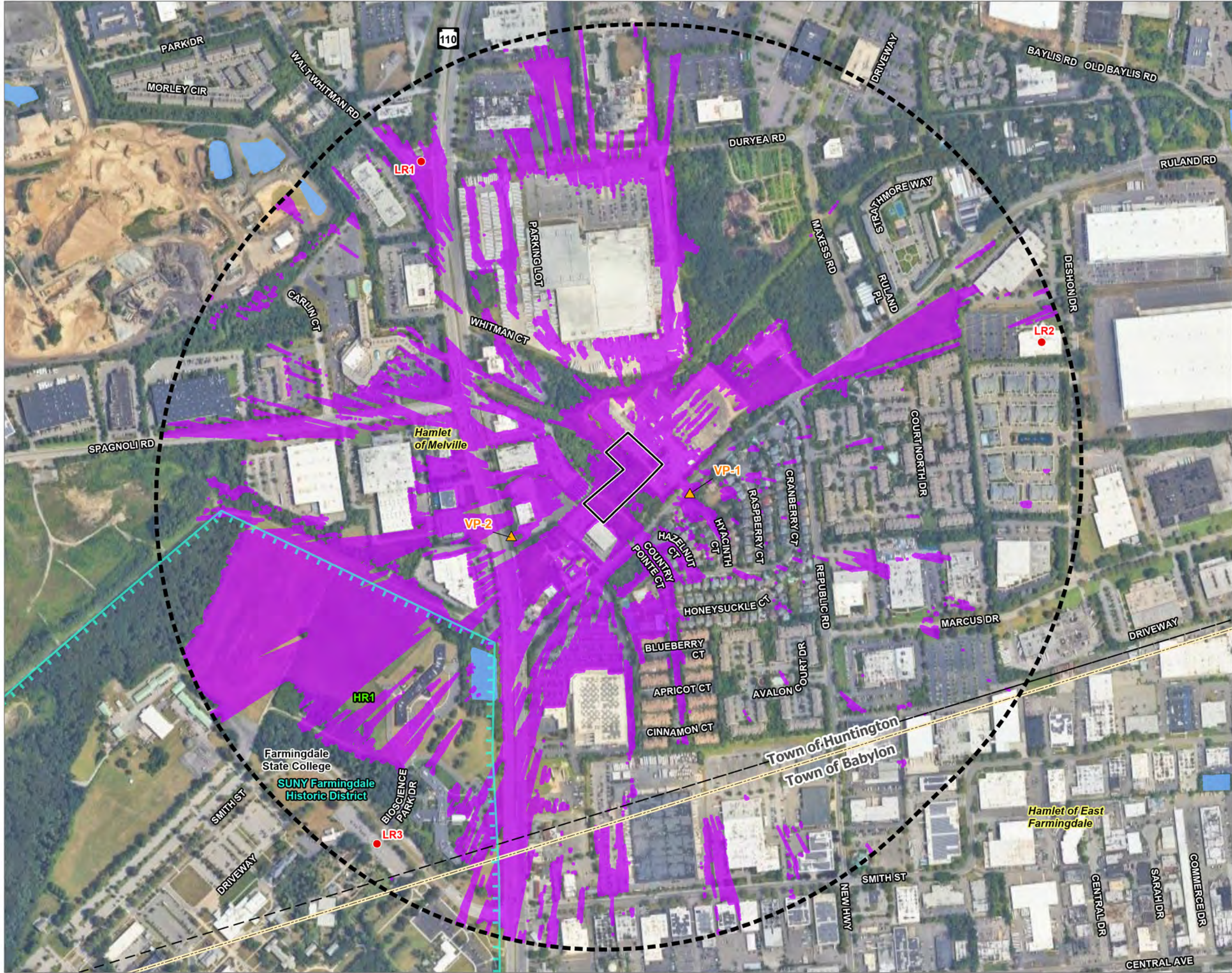


ATTACHMENT A

VISUAL RESOURCE ASSESSMENT

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet, Map Rotation: 0
— Saved By: \\ACP-MB\Billsings \\ACP-Port 5712026, 09:37:23 AM, File Path: T:\1-PROJECTS\PS&G\708407_RulandRoad\12-9-VISUAL\07_GIS\APR\X\RulandRoadSub_Figures.aprx, Layout Name: Figure 1 Viewshed_VRI_Map_11x17.1L



- HALF MILE STUDY AREA
- PROJECT LOCATION
- SIMULATION LOCATION
- LOCAL RESOURCE
- HISTORIC DISTRICT
- LAKE/POND OR RESERVOIR
- TOWN BOUNDARY
- HAMLET BOUNDARY
- POTENTIAL VISIBILITY OF PROJECT

BASE MAP: GOOGLE IMAGERY SERVICE, 6/2023
DATA SOURCES: TRC, ESRI, NY SHPO, PSEG, NYS GIS GATEWAY, NHD, USGS



PSEG LI RULAND ROAD SUBSTATION TOWN OF HUNTINGTON SUFFOLK COUNTY, LONG ISLAND, NY	
TITLE: PROJECT VIEWSHED ANALYSIS, VIEWPOINTS, AND RESOURCE MAP	
DRAWN BY: M. BILLINGS	PROJ. NO.: 708408
CHECKED BY: B. MASTERSON	FIGURE 1
APPROVED BY: S. DEHAINAUT	
DATE: MAY 2026	
TRC	
215 GREENFIELD PKWY STE 102 LIVERPOOL, NY 13088 PHONE: 315.671.1600	
FILE:	

Digital Rendering - Aerial View

Existing Conditions

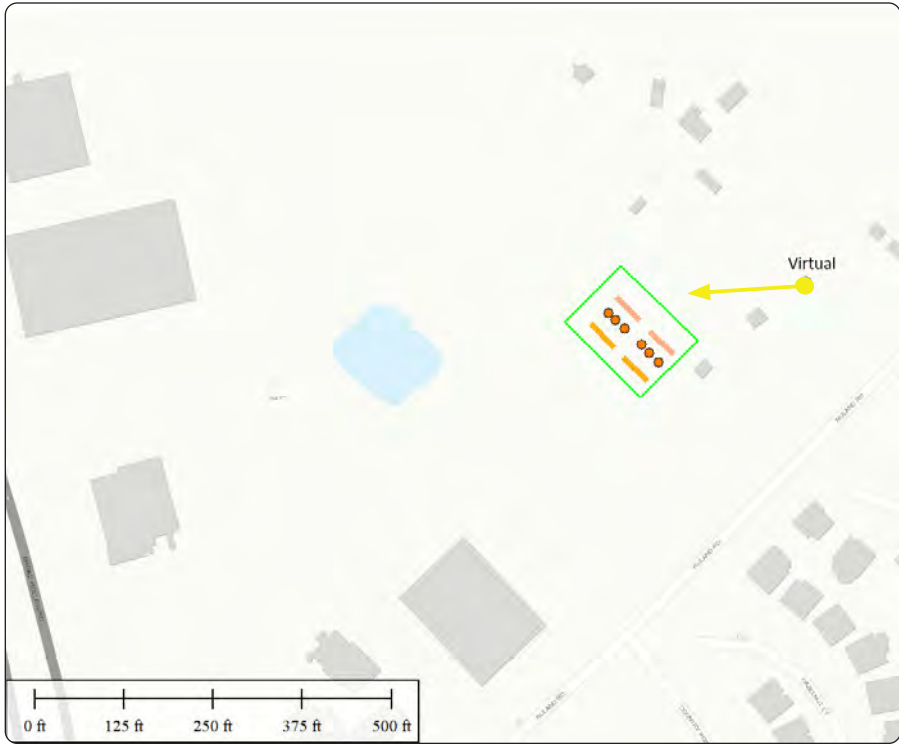


W

Viewpoint Location Aerial Map



Viewpoint Location Topographic Map



Viewpoint Location Details

Viewpoint Coordinates	40.76185926, -73.41848043
Township	Huntington
Distance to Project	149 Feet
Direction of View	West
Lens Focal Length	50 mm
Date/Time of Photo	Simulated





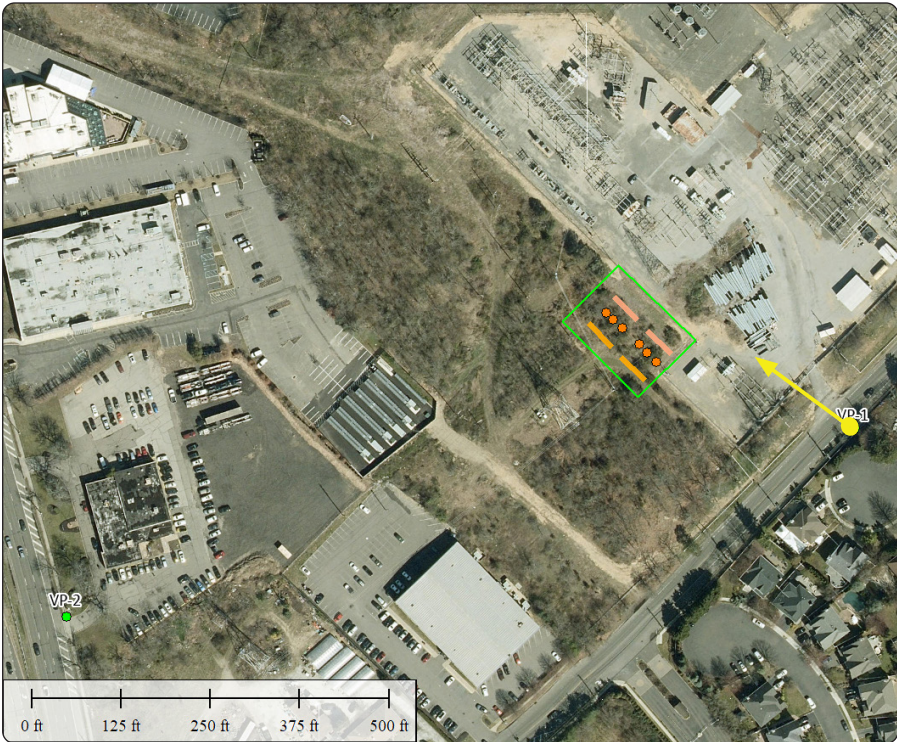
VP - 1 - Ruland Road

Existing Conditions

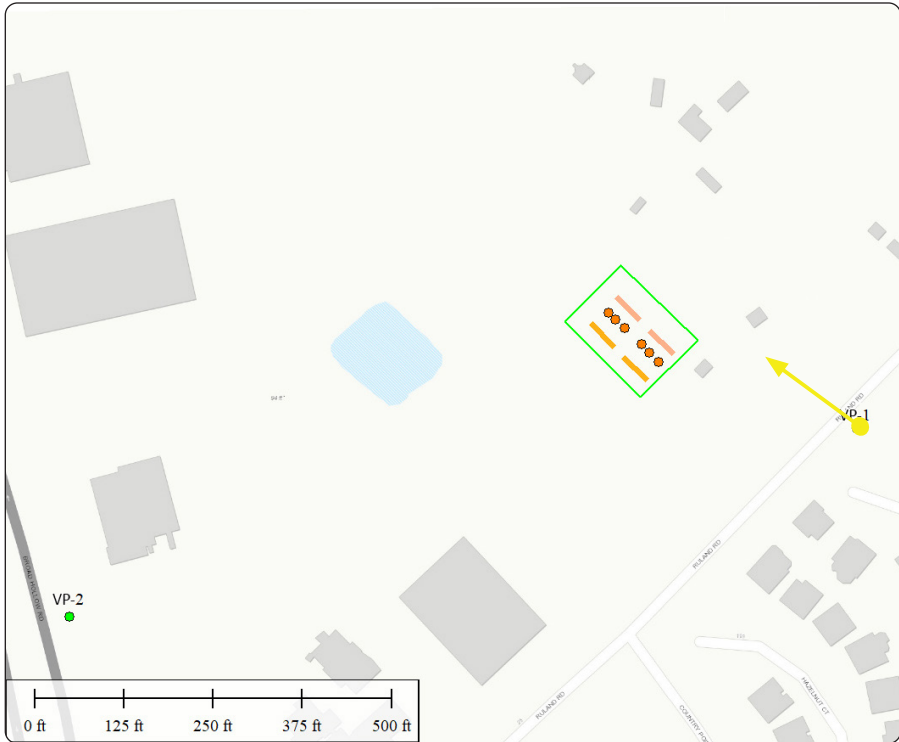


NW

Viewpoint Location Aerial Map



Viewpoint Location Topographic Map



Viewpoint Location Details

Viewpoint Coordinates	40.76129547, -73.41822812
Township	Huntington
Distance to Project	255 Feet
Direction of View	Northwest
Lens Focal Length	50 mm
Date/Time of Photo	1/14/2026 2:40PM









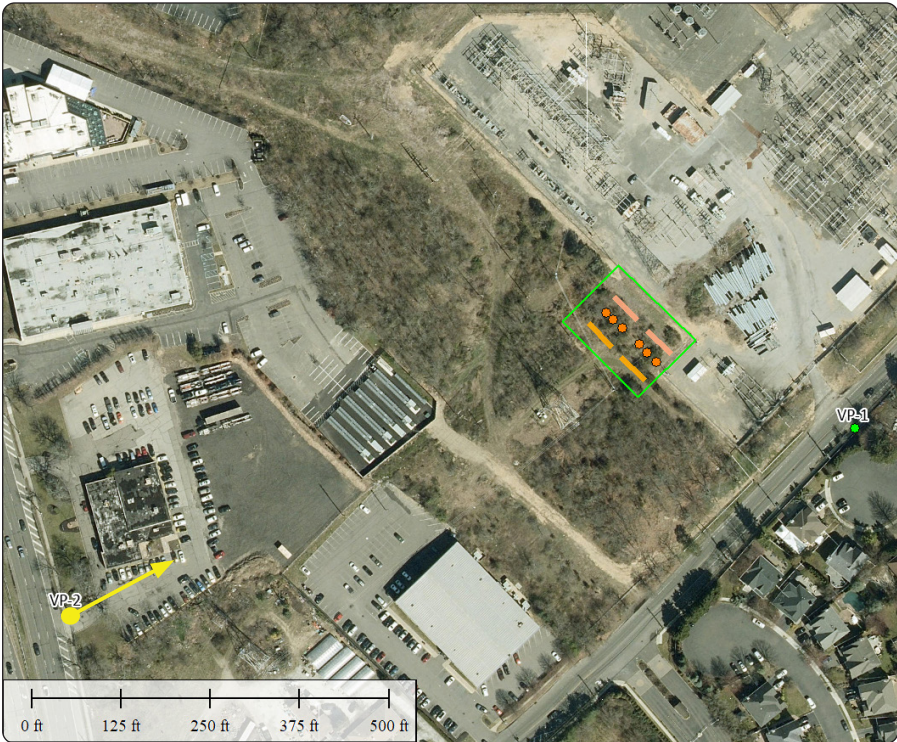
VP - 2 - Broadhollow Road

Existing Conditions

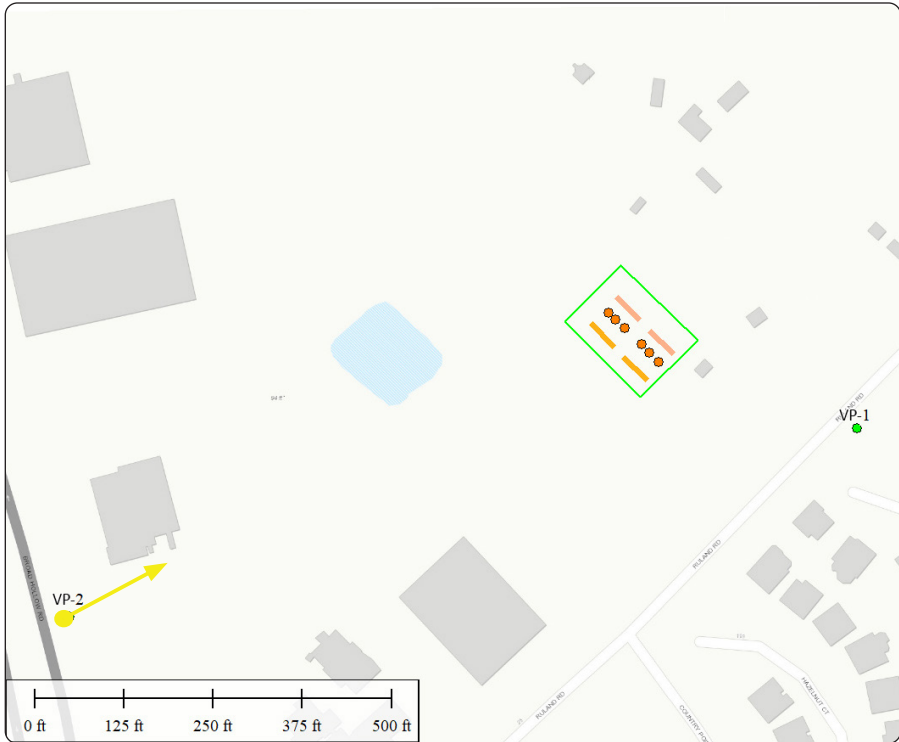


NNW

Viewpoint Location Aerial Map



Viewpoint Location Topographic Map



Viewpoint Location Details

Viewpoint Coordinates	40.76059036, -73.42221375
Township	Huntington
Distance to Project	832 Feet
Direction of View	North-Northwest
Lens Focal Length	50 mm
Date/Time of Photo	1/14/2026 3:06PM







PSEG Long Island Ruland Road Substation Expansion and Reactor Installation Visual Impact Assessment

June 2026

Suffolk County, Long Island, New York

Prepared For:

PSEG Long Island
999 Stewart Avenue, Suite 202
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TRC Companies
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ATTACHMENT 4.1

Figure 1. Project Viewshed Analysis, Viewpoints, and Resource Map
Figure 2. Digital Rendering
Figure 3. Photo Simulations

1.0 Introduction

1.1 Project Description

PSEG Long Island is proposing the installation of six new 138 kilovolt (kV) Air Core Reactors and associated support equipment immediately adjacent to the existing Ruland Road Substation (the “Substation”) located on Ruland Road in the Town of Huntington, Suffolk County, New York (the “Project”). This document serves a Visual Impact Assessment (VIA) report to evaluate the potential extent and significance of Project visibility in general accordance with the New York State Department of Environmental Conservation (NYDEC) Program Policy entitled DEP-00-2 / Assessing and Mitigating Visual and Aesthetic Impacts, dated July 31, 2000, revised December 13, 2019 (referred herein as the DEC Visual Policy). This VIA evaluates the appearance of the Project’s aboveground components with the notion that underground work would not be visible and therefore would be excluded in the study.

As Mentioned, the Project includes the installation of six (two sets of three) 138kV Air Core Reactors with support equipment comprising four new steel A-frame structures for incoming transmission lines, two 138kV gang-operated disconnect (“GOD”) switches, and associated bus work on approximately 0.38 acres of undeveloped land located immediately adjacent to the Substation. Vegetation within this area will be cleared and removed, and the property regraded. Dolomite stone will be installed on the ground surface around the equipment, and perimeter security fencing will be erected. Additionally, two existing transmission lattice structures will be removed, one from within the existing Substation and one outside of the existing Substation in the vicinity of the proposed reactor installations. These structures will be replaced with several new steel transmission poles.

The new air core reactors are cylindrical in shape, with a diameter of approximately 10 feet and a height of approximately 26 feet above grade. The new steel A-frame structures will extend to an approximate height of 52 feet above grade and will be equipped with 10-foot lightning masts, for total heights of approximately 65 feet above grade. The new steel transmission poles will range from approximately 61 to 110.5 feet in height above grade.

1.2 Purpose and Intent

The purpose of this VIA is to evaluate the extent and significance of the Project visibility within the existing landscape. The VIA report uses framework established in the DEC Visual Policy, which provides a structure specifically designed to guide staff in evaluating visual impacts under the State Environmental Quality Review Act (SEQRA). To conduct the VIA, a half-mile Visual Study Area (VSA) was established according to the Project’s scale, magnitude, and breadth, being commensurate with the viewing characteristics of the existing environment (e.g., topography, vegetation, buildings, structures, etc.). To determine the Project’s potential effect, the quality and character of the existing landscape must first be established. This is accomplished

with an inventory of the communities, transportation, land use patterns, and designated scenic and aesthetic resources within the VSA. Once determined, visual analyses are completed and reviewed to assess the level of effect a proposed action may have on the existing landscape.

A figure depicting visibility of the Project from designated scenic and aesthetic resources within the VSA (see Section 2.4 for a detailed discussion) is provided as Figure 1. A digital rendering of the Project buildout can be viewed in “Figure 2 Digital Rendering”.

2.0 Quality of Existing Landscape

2.1 Community/Residential

The half-mile VSA encompasses approximately 529 acres in the Town of Huntington and 53.75 acres in the Town of Babylon.

To understand the number of potential viewers within the VSA, population densities were calculated with Census Blocks derived from the United States Census Bureau; 2020 Decennial Census. This population data does not account for interstate travelers or national travelers that may visit the region or travel through the region to reach other destinations. As shown in Table 1, a total of approximately 3,427 residents reside within the VSA, as follows:

Table 1. Population of Communities within the VSA

Community	Population in VSA (2020 Census Estimates)*
Town of Huntington	3,132
Town of Babylon	295
Total Population in VSA	3,427

**Population estimates are derived from Census Blocks within the VSA and do not account for the community's total population that occurs beyond the VSA extents. Census Blocks are used to calculate populations and may overlap areas in other jurisdictions; therefore, these estimates are conservative and may overestimate current populations.*

2.2 Transportation

In general, various methods of transportation provide viewers with discrete corridors to reach destinations, while also furnishing the opportunity for travelers to observe their environment. Typically, viewers traveling to a place would experience the viewing environment in a fleeting manner, such that less time is available to fully interpret elements in the landscape. In the VSA, transportation is comprised of vehicle traffic on highways and local roads. Other localized travel opportunities are available in the VSA such as bicycling and walking/running. However,

depending on the travel route, viewers may be prevalent or limited in number (please see Section 4.0 for information on how viewer characteristics are evaluated in the VSA).

To determine the average volume of daily vehicle travelers in the VSA, Annual Average Daily Traffic (AADT) data was consulted as provided by the New York State Department of Transportation (NYSDOT). The AADT data was used in conjunction with population data (see Table 1) to estimate potential number of viewers within the VSA. Traditionally, AADT is a planning metric used primarily in transportation planning and transportation engineering. AADT data is calculated by totaling the annual volume of vehicle traffic of a road and dividing by 365 days. AADT counts for this VSA are provided below in Table 2.

Table 2. AADT (Traffic) Counts in VSA

Route/ Road Name	Municipality	AADT
Broadhollow Road	Towns of Huntington and Babylon	44,200
Walt Whitman Road	Town of Huntington	15,448
Spagnoli Street	Town of Huntington	13,644
Ruland Road	Town of Huntington	10,999
Republic Road	Towns of Huntington and Babylon	8,802
Duryea Road	Town of Huntington	4,354
Smith Street	Town of Babylon	4,035
Marcus Drive	Town of Huntington	2,076

In the VSA, Broadhollow Road is the most trafficked road with an estimated 44,200 daily motorists, followed by moderately less traveled roads including Walt Whitman Road (15,448), Spagnoli Street (13,644), Ruland Road (10,999; closest road to the Project), and Republic Road (8,802). Other roads with less traffic include Duryea Road (4,354), Smith Street (4,035), and Marcus Drive (2,076). While not indicated in Table 2, it is expected that a smaller number of travelers will pass by on local residential roads. Overall, most viewers traveling in the VSA are expected to frequent Broadhollow Road.

2.3 Land Use Patterns

Identifying land use patterns within the existing landscape contributes to the process of determining the landscape's character and quality in the VSA. Patterns of potential Project visibility may also be identified when considering the existing land use and how it influences viewing conditions. To determine land use within the VSA, the U.S. Geological Survey's (USGS) National Land Cover Database (NLCD) and the Long Island Zoning Atlas (Long Island Zoning Atlas, n.d.) were consulted. As a result, four general land cover types were identified in the VSA, including Commercial/Institutional/Industrial, Residential, Forested, and Recreational/Open Space. Each land cover type contains a discrete viewing environment that can encourage or discourage general landscape observations. For example, high intensity developed lands with buildings may confine or obstruct a view, whereas places comprised of open landscapes, such as open green spaces, may provide further viewing opportunities of the environment. The land use patterns identified within the VSA are further listed and described below.

Commercial/Institutional/Industrial Land Use

This land use dominates the southern and northwestern portions of the VSA, encompassing commercial and industrial buildings along Spagnoli Road, Smith Street, Broadhollow Road, and Marcus Drive. SUNY Farmingdale State College forms the primary institutional presence. Views in these areas are often confined by buildings, though limited distant views may be available where open areas or roadway alignments allow.

Residential Land Use

Residential development is concentrated in the east and southeast portions of the VSA near Ruland Road, Republic Road, Marcus Drive, and Deshon Drive. Housing density and minimal spacing between structures generally restrict outward views, with long-distance visibility primarily occurring along linear road corridors.

Forested Land Cover

Forested areas consist of mixed deciduous and coniferous vegetation occurring in small pockets or clusters, often within or adjacent to residential neighborhoods and open space. These areas largely obstruct views due to mature tree canopies, though isolated stands or less-dense vegetation may provide occasional glimpses of the broader landscape. Overall, this land-cover is notably concentrated east and south of the United States Postal Service (USPS) distribution center and within the northern quadrant of the SUNY Farmingdale Historic District.

Open Space Land Cover

While not explicitly considered a land-use in the VSA, open space land cover is described as open land with manicured lawn or scrub-shrub vegetation, such as cemeteries, green space, roadside verge, and small emergent wetlands. The most prominent example of this land use is the open fields and lawn within SUNY Farmingdale Campus. However, a multitude of localized open land cover is scattered throughout the VSA as road frontage. Typically, open land cover provides the best opportunity to view the landscape since there are fewer landscape elements that would preclude visibility; however, adjacent land uses may impact this condition.

2.4 Inventory of Visual Resources

An inventory of visual, cultural, and historic resources was developed in alignment with the DEC Visual Policy, which emphasizes evaluating publicly accessible locations that hold scenic, cultural, historical, or aesthetic value as formally recognized through planning documents, legislation, or state and national designations. The policy provides a structured approach for identifying such resources while explicitly excluding privately controlled or unofficially recognized sites that are not open to the general public. As a result, residential properties, private dwellings, and other non-public land uses are not considered visual resources under this framework.

To identify existing visual resources within the VSA, Geographic Information System (GIS) databases, federal and state agency records, and local planning documents were reviewed. The following visual, cultural, and historic resources within the VSA were inventoried:

- A property on or eligible for inclusion in the National or State Register of Historic Places [16 U.S.C. § 470a et seq., Parks, Recreation and Historic Preservation Law Section 14.07]
- State Parks [Parks, Recreation and Historic Preservation Law Section 3.09];
- NYS Heritage Areas [Parks, Recreation and Historic Preservation Law Section 35.15];
- The State Forest Preserve [NYS Constitution Article XIV];
- National Wildlife Refuges [16 U.S.C. 668dd], State Game Refuges and State Wildlife Management Areas [ECL 11-2105];
- National Natural Landmarks [36 CFR Part 62];
- The National Park System, Recreation Areas, Seashores, Forests [16 U.S.C. 1c];
- Rivers designated as National or State Wild, Scenic or Recreational [16 U.S.C. Chapter 28, ECL 15-2701 et seq.];

- A site, area, lake, reservoir or highway designated or eligible for designation as scenic [ECL Article 49 or DOT equivalent and APA. Designated State Highway Roadside];
- Scenic Areas of Statewide Significance [of Article 42 of Executive Law];
- A State or federally designated trail, or one proposed for designation [16 U.S.C. Chapter 27 or equivalent];
- Adirondack Park Scenic Vistas; [Adirondack Park Land Use and Development Map]
- State Nature and Historic Preserve Areas; [Section 4 of Article XIV of the State Constitution];
- Palisades Park; [Palisades Interstate Park Commission];
- Bond Act Properties purchased under Exceptional Scenic Beauty or Open Space category;
- National Heritage Areas [Each of the 49 designated NHAs has its own individual authorizing legislation]

Additionally, locally sensitive recreational, cultural, aesthetic, and historic resources were also reviewed and inventoried.

Properties identified in the visual resource inventory are listed in Table 3-A and 3-B below. The tables outline the identified resource with Map ID's that correspond to the viewshed analysis shown on Figure 1, USN numbers for historical resources, applicable municipality, governance of the resource, potential visibility from the resource, and the associated degree of visual effect associated with potential Project visibility.

As listed on Tables 3-A and 3-B, the only resources identified include one historic district that is eligible for inclusion on the National Register of Historic Places (NRHP), and three local resources. Eligible historic resources meet minimum criteria for potential inclusion to the NRHP record; however, not all eligible historic resources become officially registered.

Table 3-A. Historic Resource Inventory within VSA

Map ID (See Figure 1)	Historic Resource Name	USN	Municipality	Recognized as Federal (F) or State (S) Resource	Visibility of Proposed Project ¹	Anticipated Degree of Visual Effect at Resource
NRHP Eligible Districts						
HR1	SUNY Farmingdale Historic District	10304.001261	Town of Huntington	S	Yes	Low to Minimal

¹Potential visibility is obtained from the viewshed analysis using LiDAR data, which is proficient in calculating visual obstructions based on existing topography, trees, and buildings. Potential visibility may also be ascertained through the developed simulations, or by methods of onsite field verification.

Table 3-B. Visual Resource Inventory within VSA

Map ID (See Figure 1)	Visual Resource Name	City	Recognized as Federal (F), State (S), or Local (L) Resource	Visibility of Proposed Project ¹	Anticipated Degree of Visual Effect at Resource
Local Visual Resources					
LR1	Lower Melville Church and Cemetery	Town of Huntington	L	Yes	Low to Minimal
LR2	Shri Swaminarayan Mandir Hindu Temple	Town of Huntington	L	Partial - Parking Lot and Grounds Only	Minimal
LR3	SUNY Farmingdale State College	Town of Huntington	L	Yes	Low to Minimal

¹Potential visibility is obtained from the viewshed analysis using topography, trees, and buildings only. Potential visibility may also be ascertained through the developed simulations, or by methods of onsite field verification.

3.0 Visual Analysis Methodology

In addition to the visual resource inventory, the following visual analyses were also conducted to evaluate the extent and significance of the Project's visibility.

3.1 Viewshed Methodology

A viewshed analysis was prepared to evaluate the potential visual impacts of the Project against the existing landscape. The viewshed analysis identifies geographic areas within the VSA that

may experience any level of predicted visibility of the Project (see Figure 1). In general, closer vantage points typically provide greater opportunities for a visual effect, and distant views typically provide less.

To develop the visibility analysis, TRC leveraged ESRI Spatial and 3D Analyst GIS tools with Light Detection and Ranging (LiDAR) point cloud (LPC) data from the 2014 USGS Long Island New York Sandy LiDAR dataset. This data was obtained from the New York State GIS Clearinghouse LiDAR Download site. The analysis was further developed by establishing an observer height of 6 feet with the assumption that the Project would not be visible to a viewer who is standing amongst trees in a forested area. In this manner, predicted visibility was then computed within the VSA to represent a realistic and representative condition of the viewing environment. To view the discussion of the viewshed analysis results, please refer to Section 6.1.

3.1.1 Assumptions and Limitations of the Viewshed Model

The viewshed analysis identifies cells (image pixels) that contain elevation information and computes the differences along the terrain surface between an observer in the landscape and a target (e.g., building). This analysis assumes the viewer contains perfect observable conditions. Therefore, certain viewer limitations should be kept in mind when reviewing the visibility results:

1. The model assumes the observer will have perfect vision at all distances. Therefore, a certain amount of reasonable interpretation must be considered because of the limitations of human vision at greater distances or those atmospheric/meteorological conditions that may cause imperfect vision such as haze or inclement weather. Additionally, at greater viewing distances an object is naturally smaller and shows much less detail and will inherently have less visual impact. These aspects cannot be conveyed with this analysis.
2. If an area shows visibility, it does not mean the entirety of the Project will be visible from that area. The viewshed analysis does not specify whether a fraction, portion, or entirety of a component is visible, or the duration of the view, but rather determines if the Project is visible or not. For example, viewshed visibility may indicate that a fraction of the Project is potentially viewed, or that a larger portion may be seen.
3. The model was developed with the assumption that a viewer would not see the Project if standing among trees in forested areas as it is assumed the tree canopy would preclude outward-looking views.

3.2 Photo-simulation Methodology

Two photo-simulations (VP-1 and VP-2) were prepared to illustrate the appearance of the Project from adjacent roadways. The following methodologies were used to develop the simulations.

3.2.1 Site Photography

One site visit was conducted in January 2026 for the acquisition of photographs for purposes of documenting the quality of the existing environment and developing photo-simulations. Photographs were obtained from representative locations that provide the closest, most unobstructed view to the Project. In addition to site photography, Google Earth Streetview was utilized to evaluate the existing photographed landscape within the VSA to the extent possible. This process provided additional contextual viewing information about existing land uses as well as physical obstructions (e.g., existing vegetation, structures, and buildings) that may reduce or obscure views of the proposed Project.

3.2.2 Development of Photo-simulations

Photo-simulations were developed using Autodesk 3ds Max visualization software to correctly dimension the Project's 3D model into a select Viewpoint (VP) photograph, incorporating Project details, specifications, and plan drawings. Publicly available LiDAR elevation data was used to place the proposed structures on the exact geographic location and surface of the earth in the virtual model. The final computer-generated image of the proposed Project is then embedded within the digital photograph according to the physical camera's geographic location and optical specifications.

4.0 Viewer Characteristics

Viewer characteristics are important in understanding how people perceive landscapes, as these factors influence their visual attention to the environment. Areas where people live or enjoy amenities like parks and scenic views tend to have higher visual sensitivity, while industrial or commercial areas generally have lower sensitivity due to less reliance on environmental aesthetics. The following viewer types were identified:

Local Residents: These are people who live in the area and spend a significant amount of time there. They may view the environment briefly while traveling or for longer periods when stationary, such as sitting or standing.

Commuters: These individuals travel through the area primarily for work or business purposes. Their views of the environment are typically brief and transient.

Visitors/Recreational Users: These are people who visit the area for its natural beauty, cultural or historic features, recreational activities, or business. Their views may be fleeting while traveling or longer when stationary, such as resting in a park or fishing.

Additional Viewer Characteristics:

Viewer Sensitivity: Sensitivity varies based on location, objectives, and expectations. It is higher near visual changes and lower at a distance.

Number of Viewers: Sensitivity increases with the number of viewers. High-use areas like cities and dense urban centers have more viewers compared to rural or inaccessible areas.

Duration of View: The time spent viewing depends on activity. Moving viewers have fleeting views, while stationary viewers experience longer durations.

Viewer Activities: Viewer activities influence viewing time and focus. For example, drivers have brief views, while people walking or standing may have lengthened views of their environment.

Context of Viewer: Visual changes are less noticeable if they blend with the existing environment. Human-made features may distract attention from these changes. In other instances, a natural, harmonious environment may make man-made changes more noticeable.

5.0 Employed Mitigation Measures

The DEC Visual Policy recommends the employment of measures to avoid, mitigate, or offset visual and aesthetic impacts that may occur due to a proposed action, including screening, architectural design, and project color and visual offsets. As noted in Section 2.4, the DEC Visual Policy emphasizes impacts to publicly accessible designated scenic, cultural, historical, or aesthetic resources, while explicitly excluding privately controlled or unofficially recognized sites that are not open to the general public.

The screening mitigation proposed for the Project employs 10- to 12-foot-tall evergreen plantings (with potential to reach mature heights of 40 to 60 feet) to be installed along the southeast corner of the existing fenceline of the existing Ruland Road Substation, near the entrance gate. These plantings were selected for growth potential, annual screening benefit, and dense form that promises effective visual screening as they mature. There is also an existing opaque fence along Ruland Road that provides screening to a lower portion of the existing Substation components and proposed equipment.

The colors of the Project may vary per proposed component and manufacturer. However, in general, Project components such as the air core reactors, transmission poles, and bus work

depict a neutral grey, metallic surface, consistent with the adjacent existing Substation structures and equipment.

Visual offsets are another mitigatory measure that are typically reserved for unique circumstances when aesthetic impacts cannot be avoided. The DEC Visual Policy further elaborates that visual offsets should be employed where significant adverse impacts from a proposed action are unavoidable, or mitigation of other types would be economically infeasible, or mitigation is only partially effective.

Given the distance of the designated visual resources and intervening development and vegetation, visual screening, color modifications, and/or visual offsets would not significantly lessen or alter the extent of visibility from these resources.

6.0 Visual Assessment Results

The following sections summarize the findings of the viewshed analysis and impacts to designated visual resources.

6.1 Viewshed Analysis: Summary of Results

As mentioned in Section 3.0, a viewshed analysis was developed to predict potential visibility of the Project within the VSA. As shown within Table 4 below, the visibility results of the viewshed are quantified per municipality within the VSA. The proposed Project constitutes 17.0% of predicted visibility within the VSA, meaning 83.9% of the VSA will be shielded from the Project. The majority of Project visibility is predicted within the Town of Huntington (16.1%), while a small percentage of predicted visibility lands within the Town of Babylon (0.8%).

Table 4. Viewshed Results of Project within VSA

Community	Population in VSA (2020 Census Estimates)	Proposed Project		
		Total Acres in VSA	Acres of Predicted Visibility	Percent of Predicted Visibility within VSA ¹
Town of Huntington	3,132	528.81	94.01	16.1%
Town of Babylon	295	53.75	4.83	0.8%
Total	3,427*	582.56	98.84	17.0%

Community	Population in VSA (2020 Census Estimates)	Proposed Project		
		Total Acres in VSA	Acres of Predicted Visibility	Percent of Predicted Visibility within VSA ¹

**Population estimates are derived from Census Blocks within the VSA and do not account for the community's total population that occurs beyond the VSA extents. Census Blocks are used to calculate populations and may overlap areas in other jurisdictions; therefore, these estimates are conservative and may overestimate current populations.*

¹Potential visibility is obtained from the viewshed analysis using topography, trees, and buildings only. Potential visibility may also be ascertained through the developed simulations, or by methods of onsite field verification.

While predicted visibility is scattered throughout the VSA, it is more prevalent at closer distances (within 1,500 feet) to the Project. However, a few locations beyond 1,500 feet—such as the SUNY Farmingdale driving range, the existing transmission right-of-way, and segments of Broadhollow Road—contain concentrated areas of predicted visibility. Given that these locations are beyond 1,500 feet from the Project and that ground-level views are subject to intervening vegetation and structures, it is reasonable to expect that only taller portions of the proposed Project (transmission pole structures) would be seen.

Locations within 1,500 feet from the Project with an elevated amount of potential visibility are Broadhollow Road as well as parking lots adjacent to the road and Ruland Road. As discussed in Section 6.3, because of the vehicle speeds of travelers in conjunction with the limited viewing opportunities created by intervening buildings, vegetation, and parking lot infrastructure, motorists on Broadhollow Road (44,200 AADT) are expected to experience only brief and fragmented views of the Project, if at all since viewer focus and attention is expected to be forward facing while navigating on the road.

It is anticipated that most travelers on Ruland Road (10,999 AADT) will experience a brief and momentary view of the Project. A subset of residential roads (e.g., Cranberry Court, Hyacinth Court, Country Pointe Court) have predicted Project visibility. A precursory review of Google Earth Streetview photography revealed that an existing lattice structure (to be replaced with poles) is visible from limited areas on these subject roads. Therefore, it is anticipated that this lattice structure, when replaced with steel transmission poles, could be distinguishable by those residing or passing along the subject roads. However, most residents south of Ruland Road will not have visibility of the Project.

Overall, the Project's visibility (17.0%) is fairly limited within the VSA. As discussed above, in places where visibility occurs beyond 1,500 feet from the Project, the proposed changes are anticipated to be minor and consistent with the character of the existing area, which consists of the Substation and adjacent transmission right-of-way which contain aboveground utility

infrastructure. The largest visual effects of the Project are anticipated along parts of Ruland Road (including a few residences with existing views of the Substation), and a portion of Broadhollow Road near the existing transmission right-of-way.

6.2 Visual Resources: Summary of Results

As discussed in Section 2.4, an inventory of visual, cultural, and historic resources was completed in accordance with the DEC Visual Policy. This policy emphasizes the importance of evaluating publicly accessible locations that hold scenic, cultural, historical, or aesthetic value as formally recognized through planning documents, legislation, or state and national designations. In the VSA, a total of four resources received predicted visibility of the Project (within the Town of Farmingdale) and are further described as follows.

SUNY Farmingdale State College and NRHP Eligible Historic District (Map ID “HR1” & “LR3”)

The Suny Farmingdale State College was identified as a district eligible for listing on the NRHP, and was also identified as a local resource. This resource is located approximately 1,300 feet southwest of the Project. As shown in Figure 1, Project visibility is dispersed within the school’s golf driving range and adjacent field, and limited areas of Bioscience Park parking lot and road.

The existing view from the driving range consists of a large area of open lawn that is enclosed by several rows of mature tree vegetation, with portions of commercial and industrial buildings visible above the trees. Given that the Project is located half a mile from the golf range, and existing development intervenes views of the Project, it is anticipated that Project visibility would be limited to taller components (transmission pole structures). Recreational viewers at the golf range would have the ability to face the Project and potentially view limited portions of the proposed transmission pole structures, but most viewer’s attention will be focused on playing golf and the associated ball trajectory.

As indicated in Figure 1, segmented areas of potential Project visibility are scattered within the Bioscience Park parking lots and adjacent lawn. However, local residents, workers, and visitors within the parking lots and pertinent access roadways are unlikely to notice the Project as views will be focused on access to and from the buildings (facing west from the parking lots), in the opposite viewing direction of the Project (northeast).

Therefore, the Project is not expected to diminish the recreational activities and existing viewing environment at the SUNY Farmingdale State College campus.

Lower Melville Church and Cemetery (Map ID “LR1”)

The Lower Melville Church and Cemetery is a local resource located approximately 0.45 miles northwest of the Project along Walt Whitman Road. Project visibility is predicted around the

periphery of the church building and a small western section of the cemetery. The existing view from the church and cemetery towards the Project contains cluttered elements of local distribution poles, street light poles, road signage, and overhead wires. Given the distance of the Project and the presence of intervening development and vegetation, it is anticipated that limited Project components (portions of the transmission pole structures) may be visible, while shorter structures (e.g., air core reactors, bus work, etc.) would likely be obscured by existing buildings and vegetation. Therefore, the view of the Project would not degrade the quality of the existing view from this resource.

Shri Swaminarayan Mandir Hindu Temple (Map ID “LR2”)

Shri Swaminarayan Mandir Hindu Temple is a local resource located approximately 0.5 miles north-northeast of the Project along Ruland Road. Due to intervening trees along the western perimeter of the parking lot, most of the Project is obstructed; however, a small area of potential Project visibility is predicted within access roads to the parking lot (north of the temple). From this area, the tallest components of the Project (steel transmission poles) would appear juxtaposed with the existing transmission line structures and would likely be insignificant in scale to the larger structures in view. Therefore, the view of the Project would unlikely degrade the quality of the existing views from this resource.

6.3 Photo-simulations: Summary of Results

Two simulation locations were selected to demonstrate representative views of Project appearance (see Figure 3), as described below. Figure 3 presents the completed simulations under existing and proposed conditions. The simulations were prepared during leaf-off conditions when there is typically an absence of natural visual screening (tree foliage) and demonstrate the most visible condition. Given that the leaf-off condition is conservative, it is reasonable to assume that warmer seasonal (leaf-on) circumstances will result in decreased visibility due to interfering vegetation.

VP-1 – Ruland Road, near Hyacinth Court, Located Southeast of Project, Town of Huntington (Distance to Project: 255 Feet)

VP-1 was photographed at the entrance to the existing Substation from Ruland Road.

The VP-1 existing condition photograph depicts a small area of visibility along Ruland Road with a view into the Substation, beyond existing fencing and few shrubs. Substation infrastructure, equipment, and transmission structures are visible within the fenceline of the Substation. The

background of the photograph depicts some forested areas, which partially absorb some of the textures of the existing Substation components.

As shown in the proposed condition of VP-1, several new substation components are introduced and apparent within this view. A lattice structure within the Substation is replaced by two steel transmission poles. On the left side of the image, proposed equipment is juxtaposed with existing bus work within the Substation. From this view, grey cylindric shapes of the air core reactors are moderately noticeable within the overlapping structures. Overall, while the new equipment is discernable, it does not significantly alter the current view given the visibility of the existing Substation equipment and the existing character of the area.

Local residents and commuters from this part of Ruland Road will pass the Project in a fleeting manner and may glance at the changes within and adjacent to the Substation. A few residential dwellings on Ruland Road that are not screened by existing evergreens and vegetation may discern the Project for longer periods of time. Although, a vast majority of residential properties south of Ruland Road will not be subject to this perspective when oriented toward the Project.

VP-2 – Broadhollow Road, Located West-Southwest of Project, Town of Huntington (Distance to Project: 832 Feet)

VP-2 was photographed near an upholstery business on Broadhollow Road where Project visibility is predicted (see Figure 1). This VP was selected since it provides an unobstructed view to the Project through an open parking lot and is representative of the Project visibility along scattered segments of Broadhollow Road.

The VP-2 existing condition photograph depicts the entrance to a large parking lot associated with a nearby commercial property. Existing transmission infrastructure consisting of transmission lattice structures and poles are apparent within this view, beyond the parking lot. The existing Substation is only slightly visible beyond distance forested vegetation.

The proposed condition of VP-2 illustrates the replacement of two existing lattice tower structures (one within the Substation and one outside the Substation) with several new steel transmission poles. The proposed reactors are barely visible from this perspective, though the adjacent A-frame structures are apparent. The proposed Project results in visual improvements, as the complex geometric forms of the lattice towers are replaced with simpler, linear transmission poles. At the same time, the introduction of additional A-frame and transmission pole structures increases the overall presence of utility elements within the view. Viewers likely to experience this perspective include patrons of local businesses, local residents accessing nearby commercial parking lots and motorists traveling along Broadhollow Road. However, due to travel speed and the limited viewing windows created by intervening buildings, vegetation, and parking areas, motorists may only experience momentary and fragmented views of the Project.

Residents or visitors who enter or briefly remain in the commercial parking lot along Broadhollow Road would most likely notice the incremental change associated with the Project. Although the number of visible utility elements would increase, the overall character of the view remains consistent with existing conditions.

6.4 Visual Assessment: Conclusionary Discussion

Conclusions of the visual assessment are as follows.

1. The viewshed analysis shows that the Project is predicted to be visible from 17.0% of the VSA, with most visibility occurring within the Town of Huntington and only a small portion in Babylon. Visibility is greatest within 1,500 feet of the Project, particularly along Broadhollow Road, adjacent parking lots, and Ruland Road, where motorists are expected to experience only brief, fragmented, or momentary views due to travel speed and intervening buildings and vegetation. Residents that reside directly on Ruland Road who have existing views of the Substation will likely be subject to the most visual change associated with the Project; however, currently experience visibility of the existing Substation. Other nearby residential streets (Cranberry Court, Hyacinth Court, Country Pointe Court) may notice limited Project changes such as transmission structure replacements, but most residents south of Ruland Road will not see the Project. Beyond 1,500 feet, locations such as the SUNY Farmingdale driving range and scattered parts of Broadhollow, Spagnoli Road, etc., are predicted to have visibility of the Project; however, is expected to be limited to the transmission poles given intervening development and vegetation. The largest visual effect associated with the Project is anticipated along parts of Ruland Road (including a few residences with existing views of the Substation), and a limited section of Broadhollow Road by the existing transmission right-of-way (including private parking lots in the vicinity of the Project).
2. Two photo-simulations (VP-1 and VP-2) were developed to depict representing views of the Project from two locations:
 - a. VP-1 (Ruland Road) reveals that the proposed changes (located 255 feet from the observer) introduce new steel transmission poles and A-frame structures, replacing a single lattice structure. These additions result in an increase in line, form, and texture contrast within the view. However, the changes blend into the existing utility-dominated view, which already features substation infrastructure and transmission structures. From this perspective, a few residents without existing screening on Ruland Road would experience a view equivalent to the VP-

1 simulation over a prolonged period, though most viewer population are motorists passing the Project in a fleeting manner.

- b. At VP-2 (Broadhollow Road), located 832 feet from the Project, depicts the replacement of lattice structures with steel transmission poles. While these changes improve visual uniformity, they also increase the overall presence of utility elements within the view. The perspective, dominated by commercial and utility land uses, remains consistent with its existing character. Viewer impacts are limited, as motorists experience momentary and fragmented views due to intervening buildings and vegetation, and only those entering the nearby parking lot may notice the incremental changes more distinctly.
3. Visual, historic, and local resources were investigated within the VSA. In total, four visual resources were identified within the VSA. Anticipated effects to these resources are as follows:

SUNY Farmingdale State College & NRHP Eligible Historic District (Map ID: HR1 & LR3)

- Limited visibility from golf driving range, adjacent field, and portions of Bioscience Park parking lots.
- Only tallest structures (steel monopoles) may be visible due to distance and screening.
- View is expected to retain character of open fields and trees with background consisting of existing development; Project is expected to have low to minimal visual effect.
- Recreational use and the general campus viewing environment will likely be minimally affected.

Lower Melville Church & Cemetery (Map ID: LR1)

- Minor visibility predicted along the church perimeter and a small section of cemetery.
- Existing views currently depict utilities, road signage, wires, and commercial buildings.
- Only the tallest Project components are likely to be visible; however, with distance and visual clutter of existing man-made development, the visual effect is expected to be underwhelming and easily overlooked by visitors/residents.

Shri Swaminarayan Mandir Hindu Temple (Map ID: LR2)

- A substantial area of the temple's parking lot is screened by existing trees located west of the parking lot. The Project may be potentially visible from the temple access drive.
- While Project infrastructure may be visible, it is expected to be substantially consistent to the current view which consists of existing transmission structures.

- Minimal visibility and negligible visual effects are anticipated, and visitors/residents are unlikely to notice the Project.

The visual assessment demonstrates that although the Project introduces new utility infrastructure, it is consistent with the existing utility land uses in the VSA. While the new structures result in incremental changes to the local environment, the vast majority of population in the VSA will not be affected by the Project and the changes associated with the Proposed will not result in any substantial adverse impacts to the character of the area.

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