

**Empire Offshore Wind LLC and EW Offshore
Wind Transport Corporation
Empire Wind 2 Project**

**Appendix J
Article VII Application Summary Memorandum
Analysis of Visual Effects to Historic and
Architectural Properties**

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ACRONYMS AND ABBREVIATIONS

ac	acres
APE	Area of Potential Effect
AVEHAP	Analysis of Visual Effects to Historic and Architectural Properties
BOEM	Bureau of Ocean Energy Management
COP	Construction and Operations Plan
CRIS	Cultural Resource Information System
EM&CP	Environmental Management & Construction Plan
Empire or the Applicant	Empire Offshore Wind LLC and EW Offshore Wind Transport Corporation
EW 2	Empire Wind 2
ft	foot
ha	hectares
HDD	horizontal directional drilling
HVAC	high-voltage alternating current
km	kilometer
kV	kilovolt
Lease Area	designated Renewable Energy Lease Area OCS-A 0512
LIPA	Long Island Power Authority
m	meter
mi	mile
nm	nautical mile
NPS	National Park Service
NRHP	National Register of Historic Places
NRIS	National Register Information System
NY SHPO	New York State Historic Preservation Office
NYSPO	New York State Public Service Commission
OCS	Outer Continental Shelf
PAPE	Preliminary APE
POI	Point of interconnection at the Hampton Road substation
PSEG-LI	PSEG Long Island
NY Project	EW 2 Project transmission system in New York
NY Project Area	The submarine export cable corridor, onshore export cable corridor, onshore substation, interconnection cable corridor, Hampton Road substation, and loop-in / loop-out line facilities within New York State jurisdiction
SHPO	State Historic Preservation Office
Tetra Tech	Tetra Tech, Inc.
VIA	Visual Impact Assessment

J.1 Introduction

Tetra Tech, Inc. (Tetra Tech) was contracted by Empire Offshore Wind LLC¹ and EW Offshore Wind Transport Corporation (collectively, Empire or the Applicant) to prepare an Analysis of Visual Effects to Historic and Architectural Properties (AVEHAP) in support of the development of the Empire Wind 2 (EW 2) Project. The Applicant proposes to construct and operate the EW 2 Project (**Figure J-1**) as one of two separate offshore wind projects to be located within the Bureau of Ocean Energy Management (BOEM) designated Renewable Energy Lease Area OCS-A 0512. This assessment is being submitted as part of the review by the New York State Public Service Commission (NYSPSC or Commission) for the portions of the EW 2 Project transmission system located within the State of New York (collectively the NY Project) pursuant to Article VII of the New York Public Service Law. This memorandum provides an abbreviated summary of the AVEHAP for the onshore NY Project in New York.

The NY Project will interconnect to the New York State Transmission System operated by the New York Independent System Operator, Inc. at the Oceanside Point of Interconnection (POI) at the Hampton Road substation, which will be located in Oceanside, in the Town of Hempstead, New York. The onshore NY Project will be located entirely within Nassau County, New York.

The purpose of the AVEHAP is to assess the potential visual effects of the construction and operation of the NY Project from above-ground historic properties (e.g., cultural properties, districts, buildings, structures, or objects, that are 50 years old or older and are listed in or eligible to be listed in the National Register of Historic Places [NRHP]) that will have views or partial views of NY Project components. The term “historic properties” is defined as properties listed on the NRHP or determined NRHP eligible. “Architectural property” is the term used here to denote an above-ground building, structure or object, 50 years old or older, that has not been evaluated for NRHP eligibility or that has been determined not eligible for the NRHP.

The AVEHAP focuses on the preliminary Area of Potential Effect (PAPE) for the onshore NY Project facilities associated with the onshore substation (Onshore Substation AVEHAP PAPE) and the Hampton Road substation (Hampton Road Substation AVEHAP PAPE). Seven above-ground historic or architectural properties may have views of an onshore NY Project component:

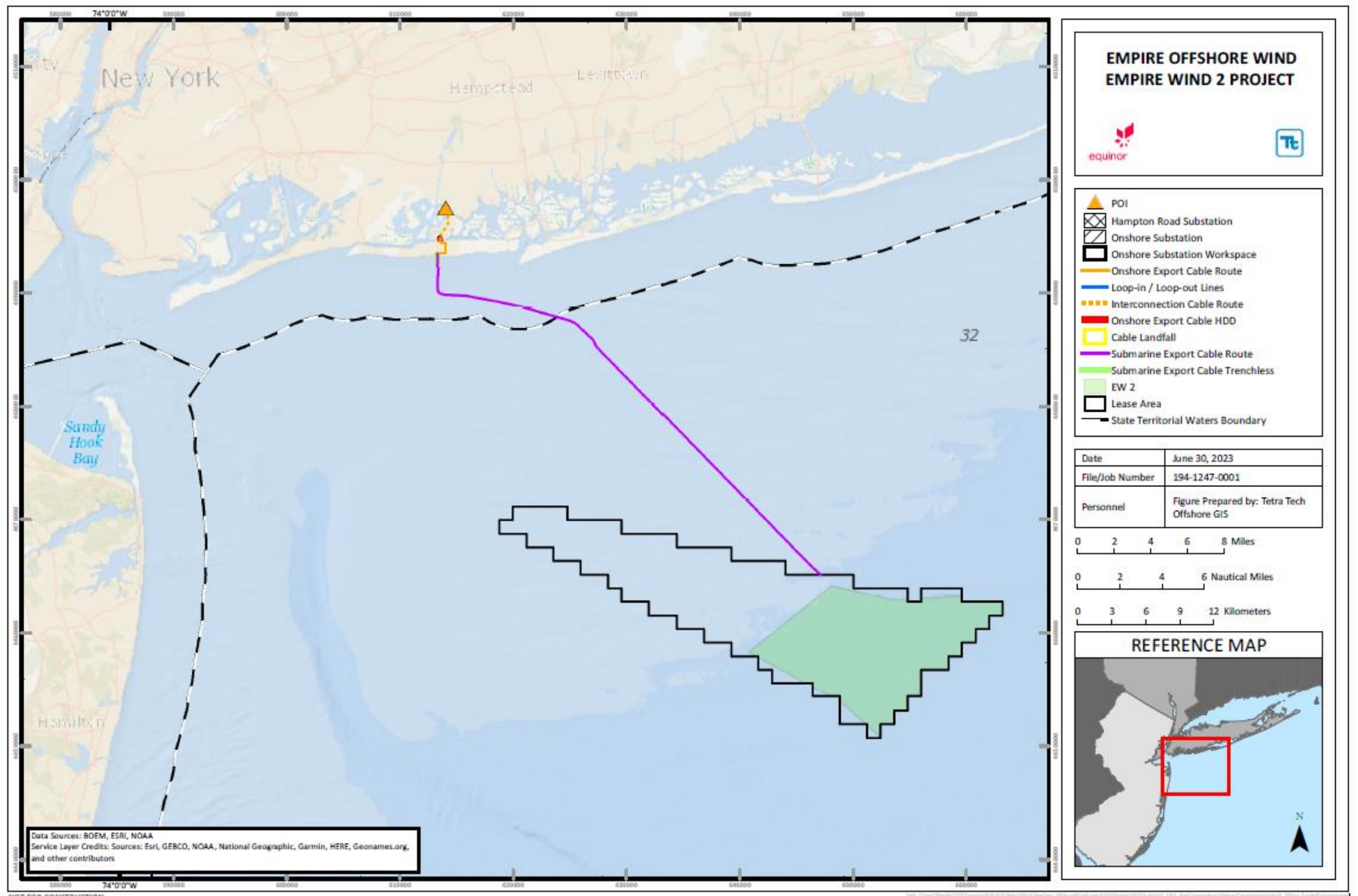
- Cobble Villa (National Register Information System [NRIS] No. 14001214), which is located within the Onshore Substation AVEHAP PAPE
- Three architectural properties in Oceanside, NY within the Hampton Road Substation AVEHAP PAPE
 - 177 Harris Dr. (CRIS# 05901.001528),
 - 458 Reina Rd. (CRIS# 05901.002261), and
 - 3495 Westminster Rd. (CRIS# 05901.002265;
- Three architectural properties in Island Park, NY within the Hampton Road Substation AVEHAP PAPE

¹ Empire is a direct, wholly owned subsidiary of Empire Offshore Wind Holdings LLC (Empire HoldCo). Empire HoldCo is jointly owned by (1) an indirect, wholly owned subsidiary of Equinor ASA (collectively, Equinor); and (2) an indirect, wholly owned subsidiary of BP Wind Energy North America Inc. BP Wind Energy North America Inc. acquired ownership interest in Empire HoldCo in a transaction that closed on January 29, 2021.

- 1 McCarthy Rd., (CRIS# 05901.003524),
- 49 Redfield Rd. (CRIS# 05936.000019), and
- 159 Waterford Rd. (CRIS# 05936.000021).

The submarine export cables, onshore export, cables, interconnection cables, and loop-in / loop-out lines will be entirely submerged under water and/or buried, with the exception of a proposed cable bridge crossing over Barnums Channel along the interconnection cable route (see **Appendix I Visual Impact Assessment** for further discussion); therefore, these NY Project components will not be addressed further in this analysis.

The AVEHAP includes a detailed description of the NY Project components evaluated (Section J.2 NY Project Description); a summary of the regulatory framework driving the analyses herein (Section J.1.1 Regulatory Context); a detailed discussion of the methods used to identify the Study Area and the PAPEs (i.e., locations of NRHP-listed and -eligible resources potentially affected by the construction and operation of the NY Project, Section 4 Architectural Property Survey Methodology); the environmental context of the NY Project Area (Section J.3.1); the PAPE descriptions and descriptions of historic and architectural properties that may be impacted for each substation (Section J.4.1.3 Onshore Substation AVEHAP PAPE and Section J.4.1.4 Hampton Road Substation AVEHAP PAPE); and a summary of recommendations (Section J.5 Summary and Conclusions). This analysis also relies upon assessments reported in a separate Visual Impact Assessment developed for the NY Project and presented in a report detailing onshore visual effects, which was filed with the Article VII Application.



J.1.1 Regulatory Context

Several federal, state, and local agencies have regulatory authority over the NY Project, based on the location of the different NY Project components. Onshore facilities, including the onshore substation and Hampton Road substation, will be located in Nassau County, New York.

The NY Project is subject to regulation by BOEM under provisions of the Outer Continental Shelf Renewable Energy Program authorized by the Energy Policy Act of 2005 (42 United States Code §§ 13201 *et seq.*). Assessments of effects on historic architectural resources are required to support BOEM's National Environmental Policy Act review process and the review performed under Section 106 of the National Historic Preservation Act (54 United States Code, § 306108). In its Construction and Operations Plan (COP) Guidelines, BOEM provides recommended approaches for assessing historic architectural resources during the permitting phase of offshore wind projects (BOEM 2017). BOEM directs that an AVEHAP should be conducted in a manner acceptable to the relevant State Historic Preservation Office (SHPO) for the state with the onshore viewshed.

In 2016, BOEM executed a Programmatic Agreement with the SHPOs of New Jersey and New York, the Shinnecock Indian Nation, and the Advisory Council on Historic Preservation to formalize agency jurisdiction and coordination for the review of offshore renewable energy development regarding cultural resources (BOEM 2016). The Programmatic Agreement recognized that issuing renewable energy leases on the Outer Continental Shelf constituted an undertaking subject to Section 106 of the National Historic Preservation Act. BOEM, as the lead federal agency in this process, has authority to initiate consultations with the SHPOs, and to consult with interested Native American Tribes.

An electric transmission line with a design capacity of 125 kV or more, extending a distance of one mile (mi) or more, is also subject to review and approval by the NYSPSC as a major electric transmission facility pursuant to Article VII of the New York Public Service Law. The EW 2 Project is subject to review by the Commission for the portions of the EW 2 Project transmission system located within the State of New York. Per 16 New York Code of Rules and Regulations § 86.5, Article VII applications must consider avoidance of “scenic, recreational and historic areas.” The New York State Historic Preservation Act of 1980, the state counterpart to the National Historic Preservation Act, establishes the New York State Register of Historic Places (NYSRHP).

J.1.2 State Historic Preservation Office Coordination

The scope and approach to the AVEHAP were supported through engagement with federal and state agencies. Empire met with BOEM and the National Park Service (NPS) on August 29, 2018 to discuss approaches to the historic architectural survey and visual impact analysis. Empire initiated discussions with the New York State Office of Parks, Recreation and Historic Preservation in its role as New York State Historic Preservation Office (NYSHPO) via a letter dated December 13, 2018. The NY SHPO concurred with the approach in a letter dated December 27, 2018. As the NY Project evolved, Empire provided NY SHPO with a NY Project update letter on August 22, 2019 and met with NY SHPO on September 26, 2019 to describe the most recent preferred locations for the EW 2 onshore electrical systems². Empire provided a NY Project update letter to the NY SHPO on April 2021 for additional routes/sites under consideration. NY SHPO confirmed receipt of the update and had no comments at the time. Empire also provided NY SHPO an EW 2 Project update letter

² This update letter did not include some of the submarine export cable landfall alternatives and associated onshore export and interconnection cable route alternatives. However, these were included within the AVEHAP Study Areas using consistent approaches outlined in the consultation letter.

introducing an additional alternative landfall site (Landfall E) and additional EW 2 onshore export and interconnection cable routes on May 9, 2022³.

Empire provided NY SHPO an Article VII Application Summary Memorandum Analysis of Visual Effects to Historic and Architectural properties on June 16, 2022. NY SHPO, in a letter dated July 15, 2022, commented that the agency had “...no concerns with the project’s potential visual impacts to the identified historic and architectural properties.” Empire continues to engage with stakeholders with regards to potential impacts to architectural properties.

J.2 NY Project Description

The NY Project includes:

- Two three-core 345-kV high-voltage alternating current (HVAC) submarine export cables located within an approximately 7.7-nautical mile [nm] (14.2-kilometer [km])-long submarine export cable corridor from the boundary of New York State waters 3 nm (5.6 km) offshore to the cable landfall;
- A cable landfall in the City of Long Beach, New York;
- Two 345-kV onshore export cable circuits, each with three single-core HVAC onshore export cables within an approximately 1.6-mi (2.5-km)-long onshore export cable corridor from the cable landfall to the onshore substation;
- An onshore substation in the Village of Island Park, within the Town of Hempstead, New York, which will house major control components for the electrical system and perform functions such as voltage regulation, reactive power compensation, and harmonic filtering;
- Two 345-kV onshore interconnection cable circuits, each with three single-core HVAC onshore interconnection cables within an approximately 1.7-mi (2.8-km)-long interconnection cable corridor from the onshore substation to the Hampton Road substation;
- The new Hampton Road substation in Oceanside in the Town in Hempstead, New York which will include substation facilities that will provide the necessary breaker arrays and 345-kV/138-kV transformers; and
- Four 138-kV loop-in / loop-out line cable circuits, located within an approximately 0.1-mi (0.2-km) long cable corridor from the Hampton Road substation to existing LIPA transmission lines located under Lawson Boulevard in Oceanside, New York.

The NY Project proposes to interconnect in Oceanside, New York, where the renewable electricity generated will be transmitted to the electric grid.

The transition from submarine export cables to the onshore export cables will occur at the export cable landfall. From the cable landfall, the onshore export cables will traverse Long Beach to an onshore substation, which is proposed to be located at 15 Railroad Place in Island Park, New York. Onshore interconnection cables will originate at the onshore substation and terminate at the proposed Hampton Road substation at 3645 Hampton Road, in Oceanside, New York, which is where the POI will be located. Loop-in / loop-out lines will connect from the Hampton Road substation to existing LIPA 138-kV transmission lines under Lawson Boulevard. The location of the onshore facilities is shown in **Figure J-2**.

³ Correspondence with NY SHPO in 2021 and 2022 included the “EW 2 Onshore Substation A” alternative, which includes the location of the Hampton Road substation.

Construction of the onshore substation will be predominantly located within the 5.2-ac (2.1-ha) onshore substation site. However, an additional temporary work area of approximately 1.1 ac (0.4 ha) will be also be associated with the onshore substation (collectively referred to as an approximately 6.3 ac [2.5 ha] onshore substation workspace); . Temporary construction work area outside of the perimeter fence line of the onshore substation will be restored to pre-construction conditions, to the extent practicable, following construction activities.

The onshore substation site will be contained within a perimeter fence that will be up to 10 feet (ft) (3-meter [m]) high, constructed of chain link, welded wire, or similar material, with an up to 2-ft (0.6-m)-tall, barbed wire extension. The onshore substation site may be elevated to protect facilities from potential flooding. Elevated portions of the site will be located behind a proposed retaining wall within the perimeter fence line. The maximum height of the proposed facilities, including the site elevation and maximum building height, will be no more than 60 ft (18 m). Conceptual layouts of the onshore substation are provided in **Attachment J-1**. Conceptual elevation drawings of the onshore substation are provided in **Attachment J-2**. Construction of the Hampton Road substation will be predominately located within the 6.4-ac (2.6 ha) site. A temporary laydown area for construction is located immediately north of Daly Boulevard within the 6.4-ac (2.6 ha) property. The Hampton Road substation site will be contained within a perimeter fence that will be up to approximately 10 ft (3 m) high, constructed of chain link, welded wire, or similar material, with an up to 2-ft (0.6-m)-tall barbed wire extension. Parking spaces and temporary laydown will be provided within the Hampton Road substation fence line. The Hampton Road substation site may require elevation on portions of the site. Site elevation will be finalized as part of the detailed facility design to be provided in the Environmental Management & Construction Plan (EM&CP); however, the maximum height of the proposed facilities, including the site elevation and maximum building height, will be no more than 75 ft (23 m). Conceptual layouts of the Hampton Road substation are provided in **Attachment J-1**. Conceptual elevation drawings of the Hampton Road substation are provided in **Attachment J-2**.

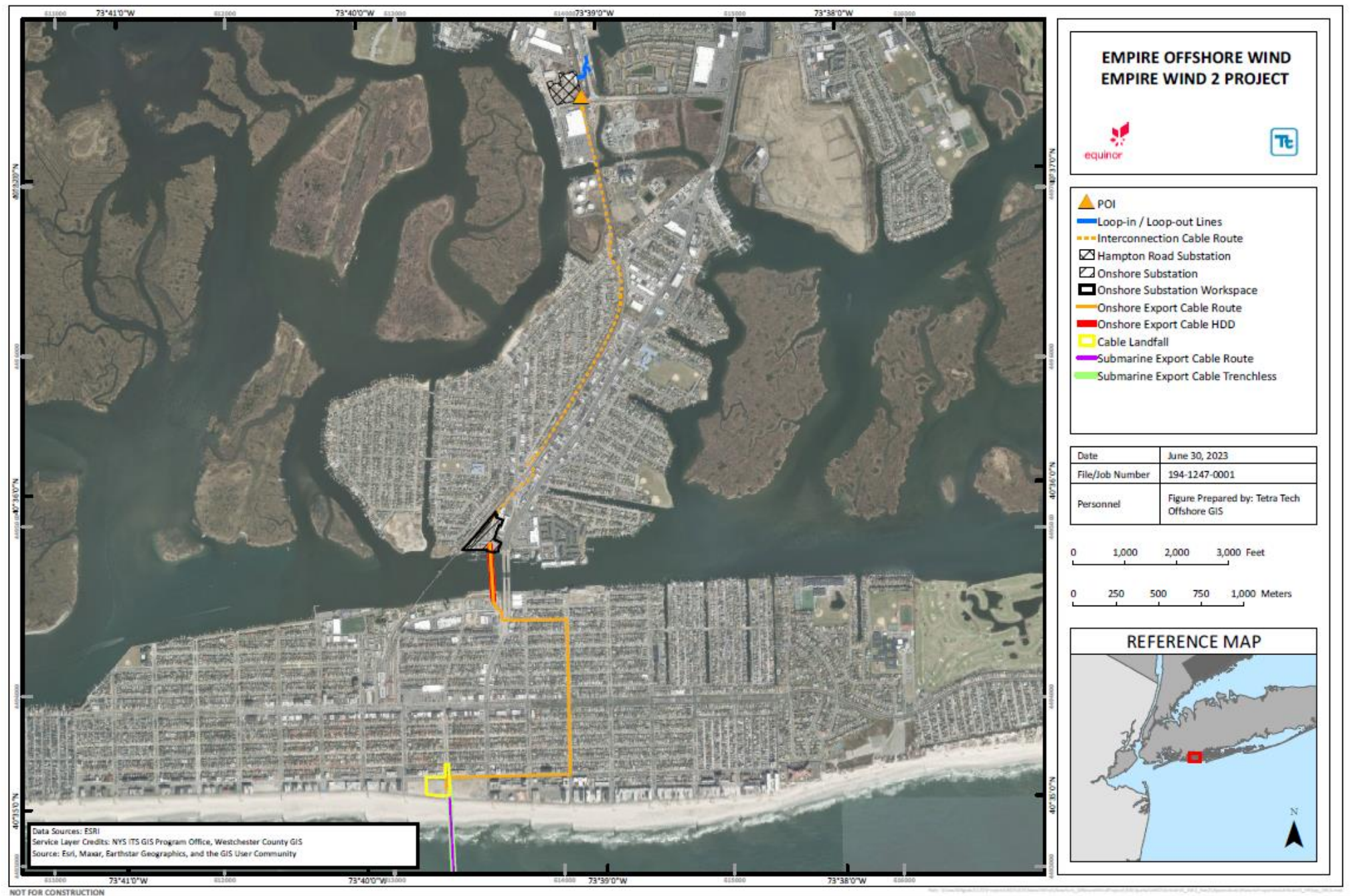


Figure J-2 Onshore NY Project Area

The interconnection cable route includes an inland waterway crossing (Barnums Channel) between the Village of Island Park and Oceanside, New York, which will utilize an above-water cable bridge. The crossing will be located adjacent to the existing Long Island Rail Road (LIRR) railway bridge. This crossing will consist of two cable tray transition areas to elevate the cables to the height of the proposed bridge superstructure. The total structure, inclusive of the two transition areas and the bridge superstructure, will be supported by approximately thirty-one piles at seven locations (e.g., pile caps). The proposed piles to support the transition areas and bridge superstructure consist of steel H-piles installed within 2-ft (0.61-m) diameter steel pipe piles. Multiple piles will be required at each pile cap location along the bridge.

Within the crossed waterway, there are planned to be up to five bent caps consisting of approximately twenty-three piles. These supports may be installed by hammer or other installation methods, up to 100 ft (30 m) below the seabed, with final design subject to geotechnical investigation. The cable bridge superstructure will be constructed from a prefabricated steel truss system assembled offsite and set in place, and the superstructure will measure up to 25 ft (7.6 m) wide and 10 ft (3.0 m) tall and span a length of approximately 200 ft (64 m). The bridge superstructure is anticipated to have low chord elevation up to 16.0 ft, with a maximum total height of 30 ft (9.1 m) NAVD88.

As these onshore export cables, interconnection cables, and loop-in / loop-out lines will be located underground (with the exception of the Barnums Channel crossing) and will not be visible once installed, (see **Appendix I**), the underground cables are not discussed in detail in this document.

J.3 Environmental and Historical Context

J.3.1 Environmental Setting

The AVEHAP Study Area for each substation is defined as the area of maximum theoretical visibility of the onshore substation and Hampton Road substation extending to a 4-mi (6.4-km) radius, including portions of the Long Beach barrier island, Barnum Island, and the Town of Hempstead, all within Nassau County, New York (see Section J.4.1.2). These AVEHAP Study Areas are situated at the northernmost extent of the Atlantic Coastal Plain physiographic province, a region of low relief and diverse ecological habitats. In general, the coarse-textured soils of the coastal plain are derived from Cretaceous period marine sediments and a mantle of Pleistocene period glacial till and outwash. The southern shore of Long Island is characterized by barrier islands, bayside salt marsh lagoons, and sand beaches.

J.3.2 Historical Context

The historical record of the 400-year European-American presence in the NY Project vicinity can be viewed as three eras of broad social transformations. These eras represent the Colonial Period (1600-1776), which entailed the arrival of Europeans and the demise of pre-contact Native American lifeways; American Independence and Internal Development (1776-1860), representing the transfer of sovereignty from George III to American rule as well as the rise of canals and railroads, and expansion of agricultural production; and, Urban Expansion and Rural Decline (1860-1960), which designated New York City as the financial and manufacturing capital of the world and the transformation of its Long Island and New Jersey vicinities from agrarian societies to an urban mass culture. Additional detail on these three eras is provided in the Empire Offshore Wind: Empire Wind Project (EW 1 and EW 2) AVEHAP, which was filed as Appendix Z of the COP submitted to BOEM.

J.4 Architectural Property Survey Methodology

Coastal New York is an area with extensive historical value and a tradition of historical commemoration resulting in numerous cultural resources that are listed in or determined to be eligible for the NRHP (i.e.,

historic properties), some within the recommended Onshore Substation and Hampton Road Substation PAPEs. For the purposes of this assessment, the evaluated project impact area described by the New York State Historic Preservation Act of 1980, Section 14.09 is the APE as defined by 36 Code of Federal Regulations § 800.16(d), or “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.” Under Section 106, BOEM will determine the extent of and define the Onshore APE for the EW 2 Project. The AVEHAP focuses on historic properties and architectural properties within the Onshore Substation and Hampton Road Substation AVEHAP PAPEs that may be affected by construction and operation of the NY Project. The Onshore Substation and Hampton Road Substation AVEHAP PAPEs are defined as the areas in which there may be visibility of the onshore substation and the Hampton Road substation, respectively.

The National Park Service maintains the NRHP and defines four criteria for evaluating a cultural resource to be eligible to the NRHP (NPS 1997:2). A cultural resource must meet at least one of the following criteria for NRHP eligibility.

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

- A. That are associated with events that have made a significant contribution to the broad patterns of our history;
- B. That are associated with the lives of persons significant in our past;
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and
- D. That have yielded, or may be likely to yield, information important in prehistory or history (NPS 1997:2).

In addition to meeting at least one of the criteria, properties must also retain sufficient integrity to convey their significance. Integrity is assessed on the following aspects: location, design, setting, materials, workmanship, feeling, and association (NPS 1997:44).

Designated State Register properties and National Register properties overlap and are not distinguished in the New York Cultural Resource Information System within the NY Project’s Onshore Substation or Hampton Road Substation AVEHAP PAPEs. Therefore, the focus on historic properties covers both state and federally recognized properties.

This section is organized to highlight the step-by-step approach taken to define the Onshore Substation and Hampton Road Substation AVEHAP PAPEs. The Onshore Substation and Hampton Road Substation AVEHAP PAPEs are described, as are the steps taken to identify and assess the historic properties and potential historic properties that occur within them.

J.4.1 Defining the Onshore Substation and Hampton Road Substation AVEHAP PAPEs

The two AVEHAP PAPEs are the areas, on land or sea, where views of either the onshore substation and Hampton Road substation may be visible. The process of defining the Onshore Substation and Hampton Road Substation AVEHAP PAPEs involved establishing a study area and models of preliminary viewsheds. Both the Onshore Substation and Hampton Road Substation AVEHAP PAPEs, in turn, were refined to resolve NY Project visibility to a more fine-grained and realistic degree, resulting in a more acute computer-generated viewshed model through observation of real conditions in the field (i.e., ground-truthing). This refinement

resulted in development of each PAPE. Under Section 106, BOEM will then determine the extent of and define the Onshore AVEHAP APE for this NY Project.

J.4.1.1 Onshore Facilities

The NY Project proposes to develop an onshore substation in the incorporated Village of Island Park, and the Hampton Road substation in Oceanside, both of which are in the Town of Hempstead, New York. The transition from submarine export cables to onshore export cables will occur at the export cable landfall; however, there will be no permanent above-ground structures at the export cable landfall location. The onshore export and interconnection cables and loop-in / loop-out lines will be located underground, and will not be visible once installed, with the exception of a cable bridge crossing of Barnums Channel; therefore, these facilities were not discussed in detail in this document. Locations for the onshore facilities are shown in **Figure J-2**.

Short-term visual effects to historic properties would occur during construction of both substations and would result from construction activities and the presence of construction equipment and work crews. Construction activities associated with the construction and installation of the substations will include surveying, clearing and grubbing the construction site, stockpiling topsoil, grading, forming and construction of substation equipment foundations, placement and erection of buildings and electrical equipment, placement of perimeter security fencing, and restoration and landscaping installation (if required).

It is anticipated that contrast would be introduced during NY Project construction of both substations primarily for viewers associated with residential areas in proximity to the substations where the presence of construction equipment, materials, and crews would be dominant in the foreground. However, these visual effects will be short-term because construction equipment and crews would be removed once construction is complete. Views of NY Project construction from areas not immediately adjacent to each substation site would be mostly screened by residential, commercial or industrial buildings, vegetation and/or topography. Visual effects to these viewers will be mostly limited to seeing construction traffic on local roads. Visual simulations of the onshore substation and Hampton Road substation are provided in **Attachment J-3**.

Other onshore NY Project components, namely onshore export cable, interconnection cable and loop-in / loop-out line trenches, and laydown yards, will occur at-grade (with the exception of the cable bridge across Barnums Channel) and will offer temporary views of construction equipment only to areas immediately adjacent to the construction.

It is anticipated that proposed lighting associated with the onshore NY Project components (i.e., onshore substation and Hampton Road substation) will include emergency and exterior lighting. Emergency lighting would most likely include lighting installed on the static masts and/or buildings and would be directed downward toward outdoor electrical equipment. Emergency lights would only be turned on during emergency repairs. Exterior lighting would consist of security lighting at building entrances and access gates. The lights would be directed downward and will be motion sensor activated. Potential impacts associated with nighttime lighting for onshore NY Project components are discussed in the Visual Impact Assessment.

J.4.1.2 Onshore Substation and Hampton Road Substation Study Areas

The area encompassed by a computer-generated viewshed indicated that both the onshore substation and Hampton Road substation would have a maximum theoretical visibility up to 4 mi (6.4 km) away, including portions of the Long Beach barrier island, Barnum Island, and the Town of Hempstead, all within Nassau County, New York. The 4-mi (6.4-km) radius from the onshore substation was designated as the AVEHAP Onshore Substation Study Area and the 4-mi (6.4-km) radius from the Hampton Road substation was

designated as the AVEHAP Hampton Road Substation Study Area (see **Figure J-3**). Based on the near-sea level elevation of the onshore substation locations, a refined Study Area of a 2-mi (3.2-km) radius was evaluated, which captures the realistic line-of-sight in the area adjacent to the onshore substations.

A more realistic viewshed consisting of a 2-mi (3.2-km) radius around the onshore substation would contain 128 historic properties (7 NRHP listed, 121 NRHP eligible) and 837 unevaluated architectural properties. A 2-mi (3.2-km) radius around the Hampton Road substation would contain 485 historic properties (no NRHP listed, 1 NRHP eligible) and 482 unevaluated architectural properties.

The overlap between the 2-mi (3.2-km) radii from the Hampton Road substation and the onshore substation measures approximately 3,750 acres and contains 259 architectural properties, all unevaluated for eligibility to the NRHP. These buildings are representative of common building types that do not impart historic significance and are not recommended for NRHP eligibility.

J.4.1.3 Onshore Substation AVEHAP PAPE

The Onshore Substation AVEHAP PAPE was defined as the zone within the AVEHAP Onshore Substation Study Area that has theoretical views of the proposed substation (**Figure J-3**). Viewshed analyses were conducted on all 128 historic properties (121 NRHP-eligible and 7 NRHP-listed) occurring on the Long Beach barrier island, resulting in 85 historic properties with potential views of the onshore substation. Unevaluated architectural properties were not included. Barnum Island contains no NRHP-listed or eligible resources. Photo documentation of 31 selected historic properties within Onshore Substation AVEHAP PAPE is presented in **Attachment J-4**.

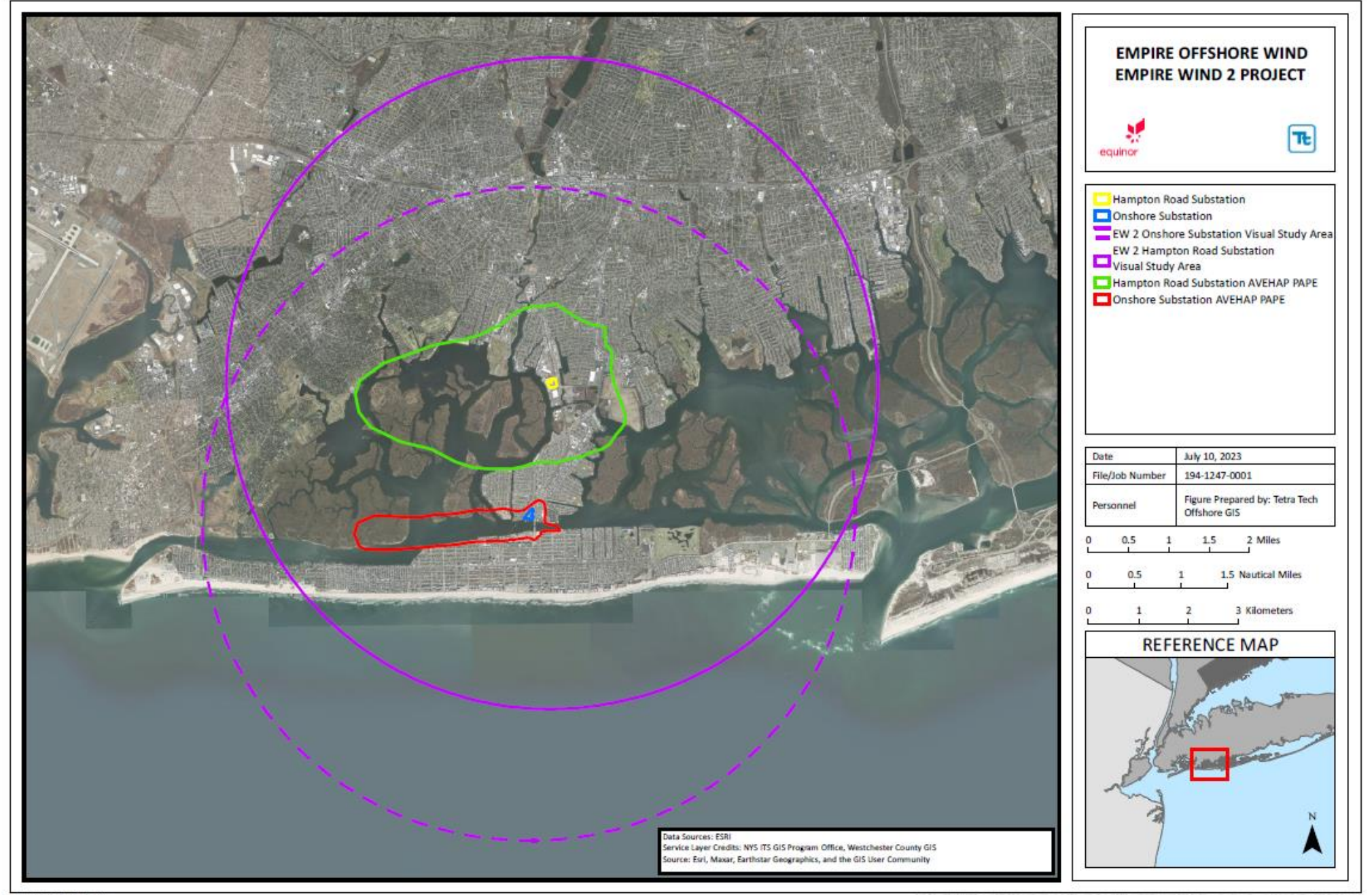


Figure J-3 Onshore Substation and Hampton Road Substation AVEHAP Study Areas and PAPes

The City of Long Beach elevated water tower (USN 05946.001723), located between Water Street and Park Place, reaches a height of approximately 160 ft (49 m) or more than twice the height of the proposed onshore substation. Its position on the south shore of Reynolds Channel, opposite the site of the proposed onshore substation, makes the tower a useful visual reference point vis-à-vis historic properties across the PAPE. An assessment of street-level views toward the tower’s midpoint resulted in an onshore zone of visual impact extending not beyond approximately 0.25 mi (0.40 km) from the tower, encompassing an area around 125 ac (51 ha). Beyond approximately 0.25 mi (0.40 km) ground-level views of the tower are obscured by the built environment of the surrounding neighborhoods.

The onshore substation’s location on the north shore of Reynolds Channel allows potential views largely limited to the channel shorelines. The street-level analysis identified one historic resource with a potential view of the proposed onshore substation, the Cobble Villa house (NR No. 14001214) located at 657 Laurelton Boulevard on the south shore of Reynolds Channel.

Cobble Villa is a two-story house that is NRHP listed under Criterion A for its association with town planning and the development of Long Beach as a resort community during the early twentieth century, and under Criterion C for its Mediterranean Revival style. The “cobble” in its name refers to the use of cobble stone as a decorative element on the front façade. Observations made by the NY Project team in 2019 indicate that Cobble Villa currently retains its significance and integrity.

The assessment of effects to Cobble Villa is described in **Table J-1**. The onshore substation will be visible from Cobble Villa, approximately 0.8 mi (1.3 km) northeast of the historic property. The industrial character of the Reynolds Channel shorelines and its environs are consistent with the massing and appearance of the proposed onshore substation. Cobble Villa’s significance and NRHP listing is not associated with unobstructed vistas or pristine natural settings. Tetra Tech’s assessment is that the NY Project will have no adverse effect on the significance of Cobble Villa.

Table J-1 Assessment of Effects of Historic Properties within the Onshore Substation AVEHAP PAPE

Resources	NRIS No./ CRIS No.	Status	NR Criteria	Tetra Tech Assessment of Effect
Cobble Villa	14001214	NR listed	A, C	No Adverse Effect

At a maximum height of approximately 30 ft (9 m) above mean sea level, the cable bridge at Barnums Channel is screened by the local built environment at distances ranging from approximately 280 ft (85 m) to 660 ft (200 m). To the north the view is screened by the Costco Wholesale building at 3705 Hampton Road, Oceanside, New York; to the east and northeast the view is screened by the E.F. Barrett Power Station and its substation; and, to the southwest, fuel storage tanks obstruct views of the proposed cable bridge. A narrow corridor of visibility to the west takes in undeveloped salt marsh. It is concluded that the proposed cable bridge crossing between Village of Island Park and Oceanside, New York, will not introduce new visual effects on NRHP historic properties or potentially eligible architectural properties.

J.4.1.4 Hampton Road AVEHAP PAPE

The Hampton Road Substation AVEHAP PAPE was defined as the zone within the AVEHAP Hampton Road Substation Study Area that has theoretical views of the proposed substation (**Figure J-3**). Viewshed analyses were conducted on 489 historic and architectural properties (2 NRHP-listed, 1 NRHP eligible and 486 unevaluated properties) present within a 2-mi (3.2-km) radius of the proposed Hampton Road substation.

Tetra Tech conducted a desktop analysis using Google Earth streetview imagery to assess the potential for properties within the modeled viewshed to possess actual NY Project views based on the presence in a line-of-sight of the E.F. Barrett Power Station main building. A vantage point about 50 ft (15 m) below the main building's 125 ft (38 m) roofline was used to estimate the potential for NY Project visibility. The E.F. Barrett main building was used as a proxy to assess the line-of-sight visibility of the proposed substation to historic/architectural properties within the modeled viewshed. Given the flat terrain and general absence of tall structures in the area, the distance of the power station main building to the proposed substation (~0.3-mi), is considered a valid measuring tool against which to evaluate NY Project visibility. Desktop analysis indicates that the three historic properties (the Haviland-Davison Grist Mill, NRIS #98000352; the Denton Homestead, NRIS #14000913; and eligible dwelling CRIS #05901.001038) located within 2 mi (3.2 km) of the Hampton Road substation site would have no views of the NY Project. However, six unevaluated architectural properties that are recorded in the New York Cultural Resource Information System (CRIS) were determined to have potential NY Project views. Photo documentation of 30 selected architectural properties within the Hampton Road Substation AVEHAP viewshed, including the six properties that Tetra Tech concludes have actual NY Project views, is presented in **Attachment J-5**.

Of the six architectural properties within the Hampton Road Substation PAPE, five are mid-twentieth century ranch and split level house types, and one is a 1929 bungalow. These house types are ubiquitous on Long Island and across the New York metropolitan area, and these individual examples do not exhibit the kind of historic associations that would be considered significant and eligible for listing in the NRHP under Criterion A, nor possessing distinctive architectural characteristics or craftsmanship that would be considered significant and eligible for listing in the NRHP under Criterion C.

Tetra Tech's evaluation indicates that the six unevaluated architectural properties within the Hampton Road Substation PAPE will not be adversely affected by the NY Project view based on the absence of traits or associations that would impart historic significance to a resource. The properties within the Hampton Road substation PAPE are listed in **Table J-2**.

Table J-2 Assessment of Effects of Architectural Properties within the Hampton Road substation AVEHAP PAPE

Resources	NRIS No./ CRIS No.	Status	NR Criteria	Tetra Tech Assessment of Effect
1962 Ranch	05901.001528	Unevaluated	-	No Adverse Effect
1967 Ranch	05901.002261	Unevaluated	-	No Adverse Effect
1962 Ranch	05901.002265	Unevaluated	-	No Adverse Effect
Office Building	05901.003524	Unevaluated	-	No Adverse Effect
1960 Split Level	05936.000019	Unevaluated	-	No Adverse Effect
1929 Bungalow	05936.000021	Unevaluated	-	No Adverse Effect

J.5 Summary and Conclusions

Tetra Tech defined a Study Area that encompassed the maximum theoretical extent of NY Project visibility, extending in a 4-mi (6.3-km) radius from the onshore substation and Hampton Road substation. A 2-mi (3.2-km) radius around the onshore substation would contain 128 historic properties (7 NRHP listed, 121 NRHP eligible) and 837 unevaluated architectural properties. A 2-mi (3.2-km) radius around the Hampton Road substation would contain 485 historic properties (no NRHP listed, 1 NRHP eligible) and 482 unevaluated architectural properties.

The geographic extent of potential visibility was defined as the Onshore Substation AVEHAP PAPE. A refined analysis of the Onshore Substation AVEHAP PAPE, utilizing a site visit and Google Earth street views, resulted in the identification of 85 of the historic properties located within 2 mi (3.2 km) of the onshore substation having a potential NY Project view based on modeled viewshed analysis. A refined analysis further identified only one historic property with an actual NY Project view, Cobble Villa, which is assessed as not adversely affected.

A desktop analysis using Google Earth street views resulted in a refined definition of the Hampton Road Substation AVEHAP PAPE that includes six unevaluated architectural properties that are recorded in CRIS. An assessment of eligibility concluded that none of the six properties within the Hampton Road Substation AVEHAP PAPE possessed sufficient historic significance under Criterion A or Criterion C to qualify for listing on the NRHP, and therefore would not be subject to adverse effects by the NY Project.

Onshore, the burial of the onshore export cables, interconnection cables and loop-in / loop-out lines will result in the avoidance of the potential visual effects of the NY Project that would otherwise occur. For the onshore aboveground NY Project components, the following measures are proposed to minimize visual contrast:

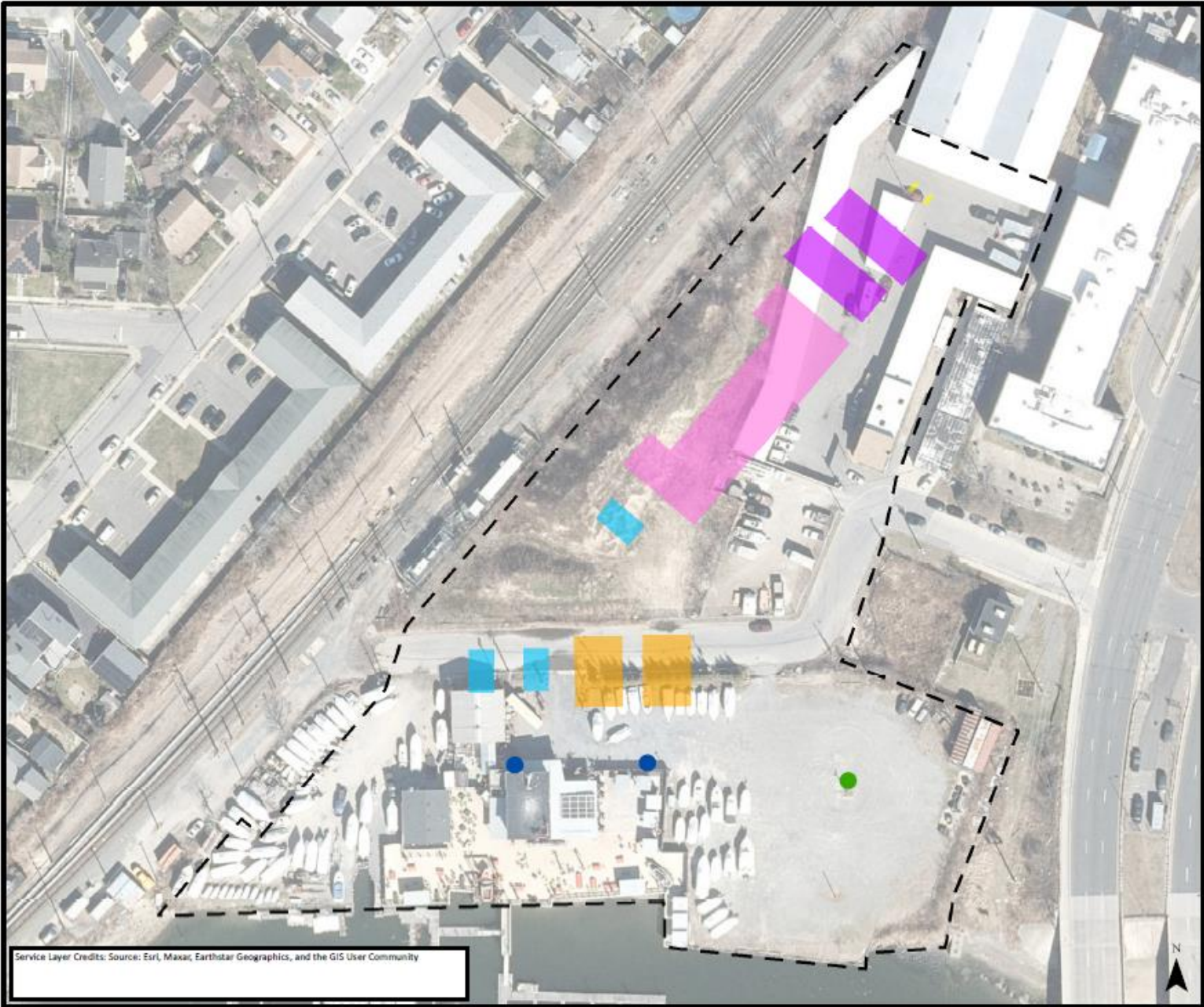
- Construction Phase:
 - A Fugitive Dust Control Plan will be implemented to minimize dust (visual pollution);
 - The onshore NY Project Area will be maintained free of debris, trash, and waste to the extent possible during construction; and
 - Areas temporarily disturbed during construction will be restored to the conditions required by state and/or local permits.
- Operations Phase:
 - Minimal presence of crews and equipment conducting maintenance activities;
 - Lighting at the onshore substation will be designed to reduce light pollution where feasible (e.g., downward lighting, motion-detecting sensors); and
 - In coordination with state and local permitting entities and as site design progresses, mitigation measures to reduce visual contrast will be considered such as repetition of form, line, color, and texture based on other existing elements around the site.

Tetra Tech has researched the effects of the NY Project on those historic and architectural properties with actual NY Project views. The Onshore Substation and Hampton Road Substation AVEHAP PAPERs occur within a dense suburban setting that has witnessed multiple episodes of construction and demolition, creating a complex mosaic of property use, architectural styles, and building massing. Tetra Tech concludes that the character-defining qualities that qualify each historic and architectural property to be NRHP listed or eligible, will not be adversely affected by the introduction of the NY Project.

J.6 References

- BOEM. 2016. *Programmatic Agreement Among The U.S. Department of the Interior, Bureau of Ocean Energy Management, The State Historic Preservation Officers of New Jersey and New York, The Shinnecock Indian Nation, and the Advisory Council on Historic Preservation, Regarding Review of Outer Continental Shelf Renewable Energy Activities Offshore New Jersey and New York, Under Section 106 of the National Historic Preservation Act*. Available online at: <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/HP/NY-NJ-Programmatic-Agreement-Executed.pdf>. Accessed Nov. 7, 2019.
- BOEM. 2017. Guidelines for Information Requirements for a Renewable Energy Construction and Operations Plan (COP). Available online at: <https://www.boem.gov/sites/default/files/renewable-energy-program/COP-Guidelines.pdf>. Accessed August 21, 2018.
- NPS (National Park Service). 1997. How to Apply the National Register Criteria for Evaluation. *National Register Bulletin*. Washington, D.C.

Attachment J-1 Conceptual Onshore Substation and Hampton Road Substation Layouts





Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

EMPIRE OFFSHORE WIND
EMPIRE WIND 2 PROJECT





Substation Layout


 Capacitor Bank


 Harmonic Filters


Building


 Auxiliary Transformer

 Control Building

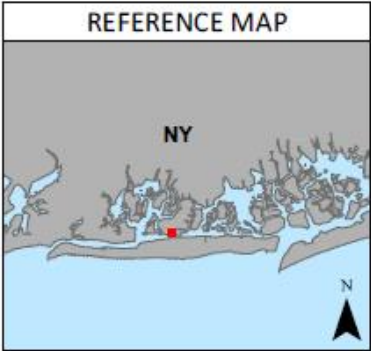
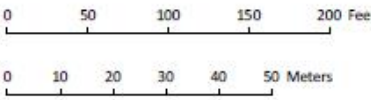
 GIS Building

 Main Transformer

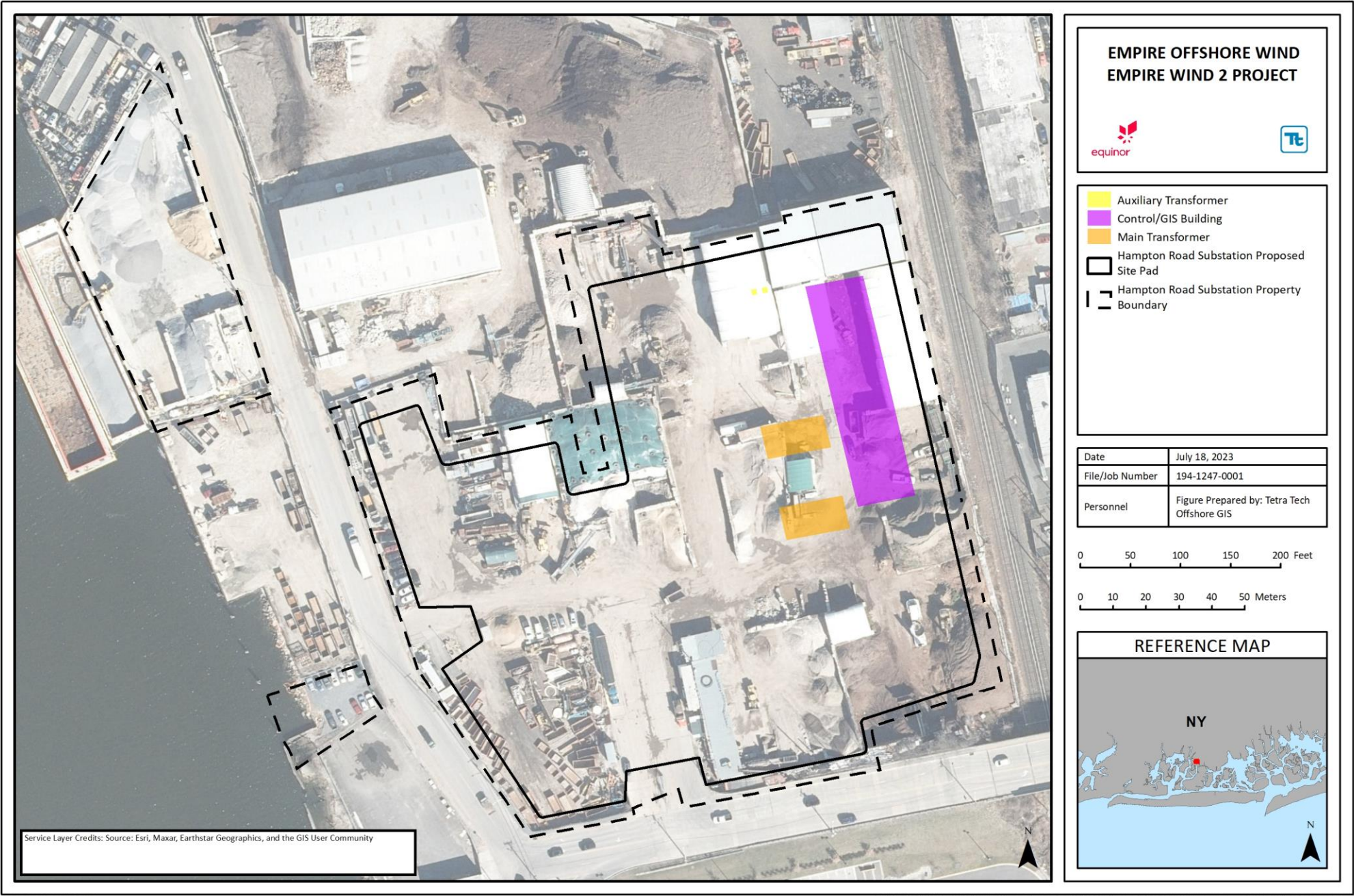
 Shunt Reactor

 Onshore Substation Property Boundary

Date	July 12, 2023
File/Job Number	194-1247-0001
Personnel	Figure Prepared by: Tetra Tech Offshore GIS



NOT FOR CONSTRUCTION



Attachment J-2
Conceptual Onshore Substation and Hampton Road Substation Elevations

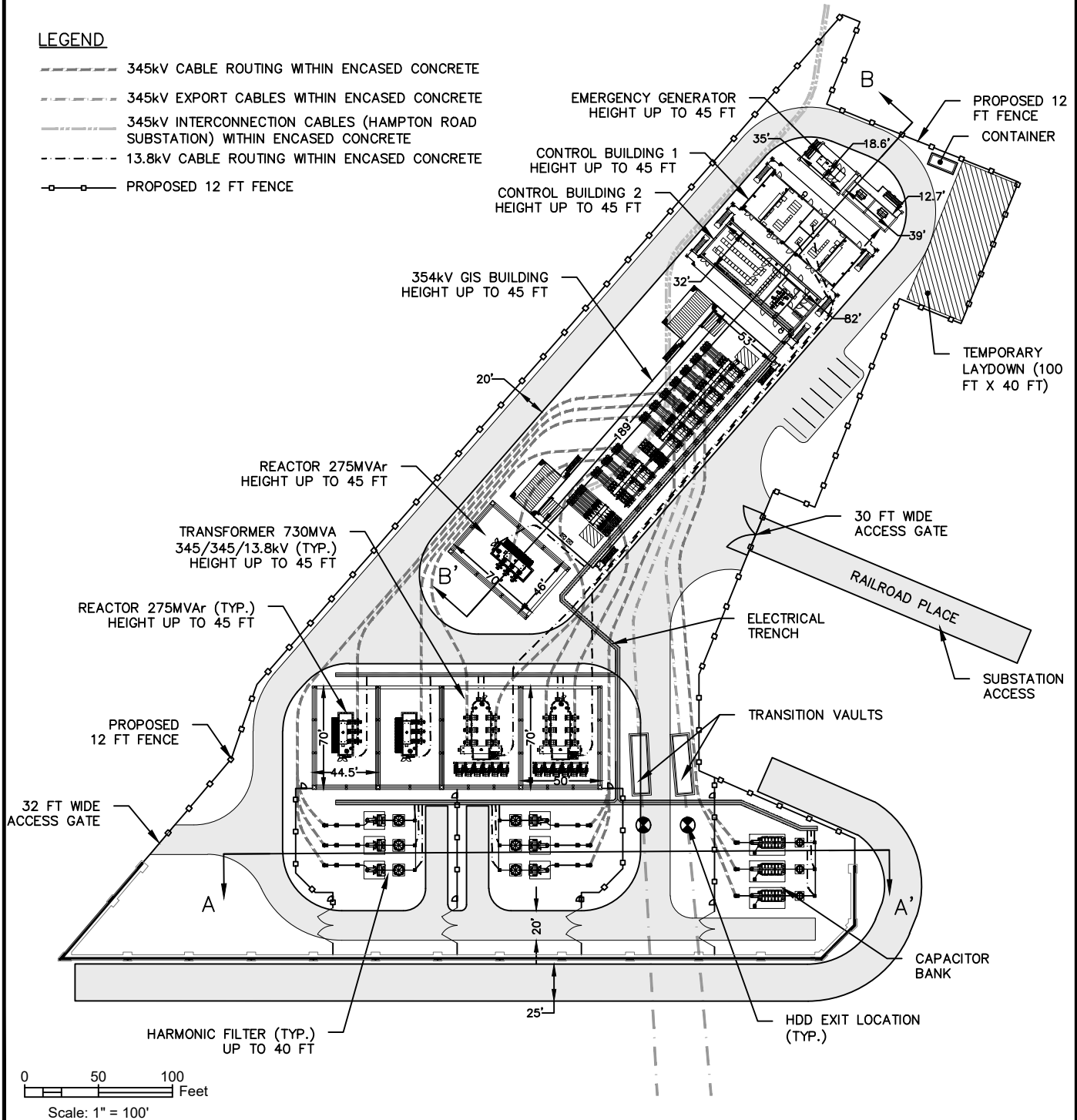
DRAFT – NOT FOR CONSTRUCTION



1. DIMENSIONS ARE APPROXIMATE AND SUBJECT TO CHANGE AS DESIGN IS FINALIZED.
2. SUBSTATION SITE MAY BE ELEVATED. MAX HEIGHT WILL NOT EXCEED 60 FT ABOVE EXISTING GRADE (INCLUDES ELEVATION AND STRUCTURES).
3. CABLE ROUTING SHOWN IS PRELIMINARY AND SUBJECT TO CHANGE AS DESIGN IS FINALIZED.

LEGEND

- 345kV CABLE ROUTING WITHIN ENCASED CONCRETE
- 345kV EXPORT CABLES WITHIN ENCASED CONCRETE
- 345kV INTERCONNECTION CABLES (HAMPTON ROAD SUBSTATION) WITHIN ENCASED CONCRETE
- 13.8kV CABLE ROUTING WITHIN ENCASED CONCRETE
- o-o- PROPOSED 12 FT FENCE



0 50 100
Feet
Scale: 1" = 100'



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Boston, MA 02109
Phone: (617) 443-7500 Fax: (617) 737-3480

Empire Offshore Wind LLC and EW Offshore Wind Transport Corporation

Empire Wind 2 Project
Onshore Substation Layout

NOTE: DIMENSIONS ARE APPROXIMATE
AND SUBJECT TO CHANGE AS DESIGN IS
FINALIZED.

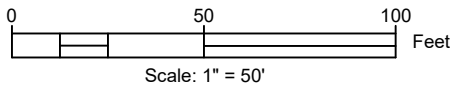
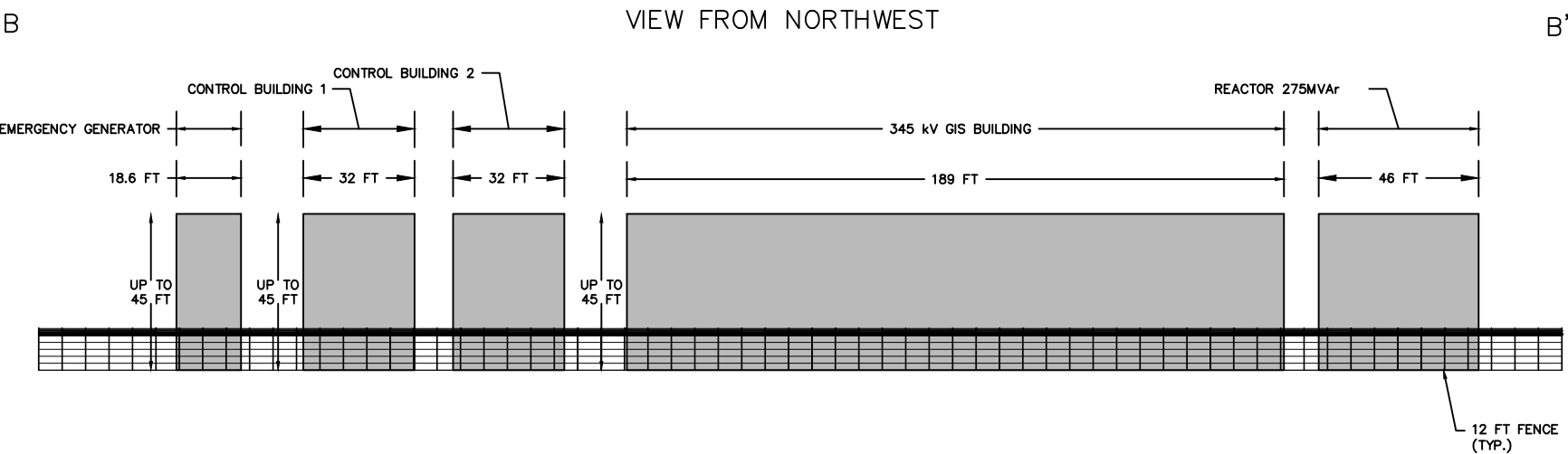
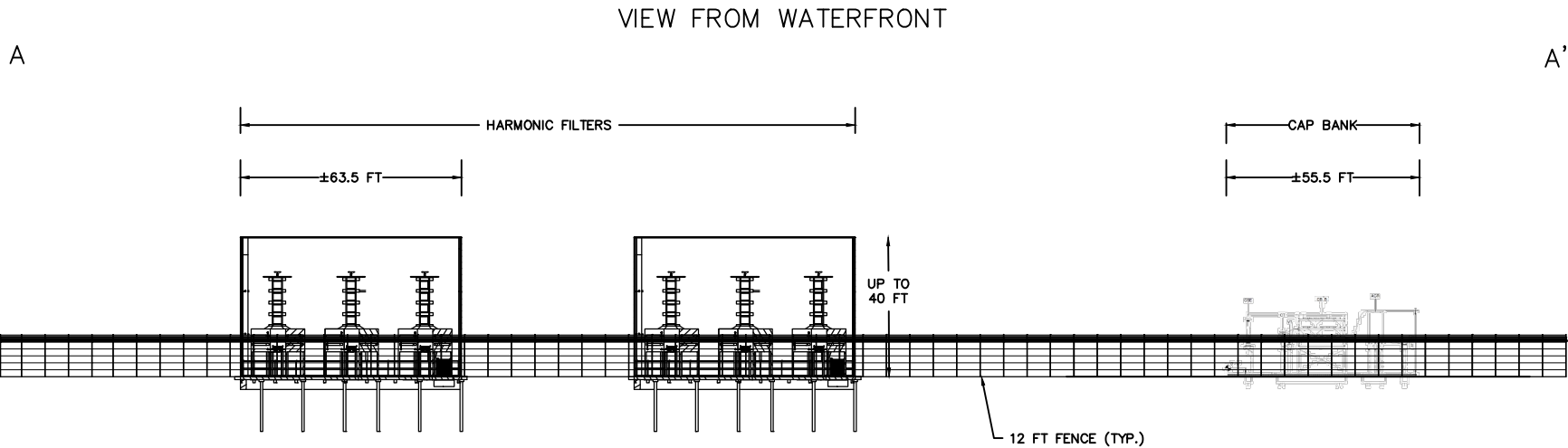
PROJ: 194-1247-0001

DATE: 06/29/2023


DESN: S. Goyette

Figure

1



1. DIMENSIONS ARE APPROXIMATE AND SUBJECT TO CHANGE AS DESIGN IS FINALIZED.
2. SUBSTATION SITE MAY BE ELEVATED. MAX HEIGHT WILL NOT EXCEED 60 FT ABOVE EXISTING GRADE (INCLUDES ELEVATION AND STRUCTURES).

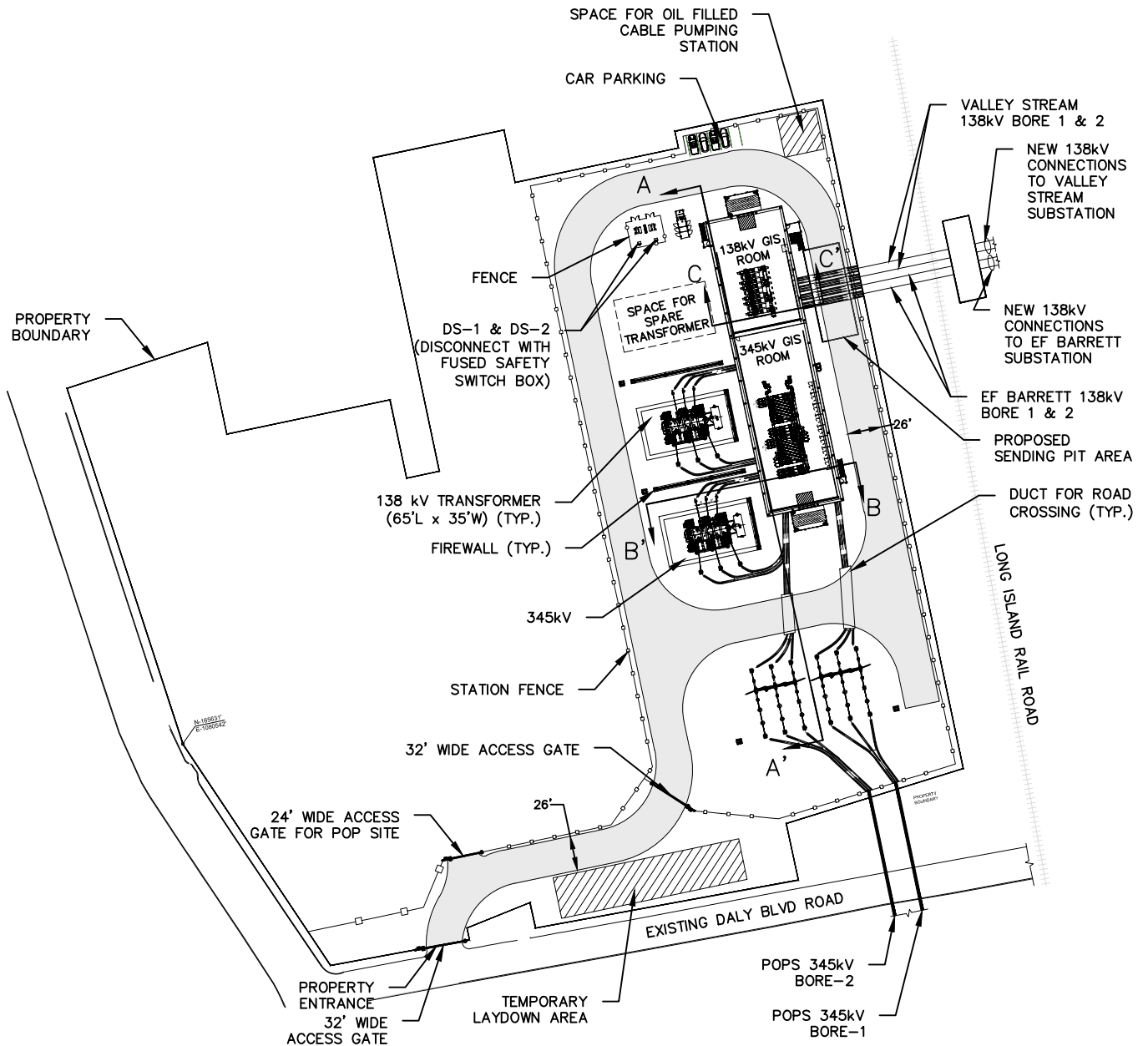
<div>TETRA TECH</div> <div>www.tetratech.com</div> <div>10 Post Office Square, 11th Floor Boston, MA 02109 Phone: (617) 443-7500 Fax: (617) 737-3480</div>	Empire Offshore Wind LLC and EW Offshore Wind Transport Corporation		PROJ: 194-1247-0001
	Empire Wind 2 Project Onshore Substation Layout		DATE: 06/29/2023
			DESN: S. Goyette
			Figure 2

Bar Measures 1 inch

DRAFT – NOT FOR CONSTRUCTION



1. DIMENSIONS ARE APPROXIMATE AND SUBJECT TO CHANGE AS DESIGN IS FINALIZED.
2. SUBSTATION SITE MAY BE ELEVATED. MAX HEIGHT WILL NOT EXCEED 75 FT ABOVE EXISTING GRADE (INCLUDES ELEVATION AND STRUCTURES).
3. CABLE ROUTING SHOWN IS PRELIMINARY AND SUBJECT TO CHANGE AS DESIGN IS FINALIZED.



0 60 120
Feet
Scale: 1" = 120'



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Empire Offshore Wind LLC and EW Offshore Wind Transport Corporation

Empire Wind 2 Project
Hampton Road Substation Layout

NOTE: DIMENSIONS ARE APPROXIMATE
AND SUBJECT TO CHANGE AS DESIGN IS
FINALIZED.

PROJ: 194-1247-0001

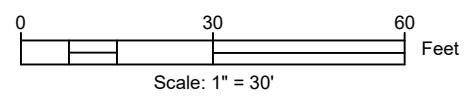
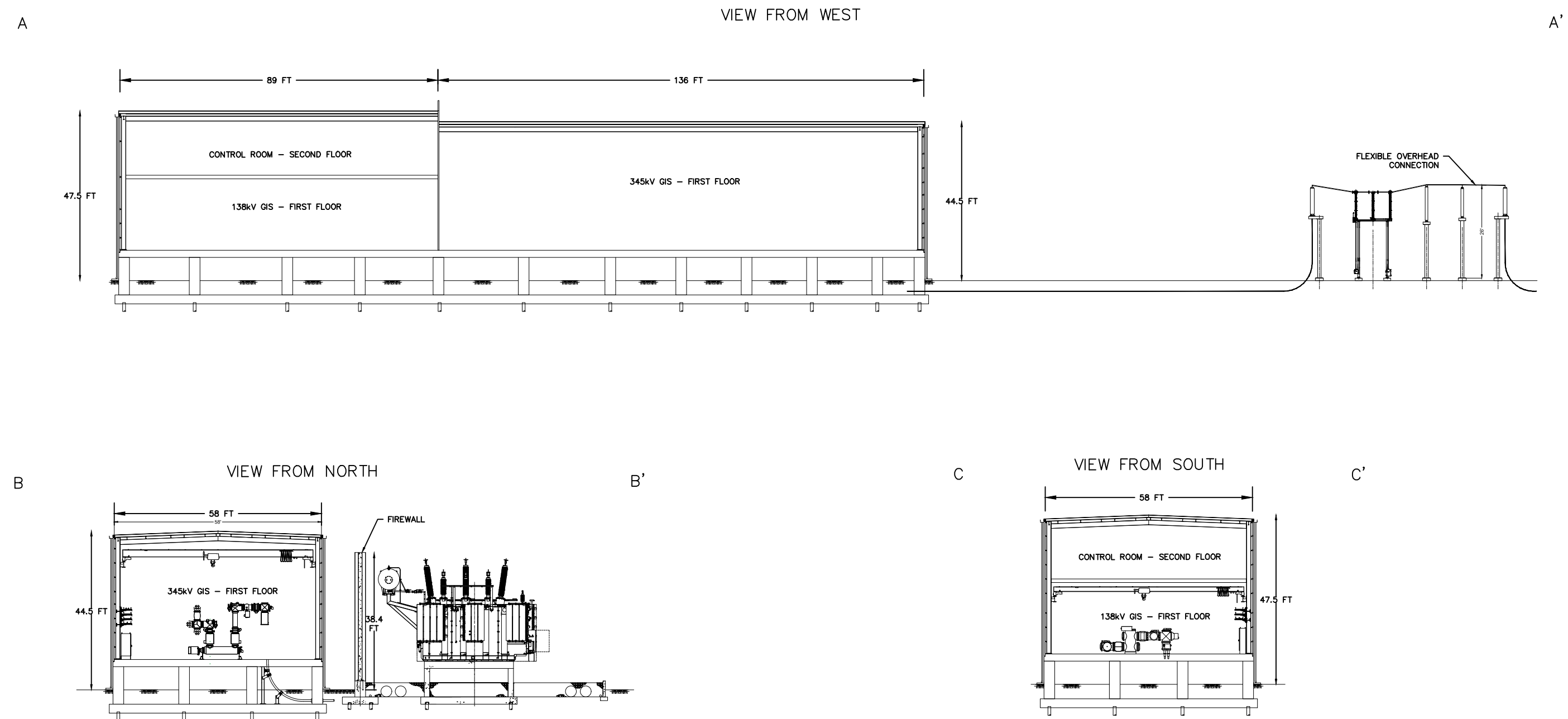
DATE: 06/29/2023

DESN: S. Goyette

Figure

3

DRAFT – NOT FOR CONSTRUCTION



1. DIMENSIONS ARE APPROXIMATE AND SUBJECT TO CHANGE AS DESIGN IS FINALIZED.
2. SUBSTATION SITE MAY BE ELEVATED. MAX HEIGHT WILL NOT EXCEED 75 FT ABOVE EXISTING GRADE (INCLUDES ELEVATION AND STRUCTURES).



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Hampton Road Onshore Substation Layout

PROJ: 194-1247-0001

DATE: 06/29/2023

DESN: S. Goyette

Figure

4

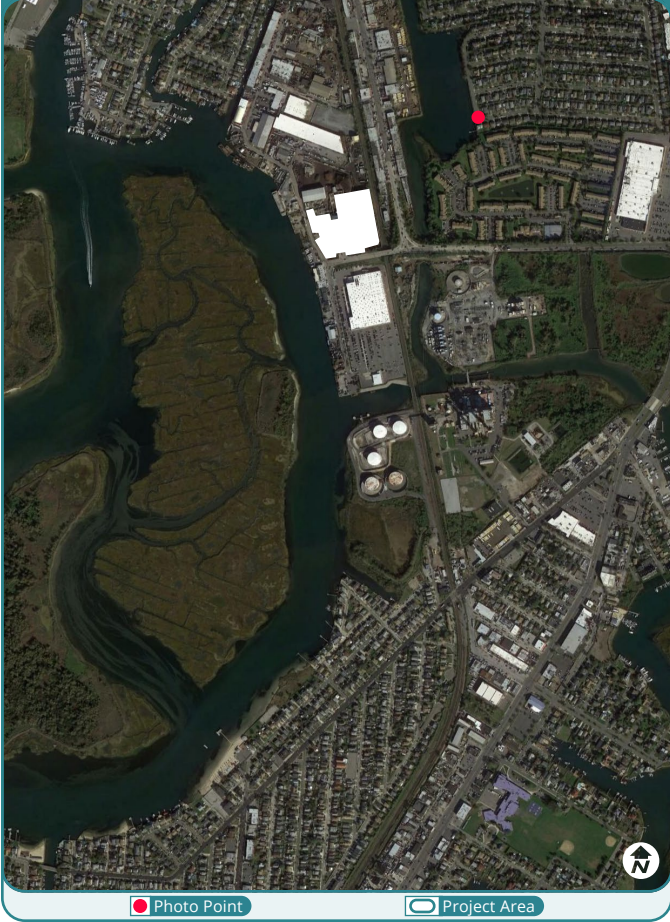
Bar Measures 1 inch

Attachment J-3
Visual Simulations

Panoramic Photograph



Vicinity Map



Photograph Information

Viewpoint Location:	Oceanlea Drive
Date of Photograph:	February 4, 2021
Time of Photograph:	10:38 AM (EDT)
Weather Condition:	Clear
Latitude:	40.6239505° N
Longitude:	-73.6479803° W
Viewing Direction:	Southwest
Ground Elevation + Tripod Height:	6 feet

Viewing Instructions

The single-frame simulations on the following pages should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches).

If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).

Preliminary Substation Design



This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches). If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).



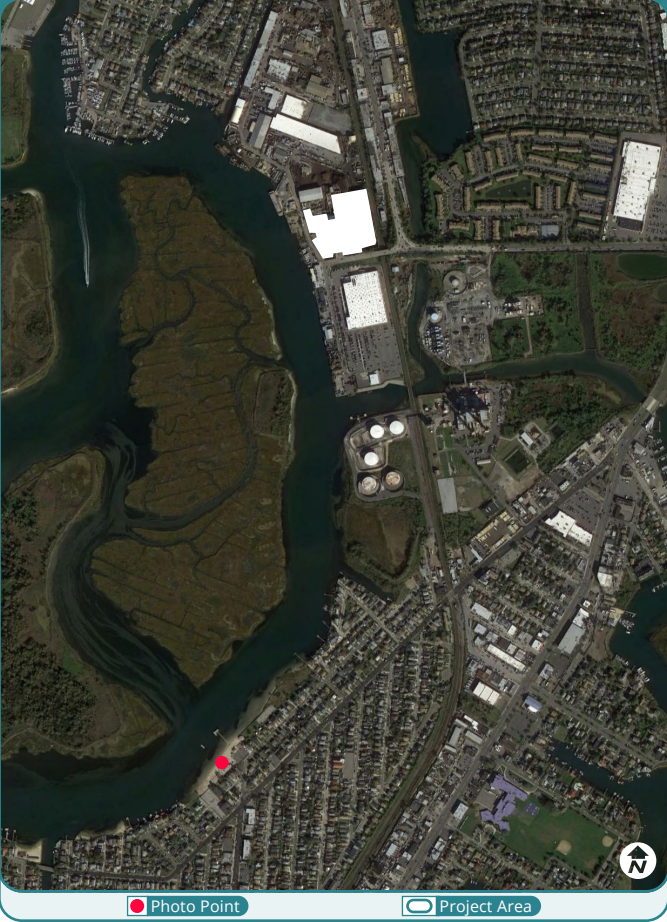
Equinor Wind Lease Area OCS-A 0512
EW 2 Hampton Road Substation | Oceanlea Drive



Panoramic Photograph



Vicinity Map



Photograph Information

Viewpoint Location:	Masone Point Beach
Date of Photograph:	February 4, 2021
Time of Photograph:	9:08 AM (EDT)
Weather Condition:	Clear
Latitude:	40.6075482° N
Longitude:	-73.6563308° W
Viewing Direction:	North
Ground Elevation + Tripod Height:	6 feet

Viewing Instructions

The single-frame simulations on the following pages should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches).

If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).

Preliminary Substation Design



This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches). If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).

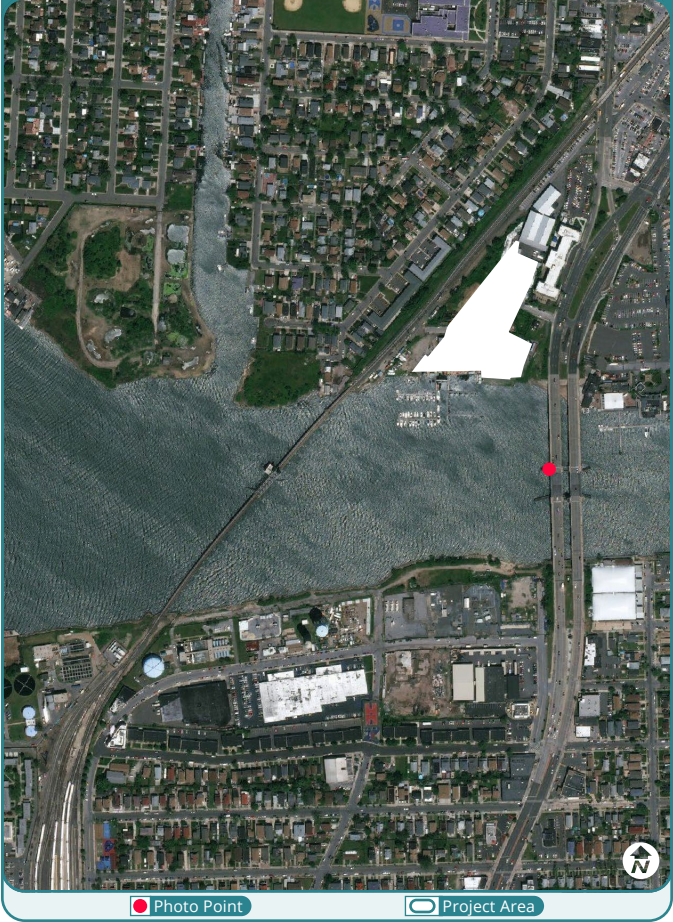


Equinor Wind Lease Area OCS-A 0512
EW 2 Hampton Road Substation | Masone Point Beach

Panoramic Photograph



Vicinity Map



Photograph Information

Viewpoint Location:	Long Beach Road
Date of Photograph:	September 1, 2021
Time of Photograph:	12:45 PM (EDT)
Weather Condition:	Overcast
Latitude:	40.595684° N
Longitude:	-73.656966° W
Viewing Direction:	Northwest
Ground Elevation + Tripod Height:	30 feet

Viewing Instructions

The single-frame simulations on the following pages should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches).

If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).

Preliminary Substation Design



This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches). If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).

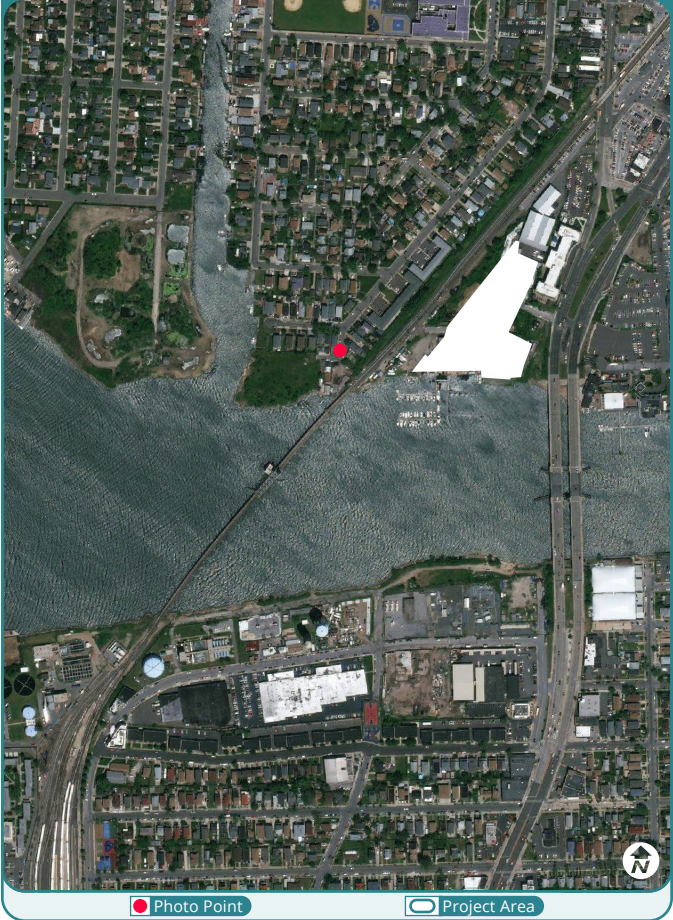


Empire Offshore Wind: Empire Wind Project (EW 1 and EW 2)
EW 2 Onshore Substation | Long Beach Road

Panoramic Photograph



Vicinity Map



Photograph Information

Viewpoint Location:	Quebec Road
Date of Photograph:	September 1, 2021
Time of Photograph:	2:55 PM (EDT)
Weather Condition:	Overcast
Latitude:	40.597048° N
Longitude:	-73.660342° W
Viewing Direction:	Northeast
Ground Elevation + Tripod Height:	10 feet

Viewing Instructions

The single-frame simulations on the following pages should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches).

If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).

Preliminary Substation Design



This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches). If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).



The view of the Onshore Substation is blocked by the existing buildings and vegetation

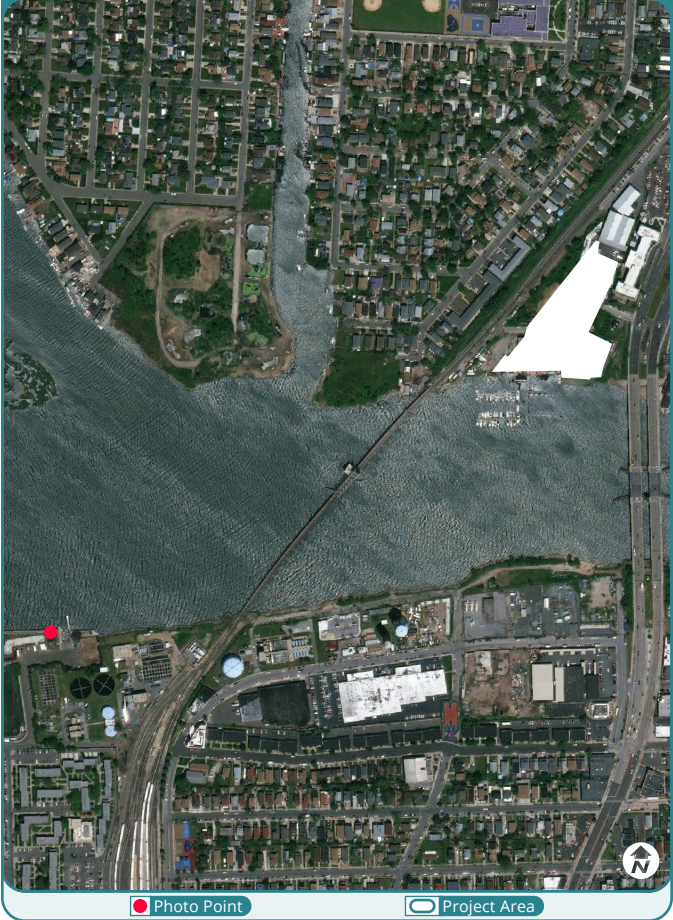
Equinor Wind Lease Area OCS-A 0512
EW 2 Onshore Substation | Quebec Road



Panoramic Photograph



Vicinity Map



Photograph Information

Viewpoint Location:	Long Beach Park
Date of Photograph:	September 1, 2021
Time of Photograph:	2:10 PM (EDT)
Weather Condition:	Overcast
Latitude:	40.593714° N
Longitude:	-73.666350° W
Viewing Direction:	Northeast
Ground Elevation + Tripod Height:	8 feet

Viewing Instructions

The single-frame simulations on the following pages should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches).

If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).

Preliminary Substation Design



This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches). If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).

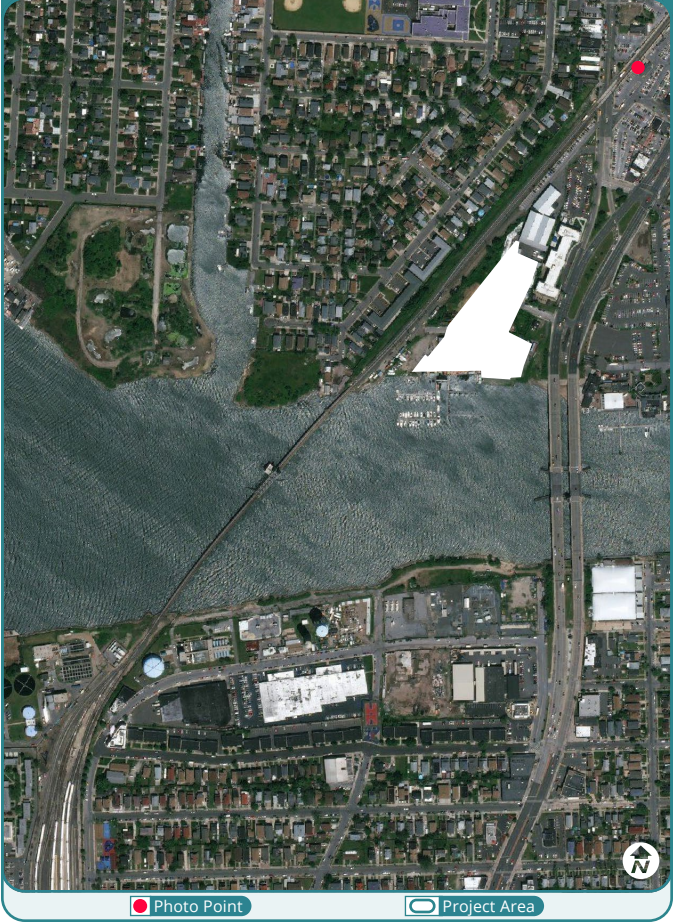


Equinor Wind Lease Area OCS-A 0512
EW 2 Onshore Substation | Long Beach Park

Panoramic Photograph



Vicinity Map



Photograph Information

Viewpoint Location:	Island Park Station
Date of Photograph:	September 1, 2021
Time of Photograph:	12:30 PM (EDT)
Weather Condition:	Overcast
Latitude:	40.600392° N
Longitude:	-73.655512° W
Viewing Direction:	Southwest
Ground Elevation + Tripod Height:	12 feet

Viewing Instructions

The single-frame simulations on the following pages should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm’s length (24 inches).

If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm’s length (24 inches).

Preliminary Substation Design



This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches). If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).



The view of the Onshore Substation is blocked by the existing buildings and vegetation

Equinor Wind Lease Area OCS-A 0512
EW 2 Onshore Substation | Island Park Station

Attachment J-4

**Photo Documentation of Historic and Architectural Properties Within the AVEHAP
Onshore Substation Study Area**

Attachment J-4
Photo Documentation of Historic and
Architectural Properties within the
AVEHAP Onshore Substation Study
Area

Historic Architecture Property Form – Barkin House, 84 East Olive Street, Long Beach, New York



View southwest (CRIS).

CRIS USN: 05946.000211

County: Nassau

Build Date: 1946-7

Modeled View of Substation: No view

Actual View: No view

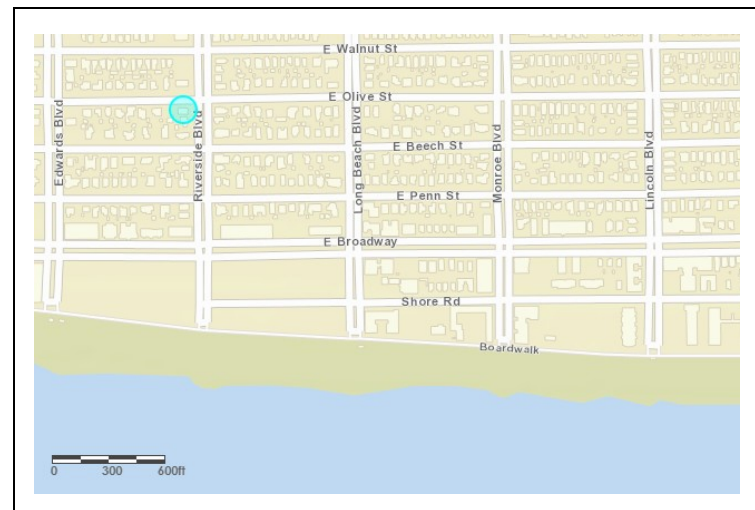
NRHP Status: Listed (NRIS # 15000234)

NRHP Criterion: C

Project Effects: No adverse effects



View northeast toward project (Google Earth).



Historic Architecture Property Form – Cobble Villa, 657 Laurelton Boulevard, Long Beach, New York



CRIS USN: 05946.000106

County: Nassau

Build Date: 1912

Modeled View of Substation: Potential view

Actual View: Potential view

NRHP Status: Listed (NRIS # 14001214)

NRHP Criterion: A, C

Project Effects: No adverse effects

View east (CRIS).



View northeast toward project (Google Earth).



Historic Architecture Property Form – 18 East Beech Street, Long Beach, New York



View southeast (CRIS).

CRIS USN: 05946.000015

County: Nassau

Build Date: 1911

Modeled View of Substation: Potential view

Actual View: No view

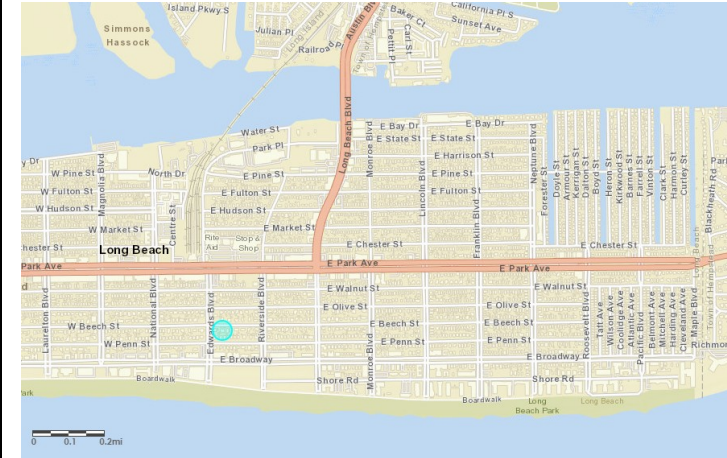
NRHP Status: Eligible (Estates of Long Beach Hist. Dist.)

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View northeast to Project (Google Earth).



Historic Architecture Property Form – 128 East Beech Street, Long Beach, New York



View southwest (Google Earth).



View northeast to Project (Google Earth).

CRIS USN: 05946.000290

County: Nassau

Build Date: 1930

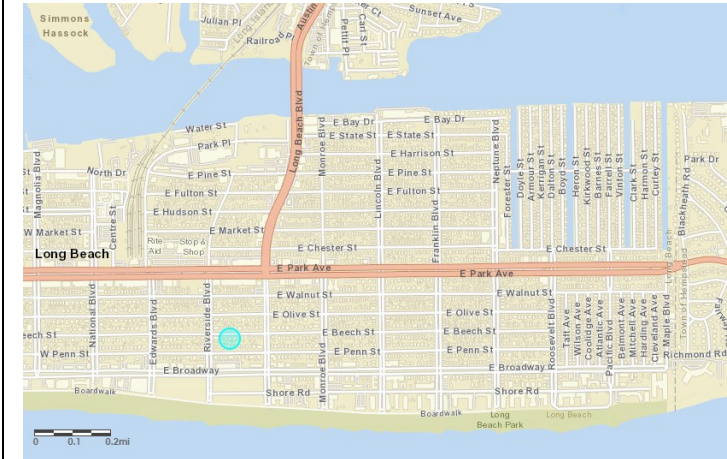
Modeled View of Substation: Potential view

Actual View: No view

NRHP Status: Eligible (Estates of Long Beach Hist. Dist.)

NRHP Recommendation: Eligible

Project Effects: No adverse effects



Historic Architecture Property Form – 266 East Beech Street, Long Beach, New York



View southwest (CRIS).

CRIS USN: 05946.001661

County: Nassau

Build Date: 1920

Modeled View of Substation: Potential view

Actual View: No view

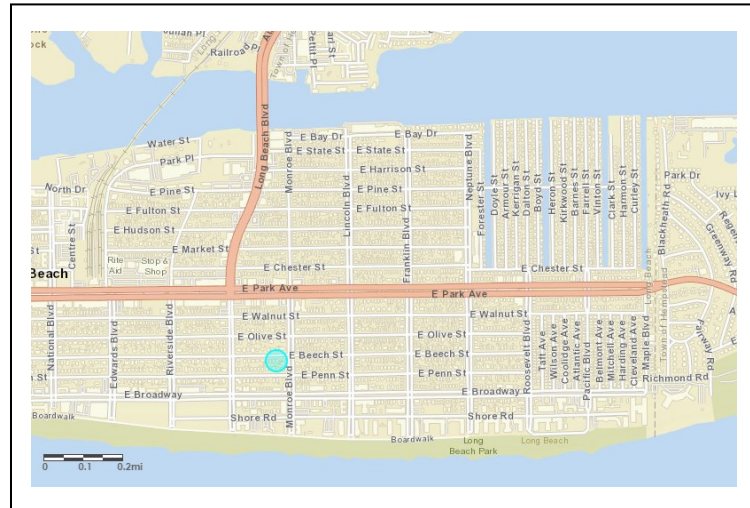
NRHP Status: Eligible

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View north to Project (Google Earth).



Historic Architecture Property Form – 355 East Chester Street, Long Beach, New York



View northwest (CRIS).

CRIS USN: 05946.000210

County: Nassau

Build Date: 1938

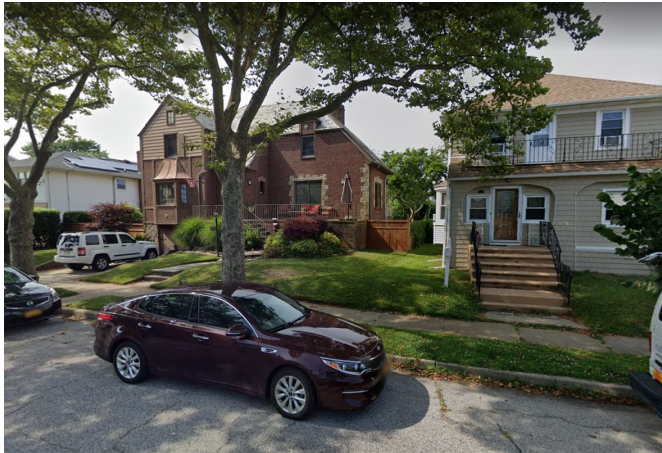
Modeled View of Substation: Potential view

Actual View: No view

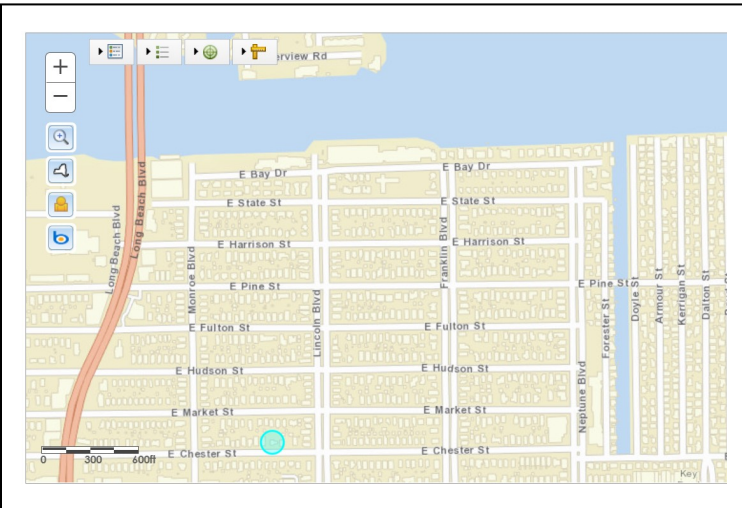
NRHP Status: Eligible

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View northwest to Project (Google Earth).



Historic Architecture Property Form – 114 East Olive Street, Long Beach, New York



View southeast (CRIS).

CRIS USN: 05946.001590

County: Nassau

Build Date: 1922

Modeled View of Substation EW: Potential view

Actual View: No view

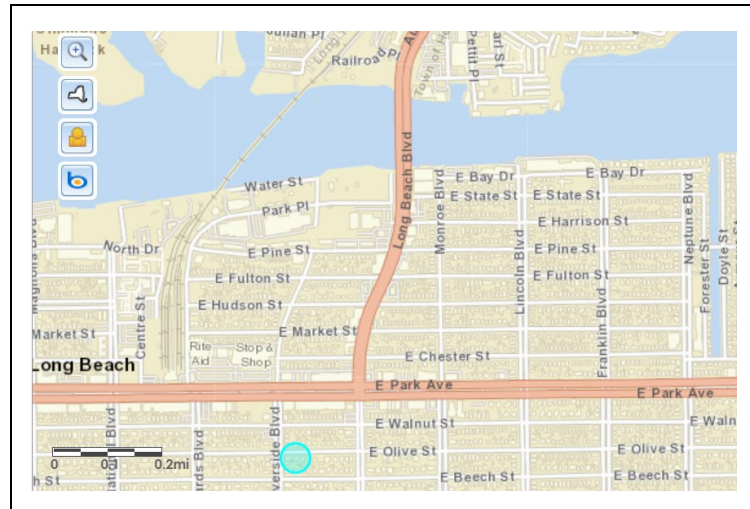
NRHP Status: Eligible (Estates of Long Beach Hist. Dist.)

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View north to Project (Google Earth).



Historic Architecture Property Form – 150 East Olive Street, Long Beach, New York



View southwest (CRIS).

CRIS USN: 05946.001588

County: Nassau

Build Date: 1913

Modeled View of Substation: Potential view

Actual View: No view

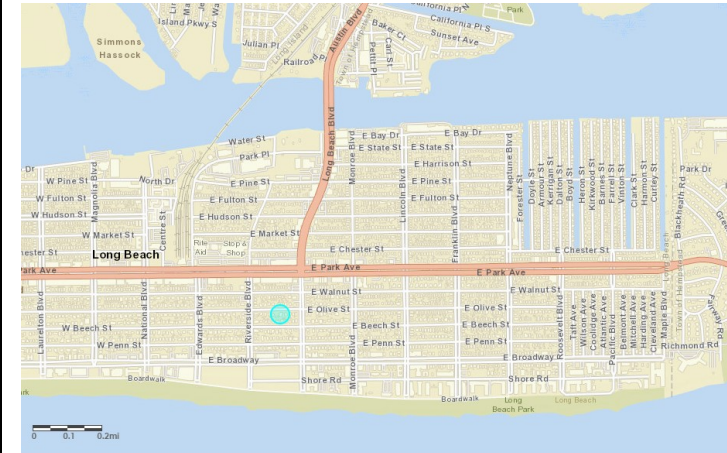
NRHP Status: Eligible (Estates of Long Beach Hist. Dist.)

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View north to Project (Google Earth).



Historic Architecture Property Form – 517 East Olive Street, Long Beach, New York



View southwest (Google Earth).



View northwest to Project (Google Earth).

CRIS USN: 05946.000200

County: Nassau

Build Date: circa 1935

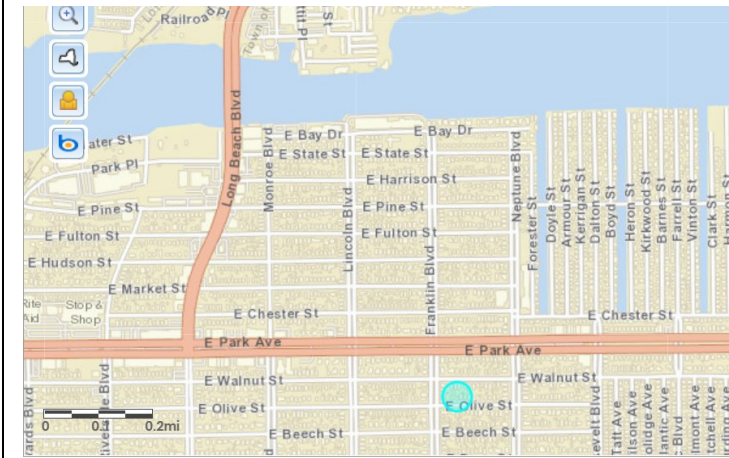
Modeled View of Substation: Potential view

Actual View: No view

NRHP Status: Eligible

NRHP Recommendation: Eligible

Project Effects: No adverse effects



Historic Architecture Property Form – 47 East Penn Street, Long Beach, New York



View northeast (CRIS).

CRIS USN: 05946.001586

County: Nassau

Build Date: circa 1930

Modeled View of Substation: Potential view

Actual View: No view

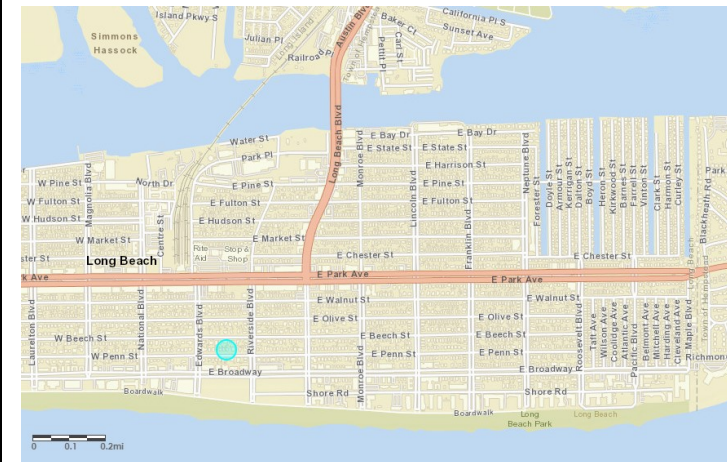
NRHP Status: Eligible (Estates of Long Beach Hist. Dist.)

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View northeast to Project (Google Earth).



Project Effects: No adverse effects



Historic Architecture Property Form – Granada Towers, 310 Riverside Boulevard, Long Beach, New York



View southeast (CRIS).

CRIS USN: 05946.000003

County: Nassau

Build Date: 1929

Modeled View of Substation: Potential view

Actual View: No view

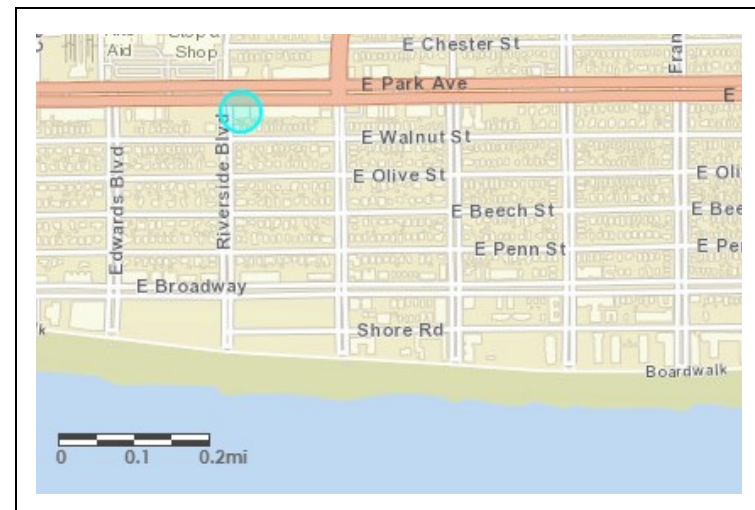
NRHP Status: Listed (NRIS # 84002750)

NRHP Criterion: A, C

Project Effects: No adverse effects



View north to project (Google Earth).



Historic Architecture Property Form – 149 Hazzard Street, Lido Beach, New York



View northwest (Google Earth).



View northwest to Project (Google Earth).

CRIS USN: 05901.002654

County: Nassau

Build Date: circa 1926

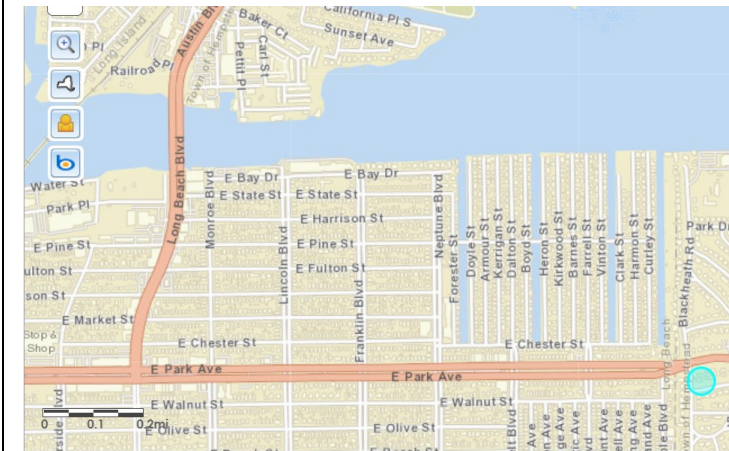
Modeled View of Substation: Potential view

Actual View: No view

NRHP Status: Eligible

NRHP Recommendation: Eligible

Project Effects: No adverse effects



Historic Architecture Property Form – Jones Beach State Park, Causeway & Parkway System, Hempstead/Oyster Bay, New York



View southeast (NYS OPRHP).

CRIS USN: 05903.001165

County: Nassau

Build Date: 1925-1955

Modeled View of Substation: No view

Actual View: no view

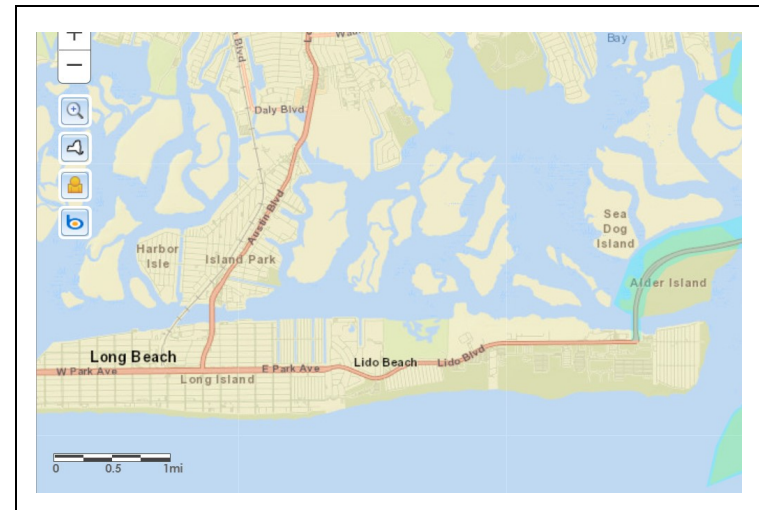
NRHP Status: Listed (NRIS # 05000358)

NRHP Criterion: A, C

Project Effects: No adverse effects



View west to project from Loop Parkway (Google Earth).



Historic Architecture Property Form – 605 Laurelton Boulevard, Long Beach, New York



View west (Google Earth).

CRIS USN: 05946.000009

County: Nassau

Build Date: 1925

Modeled View of Substation: Potential view

Actual View: No view

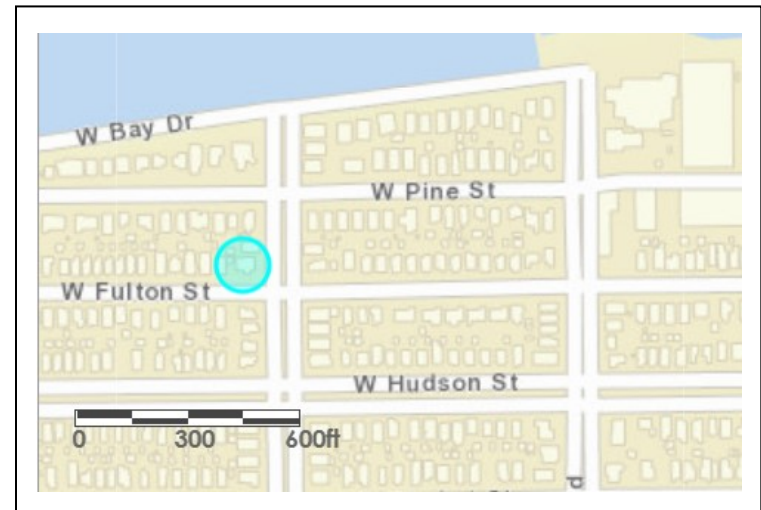
NRHP Status: Eligible

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View northeast to Project (Google Earth).



Historic Architecture Property Form – 138 Lido Boulevard, Lido Beach, New York



View south (CRIS).

CRIS USN: 05901.002655

County: Nassau

Build Date: circa 1926

Modeled View of Substation: Potential view

Actual View: No view

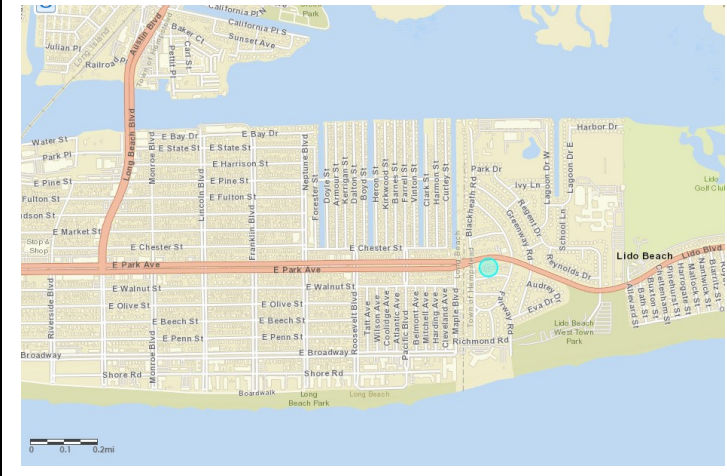
NRHP Status: Eligible (Lido Guest Houses Historic District)

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View northwest to Project (Google Earth).



Historic Architecture Property Form – 159 Lindell Boulevard, Long Beach, New York



View west (Google Earth).

CRIS USN: 05946.001507

County: Nassau

Build Date: 1946

Modeled View of Substation: Potential view

Actual View: No view

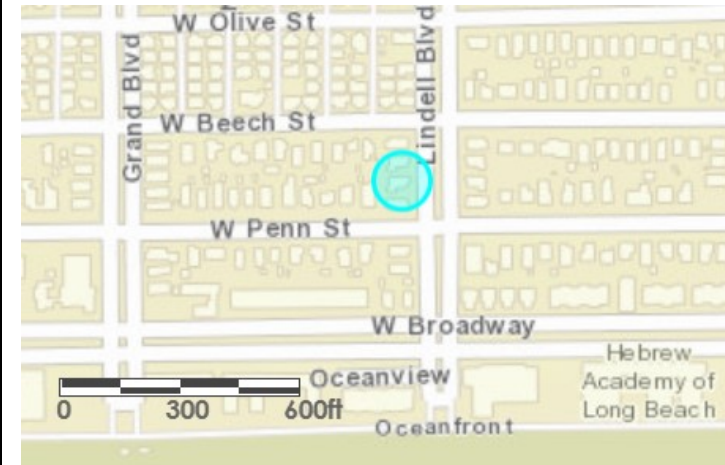
NRHP Status: Eligible

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View northeast to Project (Google Earth).



Historic Architecture Property Form – 50 Montgomery Boulevard, Atlantic Beach, New York



View southeast (CRIS).

CRIS USN: 05904.000063

County: Nassau

Build Date: 1930

Modeled View of Substation: Potential view

Actual View: No view

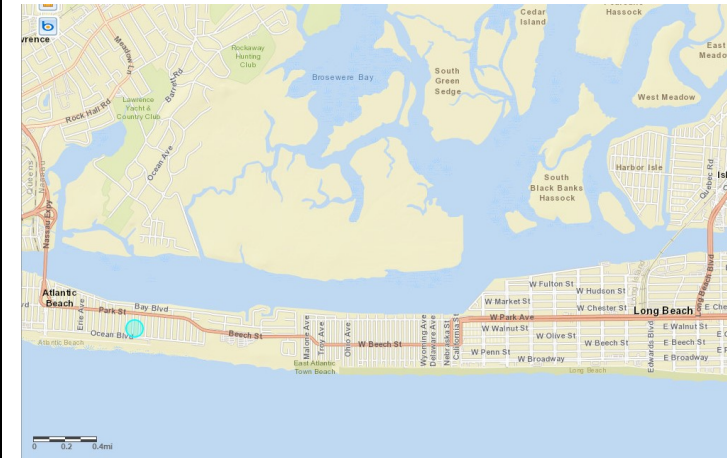
NRHP Status: Eligible

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View east-northeast to Project (Google Earth).



Historic Architecture Property Form – Pauline Felix House, 151 West Penn Street, Long Beach, New York



View north (Google Earth).

CRIS USN: 05946.000081

County: Nassau

Build Date: 1909

Modeled View of Substation: No view

Actual View: No view

NRHP Status: Listed (NRIS # 05000090)

NRHP Criterion: A, C

Project Effects: No adverse effects



View northeast to project (Google Earth).



Historic Architecture Property Form – U.S. Post Office, 101 East Park Avenue, Long Beach, New York



View northeast (CRIS).

CRIS USN: 05946.000002

County: Nassau

Build Date: 1936

Modeled View of Substation: Potential view

Actual View: No view

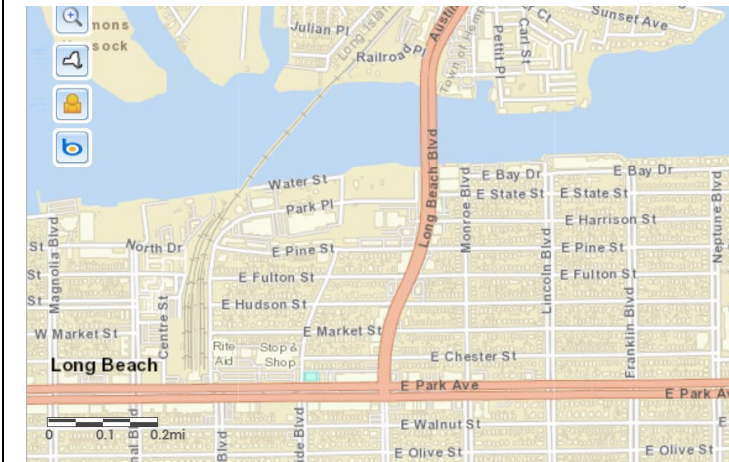
NRHP Status: Listed (NRIS # 88002347)

NRHP Criterion: A

Project Effects: No adverse effects



View northeast to Project (Google Earth).



Historic Architecture Property Form – Samuel Vaisberg House, 257 West Olive Street, Long Beach, New York



View northwest (CRIS).

CRIS USN: 05946.0000082

County: Nassau

Build Date: 1927

Modeled View of Substation: Potential view

Actual View: No view

NRHP Status: Listed (NRIS # 05001137)

NRHP Criterion: A and C

Project Effects: No adverse effects



View north toward project (Google Earth).



A photograph of a two-story house with a red tiled roof, white siding, and dark blue trim. The house features a prominent front porch with a small roof and a large window on the right side. The house is surrounded by a green lawn and some bare trees.

Project Effects: No adverse effects



Historic Architecture Property Form – 275 West Beech Street, Long Beach, New York



View east (Google Earth).

CRIS USN: 05946.000025

County: Nassau

Build Date: 1936

Modeled View of Substation: Potential view

Actual View: No view

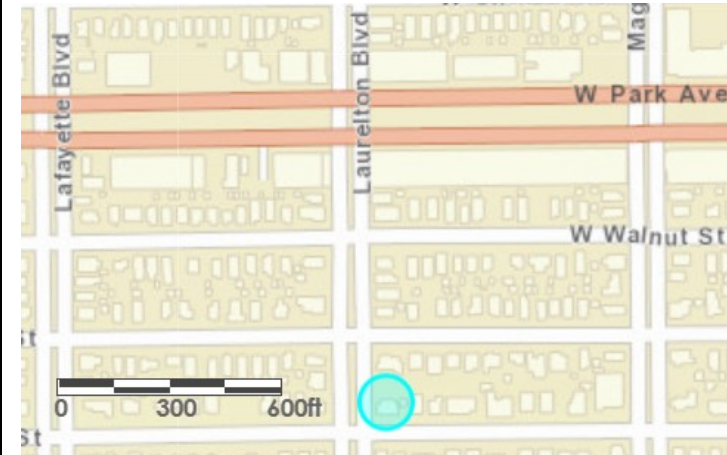
NRHP Status: Eligible

NRHP Recommendation: Eligible

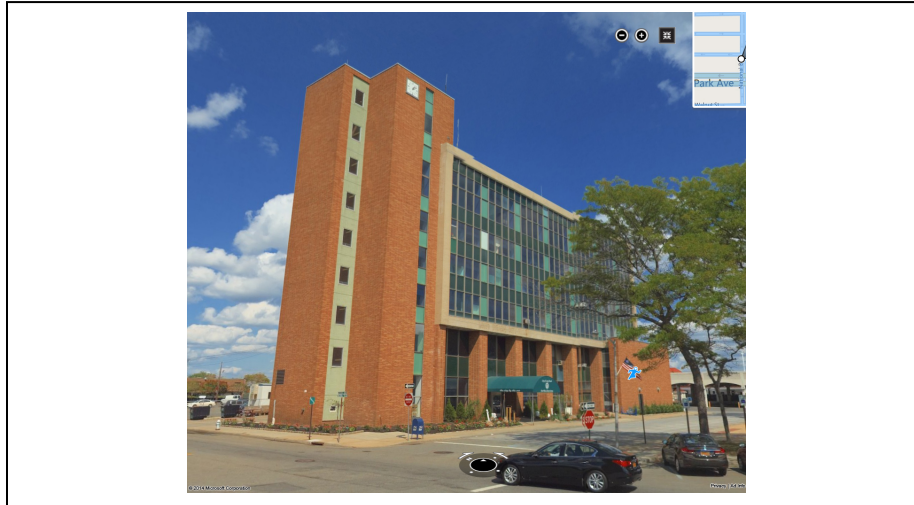
Project Effects: No adverse effects



View south to Project (Google Earth).



Historic Architecture Property Form – Long Beach Municipal Building, 1 West Chester Street, Long Beach, New York



View northeast (CRIS).

CRIS USN: 05946.000209

County: Nassau

Build Date: 1964

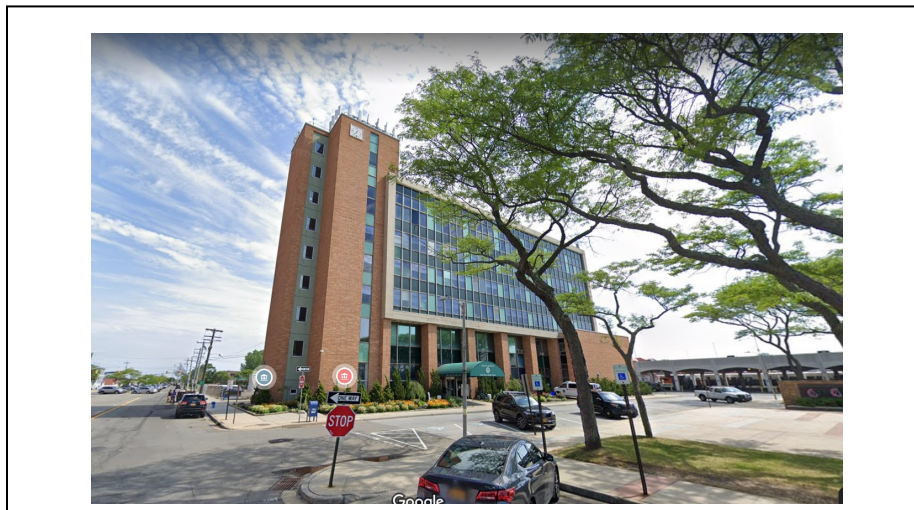
Modeled View of Substation: Potential view

Actual View: No view

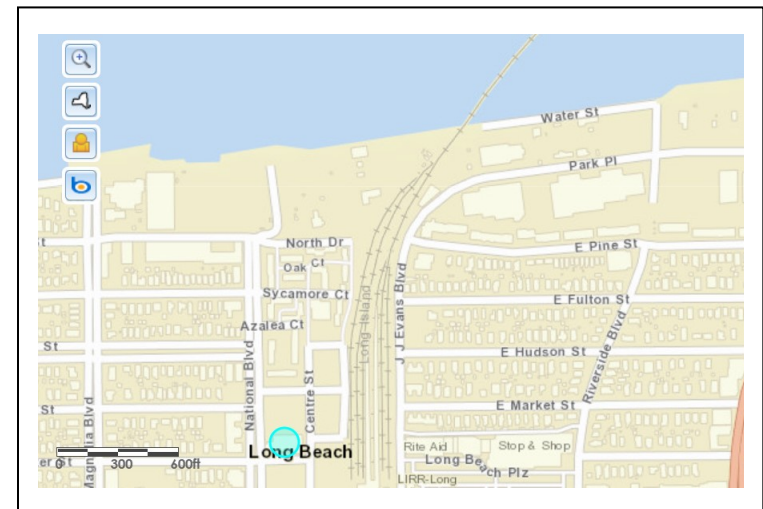
NRHP Status: Eligible

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View northeast to Project (Google Earth).



Historic Architecture Property Form – 28 West Olive Street, Long Beach, New York



View south (CRIS).

CRIS USN: 05946.001576

County: Nassau

Build Date: circa 1915

Modeled View of Substation: Potential view

Actual View: No view

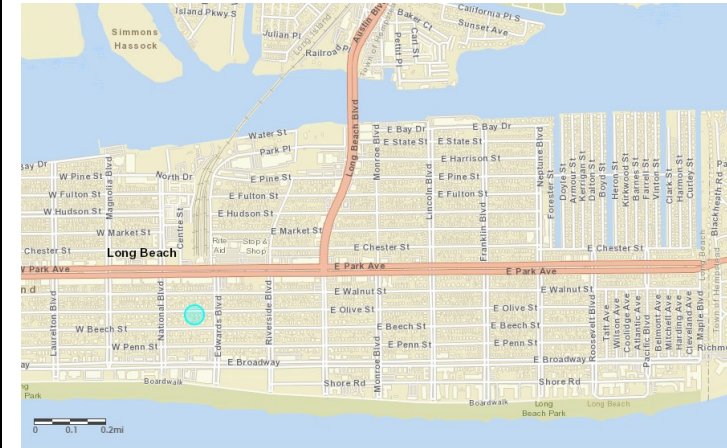
NRHP Status: Eligible (Estates of Long Beach Hist. Dist.)

NRHP Recommendation: Eligible

Project Effects: No adverse effects



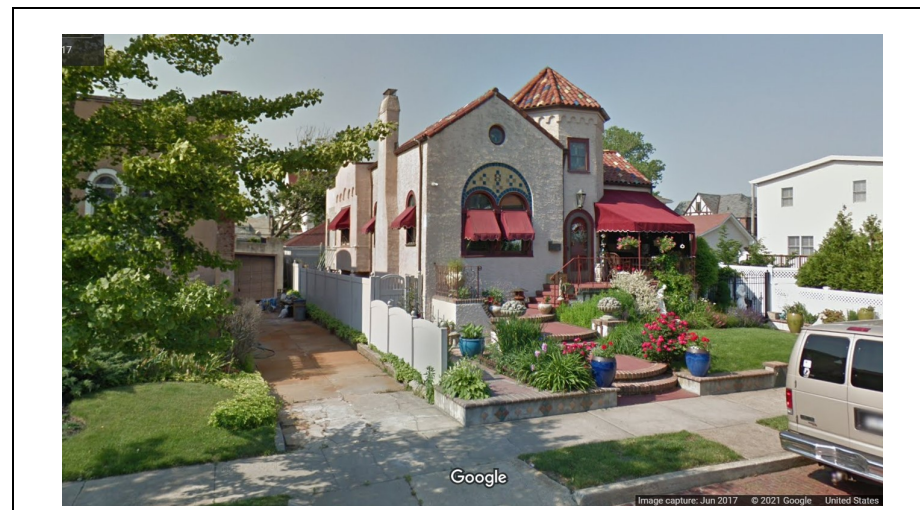
View northeast to Project (Google Earth).



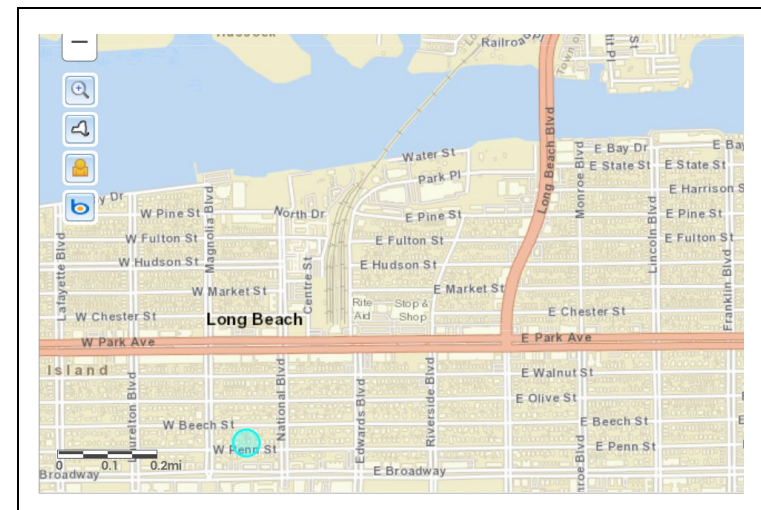
A Google Street View image of a single-story house with a red-tiled roof, arched windows, and a red awning. The house is surrounded by a white fence and a well-maintained lawn. A white van is parked on the street in the foreground. The image is labeled with 'Google' in the bottom center and 'Image capture: Jun 2017 © 2021 Google United States' in the bottom right corner.

Project Effects: No adverse effects

View northeast (Google Earth).



View northeast to Project (Google Earth).



Historic Architecture Property Form – Long Beach Historical Museum, 226 West Penn Street, Long Beach, New York



CRIS USN: 05946.000075

County: Nassau

Build Date: 1908

Modeled View of Substation: No view

Actual View: No view

NRHP Status: Listed (NRIS # 08000932)

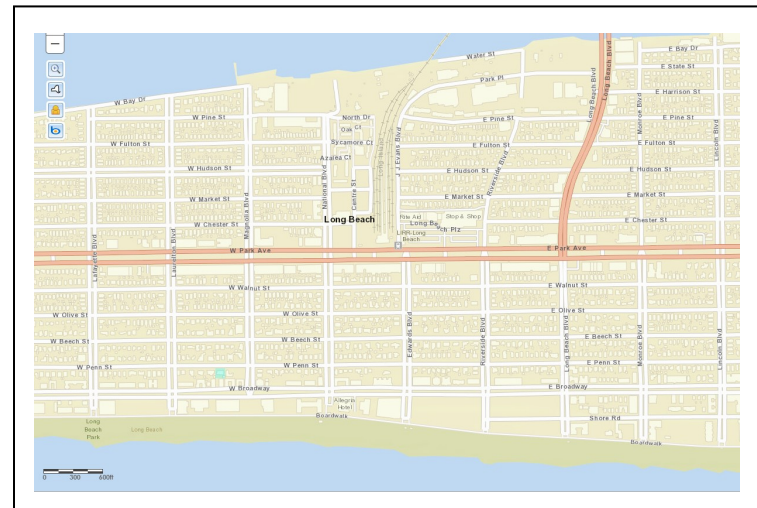
NRHP Criterion: A, C

Project Effects: No adverse effects

View southeast (CRIS).



View northeast to Project (Google Earth).



Historic Architecture Property Form – 262 West Penn Street, Long Beach, New York



View south (CRIS).

CRIS USN: 05946.000064

County: Nassau

Build Date: circa 1915

Modeled View of Substation: Potential view

Actual View: No view

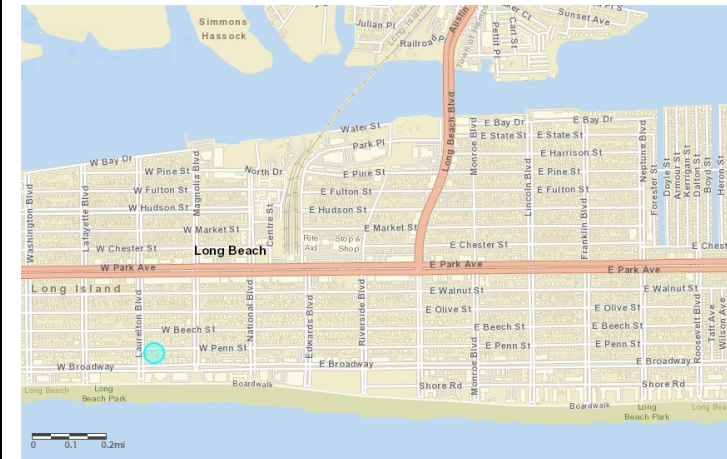
NRHP Status: Eligible

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View northeast to Project (Google Earth).



Historic Architecture Property Form – 468 West Penn Street, Long Beach, New York



View southwest (CRIS).

CRIS USN: 05946.000915

County: Nassau

Build Date: 1938

Modeled View of Substation: Potential view

Actual View: No view

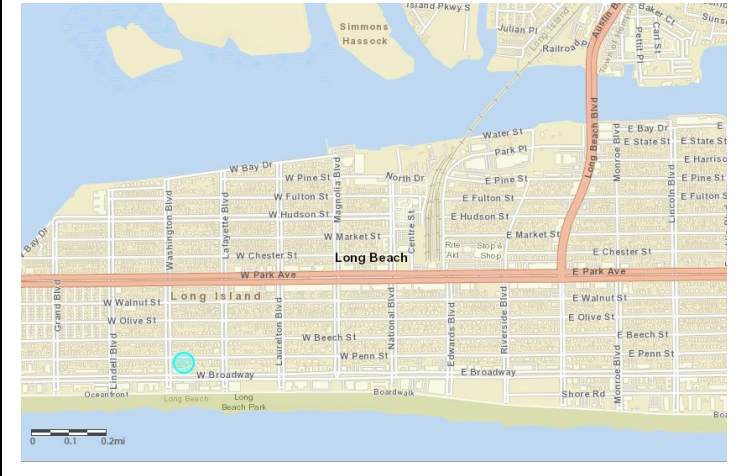
NRHP Status: Eligible

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View northeast to Project (Google Earth).



Historic Architecture Property Form – 166 West Walnut Street, Long Beach, New York



View south (CRIS).

CRIS USN: 05946.001680

County: Nassau

Build Date: circa 1925

Modeled View of Substation: Potential view

Actual View: No view

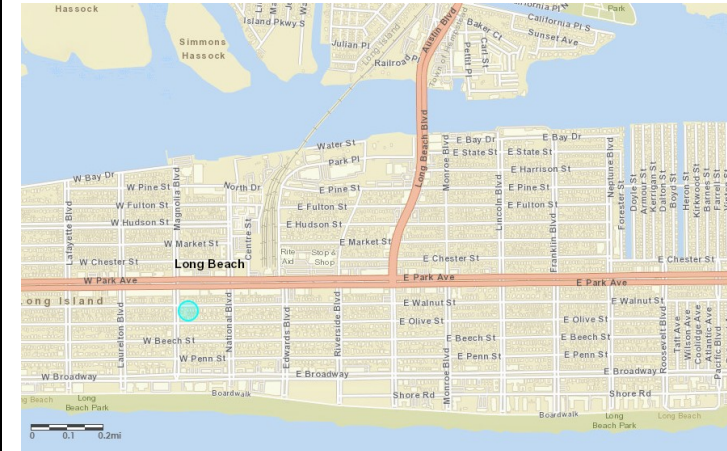
NRHP Status: Eligible

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View northeast to Project (Google Earth).



Historic Architecture Property Form – 122 West Walnut Street, Long Beach, New York



View southwest (CRIS).

CRIS USN: 05946.000327

County: Nassau

Build Date: 1938

Modeled View of Substation: Potential view

Actual View: No view

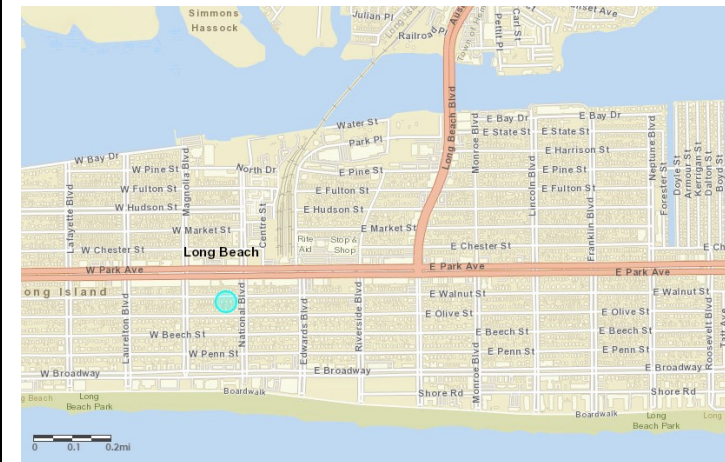
NRHP Status: Eligible

NRHP Recommendation: Eligible

Project Effects: No adverse effects



View northeast to Project (Google Earth).



Attachment J-5

**Photo Documentation of Historic and Architectural Properties Within the AVEHAP
Hampton Road Substation Study Area**

Attachment J-5
Photo Documentation of Historic and
Architectural Properties within the
AVEHAP Hampton Road Substation
Study Area

Historic Architecture Property Form – 3289 Fifth Street, Oceanside, New York



View east (CRIS).

CRIS USN: 05901.001038

County: Nassau

Build Date: 1929

Style: Cape

Actual View: No Actual View

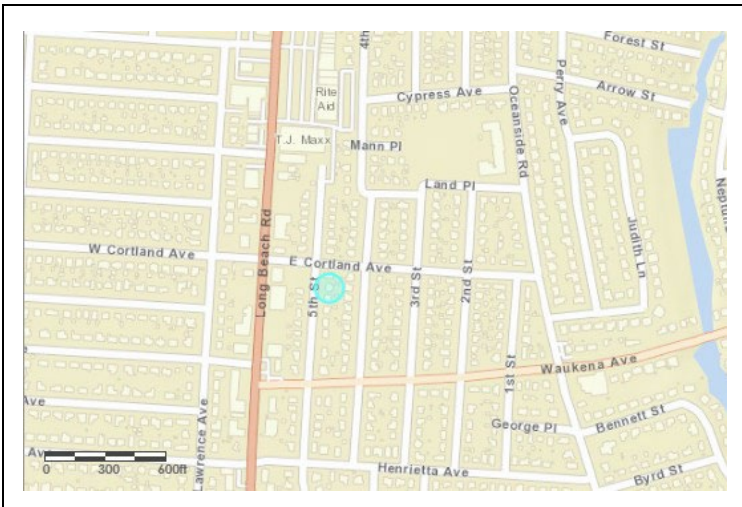
NRHP Status: Eligible

NRHP Criterion: C

Project Effects: No Adverse Effect



View southwest toward project (Google Earth).



Historic Architecture Property Form – 121 Atlantic Place South, Island Park, New York



View north (CRIS).

CRIS USN: 05901.001062

County: Nassau

Build Date: 1975

Style: Ranch

Actual View: No Actual View

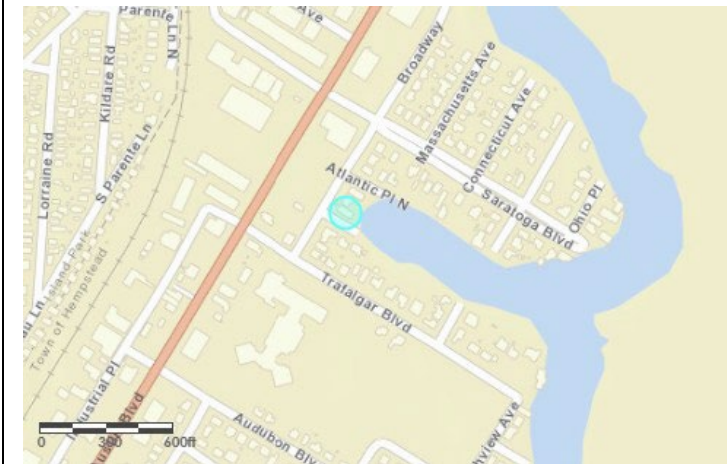
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View northwest toward project (Google Earth).



Historic Architecture Property Form – 317 West Windsor Parkway, Oceanside, New York



View south (CRIS).

CRIS USN: 05901.001108

County: Nassau

Build Date: 1957

Style: Split Level

Actual View: No Actual View

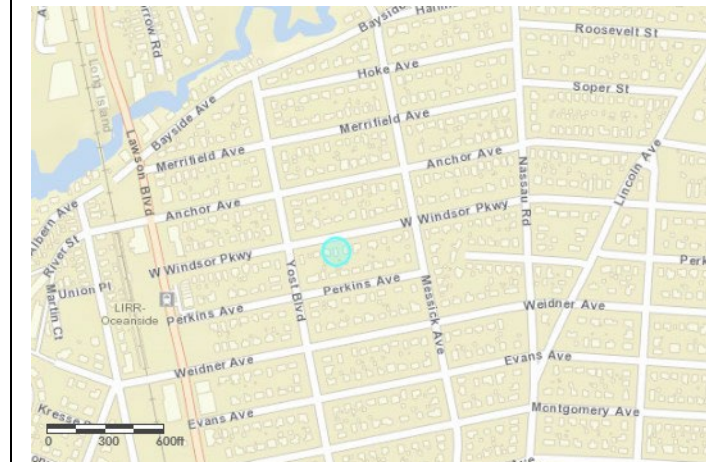
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View west toward project (Google Earth).



Historic Architecture Property Form – 3242 Nasau Road, Oceanside, New York



View west (CRIS).

CRIS USN: 05901.00116

County: Nassau

Build Date: 1954

Style: Split Level

Actual View: No Actual View

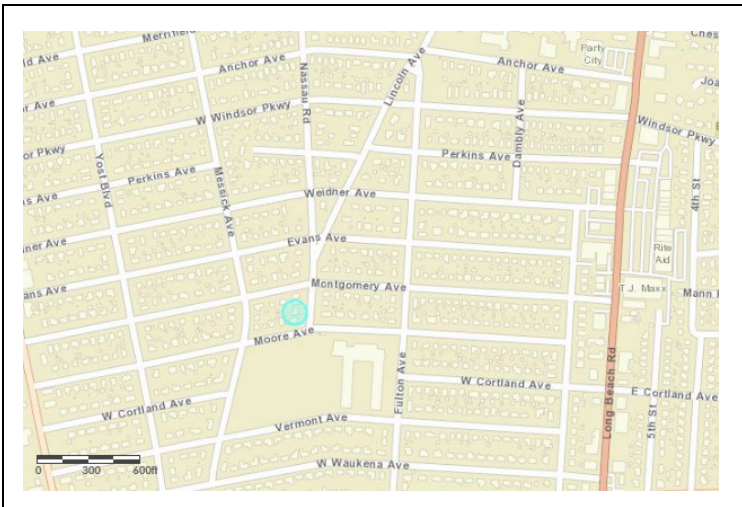
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View south southwest toward project (Google Earth).



Historic Architecture Property Form – 391 North Weidner Avenue, Oceanside, New York



View south (CRIS).

CRIS USN: 05901.001251

County: Nassau

Build Date: 1954

Style: Cape

Actual View: No Actual View

NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View south southeast toward project (Google Earth).



Historic Architecture Property Form – 3168 Yost Boulevard, Oceanside, New York

Front
Date Taken: 11/23/2013
Taken By: James Fortiman



CRIS USN: 05901.001252

County: Nassau

Build Date: 1951

Style: Cape

Actual View: No Actual View

NRHP Status: Undetermined

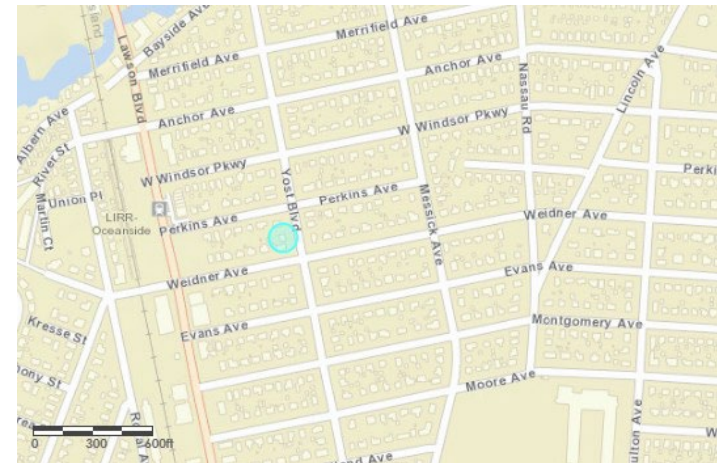
NRHP Criterion: None

Project Effects: No Adverse Effect

View east (CRIS).



View south toward project (Google Earth).



Historic Architecture Property Form – 3488 Weidner Avenue, Oceanside, New York



CRIS USN: 05901.001319

County: Nassau

Build Date: 1963

Style: Split Level Ranch

Actual View: No Actual View

NRHP Status: Undetermined

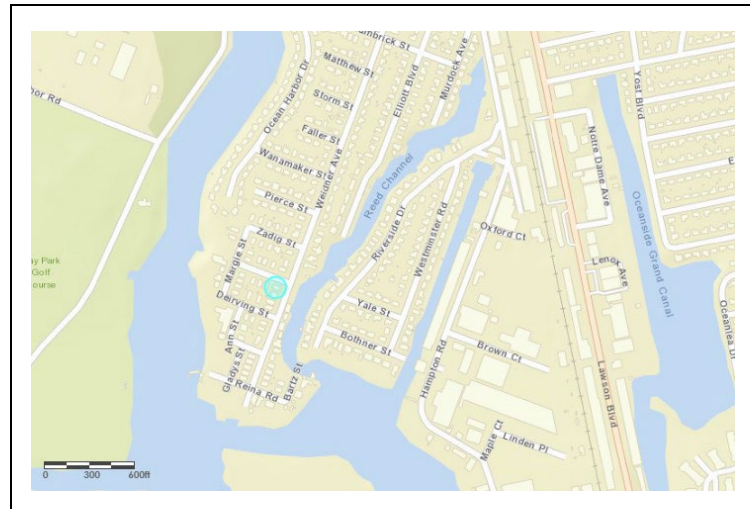
NRHP Criterion: None

Project Effects: No Adverse Effect

View west (CRIS).



View southeast toward project (Google Earth).



Historic Architecture Property Form – 313 Moore Avenue, Oceanside, New York



View south (CRIS).

CRIS USN: 05901.001333

County: Nassau

Build Date: 1956

Style: Ranch

Actual View: No Actual View

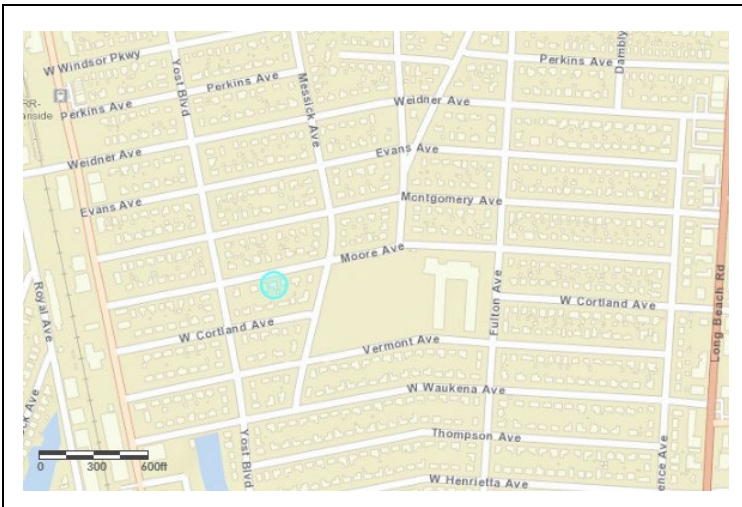
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View south toward project (Google Earth).



Historic Architecture Property Form – 3227 Weidner Avenue, Oceanside, New York



View east (CRIS).

CRIS USN: 05901.001362

County: Nassau

Build Date: 1957

Style: Cape

Actual View: No Actual View

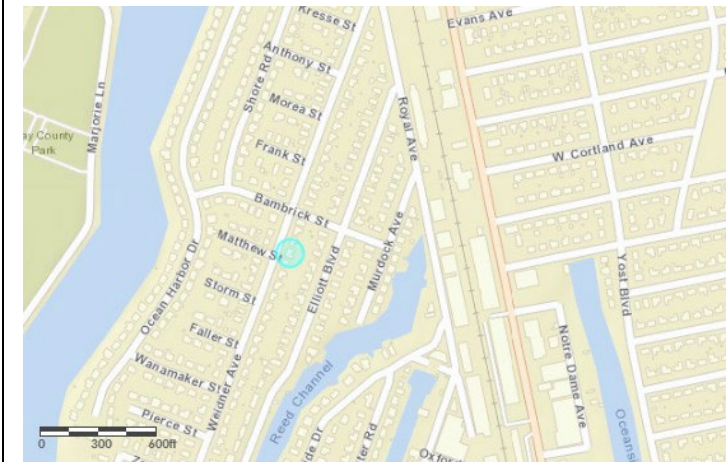
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View southeast toward project (Google Earth).



Historic Architecture Property Form – 3300 Ocean Harbor Drive, Oceanside, New York



View southwest (CRIS).

CRIS USN: 05901.001397

County: Nassau

Build Date: 1962

Style: Ranch

Actual View: No Actual View

NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View southeast toward project (Google Earth).



Historic Architecture Property Form – 4083 Broadway, Island Park, New York



View east (CRIS).

CRIS USN: 05901.001463

County: Nassau

Build Date: 1966

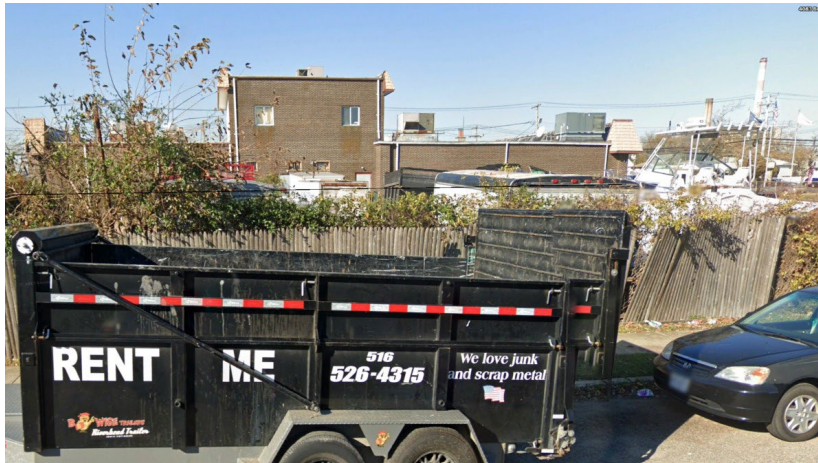
Style: Ranch

Actual View: No Actual View

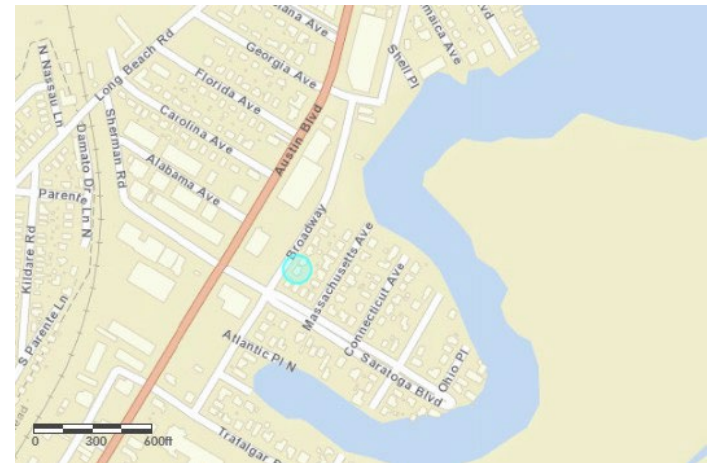
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View northwest toward project (Google Earth).



Historic Architecture Property Form – 3442 Riverside, Oceanside, New York



CRIS USN: 5901.001514

County: Nassau

Build Date: 1967

Style: Split Ranch

Actual View: No Actual View

NRHP Status: Undetermined

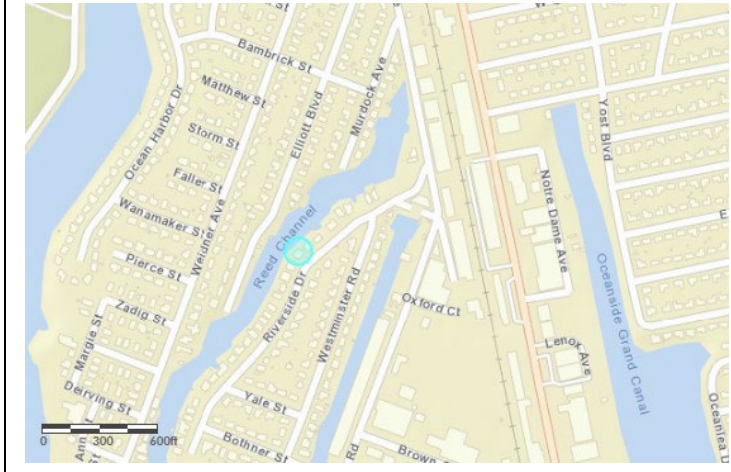
NRHP Criterion: None

Project Effects: No Adverse Effect

View west (CRIS).



View southeast toward project (Google Earth).



Historic Architecture Property Form – 4059 Connecticut Avenue, Island Park, New York



CRIS USN: 05901.001463

County: Nassau

Build Date: 1966

Style: Cape

Actual View: No Actual View

NRHP Status: Undetermined

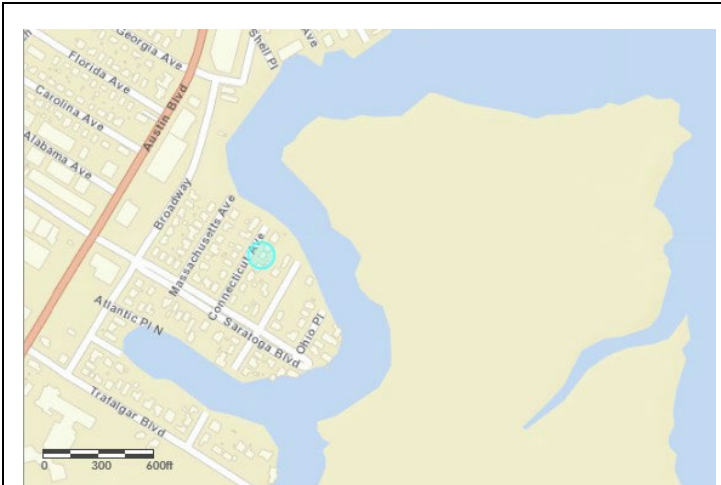
NRHP Criterion: None

Project Effects: No Adverse Effect

View west (CRIS).



View northwest toward project (Google Earth).



Historic Architecture Property Form – 177 Harris Drive, Oceanside, New York



View south (CRIS).

CRIS USN: 05901.001528

County: Nassau

Build Date: 1962

Style: Split Level Ranch

Actual View: Yes, Actual View

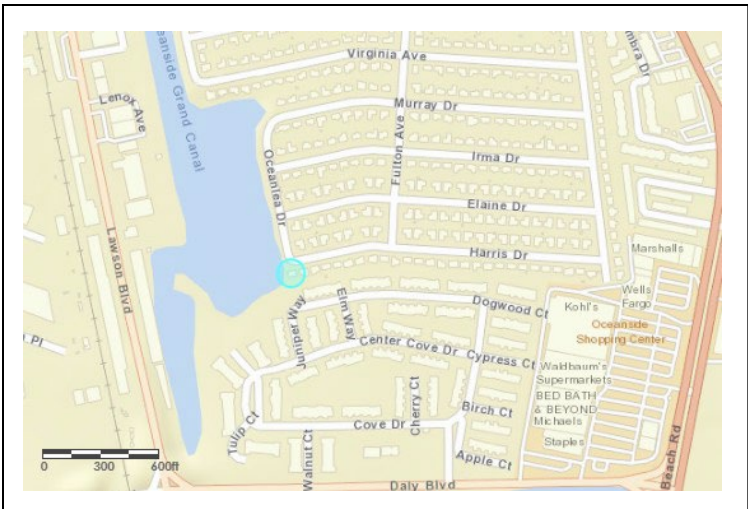
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View southwest toward project (Google Earth).



Historic Architecture Property Form – 3257 Weidner Avenue, Oceanside, New York



View east (CRIS).

CRIS USN: 05901.001757

County: Nassau

Build Date: 1955

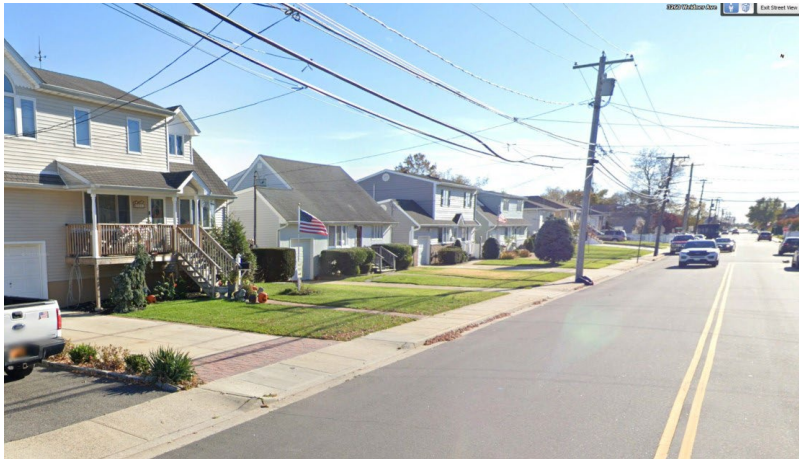
Style: Cape

Actual View: No Actual View

NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View south southeast toward project (Google Earth).



Historic Architecture Property Form – 37 Mott Street, Oceanside, New York



View north (CRIS).

CRIS USN: 05901.001855

County: Nassau

Build Date: 1948

Style: Colonial Revival

Actual View: No Actual View

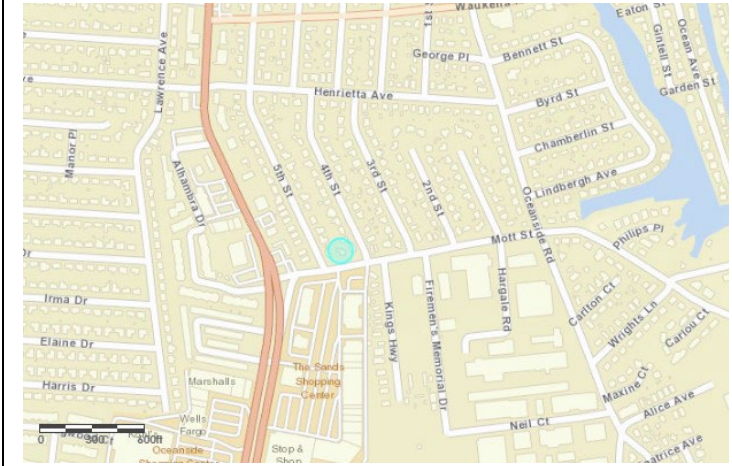
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View southwest toward project (Google Earth).



Historic Architecture Property Form – Nassau County Police Dept, First Avenue, Oceanside, New York



View east (CRIS).

CRIS USN: 05901.001893

County: Nassau

Build Date: Unknown

Style: Utilitarian

Actual View: No Actual View

NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View southeast toward project (Google Earth).



Historic Architecture Property Form – 458 Reina Road, Oceanside, New York



View north (Google Earth).

CRIS USN: 05901.002261

County: Nassau

Build Date: 1967

Style: Ranch

Actual View: Yes, Actual View

NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View southeast toward project (Google Earth).



Historic Architecture Property Form – 3495 Westminster Road, Oceanside, New York



CRIS USN: 05901.002265

County: Nassau

Build Date: 1962

Style: Ranch

Actual View: Yes, Actual View

NRHP Status: Undetermined

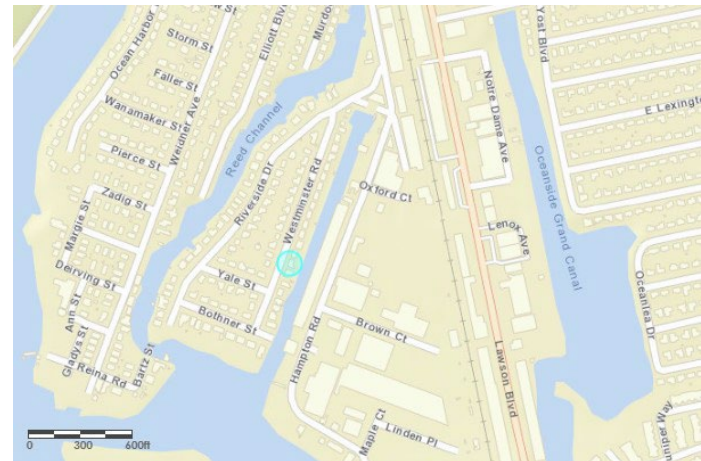
NRHP Criterion: None

Project Effects: No Adverse Effect

View east (CRIS).



View southeast toward project (Google Earth).



Historic Architecture Property Form – 80 Harris Drive, Oceanside, New York



View north (CRIS).

CRIS USN: 05901.002266

County: Nassau

Build Date: 1960

Style: Ranch

Actual View: No Actual View

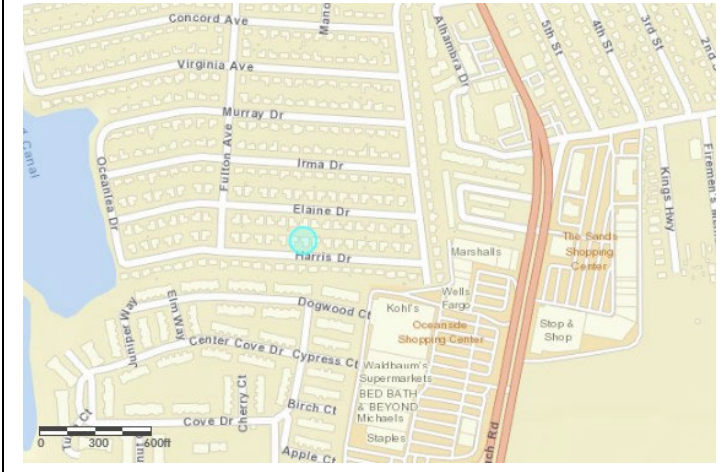
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View southwest toward project (Google Earth).



Historic Architecture Property Form – 1 McCarthy, Island Park, New York



View west (CRIS).

CRIS USN: 05901.003524

County: Nassau

Build Date: Unknown

Style: Utilitarian

Actual View: Yes, Actual View

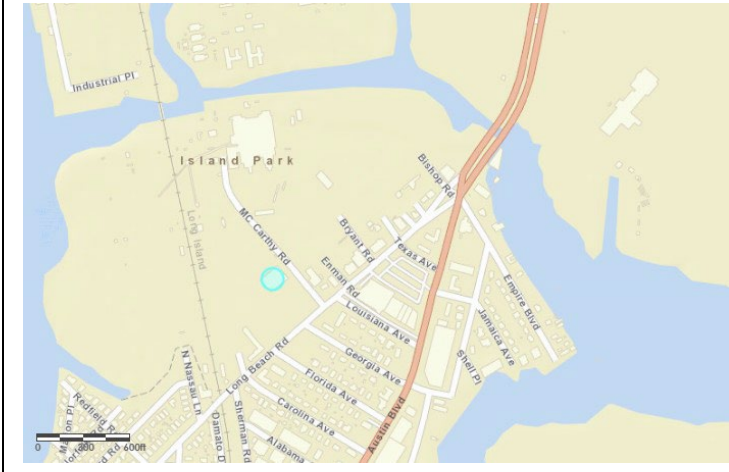
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View north toward project (Google Earth).



Historic Architecture Property Form – 131 Waterford Road, Island Park, New York



CRIS USN: 05936.000011

County: Nassau

Build Date: 1967

Style: Duplex

Actual View: No Actual View

NRHP Status: Undetermined

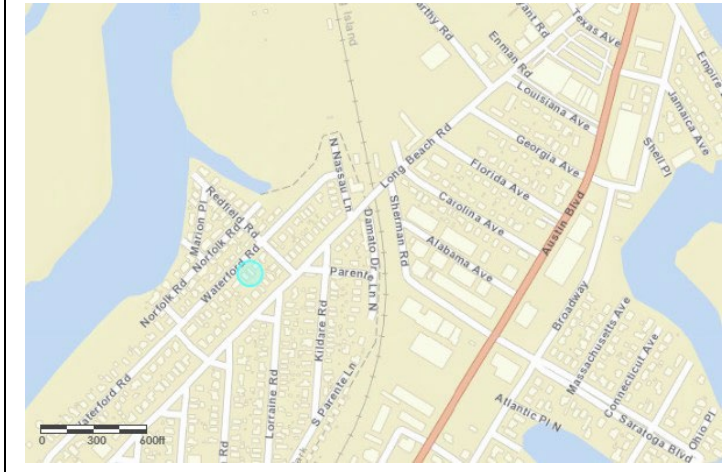
NRHP Criterion: None

Project Effects: No Adverse Effect

View southeast (CRIS).



View north toward project (Google Earth).



Historic Architecture Property Form – 39 Marina Road, Island Park, New York



View east (CRIS).

CRIS USN: 05936.000012

County: Nassau

Build Date: 1939

Style: Bungalow

Actual View: No Actual View

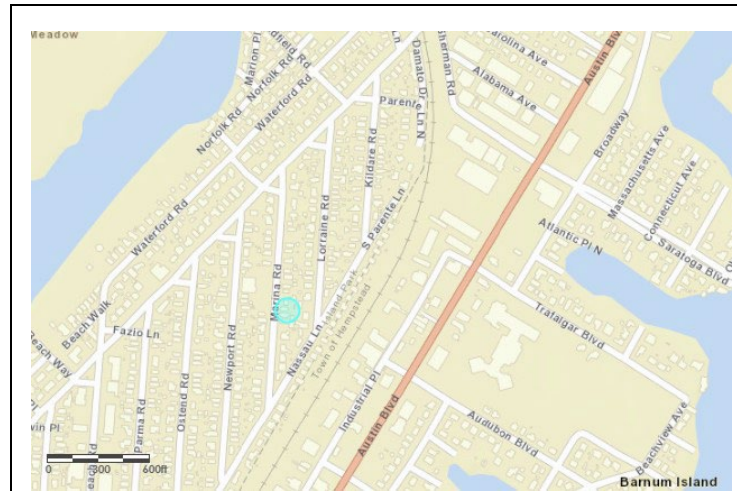
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View north toward project (Google Earth).



Historic Architecture Property Form – 49 Redfield Road, Island Park, New York



View east (CRIS).

CRIS USN: 05936.000019

County: Nassau

Build Date: 1960

Style: Split Level

Actual View: Yes, Actual View

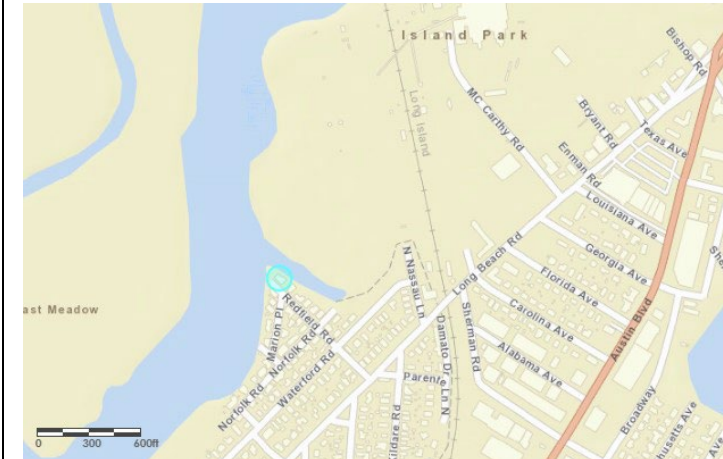
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View north toward project (Google Earth).



Historic Architecture Property Form – 159 Waterford Road, Island Park, New York



View southeast (CRIS).

CRIS USN: 5936.000021

County: Nassau

Build Date: 1929

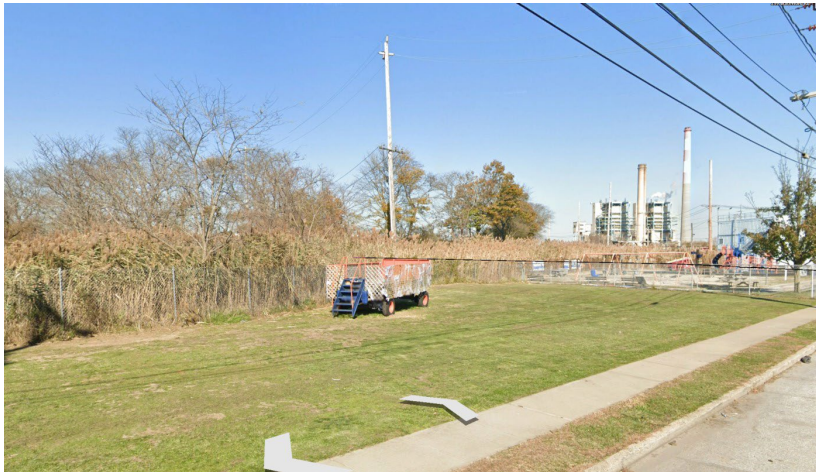
Style: Bungalow

Actual View: Yes, Actual View

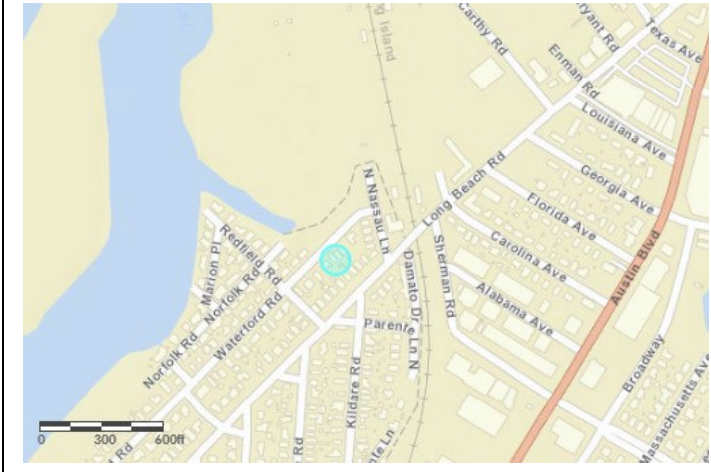
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View north toward project (Google Earth).



Historic Architecture Property Form – 28 Kildare Road, Island Park, New York



View west (CRIS).

CRIS USN: 05936.000053

County: Nassau

Build Date: 1929

Style: Bungalow

Actual View: No Actual View

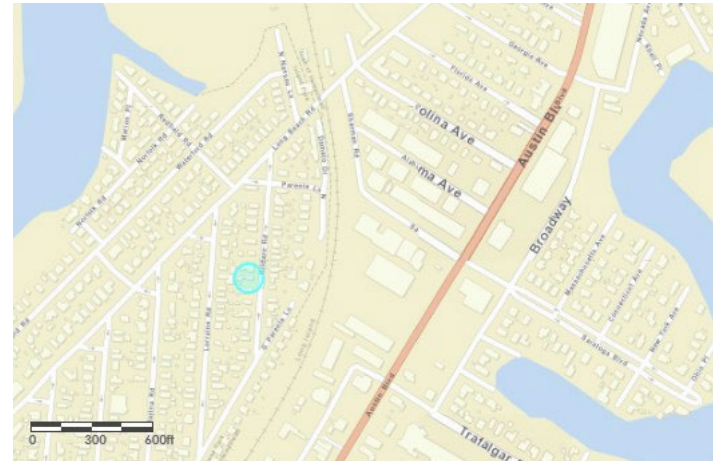
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View northwest toward project (Google Earth).



Historic Architecture Property Form – 8 Norfolk Road, Island Park, New York



View west (CRIS).

CRIS USN: 05936.000054

County: Nassau

Build Date: Unknown

Style: Multi-family

Actual View: No Actual View

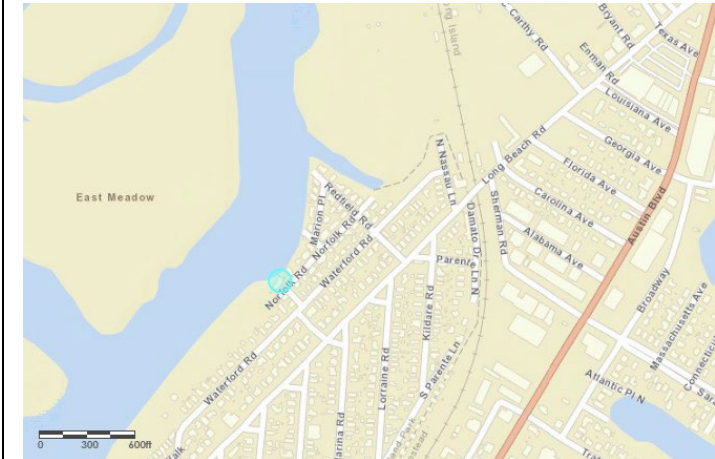
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View northwest toward project (Google Earth).



Historic Architecture Property Form – 550 Long Beach Road, Island Park, New York



View northwest (CRIS).

CRIS USN: 05936.000056

County: Nassau

Build Date: 1960

Style: Ranch

Actual View: No Actual View

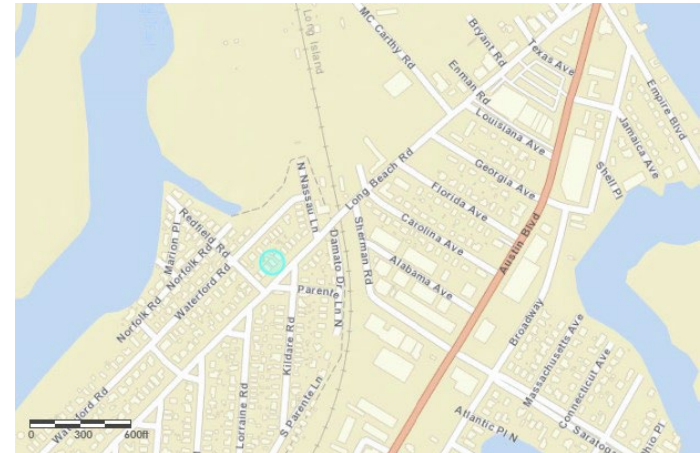
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View northwest toward project (Google Earth).



Historic Architecture Property Form – 51 Kildare Road, Island Park, New York



View east (CRIS).

CRIS USN: 05936.000112

County: Nassau

Build Date: 1929

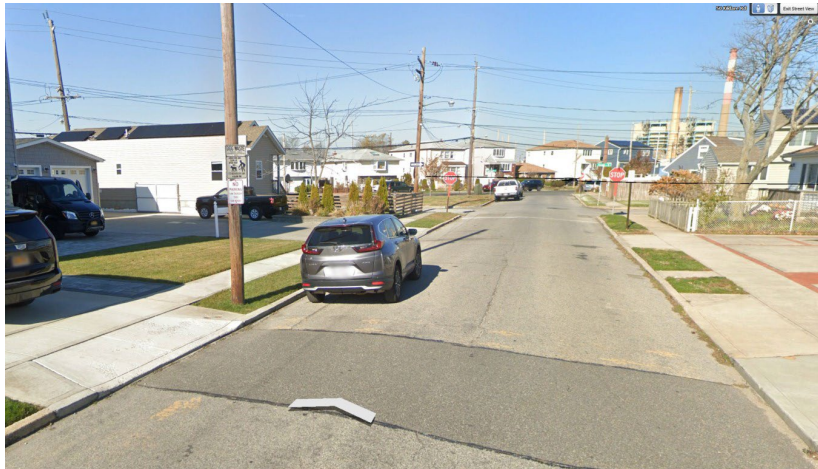
Style: Bungalow

Actual View: No Actual View

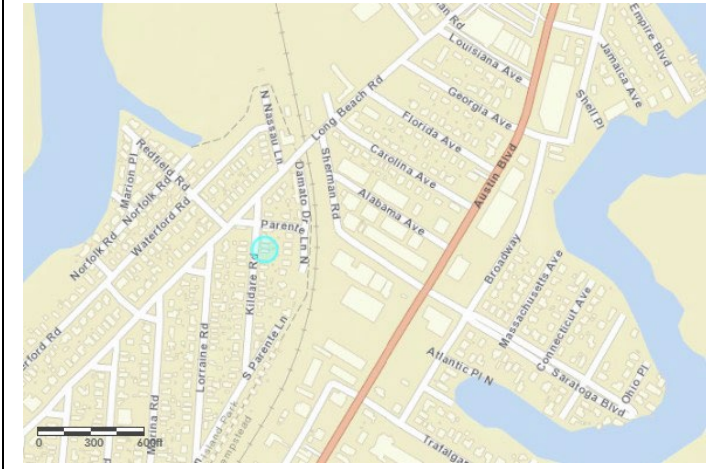
NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View northwest toward project (Google Earth).



Historic Architecture Property Form – 62 Lorraine Road, Island Park, New York



View west (CRIS).

CRIS USN: 05936.000175

County: Nassau

Build Date: 1926

Style: Mission

Actual View: No Actual View

NRHP Status: Undetermined

NRHP Criterion: None

Project Effects: No Adverse Effect



View north toward project (Google Earth).

