

**Southampton to Bridgehampton Transmission Line and Expansion of the  
Bridgehampton Substation Project**  
**Final Scope of Work**  
**for the Preparation of an Environmental Impact Statement**  
**Pursuant to the State Environmental Quality Review Act**

---

## **A. INTRODUCTION**

The proposed Long Island Power Authority (LIPA) Southampton to Bridgehampton Transmission Line and Expansion of the Bridgehampton Substation Project (the Proposed Action) is the construction of a new 69 kilovolt (kV) transmission line between the Southampton and Bridgehampton Substations. The new transmission line is needed to meet the growth in energy demand and improve system reliability on the South Fork of Long Island. The Proposed Action also includes the installation of a new transmission switching station on the currently unimproved northern portion of the parcel of property where the existing Bridgehampton distribution substation is located.

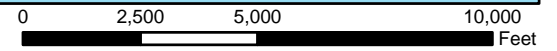
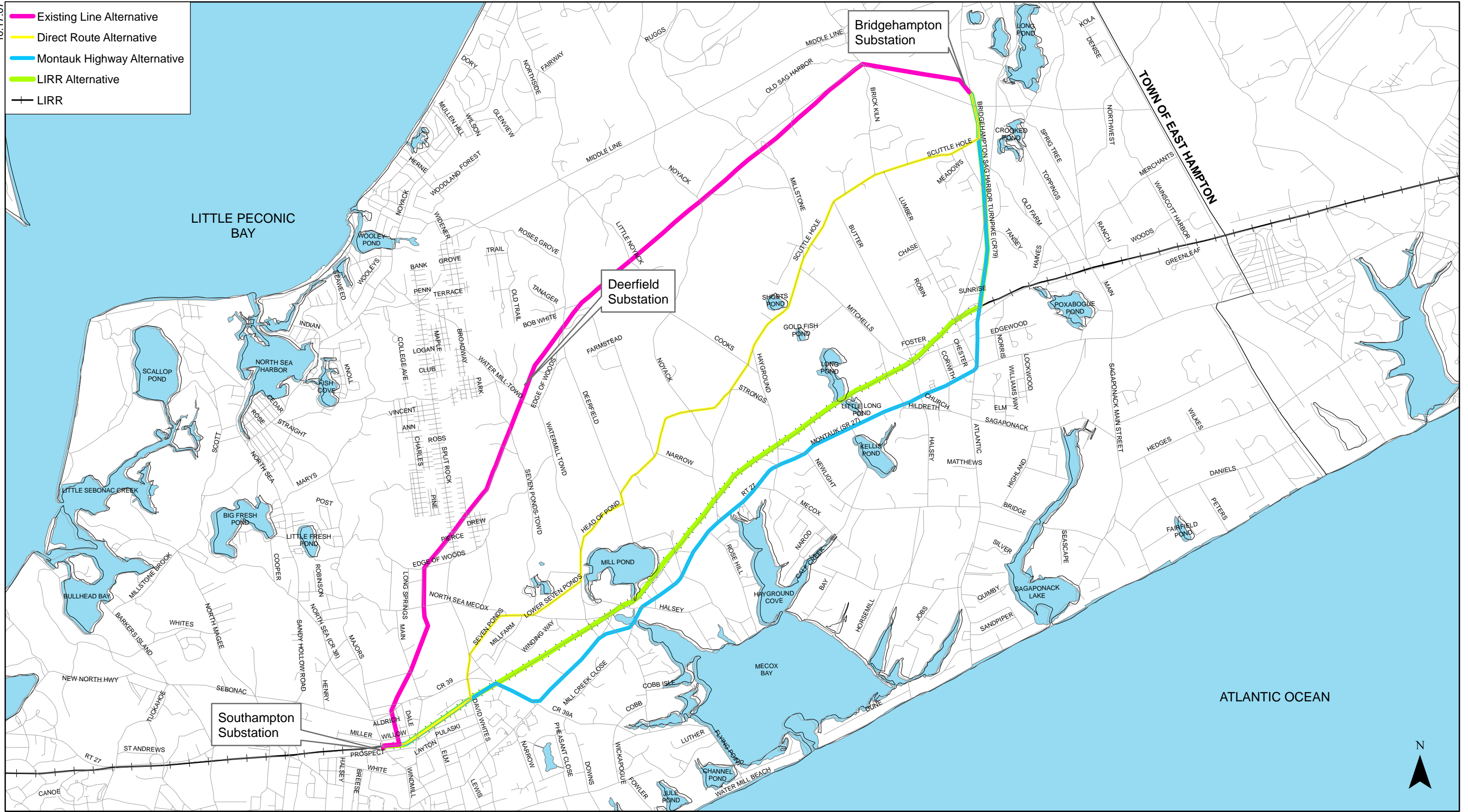
Four alternative routes have been considered for the installation of the new transmission line. These alternative routes are shown in Figure 1. The routes are as follows:

- Existing Line Alternative – This route would consist of installation of the proposed line along the existing transmission line easements between the Southampton and Bridgehampton Substations. This route would exit the Southampton Substation and follow Prospect Street for a short distance, and then turn north and northeast, following the existing double circuit transmission line.
- Direct Route Alternative – This route would follow existing roadways on the most direct route between the two substations. Starting at the Southampton Substation, this route would follow the Long Island Rail Road (LIRR) right-of-way to David Whites Lane to Seven Ponds Road to Lower Seven Ponds Road to Head of Pond Road to Scuttle Hole Road (Huntington Path) to Bridgehampton Sag Harbor Turnpike to the Bridgehampton Substation.
- LIRR Alternative – This route would follow the LIRR right-of-way from the Southampton Substation to Bridgehampton Sag Harbor Turnpike and then turn north along the roadway to the Bridgehampton Substation.
- Montauk Highway Alternative – This route would exit the Southampton substation and follow the LIRR right-of-way to County Road 39 to Montauk Highway to Bridgehampton Sag Harbor Turnpike and then turn north along the roadway to the Bridgehampton Substation.

An “In-Village” Alternative is being considered that would bury the line within the Village of Southampton. This option would exit the Southampton Substation, head north on North Sea Road to County Road 39 to David Whites Lane. This part of the route would be entirely underground until reaching David Whites Lane.

10.17.07

- Existing Line Alternative
- Direct Route Alternative
- Montauk Highway Alternative
- LIRR Alternative
- LIRR



## **LIPA Southampton to Bridgehampton Transmission Line**

---

For each of the alternative routes, various options of overhead, underground, or a combination of both configurations will be considered in the analysis. Regardless of the alternative selected, the existing 69 kV double circuit line will remain overhead.

Based upon preliminary engineering, environmental, and economic evaluations, the Direct Route Alternative was selected as the preferred route. However, the environmental impacts of all four routes will be evaluated in the Environmental Impact Statement (EIS) in similar detail as the Direct Route Alternative.

On July 10, 2007, pursuant to the New York State Environmental Quality Review Act (SEQRA), LIPA declared its intention to serve as the designated lead agency for the LIPA Southampton to Bridgehampton Transmission Line Project, and issued a Positive Declaration. LIPA determined that the size and scope of the Proposed Action has the potential to result in one or more significant adverse impacts in the areas of visual resources, natural resources, cultural resources, agricultural lands, and neighborhood character. Based on the Positive Declaration, LIPA has determined that the Proposed Action requires preparation of an EIS. LIPA's declaration of Lead Agency has been challenged by the Town of Southampton's Planning Board. New York State Department of Environmental Conservation is currently considering the challenge.

This Final Scope of Work describes the proposed project and its purpose and need, the study areas, and the analyses and methodologies to be undertaken in the preparation of the EIS for the Proposed Action.

A public scoping meeting was held September 18, 2007 at the Southampton Inn (91 Hill Street) from 3 PM to 5 PM and 7 PM to 9 PM. As part of the scoping process, LIPA sought public input on the Draft Scope of Work. Written and oral comments from interested individuals, organizations, agencies, and elected officials were received at the public scoping meeting. Written comments were submitted to LIPA at 333 Earle Ovington Boulevard, Uniondale, NY 11553 until 5:00 PM on Tuesday, October 2, 2007. After review of the comments on the Draft Scope of Work, this Final Scope of Work was prepared and issued. The Final Scope of Work incorporates all public comments. The Final Scope of Work will be sent to all commenters, available in local libraries, and on LIPA's website.

Consistent with the Final Scope of Work, a Draft EIS (DEIS) will be prepared and circulated for public review. A public hearing will be held with a period for submitting written comments on the DEIS. This will be followed by preparation and circulation of the Final EIS (FEIS), which will include written responses to address public comments made on the DEIS. It is expected that the DEIS will be certified in December 2007.

## **B. PROJECT DESCRIPTION AND BACKGROUND**

### **DESCRIPTION OF PROPOSAL**

LIPA provides electric service to most of Long Island and a small portion of New York City. Included in the LIPA service area are the North and South Forks of Long Island in Suffolk County. In order to meet current and future service needs (i.e., the projected growth in demand) as well as to ensure system reliability, where conditions indicate a need, LIPA periodically proposes improvements and upgrades to its transmission system. Based upon demand forecasts, LIPA has identified the need to add increased transmission line capacity between the Village of Southampton and Bridgehampton hamlet by the summer of 2008. The Southampton to

Bridgehampton Transmission Line Project would add a new 69 kV transmission line that provides for future growth and increased reliability for residents and businesses in the Village and Town of Southampton as well as for residents and businesses across the South Fork. This area is currently served by an existing 69 kV capacity double circuit transmission line (utilizing steel towers approximately 65 feet tall and 20 feet wide), which runs between the Southampton and Bridgehampton Substations. This line will remain in service once the new transmission line is installed. As described above, the Direct Route Alternative would follow a direct route between the sites of the Southampton and Bridgehampton Substations along existing roadways and the LIRR right-of-way. The new transmission line would utilize approximately 250 wood mono poles that would typically be about 48 feet above grade and 22 inches in diameter along all existing roadways. The existing distribution poles along this route are about 35 feet above grade and 16 inches in diameter. In addition, approximately 22 existing wood poles (57 feet above grade and 19 inches in diameter) currently running along the LIRR right-of-way would be replaced with steel mono poles 61 feet above grade and 30 inches in diameter. All mono poles would be designed to withstand 130 mile per hour winds (a Category 3 hurricane).

The LIRR Alternative would have 61-foot above ground steel poles along the railroad tracks to David White's Lane, while the remainder of the line along the railroad tracks would feature steel poles ranging from 61- to 75-feet above ground. At Bridgehampton Sag Harbor Turnpike, the wooden poles would be 48 feet above grade. For the Montauk Highway Alternative, the steel poles would be 61 feet above grade alongside the railroad tracks, and the wooden poles would be 48 feet above grade along Montauk Highway. Engineering studies are still underway for the Existing Route Alternative.

#### *ALTERNATIVE ROUTES CONSIDERED*

As described above, the DEIS for the Proposed Action will examine four alternative routes—the Existing Line Route, the Direct Route, the LIRR Route, and the Montauk Highway Route. For each of these alternative routes, various options of overhead, underground, or a combination of both configurations will be considered in the analysis.

#### **STUDY AREA**

The study area for the DEIS will include all areas where impacts from operational or construction activities may occur, including the areas surrounding each alternative transmission route. The size of the study area will vary depending on the issues being analyzed and the potential for impacts on specific resources.

#### **PROJECT PURPOSE AND NEED**

Transmission supply interruptions, especially those of a sustained nature, impact public health and safety. The problems associated with blackouts were evidenced by the power failure on August 14/15 2003. Public transportation systems failed, road traffic was stalled due to lack of traffic signals, essential public services were unavailable, emergency services were not able to meet demands, and communication systems often did not function. The blackout led to large public costs and loss of output in the private sector.

Based on a planning study conducted by KeySpan Electric Service, LLC in November 2005, transmission systems reinforcements are required to supply the South Fork and to avoid thermal and voltage limitations under normal and contingency conditions beginning in 2008. This reinforcement would be sufficient to support the total forecasted East End load beyond 2025. By

the summer of 2008 without the Proposed Action, the South Fork transmission system could experience overloads and voltage collapse. The most limiting South Fork contingency is the loss of Southampton to Bridgehampton 69 kV double circuit. This loss would cause voltage collapse as well as overloads such as Jamesport to Peconic 69 kV circuit reaching 103 percent of its long term emergency (LTE) rating and Southold to Buell 69 kV cable to reach 101 percent of its LTE rating.

In order to meet anticipated future load growth within the eastern portion of the Town of Southampton and the South Fork, and to address system reliability, a new 69 kV transmission supply must be established between the Southampton and Bridgehampton Substations. In addition to the new line, a new transmission switching station would need to be constructed on the same parcel and adjacent to the existing Bridgehampton distribution Substation. Once completed, the new 69 kV line would provide for future load growth and increase system reliability. Without the addition and expansion discussed above, customers in the Towns of Southampton and East Hampton will likely be exposed to increasingly frequent service interruptions.

### **C. SCOPE OF ANALYSES FOR ENVIRONMENTAL IMPACT STATEMENT**

A DEIS will be prepared to analyze the project's potential for significant adverse impacts during both construction and operation and to identify feasible mitigation measures to minimize or avoid those impacts. The DEIS will include a detailed discussion of the purpose and need for the project, the alternatives considered, the proposed transmission line features, the environmental setting (existing conditions), and the direct and indirect short-term and long-term environmental consequences of each alternative. The DEIS will assess impacts associated with construction activities required to build the new transmission line and expand operations at the Bridgehampton Substation once it is complete.

As described below, the DEIS will include detailed evaluations of a full range of environmental issues relevant to each alternative being analyzed. Each chapter will assess existing conditions, the future without the proposed project, and the future with the proposed project. The main body of the DEIS will analyze the impacts of the Direct Route Alternative while the Alternatives chapter will analyze the impacts associated with the remaining three routes under consideration as well as the No Action Alternative, which considers the effect of not installing a new line. A Demand Management Alternative, which considers demand management to meet the project's overall objective to supply reliable energy to the South Fork and meet future growth demands, will also be analyzed.

### **D. PROPOSED SCOPE OF THE ENVIRONMENTAL IMPACT STATEMENT**

The specific chapters to be included in the DEIS are described below.

#### **EXECUTIVE SUMMARY**

Once the DEIS technical sections have been prepared, a concise executive summary will be drafted. The executive summary will utilize relevant material from the body of the DEIS to describe the Proposed Action, its environmental impacts, measures to mitigate those impacts, and alternative routes to the direct route as well as alternatives to the Proposed Action.

## **CHAPTER 1: PROJECT DESCRIPTION**

The first chapter of the DEIS will introduce the reader to the project and set the context in which to assess impacts. It will describe the Proposed Action, the background and history of electrical service provided to the East End, a statement of purpose and need, and a project cost summary, including the cost of overhead versus underground installation and maintenance. The project description will consist of a discussion of key project elements, such as site plans and elevations, substation security, and other project commitments. This chapter is the key to understanding the Proposed Action and its impacts, and gives the public and decision-makers a base from which to evaluate the project against the future condition without the project (No Action).

## **CHAPTER 2: LAND USE AND COMMUNITY CHARACTER**

The chapter will assess the compatibility of the proposed transmission line with existing and future land uses and describe the overall community character of the study area. Land use data will be obtained through Geographic Information System (GIS) databases and other local maps and data sources. The information will be verified by on-site field visits.

The land use study area will be ½-mile from the proposed transmission line, which includes those areas most likely to be affected by the proposed project. Within the study area, land uses will be mapped and described in terms of coverage by land use type (e.g., residential, commercial, utility, open space, etc.), important local and specific site uses, and overall land use and development trends. The existing conditions section of this chapter, in addition to providing a narrative discussion of existing land uses, will include land use maps, photographic illustrations of specific areas and uses, and summary tables.

Community character is an amalgam of many different factors that combine to create the “quality of life” of an area. The DEIS will describe the existing community character of the area surrounding the proposed transmission line, incorporating information collected from other technical analyses including visual character, historic resources, and natural resources. The Proposed Action’s effects on that character and general quality of life in the community will then be assessed. In the context of community character, the DEIS will address the potential of the project to cause significant adverse impacts on property values in the study area.

From the existing baseline assessment of land use and community character, future conditions in the study area will be analyzed both with and without the proposed project. The potential changes in land use and community character as a result of the proposed transmission line will be evaluated to assess the potential for significant adverse impacts at specific locations and throughout the study area.

## **CHAPTER 3: COMMUNITY FACILITIES AND OPEN SPACE**

Community facilities that serve the ½-mile study area will be described, including schools, libraries, fire and police services, health and human services, and other community services. Services and operations provided in the study area will be also discussed, including a description of the service districts specific to the study area. The chapter will then assess the proposed project’s potential for impacts on these community facilities and services. Any action that results in a significant increase in community services (e.g., the need for new facilities such as fire substations) could be considered an adverse impact for which mitigation will be presented.

In addition, this chapter will provide a description of the existing open spaces as well as in-place plans and programs with respect to open space acquisition and management. To understand the

open space conditions of the study area, it will be necessary to compile and analyze a complete list and mapping of open spaces with the jurisdiction and responsible agency based on field reconnaissance, existing inventories, and available policy documents. The open space study area, similar to the land use study area, will be ½-mile from the proposed transmission line. The DEIS will provide a description of the ownership (e.g., public or private) and primary function of the open space—e.g., natural area (e.g., wetland or other habitat protection), active recreation (e.g., ball fields), marine recreation, and beaches. This chapter will also describe any proposed improvements or expansion of open space including preservation of greenspace/greenways between hamlet centers to preserve community character. The Proposed Action’s impact on the open space will then be assessed.

#### **CHAPTER 4: ZONING, AND PUBLIC POLICY**

Although this project is not subject to local land use laws, this chapter will nevertheless assess the proposed project’s consistency with the pertinent Town of Southampton and Village of Southampton zoning ordinances and other relevant public policies. The chapter will summarize existing zoning in terms of zoning districts mapped within the project study area (including any special purpose districts that overlay base zoning) and describe permitted land uses, density, and bulk regulations within each zoning district. Zoning district boundaries will be shown on the study area maps, and tables will summarize the zoning standards applicable to the districts analyzed. This chapter will then assess the project’s overall consistency and its potential to result in adverse impacts specific to local zoning ordinances as they relate to intended development trends and policies.

In addition, other relevant State, County, regional, and local public policies will also be summarized to ascertain consistency of the proposed project to applicable master plans and policies and other public initiatives for the Village, Town, and region.

#### **CHAPTER 5: COASTAL ZONE MANAGEMENT**

This chapter will describe the Proposed Action’s consistency with New York State and regional coastal zone policies. The DEIS will identify the applicable State and approved regional coastal policies and provide a discussion of the consistency of the proposed project with such policies.

#### **CHAPTER 6: VISUAL RESOURCES**

The DEIS will consider the appearance of the transmission line as viewed from the surrounding area, as well as any views across the routes. It will then consider the effect of the transmission line on those views, including changes to view corridors, duration of views, and sensitivity of views. Photomontages illustrating the appearance of the new line will be provided. A Visual Impact Assessment (VIA) will be performed following the guidance provided by New York State Department of Environmental Conservation (NYSDEC) Program Policy DEP-00-2, Assessing and Mitigating Visual Impacts (dated 7/31/00).

The DEIS will include an inventory of the resources identified as having statewide significance in DEP-00-2, as well as locations identified by local jurisdictions as having scenic or aesthetic quality. Following is a list of resources considered to have statewide significance:

- Properties on or eligible for inclusion in the National or State Register of Historic Places (16 USC §470a et seq., Parks, Recreation and Historic Preservation Law §14.07);
- New York State Parks (Parks, Recreation and Historic Preservation Law §3.09);

- Urban Cultural Parks (Parks, Recreation and Historic Preservation Law §35.15);
- New York State Forest Preserve (NYS Constitution Article XIV);
- National Wildlife Refuges (16 USC 668dd);
- State Game Refuges and State Wildlife Management Areas (ECL 11-2105);
- National Natural Landmarks (36 CFR Part 62);
- National Park System, Recreation Areas, Seashores, Forests (16 USC 1c);
- Rivers designated as National or State Wild, Scenic or Recreational (16 USC Chapter 28, ECL 15-2701 et seq.);
- Any site, area, lake, reservoir or highway designated or eligible for designation as scenic (ECL Article 49);
- Scenic Areas of Statewide Significance (Article 42 of Executive Law);
- A State or federally designated trail (16 USC Chapter 27);
- State Nature and Historic Preservation Areas (Section 4 of Article XIV of the State Constitution);
- Palisades Park; and
- Bond Act Properties purchased under Exceptional Scenic Beauty or Open Space Category.

The DEIS will include a list of local scenic or visual resources, designated scenic roads, and locally significant open space and historic resources. Locally significant visual resources or view corridors will be determined based on Town designations or through field surveys where such designations do not exist. All resources within one mile of the above ground portions of the transmission line will be identified and described in the DEIS. One mile is considered the maximum distance a pole would pose a significant adverse visual impact.

Using a GIS database containing the identified resources and topography along the route of the transmission line, the inventory of aesthetic resources within the one-mile study area will be screened based on topography and vegetation to identify resources that may have views of the transmission line. The GIS screening will be field-checked through windshield surveys along the route of the transmission line and through site visits for views off of publicly traveled ways. Those views of the transmission line that would be significantly obstructed by vegetation will be eliminated through this screening.

### *IMPACT ASSESSMENT*

#### *Evaluation of Transmission Line Visibility*

Resources identified through the process, discussed above, will be field surveyed and potential visibility will be determined based upon specific topographic data between the resource and the transmission line. Site visits to resources will verify the location and aspect of significant views from the property. These viewsheds would be documented through digital photography and a Geographic Positioning System (GPS) transponder and compass. Each resource identified will include a discussion of the existing visual environment and a discussion of potential impacts of the proposed transmission line.

#### *Photosimulations*

Where the transmission line may be visible from identified resources, photosimulations will be prepared to demonstrate the anticipated impact of the transmission line from publicly-accessible

## **LIPA Southampton to Bridgehampton Transmission Line**

---

views. Locations of the viewpoints for the photosimulations will be selected so as to demonstrate potential visibility of the transmission line from a variety of representative viewpoints in the study area. Depending on the varying degrees of potential visibility of the transmission line, photosimulations may be prepared to demonstrate visibility from a range of public view corridors and State and locally designated resources to demonstrate the “worst case scenarios” or potential visibility from areas most affected by the transmission line.

### *Evaluation of Impacts*

According to DEP-00-2, a “visual impact” occurs when “the mitigating effects of perspective do not reduce the visibility of an object to insignificant levels. Beauty plays no role in this concept.” (DEP-00-2, p. 10). DEP-00-2 also provides guidance with respect to the definition of an “aesthetic impact”:

*Aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Mere visibility, even startling visibility of a project proposal, should not be a threshold for decision making. Instead a project, by virtue of its visibility, must clearly interfere with or reduce the public’s enjoyment and/or appreciation of the appearance of an inventoried resource. (DEP-00-2, p. 9).*

The “mitigating effects of perspective” are important to understand in the assessment of visual impact. While an object, such as a transmission line pole, may be visible over a long distance, “atmospheric perspective,” which DEP-00-2 describes as the “reduction in intensity of colors and the contrast between light and dark as the distance of the objects from the observer increases” and which is a product of the natural particles within the atmosphere that scatter light, serves to minimize the significance of the pole in the overall viewshed. A second mitigating factor is the overall character of the surrounding landscape. The mitigating effects of distance and contextual topography typically reduce the visibility of transmission line poles to insignificant levels.

Thus, while a proposed project may be visible within a viewshed, mere visibility is not a threshold of significance. The significance of the visibility is dependent on several factors: presence of any designated historic or scenic resources within the viewshed of the project, distance, general characteristics of the surrounding landscape, and the extent to which the visibility of the project interferes with the public’s enjoyment or appreciation of the resource. A significant adverse visual impact would only occur when the mitigating effects of design, distance, and intervening topography and vegetation do not minimize the visibility of an object and the visibility significantly detracts from the public’s enjoyment of a resource.

## **CHAPTER 7: ARCHAEOLOGICAL RESOURCES**

The Stage 1A Archaeological Survey will be undertaken in accordance to the guidelines in the New York State Historic Preservation Office Phase I Archaeological Report Format Requirements (May 2005) and in the Standards for Cultural Resource Investigations and the Curation of Archaeological Collections issued by the New York Archaeological Council and the New York State Office of Parks, Recreation, and Historic Preservation (1995). The purpose of the study is to assess the sensitivity of the parcel for archaeological remains, and if needed, to provide information necessary for designing the Stage 1B field methodology. No standing structures will be evaluated as part of the Stage 1 Archaeological Survey.

***METHOD***

Archival Research: The archival research will include an examination of pertinent historical documents in Albany and on Long Island (maps, photographs, descriptive histories, site files, etc.) to determine past land use in the project area and to define the locations of any previously documented cemeteries, roads, buildings, and Native American settlements.

Archaeological Inspection: The goal of the archaeological survey is to examine the property for the presence of visible undocumented historic and prehistoric sites, and to assess the archaeological sensitivity of the property. This will involve a surface inspection and walkover of the entire project area. Exposed soil will be examined for artifacts and other manifestations of past activity. Vegetation patterns and topographic features that might provide insights into prehistoric and historic use of the area will also be noted.

Sensitivity Evaluation: On the basis of the archival research and the surface examination of the property, an assessment of the archaeological sensitivity of the property will be made. This assessment will determine whether subsurface archaeological testing (Stage 1B) is necessary, and if so, what field strategies are appropriate.

**CHAPTER 8: HISTORIC RESOURCES**

In compliance with SEQRA and the New York State Historic Preservation Act (SHPA), the Historic Resources analysis will evaluate the potential for the proposed project to affect historic resources. Tasks that will be undertaken as part of this analysis are as follows:

- A. Identify the study area for historic resources. This is the area where the project may directly or indirectly cause changes in the character or use of historic properties.
- B. Consult with the State Historic Preservation Office (SHPO) as necessary in submitting materials and facilitating SHPO's review.
- C. Provide a brief historical background of the project vicinity to provide a context for the evaluation.
- D. Map and briefly describe both previously identified and potential historic resources in the study area. In order to complete this task, information will be collected on all designated historic resources in the study area, including properties and districts identified as local landmarks, properties and districts listed on or determined eligible for listing on the State and National Registers of Historic Places (S/NRs), and National Historic Landmarks (NHLs). SHPO will be contacted for information pertaining to any S/NR-eligible resources; and the Town of Southampton, Village of Southampton, and local sources will be contacted for information pertaining to locally designated or surveyed resources, as required.
- E. Conduct a field survey of the study area to identify any potential historic resources that could be affected by the proposed project. Potential historic resources comprise properties that may be eligible for listing on the S/NR, but have not yet been evaluated by SHPO. Identification of potential historic resources will be based on criteria for listing on the National Register as found in the Code of Federal Regulations. The DEIS will include maps, descriptions, and a photograph of any identified potential historic resources.
- F. Evaluate the potential of the proposed project to impact cultural resources in the Area of Potential Effect. Any direct physical impacts of the proposed project on archaeological

resources will be identified and assessed, including demolition, disturbance, and impacts potentially resulting from nearby construction activities, if any. The DEIS will also assess the Proposed Action's potential to result in any indirect impacts (such as visual and contextual impacts) on historic resources.

- G. If any potential adverse impacts on cultural resources are identified, measures will be developed to mitigate such impacts, in consultation with SHPO.

## **CHAPTER 9: NATURAL RESOURCES**

This chapter will evaluate the potential impacts of construction and operation of the proposed transmission line and new transmission switching station on the natural resources of the area. The following tasks will be undertaken for this chapter:

- A. Describe the physical boundaries of disturbance required for construction and maintenance of the proposed project. This includes the width (limits) of disturbance for pole installation, or cut/cover for subsurface transmission line installation, as well as the need for disturbance for the construction (or improvement) of access roads, the new transmission switching station, construction staging areas, fencing, and long-term maintenance.
- B. Develop figures for the transmission line corridor and switching station showing cover types and land uses, including: woodlands, wetlands, sensitive habitats, agriculture, development, stream or water crossings, sensitive species or habitat areas, etc.
- C. Conduct a vegetation and wildlife inventory and habitat characterization within the potential disturbance area along the proposed transmission line and within the new transmission switching station. Plant and animal species will be identified by qualified ecologists. Potential impacts to habitats and to any specific plant and animal species will be determined. A supplemental list of potentially-present animal species will be provided based on the existing habitat.
- D. Wetland mapping resources will be consulted to determine the presence of NYSDEC-regulated wetlands within and in the vicinity of proposed transmission line and new transmission switching station. Wetland areas mapped by the US Fish and Wildlife Service and National Wetlands Inventory (NWI) will also be consulted.
- E. As part of the field investigation, any wetlands located within the footprint of the transmission line route or within new transmission switching station will be identified and delineated, when necessary, in accordance with the appropriate Federal (Army Corp of Engineers) or State (NYSDEC) methodology. Potential impacts to regulated wetlands will be quantified and wetland regulatory requirements (local, State and Federal) discussed. Methods to avoid, minimize, or mitigate potential wetland impacts will be discussed.
- F. The NYSDEC Natural Heritage Program (NYSNHP) will be contacted to obtain records of past occurrence of threatened or endangered plants and animals within the project site and vicinity. An assessment of the habitat requirements of species determined to be potentially present within the project area will be provided and the need for supplemental threatened and endangered field inventories presented in the DEIS. Potential impacts to threatened and endangered species identified during field investigation, or those potentially present based on NYSNHP records, will be described.
- G. The predominant soils and unconsolidated deposits underlying the project area will be described based on published information obtained from the United States Department

of Agriculture Natural Resources Conservation Service and New York State Museum. Limitations of soils/geology applicable to the proposed project will be described qualitatively. Potential impacts to soils and geology from the proposed project will be discussed.

- H. Other published sources of Federal, State, and local ecological information shall be consulted, including:
- NYS Breeding Bird Atlas Project;
  - NYS Herp Atlas Project;
  - The Southampton Critical Wildlands and Groundwater Protection Plan Generic Environmental Impact Statement, 2003; and
  - The Town of Southampton 1999 Comprehensive Plan

## **CHAPTER 10: HAZARDOUS MATERIALS**

The Proposed Action is expected to require subsurface disturbance and some excavation along the length of the proposed line and at the proposed substation. The hazardous materials assessment will include a discussion of current environmental conditions and will examine how the Proposed Action would affect these conditions. The discussion of current environmental conditions will rely on information provided by State and Federal environmental databases, historical mapping, and field observations of current conditions. The tasks are as follows:

- A. The scope of the Limited Phase I Environmental Site Assessment (ESA) will include an environmental database search of categories that are consistent with current industry standards, including ASTM E1527-05 (though search radii for off-site properties will be modified given the extent of the study area and its location). The hazardous materials study will include the following: a review of available records and historical maps and aerial photographs to determine previous on-site and adjacent land uses; a site reconnaissance and general characterization from public rights-of-way; evaluation of regulatory compliance; and a determination of the need for further investigations to identify and quantify potential contamination and related liabilities. Areas of the project site that are not accessible for inspection would be cited as limitations.
- B. The Limited Phase I ESA will identify properties where subsurface testing is required to determine the need for or scope of remedial measures (e.g., relating to underground petroleum tanks or special handling of excavated soil).
- C. The data gathered during the Limited Phase I ESA will be summarized for inclusion in the DEIS. If warranted based on the results of the study, a Phase II investigation, any necessary remediation of hazardous materials identified as a result of either the Limited Phase I ESA or possible Phase II investigation, and a worker health and safety plan would be developed and described in the hazardous materials chapter.

## **CHAPTER 11: INFRASTRUCTURE**

When applicable, this chapter will assess the suitability and capacity available of utilities including water, sewer, stormwater, solid waste, and energy to accommodate the transmission line and expanded substation. The potential for loss of power supply and its effects on the area during storms will also be assessed.

## **CHAPTER 12: GROUNDWATER AND SURFACE WATER RESOURCES**

There are surface and subsurface water resources within the project study area; therefore, this analysis will focus on the surface water bodies and groundwater. This task will include the following:

- A. Describe the geologic cross-section at this part of Long Island and the aquifer systems. Utilize local sources of data to assess depth to groundwater and groundwater quality. Describe groundwater protection laws, rules, and regulations.
- B. Qualitatively describe the future changes and trends in surface water and groundwater conditions.
- C. Qualitatively assess impacts of the proposed project on groundwater recharge and quality.
- D. Identify and provide approximate location of any existing surface waters and streams on or adjacent to the project route. Describe the general characteristics, functions and any uses of any such water bodies. Provide any State classification of surface waters, if applicable.
- E. Describe potential impacts to existing surface waters or drainage patterns associated with the proposed project.

## **CHAPTER 13: TRAFFIC, AIR QUALITY, AND NOISE**

This chapter will examine how the Proposed Action could impact traffic, air quality, or noise conditions in the study area. The study area is traversed by arterial and collector roads. This analysis will examine how the Proposed Action could impact significant roadways in the study area including David Whites Lane, County Road 27, Seven Ponds Road, Lower Seven Ponds Road, Head of Pond Road, Scuttle Hole Road, and Bridgehampton Sag Harbor Turnpike. Traffic levels on these roadways will be examined based on traffic data compiled by the Suffolk County Department of Public Works. These data will be used to present a qualitative assessment of the traffic conditions for the area. The number of traffic accidents involving utility poles in the local area will be presented. In addition, emergency evacuation routes will be mapped and discussed. Air quality data will also be used from existing NYSDEC monitoring stations in the area. A growth factor will be used to increase the traffic volumes for the No Action (2008) condition. Trip generation will be based on the existing trips generated at the Southampton and Bridgehampton substations. This analysis will look at order of magnitude changes in traffic volumes at pertinent intersections to determine how these intersections would be impacted. In addition, the traffic data will be reviewed to assess any potential impacts on air quality conditions or ambient noise.

## **CHAPTER 14: ELECTROMAGNETIC FIELDS**

A qualitative assessment of potential impacts of the proposed project in terms of electromagnetic fields (EMFs) will be provided. This assessment will include a general description of magnetic fields, a discussion of applicable standards and criteria, estimates of the strength of EMFs adjacent to typical transmission lines of this magnitude and substations, and a discussion of health effects of EMFs (based upon current literature).

## **CHAPTER 15: CONSTRUCTION IMPACTS**

Construction impacts, while temporary in nature, will be described and their significance qualitatively analyzed in the DEIS. The assessment of construction impacts will include:

- A. A description of the construction and its schedule, including the expected start and completion dates as well as expected service interruptions. An estimate of the number of employees for the construction will also be provided.
- B. A narrative description of the construction techniques, the construction equipment, and the expected hours of construction.
- C. An assessment of potential traffic, air quality, noise, water quality, natural resources, and hazardous material impacts during construction.

If necessary, mitigation measures to prevent or minimize any significant construction impacts will be identified.

## **CHAPTER 16: ENVIRONMENTAL JUSTICE**

The environmental justice analysis will consider the requirements of Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” and will assess the project’s potential for disproportionately high and adverse environmental impacts on minority and/or low-income populations. The analysis will follow the guidance in CP-29, Environmental Justice and Permitting, issued by the New York State Department of Environmental Conservation on March 19, 2003. Demographic data from the U.S. Census Bureau will be used to determine whether minority and/or low-income populations are located within the study areas, or the areas where potential significant adverse impacts from the proposed project and its alternatives could occur.

## **CHAPTER 17: ALTERNATIVES**

The purpose of an alternatives analysis is to examine reasonable and practicable options that avoid or reduce project-related significant adverse impacts and achieve the stated goals and objectives of the Proposed Actions. Among the alternatives that will be considered are the following:

- A. No action alternative;
- B. Demand Management Alternative:
  - Alternative methods that LIPA could implement to meet the project’s objectives, such as demand side management; and
- C. Alternative routes:
  - Existing Line Alternative
  - LIRR Alternative
  - Montauk Highway Alternative

For each of these alternative routes, various options of overhead, underground, or a combination of both configurations will be considered in the analysis.

## **CHAPTER 18: MITIGATION**

Where significant adverse impacts have been identified in the analyses discussed above, practicable measures to mitigate those impacts will be identified. This chapter will summarize the findings of the relevant analyses and will identify practicable mitigation measures for significant adverse impacts from the proposed project. Depending on the nature and extent of the significant adverse impact, a variety of measures to avoid or minimize the significant adverse impact would be evaluated for their feasibility and practicability for implementation. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

## **CHAPTER 19: OTHER CHAPTERS**

As part of the DEIS, chapters will be developed, as appropriate, that discuss the following issues:

- A. Cumulative Impacts. Cumulative impacts can result when the effects of an action are added to or interact with other effects in a particular place and within a particular timeframe. The potential for cumulative impacts with other projects in the area will be assessed, including the potential for a large scale construction project occurring during the time period the transmission line is being installed and the substation expanded.
- B. Unavoidable Adverse Impacts. Those impacts, if any, which could not be avoided and could not be practicably mitigated, will be discussed in this chapter.
- C. Irreversible and Irretrievable Commitments of Resources. This chapter focuses on those resources, such as energy and construction materials, that would be irretrievably committed should the project be built.
- D. Growth-Inducing Aspects of the LIPA Project. This chapter will focus on whether the proposed project would have the potential to induce new development within the surrounding area.
- E. Conservation of Energy. The extent to which the proposed project would use energy during its construction and operation will be assessed, based on the information in the infrastructure chapter. \*