

Sunrise Wind - Appendix J: Finding of Adverse Effect for Historic Properties and Draft Memorandum of Agreement

Finding of Adverse Effect for Historic Properties and Draft Memorandum of Agreement

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U.S. Department of the Interior
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LIST OF ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
ADLS	aircraft detection lighting systems
APE	area of potential effects
ASLF/s	ancient submerged landscape feature/s
BOEM	Bureau of Ocean Energy Management
CHRVEA	Cumulative Historic Resources Visual Effects Analysis
COP	Construction and Operations Plan
EIS	Environmental Impact Statement
Finding	finding of adverse effect
IPFs	impact-producing factors
km	kilometer
Lease Area	Renewable Energy Lease Area OCS-A 0487
MARA	Marine Archaeological Resources Assessment
MHC	Massachusetts Historical Commission
MOA	Memorandum of Agreement
MW	megawatt
NOI	notice of intent
NP&EDC	Nantucket Planning & Economic Development Commission
NPS	National Park Service
Tribes	Native American Tribes
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
nm	nautical miles
NRHP	National Register of Historic Places
OCS-DC	offshore converter station
OnCS-DC	onshore converter station
PA/s	programmatic agreement/s
PAPE	preliminary area of potential effect
PDE	Project Design Envelope
Project	Sunrise Wind Farm Project
RCG&A	R. Christopher Goodwin & Associates, Inc.
SAP	site assessment plan
SHPO/s	State Historic Preservation Officer/s
SEARCH	SEARCH, Inc.
Secretary	Secretary of the Interior
SRW	Sunrise Wind, LLC
SRWF	Sunrise Wind Farm
TARA	Terrestrial Archaeological Resources Assessment
Tribes	Native American Tribes
WTG	wind turbine generator

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INTRODUCTION

The Bureau of Ocean Energy Management (BOEM) has made a finding of adverse effect (Finding), for the Sunrise Wind Farm (SRWF) Project (the Project) pursuant to 36 CFR 800.5, in compliance with Section 106 of the National Historic Preservation Act (NHPA, 54 USC 306108). The SRWF is located in federal and New York State waters in Lease Area OCS-A 0487. BOEM finds that the implementation of the Project would adversely affect the 47 historic properties listed below, introducing visual effects and adding to cumulative visual effects from wind turbine generator (WTG) visibility.

Town of Aquinnah, Massachusetts:

- Gay Head Light (National Register of Historic Places [NRHP] Listed Resource)
- Gay Head – Aquinnah Shops Area (Massachusetts Historical Commission [MHC] Historic Inventory Site)
- Vanderhoop, Edwin DeVries Homestead (NRHP Listed Resource)
- Cooper, Tom House (MHC Historic Inventory Site)
- Gay Head – Aquinnah Coast Guard Station Barracks (MHC Historic Inventory Site)
- Haskins, Theodore House (MHC Historic Inventory Site)
- Gay Head – Aquinnah Town Center Historic District (NRHP-Listed Resource)
- 3 Windy Hill Drive (MHC Historic Inventory Site)
- 71 Moshup Trail (MHC Historic Inventory Site)
- Vanderhoop, Leonard House (MHC Inventory Site)
- Vineyard Sound and Moshup’s Bridge Traditional Cultural Property (TCP) (NRHP-eligible Resource)

Town of Chilmark, Massachusetts:

- Hancock, Capt. Samuel – Mitchell, Capt. West House (NRHP-Eligible Resource)
- Flanders, Ernest House, Shop and Barn (MHC Historic Inventory Site)
- Hancock, Russell House (MHC Historic Inventory Site)
- Mayhew, Simon House (MHC Historic Inventory Site)
- Flaghole (MHC Historic Inventory Site)

Town of Edgartown, Massachusetts:

- Chappaquiddick Island TCP (NRHP-Eligible Resource)

Town of West Tisbury, Massachusetts:

- Scrubby Neck Schoolhouse (MHC Historic Inventory Site)

Town of Narragansett, Rhode Island:

- Point Judith Lighthouse (NRHP-Listed Resource)

City of Newport, Rhode Island

- Bellevue Avenue Historic District (National Historic Landmark [NHL])
- Ocean Drive Historic District (NHL)

- The Breakers (NHL)

Town of New Shoreham, Rhode Island:

- Block Island North Light (NRHP-Listed Resource)
- Corn Neck Road (NRHP-Eligible Resource)
- Hippocampus/Boy's Camp/Beane Family (NRHP-Eligible Resource)
- Mitchell Farm (NRHP-Eligible Resource)
- Champlin Farm (NRHP-Eligible Resource)
- Indian Head Neck Road (NRHP-Eligible Resource)
- Island Cemetery/Old Burial Ground (RI Historical Cemetery)
- Beach Avenue (RI Historical Cemetery)
- Old Harbor Historic District (NRHP-Listed Resource)
- Beacon Hill (NRHP-Eligible Resource)
- Spring House Hotel (NRHP-Eligible Resource)
- Spring House Hotel Cottage (NRHP-Eligible Resource)
- Capt. Welcome Dodge Sr. House (NRHP-Eligible Resource)
- Spring Street (NRHP-Eligible Resource)
- Caleb W. Dodge Jr. House (NRHP-Eligible Resource)
- WWII Lookout Tower – Spring Street (NRHP-Eligible Resource)
- Pilot Hill Road and Seaweed Lane (NRHP-Eligible Resource)
- WWII Lookout Tower at Sands Pond (NRHP-Eligible Resource)
- Lewis-Dickens Farm (NRHP-Eligible Resource)
- Block Island Southeast Lighthouse Historic Landmark (NHL)
- Miss Abby E. Vaill/1 of 2 Vaill Cottages (NRHP-Eligible Resource)
- Hon. Julius Deming Perkins/Bayberry Lodge (NRHP-Eligible Resource)
- Mohegan Cottage/Everett D. Barlow House (NRHP-Eligible Resource)
- Capt. Mark L. Potter House (NRHP-Eligible Resource)
- New Shoreham Historic District (Local Historic District)

Additionally, in the Construction and Operations Plan (COP), Sunrise Wind, LLC (SRW) has identified a single maritime historic property within the area of potential effect (APE) where construction activities would not be able to avoid physical disturbance. Therefore, BOEM has determined that Ancient Submerged Landform Feature (ASLF) WEA_P-22 will be adversely affected.

PROJECT OVERVIEW

Sunrise Wind, LLC (SRW) submitted a COP on September 1, 2020, to BOEM proposing the construction and installation, operations and maintenance, and conceptual decommissioning of offshore wind energy

facilities for the Sunrise Wind Farm (SRWF) project. The Sunrise Wind COP calls for up to 122 WTGs, an offshore converter station (OCS-DC), and inter-array cables within Commercial Lease Area OCS-A 0487 approximately 16.4 nautical miles (nm; 30.4 kilometers [km]) south of Martha's Vineyard, Massachusetts, 26.5 nm (48.1 km) east of Montauk, New York, and 14.5 nm (26.8 km) from Block Island, Rhode Island. The COP also includes an offshore transmission cable making landfall on Long Island, New York, an onshore interconnection cable to Long Island Power Authority Holbrook Substation, and an onshore converter station (OnCS-DC).

In October 2021, SRWF informed BOEM that they intended to revise the maximum number of WTGs for the project due to a maximum capacity limitation for infrastructure to receive power. Under the proposed change, the SRWF project calls for up to 102 WTG positions. As a result, Sunrise Wind submitted a revised COP proposing the construction, operation, and eventual decommissioning of the Project, with up to 102 WTGs with a nameplate capacity of 11 megawatts (MWs), OCS-DC, inter-array cables, OnCS-DC, an offshore transmission cable making landfall on Long Island, New York, and an onshore interconnection cable to the Long Island Power Authority Holbrook Substation.

SRWF is utilizing a project design envelope (PDE) in its COP, which represents a reasonable range of design parameters that may be used for the Project. In reviewing the PDE, BOEM is analyzing the maximum impacting scenario that could occur from any combination of the contemplated parameters. BOEM's analysis and review of the PDE may result in the approval of a project that is constructed within that range or a subset of design parameters within the proposed range.

If approved by BOEM, SRWF would be allowed to construct and operate offshore WTGs, an export cable to shore, and associated facilities for a specific term. BOEM is now conducting its environmental and technical reviews of the COP and has published a draft environmental impact statement (EIS) under the National Environmental Policy Act (NEPA) for its decision regarding approval of the plan (BOEM 2022). The EIS information for the Project, including the revised COP, are available at <https://www.boem.gov/renewable-energy/state-activities/sunrise-wind-activities>. The EIS considers reasonable foreseeable impacts of the proposal, specifically analyzing impacts to cultural resources, including historic properties. BOEM is in the process of completing the final EIS on the Project at the time of this Finding release, and the Finding is consistent with final EIS information to date.

BACKGROUND

The Project is within a commercial lease area that has received previous Section 106 review by BOEM regarding the issuance of the commercial lease and approval of site assessment activities and is subject to two prior programmatic agreements (PAs): *Programmatic Agreement Among The U.S. Department of the Interior, Bureau of Ocean Energy Management; The State Historic Preservation Officers of Massachusetts and Rhode Island; The Mashpee Wampanoag Tribe; The Narragansett Indian Tribe; The Wampanoag Tribe of Gay Head (Aquinnah); and The Advisory Council on Historic Preservation; Regarding the "Smart from the Start" Atlantic Wind Energy Initiative: Leasing and Site Assessment Activities offshore Massachusetts and Rhode Island* (<http://www.boem.gov/MA-RI-PA-Executed>) and *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* (<http://www.boem.gov/NY-NJ-Programmatic-Agreement-Executed>).

In 2012, BOEM executed a PA among the State Historic Preservation Officers (SHPOs) of MA and RI, the Advisory Council on Historic Preservation (ACHP), the Mashpee Wampanoag Tribe, the Narragansett Indian Tribe, and the Wampanoag Tribe of Gay Head (Aquinnah) (see www.boem.gov/MA-RI-PA-Executed) and concurrently conducted a Section 106 review of its decision to issue commercial leases within the RI-MA WEAs. Additionally, in 2016, BOEM executed a PA among the SHPOs of New York and New Jersey and the ACHP to consider renewable energy activities offshore NY-NJ (see www.boem.gov/NY-NJ-Programmatic-Agreement-Executed). In 2013, BOEM prepared an environmental assessment to analyze the environmental impacts associated with issuing commercial wind leases and approving site assessment activities within the RI-MA WEAs.

On July 31, 2013, BOEM conducted a competitive auction and awarded Lease OCS-A 0487, consisting of about 67,250 acres, to Deepwater Wind New England, LLC. On August 3, 2020, Deepwater Wind New England, LLC assigned Lease OCS-A 0487 to Sunrise Wind, LLC. On September 3, 2020, Bay State Wind, LLC assigned 100 percent of its record title interest in a portion of lease OCS-A 0500, which BOEM designated OCS-A 0530, to Sunrise Wind, LLC. On March 15, 2021, BOEM completed the consolidation of lease OCS-A 0530 into Lease OCS-A 0487 through an amendment to Lease OCS-A 0487. The resulting lease area is 109,952 acres. The effective date of lease OCS-A 0487 remains October 1, 2013. On September 18, 2018, Deepwater Wind New England, LLC requested an extension of the site assessment term for commercial lease OCS-A 0487 pursuant to 30 CFR 585.235(b). BOEM approved a 3.5-year extension of the site assessment term, from July 1, 2019, to January 1, 2023, on October 23, 2018.

Subsequent to award of the lease, SRWF submitted a site assessment plan (SAP) describing the proposed construction, operation, maintenance, and decommissioning of a stand-alone offshore meteorological data collection system. BOEM had previously determined that approval of SAP constitutes an undertaking subject to review under Section 106 of the NHPA. BOEM conducted a NHPA Section 106 review of the proposed SAP and resulting in the September 21, 2016, Finding of No Historic Properties Affected for Approval of the Deepwater Wind Site Assessment Plan on the Outer Continental Shelf Offshore Rhode Island (<https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/HP/RI-SAP-Finding.pdf>).

UNDERTAKING

BOEM has determined that approval, approval with modification, or disapproval of the COP constitutes an undertaking subject to Section 106 of the NHPA and its implementing regulations (36 CFR 800) and that the activities proposed under the COP have the potential to affect historic properties. Detailed information about the Project, including the COP and its appendices, can be found on BOEM's website (see <https://www.boem.gov/renewable-energy/state-activities/sunrise-wind-activities>). Confidential appendices to the COP reference in this document, and their revisions, were provided to all consulting parties beginning December 2022. The COP, as well as its public and confidential appendices, is hereby incorporated by reference. BOEM has coordinated its NHPA Section 106 and NEPA reviews pursuant to 36 CFR 800.8(a). The Section 106 and NEPA reviews included four action alternatives as described in the EIS (**Table 1**).

Table 1. Description of Action Alternatives Reviewed in the EIS.

Alternative	Description (from BOEM 2022)
A – No Action Alternative	Under the No Action Alternative, BOEM would not approve the COP; Project construction and installation, O&M, and conceptual decommissioning would not occur; and no additional permits or authorizations for the Project would be required. Any potential environmental and socioeconomic impacts, including benefits, associated with the Project as described under the Proposed Action would not occur.
B – Proposed Action	The Proposed Action would construct, operate, maintain, and decommission an approximately 1,034-MW wind energy facility on the OCS offshore of Massachusetts, Rhode Island, and New York within the range of design parameters described in the Sunrise Wind COP.
C – Fisheries Habitat Impact Minimization	Under Alternative C, the construction, O&M, and eventual decommissioning of a 1,034-MW wind energy facility on the OCS offshore of Massachusetts, Rhode Island, and New York would occur within the range of the design parameters outlined in the COP, subject to applicable mitigation measures. However, Alternative C is proposed with the intent to minimize impacts to fisheries habitats in the proposed project area that are the most vulnerable to long-term impacts. This alternative considered and prioritized contiguous areas of complex bottom habitat to be excluded from development to potentially avoid and/or minimize impacts to complex fisheries habitats, while still meeting BOEM’s purpose and need for the project.
C-1 – Fisheries Habitat Impact Minimization Alternative 1	Sunrise Wind’s proposed layout includes 102 WTG positions; however, only 94 11-MW WTGs would be needed to meet the Project’s maximum capacity of 1,034 MW. Under Alternative C-1, the construction and installation, O&M, and eventual decommissioning of a wind energy facility, and an OSS would occur within the design parameters outlined in the Sunrise Wind Farm COP (Sunrise Wind 2022) subject to applicable mitigation measures. However, certain WTG positions would be excluded from the identified priority areas in order to reduce impacts to sensitive benthic habitat and areas where cod spawning has been detected. Under this alternative the Project would maintain a uniform east-west and north-south grid of 1 x 1 nm spacing between WTGs. Alternative C-1 would result in the exclusion of up to 8 WTG positions from the identified priority areas.
C-2 – Fisheries Habitat Impact Minimization Alternative 2	Under Alternative C-2, the 8 WTG positions identified for exclusion from development in Alternative C-1 would remain the same, and an additional 12 WTG positions would be removed from the Priority Areas and relocated to the eastern side of the lease area. The construction and installation, O&M, and eventual decommissioning of a wind energy facility, and an OSS would occur within the design parameters outlined in the Sunrise Wind Farm COP (Sunrise Wind 2022) subject to applicable mitigation measures. The Project would maintain a uniform east-west and north-south grid of 1 x 1 nm spacing between WTGs. Alternative C-2 assumes that habitat on the eastern side of the lease area is suitable for development. Geotechnical and geophysical surveys conducted in 2022 will help inform the feasibility of Alternative C-2.

AREA OF POTENTIAL EFFECTS

Through consultation with the SHPOs during development of the above-referenced Programmatic Agreements and BOEM’s *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* (Guidelines), BOEM has defined the Area of Potential Effects (APE) for approval of a COP to include the following geographic areas:

- The depth of and breadth of the seabed potentially impacted by any bottom-disturbing activities, constituting the marine archaeological resources portion of the APE;
- The depth and breadth of terrestrial areas potentially impacted by any ground-disturbing activities, constituting the terrestrial archaeological resources portion of the APE;
- The viewshed from which renewable energy structures, whether located offshore or onshore, would be visible, constituting the viewshed portion of the APE; and
- Any temporary or permanent construction or staging areas, both onshore and offshore, which may fall into any of the above portions of the APE.

Effects are only assessed to historic properties within the APE for the Project. This includes reasonable foreseeable effects caused by the Project that may occur later in time, be farther removed in distance, or be cumulative (36 CFR 800.5(a)(1)).

Marine Archaeological Resources Area of Potential Effects

The marine archaeological resources portion of the APE (hereafter marine APE) for the Project is the depth and breadth of the seabed potentially affected by any bottom-disturbing activities and temporary or permanent offshore construction or staging areas. The APE includes a conservative Project Design Envelope (PDE) that can accommodate a number of potential designs, whether monopile or jacketed foundations are used, installed by jack-up vessels, as well as necessary support vessels and barges. The marine APE encompasses activities within the Lease Area and activities within the SRWEC corridor.

The Lease Area encompasses 109,952 acres (ac) (44,496 hectares [ha]). Within the Lease Area, the wind farm development would occur in a smaller footprint of 106,394 ac (43,056 ha) with water depths ranging from 134 to 184 feet (ft) (41 to 56 meters [m]). Sunrise Wind proposes up to 94 WTGs and one OCS-DC at 102 possible locations within the extent of the PDE. Construction activities would occur within a 1.06 ac (4,290 square meters [m²]) work zone around each WTG location, and within a 2.64 ac (10,684 m²) area for the OCS-DC foundation structure. The marine APE also includes all offshore areas where seafloor-disturbing activities from inter-array cable trenching and installation, boulder relocation, and vessel anchoring may occur. The maximum vertical extent of seafloor impact would be approximately 164 ft (50 m) below the seafloor for WTGs and approximately 295 ft (90 m) for OCS-DC. The array and substation interconnector cables have a target burial depth of 3 to 7 ft (1 to 2 m) below the stable seabed.

The marine APE also includes offshore export cable corridors extending from the Lease Area to the sea-to-shore transition at landfall location in Brookhaven. The export cable corridors would be a maximum width of 98 ft (30 m). The SRWEC route would be approximately 105 mi (170 km). Offshore export cables would typically be buried to a depth of 3 to 7 ft (1 to 2 m) below the seabed similarly to the array cables.

Terrestrial Archaeological Resources Area of Potential Effects

The terrestrial archaeological resources portion of the APE (hereafter terrestrial APE) includes areas of potential ground disturbance associated with the onshore construction and operation of the Project. The APE is presented as a conservative PDE and consists of the landfall site, underground cable routes, converter station site, and equipment laydown areas. The depth and breadth of potential ground-disturbing activities are described below for each location. Figure 3 depicts the terrestrial APE for onshore cable and landfall site for the SRWEC in detail.

The terrestrial APE includes the sea-to-shore transition landfall site. The transition of the export cables from offshore to onshore would be accomplished by using open-cut trenching or trenchless methods. Ground-disturbing activities from the installation of the TJB and associated excavation would occur at the Brookhaven landfall site. From the TJB at the landfall site, Sunrise Wind would install the onshore export cable underground. Burial of the export cable in a single duct bank would require up to a 30 ft wide (9.1 m wide) construction corridor up to 6 feet (1.8 m) deep for onshore export cable corridors, excluding the landfall location and cable splice locations. The onshore cable would connect to the proposed onshore converter parcel. Ground-disturbing activities associated with the construction of the Brookhaven converter station would occur on a 7 ac (2.84 ha) parcel. An Onshore Interconnection Cable would connect the Onshore Converter Station at Brookhaven to the Holbrook Substation.

Area of Potential Effects for Visual Effects Analysis

The APE for visual effects analysis (hereafter visual APE) includes the viewshed from which renewable energy structures—whether offshore or onshore—would be visible. Offshore, the visual study area consists of a 40 mi (64 km) radial distance from the Wind Farm Area, which is the approximate maximum theoretical distance at which the WTGs could be visible—a distance that does not factor in certain conditions such as weather or environmental conditions. (COP Appendix Q1).

Sunrise Wind, LLC methodically conducted geographic information system (GIS) analysis and subsequent field investigation through a series of steps, beginning with the maximum theoretical distance WTGs could be visible. This was determined by first considering the visibility of a WTG from the water level to the tip of a vertical rotor blade at the height of 968 ft (295 m)¹. The analysis then accounted for how distance and environmental conditions impede visibility as the distance increases between the viewer and WTGs (i.e., by a 40 mi (64 km) distance, even blade tips would be below the sea level horizon line). The mapping effort then removed all areas with obstructed views toward WTGs, such as those views impeded by intervening topography, vegetation, and structures. Areas with unobstructed views of offshore Project elements constitute the visual Preliminary APE, which is documented in the HRVEA, COP Appendix T (Sunrise Wind 2022). Onshore, the visual APE includes a 1.0 mi (1.6 km) buffer around the Brookhaven converter station location (COP, Appendix U; Sunrise Wind 2022). All other elements would be underground and would not be visible.

¹ The Project's proposed alternatives include a selection of up to 94 WTGs at 102 possible positions within the Lease Area, and the Project would utilize an 11 MW turbine. The 11 MW turbine was selected as the Project's nameplate wind turbine size (see Alternative Considered but dismissed from further analysis table for rationale in the EIS) and consists of a nacelle height of 459 ft (140 m), a rotor diameter of 656 ft (200 m), and a maximum blade tip height of 787 ft (240 m). The Visual APE presented herein considers up to 122 WTGs with a nacelle height of 574 ft (175 m), a 787 ft (240 m) rotor diameter, and a maximum blade tip height of 968 ft (295 m). The WTG specifications evaluated in the visual impact analysis reports represent the Project's original PDE dated August 2020, which included a wider range of turbine size (8 - 15 MWs) and included up to 122 WTGs. These 122 WTGs were extrapolated from a PDE that included 122 WTGs and a single OCS-DC or 120 WTGs and three OCS-DCs, as presented in the Visual Impacts Assessment (VIA; SRWF COP Appendix Q1). The VIA asserts that the distinction between the counts of WTGs and OCS-DCs is not anticipated to change the overall results of the VIA in this instance. BOEM considers the evaluation of these more numerous and larger WTGs to represent a reasonable and good faith effort to identify potential effects to cultural resources and historic properties, and that analysis based on these evaluations is sufficient for the purposes of evaluating impacts to cultural resources under NEPA and adverse effects to historic properties under the NHPA because it evaluates a larger, more impactful scenario.

STEPS TAKEN TO IDENTIFY HISTORIC PROPERTIES

TECHNICAL REPORTS

To support the identification of historic properties within the APE, SRWF has provided survey reports detailing the results of multiple investigations within the marine, terrestrial, and viewshed portions of the APE. **Table 2** provides a summary of these efforts to identify historic properties and the results/key findings of each investigation. BOEM has reviewed all reports summarized in **Table 2** and found them to be sufficient. BOEM found that the APE proposed by SRWF is appropriate for the magnitude, extent, location, and nature of the undertaking. Further, BOEM has determined that the reports collectively represent a good faith effort to identify and evaluate historic properties within the APE, they are sufficient to apply the Criteria of Adverse Effect, and they support consultation with consulting parties regarding the resolution of adverse effects to historic properties.

Table 2. Summary of Cultural Resources Investigations Performed by SRWF in the Marine, Terrestrial and Viewshed APEs.

Portion of APE	Report	Description	Key Findings/Recommendations
Offshore	Phase I Marine Archaeological Resources Assessment for the Sunrise Offshore Wind Farm (SRW01) Located on the Outer Continental Shelf Block OCS-A 487, and Offshore New York. Appendix R. Sunrise Wind Farm Construction and Operations Plan	R. Christopher Goodwin & Associates, Inc. (RCG&A) performed a marine archaeological resources assessment (MARA) of the submerged portions of the Preliminary Area of Potential Effect (PAPE). The MARA utilized geotechnical and high-resolution geophysical data collected by Fugro USA Marine, Inc. and Gardline during survey campaigns from 2019 to 2021. The MARA also included a review of shipwreck databases and previous surveys. The analysis was conducted to identify potential marine archaeological resources that might be impacted by the Project.	Eight potential shipwreck sites, and 43 buried paleolandscape features within the SRWEC and SRWF APE were identified and were recommended for avoidance by the Project.
Onshore	Sunrise Wind Farm Project: Phase IA Archaeological Survey, Sunrise Wind Onshore Facilities. Appendix S-1. Sunrise Wind Farm Construction and Operations Plan	Phase IA archaeological survey to determine whether previously identified terrestrial archaeological resources were located in the terrestrial archaeology PAPE, and to evaluate the potential for previously unidentified terrestrial archaeological resources to be located within the PAPE.	Phase I terrestrial archaeological survey identified a single archaeological site (EDR-SRW-001). This archaeological site was identified in an off-route variation outside of the preferred route, and will not be impacted by the Project.
	Sunrise Wind Farm Project: Phase IB Archaeological Survey, Sunrise Wind Onshore Facilities. Appendix S-2. Sunrise Wind Farm Construction and Operations Plan	Phase IB Archaeological Survey was to determine the presence or absence of previously unidentified terrestrial archaeological resources located within the Project’s PAPE through infield investigations.	
Viewshed	Sunrise Wind Farm Project: Appendix T, Historic Resources Visual Effects Assessment. Report prepared for Sunrise Wind by Environmental Design & Research. Appendix T, Sunrise Wind Farm Construction and Operations Plan	Report detailing desktop research conducted for the HRVEA for the WTGs and OCS-DC, which provided information for 307 previously identified above-ground historic resources within the PAPE for viewshed resources.	Identifies and evaluates 307 above ground historic properties within the PAPE. The assessment finds that potential adverse effects are possible concerning 47 above ground historic properties.

	<p>Sunrise Wind Farm Project: Appendix U, Onshore Above-ground Historic Properties Report. Report prepared for Sunrise Wind by Environmental Design & Research. Appendix U, Sunrise Wind farm Construction and Operations Plan.</p>	<p>Report detailing field reconnaissance survey and viewshed analysis of the PAPE for the OnCS-DC.</p>	
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Consequent to the reports prepared for the COP submittal, SEARCH, Inc. (SEARCH) prepared a technical report for BOEM to support BOEM's cumulative effects analysis entitled *Cumulative Historic Resources Visual Effects Analysis Management Summary for the Sunrise Wind Farm* (CHRVEA; SEARCH 2022). The cumulative historic resources visual effects analysis (CHRVEA) presents the analysis of cumulative visual effects where BOEM has determined in its review of the *Onshore Above-ground Historic Properties Report* (COP Appendix U, Sunrise 2022) that historic properties would be adversely affected by the Project. The efforts of other reasonable foreseeable wind energy development activities are additive to those adverse effects from the Project itself, resulting in cumulative effects. Forty-seven historic properties in the offshore viewshed APE for the Project would be adversely affected, and the addition of other reasonable foreseeable offshore wind energy development activities would result in cumulative effects to these 47 properties (see Appendix X in the Sunrise EIS).

CONSULTATION AND COORDINATION WITH PARTIES AND THE PUBLIC

Early Coordination

Since 2010, BOEM has coordinated OCS renewable energy activities for the NY WEAs with its federal, state, local, and tribal government partners through its intergovernmental Renewable Energy Task Force. Also from 2010 onward, BOEM has met regularly with federally recognized Native American Tribes (Tribes) that may be affected by renewable energy activities in the area, specifically during planning for the issuance of leases and review of site assessment activities. BOEM also hosts public information meetings to update interested stakeholders on major renewable energy milestone. Information on BOEM's Renewable Energy Task Force meetings is available at <https://www.boem.gov/renewable-energy/state-activities/new-york-activities>.

National Environmental Policy Act Scoping and Public Hearings

On August 31, 2021, BOEM announced its notice of intent (NOI) to prepare an EIS for the SRWF COP (BOEM 2021). This NOI was revised on September 3, 2021 to allow for the comment period to extend to October 4, 2021, and to make technical corrections. The purpose of the NOI was to solicit input on issues and potential alternatives for considerations in the COP. Throughout the scoping process, federal agencies; state tribal, and local governments; other interested parties; and the public had the opportunity to aid BOEM in determining significant resources and issues, impact-producing factors (IPFs), reasonable alternatives, and potential mitigation measures to be analyzed in the EIS as well as provide additional information. BOEM also used the NEPA commenting process to allow for public involvement in the NHPA Section 106 consultation process (54 USC 300101 et seq.) as permitted by 36 CFR 800.2(d)(3). Through this notice, BOEM announced that it would inform its NHPA Section 106 consultation use the NEPA commenting process and invited public comment and input regarding the identification of historic properties or potential effects to historic properties from activities associated with approval of the SRWF COP.

Additionally, BOEM held public scoping meetings virtually, which included specific opportunities for engaging on issues relative to NHPA Section 106 for the SRWF COP, on September 16th, 20th, and 22nd of 2021. Through this NEPA scoping process, BOEM received comments related to cultural, historic, archaeological, or tribal resources. Comments indicated that the EIS should assess potential onshore impacts to archaeological and historic resources at Project locations in NY. BOEM's EIS scoping report

includes these comments and is available at <https://www.boem.gov/renewable-energy/state-activities/sunrise-wind-activities>.

On December 16, 2022, BOEM published a notice of availability for the draft EIS for the COP submitted by SRWF. As part of this process, BOEM will hold public meetings on three dates in 2023. Each of these public meetings will be held virtually. The public and consulting parties will be able to comment on the DEIS until the comment period closes. BOEM's review and consider of comments received during scoping and on the draft EIS will inform this Finding.

National Historic Preservation Act Section 106 Consultation

BOEM extended invitations to consult under NHPA Section 106 via letter on August 4, 2021 to 149 consulting parties. As third-party consultant to BOEM, SEARCH followed up with these parties to confirm preferred points of contact and interest in participating. The organizations BOEM invited to consult are listed in **Table 3**.

Table 3. Parties Invited to Participate in NHPA Section 106 Consultation.

Participants in the Section 106 Process	Invited Consulting Parties
SHPOs and State Agencies	Connecticut State Historic Preservation Office, Connecticut Department of Economic and Community Development
	Rhode Island Historical Preservation & Heritage Commission
	New York State Division for Historic Preservation
	Massachusetts Historical Commission
	Massachusetts Board of Underwater Archaeological Resources
	Massachusetts Commissioner on Indian Affairs
	Rhode Island Department of Environmental Management
Federal Agencies	ACHP
	BSEE
	NOAA
	USACE
	USCG
	USEPA
	USFWS
	National Park Service
	DASNE
	FAA
	USDOD
	Fire Island National Seashore
	Federally Recognized Tribes
Shinnecock Indian Nation	
Mashantucket Pequot Tribal Nation	
Wampanoag Tribe of Gay Head - Aquinnah	

Participants in the Section 106 Process	Invited Consulting Parties
	Mohegan Tribe of Indians of Connecticut
	Narragansett Indian Tribe
	Delaware Tribe of Indians
	The Delaware Nation
Non-Federally Recognized Tribe	Chappaquiddick Tribe of Wampanoag Nation
	Unkechaug Nation
	The Golden Hill Paugussett
	Eastern Pequot Tribal Nation
	Schaghticoke Tribal Nation
Local Government	City of New Bedford
	City of Newport
	County of Barnstable (MA)
	County of Bristol (MA)
	County of Dukes (MA)
	County of Suffolk (NY)
	Town of Acushnet
	Town of Aquinnah
	Town of Bourne
	Town of Charlestown
	Town of Chilmark
	Town of Dartmouth
	Town of East Hampton
	Town of Edgartown
	Town of Exeter
	Town of Fairhaven
	Town of Falmouth
	Town of Gosnold
	Town of Jamestown
	Town of Little Compton
	Town of Middletown
	Town of Nantucket
	Nantucket Planning & Economic Development Commission (NP&EDC)
	Town of Narragansett
	Town of New Shoreham
	Town of North Kingstown
	Town of North Stonington
	Town of Oak Bluffs
	Town of Portsmouth
	Town of South Kingstown

Participants in the Section 106 Process	Invited Consulting Parties
	Town of Southold
	Town of Stonington
	Town of Tisbury
	Town of Tiverton
	Town of West Tisbury
	Town of West Warwick
	Town of Westerly
	Town of Westport
	Town of Brookhaven
	Cape Cod Commission
Certified Local Governments	Edgartown Historic Preservation Commission
	Acushnet Historical Commission
	North Kingstown Historic District Commission
	East Hampton Design Review Board
	Narragansett Historic District Commission
	Newport Historic District Commission
	South Kingstown Historic District Commission
	New Shoreham Historic District Commission
	Barnstable Historical Commission
	Bourne Historic Commission
	Chilmark Historical Commission
	Dartmouth Historical Commission
	Fairhaven Historical Commission
	Falmouth Historical Commission
Nongovernmental Organizations or Groups	Salve Regina University
	Norman Bird Sanctuary
	Montaukett Indian Nation
	Nantucket Historical Commission
	Nantucket Historic District Commission
	Gay Head Lighthouse Advisory Committee
	Southeast Lighthouse Foundation
	Block Island Historical Society
	Martha's Vineyard Commission
	Alliance to Protect Nantucket Sound
	Montauk Historical Society
	Preservation Massachusetts
	Bristol Historical and Preservation Society
	East Greenwich Historic Preservation Society
	The Preservation Society of Newport County (operate The Breakers, Marble House, etc.)

Participants in the Section 106 Process	Invited Consulting Parties
	Newport Historical Society
	Rhode Island Historical Society (operates The John Brown House Museum, Aldrich House, etc.)
	Newport Restoration Foundation
	Bellport-Brookhaven Historical Society
	Little Compton Historical Society
	Jamestown Historical Society
	Middletown Historical Society
	Portsmouth Historical Society
	Tiverton Historical Society
	Charlestown Historical Society
	Exeter Historical Association
	Narragansett Historical Society
	Westerly Historical Society
	Martha's Vineyard Museum
	Cuttyhunk Historical Society, Museum of the Elizabeth Islands, Massachusetts
	Nantucket Historical Association
	Nantucket Preservation Trust
	Stonington Historical Society
	New London County Historical Society
	Suffolk County Historical Society
	East Hampton Historical Society
	Southold Historical Museum
	Aquinnah Wampanoag Indian Museum
	The Barnstable Historical Society
	Falmouth Historical Society and Musums on the Green
	Dartmouth Historical and Arts Society
	Westport Historical Society
	New Bedford Historical Society
	Fairhaven Historical Society
	Long Plain Museum
	Bourne Historical Society
	Long Island Historical Societies
	Preservation Long Island
	Davis Town Meeting House Society Inc.

On June 10, 2022, BOEM contacted responsive governments and organizations listed in **Table 3**, providing information on the proposed undertaking, and re-extending the invitation to be a consulting party to the NHPA Section 106 review of the COP. The information provided to consulting parties beginning December

2022 included technical reports listed in **Table 2**, that were prepared for historic property identification and presented as appendices to the COP. Forty-one entities that responded to BOEM's invitation or were subsequently made known to BOEM and added as participating consulting parties are listed in **Table 4**.

Table 4. Consulting Parties Participating in the NHPA Section 106 Consultation.

Participants in the Section 106 Process	Invited Consulting Parties That Participated in Consultation
SHPOs and State Agencies	Connecticut State Historic Preservation Office, Connecticut Department of Economic and Community Development
	Rhode Island Historical Preservation & Heritage Commission
	New York State Division for Historic Preservation
	Massachusetts Historical Commission
	Massachusetts Commissioner on Indian Affairs
	Rhode Island Department of Environmental Management
Federal Agencies	ACHP
	BSEE
	NOAA
	USACE
	USCG
	USEPA
	USFWS
	National Park Service
	DASNE
	FAA
	USDOD
	Fire Island National Seashore
Federally Recognized Tribes	Mashpee Wampanoag Tribe
	Shinnecock Indian Nation
	Mashantucket Pequot Tribal Nation
	Wampanoag Tribe of Gay Head - Aquinnah
	Mohegan Tribe of Indians of Connecticut
	Narragansett Indian Tribe
	Delaware Tribe of Indians
	The Delaware Nation
Non-Federally Recognized Tribe	Unkechaug Nation
Local Government	City of Newport
	County of Dukes (MA)
	Town of Aquinnah
	Town of Bourne
	Town of Charlestown
	Town of East Hampton
	Town of Middletown

Participants in the Section 106 Process	Invited Consulting Parties That Participated in Consultation
	Town of Nantucket Nantucket Planning & Economic Development Commission (NP&EDC) Town of New Shoreham Town of North Stonington Town of Oak Bluffs Town of Brookhaven
Certified Local Governments	Newport Historic District Commission Barnstable Historical Commission
Nongovernmental Organizations or Groups	Salve Regina University Norman Bird Sanctuary Montaukett Indian Nation Nantucket Historical Commission Nantucket Historic District Commission Gay Head Lighthouse Advisory Committee Southeast Lighthouse Foundation Block Island Historical Society Alliance to Protect Nantucket Sound Newport Restoration Foundation Narragansett Historical Society Nantucket Historical Association Nantucket Preservation Trust The Preservation Society of Newport County (operate The Breakers, Marble House, etc.) Long Island Historical Societies Preservation Long Island

Through multiple rounds of correspondence and consultation meetings, BOEM requested information from consulting parties on defining the APE and identifying historic properties potentially affected by the proposed undertaking. BOEM held an initial NHPA Section 106 consultation meeting with consulting parties virtually on July 13, 2022, reviewing the Project background and identification of historic properties, as presented in previously provided technical reports. In December 2022, the CHRVEA was distributed to consulting parties alongside a letter formally delineating the APE updated versions of the historic resources visual effects assessment (HRVEA), terrestrial archaeological resources assessment (TARA) and marine archaeological resources assessment (MARA). A meeting on in 2023 will be scheduled to review the information contained within this Finding and to discuss the next steps for resolving adverse effects. A meeting summary and access to a recording of the meeting will be made available.

BOEM plans to continue consulting with the SHPOs, ACHP, federal and state agencies, federally recognized tribes, and the consulting parties to seek their comments and input regarding the effects of the undertaking on historic properties and the resolution of adverse effects, including the development and implementation of a memorandum of agreement (MOA).

GOVERNMENT-TO-GOVERNMENT CONSULTATIONS WITH FEDERALLY RECOGNIZED TRIBES/TRIBAL NATIONS

BOEM met with federally recognized Tribes to simultaneously discuss multiple BOEM actions, including the Project and efforts of the Project on historic properties under NHPA Section 106 (see EIS Appendix A entitled *Required Environmental Permits and Consultations*). BOEM continues to consult with these and other Tribes/Tribal Nations on developments in offshore wind and the Project.

On October 15, 2021, BOEM held a government-to-government meeting on the Sunrise Wind Project with the Mashantucket Pequot Tribal Nation, the Mashpee Wampanoag Tribe, the Delaware Nation, the Shinnecock Nation, and the Wampanoag Tribe of Gay Head (Aquinnah). The meeting discussion included a review of the project, site characteristic studies, and required field surveys. Tribes requested additional photography in different seasons, asked for further information on specific construction methods and materials, potential environmental impacts, and cumulative visual impacts. Additionally, tribes expressed an inability to facilitate a Fast-41 schedule, in general, due to the complexity and number of the projects being implemented simultaneously under their review. Further government-to-government consultations are planned for the future.

On July 13, 2022, BOEM held a Section 106 Kick-Off meeting which included the Mashpee Wampanoag Tribe, Shinnecock Indian Nation, and Mashantucket Pequot Tribal Nation. The meeting presented a project overview including maritime and terrestrial components, a review of NEPA/NHPA Section 106 substitution consultation and schedule procedures, and a description of Section 110(f) and its application to National Historic Landmarks (NHLs) with regard to the project. During the discussion, the tribes inquired about the definition of the preliminary area of potential effect (PAPE) and the difference between an APE and PAPE, siting procedures and impacts to ASLFs, avoidance measures, if ASLFs would be considered for inclusion as NHLs, and the difference in the level of scrutiny applied to NHLs under Section 110(f) and other historic properties subject to Section 106 consultation. Tribes expressed concern with lighting impacts, the inadequacy of data received to date for meaningful project review, and concern regarding the timing of consultation was raised. The tribes expressed that consultation regarding project siting should be undertaken before selecting component locations. Additional Section 106 consultation meetings are planned for the future.

APPLICATION OF THE CRITERIA OF ADVERSE EFFECT

The Criteria of Adverse Effect under NHPA Section 106 (36 CFR 800.5(a)(1)) states that an undertaking has an adverse effect on a historic property when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later, be farther removed in distance, or be cumulative (36 CFR 800.5(a)(1)). According to the regulations (36 CFR 800.5(a)(2)), adverse effects on historic properties include, but are not limited to:

- Physical destruction of or damage to all or part of the property;
- 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 of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68) and applicable guidelines;
- removal of the property from its historic location;
- change of the character of the property's use or physical features within the property's setting that contribute to its historical significance;
- introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- 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 a Tribe or Native Hawaiian organization; and
- transfer, lease, or sale of a property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure the long-term preservation of the property's historical significance.

ADVERSELY AFFECTED HISTORIC PROPERTIES

BOEM has determined that the undertaking would have an adverse effect on the following 47 historic properties within the viewshed APE:

Town of Aquinnah, Massachusetts:

- Gay Head Light (NRHP Listed Resource)
- Gay Head – Aquinnah Shops Area (MHC Historic Inventory Site)
- Vanderhoop, Edwin DeVries Homestead (NRHP Listed Resource)
- Cooper, Tom House (MHC Historic Inventory Site)
- Gay Head – Aquinnah Coast Guard Station Barracks (MHC Historic Inventory Site)
- Haskins, Theodore House (MHC Historic Inventory Site)
- Gay Head – Aquinnah Town Center Historic District (NRHP-Listed Resource)
- 3 Windy Hill Drive (MHC Historic Inventory Site)

- 71 Moshup Trail (MHC Historic Inventory Site)
- Vanderhoop, Leonard House (MHC Inventory Site)
- Vineyard Sound and Moshup's Bridge (NRHP-eligible Resource)

Town of Chilmark, Massachusetts:

- Hancock, Capt. Samuel – Mitchell, Capt. West House (NRHP-Eligible Resource)
- Flanders, Ernest House, Shop and Barn (MHC Historic Inventory Site)
- Hancock, Russell House (MHC Historic Inventory Site)
- Mayhew, Simon House (MHC Historic Inventory Site)
- Flaghole (MHC Historic Inventory Site)

Town of Edgartown, Massachusetts:

- Chappaquiddick Island TCP (NRHP-Eligible Resource)

Town of West Tisbury, Massachusetts:

- Scrubby Neck Schoolhouse (MHC Historic Inventory Site)

Town of Narragansett, Rhode Island:

- Point Judith Lighthouse (NRHP-Listed Resource)

City of Newport, Rhode Island

- Bellevue Avenue Historic District (NHL)
- Ocean Drive Historic District (NHL)
- The Breakers (NHL)

Town of New Shoreham, Rhode Island:

- Block Island North Light (NRHP-Listed Resource)
- Corn Neck Road (NRHP-Eligible Resource)
- Hippocampus/Boy's Camp/Beane Family (NRHP-Eligible Resource)
- Mitchell Farm (NRHP-Eligible Resource)
- Champlin Farm (NRHP-Eligible Resource)
- Indian Head Neck Road (NRHP-Eligible Resource)
- Island Cemetery/Old Burial Ground (RI Historical Cemetery)
- Beach Avenue (RI Historical Cemetery)
- Old Harbor Historic District (NRHP-Listed Resource)
- Beacon Hill (NRHP-Eligible Resource)
- Spring House Hotel (NRHP-Eligible Resource)
- Spring House Hotel Cottage (NRHP-Eligible Resource)
- Capt. Welcome Dodge Sr. House (NRHP-Eligible Resource)
- Spring Street (NRHP-Eligible Resource)

- Caleb W. Dodge Jr. House (NRHP-Eligible Resource)
- WWII Lookout Tower – Spring Street (NRHP-Eligible Resource)
- Pilot Hill Road and Seaweed Lane (NRHP-Eligible Resource)
- WWII Lookout Tower at Sands Pond (NRHP-Eligible Resource)
- Lewis-Dickens Farm (NRHP-Eligible Resource)
- Block Island Southeast Lighthouse Historic Landmark (National Historic Landmark [NHL])
- Miss Abby E. Vaill/1 of 2 Vaill Cottages (NRHP-Eligible Resource)
- Hon. Julius Deming Perkins/Bayberry Lodge (NRHP-Eligible Resource)
- Mohegan Cottage/Evertt D. Barlow House (NRHP-Eligible Resource)
- Capt. Mark L. Potter House (NRHP-Eligible Resource)
- New Shoreham Historic District (Local Historic District)

Additionally, BOEM has determined that the undertaking would have an adverse effect on one historic property due to physical disturbance within the marine APE:

- WEA_P-22

There is a potential for seabed disturbance within one ASLF (WEA_P-22) that coincides with the proposed jack-up work area for installing the foundation system of a proposed WTG.

Assessment of Effects on Historic Properties in the Viewshed Area of Potential Effects

The 47 adversely affected historic properties have documented significance associated with their maritime setting or sea view that contribute to the properties' NRHP eligibility. For historic properties where BOEM has determined the Project would cause adverse effects, BOEM then assessed the impact of the SRWF in the context of other reasonably foreseeable actions, which may result in cumulative effects (see SEARCH 2022).

BOEM reviewed the HRVEA's list of historic properties assessed as likely to be adversely affected by the Project and all information and comments provided by consulting parties in correspondence and meetings to inform determinations of adverse effects, including visual and cumulative effects. Historic properties with adverse effect recommendations are distributed across two states. They include the Town of Aquinnah (11), the Town of Chilmark (5), the Town of Edgartown (1), and Town of West Tisbury (1) in Massachusetts, and the Town of Narragansett (1), the City of Newport (3), and the Town of New Shoreham (25) in Rhode Island. Of the 18 adversely affected historic properties in Massachusetts, 17 are between 20 miles and 29 miles (rounded to the nearest mile) of the nearest WTG. The Vineyard Sound and Moshup's Bridge TCP is the only one of these 18 properties to extend within less than 20 miles of the WTGs, as the property boundary includes areas of the Atlantic Ocean. This TCP boundary comes to approximately 15 miles from the Project, where the boundary extends offshore of Nomans Land Island. Of the adversely affected properties in Rhode Island, four are on the mainland, while the remaining 25 are on Block Island. The four mainland properties are between 25 miles and 29 miles from the WTGs, while the Block Island properties are primarily between 16 miles and 20 miles of the closest WTG, with

one property at a distance of 27 miles. Each of the 47 adversely affected historic properties is within 30 miles of potential SRWF WTG locations.

The HRVEA found that the Project's proposed WTGs would "likely constitute a change in the physical environment" and further stated that this "is particularly true for above-ground historic properties for which open views of the ocean are integral" (EDR 2022:110). In total, the HRVEA reviewed visual effects to 307 historic properties, and the document notes that visual effects "may be mitigated by the presence of modern infrastructure which diminishes the existing integrity of setting, the presence of commercial shipping vessels on the ocean, and the effect of distance on visibility" (EDR 2022:111). To evaluate effects, the HRVEA reviewed the physical parameters of the wind farm and NRHP-qualifying characteristics of historic properties within the HRVEA's identified PAPE. Of the 307 historic properties reviewed, no adverse effect is recommended for 260. Effects did not rise to the level of adverse for these properties either because ocean views were not integral to their significance or because distance, visual obstructions, or diminished integrity of the current setting meant that the Project would not rise to the level of an adverse effect. The HRVEA analysis found that mitigating factors do not reduce or eliminate visual effects at all historic property locations. The scale and the size of the WTGs are enough to constitute adverse visual effects in some cases. Upon review, either due to the size and scale of the Project, a lack of mitigating factors, or the importance of maritime setting and/or sea view attached to NRHP significance (or a combination of all three), the HRVEA recommended adverse effects at 44 locations. Upon review, BOEM recommended adverse effects at an additional three locations.

The EIS presents five action alternatives for the Project (Table 1). BOEM determined that, aside from the No Action alternative, those alternatives proposing the construction of fewer WTGs would reduce visual effects because fewer WTGs would be visible from the affected historic properties. However, despite fewer WTGs, none of the alternatives would mitigate visual effects to the extent that would avoid visual adverse effects. Nor would the alternatives increase visual effects to historic properties already identified as having no adverse effects from the Project. Thus the 47 same historic properties would remain as adversely affected.

The cumulative effects analysis quantified the total number of WTGs from all planned future developments theoretically visible (daytime or nighttime) within the. This analysis projected the development of eight additional wind farms in the vicinity. Surrounding developments include Bay State Wind, Beacon Wind, Mayflower Wind, New England Wind, Revolution Wind, South Fork Wind, Vineyard Wind North, and Vineyard Wind Northeast, and would result in the construction of 923 additional WTGs (SEARCH 2022). Upon the full conceptual build-out of all the additional WTG locations, the Project would comprise approximately 11.6% of the total WTGs. In the cumulative analysis, SRWF is adjacent to other proposed wind farms, with the Revolution Wind Farm and Southfork Wind projects located immediately to the north and the Bay State Wind project located to the west. If all other projects are constructed, direct views of the SRWF from mainland Rhode Island would be obscured by the Revolution Wind and Southfork Wind projects. The Revolution Wind project would similarly obscure the most direct views of SRWF from Massachusetts. Despite the construction of the other projects, Block Island would have unobstructed views of the SRWF, with SRWF representing the closest project to the southeastern portion of Block Island. In areas where SRWF will be theoretically visible but partially obscured by the intervening Revolution Wind and Southfork Wind WTGs, the Project's visual effects would be proportionately small. However, for areas of Block Island with unobstructed views of the SRWF, the Project's visual effects will be proportionately large when considering the visual effects of proposed area offshore wind projects.

BOEM has found that the Project would have adverse visual effects on 47 historic properties. Per the HRVEA's application of the Criteria of Adverse Effect, the undertaking would introduce visual Project elements that diminish the integrity of significant historic features for 44 of these historic properties. Upon review, BOEM determined that the Project would diminish the integrity of significant historic features of an additional three historic properties. However, BOEM does not recommend that visual effects from the Project would disqualify any of the historic properties from NRHP eligibility. BOEM finds that the undertaking would not adversely affect 260 historic properties within the viewshed APE, because the properties' significance is not related to maritime setting or views to the sea or because of limited visibility of the project.

Assessment of Effects on Historic Properties in the Marine APE

Archaeological surveys within the marine APE identified eight shipwrecks or potential shipwrecks and 43 potential ASLFs within the SRWF marine archaeological resources PAPE (Schmidt et al. 2022). All eight shipwrecks will be avoided by sufficient buffers by all proposed Project activities that are part of the undertaking. As a result, there would be no effects on these potential historic properties. SRWF has established a protective buffer extending 50 m beyond each conservatively delineated shipwreck and would avoid seabed-disturbing activities within this buffer during construction, operations, and decommissioning activities (Schmidt et al., 2022). BOEM has determined the protective buffer to be sufficient and would require its implementation as a condition of approval if the COP is approved.

Four of the forty-three potential ASLFs within the surveyed Lease Area (WEA_P-02-D, WEA_P-11, WEA_P-17, and WEA_P-22) lie within the horizontal and vertical limits of the PAPE. Of these, three will be avoided; however, one ASLF (WEA_P-22) may not be avoidable by Project actions (Schmidt et al. 2022). ASLFs are locations that may contain preserved evidence of formerly terrestrial landscape features that have survived erosion during marine transgression. Although these landforms and features exhibit high archaeological potential, no evidence of human occupation associated with the ASLFs was identified in core samples taken during the submerged cultural resources investigation (Schmidt et al. 2022:106-126). These landforms and features may derive their significance from reasons other than their archaeological potential, such as their potential contribution to a broader culturally significant landscape.

BOEM has found that the Project would adversely affect one ASLF within the Lease Area. In terms of the Criteria of Adverse Effect, the undertaking would result in irreversible physical damage to this one ASLF (WEA_P-22).

Effects from other reasonably foreseeable offshore development activities in proximity to the Lease Area would not significantly add to the effects from the SRWF on the identified adversely impacted ASLF on this portion of the OCS. The Project would result in a major impact on the ASLF; cumulative effects to the ASLF are negligible to minor.

Assessment of Effects to Historic Properties in the Terrestrial APE

One archaeological site (EDR-SRW-001) was identified on a flat terrace within an off-route variation of the onshore portion of the APE and consists of a medium density scatter of lithic material including a single core, debitage, and fire altered rock which is associated with Native American's longstanding use of the area. All of the site deposits were recorded within subsurface test pits identifying two loci showing distinct activity areas. No diagnostic artifacts were identified within the subsurface tests. The site has not been

evaluated for its inclusion in the NRHP; the site is located within an off-route variation of the project and therefore would be completely avoided by the proposed undertaking. No other cultural resources were identified within the Terrestrial APE. Therefore, BOEM finds no historic properties of this type affected.

MEASURES TO AVOID, MINIMIZE, AND MITIGATE ADVERSE EFFECTS

BOEM would stipulate avoidance of historic properties identified in the APE and not currently found to be subject to adverse effects from the Project. Additional minimization and mitigation measures would be developed in consultation with the appropriate parties for unavoidable adverse effects to historic properties. These measures would be implemented through the execution of an MOA by BOEM, the required signatories, invited signatories and consulting parties to resolve adverse effects under Section 106 of the NHPA. Examples of minimization measures could include, but would not be limited to, the use of aircraft detection lighting systems – (ADLSs) to reduce the effect of nighttime lighting or the use of a mechanical cutter, mechanical plow, and/or jet plow to install cables to minimize the amount seabed impacts (BOEM 2022).

Examples of mitigation measures could include additional investigations or other measures to collect more information to understand the historic and archaeological context of affected historic properties. A post-review discovery plan, that SRWF would implement during Project construction, would be a requirement of the MOA (pursuant to 36 CFR 800.13) to ensure that new historic properties not previously identified, and impacts to unanticipated historic properties, are considered appropriately. The MOA would contain all measures identified to avoid, minimize, and mitigate adverse effects on historic properties from the Project. (Sunrise Wind 2022)

AVOIDANCE

The NHPA Section 106 process requires BOEM to seek ways to avoid, minimize, or mitigate the Project's adverse effects that would result from its approval of the COP (the undertaking). BOEM is approaching this process sequentially, beginning with avoidance. Avoidance of adverse effects is preferred and prioritized where practicable. Measures planned to date to avoid adverse effects consist of the following:

Marine Archaeological Properties

Project design measures would avoid the construction of facilities at 50 marine archaeological resources within the SRWF PAPE, consisting of 42 ASLFs and 8 potential shipwrecks.

Aboveground Historic Properties

To maintain avoidance of adverse effects to historic properties in the viewshed APE where BOEM determined no adverse effects or where no effects would occur, BOEM will require Sunrise Wind to ensure that Project structures are constructed within the design envelope, sizes, scale, locations, lighting prescriptions, and distances that were used by BOEM to inform the definition of the APE for the Project and for determining effects in this Finding of Effect.

MINIMIZATION

Minimization efforts would proceed to reduce the level of any unavoidable adverse effects. However, minimization cannot eliminate adverse effects, it can only reduce them. Measures planned to date to minimize adverse effects consist of the following:

Marine Archaeological Properties

- Limitation of the construction footprint and work areas at the one adversely affected ASLF in the SRWF Lease Area, to the extent practicable.
- Pre-construction investigations of the ASLF to refine avoidance and minimization of effects to significant archaeological resources, such as a specification within a historic properties treatment plan under the proposed MOA.
- Post-review discovery plan included in the MOA that would include stop-work and treatment procedures for cultural material encountered during Project installation.

Aboveground Historic Properties

- Planned distance of the SRWF Lease Area from adversely affected aboveground properties, minimizing the relative scale and prominence of visible WTGs.
- Uniform WTG design, speed, height, and rotor diameter to reduce visual contrast.
- Uniform spacing of 1 nm (1.85 km) to decrease visual clutter, consistent with spacing across the NY WEAs, aligning WTGs to allow for safe transit corridors.
- The option to reduce the number of constructed WTGs from a maximum proposed number of 102.
- Lighting and marking in compliance with BOEM's Guidelines for Lighting and Marking of Structures Supporting Renewable Energy Development (BOEM 2021b).
 - Paint color RAL 9010 Pure White or RAL 7035 Light Grey to blend with background sea and skies.
 - Flashing lighting instead of steady lighting where practicable.
 - Use of ADLSs (subject to approval by the Federal Aviation Administration) to drastically limit the time in which WTG lights are on and visible from adversely affected properties (ADLS lighting would reduce the nighttime lighting to less than 1% of the time that standard aircraft warning lights would be lit, on average, during Project operation [BOEM 2021a]).

MITIGATION

The remaining adverse effects after all avoidance and minimization efforts are employed would persist in the long term and be permanent. Mitigation measures would not correct the diminished integrity of historic properties from the Project. Resolutions of adverse effects from the Project might correct other impacts or threats to historic properties, such as through property preservation or rehabilitation measures. Other mitigation for diminished integrity would focus on replacing lost historic resource values with outcomes that are in the public interest, such as through developing products that convey the important history of the property.

Potential mitigation of remaining unavoidable adverse effects to marine archaeological properties includes the following properties and proposed mitigation measures:

- ASLF WEA_P-22
 - Preconstruction geotechnical sampling consisting of the collection of borings (cores) within the affected portions of the ASLF prior to Project construction
 - Open-source GIS, Story Maps, and animations, consisting of the compilation and transfer of relevant geophysical, geotechnical, and geoarchaeological datasets pertaining to the ASLF to a non-proprietary GIS system for use by Native American Tribes. Story Maps or equivalent digital media presentations will be prepared to integrate and present the complex technical data compiled during the MARA and mitigation investigations in a manner best suited for inter- and intra-tribal audiences.

Potential mitigation of remaining unavoidable adverse effects to Aboveground Historic Properties includes the following properties and proposed mitigation measures:

- Eight Historic (NRHP listed) Lighthouses in Rhode Island and Massachusetts, including Nobska Point Lighthouse, the Tarpaulin Cove Light, the Beavertail Light, the Sakonnet Light Station, the Point Judith Lighthouse, the Block Island North Light, the Clark's Point Light, and the Butler Flats Light Station.
 - Educational Video on Risks of Climate Change to Historic Lighthouses.
- The Scrubby Neck Schoolhouse, Town of West Tisbury, Dukes County, Massachusetts.
 - Development of a NRHP Nomination Form.
- The Gay Head Light, Town of Aquinnah, Dukes County, Massachusetts.
 - Historic rehabilitation of the Gay Head Light.
- The Block Island Southeast Lighthouse, NHL, Town of New Shoreham, Washington County, Rhode Island.
 - Physical Restoration
 - Improvements to Parking Area, Entrance, and Surrounding Landscape
- The Chappaquiddick Island Traditional Cultural Property and The Vineyard Sound & Moshup's Bridge Traditional Cultural Property, Dukes County, Massachusetts & Atlantic Outer Continental Shelf
 - Scholarships and Training for Tribal Resource Stewardship
 - Survey and Risk Assessment of Shoreline Cultural Sites
 - Funding for Habitat Restoration
- Seven Historic Properties, Town of Chilmark, Dukes County, Massachusetts
 - Historic Stone Wall Survey and Preservation Plan
- Twenty-Eight Historic Properties, Town of New Shoreham, Washington County, Rhode Island.
 - Coastal Resiliency Planning and Implementation.
- Ten Historic Properties Town of Aquinnah, Dukes County, Massachusetts.
 - Coastal Hazard Mitigation Plan for the Edwin DeVries Vanderhoop Homestead.
 - Gay Head – Aquinnah Shops Area Oral History, Documentation, and Interpretation.
 - Historic Landscape Element Maintenance Plan.
 - Historic Stone Wall Repair.

The NHPA Section 106 consultation process is ongoing for the SRWF Project and would culminate in the final MOA detailing measures to resolve adverse effects to historic properties, as agreed upon by the signatories, invited signatories, and consulting parties (pursuant to 36 CFR 800). BOEM would continue to consult in good faith with the consulting parties to resolve adverse effects.

NATIONAL HISTORIC LANDMARKS AND THE NHPA SECTION 106 PROCESS

The National Park Service (NPS), which administers the National Historic Landmarks (NHL) program for the Secretary of the Interior (Secretary), describes NHLs and the requirements for NHLs as follows: National Historic Landmarks (NHL) are designated by the Secretary under the authority of the Historic Sites Act of 1935, which authorizes the Secretary to identify historic and archaeological sites, buildings, and objects which “possess exceptional value as commemorating or illustrating the history of the United States.” Section 110(f) of the NHPA requires that Federal agencies exercise a higher standard of care when considering undertakings that may directly and adversely affect NHLs. The law requires that agencies, “to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to such landmark.” In those cases when an agency’s undertaking directly and adversely affects an NHL, or when Federal permits, licenses, grants, and other programs and projects under its jurisdiction or carried out by a state or local government pursuant to a Federal delegation or approval so affect an NHL, the agency should consider all prudent and feasible alternatives to avoid an adverse effect on the NHL (NPS 2021).

NHPA Section 110(f) applies specifically to NHLs. The implementing regulations for Section 106 of the NHPA detail special requirements for protecting NHLs, as required by NHPA Section 110(f). These special requirements found at 36 CFR 800.10, provide the following guidance to federal agencies to comply with Section 110(f) through the Section 106 process:

- Requires the agency official, to the maximum extent possible, to undertake such planning and actions as necessary to minimize harm to any NHL that may be directly and adversely affected by an undertaking.
- Requires the agency official to request the participation of the ACHP in any consultation conducted under 36 CFR 800.6 to resolve adverse effects to NHLs.
- Further directs the agency to notify the Secretary of any consultation involving an NHL and to invite the Secretary to participate in consultation where there may be an adverse effect.

The HRVEA identified ten NHLs within the viewshed APE for the Project: Battle of Rhode Island Historic District, Bellevue Avenue Historic District, Block Island Southeast Lighthouse, Marble House, Montauk Point Lighthouse, Nantucket Historic District, New Bedford Historic District, Ocean Drive Historic District, The Breakers, and William Watts Sherman House. BOEM has determined that the following NHLs will be adversely affected by the Project: the Bellevue Avenue Historic District, the Ocean Drive Historic District, The Breakers, and the Block Island Southeast Lighthouse Historic Landmark.

BOEM is fulfilling its responsibilities to give a higher level of consideration to minimizing harm to NHLs, as required by NEPA Section 110(f), through the implementation of the special requirements outlined at 36 CFR 800.10. BOEM invited the NPS (as delegated by the Secretary) and ACHP to be consulting parties with the initiation of NHPA Section 106 process on the Project. BOEM notified the NPS and ACHP of the adversely affected NHLs with the distribution of this draft Finding.

BOEM considered prudent and feasible alternatives to avoid adverse effects on the Sandy Hook Light NHL, applying The Secretary of the Interior’s Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act (NPS 2013), which is presented by the National Park Service Federal Preservation Institute under Standard 4 as such:

Where such alternatives appear to require undue cost or to compromise the undertaking's goals and objectives, the agency must balance those goals and objectives with the intent of section 110(f). In doing so, the agency should consider: (1) the magnitude of the undertaking's harm to the historical, archaeological and cultural qualities of the NHL, (2) the public interest in the NHL and in the undertaking as proposed, and, (3) the effect a mitigation action would have on meeting the goals and objectives of the undertaking.

As described in Table 1 and the Assessment of Adverse Effects on Above-Ground Historic Properties above, BOEM considered five alternatives to the Proposed Action. Among these, Alternatives C, C1, and C2 considered removal of select WTG positions from development within the Lease Area for the purpose of to minimize impacts to fisheries habitats in the proposed project area that are the most vulnerable to long-term impacts in balance with the undertaking's goals and objectives. While the WTGs identified for removal under Alternative C, C1, or C2 could lessen the visual impact of the Project on the NHLs, the overall visual impact would still result in an adverse effects on the NHLs.

BOEM has planned and is taking action to minimize harm, as required by NHPA Section 110(f) at 36 CFR 800.10, to the NHLs. Descriptions of actions to minimize or mitigate adverse effects are summarized in this Finding of Effect and are discussed in greater detail in Attachment A, Memorandum of Agreement. Actions to minimize visual adverse effects include using nonreflective white and light gray paint on offshore structures (i.e., WTGs and OSS) and using navigational lighting that minimizes the visibility of the WTGs and OSS. Measures to mitigate adverse effects on NHLs may include activities identified through consultation. Implementation of a mitigation measure to resolve visual adverse effects on Sandy Hook Light would be consistent with the nature, scope, size, and magnitude of visual impacts, including cumulative visual impacts, caused by the undertaking.

In transmittal of this Finding of Adverse Effect document to the National Park Service, BOEM will specifically request National Park Service consulting party points of contact provide input from National Park Service's NHL Program pursuant to 36 CFR 800.10I, to which the Secretary of the Interior has delegated consultation authority, and will address this request to the NHL Program lead for the region.

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REFERENCES CITED

Bureau of Ocean Energy Management (BOEM). 2022. *Environmental Impact Statement for the Sunrise Wind Project*. December. Washington, D.C.: U.S. Department of the Interior, Bureau of Ocean Energy Management.

Schmidt, James S., Chiarel, Shannon M., McLellan, Tyler, Himmelstein, Ashley, Williams, Martha, and Goodwin, R. Christopher. 2022. *Phase I Marine Archaeological Resources Assessment for the Sunrise Offshore Wind Farm (SRW01) Located on the Outer Continental Shelf Block OCS-A 0487, and Offshore New York*. Prepared for Sunrise Wind, LLC.

Sunrise Wind. 2022. Cultural Resources Avoidance, Minimization, and Mitigation Measures. Revision 3, August 19, 2022.

Attachment A

The Memorandum of Agreement for the Sunrise Wind Project

**DRAFT MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, THE RHODE ISLAND STATE
HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER, THE CONNECTICUT STATE HISTORIC
PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE SUNRISE WIND FARM**

WHEREAS, the Bureau of Ocean Energy Management (BOEM) plans to authorize construction and operation of the Sunrise Wind Farm (SRWF), which consists of the SRWF Wind Energy Area (WEA) within Lease Area OCS-A 0487 and the Sunrise Wind Export Cable (SRWEC) connecting the WEA to proposed terrestrial components located in Brookhaven, New York, pursuant to Section 8(p)(1)(C) of the Outer Continental Shelf (OCS) Lands Act (43 U.S.C. 1337(p)(1)(C)), as amended by the Energy Policy Act of 2005 (Public Law No. 109-58) and in accordance with Renewable Energy Regulations at 30 Code of Federal Regulations (CFR) Part 585; and

WHEREAS, BOEM determined that the Projects constitute an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA), as amended (54 USC 306108), and its implementing regulations (36 CFR 800), and consistent with three Programmatic Agreements (PA) regarding the review of OCS renewable energy activities offshore which included two Programmatic Agreements Among The U.S. Department of the Interior, Bureau of Ocean Energy Management; The State Historic Preservation Officers of Massachusetts and Rhode Island; The Mashpee Wampanoag Tribe; The Narragansett Indian Tribe; The Wampanoag Tribe of Gay Head (Aquinnah); and The Advisory Council on Historic Preservation; Regarding the “Smart from the Start” Atlantic Wind Energy Initiative: Leasing and Site Assessment Activities offshore Massachusetts and Rhode Island (<http://www.boem.gov/MA-RI-PA-Executed>) and the 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 (<http://www.boem.gov/NY-NJ-Programmatic-Agreement-Executed>). Additionally, in 2012, BOEM executed a third PA among the State Historic Preservation Officers (SHPOs) of MA and RI, the Advisory Council on Historic Preservation (ACHP), the Mashpee Wampanoag Tribe, the Narragansett Indian Tribe, and the Wampanoag Tribe of Gay Head (Aquinnah) (see www.boem.gov/MA-RI-PA-Executed) and concurrently conducted a Section 106 review of its decision to issue commercial leases within the RI-MA WEAs; and

WHEREAS, BOEM plans to approve with conditions the Construction and Operations Plan (COP) submitted by Sunrise Wind, LLC (Sunrise); and

WHEREAS, BOEM determined the construction, operation, maintenance, and eventual decommissioning of the Projects, planned for up to 94 offshore Wind Turbine Generators (WTGs) and one offshore converter station (OCS-DC) at 102 possible locations, up to 180 statute miles (mi) (290 kilometers [km]) of inter-array cables (IAC), one OCS-DC, one DC SRWEC located within an up to 104.7-mi (168.5-km) long corridor, onshore transmission cable, a transition joint bay (TJB), concrete and/or direct buried joint bays and associated components, onshore interconnection cable, fiber optic cable co-located with the onshore transmission and onshore interconnection cables, and one onshore converter

station (OnCS-DC), could potentially adversely affect historic properties as defined under 36 CFR 800.16(l); and

WHEREAS, BOEM is preparing an Environmental Impact Statement (EIS) for the Projects pursuant to the National Environmental Policy Act (42 USC 4321 et seq.) (NEPA) and elected to use the NEPA substitution process with its Section 106 consultation pursuant to 36 CFR 800.8(c); and

WHEREAS, BOEM published a notice of intent on August 31, 2021 of their decision to use NEPA substitution and followed the standards for developing environmental documents to comply with the Section 106 consultation for this Project pursuant to 36 CFR 800.8(c); and

WHEREAS, in accordance with 36 CFR 800.3, BOEM invited Massachusetts SHPO, Rhode Island SHPO, Connecticut SHPO, and the New York SHPO to consult on the Project on August 31, 2021, and each SHPO accepted on or before September 14, 2021, or reserved the right to consult upon review of the Draft EIS; and

WHEREAS, in accordance with 36 CFR 800.3, BOEM invited ACHP to consult on the Project on August 31, 2021, and ACHP accepted on or before June 10, 2022; and

WHEREAS, the Project is within a commercial lease area subject to the previous NHPA Section 106 review by BOEM regarding the issuance of the commercial lease and approval of site assessment activities. Both Section 106 reviews for the lease issuance and the approval of the site assessment plan were conducted pursuant to the PA and concluded with No Historic Properties Affected on September 21, 2016.

WHEREAS, consistent with 36 CFR 800.16(d) and BOEM's *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* (May 27, 2020), BOEM defined the area of potential effects (APE) for the undertaking as the depth and breadth of the seabed potentially impacted by any bottom-disturbing activities, constituting the marine archaeological resources portion of the APE (marine APE); the depth and breadth of terrestrial areas potentially impacted by any ground disturbing activities, constituting the terrestrial archaeological resources portion of the APE (terrestrial APE); the viewshed from which offshore or onshore renewable energy structures would be visible, constituting the viewshed portion of the APE (viewshed APE); and any temporary or permanent construction or staging areas that may fall into any of the aforementioned offshore or onshore portions of the APE (see Attachment 1 APE Maps); and

WHEREAS, BOEM identified 10 National Historic Landmarks, 59 historic districts and 56 NRHP-eligible aboveground historic properties, three Native American sites and Traditional Cultural Properties, 179 properties considered as potential aboveground historic properties in the offshore Project components' portion of the viewshed APE, and one aboveground historic property within the onshore above-ground viewshed APE; eight submerged historic properties and 43 ancient submerged landforms and features (ASLFs) in the marine APE; and no historic properties in the terrestrial APE; and

WHEREAS, BOEM identified 10 National Historic Landmarks (NHLs) in the offshore Project components' portion of the viewshed APE, Montauk Point Lighthouse, Nantucket Historic District, New Bedford Historic District, Block Island Southeast Lighthouse National Historic Landmark, Ocean Drive Historic District, Bellevue Avenue Historic District, William Watts Sherman House, The Breakers, Marble House, and the Battle of Rhode Island Historic District; and

WHEREAS, within the range of Project alternatives analyzed in the EIS, BOEM determined that four NHLs (including two historic districts), three historic districts, one TCP, and 39 individual historic properties would be subject to visual adverse effects from WTGs. One ASLF (WEA_P-22) may be potentially adversely affected by physical disturbance from proposed WEA Project activities within the avoidance buffers of this resource. No historic properties were identified in the terrestrial APE, and thus are not adversely affected with implementation of the undertaking; and

WHEREAS, BOEM determined there would be no visual adverse effect to six of the 10 NHLs in the offshore viewshed APE, Montauk Point Lighthouse, Nantucket Historic District, New Bedford Historic District, William Watts Sherman House, Marble House, and Battle of Rhode Island Historic District, because ocean views are not character-defining features of these historic properties or because of the limited visibility of the Project from the historic properties; and

WHEREAS, BOEM determined that the implementation of the avoidance measures identified in this MOA will avoid adverse effects to 54 historic districts, two TCPs, 196 aboveground historic properties or aboveground resources that may be considered historic properties in the offshore viewshed APE, and one aboveground historic property within the onshore above-ground viewshed APE; and

WHEREAS, BOEM determined all of the ASLFs identified in the marine APE are eligible for the National Register of Historic Places (NRHP) under Criteria A and D and determined, under each of the Project alternatives analyzed in the EIS, that the undertaking will adversely affect the one ASLF (WEA_P-22); and

WHEREAS, BOEM determined the undertaking will adversely affect no historic properties identified in the marine APE; and

WHEREAS, under each of the Project alternatives analyzed in the EIS, BOEM determined the Project would visually adversely affect one historic district, one TCP, and 16 aboveground historic properties in Massachusetts: Gay Head – Aquinnah Town Center Historic District (Aquinnah), Chappaquiddick Island TCP (Edgartown), Gay Head Light (Aquinnah), Gay Head – Aquinnah Shops Area (Aquinnah), Vanderhoop, Edwin DeVries Homestead (Aquinnah), Cooper, Tom House (Aquinnah), Gay Head – Aquinnah Coast Guard Station Barracks (Aquinnah), Haskins, Theodore House (Aquinnah), 3 Windy Hill Drive (Aquinnah), 71 Moshup Trail (Aquinnah), Vanderhoop, Leonard House (Aquinnah), Vineyard Sound and Moshup’s Bridge (Aquinnah), Hancock, Capt. Samuel – Mitchell, Capt. West House (Chilmark), Flanders, Ernest House, Shop and Barn (Chilmark), Hancock, Russell House (Chilmark), Mayhew, Simon House (Chilmark), Flaghole (Chilmark), and Scrubby Neck Schoolhouse (West Tisbury); and

WHEREAS, under each of the Project alternatives analyzed in the EIS, BOEM determined the Project would visually adversely affect four NHLs (two of these are historic districts), two historic districts and 23 aboveground historic properties in Rhode Island: Bellevue Avenue Historic District (Newport), Ocean Drive Historic District (Newport), The Breakers (Newport), Block Island Southeast Lighthouse Historic Landmark (New Shoreham), Old Harbor Historic District (New Shoreham), New Shoreham Historic District (New Shoreham), Point Judith Lighthouse (Narragansett), Block Island North Light (New Shoreham), Corn Neck Road (New Shoreham), Hippocampus/Boy’s Camp/Beane Family (New Shoreham), Mitchell Farm (New Shoreham), Champlin Farm (New Shoreham), Indian Head Neck Road (New Shoreham), Island Cemetery/Old Burial Ground (New Shoreham), Beach Avenue (New Shoreham), Beacon Hill (New Shoreham), Spring House Hotel (New Shoreham), Spring House Hotel Cottage (New

Shoreham), Capt. Welcome Dodge Sr. House (New Shoreham), Spring Street (New Shoreham), Caleb W. Dodge Jr. House (New Shoreham), WWII Lookout Tower – Spring Street (New Shoreham), Pilot Hill Road and Seaweed Lane (New Shoreham), WWII Lookout Tower at Sands Pond (New Shoreham), Lewis-Dickens Farm (New Shoreham), Miss Abby E. Vaill/1 of 2 Vaill Cottages (New Shoreham), Hon. Julius Deming Perkins/Bayberry Lodge (New Shoreham), Mohegan Cottage/Everett D. Barlow (New Shoreham), and Capt. Mark L. Potter House (New Shoreham); and

WHEREAS, Massachusetts SHPO concurred with BOEM’s finding of adverse effect on [insert date of SHPO’s concurrence], Rhode Island SHPO concurred with BOEM’s finding of adverse effect on [insert date of SHPO’s concurrence], Connecticut SHPO concurred with BOEM’s finding of adverse effect on [insert date of SHPO’s concurrence], and New York SHPO concurred with BOEM’s finding of adverse effect on [insert date of SHPO’s concurrence]; and

WHEREAS, throughout this document the term ‘Tribe,’ has the same meaning as ‘Indian Tribe,’ as defined at 36 CFR 800.16(m); and

WHEREAS, BOEM invited the following federally recognized Tribes to consult on this Project: Mashpee Wampanoag Tribe, Shinnecock Indian Nation, Mashantucket Pequot Tribal Nation, Wampanoag Tribe of Gay Head – Aquinnah, Mohegan Tribe of Indians of Connecticut, Narragansett Indian Tribe, Delaware Tribe of Indians, The Delaware Nation; and

WHEREAS, the Mashpee Wampanoag Tribe, Shinnecock Indian Nation, Mashantucket Pequot Tribal Nation, Wampanoag Tribe of Gay Head – Aquinnah accepted BOEM’s invitation to consult and BOEM invited these Tribes to sign this MOA as concurring parties; and

WHEREAS, in accordance with 36 CFR 800.3, BOEM invited other federal agencies, state and local governments, and additional consulting parties with a demonstrated interest in the undertaking to participate in this consultation, the list of those accepting participation and declining to participate by either written response or no response to direct invitations are listed in Attachment 2; and

WHEREAS, BOEM has consulted with Sunrise in its capacity as an applicant seeking federal approval of the COP, and, because Sunrise has responsibilities under the MOA, BOEM has invited the applicant to be an invited signatory to this MOA; and

WHEREAS, construction of the Project requires a Department of the Army permit from the United States Army Corps of Engineers (USACE) for activities that result in the discharge of dredged or fill material into jurisdictional wetlands and/or other waters of the United States pursuant to Section 404 of the Clean Water Act, and activities occurring in or affecting navigable waters of the United States pursuant to Section 10 of the Rivers and Harbors Act; and

WHEREAS, BOEM invited USACE to consult since USACE will be issuing permits for this Project under Section 404 of the Clean Water Act (33 USC 1344) and Section 10 of the Rivers and Harbors Act (33 USC 403); and

WHEREAS, the USACE designated BOEM as the Lead Federal Agency pursuant to 36 CFR 800.2(a)(2) to act on its behalf for purposes of compliance with Section 106 for this Project (in a letter dated [Month XX, 20XX], BOEM invited the USACE to sign this MOA as a concurring party, and the USACE accepted the invitation to sign this MOA as a concurring party; and

WHEREAS, BOEM notified and invited the Secretary of the Interior (represented by the National Park Service (NPS) to consult regarding this Project pursuant to the Section 106 regulations, including consideration of the potential effects to the NHLs as required under NHPA Section 110(f) (54 USC 306107) and 36 CFR 800.10, the NPS accepted BOEM's invitation to consult, and BOEM invited the NPS to sign this MOA as a concurring party; and

WHEREAS, BOEM has consulted with the signatories, invited signatories, and consulting parties participating in the development of this MOA regarding the definition of the undertaking, the delineation of the APEs, the identification and evaluation of historic properties, the assessment of potential effects to the historic properties, and on measures to avoid minimize, and mitigate adverse effects to historic properties; and

WHEREAS, BOEM has planned and is taking action to minimize harm, as required by NHPA Section 110(f) at 36 CFR 800.10 to the four adversely effected NHLs in the viewshed APE, Bellevue Avenue Historic District, Ocean Drive Historic District, The Breakers, and the Block Island Southeast Lighthouse, as explained in BOEM's 2022 *Finding of Adverse Effect for the Sunrise Wind Farm* (hereafter, the Finding of Effect, and dated [December 2022]), such measures include planned distance of the SRWF Lease Area to minimize relative scale and prominence of visible WTGs, uniform WTG design, speed, height, and rotor diameter to reduce visual contracts, uniform spacing of 1 nm (1.85 km) to decrease visual clutter, consistent with spacing across the NY WEAs, aligning WTGs to allow for safe transit corridors, a total number of WTG reduction from the maximum proposed 102, lighting and marking in compliance with BOEM's guidelines for Lighting and Marking of Structures Supporting Renewable Energy Development including paint color RAL 9010 Pure White or RAL 7035 Light Grey to blend with background sea and skies, flashing lighting instead of steady lighting where practicable, and the use of the ADLSs (subject to approval by the Federal Aviation Administration) to limit the time in which WTG lights are on and visible from adversely affected NHLs; and

WHEREAS, pursuant to 36 CFR 800.6, BOEM invited Sunrise to sign as invited signatory and the consulting parties as listed in Attachment 2 to sign as concurring parties; however, the refusal of any consulting party to sign this MOA or otherwise concur does not invalidate or affect the effective date of this MOA, and consulting parties who choose not to sign this MOA will continue to receive information if requested and have an opportunity to participate in consultation as specified in this MOA; and

WHEREAS, the signatories agree, consistent with 36 CFR 800.6(b)(2), that adverse effects will be resolved in the manner set forth in this MOA; and

WHEREAS, BOEM sought and considered the views of the public regarding Section 106 for this Project through the NEPA process by holding virtual public scoping meetings when initiating the NEPA and NHPA Section 106 review on September 16, 20, and 22, 2021 and virtual public hearings related to the Draft EIS on [Month Days], 2022; and

WHEREAS, BOEM made the first Draft MOA available to the public for review and comment from Month XX, 2022, to Month XX, 2022, and made an updated version of the Draft MOA available to the public from [Month XX, 2022], to [Month XX, 2022], using BOEM's Project website, and BOEM [did or did not receive any comments from the public]; and

NOW, THEREFORE, BOEM, the Massachusetts SHPO, Rhode Island SHPO, Connecticut SHPO, New York SHPO, and the ACHP agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

BOEM, with the assistance of Sunrise Wind, shall ensure that the following measures are carried out as conditions of its approval of the undertaking:

I. MEASURES TO AVOID ADVERSE EFFECTS TO IDENTIFIED HISTORIC PROPERTIES

A. Marine APE

1. BOEM will include the following avoidance measures for adverse effects within the marine APE as conditions of approval of the Sunrise Wind COP:
 - i. Sunrise will avoid known historic submerged cultural resources, such as shipwrecks and debris fields, previously identified during marine archaeological surveys for placement of Project structures and when conducting seafloor-disturbing activities.
 - ii. Sunrise will avoid potential submerged cultural resources, such as potential shipwrecks and potentially significant debris fields previously identified during marine archaeological surveys.
 - iii. Sunrise will avoid ASLFs previously identified during marine archaeological resource assessments for the Project by a distance of no less than 50 meters from the known extent of the resource for placement of Project structures and when conducting seafloor-disturbing activities, to the extent practicable. One ASLF will be subject to seabed disturbance corresponding to proposed jack-up work affiliated with the installation of the foundation of a proposed WTG (WEA_P-22).

B. Viewshed APE

1. BOEM will include the following avoidance measures for adverse effects within the viewshed APE as conditions of approval of the Sunrise COP:
 - i. To maintain avoidance of adverse effects to historic properties in the viewshed APE where BOEM determined no adverse effects or where no effects would occur, BOEM will require Sunrise to ensure Project structures are within the design envelope, sizes, scale, locations, lighting prescriptions, and distances that were used by BOEM to inform the definition of the APE for the Project and for determining effects in the Finding of Effect (see the Construction & Operations Plan: Sunrise Wind Farm, August, 2022).

II. MEASURES TO MINIMIZE ADVERSE EFFECTS TO IDENTIFIED HISTORIC PROPERTIES

A. Viewshed APE

1. BOEM has undertaken planning and actions to minimize adverse effects to aboveground historic properties in the viewshed APE. BOEM will include these minimization measures for adverse effects within the viewshed APE as conditions of approval of the Sunrise Wind COP:
 - i. Sunrise will use uniform WTG design, speed, height, and rotor diameter to reduce visual contrast and decrease visual clutter.
 - ii. Sunrise will use consistent and as far apart as possible, with maximum spacing in the dominant trawl tow direction where feasible, with minimum spacing of no less than 1.0 NM (1.9 km) to decrease visual clutter, aligning WTGs to allow for safe transit corridors.

- iii. Sunrise will apply a paint color to the WTGs no lighter than RAL 9010 pure white and no darker than RAL 7035 light gray to help reduce the potential visibility of the turbines against the horizon during daylight hours.
- iv. Sunrise will implement an aircraft detection lighting system (ADLS) to automatically activate lights when aircraft approach the wind farm. The WTGs and OSS would be lit and marked in accordance with FAA and USCG lighting standards and consistent with BOEM's *Guidelines for Lighting and Marking of Structures Supporting Renewable Energy Development* (April 28, 2021) to reduce light intrusion.

III. MEASURES TO MITIGATE ADVERSE EFFECTS TO IDENTIFIED HISTORIC PROPERTIES

A. Marine APE

1. Sunrise will avoid identified marine archaeological resources including shipwrecks and potential shipwrecks.
2. Sunrise cannot avoid one ASLF (WEA_P-22). To resolve the adverse effects to the ASLF, BOEM will include the following as conditions of approval of the Sunrise Wind Farm COP and require fulfillment of the following as mitigation measures prior to construction. Sunrise Wind will fund mitigation measures in accordance with Attachment 3 (**Historic Property Treatment Plan for the Sunrise Wind Offshore Wind Farm Ancient Submerged Landform Features Federal Waters on the Outer Continental Shelf**):
 - i. Consultations with BOEM and Native American Tribes to identify specific research questions and goals that can be addressed through geotechnical investigations of the affected ASLF.
 - a. Based on the MARA analyses, the location of the Project south of the glacial limits during the last glaciation may provide opportunities to document and analyze ancient landscapes and environmental conditions between 45,000 and 26,000 years ago. Preservation of comparable deposits in terrestrial settings of the northeastern United States is very rare due to the destructive effects of glaciation and extensive sedimentation in the post-glacial timeframe. Further analyses of such deposits, if present, may provide important new information on ancient landscapes and biomes of the region.
 - b. Rigorous analyses of accelerator mass spectrometer (AMS) dating from Sunrise Wind cores and comparable datasets from other OCS wind developments in the region should allow for detailed reconstruction of sea levels in the terminal Pleistocene and early Holocene epochs. Accurate and detailed sea level data would significantly enhance opportunities to identify and protect important submerged cultural sites that may be preserved on the OCS.
 - c. Collaborative research conducted via direct participation of indigenous researchers and knowledge keepers may expand the range of analyses conducted on the OCS and provide a more comprehensive understanding of the region's cultural history and significance.
 - ii. Development of specific protocols for field investigations, laboratory analyses, and interpretations that reflect the priorities of Native American Tribes for whom ASLF have traditional cultural significance.

- iii. Development of specific protocols for the appropriate dissemination of data and interpretations that mutually support the protection of ASLF and associated indigenous knowledge and the scientific research of ancient indigenous interactions with Pleistocene-age landscapes.
- iv. Geotechnical sampling of the affected sections of ASLF within the APE.
 - a. Sampling methods may include boring or other methods to obtain intact physical samples of preserved paleosols or other deposits for analyses. Sunrise Wind anticipates three to five borings may be collected from each affected ASLF section to support the research and analyses.
 - b. All geotechnical sampling would be completed prior to the initiation of Project construction activities that could affect the ASLF.
- v. Collaborative laboratory analyses of geotechnical samples with direct participation of Native American Tribe representatives and researchers with the QMA staff and Project representatives. Laboratory analyses may include AMS dating, stable isotope studies to assist in reconstructing environmental conditions through time, pollen/phytolith analyses to identify elements of ancient terrestrial plant communities and ecological parameters, and screening of sediments for any microscopic evidence of ancient indigenous human activities. Geographic Information System (GIS) analyses will be completed to assist in the reconstruction of ancient topography, sea levels, and post-glacial isostatic responses during the terminal Pleistocene and early Holocene eras.
 - a. All laboratory analyses will be conducted in compliance with current local, state, and federal health and safety guidelines. Where appropriate, Sunrise Wind will provide for the participation of Native American Tribe representatives via telepresence, remote video/audio connections, or comparable means to ensure opportunities for meaningful participation and discussion throughout the process.
- vi. Data aggregation and sharing via a non-proprietary, open-source GIS-format that allows for the incorporation of Sunrise Wind datasets with other relevant data collected from the Rhode Island (RI)/Massachusetts (MA) and Massachusetts Wind Energy Areas. Comparison to recently-acquired datasets from areas north of the Last Glacial Maximum glacial limits will be completed to provide a more comprehensive interpretation of the ancient OCS landscapes and their evolution through time.
- vii. Reporting of mitigation investigations to document the results of analyses and incorporation of the Sunrise Wind data with available datasets from other recent paleoenvironmental and archaeological investigations of the OCS.
 - a. Reporting would include professional documentation suitable for use by BOEM, SHPOs, and other researchers.
 - b. Reporting specifically prepared for use by Native American Tribes in a format suitable for the Tribes' interests and purposes.
 - c. Public interpretations that provide important new information gained through the mitigation efforts and that minimize the risk of inappropriate disclosures

that may risk harm to the identified ASLF or the traditional cultural use of such historic properties.

B. Terrestrial APE

1. BOEM will require archaeological monitoring during construction at the Carmans River crossing as a condition of approval for the Sunrise Wind Offshore Wind Farm COP. Archaeological monitoring would reduce potential impacts on undiscovered archaeological resources to a minor level by preventing further physical impacts on the archaeological resources encountered during construction. If archaeological resources or human remains are identified during Project construction, operations, or decommissioning, the onsite construction supervisor would stop work immediately and follow the protocols outlined in the Sunrise Wind Unanticipated Discoveries Plan (Attachment 5).

C. Viewshed APE

1. BOEM will include the following as conditions of approval of the Sunrise Wind Farm COP and as mitigation measures to resolve the adverse effects:
 - i. Mitigation measures for visual adverse effects may include:
 - a. Support for oral history projects to document Native American traditions associated with culturally significant marine and terrestrial species at risk due to climate change and/or the significance of economic practices and traditions associated with historic properties.
 - b. Support for scholarships and/or professional training programs for Native American Tribal Members for marine sciences, marine construction, geophysics, geology, history, anthropology, environmental sciences, or indigenous studies.
 - c. Support for planning, feasibility assessments, prioritization, and implementation of coastal resilience measures to minimize sea level and storm hazards, retention or appropriate adaptive re-use of historic shoreline features, and/or habitat restoration that contribute to historic maritime settings or Traditional Cultural Properties.
 - d. Repair or restoration work to maintain the physical integrity of affected historic properties, including buildings, structures, and landscape features that contribute to historic maritime settings.
 - e. Preparation of National Register nominations and/or historic resources surveys to increase public awareness and appreciation of coastal historic properties and their association with historic maritime landscapes, evolving land use patterns, and the historical development of the affected communities.
 - f. Support for public interpretation of risks, challenges, and potential solutions for coastal hazards to historic properties associated with climate change, sea-level rise, changing shorelines, and the historical relationship of shorelines and ocean views to the affected properties.
 - ii. Sunrise will fund fulfillment mitigation measures for the following adversely affected historic properties: Gay Head – Aquinnah Town Center Historic District,

Gay Head – Aquinnah Shops Area, Vanderhoop, Edwin DeVries Homestead, Cooper, Tom House, Gay Head – Aquinnah Coast Guard Station Barracks, Haskins, Theodore House, 3 Windy Hill Drive, 71 Moshup Trail, Vanderhoop, Leonard House, in accordance with Attachment 4 (Historic Properties Treatment Plan for the Sunrise Wind Farm: Nine Historic Properties, Town of Aquinnah, Dukes County, Massachusetts).

- iii. Sunrise will fund fulfillment mitigation measures for the Chappaquiddick Island TCP, in accordance with Attachment 4 (Historic Property Treatment Plan for the Sunrise Wind Farm: The Chappaquiddick Island Traditional Cultural Property).
- iv. Sunrise will fund fulfillment mitigation measures for the following adversely affected historic properties: Hancock, Capt. Samuel – Mitchell, Capt. West House, Flanders, Ernest House, Shop and Barn, Hancock, Russell House, Mayhew, Simon House, and Flaghole, in accordance with Attachment 4 (Historic Properties Treatment Plan for the Sunrise Wind Farm: Five Historic Properties, Town of Chilmark, Dukes County, Massachusetts).
- v. Sunrise will fund fulfillment mitigation measures for the Gay Head Light, in accordance with Attachment 4 (Historic Property Treatment Plan for the Sunrise Wind Farm: The Gay Head Light).
- vi. Sunrise will fund fulfillment mitigation measures for the following adversely affected historic properties: Old Harbor Historic District (New Shoreham), New Shoreham Historic District (New Shoreham), Block Island North Light (New Shoreham), Corn Neck Road (New Shoreham), Hippocampus/Boy's Camp/Beane Family (New Shoreham), Mitchell Farm (New Shoreham), Champlin Farm (New Shoreham), Indian Head Neck Road (New Shoreham), Island Cemetery/Old Burial Ground (New Shoreham), Beach Avenue (New Shoreham), Beacon Hill (New Shoreham), Spring House Hotel (New Shoreham), Spring House Hotel Cottage (New Shoreham), Capt. Welcome Dodge Sr. House (New Shoreham), Spring Street (New Shoreham), Caleb W. Dodge Jr. House (New Shoreham), WWII Lookout Tower – Spring Street (New Shoreham), Pilot Hill Road and Seaweed Lane (New Shoreham), WWII Lookout Tower at Sands Pond (New Shoreham), Lewis-Dickens Farm (New Shoreham), Miss Abby E. Vaill/1 of 2 Vaill Cottages (New Shoreham), Hon. Julius Deming Perkins/Bayberry Lodge (New Shoreham), Mohegan Cottage/Everett D. Barlow (New Shoreham), and Capt. Mark L. Potter House (New Shoreham), in accordance with Attachment 4 (Historic Properties Treatment Plan for the Sunrise Wind Farm: Twenty-four Historic Properties, Town of New Shoreham, Washington County, Rhode Island).
- vii. Sunrise will fund fulfillment mitigation measures for the Point Judith Lighthouse, in accordance with Attachment 4 (Historic Property Treatment Plan for the Sunrise Wind Farm: The Point Judith Lighthouse).
- viii. Sunrise will fund fulfillment mitigation measures for the Block Island Southeast Lighthouse, in accordance with Attachment 4 (Historic Property Treatment Plan for the Sunrise Wind Farm: The Block Island Southeast Lighthouse, National Historic Landmark).
- ix. Sunrise will fund fulfillment mitigation measures for the Vineyard Sound & Moshup's Bridge TCP, in accordance with Attachment 4 (Historic Property

Treatment Plan for the Sunrise Wind Farm: The Vineyard Sound & Moshup's Bridge Traditional Cultural Property).

- x. Sunrise will fund fulfillment mitigation measures for Scrubby Neck Schoolhouse in accordance with Attachment 4 (Historic Property Treatment Plan for the Sunrise Wind Farm: The Scrubby Neck Schoolhouse, Town of West Tisbury, Dukes County, Massachusetts).

IV. REVIEW PROCESS FOR DOCUMENTS

A. The following process will be used for any document, report, or plan produced in accordance with Stipulations of this MOA:

1. Draft Document

- i. Sunrise Wind shall provide the document to BOEM for technical review and approval
 - a. BOEM has 15 calendar days to complete its technical review.
 - b. If BOEM does not provide approval, it shall submit its comments back to Sunrise Wind, who will have 15 calendar days to address the comments.
- ii. BOEM, with the assistance of Sunrise Wind, shall provide the draft document to consulting parties, except the ACHP, for review and comment.
 - a. Consulting parties shall have 30 calendar days to review and comment.
 - b. BOEM, with the assistance of Sunrise Wind, shall coordinate a meeting with consulting parties to facilitate comments on the document if requested by a consulting party.
 - c. BOEM shall consolidate comments received and provide them to Sunrise Wind within 15 calendar days of receiving comments from consulting parties.
 - d. BOEM with the assistance of Sunrise Wind, will respond to the comments and make necessary edits to the documents.

2. Draft Final Document

- i. Sunrise Wind shall provide BOEM with the draft final document for technical review and approval
 - a. BOEM has 15 calendar days to complete its technical review.
 - b. If BOEM does not provide approval, it shall submit its comments back to Sunrise Wind, who will have 15 calendar days to address the comments.
- ii. BOEM, with the assistance of Sunrise Wind, shall provide the final draft document to consulting parties, except the ACHP, for review and comment.
 - a. Consulting parties shall have 30 calendar days to review and comment.
 - b. BOEM, with the assistance of Sunrise Wind, shall coordinate a meeting with consulting parties to facilitate comments on the document if requested by a consulting party.
 - c. BOEM shall consolidate comments received and provide them to Sunrise Wind within 15 calendar days of receiving comments from consulting parties.
 - d. BOEM with the assistance of Sunrise Wind, will respond to the comments and make necessary edits to the documents.

3. Final Document

- i. Sunrise Wind shall provide BOEM with the final document approval
 - a. BOEM has 15 calendar days to complete its technical review.
 - b. If BOEM does not provide approval, it shall submit its comments back to Sunrise Wind, who will have 15 calendar days to address the comments.
 - c. BOEM, with the assistance of Sunrise Wind, shall provide the final document to consulting parties, except the ACHP, within 30 calendar days of approving the final document. With this same submittal of final documents, Sunrise Wind will provide a summary of all the comments received on the documents and BOEM's responses.

V. SUBMISSION OF DOCUMENTS

- A. Massachusetts SHPO, Rhode Island SHPO, New York SHPO, Connecticut SHPO, ACHP, NPS, Tribes, and Consulting Parties
 1. All submittals to the Massachusetts SHPO, Rhode Island SHPO, Connecticut SHPO, New York SHPO, ACHP, NPS, Tribes, and consulting parties will be submitted electronically unless a specific request is made for the submittal be provided in paper format.

VI. PROJECT MODIFICATIONS

- A. If Sunrise Wind proposes any modifications to the Project that expands the Project beyond the Project Design Envelope included in the COP and/or occurs outside the defined APEs or the proposed modifications change BOEM's final Section 106 determinations and findings for this Project, Sunrise Wind shall notify and provide BOEM with information concerning the proposed modifications. BOEM will determine if these modifications require alteration of the conclusions reached in the Finding of Effect and, thus, will require additional consultation with the signatories, invited signatories and consulting parties. If BOEM determines additional consultation is required, Sunrise Wind will provide the signatories, invited signatories, and consulting parties with the information concerning the proposed changes, and they will have 30 calendar days from receipt of this information to comment on the proposed changes. BOEM shall take into account any comments from signatories, invited signatories, and consulting parties prior to agreeing to any proposed changes. Using the procedure below, BOEM will, as necessary, consult with the signatories, invited signatories, and consulting parties to identify and evaluate historic properties in any newly affected areas, assess the effects of the modification(s), and resolve any adverse effects.
 1. If the Project is modified and BOEM identifies no additional historic properties or determines that no historic properties are adversely affected due to the modification, BOEM, with the assistance of Sunrise Wind, will notify and consult with the signatories, invited signatories, and consulting parties following the consultation process set forth in this Stipulation VII.A.1.
 - i. Sunrise Wind will notify all the signatories, invited signatories, and consulting parties about this proposed change and BOEM's determination by providing a written summary of the project modification including any maps, a summary of any additional surveys and/or research conducted to identify historic properties and assess effects, and copies of the surveys.

- ii. BOEM and Sunrise Wind will allow the signatories, invited signatories, and consulting parties 30 calendar days to review and comment on the proposed change, BOEM's determination, and the documents.
 - iii. After the 30-calendar review period has concluded and no comments require additional consultation, Sunrise Wind will notify the signatories and consulting parties that BOEM has approved the project modification and, if they received any comments, provide a summary of the comments and BOEM's responses.
 - iv. BOEM, with the assistance of Sunrise Wind, will conduct any consultation meetings if requested by the signatories or consulting parties.
 - v. This MOA will not need to be amended if no additional historic properties are identified and/or adversely affected.
2. If BOEM determines new adverse effects to historic properties will occur due to a Project Modification(s), BOEM with the assistance of Sunrise Wind will notify and consult with the signatories, invited signatories, and consulting parties regarding BOEM's finding and the proposed measures to resolve the adverse effect(s) including the development of a new treatment plan(s) following the consultation process set forth in this Stipulation VII.A.2.
- i. Sunrise Wind will notify all signatories, invited signatories, and consulting parties about this proposed modification, BOEM's determination, and the proposed resolution measures for the adverse effect(s).
 - ii. The signatories, invited signatories, and consulting parties will have 30 calendar days to review and comment on the adverse effect finding and the proposed resolution of adverse effect(s), including a draft treatment plan(s).
 - iii. BOEM, with the assistance of Sunrise Wind, will conduct additional consultation meetings, if necessary, during consultation on the adverse effect finding and during drafting and finalization of the treatment plan(s).
 - iv. BOEM, with the assistance of Sunrise Wind, will respond to the comments and make necessary edits to the documents.
 - v. Sunrise Wind will send the revised draft final documents to the other signatories, invited signatories, and consulting parties for review and comment during a 30-calendar day review and comment period. With this same submittal of draft final documents, Sunrise Wind will provide a summary of all the comments received on the documents and BOEM's responses.
 - vi. BOEM, with the assistance of Sunrise Wind, will respond to the comments on the draft final documents and make necessary edits to the documents.
 - vii. Sunrise Wind will notify all the signatories, invited signatories, and consulting parties that BOEM has approved the project modification and will provide the final document(s) including the final treatment plan(s) and a summary of comments and BOEM's responses to comments, if they receive any on the draft final documents, after BOEM has received concurrence from the applicable SHPOs on the finding of new adverse effect(s), BOEM has accepted the final treatment plan(s), and BOEM has approved the Project modification.

3. If any of the signatories, invited signatories, or consulting parties object to determinations, findings, or resolutions made pursuant to these measures (Stipulation VII.A.1 and 2), BOEM will resolve any such objections pursuant to the dispute resolution process set forth Stipulation XIII.

VII. CURATION

A. Collections from federal lands or the OCS:

1. Any archaeological materials removed from federal lands or the OCS as a result of the actions required by this MOA shall be curated in accordance with 36 CFR 79, "Curation of Federally Owned and Administered Archaeological Collections," ACHP's "Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites" published in the Federal Register (64 Fed. Reg. 27085-27087 (May 18, 1999)), or other provisions agreed to by the consulting parties and following applicable State guidelines. No excavation should be initiated before acceptance and approval of a curation plan.

B. Collections from state, local government, and private lands:

1. Archaeological materials from state or local government lands in the APE and the records and documentation associated with these materials shall be curated within the state of their origin at a repository preferred by the SHPO, or an approved and certified repository, in accordance with the standards and guidelines required by the New York State Education Department and New York State SHPO for materials collected in New York. Lands as described here may include the seafloor in state waters. No excavation should be initiated before acceptance and approval of a curation plan.
2. Collections from private lands that would remain private property: In cases where archaeological survey and testing are conducted on private land, any recovered collections remain the property of the landowner. In such instances, BOEM and Sunrise Wind, in coordination with the New York SHPO as appropriate based on which state these materials are located, and affected Tribe(s), will encourage landowners to donate the collection(s) to an appropriate public or Tribal entity. To the extent a private landowner requests that the materials be removed from the site, Sunrise Wind will seek to have the materials donated to the repository identified under Stipulation VII.B.1 through a written donation agreement developed in consultation with the consulting parties. BOEM, assisted by Sunrise Wind, will seek to have all materials from each state curated together in the same curation facility within the state of origin. In cases where the property owner wishes to transfer ownership of the collection(s) to a public or Tribal entity, BOEM and Sunrise Wind will ensure that recovered artifacts and related documentation are curated in a suitable repository as agreed to by BOEM, the appropriate SHPO, and affected Tribe(s), and following applicable State guidelines. To the extent feasible, the materials and records resulting from the actions required by this MOA for private lands, shall be curated in accordance with 36 CFR 79. No excavation should be initiated before acceptance and approval of a curation.

VIII. PROFESSIONAL QUALIFICATIONS

- A. Secretary's Standards for Archaeology and Historic Preservation. Sunrise will ensure that all work carried out pursuant to this MOA will meet the SOI Standards for Archaeology and Historic Preservation, 48 FR 44716 (September 29, 1983), taking into account the suggested approaches to new construction in the SOI's Standards for Rehabilitation.
- B. SOI Professional Qualifications Standards. Sunrise will ensure that all work carried out pursuant to this MOA is performed by or under the direction supervision of historic preservation professionals who meet the SOI's Professional Qualifications Standards (48 FR 44738-44739). A "qualified professional" is a person who meets the relevant standards outlined in such SOI's Standards. BOEM, or its designee, will ensure that consultants retained for services pursuant to the MOA meet these standards.
- C. Investigations of ASLFs. Sunrise will ensure that the additional investigations of ASLFs will be conducted and reports and other materials produced by one or more qualified marine archaeologists and geological specialists who meet the SOI's Professional Qualifications Standards and has experience both in conducting High Resolution Geophysical (HRG) surveys and processing and interpreting the resulting data for archaeological potential, as well as collecting, subsampling, and analyzing cores.
- D. Tribal Consultation Experience. Sunrise will ensure that all work carried out pursuant to this MOA that requires consultation with Tribes is performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes.

IX. DURATION

- A. This MOA will expire at (1) the decommissioning of the Project in the lease area, as defined in Sunrise's lease with BOEM (Lease Number OCS-A 0487) or (2) 25-years from the date of COP approval, whichever occurs first. Prior to such time, BOEM may consult with the other signatories and invited signatories to reconsider the terms of the MOA and amend it in accordance with Amendment Stipulation (Stipulation XIV).

X. POST-REVIEW DISCOVERIES

- A. Implementation of Post-Review Discovery Plans. If properties are discovered that may be historically significant or have unanticipated effects on historic properties found, BOEM shall implement the post-review discovery plans found in Attachment 5 (Sunrise Wind Unanticipated Discoveries Protocol for Submerged Cultural Resources) and Attachment 6 (Sunrise Wind Terrestrial Unanticipated Discovery Protocol).
 - 1. The signatories acknowledge and agree that it is possible that additional historic properties may be discovered during the implementation of the Project, despite the completion of a good faith effort to identify historic properties throughout the APEs.
- B. All Post-Review Discoveries. In the event of a post-review discovery of a property or unanticipated effects to a historic property prior to or during construction, operation, maintenance, or decommissioning of the Project, Sunrise will implement the following actions which are consistent with the post-review discovery plan:
 - 1. Immediately halt all ground- or seafloor-disturbing activities within the area of discovery;

2. Notify BOEM in writing via report within 72 hours of the discovery;
3. Keep the location of the discovery confidential and take no action that may adversely affect the discovered property until BOEM or its designee has made an evaluation and instructs Sunrise on how to proceed; and
4. Conduct any additional investigations as directed by BOEM or its designee to determine if the resource is eligible for listing in the NRHP (30 CFR 585.802(b)). BOEM will direct Sunrise Wind to complete additional investigations, as BOEM deems appropriate, if:
 - i. The site has been impacted by Sunrise Project activities, or
 - ii. Impacts to the site from Sunrise Project activities cannot be avoided.
5. If investigations indicate that the resource is eligible for the NRHP, BOEM, with the assistance of Sunrise, will work with the other relevant signatories, invited signatories, and consulting parties to this MOA who have a demonstrated interest in the affected historic property and on the further avoidance, minimization or mitigation of adverse effects.
6. If there is any evidence that the discovery is from an indigenous society or appears to be a preserved burial site, Sunrise will contact the Tribes as identified in the notification lists included in the post-review discovery plans within 72 hours of the discovery with details of what is known about the discovery, and consult with the Tribes pursuant to the post review discovery plan.
7. If BOEM incurs costs in addressing the discovery, under Section 110(g) of the NHPA, BOEM may charge Sunrise reasonable costs for carrying out historic preservation responsibilities, pursuant to its delegated authority under the OCS Lands Act (30 CFR 585.802 (c-d)).

XI. MONITORING AND REPORTING

At the beginning of each calendar year by January 31, following the execution of this MOA until it expires or is terminated, Sunrise will prepare and, following BOEM's review and agreement to share this summary report, provide all signatories, invited signatories, and consulting parties to this MOA a summary report detailing work undertaken pursuant to the MOA. Such report shall include a description of how the stipulations relating to avoidance and minimization measures (Stipulations I and II) were implemented; any scheduling changes proposed; any problems encountered; and any disputes and objections received in BOEM's efforts to carry out the terms of this MOA. Sunrise can satisfy its reporting requirement under this stipulation by providing the relevant portions of the annual compliance certification required under 30 CFR 585.633.

XII. DISPUTE RESOLUTION

- A. Should any signatory, invited signatory, or consulting party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, they must notify BOEM in writing of their objection. BOEM shall consult with such party to resolve the objection. If BOEM determines that such objection cannot be resolved, BOEM will:
 1. Forward all documentation relevant to the dispute, including the BOEM's proposed resolution, to the ACHP. The ACHP shall provide BOEM with its advice on the resolution of the objection within 30 calendar days of receiving adequate documentation. Prior to

reaching a final decision on the dispute, BOEM shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories, invited signatories, and/or consulting parties, and provide them with a copy of this written response. BOEM will make a final decision and proceed accordingly.

2. If the ACHP does not provide its advice regarding the dispute within the 30 calendar-day time period, BOEM may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, BOEM shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories, invited signatories, or consulting parties to the MOA, and provide them and the ACHP with a copy of such written response.
- B. BOEM's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.
 - C. At any time during the implementation of the measures stipulated in this MOA, should a member of the public object in writing to the signatories regarding the manner in which the measures stipulated in this MOA are being implemented, that signatory will notify BOEM. BOEM shall review the objection and may notify the other signatories as appropriate, and respond to the objector.

XIII. AMENDMENTS

- A. This MOA may be amended when such an amendment is agreed to in writing by all signatories and invited signatories. The amendment will be effective on the date a copy signed by all of the signatories and invited signatories is filed with the ACHP.
- B. Revisions to any attachment may be proposed by any signatory or invited signatory by submitting a draft of the proposed revisions to all signatories and invited signatories with a notification to the consulting parties. The signatories and invited signatories will consult for no more than 30 calendar days (or another time period agreed upon by all signatories and invited signatories) to consider the proposed revisions to the attachment. If the signatories and invited signatories unanimously agree to revise the attachment, BOEM will provide a copy of the revised attachment to the other signatories, invited signatories, and consulting parties. Revisions to any attachment to this MOA will not require an amendment to the MOA.

XIV. TERMINATION

If any signatory or invited signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other signatories, invited signatories, and consulting parties to attempt to develop an amendment per Stipulation XIV. If within 30 calendar days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory or invited signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, BOEM must either (a) execute an MOA pursuant to 36 CFR 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR 800.7. BOEM shall notify the signatories and invited signatories as to the course of action it will pursue.

XV. COORDINATION WITH OTHER FEDERAL AGENCIES

- A. In the event that another federal agency not initially a party to or subject to this MOA receives an application for funding/license/permit for the undertaking as described in this MOA, that agency may fulfill its Section 106 responsibilities by stating in writing it concurs with the terms of this MOA and notifying the signatories and invited signatories that it intends to do so. Such federal agency may become a signatory, invited signatory, or a concurring party (collectively referred to as signing party) to the MOA as a means of complying with its responsibilities under Section 106 and based on its level of involvement in the undertaking. To become a signing party to the MOA, the agency official must provide written notice to the signatories and invited signatories that the agency agrees to the terms of the MOA, specifying the extent of the agency's intent to participate in the MOA. The participation of the agency is subject to approval by the signatories and invited signatories who must respond to the written notice within 30 calendar days or the approval will be considered implicit. Any necessary amendments to the MOA as a result will be considered in accordance with the Amendment Stipulation (Stipulation XIV).
- B. Should the signatories and invited signatories approve the federal agency's request to be a signing party to this MOA, an amendment under Stipulation XIV will not be necessary if the federal agency's participation does not change the undertaking in a manner that would require any modifications to the stipulations set forth in this MOA. BOEM will document these conditions and involvement of the federal agency in a written notification to the signatories, invited signatories, and consulting parties, and include a copy of the federal agency's executed signature page, which will codify the addition of the federal agency as a signing party in lieu of an amendment.

XVI. ANTI-DEFICIENCY ACT

Pursuant to 31 USC 1341(a)(1), nothing in this MOA will be construed as binding the United States to expend in any one fiscal year any sum in excess of appropriations made by Congress for this purpose, or to involve the United States in any contract or obligation for the further expenditure of money in excess of such appropriations.

Execution of this MOA by BOEM, the Massachusetts SHPO, Rhode Island SHPO, Connecticut SHPO, New York SHPO, and the ACHP, and implementation of its terms evidence that BOEM has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

[SIGNATURES COMMENCE ON THE FOLLOWING PAGE]

**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, THE RHODE ISLAND STATE HISTORIC
PRESERVATION OFFICER, THE CONNECTICUT STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK
STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE SUNRISE WIND FARM**

Signatory:

Bureau of Ocean Energy Management (BOEM)

NAME
Director
Bureau of Ocean Energy Management

Date: _____

DRAFT

**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, THE RHODE ISLAND STATE HISTORIC
PRESERVATION OFFICER, THE CONNECTICUT STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK
STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE SUNRISE WIND FARM**

Signatory:

Massachusetts State Historic Preservation Officer (SHPO)

NAME
TITLE
AGENCY

Date: _____

DRAFT

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AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, THE RHODE ISLAND STATE HISTORIC
PRESERVATION OFFICER, THE CONNECTICUT STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK
STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE SUNRISE WIND FARM**

Signatory:

Rhode Island State Historic Preservation Officer (SHPO)

NAME
TITLE
AGENCY

Date: _____

DRAFT

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THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, THE RHODE ISLAND STATE HISTORIC
PRESERVATION OFFICER, THE CONNECTICUT STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK
STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE SUNRISE WIND FARM**

Signatory:

Connecticut State Historic Preservation Officer (SHPO)

NAME
TITLE
AGENCY

Date: _____

DRAFT

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PRESERVATION OFFICER, THE CONNECTICUT STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK
STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE SUNRISE WIND FARM**

Signatory:

New York State Historic Preservation Officer (SHPO)

NAME
TITLE
AGENCY

Date: _____

DRAFT

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PRESERVATION OFFICER, THE CONNECTICUT STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK
STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE SUNRISE WIND FARM**

Signatory:

Advisory Council on Historic Preservation (ACHP)

NAME
Executive Director
Advisory Council on Historic Preservation

Date: _____

DRAFT

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STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE SUNRISE WIND FARM**

Invited Signatory:

Sunrise Wind, LLC

NAME
TITLE
Sunrise Wind, LLC

Date: _____

DRAFT

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THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, THE RHODE ISLAND STATE HISTORIC
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REGARDING THE SUNRISE WIND FARM**

Concurring Party:

Federally Recognized Tribe

NAME
TITLE
AFFILIATION

Date: _____

DRAFT

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Federally Recognized Tribe

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NAME
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AFFILIATION

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REGARDING THE SUNRISE WIND FARM**

Concurring Party:

Federally Recognized Tribe

NAME
TITLE
AFFILIATION

Date: _____

DRAFT

**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, THE RHODE ISLAND STATE HISTORIC
PRESERVATION OFFICER, THE CONNECTICUT STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK
STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE SUNRISE WIND FARM**

Concurring Party:

Federally Recognized Tribe

NAME
TITLE
AFFILIATION

Date: _____

DRAFT

**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, THE RHODE ISLAND STATE HISTORIC
PRESERVATION OFFICER, THE CONNECTICUT STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK
STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE SUNRISE WIND FARM**

Concurring Party:

Federally Recognized Tribe

NAME
TITLE
AFFILIATION

Date: _____

DRAFT

**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, THE RHODE ISLAND STATE HISTORIC
PRESERVATION OFFICER, THE CONNECTICUT STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK
STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE SUNRISE WIND FARM**

Concurring Party:

Federally Recognized Tribe

NAME
TITLE
AFFILIATION

Date: _____

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**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, THE RHODE ISLAND STATE HISTORIC
PRESERVATION OFFICER, THE CONNECTICUT STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK
STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE SUNRISE WIND FARM**

Concurring Party:

Organization

Name
Title
Organization

Date: _____

DRAFT

**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, THE RHODE ISLAND STATE
HISTORIC PRESERVATION OFFICER, THE CONNECTICUT STATE HISTORIC PRESERVATION
OFFICER, THE NEW YORK STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY
COUNCIL ON HISTORIC PRESERVATION REGARDING THE SUNRISE WIND FARM**

LIST OF ATTACHMENTS TO THE MOA

ATTACHMENT 1 – APE MAPS

ATTACHMENT 2 – LISTS OF INVITED AND PARTICIPATING CONSULTING PARTIES

ATTACHMENT 3 – SUNRISE WIND TREATMENT PLAN FOR ANCIENT SUBMERGED LANDFORM FEATURES

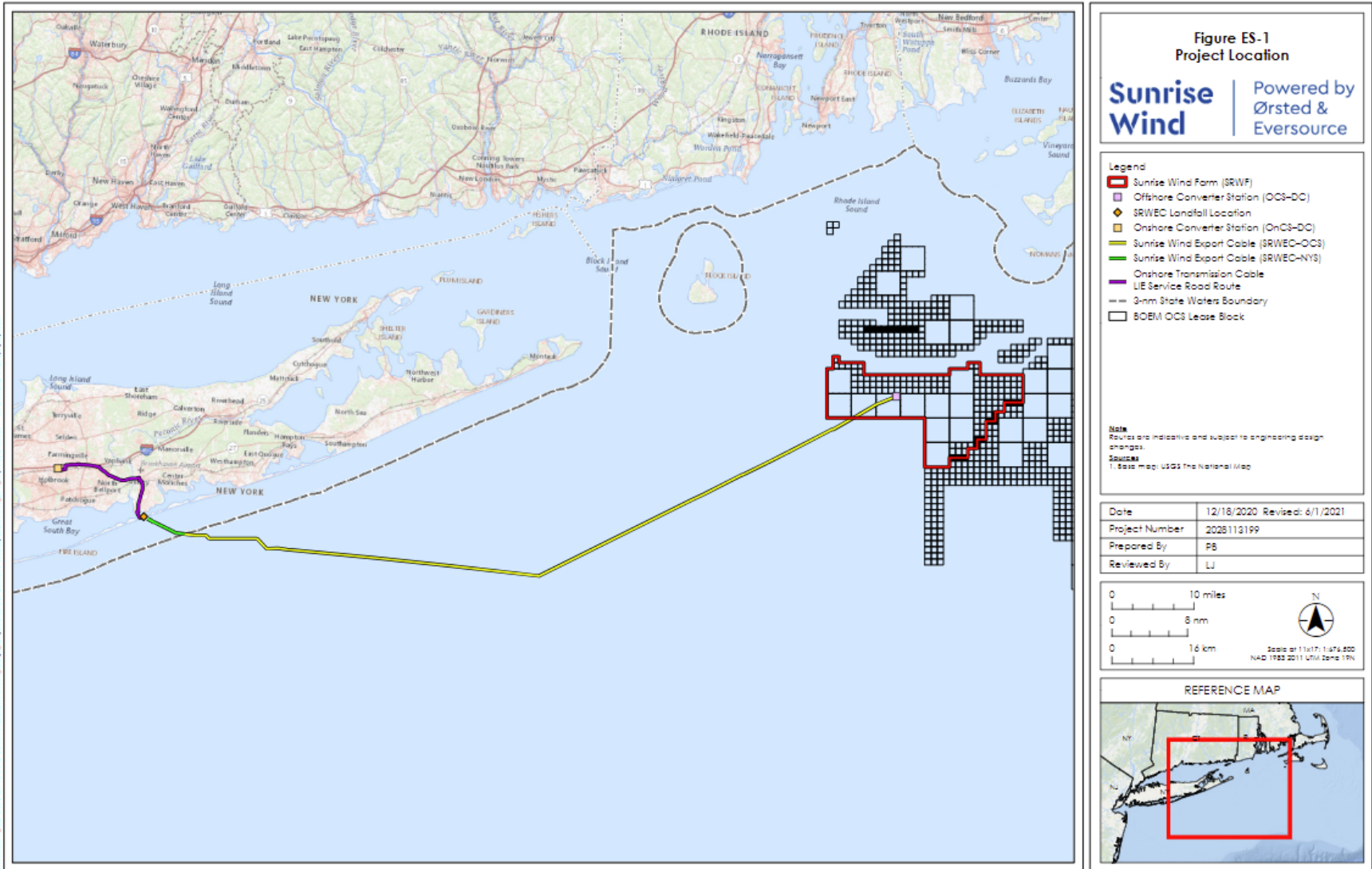
ATTACHMENT 4 – SUNRISE TREATMENT PLAN FOR ABOVE-GROUND HISTORIC PROPERTIES SUBJECT TO
ADVERSE VISUAL EFFECT

ATTACHMENT 5 – MONITORING AND UNANTICIPATED DISCOVERIES PROTOCOL FOR TERRESTRIAL
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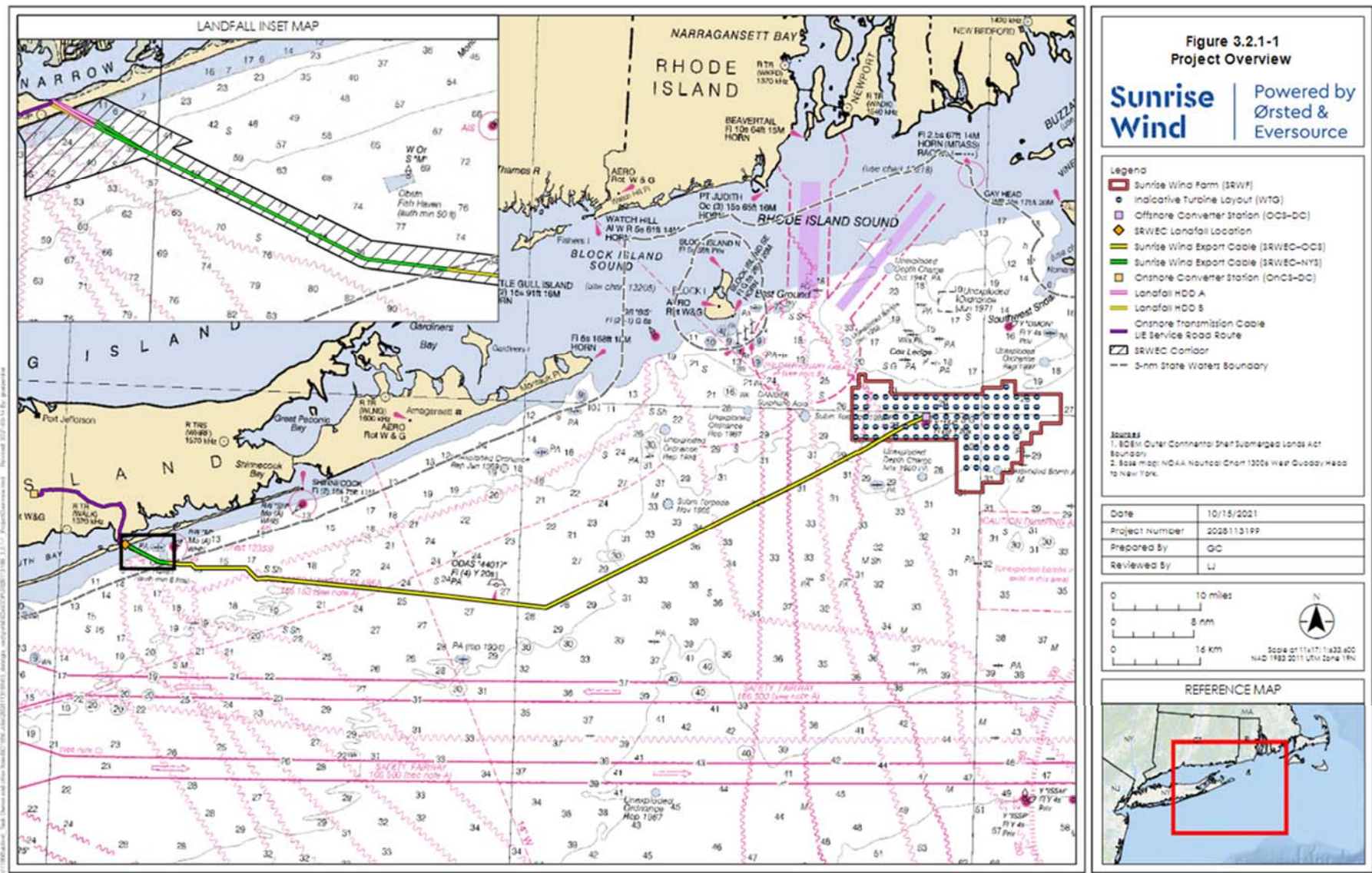
ATTACHMENT 6 – UNANTICIPATED DISCOVERIES PROTOCOL FOR SUBMERGED ARCHAEOLOGICAL SITES,
HISTORIC PROPERTIES, AND CULTURAL RESOURCES INCLUDING HUMAN REMAINS

ATTACHMENT 1 – APE MAPS

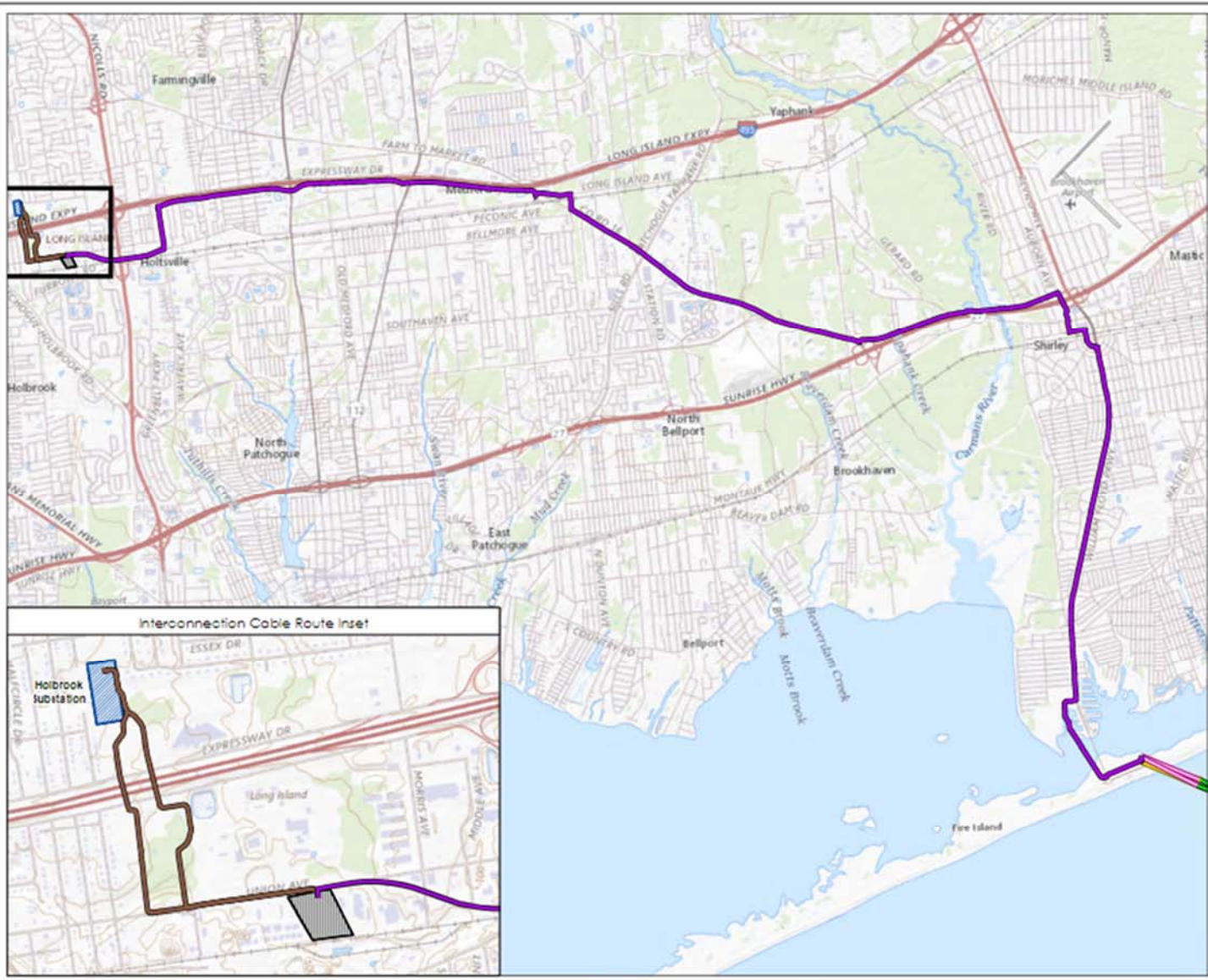
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Project Location and Components



Maritime Area of Potential Effects



**Figure ES-2
Onshore Facilities**

Sunrise Wind | Powered by Ørsted & Eversource

Legend

- Sunrise Wind Farm (SRWF)
- Sunrise Wind Export Cable (SRWEC-DC)
- Sunrise Wind Export Cable (SRWEC-NY)
- Landfall HDD A
- Landfall HDD B
- Intra-coastal Waterway HDD (ICW HDD)
- Onshore Transmission Cable
- US Service Road Route
- Onshore Interconnection Cable Route
- Union Avenue Site / Onshore Converter Station (OACS-DC)
- Holbrook Substation

Notes
1. SRWEC route will have one landfall location. Routes are indicative and subject to engineering design changes.
Sources
Base map: USGS The National Map

Date	10/16/2021
Project Number	2028113199
Prepared By	PS
Reviewed By	LJ

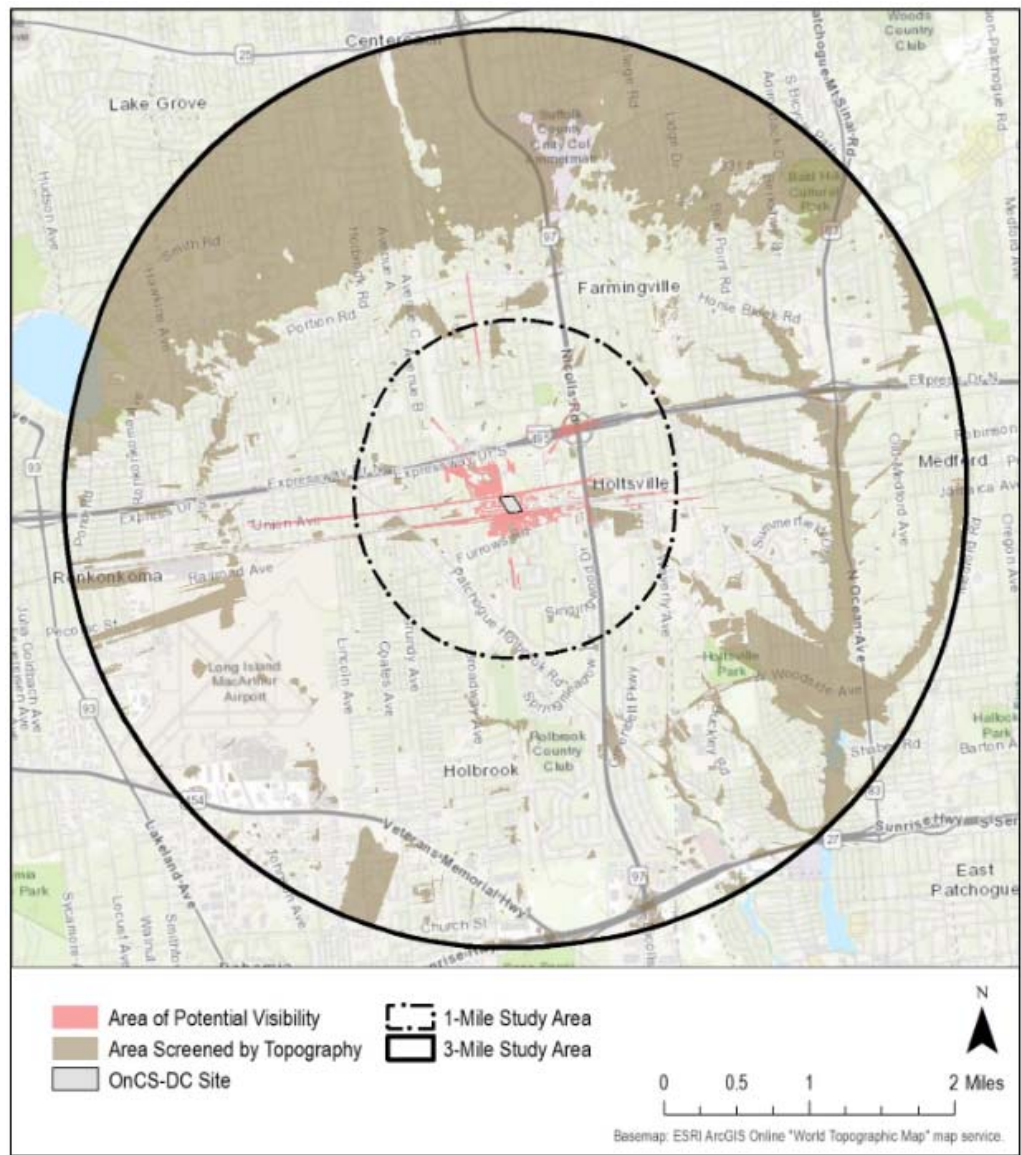
0 1 mile
0 1.5 km

N
▲

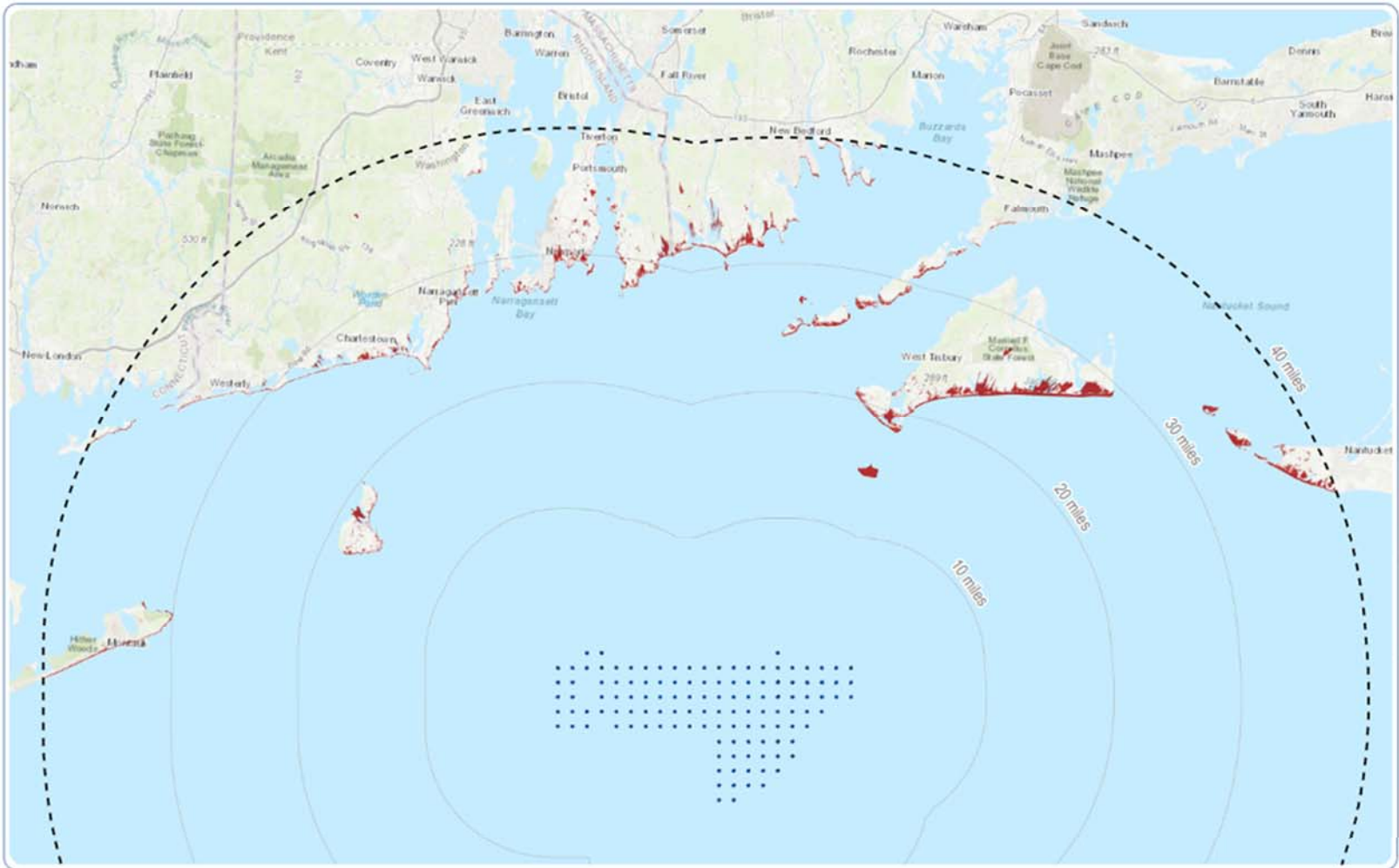
Scale of 1:11,171 at 25.00
NAD 1983 2011 UTM Zone 18N

REFERENCE MAP

Terrestrial Area of Potential Effects



Onshore Above-ground Historic Properties Visual Study Area and Area of Potential Effect.



Sunrise Wind Farm Project
Outer Continental Shelf

Figure 1.2-1: Visual Study Area and Zone of Visual Influence

Notes: 1. Basemap: ESRI ArcGIS Online "World Topographic Map" map service. 2. This map was generated in ArcMap on November 10, 2020 by Environmental Design and Research. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

- Wind Turbine
- Zone of Visual Influence (ZVI)
- - - Visual Study Area

Sunrise Wind

Powered by
Ørsted & Eversource



Visual Study Area and Area of Potential Effects

ATTACHMENT 2

LISTS OF INVITED AND PARTICIPATING CONSULTING PARTIES

Table 1. Parties Invited to Participate in NHPA Section 106 Consultation

Participants in the Section 106 Process	Invited Consulting Parties
SHPOs and State Agencies	Connecticut State Historic Preservation Office, Connecticut Department of Economic and Community Development
	Rhode Island Historical Preservation & Heritage Commission
	New York State Division for Historic Preservation
	Massachusetts Historical Commission
	Massachusetts Board of Underwater Archaeological Resources
	Massachusetts Commissioner on Indian Affairs
	Rhode Island Department of Environmental Management
Federal Agencies	ACHP
	BSEE
	NOAA
	USACE
	USCG
	USEPA
	USFWS
	National Park Service
	DASNE
	FAA
	USDOD
	Fire Island National Seashore
	Federally Recognized Tribes
Shinnecock Indian Nation	
Mashantucket Pequot Tribal Nation	
Wampanoag Tribe of Gay Head - Aquinnah	
Mohegan Tribe of Indians of Connecticut	
Narragansett Indian Tribe	
Delaware Tribe of Indians	
The Delaware Nation	
Non-Federally Recognized Tribe	Chappaquiddick Tribe of Wampanoag Nation
	Unkechaug Nation
	The Golden Hill Paugussett
	Eastern Pequot Tribal Nation
	Schaghticoke Tribal Nation

Participants in the Section 106 Process	Invited Consulting Parties
Local Government	City of New Bedford
	City of Newport
	County of Barnstable (MA)
	County of Bristol (MA)
	County of Dukes (MA)
	County of Suffolk (NY)
	Town of Acushnet
	Town of Aquinnah
	Town of Bourne
	Town of Charlestown
	Town of Chilmark
	Town of Dartmouth
	Town of East Hampton
	Town of Edgartown
	Town of Exeter
	Town of Fairhaven
	Town of Falmouth
	Town of Gosnold
	Town of Jamestown
	Town of Little Compton
	Town of Middletown
	Town of Nantucket
	Nantucket Planning & Economic Development Commission (NP&EDC)
	Town of Narragansett
	Town of New Shoreham
	Town of North Kingstown
	Town of North Stonington
	Town of Oak Bluffs
	Town of Portsmouth
	Town of South Kingstown
	Town of Southold
	Town of Stonington
Town of Tisbury	
Town of Tiverton	
Town of West Tisbury	
Town of West Warwick	
Town of Westerly	
Town of Westport	

Participants in the Section 106 Process	Invited Consulting Parties
	Town of Brookhaven
	Cape Cod Commission
Certified Local Governments	Edgartown Historic Preservation Commission
	Acushnet Historical Commission
	North Kingstown Historic District Commission
	East Hampton Design Review Board
	Narragansett Historic District Commission
	Newport Historic District Commission
	South Kingstown Historic District Commission
	New Shoreham Historic District Commission
	Barnstable Historical Commission
	Bourne Historic Commission
	Chilmark Historical Commission
	Dartmouth Historical Commission
	Fairhaven Historical Commission
	Falmouth Historical Commission
Nongovernmental Organizations or Groups	Salve Regina University
	Norman Bird Sanctuary
	Montaukett Indian Nation
	Nantucket Historical Commission
	Nantucket Historic District Commission
	Gay Head Lighthouse Advisory Committee
	Southeast Lighthouse Foundation
	Block Island Historical Society
	Martha's Vineyard Commission
	Alliance to Protect Nantucket Sound
	Montauk Historical Society
	Preservation Massachusetts
	Bristol Historical and Preservation Society
	East Greenwich Historic Preservation Society
	The Preservation Society of Newport County (Operates The Breakers, Marble House, etc.)
	Newport Historical Society
	Rhode Island Historical Society (Operates The John Brown House Museum, Aldrich House, etc.)
	Newport Restoration Foundation
	Bellport-Brookhaven Historical Society
	Little Compton Historical Society
	Jamestown Historical Society

Participants in the Section 106 Process	Invited Consulting Parties
	Middletown Historical Society
	Portsmouth Historical Society
	Tiverton Historical Society
	Charlestown Historical Society
	Exeter Historical Association
	Narragansett Historical Society
	Westerly Historical Society
	Martha's Vineyard Museum
	Cuttyhunk Historical Society, Museum of the Elizabeth Islands, Massachusetts
	Nantucket Historical Association
	Nantucket Preservation Trust
	Stonington Historical Society
	New London County Historical Society
	Suffolk County Historical Society
	East Hampton Historical Society
	Southold Historical Museum
	Aquinnah Wampanoag Indian Museum
	The Barnstable Historical Society
	Falmouth Historical Society and Museums on the Green
	Dartmouth Historical and Arts Society
	Westport Historical Society
	New Bedford Historical Society
	Fairhaven Historical Society
	Long Plain Museum
	Bourne Historical Society
	Long Island Historical Societies
	Preservation Long Island
	Davis Town Meeting House Society Inc.

Table 2. Consulting Parties Participating in Section 106 Consultation

Participants in the Section 106 Process	Invited Consulting Parties That Participated in Consultation
SHPOs and State Agencies	Connecticut State Historic Preservation Office, Connecticut Department of Economic and Community Development
	Rhode Island Historical Preservation & Heritage Commission
	New York State Division for Historic Preservation
	Massachusetts Historical Commission
	Massachusetts Commissioner on Indian Affairs
	Rhode Island Department of Environmental Management
Federal Agencies	ACHP
	BSEE
	NOAA
	USACE
	USCG
	USEPA
	USFWS
	National Park Service
	DASNE
	FAA
	USDOD
	Fire Island National Seashore
Federally Recognized Tribes	Mashpee Wampanoag Tribe
	Shinnecock Indian Nation
	Mashantucket Pequot Tribal Nation
	Wampanoag Tribe of Gay Head - Aquinnah
	Mohegan Tribe of Indians of Connecticut
	Narragansett Indian Tribe
	Delaware Tribe of Indians
The Delaware Nation	
Non-Federally Recognized Tribe	Unkechaug Nation
Local Government	City of Newport
	County of Dukes (MA)
	Town of Aquinnah
	Town of Bourne
	Town of Charlestown
	Town of East Hampton
	Town of Middletown
	Town of Nantucket

Participants in the Section 106 Process	Invited Consulting Parties That Participated in Consultation
	Nantucket Planning & Economic Development Commission (NP&EDC)
	Town of New Shoreham
	Town of North Stonington
	Town of Oak Bluffs
	Town of Brookhaven
Certified Local Governments	Newport Historic District Commission
	Barnstable Historical Commission
Nongovernmental Organizations or Groups	Salve Regina University
	Norman Bird Sanctuary
	Montaukett Indian Nation
	Nantucket Historical Commission
	Nantucket Historic District Commission
	Gay Head Lighthouse Advisory Committee
	Southeast Lighthouse Foundation
	Block Island Historical Society
	Alliance to Protect Nantucket Sound
	Newport Restoration Foundation
	Narragansett Historical Society
	Nantucket Historical Association
	Nantucket Preservation Trust
	The Preservation Society of Newport County (Operates The Breakers, Marble House, etc.)
	Long Island Historical Societies
Preservation Long Island	

Table 3. Parties Invited to Consult under Section 106 and that Did Not Participate in Consultation

Participants in the Section 106 Process	Invited Consulting Parties that Did Not Participate in Consultation
Non-Federally Recognized Tribe	Chappaquiddick Tribe of Wampanoag Nation
	The Golden Hill Paugussett
	Eastern Pequot Tribal Nation
	Schaghticoke Tribal Nation
Local Government	City of New Bedford
	County of Barnstable (MA)
	County of Bristol (MA)
	County of Suffolk (NY)
	Town of Acushnet
	Town of Charlestown
	Town of Chilmark
	Town of Dartmouth
	Town of Edgartown
	Town of Exeter
	Town of Fairhaven
	Town of Falmouth
	Town of Gosnold
	Town of Jamestown
	Town of Little Compton
	Town of Narragansett
	Town of North Kingstown
	Town of Portsmouth
	Town of South Kingstown
	Town of Southold
	Town of Stonington
	Town of Tisbury
	Town of Tiverton
	Town of West Tisbury
Town of West Warwick	
Town of Westerly	
Town of Westport	
Cape Cod Commission	
Nongovernmental Organizations or Groups	Martha's Vineyard Commission
	Alliance to Protect Nantucket Sound
	Montauk Historical Society
	Preservation Massachusetts
	Bristol Historical and Preservation Society
	East Greenwich Historic Preservation Society
	Newport Historical Society
	Rhode Island Historical Society (Operates The John Brown House Museum, Aldrich House, etc.)
	Bellport-Brookhaven Historical Society
	Little Compton Historical Society
	Jamestown Historical Society
	Middletown Historical Society
	Portsmouth Historical Society
	Tiverton Historical Society

Participants in the Section 106 Process	Invited Consulting Parties that Did Not Participate in Consultation
	Charlestown Historical Society
	Exeter Historical Association
	Westerly Historical Society
	Martha's Vineyard Museum
	Cuttyhunk Historical Society, Museum of the Elizabeth Islands, Massachusetts
	Stonington Historical Society
	New London County Historical Society
	Suffolk County Historical Society
	East Hampton Historical Society
	Southold Historical Museum
	Aquinnah Wampanoag Indian Museum
	The Barnstable Historical Society
	Falmouth Historical Society and Museums on the Green
	Dartmouth Historical and Arts Society
	Westport Historical Society
	New Bedford Historical Society
	Fairhaven Historical Society
	Long Plain Museum
	Bourne Historical Society
	Davis Town Meeting House Society Inc

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ATTACHMENT 3

**SUNRISE WIND TREATMENT PLAN FOR ANCIENT SUBMERGED LANDFORM
FEATURES**

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ATTACHMENT 4

**TREATMENT PLAN FOR ABOVE-GROUND HISTORIC PROPERTIES SUBJECT TO
ADVERSE VISUAL EFFECT**

DRAFT

ATTACHMENT 5

**MONITORING AND UNANTICIPATED DISCOVERIES PROTOCOL FOR TERRESTRIAL
ARCHAEOLOGICAL RESOURCES**

DRAFT

ATTACHMENT 6

**UNANTICIPATED DISCOVERIES PROTOCOL FOR SUBMERGED ARCHAEOLOGICAL
SITES, HISTORIC PROPERTIES, AND CULTURAL RESOURCES INCLUDING HUMAN
REMAINS**

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Attachment B

**Map Figures of Historic Properties in Relation to the APE
(Detached – Confidential)**