Sunrise Wind Farm Project

Appendix U Onshore Above-ground Historic Properties Report

Prepared for:



Technical Report

Onshore Above-Ground Historic Properties Report

Sunrise Wind Onshore Facilities

Town of Brookhaven, Suffolk County, New York

Prepared for:

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1.0 INTRODUCTION

1.1 Purpose of the Investigation

Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR) was retained by Sunrise Wind LLC (Sunrise Wind, or the Applicant) to prepare an assessment of potential impacts to above-ground historic properties for the proposed Onshore Facilities associated with the Sunrise Wind Farm Project (the Project). This Report has been prepared in support of the Sunrise Wind federal Construction and Operations Plan (COP) as well as the Sunrise Wind application for a Certificate of Environmental Compatibility and Public Need under Article VII of the New York State Public Service Law for the portions of the Project within New York State (the Sunrise Wind New York Cable Project). Onshore Facilities associated with the Project include:

- Onshore Transmission Cable and associated transition joint bays (TJBs);
- Fiber optic cable co-located with the Onshore Transmission and Onshore Interconnection Cables;
- Onshore Converter Station (OnCS–DC) located at the Union Avenue Site; and
- Onshore Interconnection Cable.

These Onshore Facilities will be located in the Town of Brookhaven, Suffolk County, New York. This report addresses the potential visual impacts to above-ground historic properties associated with the only visible component of the Onshore Facilities, which is the proposed OnCS–DC. The locations under evaluation for the proposed OnCS–DC are shown on Figure 1.1-1.

The remaining Onshore Facilities are proposed to be buried underground and may involve only temporary visual effects associated with the construction and decommissioning phases of the Project. Installation of the Onshore Transmission Cable will generally require excavation of a trench within a temporary disturbance corridor. The Onshore Transmission Cable will be installed within a concrete duct bank buried to a depth consistent with local utility standards. From the OnCS–DC, the Onshore Interconnection Cable will also be installed underground within a duct bank to the Holbrook Substation.

The purpose of this report is to evaluate the potential visual effects of the OnCS–DC on above-ground historic properties listed in, or potentially eligible for listing in, the State and/or National Register of Historic Places (S/NRHP) located within areas of potential OnCS–DC visibility. This report also includes an evaluation of the potential visibility and visual impact associated with the installation and operation of the OnCS–DC. The analysis included herein is limited to onshore, above-ground historic properties that have been determined eligible for listing on the S/NRHP, as well as above-ground historic properties that have not been formally evaluated for S/NRHP eligibility and are potentially S/NRHP-eligible. A separate Historic Resources Visual Effects Assessment (HRVEA) has been completed for the offshore portion of the Project and is included as Appendix T to the Project's Construction and Operations Plan (COP). This report is intended to supplement the HRVEA to provide interested parties with a comprehensive analysis of potential effects on above-ground historic properties resulting from the Project.



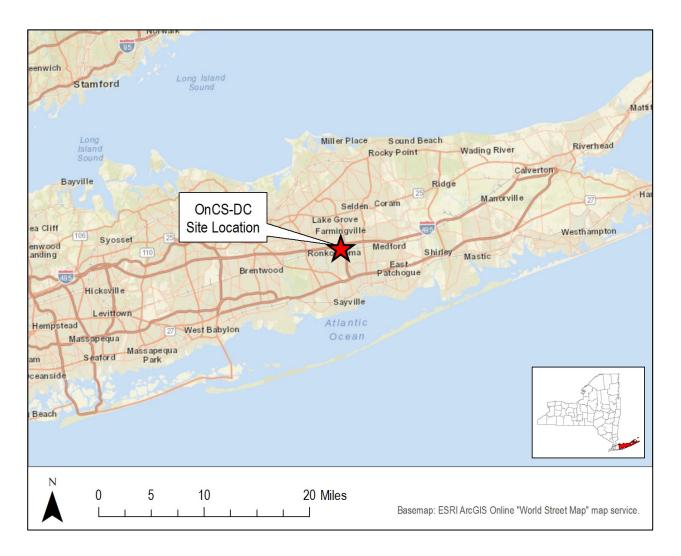


Figure 1.1-1. Regional Location of the OnCS-DC.

1.2 OnCS-DC Location and Description

The proposed OnCS-DC is located in the hamlet of Holbrook, Town of Brookhaven, Suffolk County, New York at the Union Avenue Site.

Union Avenue Site: Located on the south side of Union Avenue in the Town of Brookhaven, this 8-acre (3.2-ha) site includes two parcels. The site is bound to the north by Union Avenue; to the east by commercial development; to the south by the Long Island Railroad and commercial development; and to the west by commercial and industrial development.

The Project is in discussion with the owners regarding acquisition or lease of the properties for the Project.

The entire station footprint area will be graveled and surrounded by a 7 ft-(2.1 m-) high fence topped with a 1 ft-(0.3 m-) tall, barbed wire extension for a total height of 8 ft (2.4 m). Access will be provided through a minimum of one drive-through gate and one walk-through gate. Vegetative screening of the site will be provided as needed subject



to New York permitting requirements. General yard lighting will be provided within the site for assessment of equipment. In general, yard lighting will be minimal at night and subject to state and local requirements unless there is work in progress on site or lights are required for safety and security purposes. Station equipment and structures will be supported on foundations expected to be of concrete and will be of a design suitable for existing soil conditions. The majority of the site equipment will require shallow foundations, 4 to 5 ft (1.2 to 1.5 m) in depth based on the expected equipment size. Larger structures may require drilled shaft equipment foundations of 12 to 30 ft (4 to 9 m) in depth. The tallest components within the OnCS–DC are the lightning masts, which measure approximately 100 feet (30 meters) above ground level (AGL).

1.2.1 Historic Resources Study Area and Preliminary Area of Potential Effects

To assess potential visual effects to historic properties, EDR defined an Historic Resources Study Area (HRSA) extending 1 mile from the OnCS–DC. Although above-ground transmission infrastructure in New York State typically requires a 3-mile study area for an assessment of visual impacts, based on the relatively low height and minimal potential visual impact of the proposed OnCS–DC, as well as the results of above-ground historic properties assessments for above-ground transmission infrastructure prepared in support of previous offshore wind projects in New York State (EDR, 2018), a 1-mile study area for the proposed OnCS–DC was considered sufficient. While visibility beyond 1 mile may be possible, the nature and degree of potential visual impacts will be minimal beyond 1 mile due to the similarity in scale and general type of the proposed converter station with existing infrastructure and land uses at the proposed location, as well as significant screening of potential OnCS–DC visibility by area topography (see Figure 1.2-1). The 1-mile HRSA includes approximately 4.1 square miles within the Towns of Brookhaven and Islip, Suffolk County, New York.

To determine the geographic areas of potential visibility of the OnCS–DC, EDR used a lidar-based viewshed analysis (see Figure 1.2-1). This analysis considers the height of the support facility's components along with a digital surface model representing ground level elevations, vegetation, and structures present in the HRSA. A geographic information systems (GIS) analysis considers whether a direct line of sight is available from ground level vantage points to the facility. If a direct line of sight is available, the position is coded as visible. Additional information about the methodologies employed to create the viewshed analysis are set forth in the Visual Resources Assessment (VRA) for Onshore Facilities (EDR, 2020a). Heights used in the viewshed calculations were based on the 100-foot-tall lightning masts, the tallest visible component of the OnCS–DC.

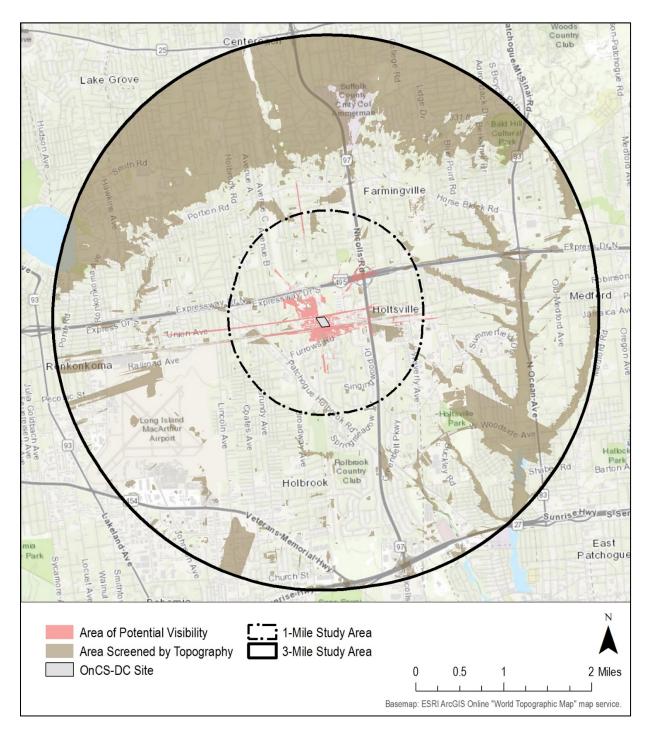


Figure 1.2-1 OnCS-DC Viewshed Analysis Results.

Under Section 106 of the NHPA, the geographic scope of review of a given project (or undertaking) is determined based on the project's Area of Potential Effects (APE), defined as follows:

Area of potential effects means 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. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking (CFR, 2004).



The APE is formally determined by the responsible federal agency in consultation with relevant SHPOs and THPOs as the area in which Project components may have a potential visual effect on above-ground historic properties. For the purpose of this report, the Preliminary Area of Potential Effects (PAPE) used in this assessment is defined as all areas of potential OnCS–DC visibility within the HRSA.

EDR's evaluation of OnCS–DC potential visual effect on above-ground historic properties is consistent with the methodology used for the Onshore VRA (EDR, 2020a), Offshore Visual Impact Assessment (EDR, 2020b), and HRVEA (EDR, 2020c) completed for the Project. To identify historic properties, EDR conducted a desktop review of state and federal agency records, GIS databases, previous cultural resources surveys, and historical collections to develop an inventory of previously identified historic properties within the HRSA. Specifically, EDR reviewed the New York State Historic Preservation Office (SHPO) Cultural Resource Information System (CRIS) to determine whether previously identified above-ground historic properties are located within or adjacent to the proposed OnCS–DC. The viewshed analysis (described in Section 1.2.1) was then applied to determine which specific above-ground historic properties were located within the PAPE (i.e., within areas where there is a theoretical potential for visibility of the OnCS-DC).

The existing buildings within the Union Avenue Site would be demolished as part of the construction of the proposed OnCS–DC. A review of historic aerial imagery and publicly available mapping indicates the buildings within the western parcel were constructed between 1962 and 1978 and expanded to their current size by 1984, and the buildings on the eastern parcel were constructed between 1984 and 2001 (Suffolk County, 2020).

Due to being less than 50 years of age, and based on a review of available imagery and field reconnaissance (see Figures 1.2-2 through 1.2.4), the buildings on the eastern parcel do not appear to be historically or architecturally significant. Although some of the buildings on the western parcel may be 50 years or older in age, based on a review of available imagery and field reconnaissance, none appear to be architecturally significant, and have no known historic associations. Therefore, demolition of the buildings within the Union Avenue Site is not anticipated to impact any above-ground historic properties and the discussion of any potential impacts associated with the construction of the OnCS–DC is limited to visual impacts.





Figure 1.2-2. One-story office constructed circa 1962-1978, with one-story addition constructed circa 1984-2001, 608 Union Avenue, view to the north.



Figure 1.2-3. Warehouse complex constructed circa 1978-1984, 608 Union Avenue, view to the southeast.



Figure 1.2-4. One-story concrete block service building and steel-framed shed constructed circa 1984-2001, 612 Union Avenue, view to the south.

1.2.2 Previously Identified Above-Ground Historic Properties

A total of one previously identified above-ground historic property is located within the PAPE of the proposed OnCS-DC. Waverly Cemetery, located approximately 0.7- mile from the proposed OnCS-DC, has not been formally evaluated by SHPO for S/NRHP eligibility. However, for the purposes of assessing potential visual effects, this above-ground historic property was treated as *potentially* eligible for listing in the S/NRHP. No above-ground historic properties listed in the S/NRHP or National Historic Landmarks (NHLs) were identified within the PAPE. The location of the previously identified above-ground historic property within the PAPE is indicated on Figure 1.2-5.

¹ The previously identified Milone House/Former School No. 32 (SHPO USN 10302.001032) at 1033 Waverly Avenue was determined to be no longer extant during field survey, and is therefore not included in this assessment of potential visual effects.

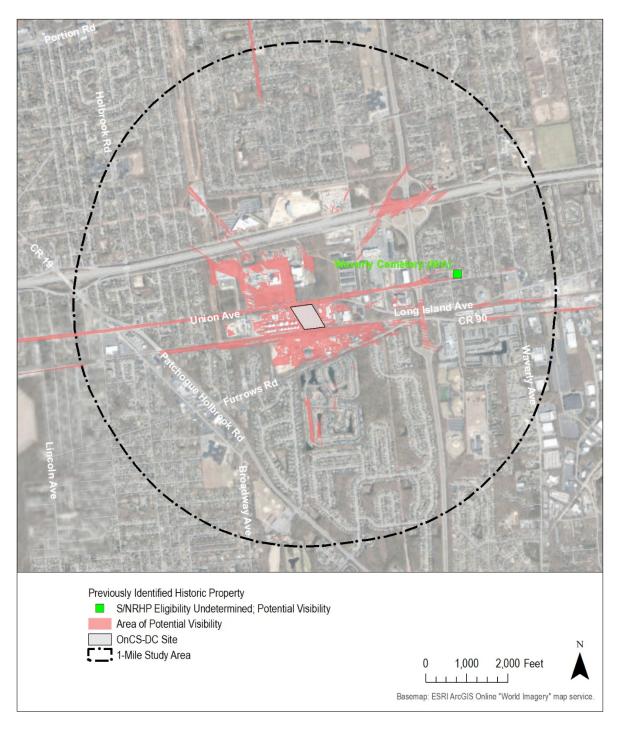


Figure 1.2-5. Previously Identified Above-Ground Historic Properties Located Within the OnCS-DC PAPE.



2.0 ABOVE-GROUND HISTORIC PROPERTIES SURVEY

A survey to identify any additional above-ground historic properties within the OnCS–DC PAPE was conducted on June 17, 2020. The survey was conducted by a professional who satisfies the qualifications per the Secretary of the Interior's Standards for Historic Preservation (36 CFR 61; CFR 2004). The condition and integrity of all above-ground historic properties located within the OnCS–DC HRSA were evaluated based solely on the visible exterior of the properties as viewed from the public right-of-way. This included photographs of the individual properties and field notes describing the style, physical characteristics and materials, condition, physical integrity, and other noteworthy characteristics for each property.

2.1 Above-Ground Historic Properties Survey Results

No additional above-ground historic properties were identified within the OnCS-DC PAPE as part of the field reconnaissance.

The Waverly Cemetery (SHPO USN N/A) is an approximately 1.85-acre cemetery located approximately 0.6-mile east of the proposed OnCS–DC on the northeast corner of Washington and Union Avenues in the hamlet of Holtsville, New York. The cemetery was established circa 1862, is comprised of approximately 370 burials and appears to be active (Find A Grave 2020; Suffolk County 2020). The cemetery appears to be in generally good condition and appears to be well-maintained though some dislodged grave markers were observed. The cemetery is lined with mature trees that screen outward views to the north, west and east (see Inset 2.1-1).



Figure 2.1-1. View to the north into Waverly Cemetery from Union Avenue. Photograph by EDR, June 17, 2020.

Historic maps (Hyde, 1915) indicate the portion of Union Avenue between the hamlets of Holbrook and Holtsville was previously known as "Cemetary Road" (sic), presumably for the presence of Waverly Cemetery. Based on its age and historic function as an active cemetery within the Town of Brookhaven for over 150 years, Waverly Cemetery may satisfy National Register eligibility criteria, particularly criteria consideration D (NPS, 1990):



Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past fifty years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

d. a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, from association with historic events

However, additional research is needed regarding the history of the cemetery and to determine if any historically significant persons have been interred there.



3.0 VISUAL EFFECTS ANALYSIS

Construction of the OnCS–DC will not require the demolition or physical alteration of any historic buildings or other above-ground historic properties. Potential effects of the OnCS–DC on a given historic property would be a change in the property's visual setting resulting from the introduction of new visible infrastructure. As it pertains to historic properties, *setting* is defined as "the physical environment of a historic property" and is one of seven aspects of a property's *integrity*, which refers to the "ability of a property to convey its significance" (NPS 1990). The other aspects of integrity include location, design, materials, workmanship, feeling, and association (NPS 1990).

Section 106 of the National Historic Preservation Act requires Federal agencies to consider the effects of their actions on historic properties that are listed or meet the eligibility criteria for listing in the NRHP. Per Section 106 § 800.5 (a)(1), the assessment of adverse effects on an historic property requires the following steps:

Apply criteria of adverse effect. In consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to identified historic properties, the agency official shall apply the criteria of adverse effect to historic properties within the area of potential effects. The agency official shall consider any views concerning such effects which have been provided by consulting parties and the public.

Criteria of adverse effect. An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative. (CFR 2004).

Per Section 106 § 800.5 (a)(2)(i-vii), adverse effects on historic properties include, but are not limited to:

- (i) Physical destruction of or damage to all or part of the property;
- (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines;
- (iii) Removal of the property from its historic location:
- (iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features:
- (vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- (vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance. (CFR, 2004)

The primary potential for adverse effects on above-ground historic properties resulting from the OnCS–DC would be consistent with § 800.5(a)(2)(v), with the "[i]ntroduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features" (CFR, 2004). The potential effect on the visual setting for any historically significant property is dependent on a number of factors, including the characteristics of the property qualifying it for listing in the S/NRHP, distance between the property and the new visual elements, visual dominance,



orientation of views, viewer context and activity, and the types and density of modern features in the existing view (such as buildings/residences, overhead electrical transmission lines, cellular towers, billboards, highways, and silos). The relevance of the affected setting to the significance of the historic property is also an important consideration. For example, historic properties significant primarily as examples of important engineering or architectural characteristics may be less sensitive to alterations to their historic setting if the physical environment surrounding such properties was inconsequential to their design, construction, or historic uses. Likewise, the compatibility of the new visual elements with the historic and natural elements of the setting of a historic property is a critical element in the assessment of potential adverse effects.

As noted previously, the potential visual effect of the proposed OnCS–DC on above-ground historic properties is based on the viewshed analysis showing potential visibility within 1 mile of the OnCS–DC.

3.1 Visibility of the Onshore Converter Station

The viewshed analysis suggests that visibility associated with the OnCS–DC will be restricted to the immediate vicinity and portions of the proposed OnCS–DC, with some areas of visibility located along major transportation corridors within the HRSA (see Figure 1.2-2). The viewshed analysis indicated that approximately 0.24-square mile, or 5.7 percent, of the HRSA would have visibility of the proposed facility. The majority of areas within the 1-mile HRSA are generally screened from view due to the presence of existing development combined with vegetative screening.

3.2 Visual Effect on Historic Properties

The viewshed analysis resulted in the identification of one previously identified historic property located within 1 mile of the OnCS–DC and within the PAPE.

The Waverly Cemetery (SHPO USN N/A) is an approximately 1.85-acre cemetery located approximately 0.6-mile east of the proposed OnCS–DC on the northeast corner of Washington and Union Avenues in the hamlet of Holtsville, New York. The cemetery was established circa 1862 and is comprised of approximately 370 burials (Find A Grave 2020; Suffolk County 2020). Additional research is needed to determine the historic significance of the cemetery. Based on the viewshed analysis, potential visibility will be limited to the area along Union Avenue at the southern edge of the cemetery boundary. Field reconnaissance (see Section 2.1) indicated the cemetery is lined with mature trees that screen outward views to the north, west and east and no visibility is anticipated to occur within the cemetery. In addition, views from the cemetery entrance along Union Avenue looking toward the OnCS–DC are framed by mature trees and existing transmission infrastructure that would likely screen any views of the OnCS–DC (see Inset 3.2-1). The limited visibility, and current conditions and heavily screened outward views from the cemetery would offset any potential visual impacts to the cemetery resulting from the OnCS–DC.



Figure 3.2-1. View to the west from Waverly Cemetery entrance along Union Avenue. Photograph by EDR. June 17, 2020.



4.0 SUMMARY AND CONCLUSIONS

4.1 Summary of Visual Effects on Historic Properties

Construction of the OnCS–DC will not require the demolition or physical alteration of any historic buildings or other above-ground historic properties. No direct physical effects to above-ground historic properties will occur as a result of the OnCS–DC. The OnCS–DC's effect on a given above-ground historic property would be a change (resulting from the introduction of new buildings and structures) in the property's visual setting. The OnCS–DC would introduce new structures into the landscape. However, at a maximum height of 100 feet (lighting masts only), the proposed OnCS–DC will not be out of scale or character with the existing types of development currently present in the vicinity. As such, it is anticipated that the OnCS–DC will not result in visual impacts, and will have no adverse effects to the previously identified above-ground historic property present in the OnCS–DC PAPE.

Review of the records of state and federal agencies, GIS databases, previous cultural resources surveys, and historical collections identified one previously reported historic property within the PAPE of the proposed OnCS—DC. This property has not been given a formal S/NRHP eligibility determination but was considered potentially S/NRHP-eligible for the purposes of this assessment. No properties listed on the S/NRHP or NHLs were identified within the HRSA. No undocumented above-ground historic properties were identified within the OnCS—DC PAPE during field reconnaissance.

4.2 Conclusions

Based on the viewshed analysis prepared for this Project, it is anticipated that the OnCS–DC will not have a visual effect, and will have no adverse effects, on the previously identified above-ground historic property located within the PAPE. The proposed OnCS–DC will be a new man-made feature built near previously developed areas with existing infrastructure.

Based on the viewshed analysis, potential visibility will be limited to the area along Union Avenue at the southern edge of the boundary of Waverly Cemetery. Field reconnaissance determined any potential visibility from Union Avenue would likely be screened by existing vegetation and transmission infrastructure, and no visibility is anticipated to occur within the cemetery due to the presence of mature deciduous trees screening any outward views toward the OnCS–DC. The limited visibility, and current conditions and heavily screened outward views from the cemetery would offset any potential visual impacts to the cemetery resulting from the OnCS–DC.





5.0 REFERENCES

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