

## 1.0 INTRODUCTION

This section assesses the potential impact of the Proposed Action on natural resources including groundwater, floodplains, wetlands, vegetation, wildlife, and federal- and state-listed species at and within the vicinity of the Proposed Action Site.

## 2.0 METHODOLOGY

### 2.1 Study Area

Natural resources and the potential impacts of the Proposed Action on natural resources were evaluated for the limits of the Proposed Action Site, including the area of the proposed BESS facility, project substation, relocated training facility, and underground generation interconnect line which will connect the project substation to the existing LIPA substation located to the south of the proposed BESS Facility.

### 2.2 Existing Conditions

Existing natural resource conditions were identified through published literature, government agency datasets, and other sources of information, including the following:

- Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) Viewer;
- United States Fish and Wildlife Service (USFWS) Information, Planning, and Conservation (IPaC) System Official Species List of threatened, endangered or candidate species;
- United States Geological Survey (USGS) Long Island Depth to Water Viewer;
- New York State Department of Environmental Conservation (NYSDEC) Environmental Assessment Form (EAF) Mapper, Environmental Resource Mapper (ERM), and DECinfo Locator Mapper;
- NYSDEC 2000–2005 Breeding Bird Atlas, Amphibian and Reptile Atlas Project database, and NY Nature Explorer;
- The New York Natural Heritage Program (NYNHP) publication Ecological Communities of New York State (Edinger et. al., 2014);
- New York Department of State (NYSDOS) Coastal Atlas;
- Suffolk County Water Authority (SCWA) Frequently Asked Questions (FAQs); and
- Suffolk County GIS Viewer.

### 2.3 Future with the Proposed Action

The potential impacts of the Proposed Action on natural resources were evaluated by considering:

- Potential impacts to groundwater resources during land-disturbing construction activities;
- Potential direct impacts to vegetation, ecological communities, terrestrial wildlife and protected species/communities due to land-disturbing construction activities and site operations; and
- Potential indirect impacts to wildlife from increased human activity during project construction and site operations.

### 3.0 EXISTING CONDITIONS

#### 3.1 Water

The Proposed Action is located within the Nassau-Suffolk Aquifer System, which is a designated Sole Source Aquifer. The aquifer consists of deposits of unconsolidated gravel, sand, silt, and clay from the Holocene, Pleistocene, and Late Cretaceous age that have a maximum total thickness of about 1,500 feet. Precipitation is the sole source of groundwater recharge. The system is primarily comprised of the Upper Glacial, Magothy, and Lloyd aquifers.

The majority of the drinking water in Suffolk County is delivered by public water systems. Water supply to the Proposed Action Site is provided by the Suffolk County Water Authority (SCWA) Distribution Area #12. The SCWA has approximately 600 wells that range in depth from 100 to 750 feet below ground surface (bgs). The water is drawn primarily from the Magothy Aquifer and pumped to water mains.<sup>1</sup>

According to the Suffolk County GIS Viewer,<sup>2</sup> the Proposed Action Site is mapped within Groundwater Management Zone 8. Further, according to the United States Geological Survey (USGS) Long Island Depth to Water Viewer,<sup>3</sup> the depth to groundwater on the Proposed Action Site, including the proposed BESS Facility area, underground generation interconnect line, and the area where the new training facility will be relocated, ranges from approximately 10 to 40 feet bgs.

#### 3.2 Floodplains

According to the NYSDEC Environmental Assessment Form (EAF) Mapper,<sup>4</sup> the Proposed Action Site is located within the 100-year floodplain. However, after further review of the FEMA National Flood Hazard Layer (NFHL) Viewer,<sup>5</sup> and as shown on **Figure C-1**, the proposed BESS Facility, underground generation interconnect line, and relocated training facility will not be located on an area which is within the 100-year floodplain, 500-year floodplain, or designated floodway.

#### 3.3 Wetlands

According to the NYSDEC EAF Mapper, the Proposed Action Site contains and/or adjoins wetlands, waterbodies, or other potential surface water features. After further review of the NYSDEC Environmental Resource Mapper (ERM)<sup>6</sup> and NYSDEC Info Locator Mapper,<sup>7</sup> and as shown on **Figure C-2** and **Figure C-3**, there are NYSDEC regulated freshwater and tidal wetlands (approximately 360 feet west), and federally regulated wetlands (approximately 150 feet west) within close proximity to the Proposed Action Site.

As shown in **Figure C-2**, federal wetlands are not located within the proposed BESS Facility area, underground generation interconnect line route, and the area where the new training facility will be relocated.

The NYSDEC issued a Letter of Non-Jurisdiction (dated July 19, 2019) determining that the majority of the LIPA-owned property (including the Proposed Action Site area) is beyond the NYSDEC's Tidal Wetlands Act (Article 25) jurisdiction. Specifically, no NYSDEC regulated tidal wetlands or adjacent areas are located

<sup>1</sup> Suffolk County Water Authority. Available from: <https://www.scwa.com/water-quality/water-education/faqs/>. Accessed April 2024.

<sup>2</sup> Suffolk County GIS Viewer. Available from: <https://gisapps.suffolkcountyny.gov/gisviewer/>. Accessed April 2024.

<sup>3</sup> United States Geological Survey (USGS) Long Island Depth to Water Viewer. Available from: <https://ny.water.usgs.gov/maps/li-dtw/>. Accessed April 2024.

<sup>4</sup> NYSDEC EAF Mapper. Available from: <https://gisservices.dec.ny.gov/eafmapper/>. Accessed April 2024.

<sup>5</sup> FEMA NFHL Viewer. Available from: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>. Accessed April 2024.

<sup>6</sup> NYSDEC ERM. Available from: <https://gisservices.dec.ny.gov/gis/erm/>. Accessed April 2024.

<sup>7</sup> NYSDEC DECinfo Locator Mapper: <https://gisservices.dec.ny.gov/gis/diil/>. Accessed April 2024.

within the proposed BESS Facility area, underground generation interconnect line route, and the area to which the new training facility will be relocated (see **Appendix B**).

The NYSDEC regulates an adjacent area extending 100 feet landward of all New York State-regulated freshwater wetlands. The proposed BESS Facility area, underground generation interconnect line route, and the area to which the new training facility will be relocated are more than 100 feet from the edge of the existing cleared and disturbed areas of the LIPA-owned property and more than 200 feet from the bottom of the steep slope to the west of the property where any wetlands would be located. Accordingly, the Proposed Action is outside of the jurisdictional areas for NYSDEC's freshwater wetlands regulations.

### 3.4 Coastal Zone

According to the New York Department of State (NYSDOS) Coastal Atlas,<sup>8</sup> the Proposed Action Site is located within the New York State Coastal Zone Area (see **Figure C-4**). The Proposed Action Site is located on the existing LIPA-owned property and is developed with training facilities, an administration building, and internal gravel/paved roadways. A New York State Coastal Assessment Form was completed by PSEG Long Island, and submitted to New York Department of State (NYSDOS) (see **Appendix C**). The Proposed Action will be consistent with and will not substantially hinder the achievement of any of the coastal policies set forth in 19 NYCRR Part 600.5.

### 3.5 Terrestrial Ecological Communities and Vegetation

According to the NYSDEC EAF Mapper, the Site contains designated significant natural communities including Maritime Dunes, Coastal Oak-Heath Forest, High Salt Marsh, Maritime Beach, and Marine Intertidal Gravel/Sand Beach. However, after further review on the NYSDEC ERM, and as shown on **Figure C-5**, the Proposed Action Site is identified as being "near" or within ½ mile of a significant natural community but does not specifically contain one. The area where the BESS Facility is proposed currently houses a training facility which contains a metal trailer, a gravel pathway, a concrete slab, sand piles, grass areas and is surrounded by a chain-link fence. The area where the new underground generation interconnect line will be located contains internal gravel/paved roadways. The area where the training facility will be relocated to, just east of the proposed the BESS Facility, is currently developed with an unoccupied two-story brick administrative building.

Following the ecological community classification system used by Edinger et al. (2014), the proposed BESS Facility is located in an area best described as "Mowed lawn" and "Construction/road maintenance spoils." Mowed lawn is defined as 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. Characteristic birds with varying abundance include American robin (*Turdus migratorius*) and killdeer (*Charadrius vociferus*). A rare bird that breeds in some of the larger mowed lawns, such as airfields, is the upland sandpiper (*Bartramia longicauda*). Construction/road maintenance spoils is defined as a site where soil from construction work and/or road maintenance materials have been recently deposited. There is little, if any, vegetation.

The proposed interconnection line is located in an area best described as "Paved road/path", which is defined as a road or pathway that is paved with asphalt, concrete, brick, stone, etc. There may be sparse vegetation rooted in cracks in the paved surface.

The proposed training facility is located in an area best described as "Interior of non-agricultural building" and "Unpaved road/path". Interior of non-agricultural building is described as interior spaces of a house, garage, commercial building, or industrial building that is used primarily by people for living space, work space, or storage space. A characteristic bird is chimney swift (*Chaetura pelagica*) which nests in chimneys

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<sup>8</sup> NYSDOS Coastal Atlas. Available from: <https://new-york-opd-geographic-information-gateway-nysdos.hub.arcgis.com/apps/coastal-atlas/explore>. Accessed April 2024.

and inner walls of buildings. Unpaved road/path is defined as a sparsely vegetated road or pathway of gravel, bare soil, or bedrock outcrop. These roads or pathways are maintained by regular trampling or scraping of the land surface. The substrate consists of the soil or parent material at the site, which may be modified by the addition of local organic material (woodchips, logs, etc.) or sand and gravel. Abandoned railroad beds where tracks have been removed are included here. One characteristic plant is path rush (*Juncus tenuis*). A characteristic bird is killdeer (*Charadrius vociferus*).

All five communities described above are classified as “unranked cultural” communities, with distributions throughout New York State.

The Proposed Action will involve the removal of existing grass areas where the new BESS Facility and relocated training facility is proposed. No vegetation removal is required for the installation of the underground interconnection line, as the proposed route is located in areas that contain gravel/paved roadways. The Site will require ongoing vegetation management including mowing and herbicide application.

### 3.6 Wildlife

Due to the disturbed/developed nature of the Proposed Action Site, there is limited natural habitat available to support terrestrial wildlife. The limited vegetative habitat onsite, consisting mostly of grass, is of poor quality and has minimal potential as wildlife habitat. Based on these factors, wildlife use of the Proposed Action Site is limited by a scarcity of vegetated habitat and the disturbed nature of the area. Wildlife use in such settings is typically restricted to a limited assemblage of suburban-adapted, habitat generalist species that can tolerate developed environments and high levels of human activity.

#### 3.6.1 Birds

The New York State Breeding Bird Atlas (BBA) projects are comprehensive statewide surveys designed to document the distribution of breeding birds within New York State.<sup>9</sup> There have been two BBA projects. The first project was conducted from 1980-1985 and the more recent project took place from 2000-2005. Mapping for the BBA is based on a grid system that divided the state into discreet atlas blocks measuring 10 kilometers (km) by 10km. The Proposed Action Site is located within BBA Block 6753A. The 2000-2004 BBA survey documented 67 species as confirmed or probable/possible breeders within BBA Block 6753A (See **Table C-1**). However, these BBA survey blocks also cover natural areas, where there may be suitable habitat to support many of the identified species. The Proposed Action Site contains habitat that is suitable for only a few of the bird species that can tolerate developed environments. These species include common species listed on **Table C-1** such as European Starling (*Sturnus vulgaris*), House Sparrow (*Passer domesticus*), Rock Pigeon (*Columbia livia*), American Robin (*Turdus migratorius*), Northern Cardinal (*Cardinalis cardinalis*), and Song Sparrow (*Melospiza melodia*).

**Table C-1 – 2000-2004 BBA Survey Results for Block 6753A**

Common Name	Scientific Name
Canada Goose	<i>Branta canadensis</i>
Mute Swan	<i>Cygnus olor</i>
Mallard	<i>Anas platyrhynchos</i>
Northern Bobwhite	<i>Colinus virginianus</i>
Ring-necked Pheasant	<i>Phasianus colchicus</i>
Great Egret	<i>Ardea alba</i>
Snowy Egret	<i>Egretta thula</i>
Green Heron	<i>Butorides virescens</i>

<sup>9</sup> New York State Breeding Bird Atlas Project Past Results. Available from: <https://extapps.dec.ny.gov/cfm/extapps/bba/>. Accessed April 2024.

Osprey	<i>Pandion haliaetus</i>
Cooper's Hawk	<i>Accipiter cooperii</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
American Kestrel	<i>Falco sparverius</i>
Piping Plover	<i>Charadrius melodus</i>
Killdeer	<i>Charadrius vociferus</i>
Spotted Sandpiper	<i>Actitis macularius</i>
Least Tern	<i>Sternula antillarum</i>
Common Tern	<i>Sterna hirundo</i>
Rock Pigeon	<i>Columba livia</i>
Mourning Dove	<i>Zenaida macroura</i>
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>
Eastern Screech-Owl	<i>Megascops asio</i>
Belted Kingfisher	<i>Megaceryle alcyon</i>
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>
Downy Woodpecker	<i>Picoides pubescens</i>
Hairy Woodpecker	<i>Picoides villosus</i>
Northern Flicker	<i>Colaptes auratus</i>
Eastern Wood-Pewee	<i>Contopus virens</i>
Eastern Phoebe	<i>Sayornis phoebe</i>
Great Crested Flycatcher	<i>Myiarchus crinitus</i>
Eastern Kingbird	<i>Tyrannus tyrannus</i>
White-eyed Vireo	<i>Vireo griseus</i>
Red-eyed Vireo	<i>Vireo olivaceus</i>
Blue Jay	<i>Cyanocitta cristata</i>
American Crow	<i>Corvus brachyrhynchos</i>
Fish Crow	<i>Corvus ossifragus</i>
Tree Swallow	<i>Tachycineta bicolor</i>
Bank Swallow	<i>Riparia riparia</i>
Barn Swallow	<i>Hirundo rustica</i>
Black-capped Chickadee	<i>Poecile atricapillus</i>
Tufted Titmouse	<i>Baeolophus bicolor</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
Carolina Wren	<i>Thryothorus ludovicianus</i>
House Wren	<i>Troglodytes aedon</i>
Marsh Wren	<i>Cistothorus palustris</i>
Wood Thrush	<i>Hylocichla mustelina</i>
American Robin	<i>Turdus migratorius</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
Brown Thrasher	<i>Toxostoma rufum</i>
European Starling	<i>Sturnus vulgaris</i>
Blue-winged Warbler	<i>Vermivora pinus</i>
Yellow Warbler	<i>Dendroica petechia</i>
Prairie Warbler	<i>Dendroica discolor</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Eastern Towhee	<i>Pipilo erythrophthalmus</i>
Field Sparrow	<i>Spizella pusilla</i>
Song Sparrow	<i>Melospiza melodia</i>
Scarlet Tanager	<i>Piranga olivacea</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>

Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Common Grackle	<i>Quiscalus quiscula</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Orchard Oriole	<i>Icterus spurius</i>
Baltimore Oriole	<i>Icterus galbula</i>
House Finch	<i>Carpodacus mexicanus</i>
American Goldfinch	<i>Spinus tristis</i>
House Sparrow	<i>Passer domesticus</i>
Source: NYS BBAAtlas (2000-2005) Block 6753A	

### 3.6.2 Mammals

Habitat for mammals is limited on the Proposed Action Site and is likely to be used by species that can tolerate developed environments. These species include common species listed on **Table C-2** such as Raccoon (*Procyon lotor*), House Mouse (*Mus musculus*), Norway Rat (*Rattus norvegicus*), Gray Squirrel (*Sciurus carolinensis*), and feral Domestic Cats (*Felis catus*). Most of the mammalian species that might utilize the study area are ubiquitous species that are highly adaptable to various habitats and degrees of human disturbance. These species are considered habitat generalists.

**Table C-2 – Mammals That May Be Found on the Proposed Action Site**

Common Name	Scientific Name
Opossum	<i>Didelphis marsupialis</i>
Feral Cat	<i>Felis domesticus</i>
House Mouse	<i>Mus musculus</i>
White Footed Mouse	<i>Peromyscus leucopus</i>
Deer mouse	<i>Peromyscus maniculatus</i>
Raccoon	<i>Procyon lotor</i>
Norway Rat	<i>Rattus norvegicus</i>
Eastern Mole	<i>Scalopus aquaticus</i>
Eastern Gray Squirrel	<i>Sciurus carolinensis</i>
Eastern Cottontail Rabbit	<i>Sylvilagus floridanus</i>
Eastern Chipmunk	<i>Tamias striatus</i>

### 3.6.3 Reptiles and Amphibians

No reptile or amphibian species are anticipated to be present onsite, as the Site is fully cleared and developed. To identify herpetofauna that may occur on or adjoining the Site, the NYSDEC New York State Amphibian and Reptile Atlas Project (NYSARAP) data<sup>10</sup> was reviewed. The database search engine that allows you to review quadrangle-specific results was unserviceable at the time of this environmental review, and as a result, the species distribution PDF maps were reviewed instead. According to the PDF maps, it is estimated that 27 amphibian and reptile species have been identified within the Shoreham, New York Quadrangle that the Proposed Action Site occurs within. The majority of the 27 listed species require aquatic habitats for at least a portion of their life cycles or undisturbed vegetated habitats such as forests, wetlands, and grasslands. Although these habitats occur near the Proposed Action Site, they do not occur at the Proposed Action Site. Considering the observed largely unvegetated conditions at the Proposed Action Site and taking into account the predominantly developed conditions on the LIPA-owned property, the area of the Proposed Action does not provide habitat for the NYSARAP-listed species and does not represent a significant herpetofauna habitat area overall.

<sup>10</sup> Amphibian & Reptile Atlas Project. NYSDEC. Available from: <https://dec.ny.gov/nature/animals-fish-plants/amphibians-reptiles/herp-atlas-project>. Accessed April 2024.

### 3.7 Threatened, Endangered, Special Concern Species and Significant Habitats

Review of the NYS EAF Mapper, NYS Environmental Resource Mapper, NY Nature Explorer,<sup>11</sup> and USFWS iPAC database<sup>12</sup> indicates that several threatened or endangered species have potential to occur at or in the vicinity of the Proposed Action Site.

The NYSDEC EAF Mapper states Piping Plover (*Charadrius melodus*) (NYS Endangered, Federal Threatened) and Least Tern (*Sternula antillarum*) (NYS Threatened) are known to occur in the vicinity. These protected shorebirds utilize beach, shoreline/wetland, and coastal habitats that are not found within the Proposed Action Site area.

As per the NY Nature Explorer database, several listed species and/or species of concern are known to occur within the vicinity of the Proposed Action Site. Please refer to **Table C-3** below for a summary of all listed plant species indicated on the NY Nature Explorer. Many of these species inhabit tidal and brackish marshes and coastal plain pond shores including Annual Saltmarsh Aster (*Symphotrichum subulatum*) (NYS Threatened), Coastal Silverweed (*Potentilla anserina ssp. pacifica*) (NYS Threatened), Short-beaked Beak Sedge (*Rhynchospora nitens*) (NYS Threatened), Three-ribbed Spike Rush (*Eleocharis tricostata*) (NYS Endangered), Seaside Agalinis (*Agalinis maritima*) (NYS Threatened), Seaside Plantain (*Plantago maritima var. juncooides*) (NYS Threatened), Eastern Gamma Grass (*Tripsacum dactyloides*) (NYS Threatened), Eastern Grasswort (*Lilaeopsis chinensis*) (NYS Threatened), New England Bulrush (*Bolboschoenus novae-angliae*) (NYS Threatened), Clustered Bluets (*Edrastima uniflora*) (NYS Endangered), Hyssop Hedge Nettle (*Stachyshyssopifolia*) (NYS Threatened), Rose Coreopsis (*Coreopsis rosea*) (NYS Rare), Small Swollen Bladderwort (*Utricularia radiata*) (NYS Threatened), Striped Bladderwort (*Utricularia striata*) (NYS Threatened), and Wright’s Rosette Grass (*Dichantherium wrightianum*) (NYS Endangered).

Listed species such as Black-edged Sedge (*Carex nigromarginata*) (NYS Rare), Low Rock Rose (*Crocantemum propinquum*) (NYS Threatened), Stuve’s Bush Clover (*Lespedeza stuevei*) (NYS Threatened), Hairy Small-leaved Tick Trefoil (*Desmodium ciliare*) (NYS Threatened), Narrow-leaved Pinweed (*Lechea tenuifolia*) (NYS Threatened), Northern Blazing Star (*Liatris scariosa*) (NYS Rare), Reznicek’s Sedge (*Carex reznicekii*) (NYS Endangered), and Small White Snakeroot (*Ageratina aromatica*) (NYS Endangered) exist in upland areas, such as coastal oak forests and openings in oak forests, which are found adjacent to the Proposed Action Site.

The NY Nature Explorer lists also nine (9) threatened species with historical records (between 1898 and 1991). Due to the long period of time since these species were observed there is a very high probability these species are not in the Proposed Action Site area and these species are not presented in **Table C-3**.

**Table C-3 – Listed Species in Project Vicinity as per NY Nature Explorer**

Common Name / Scientific Name	Year Last Documented	State Protection Status	Typical Habitat
Annual Saltmarsh Aster <i>Symphotrichum subulatum</i>	2011	NYS-Threatened	Salt marshes, brackish tidal marshes, and the shores of coastal salt ponds
Black-edged Sedge <i>Carex nigromarginata</i>	2008	NYS-Rare	Coastal oak forests
Clustered Bluets <i>Edrastima uniflora</i>	2008	NYS-Endangered	Coastal plain pond shores
Coastal Silverweed <i>Potentilla anserina ssp.</i>	2008	NYS-Threatened	Salt marshes, brackish tidal marshes, and the shores of coastal salt ponds

<sup>11</sup> NYS Nature Explorer. Available from: <https://extapps.dec.ny.gov/natureexplorer/app/>. Accessed April 2024.

<sup>12</sup> USFWS iPAC. Available from: <https://ipac.ecosphere.fws.gov/>. Accessed April 2024.

Eastern Gamma Grass <i>Tripsacum dactyloides</i>	2011	NYS- Threatened	Various coastal habitats including high salt marsh, wet meadows, oak forests, old fields, roadsides, and
Eastern Grasswort <i>Lilaeopsis chinensis</i>	2007	NYS- Threatened	Brackish intertidal mudflats, brackish tidal marsh, low salt marsh, sea level
Hairy Small-leaved Tick Trefoil	2020	NYS- Threatened	Dry, open habitats; oak openings, openings, and roadsides within pitch-
Hyssop Hedge Nettle <i>Stachys hyssopifolia</i>	2004	NYS- Threatened	Coastal plain pond shores
Low Rock Rose <i>Crocantemum propinquum</i>	2007	NYS- Threatened	Openings in coastal oak-heath forests
Narrow-leaved Pinweed <i>Lechea tenuifolia</i>	2019	NYS- Threatened	Openings in coastal oak-heath forests and other dry habitats
New England Bulrush <i>Bolboschoenus novae-</i>	2007	NYS- Endangered	Brackish tidal marshes
Northern Blazing Star <i>Liatris scariosa</i>	1992	NYS- Threatened	Maritime grasslands, or grassy openings within maritime heathlands
Reznicek's Sedge <i>Carex reznicekii</i>	2008	NYS- Endangered	Upland oak-dominated and pine-oak forests
Rose Coreopsis <i>Coreopsis rosea</i>	2016	NYS-Rare	Coastal plain pond shore Pine barrens vernal pond
Seaside Agalinis <i>Agalinis maritima</i>	2007	NYS- Threatened	Brackish tidal marsh High salt marsh
Seaside Plantain <i>Plantago maritima var.</i>	2007	NYS- Threatened	High salt marshes, brackish meadows, and on dunes formed from
Short-beaked Beak Sedge <i>Rhynchospora nitens</i>	2016	NYS- Threatened	Coastal plain pond shores
Small Swollen Bladderwort <i>Utricularia radiata</i>	2000	NYS- Threatened	Coastal plain pond, eutrophic pond, Pine barrens vernal pond
Small White Snakeroot <i>Ageratina aromatica var.</i>	2020	NYS- Endangered	Dry sandy openings in coastal, maritime, and pine barrens forests
Striped Bladderwort <i>Utricularia striata</i>	2016	NYS- Threatened	Coastal plain pond shore Pine barrens shrub swamp
Stuve's Bush Clover <i>Lespedeza stuevei</i>	2007	NYS- Threatened	Dry sandy openings barrens, pitch pine oak woods and coastal oak
Three-ribbed Spike Rush <i>Eleocharis tricostata</i>	2005	NYS- Endangered	Coastal plain pond shore Pine barrens vernal pond
Wright's Rosette Grass <i>Dichantherium wrightianum</i>	2016	NYS- Endangered	Coastal plain pond shore Pine barrens vernal pond

According to the USFWS iPAC database, Endangered Species Act-listed mammal, bird, and plant species for Suffolk County include the Northern long-eared bat (*Myotis septentrionalis*) (NYS Threatened), Piping plover (*Charadrius melodus*) (NYS Endangered), Red knot (*Calidris canutus rufa*) (NYS Threatened), Roseate tern (*Sterna dougallii dougallii*) (NYS Endangered), Sandplain gerardia (*Agalinis decemloba*) (NYS Endangered), and Seabeach amaranth (*Amaranthus pumilus*) (NYS Threatened). It should be noted that the iPAC database is not site specific, but rather county specific. Piping plover, red knot, roseate tern, sandplain gerardia, and seabeach amaranth inhabit beach and shoreline/wetland habitats that are not found on the Proposed Action Site. Northern long-eared bat can utilize a wide variety of upland woodland and forest types on Long Island but are typically associated with mature interior forest and tend to avoid woodlands with significant edge habitat. There are no trees on the Proposed Action Site, thus Northern long-eared bats are not anticipated to be impacted by the development, nor are any seasonal tree clearing restrictions related to bat protection to be imposed on the project.

Additionally, the USFWS iPAC report indicates a total of 15 bird species that are protected under the Migratory Bird Treaty Act and/or Bald and Golden Eagle Protection Act that may inhabit or utilize the site for breeding.

Although the resources consulted indicate potential presence of the above threatened and endangered species, it should be noted the actual Site does not provide suitable habitat for these species as the Site consists of a previously disturbed, grassy areas surrounded by multiple buildings and parking lots. Therefore, the indicated species are not anticipated to be present onsite.

## **4.0 PROBABLE IMPACTS OF THE PROPOSED ACTION**

### **4.1 Groundwater**

Currently, development density in Suffolk County on specific properties is determined in accordance with Suffolk County Sanitary Code (SCSC) Article 6, the intent of which is generally to promote public health and safeguard water resources through requirements for installation and maintenance of onsite wastewater treatment infrastructure. The Proposed Action does not introduce new nitrogen discharges, wastewater treatment systems, or point source discharges, nor does it require treatment of sanitary sewer or industrial discharges.

The Proposed Action will include the presence of chemicals, including dielectric/cooling fluid for the transformers, and lithium-ion electrolyte and cooling fluid encased within the BESS units. However, the design of the Proposed Action incorporates several features to mitigate potential discharges of these chemicals into the environment. Specifically, the dielectric/cooling fluid will arrive pre-sealed in the transformers, and the lithium-ion and cooling fluids will be pre-sealed within each individual battery unit within the containers. In addition, the battery enclosures, transformers, and the BESS Facility substation equipment will be installed on concrete foundations; these features will be designed to minimize the potential for infiltration into impervious surfaces or transport via stormwater runoff. Secondary containment for the main power transformer and, if required by Environmental Protection Agency or NYSDEC regulatory standards, medium voltage transformer fluids will be designed and implemented.

A total of approximately 4.39 acres of land disturbance is anticipated to occur during construction activities under the Proposed Action (2.29 acres for construction of the BESS Facility and 2.10 acres for the relocation of the training facility). Construction activities that result in greater than or equal to one (1) acre of land disturbance must comply with the requirements of the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001 or General Permit). In consideration of this, KCE will prepare a Stormwater Pollution Prevention Plan (SWPPP) compliant with the General Permit and submit a Notice of Intent (NOI) to the NYSDEC.

During the demolition and construction phases, erosion and sediment control measures will be installed and inspected. Weekly SWPPP inspections will be required under GP-0-20-001 during the demolition and construction phase of the Proposed Action and will help to ensure that erosion and sedimentation controls are functioning as designed to minimize the potential for significant adverse impacts from stormwater runoff during demolition and construction. To manage post construction stormwater flows from the BESS Facility, a system of drywells and yard inlets is proposed. Yard inlets located throughout the development will capture runoff and convey stormwater to the drywells designed to infiltrate stormwater into the subsurface soils, thus preventing off-site transport of stormwater runoff for the design stormwater criteria. Drywells are green infrastructure practices that provide infiltration of stormwater and can be utilized to count towards Runoff Reduction Volume (RRv) capacity.

The stormwater management system has been designed to meet the sizing criteria of the New York State Stormwater Management Design Manual, including Water Quality Volume (WQV), RRv, Channel Protection Volume (Cpv), Overbank Flood control (Qp), and Extreme Storm control (Qf) sizing criteria. Utilization of infiltration practices (leaching galleys) emulates natural stormwater runoff mitigation by

allowing stormwater to infiltrate into onsite soils. The hydrology and hydraulics of the development site and stormwater management practices have been modeled to demonstrate no net increase in stormwater runoff leaving the developed project site when comparing pre- and post-construction conditions, thereby demonstrating compliance with Stormwater Management Design Manual Qp and Qf sizing criteria.

With the lack of new wastewater discharges, the integration of design elements which mitigate potential discharges of chemicals to the environment including concrete foundations and secondary containment, and the implementation of a SWPPP to manage construction and post construction stormwater flows, no potential significant adverse impacts to groundwater are anticipated.

#### **4.2 Floodplains**

As described in Existing Conditions, it was identified that the Proposed Action Site is located within the 100-year floodplain. However, after further review of the FEMA National Flood Hazard Layer (NFHL) Viewer, and as shown on **Figure C-1**, the Proposed Action Site (the area where the BESS Facility, underground generation interconnect line, and relocated training facility is proposed) will not be located within the 100-year floodplain. Considering the Proposed Action Site is not within the 100-year floodplain, 500-year floodplain, or designated floodway significant adverse flooding impacts are not anticipated.

#### **4.3 Wetlands**

As described in Existing Conditions, no federal wetlands or NYSDEC regulated tidal/freshwater wetlands or adjacent areas are located on the Proposed Action Site.

As discussed above in Groundwater, the Proposed Action will include the presence of chemicals, including dielectric/cooling fluid for the transformers, and lithium-ion electrolyte and cooling fluid encased within the BESS units. However, the design of the Proposed Action incorporates several features to mitigate potential discharges of these chemicals into the environment. Specifically, the dielectric/cooling fluid will arrive pre-sealed in the transformers, and the lithium-ion electrolyte and cooling fluids will be pre-sealed within each individual battery unit within the containers. The dielectric/cooling fluid will arrive pre-sealed in the transformers, and the lithium-ion electrolyte and ethylene glycol fluids will be pre-sealed within each individual battery unit within the containers. In addition, the battery enclosures, transformers, and the project substation equipment will be installed on foundations; these features will be designed to minimize the potential for infiltration into impervious surfaces or transport via stormwater runoff. In addition, secondary containment for the main power transformer and, if required by EPA or DEC environmental regulatory standards, medium voltage transformer fluids will be designed and implemented.

As discussed above in Water, KCE will prepare a SWPPP compliant with the GP-0-20-001 and submit a NOI to the NYSDEC. During the construction phase, erosion and sediment control measures will be installed and inspected. Weekly SWPPP inspections will be required under GP-0-20-001 during the construction phase of this project and will help to ensure that erosion and sedimentation controls are functioning as designed to minimize the potential for significant adverse impacts from stormwater runoff during construction. To manage post construction stormwater flows from the BESS Facility, a system of drywells and yard inlets is proposed. Yard inlets located throughout the development will capture runoff and convey stormwater to the drywells designed to infiltrate stormwater into the subsurface soils, thus preventing off-site transport of stormwater runoff for the design storm.

With the lack of wetlands and wetland adjacent areas onsite, the integration of design elements which mitigate potential discharges of chemicals to the environment including concrete foundations and secondary containment, and the implementation of a SWPPP that will manage construction and post construction stormwater flows, no potential significant adverse impacts to wetlands are anticipated.

#### **4.4 Coastal Zone**

The Proposed Action Site is located within the New York State Coastal Zone. The Proposed Action Site is located on the existing LIPA-owned property and is developed with training facilities, an administration

building, and internal gravel/paved roadways. In addition, the Proposed Action will not substantially hinder the achievement of any of the coastal policies set forth in 19 NYCRR Part 600.5 (See **Appendix C**). Thus, no potential significant adverse impacts to coastal zones are anticipated.

#### **4.5 Terrestrial Ecological Communities and Vegetation**

As described in Existing Conditions, the area where the BESS Facility is proposed currently houses a training facility which contains a metal trailer, a gravel pathway, a concrete slab, sand piles, grass areas and is surrounded by a chain-link fence. The area where the new underground generation interconnect line is located contains internal gravel/paved roadways. The area where the training facility will be relocated to, just east of where the BESS Facility will be located, is currently developed with a two-story brick administrative building. The Proposed Action Site area is best described as a mix of five (5) unranked cultural communities with wide distribution throughout New York State, including “Mowed lawn”, “Construction/road maintenance spoils”, “Paved road/path”, “Interior of non-agricultural building”, and “Unpaved road/path”.

The Proposed Action will involve the removal of existing grass areas where the new BESS Facility and relocated training facility is proposed. These areas will be stabilized with gravel or grass seeding in certain areas. No vegetation removal is required for the installation of the underground interconnection line, as the proposed route is located in areas that contain gravel/paved roadways.

Due to the lack of sensitive ecological communities, and the Proposed Action Site currently developed with training facilities, an administration building, and internal gravel/paved roadways, the Proposed Action will not result in significant adverse impacts to terrestrial ecological communities and vegetation.

#### **4.6 Wildlife**

Terrestrial wildlife use of the Proposed Action Site is limited due to the disturbed/ developed nature of the Site. Due these existing conditions, the Proposed Action will not result in the elimination of high quality or otherwise undisturbed wildlife habitat and will not adversely affect the limited suburban species expected to occur in the vicinity of the Proposed Action Site. Suburban species are able to adapt quickly to changes in habitat with any displacement being temporary in nature, and therefore are tolerant of disturbance. Individuals of these species that may temporarily be displaced from the Site during construction will likely ultimately occupy abundant surrounding suitable habitats.

#### **4.7 Threatened, Endangered, Special Concern Species and Significant Habitats**

As described in Existing Conditions, several threatened and endangered species were identified as occurring within the vicinity of the Proposed Action Site.

Piping Plovers and Least Terns were identified by the NYSDEC EAF mapper as present in the vicinity of the Site. These protected shorebirds utilize beach, shoreline/wetland, and coastal habitats which are not found within the area of the Proposed Action. The NYSDEC regulates a 200-meter buffer around known Piping Plover and Least Tern nesting habitats to protect the species from disturbance during construction or other development activities. Beach and shoreline habitats that are likely to be used by Piping Plover or Least Tern as nesting and/or foraging habitat are more than 300 meters from the Site (see **Figure C-6**). There are no known nests within the nearest shoreline habitat. Further, no blasting or other noise intensive activity is proposed during construction and demolition of the Proposed Action, and best management practices will be utilized for dust control. Considering that there are no known occurrences of nests on nearby shoreline habitats, and due to the large spatial separation from nearby shoreline habitat and lack of noise intensive activity during construction, construction-related noise and disturbances are not expected to result in adverse effects to plovers or terns.

As discussed in Existing Conditions, **Table C-1** provides a summary of all listed species and/or species of concern identified on the NY Nature Explorer as being in the vicinity of the Proposed Action Site. Many of

these species inhabit tidal and brackish marshes and coastal plain pond shores. Further, several listed species exist in upland areas, such as coastal oak forests and openings in oak forests. These types of habitats are found adjacent to or near the Proposed Action Site. It should be noted the actual Site does not provide suitable habitat for the species that inhabit these types of natural communities as the Site consists of a previously disturbed, grassy areas surrounded by multiple buildings and parking lots. Nine (9) additional threatened species were identified with historical records (between 1898 and 1991). Due to the long period of time since these species were observed there is a very high probability these species are not in the Proposed Action Site area and these species are not presented in **Table C-3**.

As discussed in Existing Conditions, according to the USFWS iPAC database, Endangered Species Act-listed mammal, bird, and plant species for Suffolk County. It should be noted that the iPAC database is not site specific, but rather county specific. Five (5) of the six (6) species identified by the iPAC inhabit beach and shoreline/wetland habitats that are not found on the Proposed Action Site. The last species identified by the iPAC, the Northern long-eared bat, can utilize a wide variety of upland woodland and forest types on Long Island but are typically associated with mature interior forest and tend to avoid woodlands with significant edge habitat. There are no trees on the Proposed Action Site, thus Northern long-eared bats are not anticipated to be impacted by the development, nor are any seasonal tree clearing restrictions related to bat protection to be imposed on the project.

Lastly, as discussed in Existing Conditions, the USFWS iPAC report indicates a total of 15 bird species that are protected under the Migratory Bird Treaty Act and/or Bald and Golden Eagle Protection Act that may inhabit or utilize the site for breeding. It should be noted the actual Site does not provide suitable habitat for these species as the Site consists of a previously disturbed, grassy areas surrounded by multiple buildings and parking lots. Therefore, these species are not anticipated to be present onsite.

Considering the foregoing, significant adverse impacts to threatened, endangered, and special concern species are not anticipated.