heracleum mantegazzianum</i>	Giant Hogweed
<i>Humulus japonicus</i>	Japanese Hops
<i>Hydrilla verticillata</i>	Hydrilla, Water Thyme
<i>Hydrocharis morus-ranae</i>	European Frogbit
<i>Imperata cylindrica</i> (I. arundinacea, Lagurus cylindricus)	Cogon Grass
<i>Iris pseudacorus</i>	Yellow Iris
<i>Lepidium latifolium</i>	Broad-leaved Pepper-grass
<i>Lespedeza cuneata</i>	Chinese Lespedeza
<i>Ligustrum obtusifolium</i>	Border Privet
<i>Lonicera japonica</i>	Japanese Honeysuckle
<i>Lonicera maackii</i>	Amur Honeysuckle
<i>Lonicera morrowii</i> *	Morrow's Honeysuckle
<i>Lonicera tatarica</i>	Tartarian Honeysuckle
<i>Lonicera x bella</i>	Fly Honeysuckle
<i>Ludwigia hexapetala</i> (L. grandiflora)	Uruguayan Primrose Willow
<i>Ludwigia peploides</i>	Floating Primrose Willow
<i>Lysimachia vulgaris</i>	Garden Loosestrife
<i>Lythrum salicaria</i>	Purple Loosestrife
<i>Microstegium vimineum</i> *	Japanese Stilt Grass
<i>Murdannia keisak</i>	Marsh Dewflower
<i>Myriophyllum aquaticum</i>	Parrot-feather
<i>Myriophyllum heterophyllum</i>	Broadleaf Water-milfoil
<i>Myriophyllum heterophyllum x M. laxum</i>	Broadleaf Water-milfoil Hybrid

<i>Myriophyllum spicatum</i>	Eurasian Water-milfoil
<i>Nymphoides peltata</i>	Yellow Floating Heart
<i>Oplismenus hirtellus</i>	Wavyleaf Basketgrass
<i>Persicaria perfoliata</i> (<i>Polygonum perfoliatum</i>)	Mile-a-minute Weed
<i>Phellodendron amurense</i>	Amur Cork Tree
<i>Phragmites australis</i>	Common Reed Grass
<i>Phyllostachys aurea</i>	Golden Bamboo
<i>Phyllostachys aureosulcata</i>	Yellow Groove Bamboo
<i>Potamogeton crispus</i>	Curly Pondweed
<i>Pueraria montana</i>	Kudzu
<i>Reynoutria japonica</i> (<i>Fallopia japonica</i> , <i>Polygonum cuspidatum</i>)	Japanese Knotweed
<i>Reynoutria sachalinensis</i> (<i>Fallopia sachalinensis</i> , <i>Polygonum sachalinensis</i>)	Giant Knotweed
<i>Reynoutria x bohemica</i> (<i>Fallopia x bohemica</i> , <i>Polygonum x bohemica</i>)	Bohemian Knotweed
<i>Rhamnus cathartica</i>	Common Buckthorn
<i>Rosa multiflora</i>	Multiflora Rose
<i>Rubus phoenicolasius</i> *	Wineberry
<i>Salix atrocinerea</i>	Gray Florist's Willow
<i>Silphium perfoliatum</i>	Cup-plant
<i>Trapa natans</i>	Water Chestnut
<i>Vitex rotundifolia</i>	Beach Vitex
Regulated Plant Species	
<i>Acer platanoides</i> *	Norway Maple
<i>Clematis terniflora</i>	Japanese Virgin's Bower
<i>Euonymus alatus</i>	Burning Bush
<i>Euonymus fortunei</i>	Winter Creeper
<i>Miscanthus sinensis</i>	Chinese Silver Grass
<i>Robinia pseudoacacia</i> *	Black Locust
*Species identified during field reconnaissance in 2023 and 2024.	

1.3 Invasive Species Observations

Section 1.3 describes the findings from a review of publicly available invasive species data and invasive species field reconnaissance.

1.3.1 Review of Publicly Available Data

The invasive species documented by the New York Natural Heritage Program (NYNHP) within the ROW

or the immediate vicinity of the Project are detailed in Table 1-2.

Table 1-2. NYNHP-Identified Invasive Plant Species Observations Near the Project

Approximate Location	ID	Common Name	Scientific Name	Date Observed
435 North Main Street, Southampton, NY 11968	425796	Japanese Angelica Tree	<i>Aralia elata</i>	10/17/2014
	476215	Japanese Angelica Tree	<i>Aralia elata</i>	10/17/2014
	421461	Japanese Angelica Tree	<i>Aralia elata</i>	10/17/2014
531 North Main Street, Southampton, NY 11968	367507	Wineberry	<i>Rubus phoenicolasius</i>	1/1/1962
610 North Sea Mecox Road, Southampton, NY 11968	403070	Giant Hogweed	<i>Heracleum mantegazzianum</i>	7/11/2012
	412223	Giant Hogweed	<i>Heracleum mantegazzianum</i>	6/5/2013
	352953	Giant Hogweed	<i>Heracleum mantegazzianum</i>	1/1/2011

1.3.2 Field Reconnaissance

Field reconnaissance was performed in August 2023 to identify habitat communities along the Project and a tree inventory was performed in June and July 2024. These baseline surveys were completed by qualified biologists familiar with the flora of New York State who mapped the predominant invasive species within the public road shoulder and on substation property. Where invasive species were present, their coverage was visually estimated, and each area was assigned a cover rating of either low (Zero percent to 50 percent) or high (50 percent to 100 percent). Due to access rights, private property adjacent to the public roadways was only surveyed from the road shoulder. Because the occurrence, location and/or density of invasive species could change in the time between the approval of the Environmental Management and Construction Plan (EM&CP) and the start of construction, the Certificate Holder may conduct an invasive species survey before the start of construction.

1.3.2.1 Field Reconnaissance Results

The species listed below in Table 2-1 are the invasive species identified during field investigations. Of the 29 invasive species identified, 11 are trees, five are shrubs, six are woody vegetation or vines, four are herbaceous or non-woody, and three are grasses. Invasive species and their relative abundance are shown in Attachment 1 (Field-Identified Habitat Map for PSEG Long Island Southampton to Deerfield Transmission Project). The locations of invasive plants and recommended removal methods are provided in Appendix U, Attachment 1 of the EM&CP. All species found within the Project ROW also occur throughout the broader landscape and are not confined solely to the Project ROW. Attachment 2 – Identification Guide for Invasive Species Previously Identified Along the Certified Route provides more details of the invasive species identified along the Project. Prior to construction, the Certificate Holder will submit an Initial Invasive Plant Species Monitoring Report to NYSDEC which will present the findings of the baseline survey.

Table 2-1. Field-Identified Invasive Plant Species Along the Project

Common Name	Scientific Name	NYNHP Ecological Invasiveness and PRISM Tier ^e
Tree		
Black locust ^{b, c}	<i>Robinia pseudoacacia</i>	Very high (Tier 4)
Bradford pear	<i>Pyrus calleryana</i> 'Bradford'	High (Tier 4)
Callery pear	<i>Pyrus calleryana</i>	High (Tier 4)
Crimson king maple	<i>Acer platanoides</i> 'Crimson King'	--
Japanese angelica tree ^a	<i>Aralia spinosa</i>	Very high (Tier 4)
Japanese pagoda tree	<i>Styphnolobium japonicum</i>	Unknown (Tier M)
Norway maple ^b	<i>Acer platanoides</i>	Very high (Tier 4)
Siberian elm	<i>Ulmus pumila</i>	Moderate (Tier M)
Silver poplar	<i>Populus alba</i>	Moderate (Tier M)
Sycamore maple ^a	<i>Acer pseudoplatanus</i>	High (Tier 4)
Japanese Maple	<i>Acer palmatum</i>	Moderate (Tier M)
Tree of heaven	<i>Ailanthus altissima</i>	High (Tier 4)
Shrub		
Autumn olive ^a	<i>Elaeagnus umbellata</i>	Very high (Tier 4)
Honeysuckle	<i>Lonicera</i> spp.	Unknown, not assessed, moderate or very high (Tier 3, 4, or M) depending on species
Marrow's honeysuckle	<i>Lonicera marrowii</i>	Very high (Tier 4)
Multiflora rose	<i>Rosa multiflora</i>	Very high (Tier 4)
Privet	<i>Ligustrum</i> spp.	Not assessed, low, moderate, or high (Tier 4 or M) depending on species
Winged euonymus ^b	<i>Euonymus alatus</i>	Very high (Tier 4)
Japanese barberry ^a	<i>Berberis thunbergii</i>	Very high (Tier 4)
Japanese holly	<i>Ilex crenata</i>	Moderate (Tier 4)
Woody Vegetation/Vines		
English ivy	<i>Hedera helix</i>	Moderate (Tier 4)
Greenbrier	<i>Smilax</i> spp.	--
Oriental Bittersweet ^a	<i>Celastrus orbiculatus</i>	Very high (Tier 4)
Poison Ivy ^c	<i>Toxicodendron radicans</i>	--
Porcelain Berry ^a	<i>Ampelopsis brevipedunculata</i>	High (Tier 4)
Wineberry ^a	<i>Rubus phoenicolasius</i>	Very high (Tier 4)
Wisteria	<i>Wisteria</i> spp.	Moderate (Tier 4)

Common Periwinkle	<i>Vinca minor</i>	Moderate (Tier 4)
Grasses		
Arrow Bamboo	<i>Pseudosasa japonica</i>	--
Bamboo	<i>Bambusoideae spp.</i>	Not assessed (Tier 4)
Japanese Stiltgrass	<i>Microstegium vimineum</i>	Very high (Tier 4)
Miscanthus ^b	<i>Miscanthus spp.</i>	Moderate to high (Tier 4 or M)
Herbaceous/Non-woody Vegetation^d		
Garlic Mustard ^a	<i>Alliaria petiolata</i>	Very high (Tier 4)
Mile A Minute	<i>Persicaria perfoliata</i>	Very high (Tier 4)
Mugwort ^a	<i>Artemisia vulgaris</i>	High (Tier 4)
Pachysandra	<i>Pachysandra spp.</i>	Not assessed or high (Tier 4 or M)
Pokeweed ^c	<i>Phytolacca americana</i>	--
Notes: a) These species are prohibited by New York State Department of Environmental Conservation (NYSDEC). These species shall not be sold, imported, purchased, transported, introduced, or propagated. See 6 NYCRR 575.3 for the full regulation. b) These species are regulated by NYSDEC. These species shall not be knowingly introduced into a free-living state, but these species can still be legally possessed, sold, bought, propagated, and transported. See 6 NYCRR 575.4 for the full regulation. c) These species are native to North America, but considered invasive due to the pervasive and dominant nature of their growth. d) Other invasive forb species were surveyed outside Deerfield Substation, but taxonomic classification was not provided. e) Invasiveness and PRISM Tier is based on NYNHP's New York State Invasive Species Tiers. Tier is based on Long Island's Invasive Species Management Area. a. Tier 3: Highly invasive species with medium abundance in the region, management goal of containment. b. Tier 4: Highly invasive species with great abundance in the region, management goal of local control. c. Tier M: Non-native species in the region with unknown invasiveness, requiring research or monitoring.		

1.3.2.2 Invasive Animal Species

No invasive animal species were identified during the field investigations completed for the Project. However, the New York State Department of Environmental Conservation (NYSDEC) prohibits and regulates multiple terrestrial vertebrates and invertebrates under 6 NYCRR 575. The following species are often associated with the plant species identified along the Project. See Attachment 2 for a more detailed list of the invasive species identified along the Project.

Table 2-2. Potential Invasive Animal Species Near the Project

Common Name	Scientific Name	Regulatory Status in New York	Potential Host within ROW	Notes
Asian Longhorned Beetle	<i>Anoplophora glabripennis</i>	Regulated under 6 NYCRR 575 as a Prohibited Terrestrial Invertebrate.	Various hardwood tree species including, maple, birch, elders, elm, polar, planetree, locust, and horse	Ecological invasiveness is high and they are a Tier 2 species (low in regional abundance, management goal of eradication).

			chestnut.	
Gypsy Moth	<i>Lymantria dispar</i>	Regulated under 6 NYCRR 575 as a Prohibited Terrestrial Invertebrate.	Oak tree species.	--
Sirex Woodwasp	<i>Sirex noctilio</i>	Regulated under 6 NYCRR 575 as a Prohibited Terrestrial Invertebrate.	Pine tree species.	Ecological invasiveness is high and they are a Tier 1a species (located within 100 miles of the region, currently being monitored within the region).
Beech Scale	<i>Cryptococcus fagisuga</i>	Regulated under 6 NYCRR 575 as a Prohibited Terrestrial Invertebrate.	Beech tree species.	Ecological invasiveness is high and they are not assigned a tier within the Long Island Invasive Species Management Area.
Spotted Lantern Fly	<i>Lycorma delicatula</i>	Invasive (not regulated under 6 NYCRR 575).	Tree of Heaven.	While not regulated under 6 NYCRR 575, is considered a major invasive species in New York. Ecological invasiveness is high and they are a Tier 4 species (high regional abundance, management goal of local control).
Southern Pine Beetle	<i>Dendroctonus frontalis</i>	Invasive (not regulated under 6 NYCRR 575).	Pine tree species.	While not regulated under 6 NYCRR 575, is considered an invasive insect to the Long Island area. Ecological invasiveness is high and they are a Tier 4 species (high regional abundance, management goal of local control). While no individuals were identified, one stand of dead pitch pines during surveys showed signs of the pine beetle impact.

2 CONSTRUCTION BEST MANAGEMENT PRACTICES

The Certificate Holder will use the following measures to minimize the potential for the introduction and spread of invasive species:

1. *Contractor/Employee Training:* All field management personnel as well as project contractors will be trained and educated in the identification of invasive species, implementing best management practices, and cleaning methods to prevent, control and/or minimize the transport of invasive species throughout and off the Project. The contractor will be informed of known invasive species concentration areas during pre-construction training and at morning meetings when reviewing daily construction plans. Contractor education will be accomplished through training provided by Certificate Holder.
2. *Environmental Monitor Training and Invasive Species Construction Monitoring:* Environmental Monitor(s) will be able to recognize all pertinent invasive species in 6 NYCRR Part 575 and will be aware of the areas of invasive species identified within the ROW and work places. In particular, the Environmental Monitor(s) shall be trained to identify the Asian longhorned beetle, the southern pine beetle, spotted lanternfly, gypsy moth, sirex woodwasp, beech scale and any other invasive insects that the NYSDEC identifies as a potential problem. If evidence of the existence of invasive insects is found, or if the species is identified during the course of construction activities, they shall be reported immediately to the NYSDEC.

As an additional ongoing mitigation measure, the Environmental Monitor(s) will monitor for invasives and ensure the ISMP is being followed throughout the construction of the Project.

3. *Proper Cleaning of Clothing, Footwear, and Gear:* No cleaning of clothing, footwear, or gear will be permitted in or adjacent to waterways – it may promote the spread of invasive plant species downstream.
4. *Installation of Appropriate Erosion and Sediment Controls:* Appropriate erosion and sediment controls will be installed to help prevent or control the potential transport of invasive plant species via soil erosion.
5. *Initial Inspection and Cleaning of Construction Materials and Equipment:* Soils, plant parts, and seeds will be cleaned from tools and equipment including undercarriage, tires, tailgates and grills of all vehicles and equipment. Equipment cleaning will be accomplished using high-pressure air, brushes and other hand tools (without using water). Equipment will be cleaned in LOD prior to leaving the site containing invasive species. Seed mixes and straw bales brought into the Project area from an outside source, or another source on the Project, will be either certified weed-free or visibly weed free.
6. *Proper Staging of Equipment and Materials:* proper staging of equipment and materials: Staging equipment or materials with invasive species will be avoided to the maximum extent practicable.
7. *Inspection of Imported Fill:* Imported fill will be inspected by the Environmental Monitor(s) for invasive species. If any new invasive species or any invasive insects are found, the material will not be accepted. Depending on the species, proper notifications will occur to allow for early detection/rapid response for invasive species that need to be contained as soon as they are identified.

8. *Avoidance*: For any areas immediately adjacent to the Project area where invasive species of special concern (defined in Section 5 of the ISMP) have been identified, crews will be instructed to avoid these areas (as part of the morning tailboard), where applicable. The location of invasive species likely to be encountered during construction are shown on the Vegetation and Tree Management & Restoration Plans provided in Attachment 1 of Appendix U of the EM&CP.
9. *Minimization of Ground Disturbance*: Soil disturbance will be minimized through the use of delineation of clearing, grading and ground disturbance limits prior to construction. Construction activities have been designed to minimize ground disturbance through the use of existing public roadways, limiting the size of designated work areas, avoiding areas that require grading, and minimizing vegetation removal. Soil disturbance will be limited to fusing areas. There are no NYSDEC regulated wetland and adjacent areas bordering the Project. The agricultural lands that border the Project have no planned impact.
10. *Clearing and Disposal Practices*: If an invasive species must be cut or uprooted during construction, the material will either remain within the same infested area or be disposed of off-site to an authorized location. The plant material will be transported in a secure manner. Any soil associated with the removal of invasive plant material or construction activities such as trenching, shall be disposed of in a similar manner.
11. *Handling of Wood Waste*: Removal of any wood from the ROW will be pursuant to the NYSDEC's firewood regulations to protect forests from invasive species found in 6 NYCRR Part 192, and any applicable NYSDEC quarantine orders and/or NYSAGM quarantine regulations.
12. *Site Restoration Best Management Practices*: Bare soils will be revegetated as soon as appropriate with appropriate seeding or plantings to minimize possible establishment of invasive species.
13. *Initial Inspection and Cleaning of Construction Materials and Equipment*: The inspection and cleaning of equipment will be completed for all equipment prior to leaving an area of mapped invasive species. Soils, plant parts, and seeds will be cleaned from tools and equipment including undercarriage, tires, tailgates and grills of all vehicles and equipment. Equipment cleaning will be accomplished using high-pressure air, brushes and other hand tools (without using water).

For vegetation and invasive management during maintenance and operation, refer to the Certificate Holder's most recent long-term ROW management plan.

3 SPECIES SPECIFIC MITIGATION

During construction, the Environmental Monitor(s) will observe trees and vegetation along the Project for signs of the Asian longhorned beetle, gypsy moth, sirex woodwasp, beech scale, spotted lantern fly, and southern pine beetle. Signs include individuals, larva, eggs, and bore holes. These invasive species have preferred host trees that were identified along the route. If observed, the Environmental Monitor(s) will notify NYSDEC.

Prior to construction, invasive plant species located within the limits of disturbance of the Project will be removed. The recommended removal methods for invasive species are described below. Removal and disposal methods must be completed in a manner that avoids the spread of invasive species. Invasive trees that must be replaced pursuant to Certificate Condition 54 will be replaced with non-invasive trees and in accordance with Appendix U – Vegetation and Tree Management and Restoration Plan. See Appendix U, Section 7 for more details.

Table 3-1. Recommended Removal Methods for Invasive Plant Species Located within the Potential Area of Transmission Line Disturbance

Species	Removal Method(s)
Miscanthus and Multiflora rose	Cut down and remove vegetation.
Garlic mustard, Mugwort, Wineberry, Pachysandra, Pokeweed, Japanese stilt grass, and Privet	Pull by hand or dig up.
Marrow's honeysuckle, Honeysuckle, Oriental bittersweet, Green briar, and Wisteria	Cut stem flush to ground and dig up roots.
Mile-a-minute and Porcelain berry	Cut stem flush to ground.
Norway maple, Black locust, Tree of heaven, Autumn olive, Japanese barberry, and Japanese holly	Removal and stump grinding.

Wood chips, with a depth greater than three inches, can be used as temporary stabilization and invasive species control per Certificate Condition 53(c), as long as it is not covering native vegetation or landscaping trees. Any wood chips generated should not be spread outside of the limits of disturbance (LOD).

To mitigate the spread of invasive plant species, once removed from the group, invasive plant species must be disposed of according to Section 2 Construction Best Management Practices which state that if an invasive species must be cut or uprooted during construction, the material will either remain within the same infested area or be disposed of off-site to an authorized location. The plant and soil material will be transported in a secure manner.

4 POST-CONSTRUCTION MONITORING

A post-construction monitoring survey of invasive species shall be conducted in the Project area, within the LOD and laydown areas. The post-construction monitoring surveys shall occur after the second full growing season from final SWPPP sign off.

During the post-construction monitoring survey, a monitor will (1) visually inspect areas for known invasive species as identified during pre-construction surveys and note differences from the densities and locations; and (2) document the locations and densities of new occurrences of invasives. The post-construction surveys will use the same protocols used during baseline surveys.

5 ADAPTIVE MANAGEMENT STRATEGY

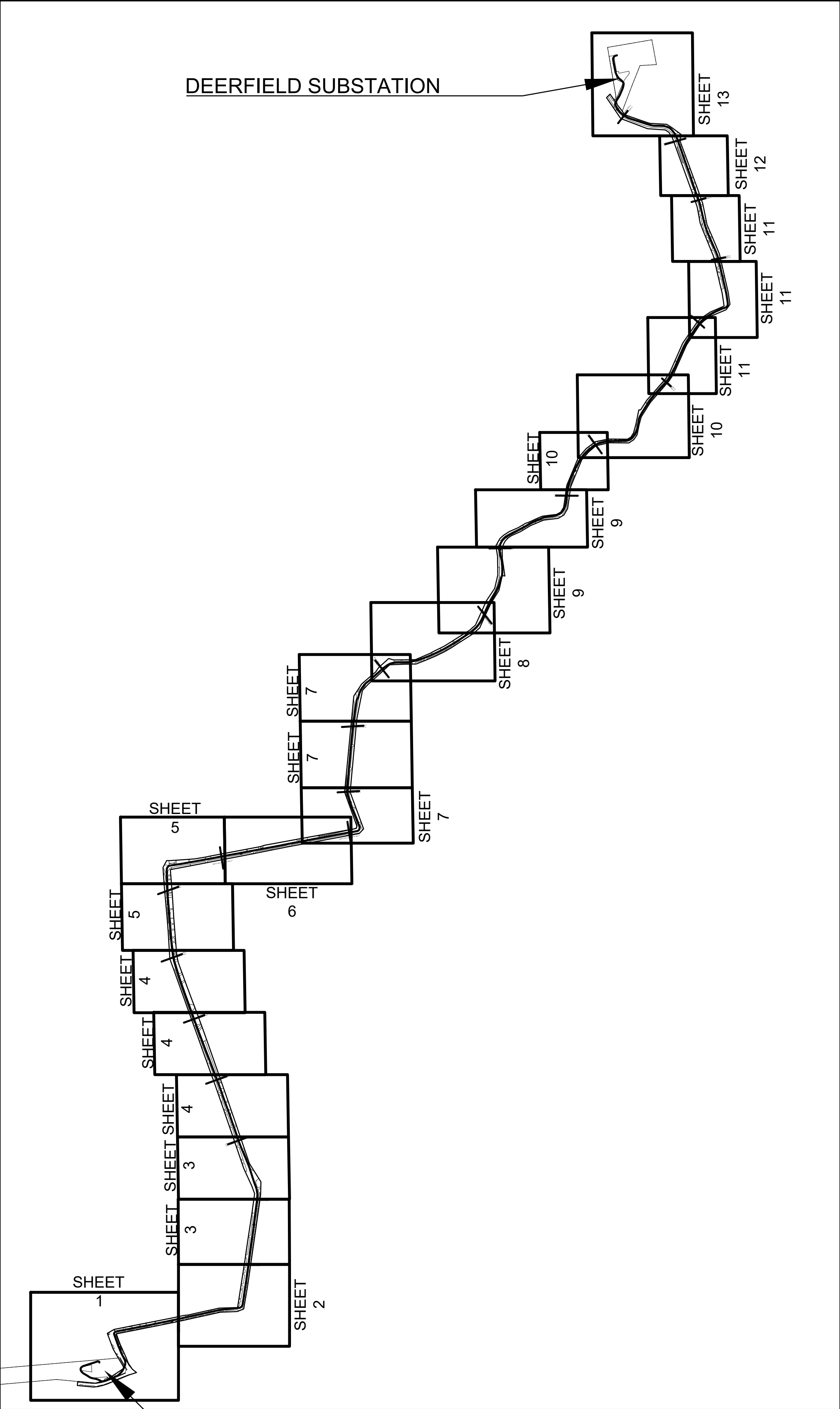
In the case of identified invasive species spread during construction, the certificate holder will consult with NYSDEC and the NYSDPS Staff as to the adoption of an Adaptive Management Strategy.

ATTACHMENT 1 – Field-Identified Habitat Map for
PSEG Long Island Southampton to Deerfield
Transmission Project

FIELD-IDENTIFIED HABITAT MAP

FOR

PSEG LONG ISLAND SOUTHAMPTON TO DEERFIELD TRANSMISSION PROJECT



DEERFIELD SUBSTATION

SOUTHAMPTON SUBSTATION

KEY MAP
NTS

HABITAT CLASSIFICATION LEGEND

- MOWED LAWN
- MOWED LAWN WITH TREES
- MOWED ROADSIDE
- COASTAL OAK-BEECH FOREST
- PITCH PINE-OAK FOREST
- SUCCESIONAL SHRUBLANDS
- SUCCESIONAL SOUTHERN HARDWOODS
- HIGH QUANTITY OF INVASIVE
- LOW QUANTITY OF INVASIVE

LEGEND

- PROPOSED TRANSMISSION LINE
- POTENTIAL AREA OF TRANSMISSION LINE DISTURBANCE
- PROPOSED SPLICE VAULT LOCATION
- RIGHT OF WAY
- PROPERTY BOUNDARY
- PAGE MATCH LINE



Long Island Power Authority
SOUTHAMPTON – DEERFIELD

138KV TRANSMISSION LINE

SOUTHAMPTON TO DEERFIELD
138KV TRANSMISSION LINE (OPERATED AT 69KV)
HABITAT EXHIBIT

PSEG LONG ISLAND
175 East Old Country Road
Hicksville, New York

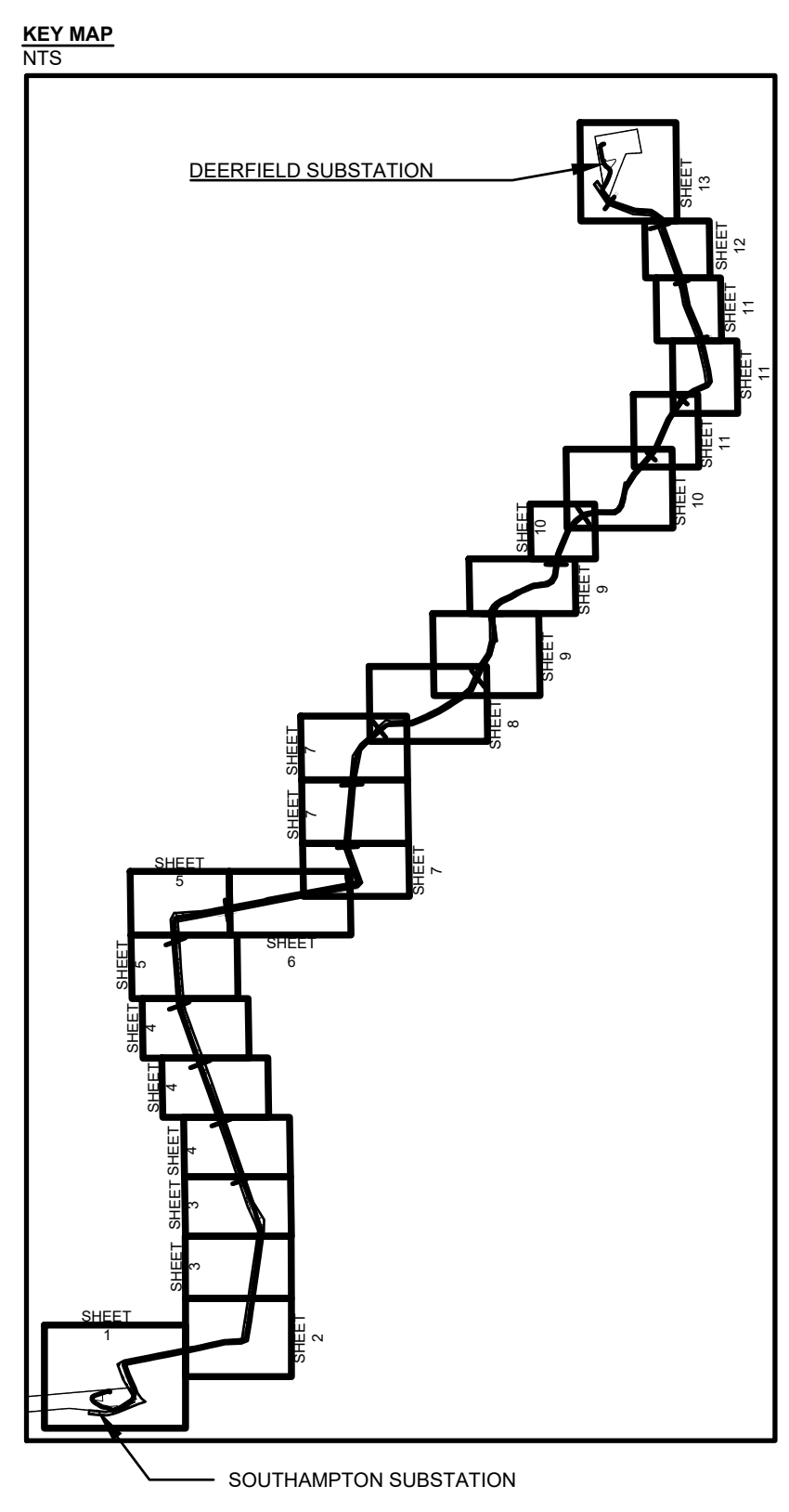


HABITAT CLASSIFICATION LEGEND

- MOWED LAWN
- MOWED LAWN WITH TREES
- MOWED ROADSIDE
- COASTAL OAK-BEECH FOREST
- PITCH PINE-OAK FOREST
- SUCCESIONAL SHRUBLANDS
- SUCCESIONAL SOUTHERN HARDWOODS
- HIGH QUANTITY OF INVASIVE
- LOW QUANTITY OF INVASIVE

LEGEND

- PROPOSED TRANSMISSION LINE
- POTENTIAL AREA OF TRANSMISSION LINE DISTURBANCE
- PROPOSED SPLICE VAULT LOCATION
- RIGHT OF WAY
- PROPERTY BOUNDARY
- PAGE MATCH LINE





HABITAT AREA 2

HABITAT CLASSIFICATION LEGEND			
	MOWED LAWN		SUCCESSIONAL SHRUBLANDS
	MOWED LAWN WITH TREES		SUCCESSIONAL SOUTHERN HARDWOODS
	MOWED ROADSIDE		HIGH QUANTITY OF INVASIVE
	COASTAL OAK FOREST		LOW QUANTITY OF INVASIVE
	PITCH PINE-OAK FOREST		

LEGEND	
	PROPOSED TRANSMISSION LINE
	POTENTIAL AREA OF TRANSMISSION LINE DISTURBANCE
	PROPOSED SPLICE VAULT LOCATION
	RIGHT OF WAY
	PROPERTY BOUNDARY
	PAGE MATCH LINE

0 50 100 FEET

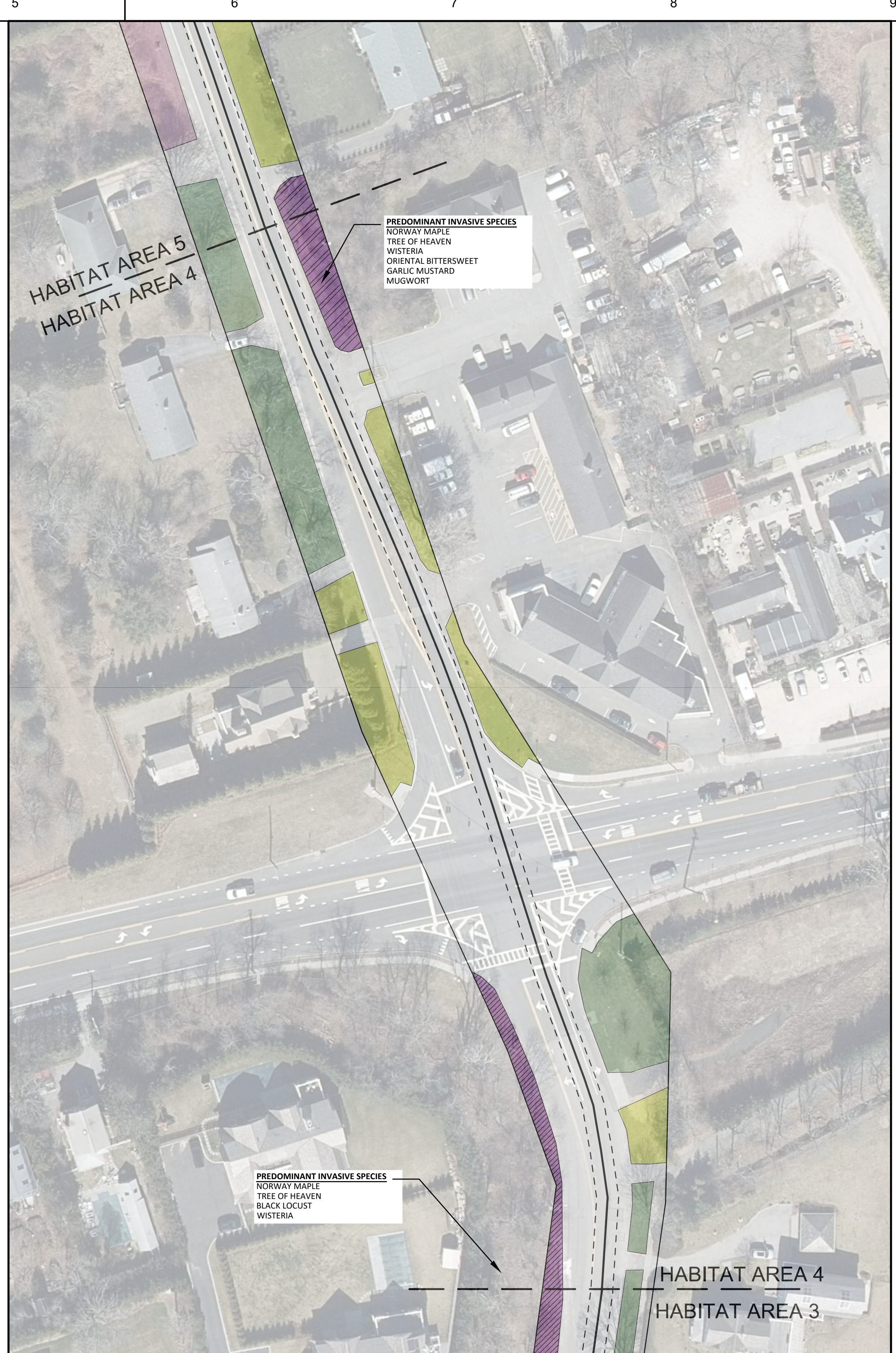
Long Island Power Authority
SOUTHAMPTON – DEERFIELD
138KV TRANSMISSION LINE
SOUTHAMPTON TO DEERFIELD
138KV TRANSMISSION LINE (OPERATED AT 69KV)
HABITAT EXHIBIT

PSEG LONG ISLAND
175 East Old Country Road
Hicksville, New York



HABITAT AREA 3

HABITAT MAPPING BASED ON FIELD VISIT AND VERIFICATION BY NPV ON AUGUST 25, 2023



HABITAT AREA 4

HABITAT CLASSIFICATION LEGEND	
	MOWED LAWN
	MOWED LAWN WITH TREES
	MOWED ROADSIDE
	COASTAL OAK-BEECH FOREST
	PITCH PINE-OAK FOREST
	SUCCESIONAL SHRUBLANDS
	SUCCESIONAL SOUTHERN HARDWOODS
	HIGH QUANTITY OF INVASIVE
	LOW QUANTITY OF INVASIVE

LEGEND	
	PROPOSED TRANSMISSION LINE
	POTENTIAL AREA OF TRANSMISSION LINE DISTURBANCE
	PROPOSED SPICE VAULT LOCATION
	RIGHT OF WAY
	PROPERTY BOUNDARY
	PAGE MATCH LINE

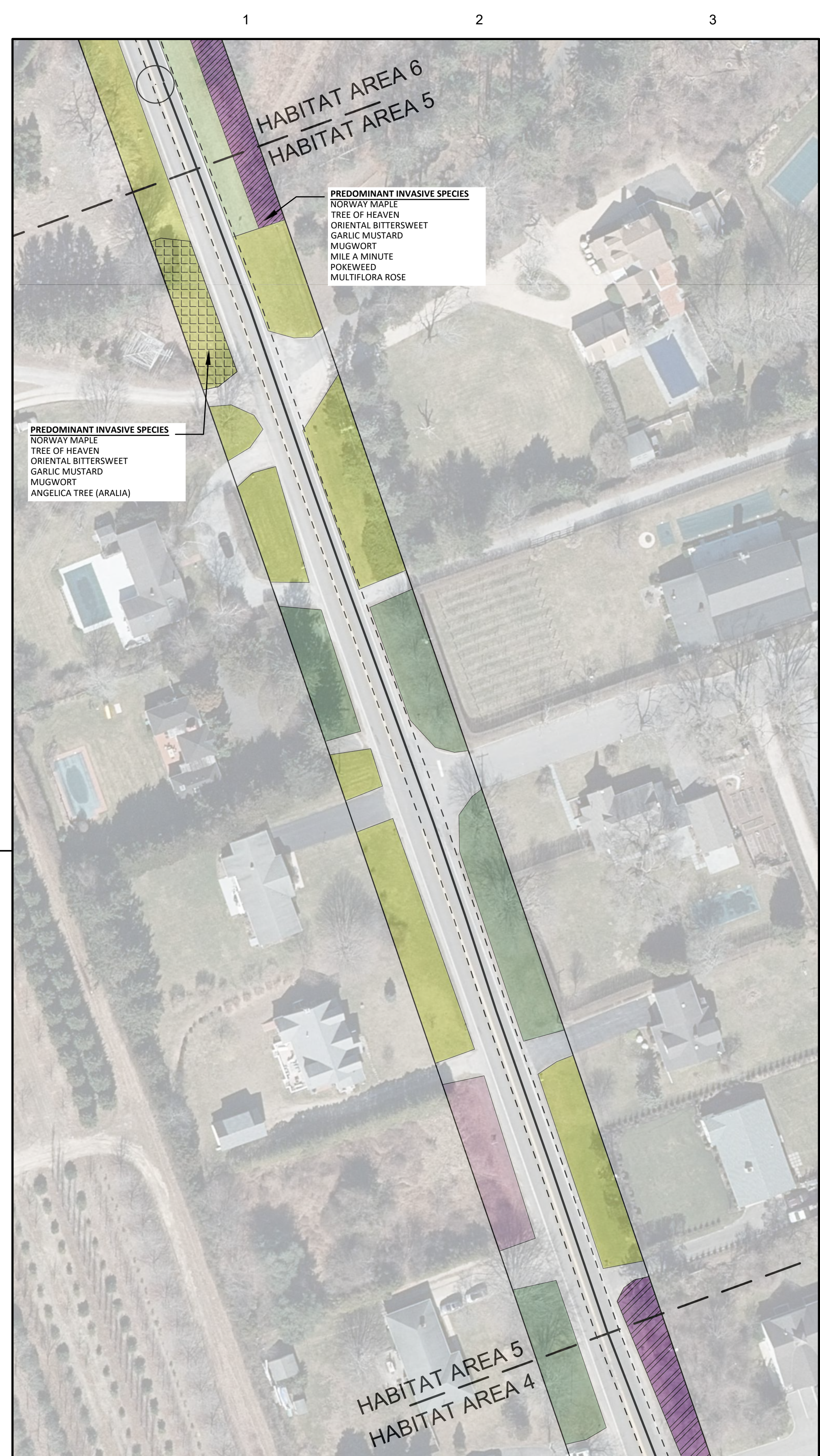
Long Island Power Authority
SOUTHAMPTON – DEERFIELD

138KV TRANSMISSION LINE

SOUTHAMPTON TO DEERFIELD
138KV TRANSMISSION LINE (OPERATED AT 69KV)
HABITATEXHIBIT

PSEG LONG ISLAND
175 East Old Country Road
Hicksville, New York



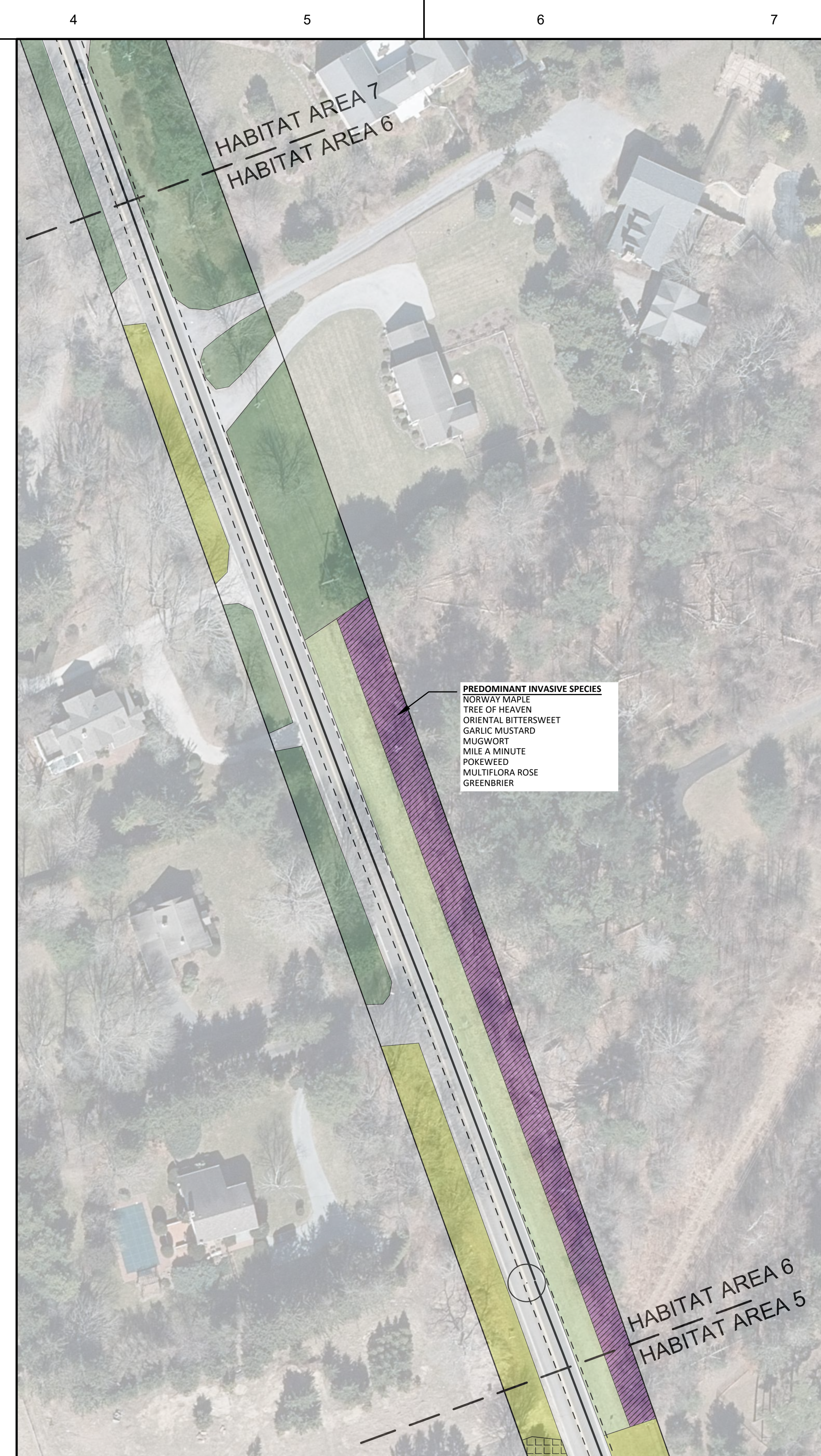


HABITAT AREA 5

HABITAT CLASSIFICATION LEGEND

MOWED LAWN	SUCCESSIONAL SHRUBLANDS
MOWED LAWN WITH TREES	SUCCESSIONAL SOUTHERN HARDWOODS
MOWED ROADSIDE	HIGH QUANTITY OF INVASIVE
COASTAL OAK FOREST	LOW QUANTITY OF INVASIVE
PITCH PINE-OAK FOREST	

HABITAT MAPPING BASED ON FIELD VISIT AND VERIFICATION BY NPV ON AUGUST 25, 2023



HABITAT AREA 6

LEGEND

- PROPOSED TRANSMISSION LINE
- POTENTIAL AREA OF TRANSMISSION LINE DISTURBANCE
- PROPOSED SPLICE VAULT LOCATION
- RIGHT OF WAY
- PROPERTY BOUNDARY
- PAGE MATCH LINE



HABITAT AREA 7

Long Island Power Authority
SOUTHAMPTON – DEERFIELD
138KV TRANSMISSION LINE
SOUTHAMPTON TO DEERFIELD
138KV TRANSMISSION LINE (OPERATED AT 69KV)
HABITAT EXHIBIT

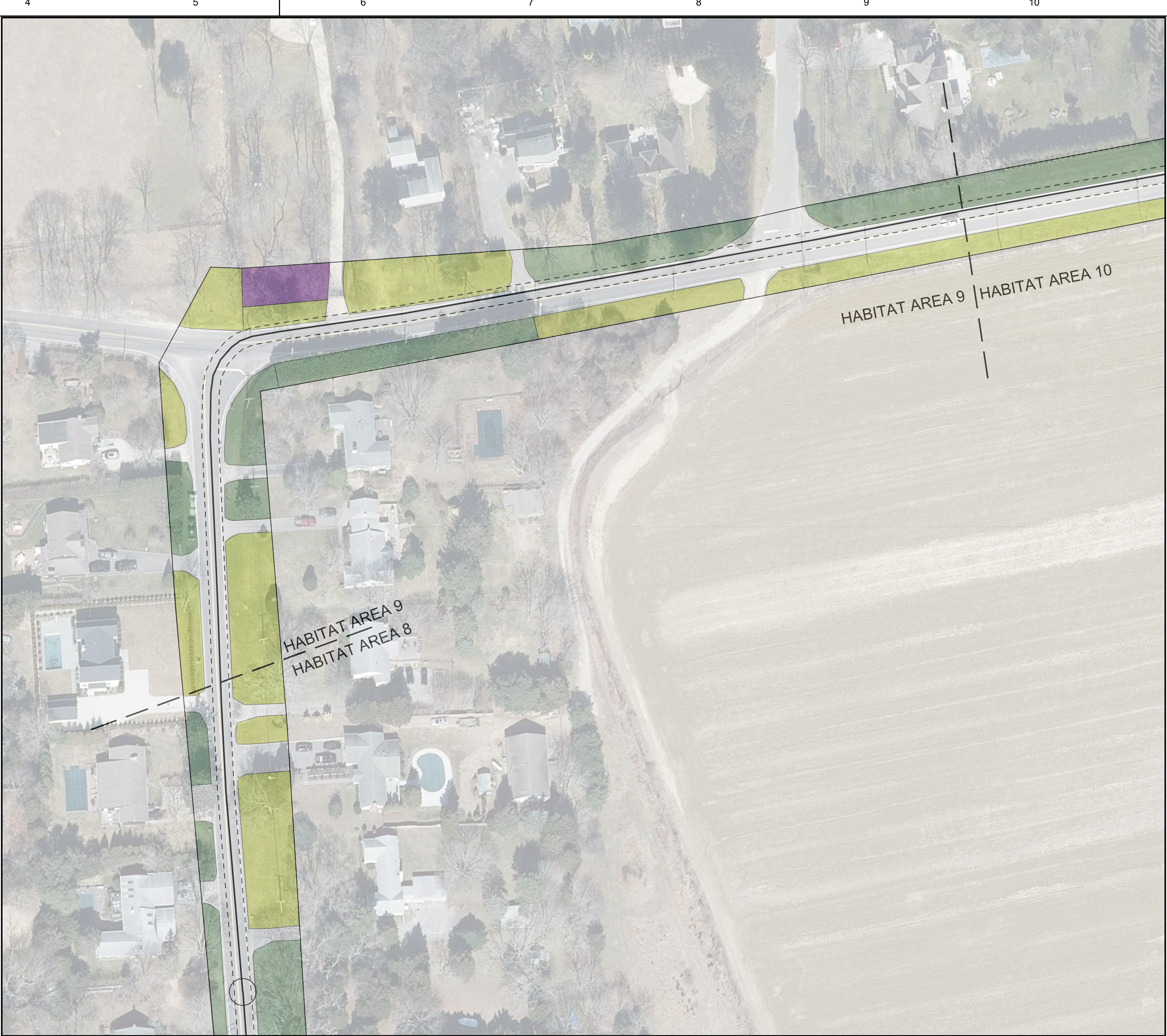
PSEG LONG ISLAND
175 East Old Country Road
Rockville, New York

0 50 100 FEET



HABITAT AREA 8

HABITAT MAPPING BASED ON FIELD VISIT AND
VERIFICATION BY NPV ON AUGUST 25, 2023



HABITAT AREA 9

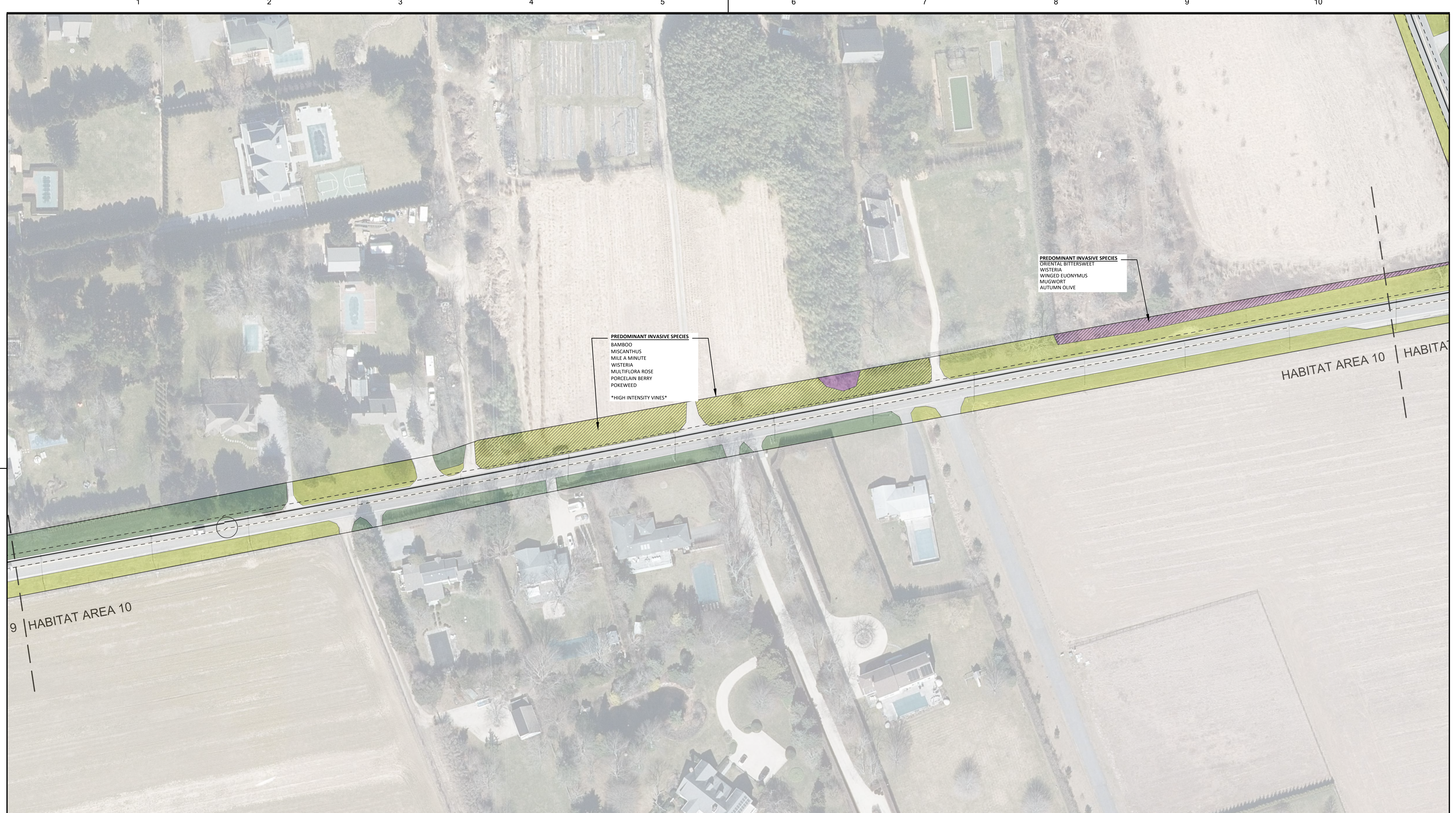
HABITAT CLASSIFICATION LEGEND	
MOWED LAWN	SUCCESSIONAL SHRUBLANDS
MOWED LAWN WITH TREES	SUCCESSIONAL SOUTHERN HARDWOODS
MOWED ROADSIDE	HIGH QUANTITY OF INVASIVE
COASTAL OAK FOREST	LOW QUANTITY OF INVASIVE
PITCH PINE-OAK FOREST	

LEGEND	
PROPOSED TRANSMISSION LINE	POTENTIAL AREA OF TRANSMISSION LINE DISTURBANCE
PROPOSED SPLICE VAULT LOCATION	RIGHT OF WAY
PROPERTY BOUNDARY	PAGE MATCH LINE

0 50 100 FEET

Long Island Power Authority
SOUTHAMPTON – DEERFIELD
138KV TRANSMISSION LINE
SOUTHAMPTON TO DEERFIELD
138KV TRANSMISSION LINE (OPERATED AT 69KV)
HABITAT EXHIBIT

PSEG LONG ISLAND
175 East Old Country Road
Hicksville, New York



HABITAT AREA 10

HABITAT CLASSIFICATION LEGEND

MOWED LAWN	SUCCESSIONAL SHRUBLANDS
MOWED LAWN WITH TREES	SUCCESSIONAL SOUTHERN HARDWOODS
MOWED ROADSIDE	HIGH QUANTITY OF INVASIVE
COASTAL OAK FOREST	LOW QUANTITY OF INVASIVE
PITCH PINE-OAK FOREST	

LEGEND

- PROPOSED TRANSMISSION LINE
- POTENTIAL AREA OF TRANSMISSION LINE DISTURBANCE
- PROPOSED SPLICE VAULT LOCATION
- RIGHT OF WAY
- PROPERTY BOUNDARY
- PAGE MATCH LINE

0 50 100 FEET

Long Island Power Authority
SOUTHAMPTON – DEERFIELD
138KV TRANSMISSION LINE
SOUTHAMPTON TO DEERFIELD
138KV TRANSMISSION LINE (OPERATED AT 69KV)
HABITAT EXHIBIT

PSEG LONG ISLAND
175 East Old Country Road
Hicksville, New York

HABITAT MAPPING BASED ON FIELD VISIT AND VERIFICATION BY NPV ON AUGUST 25, 2023