

Appendix F – Archaeology and Historic Properties Survey Report

PORTIONS CONTAIN CONFIDENTIAL INFORMATION



Appendix F-1 - Marine Archaeological Resources Assessment (MARA)

CONTAINS CONFIDENTIAL INFORMATION





Appendix F-2 - Terrestrial Archaeological Resources Assessment (TARA)

CONTAINS CONFIDENTIAL INFORMATION





Appendix F- 3 - Assessment of Visual Effects on Onshore Historic Properties

CONTAINS CONFIDENTIAL INFORMATION





Appendix F-4 - Historic Properties Treatment Plans



Historic Property Treatment Plan for Ancient Submerged Landform Features

Applicant Proposed Draft Historic Properties Treatment Plan

for the

Ocean Wind 1 Offshore Wind Farm Project

Ancient Submerged Landform Features Subject to Adverse Effect Federal Waters on the Outer Continental Shelf

Submitted to:



Bureau of Ocean Energy Management U.S. Department of the Interior

Prepared for:



Ocean Wind 1, https://oceanwind.com/

Prepared by:



www.searchinc.com

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ABSTRACT

Federal Undertaking: Ocean Wind 1 Offshore Wind Farm Project, OCS-A 0498

Location: Outer Continental Shelf, New Jersey

Federal and

State Agencies: Bureau of Ocean Energy Management

Environmental Protection Agency National Marine Fisheries Service U.S. Army Corps of Engineers

New Jersey Department of Environmental Protections/State Historic Preservation

Office

Advisory Council on Historic Preservation

ACHP Project No.: 016649

HPO Project No.: 18-1184-30

Potential Adverse

Effect Finding for: 16 Properties in the Atlantic OCS

Date: June 2022

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LIST OF ACRONYMS

ACHP Advisory Council on Historic Preservation

ADLS Aircraft Detection Lighting System

APE Area of Potential Effects

ASLF Ancient Submerged Landscape Feature BOEM Bureau of Ocean Energy Management

CFR Code of Federal Regulations

COP Construction and Operations Plan

FEIS Final Environmental Impact Statement

FR Federal Regulation

HDR HDR, Inc.

HPTP Historic Preservation Treatment Plan

N/A Not Applicable

NHL National Historic Landmark

NHPA National Historic Preservation Act of 1966

NJ DEP New Jersey Department of Environmental Protection

NJ HPO New Jersey State Historic Preservation Office(r)

NPS National Park Service

NRHP National Register of Historic Places

OCS Outer Continental Shelf

OW1 Ocean Wind1 Offshore Wind Farm Project

QMA Qualified Marine Archaeologist

RFP Request for Proposals
ROD Record of Decision
SOI Secretary of the Interior

TCP Traditional Cultural Property
UDP Unanticipated Discoveries Plan
USCG United States Coast Guard
WTG Wind Turbine Generator

1.0 INTRODUCTION

This Historic Properties Treatment Plan (HPTP) was prepared to support fulfillment of Stipulation III.A of the Memorandum of Agreement (MOA) Among the Bureau of Ocean and Energy Management, The New Jersey State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Ocean Wind 1 Offshore Wind Farm Project. This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation actions to resolve adverse effects to 16 ancient submerged landform features (ASLFs) identified by the Bureau of Ocean Energy Management (BOEM) through Section 106 consultation for the Ocean Wind 1 Offshore Wind Farm (OW1). The mitigation measures and the process for implementation described herein were developed in consultation with the New Jersey Historic Preservation Officer (NJ HPO), federally recognized Tribes, the Advisory Council on Historic Preservation (ACHP) and other consulting parties. This HPTP outlines mitigation measures, implementation steps, and timeline for actions.

Section 1.0 Introduction: Outlines the content of this HPTP.

Section 2.0 Background Information: Briefly summarizes the OW1 (the Undertaking) while focusing on cultural resources regulatory contexts (federal, tribal, state, and local, including preservation restrictions), identifies the 16 historic properties discussed in this HPTP that will be adversely affected by the Undertaking, and summarizes the pertinent conditions that guided the development of this document.

Section 3.0 Existing Conditions and Historic Significance: Provides a physical description of each historic property included in this HPTP. Set within their historic context, the applicable National Register of Historic Places (NRHP) criteria for each resource is discussed with a focus on the contribution of an ocean setting to its significance and integrity.

Section 4.0 Mitigation Measures: Presents specific steps to carry out the mitigation measures proposed by OW1 in the COP. Each mitigation measure includes a detailed description, intended outcome, and specifications that include maximum cost, methods, standards, requirements for documentation, and reporting instructions. Property-specific challenges, if any have been identified, are outlined as well.

Section 5.0 Implementation: Establishes the process for executing mitigation measures at the Historic Properties, as identified in Section 4.0 of this HPTP. For each action, organizational responsibilities are outlined, a timeline is provided, and regulatory reviews are listed.

Section 6.0 References: A list of works cited in this HPTP.

2.0 BACKGROUND INFORMATION

BOEM has determined that approval, approval with modification, or disapproval of the Ocean Wind 1 Offshore Wind Farm COP constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA; 54 U.S.C. § 306108) and its implementing regulations (36 CFR 800), and that the activities proposed under the COP have the potential to affect historic properties. The Ocean Wind 1 Offshore Wind Farm undertaking (the Undertaking) is defined as a wind-powered electric generating facility composed of up to 98 wind turbine generators (WTGs) and associated foundations, up to three offshore substations, and inter-array cables connecting the WTGs and the offshore substations (**Error! Reference source not found.**).

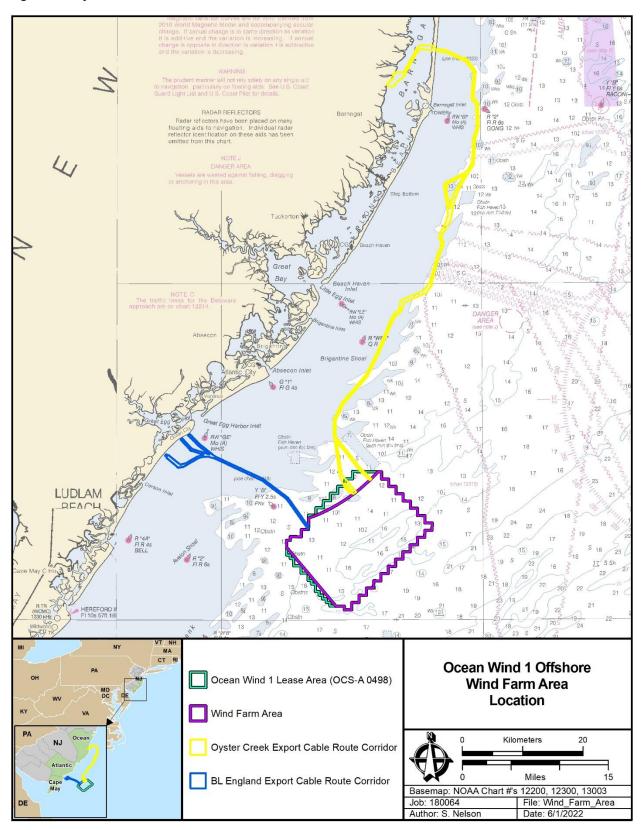
The WTGs, foundations, offshore substations, and inter-array cables will all be in federal waters on the Outer Continental Shelf (OCS), approximately 15 statute miles (mi) (13 nautical miles [nm]) southeast of Atlantic City, New Jersey. Cables will be buried below the seabed. Export cables from the offshore substations will extend along the seabed and connect to buried onshore export cables, which will connect to two interconnection points, at Oyster Creek and Bl England. Onshore cables will be buried within up to a 15-m-wide (50-ft-wide) construction corridor with a permanent easement up to 9.8-m-wide (30-ft-wide) for BL England. Two new onshore substations are proposed at Oyster Creek and BL England along with grid connections to the existing grid for each substation. Onshore substation locations would be sited on existing parcels containing decommissioned power facilities at BL England and Oyster Creek. The Oyster Creek and BL England onshore substation locations would require a permanent site up to 31.5 acres (ac) (12.7 hectares [ha]) and 13 ac (5.3 ha) respectively, for the substation equipment and buildings, energy storage, and stormwater management and associated landscaping. Underground or overhead transmission lines would connect the substations to the planned interconnection point (grid connections).

BOEM, as the lead federal agency for the NHPA Section 106 review, has defined the APE for the Undertaking as follows:

- The depth and breadth of the seabed potentially impacted by any bottom-disturbing activities;
- The depth and breadth of terrestrial areas potentially impacted by any ground disturbing activities;
- The viewshed from which renewable energy structures, whether located offshore or onshore, would be visible; and
- Any temporary or permanent construction or staging areas, both onshore and offshore.

To support BOEM's efforts to identify historic properties within the APE, OW1 conducted a terrestrial archaeological resource assessment (TARA), marine archaeological resource assessment (MARA), and historic resources visual effects assessment (HRVEA) within the APE. The results of these investigations can be found in Volume II, Section 2.4 of the Ocean Wind 1 COP. Based on a review of these documents and consultations with NHPA Section 106 consulting parties, BOEM has determined that the undertaking will result in adverse effects to historic properties. Information about BOEM's assessment of adverse effects can be found in BOEM's Finding of Adverse Effect (FoAE) for the Undertaking.

Figure 1: Project Location



In the FoAE, BOEM determined that the OW1 undertaking will adversely affect 16 ASLFs. BOEM has consulted with the Advisory Council on Historic Preservation (ACHP), New Jersey Historic Preservation Office (NJ HPO), federal recognized Native American Tribes, and other NHPA Section 106 consulting parties to seek ways to avoid, minimize, or mitigate adverse effects to historic properties. BOEM has decided to codify the resolution of adverse effects through an NHPA Section 106 MOA pursuant to 36 CFR 800.8(c)(4)(i)(B). As defined in 36 CFR § 800.6 (c), a project specific MOA records the terms and conditions agreed upon to resolve adverse effects of the undertaking (i.e., the approval, approval with modification, or disapproval of the OW1 COP). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation actions. The measures agreed upon by BOEM, the ACHP, and NJ HPO to resolve adverse effects to historic properties are recorded in the Memorandum of Agreement Among the Bureau of Ocean and Energy Management, The New Jersey State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Ocean Wind 1 Offshore Wind Farm Project.

Pursuant to the terms and conditions of the MOA, OW1 will implement applicant-proposed environmental protection measures to avoid potential impacts to marine archaeological resources (see MOA Stipulation I.A) and will implement an Unanticipated Discoveries Plan for Submerged Archaeological (see MOA Attachment 7) in the event of unanticipated discovery). This HPTP was developed by the applicant to fulfill Stipulation III.A of the MOA to resolve adverse effects to 16 ASLFs. Mitigation Measures implemented under this HPTP will be conducted in accordance with all agreed upon terms and conditions in the MOA and with applicable local, state, and federal regulations and permitting requirements. Responsibilities for specific compliance actions are described in further detail in Section 5.2, Organizational Responsibilities.

Participating NHPA Section 106 Consulting Parties

For the purposes of this HPTP, Participating Parties are defined as a subset of the NHPA Section 106 consulting parties that have a functional role in the process of fulfilling Stipulation III.A of the MOA and the mitigation measure implementation processes described herein. The roles of Participating Parties are identified for each mitigation measure in section 4.0 of this document, including meeting participation and document reviews. Participating Parties include, and the following Section 106 consulting parties:

- ACHP;
- NJ HPO;
- Delaware Nation;
- Delaware Tribe of Indians;
- Stockbridge-Munsee Community Band of Mohican Indians; and
- Wampanoag Tribe of Gay Head (Aquinnah)

No other NHPA Section 106 consulting parties are anticipated to be Participating Parties for the HPTP. If BOEM determines additional consulting parties will participate in this plan, the plan will be updated to include those parties. The list of invited and participating of consulting parties is available as Attachment 3 of the MOA.

3.0 EXISTING CONDITIONS AND HISTORIC SIGNIFICANCE

3.1 Historic Properties

This HPTP involves 16 historic properties, as identified below in Table 1. All 16 historic properties are ASLFs identified during geophysical and geotechnical investigations within the OW1 Wind Farm Area (WFA) and within the BL England and Oyster Creek Export Cable Routes (ECRs) Corridors.

Table 1: Historic Properties included in the HPTP

	Project Component	Project Component	Potential Effect	
Name	Area	Affecting ASLF	Recommendation	
Target 20	Wind Farm Area	jack-up barge, inter-array cable	Adverse effect, potential for avoidance during final design.	
Target 21	Wind Farm Area	WTG foundation, jack-up barge, inter-array cable	Adverse effect.	
Target 22	Wind Farm Area	WTG foundation, jack-up barge, inter-array cable	Adverse effect.	
Target 23	Wind Farm Area	WTG foundation, jack-up barge, inter-array cable	Adverse effect.	
Target 24	Wind Farm Area	WTG foundation, jack-up barge, inter-array cable	Adverse effect.	
Target 25	Wind Farm Area	WTG foundation, jack-up barge, inter-array cable	Adverse effect.	
Target 26	Wind Farm Area	WTG foundation, jack-up barge, inter-array cable	Adverse effect.	
Target 27	Wind Farm Area	jack-up barge, inter-array cable	Adverse effect, potential for avoidance during final design.	
Target 28	Wind Farm Area	WTG foundation, jack-up barge, inter-array cable	Adverse effect.	
Target 29	Wind Farm Area	WTG foundation, jack-up barge, inter-array cable	Adverse effect.	
Target 30	Wind Farm Area	inter-array cable	Adverse effect.	
Target 31	Wind Farm Area	WTG foundation, jack-up barge, inter-array cable	Adverse effect.	
Target 32	Wind Farm Area	jack-up barge, inter-array cable	Adverse effect, potential for avoidance during final design.	
Target 33	Bl England Export Cable Route Corridor	Export cable	Adverse effect.	
Target 34	Oyster Creek Export Cable Route Corridor	Export cable	Adverse effect.	
Target 35	Oyster Creek Export Cable Route Corridor	Export cable	Adverse effect.	

The undertaking would adversely affect 16 ASLFs (Targets 20-35) due to physical impacts during WTG foundation installation, inter-array cable, and/or export cable installation. Because of the project design plans, vertical and/or horizontal avoidance is not possible.

Avoidance may be accomplished by micro-siting facilities and work zones away from features and/or adjusting the cable burial depth across features. Horizontal avoidance would be accomplished through project installation outside of avoidance buffers and target areas. Vertical avoidance of cable installation would include laying of the cable through portions of the feature with no preservation potential, within areas of the feature not available for human occupation (i.e., paleochannel thalweg), or above the feature in stratigraphic units consisting of marine sediments. If it is determined that adverse effects to an ASLF will be avoided when the project design is finalized, documentation demonstrating avoidance will be provided for concurrence by BOEM and Participating Parties. Otherwise, measures to resolve the adverse effect must be carried out as outlined in the HPTP.

3.2 Adversely Affected Historic Properties

Target 20: Target 20 represents the northern flank of a preserved H30 channel margin along a small branch of the main paleo-channel. Covering approximately 29.4 ha (72.7 ac), the acoustic imagery of Target 20 is similar to other preserved former subaerial landscapes observed throughout the Area of Potential Effect (APE) (i.e., Target 22). The flank is buried 5.8 m (19.0 ft) below seabed (bsb) and is 572.5 m (1,878.3 ft) at its widest. Approximately 92% (27.0 ha [66.7 ac]) of Target 20 is present within the APE around a proposed turbine location and the inter-array cable corridor.

Target 21: Target 21 represents the northern portion of an interfluve of U30/H30 flanked on the west by a meandering channel and a possible sinuous channel on the east. This topographical high between two channels was most likely a vegetative-rich area. Covering approximately 29.4 ha (146.2 ac), the acoustic imagery of Target 21 indicates a well-preserved margin between two divergent river channels. The reflector is buried 7.5 m (24.7 ft) bsb and is 874.3 m (2,868.4 ft) at its widest. Approximately 40% (23.6 ha [58.2 ac]) of Target 21 is present within the APE around a proposed turbine location and the inter-array cable corridor.

Target 22: Target 22 represents two possible landscapes based on the ground model and the seismic data. Seismic data appears to represent a preserved interfluve associated with U30/H30, while the ground model depicts a margin adjacent to a deeply incised channel. Marine transgression removed a large portion of the possible eastern tributary, resulting in two possible interpretations. Either environment would have been a vegetative rich landscape; archaeological core AC-15 recovered an intact paleosol from this area, aiding in the interpretation of Target 22. Covering approximately 181.9 ha (449.6 ac), the acoustic imagery of Target 22 suggests a well-preserved margin between a major paleochannel and a tributary. The reflector is buried 7.8 m (25.6 ft) bsb and is 1,478.9 m (4,852.0 ft) at its widest. Approximately 70% (127.8 ha [315.7 ac]) of Target 22 is present within the APE around a proposed turbine location and the inter-array cable corridor.

Target 23: Target 23 represents the western flank of a meandering paleochannel associated with U30/H30. Marine transgression removed portions of this margin, downcutting into the potential former subaerial landscape. Nearby archaeological core AC-03_rev did not yield any evidence of a paleosol as it penetrated through the channel. Covering approximately 202.0 ha (499.2 ac), the acoustic imagery of Target 23 (Figure 100) evidences a slightly eroded, yet preserved paleochannel flank. The reflector is buried 6.2 m (20.3 ft)

bsb and is 2,468.7 m (8,099.4 ft) at its widest. Approximately 76% (154.5 ha [381.7 ac]) of Target 23 is present within the APE around a proposed turbine location and the inter-array cable corridor.

Target 24: Target 24 represents the eastern flank of a meandering paleochannel associated with U30/H30. Marine transgression removed portions of this margin, downcutting into the former subaerial landscape. Archaeological core AC-16 recovered an intact paleosol from this area, aiding in the interpretation of Target 24. Covering approximately 126.5 ha (312.5 ac), the acoustic imagery of Target 24 indicates a slightly eroded, yet preserved paleochannel flank. The reflector, as depicted in Figure 102, is buried 3.2 m (10.5 ft) bsb and is 1,178.7 m (3867.1 ft) at its widest. Approximately 60% (75.6 ha [186.9 ac]) of Target 24 is present within the APE around a proposed turbine location and the inter-array cable corridor.

Target 25: Target 25 represents the eastern flank and floodplain of a major paleochannel associated with U30/H30. This geomorphic feature of archaeological interest is an extensive, well-preserved surface represented by a dark reflector in seismic imagery covering approximately 650.6 ha (1,607.6 ac). Archaeological cores AC-13_rev and AC-14_rev recovered similar intact paleosols from within Target 25, aiding in the interpretation of Target 25. The reflector is buried 5.8 m (19.0 ft) bsb and is 2,364.3 m (7,756.9 ft) at its widest. Approximately 41% (268.1 ha [662.5 ac]) of Target 25 is present within the APE around a five proposed turbine location and inter-array cable corridors.

Target 26: Target 26 represents a discrete portion of the western flank and floodplain of a meandering paleochannel associated with U30/H30, similar to Target 23. Covering approximately 33.9 ha (83.7 ac), the acoustic imagery of Target 26 suggests a well-preserved paleochannel flank and floodplain. The reflector is buried 1.8 m (5.9 ft) bsb and is 763.1 m (2,503.6 ft) at its widest. Nearby archaeological core AC-01 did not yield any evidence of a paleosol as it penetrated through the channel (see 2020 Marine Archaeological Geotechnical Campaign). Approximately 99% (33.4 ha [82.5 ac]) of Target 26 is present within the APE around a proposed turbine location and the inter-array cable corridor.

Target 27: Target 27 represents the eastern flank of a meandering paleochannel associated with U30/H30, opposite Targets 26 and 29. To the east of Target 27, another potential paleochannel may have existed, but shows extensive erosion and reworking due to marine transgression. Similar processes removed portions of margin from within Target 27, downcutting into the potential former subaerial landscape. Covering approximately 59.6 ha (147.3 ac), the acoustic imagery of Target 27 is indicative of a slightly eroded, yet preserved paleochannel flank potentially associated with the oldest generation of the channel. The reflector is buried 4.3 m (14.1 ft) bsb and is 847.6 m (2,480.8 ft) at its widest. Approximately 18% (10.7 ha [26.4 ac]) of Target 27 is present within the APE around a proposed turbine location and the inter-array cable corridor.

Target 28: Target 28 represents an interfluve between a bifurcation or convergence of a major paleochannel and a tributary associated with U30/H30. A significant portion of this geomorphic feature of archaeological interest remains intact, although marine transgression removed portions of this feature in the northeast, downcutting into the potential former subaerial landscape. Nearby archaeological cores AC-09a and AC-10 did not yield any evidence of a paleosol, as both penetrated the paleochannel. Covering approximately 210.8 ha (520.9 ac), the acoustic imagery of Target 28 indicates a well-preserved surface between two

paleochannels. The reflector is buried 2.5 m (8.2 ft) bsb and is 1,7551.1 m (5,758.2 ft) at its widest. Approximately 24% (50.6 ha [125.1 ac]) of Target 28 is present within the APE around a proposed turbine location and the inter-array cable corridor.

Target 29: Target 29 represents an interfluve between a meandering paleochannel and a straight paleochannel associated with U30/H30. Marine transgression removed portions of this margin, truncating the floodplains. Additionally, portions of the meandering paleochannel cut through Target 29 for a period. Nearby archaeological core AC-05a did not yield evidence of a paleosol as it penetrated through a thin portion of U30/H30 to capture lower stratigraphic units. Covering approximately 203.4 ha (502.7 ac), the acoustic imagery of Target 29 suggests a slightly eroded, yet preserved paleochannel flank. The reflector is buried 1.1 m (3.6 ft) bsb and is 1,907.7 m (6,258.8 ft) at its widest. Approximately 41% (83.0 ha [205.2 ac]) of Target 29 is present within the APE around four proposed turbine locations and inter-array cable corridors.

Target 30: Target 30 represents a discrete portion of the eastern flank of a major paleochannel associated with U30/H30. Nearby archaeological core AC-04 captured evidence of a paleosol; however, the spatial extent of this surface is highly truncated ephemeral due to marine transgression. Covering approximately 23.7 ha (58.5 ac), the acoustic imagery of Target 30 indicates a slightly eroded, yet preserved paleochannel flank. The reflector is buried 2.5 m (8.2 ft) bsb and is 417.3 m (1,369.1 ft) at its widest. Approximately 69% (16.3 ha [40.4 ac]) of Target 30 is present within the APE around a proposed turbine location and the interarray cable corridor.

Target 31: Target 31 represents an extensive portion of the western flank of a major paleochannel associated with U30/H30. Marine transgression removed portions of this margin, downcutting into the potential former subaerial landscape. Nearby archaeological core AC-08 did not yield any evidence of a paleosol as it penetrated through the channel. Radiocarbon dating from Target 31 suggests the former subaerial landscape is older than the archaeological framework for human settlement in North America; however, overlying stratigraphic units dated within the accepted timeframe. Covering approximately 59.6 ha (147.6 ac), the acoustic imagery of Target 31 indicates a slightly eroded, yet preserved paleochannel flank. The reflector is buried 1.8 m (5.9 ft) bsb and is 1,828.9 m (6,000.3 ft) at its widest. Approximately 79% (47.3 ha [116.9 ac]) of Target 31 is present within the APE around two proposed turbine locations and array cable corridors.

Target 32: Target 32 represents the western flank of a major paleochannel associated with U30/H30. Marine transgression removed portions of this margin, downcutting into the potential former subaerial landscape. Acoustic imagery of Target 32 is like other targets within the WFA (i.e., Target 29). Covering approximately 68.7 ha (169.7 ac), the acoustic imagery of Target 32 suggests a slightly eroded, yet preserved paleochannel flank. The reflector is buried 4.9 m (16.1 ft) bsb and is 1,034.6 m (3,392.4 ft) at its widest. Approximately 47% (32.2 ha [79.5 ac]) of Target 32 is present within the APE around two proposed turbine locations and array cable corridors.

Target 33: Target 33 is located along the BL England ECR Corridor and represents the flank and floodplain of a paleochannel associated with U30/H30. Marine transgression removed portions of this paleolandform,

downcutting into the potential former subaerial landscape. Acoustic imagery of Target 33 is similar to other targets within the WFA (i.e., Target 29). Covering approximately 55.9 ha (138.2 ac), the acoustic imagery of Target 33 indicates a slightly eroded, yet preserved paleochannel flank. The reflector is buried 2.3 m (7.5 ft) bsb and is 1,198.8 m (3,933.1 ft) at its widest. Approximately 69% (38.4 ha [94.8 ac]) of Target 33 is present within the APE.

Target 34: Target 34 is within the Oyster Creek ECR Corridor and represents the preserved channel margins of a minor tributary associated with U30/H30. Marine transgression removed portions of this paleolandform, downcutting into the potential former subaerial landscape. Acoustic imagery of Target 34 is similar to other targets within the WFA (i.e., Target 29). Covering approximately 13.1 ha (32.3 ac), the acoustic imagery of Target 34 is indicative of a slightly eroded, yet preserved paleochannel flank. The reflector is buried 4.0 m (13.1 ft) bsb and is 743.2 m (2,438.3 ft) at its widest. Approximately 80% (10.5 ha [25.8 ac]) of Target 34 is present within the APE.

Target 35: Target 35 is in the Oyster Creek ECR Corridor and a small portion of the WFA and represents the eastern flank of a major paleochannel associated with U30/H30. Marine transgression removed portions of this margin, downcutting into the potential former subaerial landscape. Acoustic imagery of Target 35 is similar to other targets within the WFA (i.e., Target 29). Covering approximately 20.4 ha (50.5 ac), the acoustic imagery of Target 35 suggests a slightly eroded, yet preserved paleochannel flank. The reflector is buried 4.3 m (14.1 ft) bsb and is 1,110.8 m (3,644.3 ft) at its widest. Target 35 exists entirely within the APE.

3.3 Historic Context

The paleolandscape reconstruction for the APE based on the geophysical and geotechnical data indicated that unit 30 and its corresponding basal horizon (U30/H30) represented the last subaerial surface available for human occupation prior to the terminal Pleistocene sea level transgression. Radiocarbon data collected during the geoarchaeological campaign confirmed that U30/H30 dated to 9,351 cal BP to 13,646 cal BP. This timeframe correlates to the archaeologically defined Paleoindian Period and Early Archaic Period. Targets 20-35 represent discontinuous portions of this surface and are the preserved margins adjacent to the paleo-fluvial network that once dominated this landscape. The interpretation of these ASLFs suggests that stable, former subaerial surfaces, such as these, are the most likely locations where evidence of human occupation could be preserved.

Although direct evidence of the former inhabitants does not exist within the current dataset, the paleoenvironmental reconstruction and correlation to similar, known terrestrial archaeological sites suggest the ASLFs are types of locations frequented by indigenous peoples in the region. Paleoindian and early Archaic peoples were highly mobile populations that relied on resource rich areas for survival, such as river valleys. Coastal adaptation during this time is not well-understood due to the nature of marine transgression. It is highly likely that the former coastline now drowned and buried on the OCS also was a locale frequented and utilized by the same indigenous populations.

The ASLFs discussed above represent preserved elements of a former subaerial surface, one that was likely home to the indigenous peoples. These types of features are recognized as having traditional cultural

significance to the consulting Native American tribes, many of whom are ancestors of the people that once traversed this landscape. Several of the Tribes maintain within their traditions that their people have always been present here. Their Tribal histories possess accounts of their ancestors existing and interacting with these former subaerial surfaces, a place that holds value and importance to their heritage and identity.

3.4 NRHP Criteria

Based on prior BOEM consultations for the South Fork Wind Farm and Vineyard Wind 1 Wind Farm undertakings and OW1's assessments, the identified ASLFs are potentially eligible for listing in the National Register of Historic Places under Criterion D for their potential to yield important information about the indigenous settlement of the northeastern United States and development of coastal subsistence adaptations. Each ASLF may also be eligible for listing under Criterion A for their association with and importance in maintaining the cultural identities of multiple Native American Tribes/Tribal Nations.

4.0 MITIGATION MEASURES

This section details the proposed mitigation measures to resolve adverse effects to historic properties stipulated in the MOA, and describes the purpose and intended outcome, scope of work, methodology, standards, deliverables, and funds and accounting for each measure. The content of this section was developed on behalf of OW1 by individuals who met Secretary of the Interior (SOI) Qualifications Standards for Archeology and/or History (62 FR 33708) and is consistent with fulfilling the mitigation measures such that they fully address the nature, scope, size, and magnitude of adverse effects to ancient submerged landform features. Implementation of the mitigation measures described in the following sections will be led by a Qualified Marine Archaeologist (QMA) pursuant to 30 CFR 585 and who meets SOI (Secretary of the Interior) Qualifications Standards for Archeology and Historic Preservation (48 FR 44738-44739).

4.1 Preconstruction Geoarchaeology

4.1.1 Purpose and Intended Outcome

This mitigation measure will consist of the collection vibracores within affected portions of each ASLF that was not previously investigated during the 2020 Geotechnical Survey campaign prior to Project construction. The collected cores, the locations which will be selected in consultation with Native American Tribes/Tribal Nations, BOEM, and the NJ HPO, and will be analyzed in collaboration with the Tribes/Tribal Nations to provide a more detailed understanding of ancient, former terrestrial landscapes within the OW1 WFA and ECR corridors and how such settings may have been used by Late Pleistocene-Early Holocene indigenous peoples. Data acquired from this effort is expected to refine the age estimates for each stable landform, the timing and character of ecological transitions evidenced in the MARA report and provide an additional opportunity to recover evidence of ancient indigenous use of each ASLF.

This measure will provide for a more detailed analysis of the stratigraphy, chronology, and evolving ecological conditions at each ancient landform. Two separate reports on the analyses and interpretations will be developed. The first will be focused on content of specific interest to the consulting Tribes/Tribal Nations, referred to as the Tribal Audience Report, including a broad approach to integrating available data

collected from other recent archaeological research and surveys on the Atlantic OCS. The specific content and formatting of this report will be refined in consultation with the tribes to align the work product with intended intra- and inter-tribal audiences. The second report, referred to as the Technical Report, will be geared primarily toward technical, Tribal/State Historic Preservation Officer and agency audiences.

4.1.2 Scope of Work

The scope of work will consist of the following:

- Collaborative review of existing geophysical and geotechnical data with Native American Tribes/Tribal Nations;
- Selection of coring locations in consultation with Tribes/Tribal Nations;
- Collection of two to three vibracores within each affected ASLF that has not been previously sampled, with a sampling focus on areas that will be disturbed by Project construction activities;
- Written verification to BOEM that the samples collected are sufficient for the planned analyses and consistent with the agreed scope of work;
- Collaborative laboratory analyses at a laboratory located in Rhode Island or New Jersey;
- Screening of recovered sediments for debitage or micro-debitage associated with indigenous land uses;
- Third-party laboratory analyses, including micro- and macro-faunal analyses, micro- and macro-botanical analyses, radiocarbon dating of organic subsamples, and chemical analyses for potential indirect evidence of indigenous occupations;
- Temporary curation of archival core sections;
- Draft reports for review by participating parties;
- Final reporting;
- Complete a NRHP Multiple Property Documentation Form (NPS 10-900-b) form for Targets 20-35;
 and
- Public or professional presentations summarizing the results of the investigations, developed with the consent of the consulting Tribes/Tribal Nations.

4.1.3 Methodology

OW1 will conduct the Preconstruction Geoarchaeology in consultation with the Native American Tribes/Tribal Nations, BOEM, and the NJ HPO. Although BOEM and the NJ HPO will be consulted, the research, analyses, and interpretations are intended to be a collaborative effort between OW1 and the consulting Tribes/Tribal Nations, who will be invited by OW1 to series of working sessions to:

- Review existing data;
- Develop specific research questions addressing the tribes' interests in the ASLF;
- Select candidate coring locations;
- Split, document, and sample recovered vibracores in the laboratory;
- Review analytic results and preliminary interpretations; and
- Review draft reporting.

Vibracores placed within the affected sections of each ASLF will extend a maximum depth of approximately 20 feet (6 meters) below the seafloor. The cores will be cut on the survey vessel into approximately 1-meter-long sections and sealed to minimize the risk of environmental contamination. The core segments will be logged on the survey vessel and a chain of custody will be maintained to ensure all samples are accounted for and that all samples are transferred to the laboratory for geoarchaeological analyses. Once the core segments are transferred to the onshore laboratory, OW1 will invite Tribal representatives to participate in the splitting, documentation, and subsampling of each core.

Each core segment will be split longitudinally into working and archival halves. Subsamples collected from working halves for specific third-party analyses will be packaged in a manner appropriate to the specific analysis for which they are intended. Archival halves will be sealed and stored horizontally on shelves or racks in a climate-controlled facility for at least one year following completion of laboratory analyses. OW1 will prioritize reasonable access to archival core segments by consulting parties and researchers when selecting the storage facility. All samples collected from the working halves will be submitted to third party laboratories within approximately 6 months of core transfer to the Qualified Marine Archaeologist facilities.

OW1 will prepare a presentation of the preliminary results and interpretations for discussion with the Tribes/Tribal Nations. OW1 will consider the Tribes'/Tribal Nations' comments and suggestions when preparing the draft Tribal Audience and Technical reports and will seek to resolve any disagreements among the parties through supplemental consultations prior to preparing the draft reports. OW1 will submit the draft Technical Report to all Participating Parties for review and comment. OW1 submit the draft Tribal Audience Report to only the participating federally recognized Tribes/Tribal Nations for review and comment. OW1 will consider all comments received when developing the final reports. Final digital copies of the completed Tribal Audience and Technical reports will be provided to all participating parties. Hard copies of the final reports will be submitted to the State Historic Preservation Officers, Tribes/Tribal Nations governments or other parties upon request.

Following the one-year retention period, OW1 will offer transfer of the archival core segments to the Consulting Tribes, SHPOs and related state agencies, and regional research institutions with an interest in and capacity to conduct further analyses. OW1 currently anticipates research institutions with potential interests/capacities to include the Princeton University, Rutgers University, New Jersey Institute of Technology, and the University of Rhode Island. OW1 will notify the Consulting Parties of its intent to transfer archival core segments to any party at least 45 days prior to initiating such transfer and will consider any comments provided by Consulting Parties before proceeding. If no external parties agree to accept the archival core segments, OW1 will water-screen the retained segments to identify and collect potential physical evidence of ancient Native American activity at the ASLFs. In such circumstances, OW1 will prepare a technical memorandum summarizing the results of the archival core segment processing and analyses and submit that memorandum to the Consulting Parties.

Upon completion of the geoarchaeological analysis and reporting, OW1 will prepare a NRHP Multiple Property Documentation Form (NPS 10-900-b) form for Targets 20-35. As a result of previous and ongoing

consultations with federally recognized Tribes/Tribal Nations, BOEM has determined that ASLFs are eligible for the NRHP as Traditional Cultural Properties. A traditional cultural property is defined generally as a property eligible for inclusion in the NRHP because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community. Federally recognized Tribes/Tribal Nations have repeatedly stated to BOEM that ASLF are significant to their members as the lands formerly occupied by their ancestors, likely containing burials and human remains, and as such are an important part of Tribal history and cultural identify. The form will be completed using the information collected during the preconstruction geoarchaeological investigations as well as information collected previous geophysical and geotechnical and drafted in consultation with participating Native American Tribes/Tribal Nations.

The Multiple Property Documentation Form (NPS 10-900-b) is used to nominate groups of related significant properties that share themes, trends, and patterns of history. The form serves as the basis for evaluating the NRHP eligibility of related properties and it may be sued to nominate and register thematically related historic properties simultaneously or establish the registration requirements for properties that may be nominated in the future. Under this proposal, a National Register Registration Form (NPS 10-900) will be completed for each of the 16 identified ASLFs along with a single Multiple Property Documentation Form that incorporates all 16 ASLFs. The Multiple Property Documentation Form will streamline the NRHP nomination process for all 16 ASLFs by allow information that is common to all ASLFs (NRHP evaluation criteria, historic context description, statement of significance, etc.) to be recorded on the Multiple Property Documentation Form while the unique characteristics of each ASLF (location, integrity, etc.) are completed for each individual ASLF.

OW1 will draft the Multiple Property Documentation Form (NPS 10-900-b) and individual National Register Registration Form (NPS 10-900) for Targets 20-35 in consultation with participating Native American Tribes/Tribal Nations and BOEM. OW1 will work with the Tribes/Tribal Nations to develop draft NPS 10-900 forms for each ASLF and the NPS 10-900-b form. OW1 will then submit draft forms to the Tribes/Tribal Nations and BOEM for review and comment. Based on the feedback and comments from BOEM and the Tribes/Tribal Nations, OW1 will finalize the nomination forms and BOEM will submit the forms to the National Park Service in Washington, D.C. for final review and listing by the Keeper of the NRHP.

4.1.4 Standards

The Preconstruction Geoarchaeology effort will be conducted in accordance with BOEM's *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* (May 2020). The qualified professional archaeologists leading the research will meet the SOI professional qualification standards for archaeology (62 FR 33708) and BOEM's standards for Qualified Marine Archaeologists.

4.1.5 Deliverables

The following documentation is to be provided for review by Participating Parties:

Draft Tribal Audience Report;

- Draft Technical Report;
- Final Tribal Audience Report;
- Final Technical Report; and
- Draft Public or Professional Presentations.

4.1.6 Schedule

The following is a preliminary schedule for execution of the preconstruction geoarchaeological mitigation study based on the current BOEM timeline for completing the OW1 NEPA and NHPA Section 106 reviews. A more detailed schedule will be requested in the solicitation/request for proposal used to identify and select a QMA(s) to perform the scope of work described in the HPTP. Once the QMA(s) is identified and under contract, the QMA, OW1, and the Participating Parties will develop and agree upon a final delivery schedule.

Summer 2023	Solicitation/Request for Proposal for QMA and contracting QMA to
	perform study; collaborative review of existing geophysical and
	geotechnical data with Native American Tribes/Tribal Nations; and

selection of coring locations in consultation with Tribes/Tribal Nations.

Summer-Fall 2023 Collection of two to three vibracores within each affected ASLF that has not been previously sampled, with a sampling focus on areas that will be

disturbed by Project construction activities.

Winter 2023 Collaborative laboratory analyses at a laboratory located in Rhode Island

or New Jersey and screening of recovered sediments for debitage or micro-debitage associated with indigenous land uses and third-party

laboratory analyses.

Winter 2023-Spring 2024 Draft reports/deliverables for review by Participating Parties followed by

submission of final reports/deliverables.

Spring 2024 Complete a NPS 10-900-b form for Targets 20-35 and public or

professional presentations summarizing the results of the investigations

developed with the consent of the consulting Tribes/Tribal Nations.

The final mitigation schedule will include opportunities for Participating Parties to review and comment on deliverables. Table 2 provides an overview of each opportunity for Participating Parties to review and comment on deliverables and the length of the associated review and comment periods.

Table 2: Preconstruction Geoarchaeology Mitigation Deliverables and Review & Comment Periods

Activity	Review and	
Activity	Comment Period	
Review and comment on final mitigation project schedule	30 days	
Review of existing geophysical and geotechnical data	60 days	
Comment on preliminary results and interpretations	30 days	
BOEM to review, comment, and/or approve written verification that the samples		
collected are sufficient for the planned analyses and consistent with the agreed	30 days	
scope of work. ¹		
Submit draft Technical Report	60 days	
Submit final Technical Report	30 days	
Submit draft Tribal Audience Report ²	60 days	
Submit final Tribal Audience Report	30 days	
Notify the Participating Parties of its intent to transfer archival core segments to	4F days	
any party	45 days	
Submit draft Multiple Property Documentation Form (NPS 10-900-b) and		
individual National Register Registration Form (NPS 10-900) for Targets 20-35	60 days	
Submit final Multiple Property Documentation Form (NPS 10-900-b) and	30 days	
dividual National Register Registration Form (NPS 10-900) for Targets 20-35		

4.1.7 Funds and Accounting

OW1 will be responsible for funding and implementation of this mitigation measure.

4.2 Open-Source GIS and Story Maps

4.2.1 Purpose and Intended Outcome

This mitigation measure will consist 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/Tribal Nations. The datasets will include sub-bottom (seismic) data used to characterize the seabed and ASLFs, the location of all geotechnical/geoarchaeological samples collected, and the vertical and horizontal extents of the affected features or sub-features within each ASLF. The GIS will be, to the extent feasible and practicable, compatible with GIS datasets compiled for other OCS projects to assist in the tribes' on-going research and stewardship efforts. 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. Story Map content would be developed in close consultation and collaboration with the consulting Native American Tribes/Tribal Nations.

¹ BOEM, not all Participating Parties, will be solely responsible for reviewing and approving the written verification that the samples collected are sufficient for the planned analyses and consistent with the agreed scope of work.

² Only participating federally recognized Tribes/Tribal Nations will be afforded the opportunity to review and comment on the draft and final Tribal Audience Report.

Incorporation of OW1 datasets into a broader GIS framework will allow the Tribes/Tribal Nations to better understand and protect preserved elements of ASLFs of traditional cultural significance. The intent of this measure is to enhance the Tribes/Tribal Nations understanding of existing conditions for a range of ASLFs located in the northeastern Atlantic OCS. This knowledge would allow for more effective Government to Government consultations regarding similar features that may be affected by future federal undertakings. The value of the GIS will increase as additional datasets are acquired and incorporated. Access to the GIS will support each Tribes' capacity to pursue their own research or intra-tribal educational programs related to the OCS and traditional cultural uses of the now-submerged landscapes of their ancestors.

The combined MARA and Preconstruction Geoarchaeology investigations will provide an important perspective on the preservation of submerged Traditional Cultural Properties within formerly glaciated sections of the OCS and within the footprint of former glacial lakes. Integrated GIS that can accommodate datasets collected from other OCS development projects and surveys would allow for comparisons to areas south of the maximum glacial limits on the OCS to provide a more comprehensive view of the ancient landscapes within the region. OW1 will provide reasonable compensation to tribal representative working with OW1 on implementation of this measure. Story Maps created within the GIS will provide a flexible approach to incorporating media from a variety of sources, including geospatial data, interviews with traditional knowledge-holders, photographs, audio recordings, and archival cartography for a compelling interpretive experience. Story Maps can be tailored for specific tribal audiences and uses and would be developed in consultation with the consulting tribes.

4.2.2 Scope of Work

The scope of work will consist of the following:

- Consultation with the Tribes/Tribal Nations to determine the appropriate open-source GIS platform;
- Review of candidate datasets and attributes for inclusion in the GIS;
- Data integration;
- Development of custom reports or queries to assist in future research or tribal maintenance of the GIS;
- Work Sessions with Tribes/Tribal Nations to develop Story Map content;
- Training session with Tribes/Tribal Nations to review GIS functionality;
- Review of Draft Story Maps with Tribes/Tribal Nations;
- Delivery of GIS to Tribes/Tribal Nations; and
- Delivery of Final Story Maps.

4.2.3 Methodology

OW1 will develop the Open-Source GIS and Story Maps in consultation with the Participating Parties. At least one work session will be scheduled to refine specific functionality of interest to the Tribes/Tribal Nations. That session will be conducted after the preliminary data analyses for the Preconstruction Geoarchaeology effort has been completed. This will allow for a more focused walk-through of the data

and options for organizing and integrating different datasets. OW1 will request from the Tribes/Tribal Nations details on any existing open-source GIS systems currently in use by each Tribe/Tribal Nation to minimize any issues with data integration or interoperability.

Once the work session has been conducted OW1 will proceed with development of the GIS, considering the Tribes'/Tribal Nations' comments and suggestions. The draft GIS system will be shared with the Tribes/Tribal Nations in a training session that presents the functions of the GIS and familiarizes the Tribal representatives with the interfaces, data organization, and any custom features developed to enhance useability. OW1 will consider any feedback from the Tribes/Tribal Nations on the draft GIS before proceeding with finalizing the system design and implementation. OW1 will provide the GIS to the Tribes/Tribal Nations by physical storage media or as a secure digital file transfer, as appropriate to each Tribes/Tribal Nations IT infrastructure and preference. OW1 does not intend to be responsible for the upkeep of the GIS database.

Story Map content will be developed with the consulting Tribes/Tribal Nations through one or more scheduled work sessions. Potential options for content intended for youth audiences, tribal governments, and/or general tribal membership will be discussed to refine the conceptual framework and develop draft Story Maps for review by the Tribes/Tribal Nations. OW1 will consider all comments and feedback provided by the Tribes when preparing the final Story Maps.

4.2.4 Standards

The GIS developed under this measure will be free to use and free to modify by the Tribes/Tribal Nations. To the extent feasible, all data will be provided in formats that allow for interoperability with other GIS platforms that the tribes may use. All datasets incorporated in the GIS will comply with Federal Geographic Data Committee data and metadata standards.

4.2.5 Documentation

OW1 will provide draft descriptions and documentation of the GIS for review by the Participating Parties and will provide a description of the draft Story Maps to the consulting Tribes/Tribal Nations following the initial working sessions.

The following documentation is to be provided for review by Participating Parties:

- Draft Description of the GIS with appropriate schema, data organization, and custom reports/queries;
- Draft Story Map descriptions with details on content, formatting, and intended audiences; and
- Final Technical Description of the GIS with schema, data organization, and custom reports/queries.

4.2.7 Schedule

The following is a preliminary schedule for execution of the preconstruction geoarchaeological mitigation study based on the current BOEM timeline for completing the OW1 NEPA and NHPA Section 106 reviews.

A more detailed schedule will be requested in the solicitation/request for proposal used to identify and select a GIS developer to perform the scope of work described in the HPTP. Once the GIS developer is identified and under contract, the GIS developer, OW1, and the Participating Parties will develop and agree upon a final delivery schedule.

Summer 2023	Consultation with the Tribes/Tribal Nations to determine the appropriate open-source GIS platform and review of candidate datasets and attributes for inclusion in the GIS.
Fall 2023	Data integration and development of custom reports or queries to assist in future research or Tribal maintenance of the GIS and work sessions with Tribes/Tribal Nations to develop Story Map content.
Winter 2023	Training session with Tribes/Tribal Nations to review GIS functionality; and review of Draft Story Maps with Tribes/Tribal Nations.
Spring 2024	Delivery of GIS and Final Story Maps to Tribes/Tribal Nations.

The final mitigation schedule will include opportunities for Participating Parties to review and comment on deliverables. Table 3 provides an overview of each opportunity for Participating Parties to review and comment on deliverables and the length of the associated review and comment periods.

Table 3: Open-Source GIS and Story Maps Mitigation Deliverables and Review & Comment Periods

Activity	Review and Comment Period
Review and comment on final mitigation project schedule	30 days
Draft Description of the GIS with appropriate schema, data organization, and custom reports/queries.	30 days
Draft Story Map descriptions with details on content, formatting, and intended audiences.	60 days
Final Technical Description of the GIS with schema, data organization, and custom reports/queries	30 days

4.2.7 Funds and Accounting

OW1 will be responsible for funding and implementation of this mitigation measure.

5.0 IMPLEMENTATION

5.1 Timeline

It is anticipated that the mitigation measure identified in Section 4.0 will commence after execution of the MOA unless otherwise agreed by the consulting parties and accepted by BOEM. OW1 assumes that the proposed scope of work will be completed within 5 years of MOA execution, unless a different timeline is

agreed upon by Participating Parties and accepted by BOEM. Construction activities that could potentially impact the 16 ASLF historic properties that are the subject of the preconstruction geoarchaeological mitigation will not commence until BOEM has formally accepted the written verification that the vibracore samples collected from the 16 ASLFs are sufficient for the planned analyses and consistent with the agreed scope of work. Once BOEM has provided OW1 with written verification, construction can commence within the boundaries of the 16 ASLFs while OW1 or their designee completes the remaining components of the preconstruction geoarchaeological and open-source GIS and story maps mitigations.

5.2 Reporting

OW1 shall prepare and, following BOEM review and approval, provide all signatories, invited signatories, and consulting parties to the MOA a summary report detailing work undertaken pursuant to the MOA consistent with MOA Stipulation IX (Monitoring and Reporting), including the mitigation measures outlined in the final HPTP. This report will be prepared, reviewed, and distributed by January 31, 2024, and summarize the work undertaken during the previous year. OW1 will continue to generate and distribute this yearly report until all activities required under the MOA are completed.

5.3 Organizational Responsibilities

The following sections describe the roles and responsibilities of the various participating parties.

5.3.1 BOEM

- Make all federal decisions and determine compliance with Section 106 of the NHPA;
- Ensure mitigation measures adequately resolve adverse effects, consistent with the NHPA, and in consultation with the Participating Parties;
- Review, comment, and/or approve written verification that the samples collected for preconstruction geoarchaeological study mitigation are sufficient for the planned analyses and consistent with the agreed scope of work.
- Consult with OW1, NJ HPO, federally recognized Tribes/Tribal Nations, and the ACHP; and
- Review and approve the annual summary report prepared and distributed to consulting parties by OW1.

5.3.2 Ocean Wind LLC

- Fund the mitigation measures identified in Stipulation III.A of the MOA and described in Section 4.0 of this HPTP;
- Complete the scope/s of work in Section 4.0;
- Ensure all Standards in Section 4.0 are met;
- Provide the Documentation in Section 4.0 to the Participating Parties for review and comment;
- Prepare annual reporting, submit reporting to BOEM for review and approval, and distribute annual reporting to consulting parties; and
- Ensure all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes.

5.3.3 New Jersey HPO

• Participate in all participating party consultation opportunities and deliverable reviews described in Section 4.0 within the review and comment periods outlined in Tables 2 and 3.

5.3.4 Federally recognized Tribes/Tribal Nations

• Participate in all activities outlined in Section 4.0 and complete all associated reviews, comments, requests for feedback/input in the timeframes presented in Tables 2 and 3.

5.3.5 Advisory Council on Historic Preservation

• Participate in all activities outlined in Section 4.0 and complete all associated reviews, comments, requests for feedback/input in the timeframes presented in Tables 2 and 3.



6.0 REFERENCES

Federal Regulations

Code of Federal Regulations (CFR). 2022. 40 CFR 1500 – National Environmental Policy Act Implementing Regulations. Available at https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A.

CFR. 2021a. 36 CFR 800 – Protection of Historic Properties [incorporating amendments effective December 15, 2021]. Available at https://www.ecfr.gov/current/title-36/chapter-VIII/part-800.

CFR. 2021b. 36 CFR 61.4(e)(1) – Procedures for State, Tribal, and Local Government Historic Preservation Programs [incorporating amendments effective December 15, 2021]. Available at https://www.ecfr.gov/current/title-36/chapter-l/part-61#p-61.4(e)(1).

CFR. 2021c. 36 CFR 65.2(c)(2) – National Historic Landmarks Program – Effects of Designation [incorporating amendments effective December 15, 2021]. Available at https://www.ecfr.gov/current/title-36/chapter-l/part-65#p-65.2(c)(2). Accessed December 21, 2021.

Federal Register. 1997. 62 FR 33708 – The Secretary of the Interior's Historic Preservation Professional Qualifications Standards. Office of the Federal Register, National Archives and Records Administration. Washington, D.C. Available at https://www.govinfo.gov/app/details/FR-1997-06-20/97-16168.

United States Code. 2016. Title 54 - National Historic Preservation Act [as amended through December 16, 2016]. Available at https://www.achp.gov/sites/default/files/2018-06/nhpa.pdf.

State Regulations

New Jersey Register of Historic Places Act of 1970 (N.J.S.A. 13:1B-15.128 et seq.): https://www.state.nj.us/dep/hpo/2protection/njsa13.htm

Public documents related to Ocean Wind1

https://www.boem.gov/ocean-wind

Ocean Wind1 COP: https://www.boem.gov/ocean-wind-1-construction-and-operations-plan

OW1 DEIS: TBD OW1 FEIS: TBD OW1 ROD: TBD

General Information on Section 106

https://www.achp.gov/protecting-historic-properties/section-106-process/introduction-section-106

https://www.achp.gov/digital-library-section-106-landing/section-106-consultation-involving-national-historic-landmarks

National Park Service (NPS)

How to Apply the National Register Criteria for Evaluation. Rev. ed. National Register

Bulletin 15. Available at: https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf. Accessed April 21, 2022.



Historic Properties Treatment Plan for Historic Properties Subject to Adverse Effect

Applicant Proposed Draft Historic Properties Treatment Plan for the Ocean Wind 1 Offshore Wind Farm Project

Historic Properties Subject to Adverse Visual Effect

Cape May and Atlantic Counties, New Jersey

Submitted to:



Bureau of Ocean Energy Management U.S. Department of the Interior

Prepared for:



An Ørsted & PSEG project

Ocean Wind 1 https://oceanwind.com/

Prepared by:



June 2022

ABSTRACT

Federal Undertaking: Ocean Wind 1 Offshore Wind Farm Project, OCS-A 0498

Location: Outer Continental Shelf, New Jersey

Federal and

State Agencies: Bureau of Ocean Energy Management

Environmental Protection Agency National Marine Fisheries Service U.S. Army Corps of Engineers

New Jersey Department of Environmental Protection/State Historic Preservation

Office

Advisory Council on Historic Preservation

ACHP Project No.: 016649

HPO Project No.: 18-1184-30

Potential Adverse Visual Effect Finding

for: Five Properties in Cape May, Ocean, and Atlantic Counties

Date: June 2022

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LIST OF ACRONYMS

ACHP Advisory Council on Historic Preservation

APE Area of Potential Effects

BOEM Bureau of Ocean Energy Management

CFR Code of Federal Regulations

COP Construction and Operations Plan
FEIS Final Environmental Impact Statement

FR Federal Regulation

HDR HDR, Inc.

HPTP Historic Preservation Treatment Plan

NHPA National Historic Preservation Act of 1966

NJ SHPO New Jersey State Historic Preservation Office(r)

NPS National Park Service

NRHP National Register of Historic Places

OCS Outer Continental Shelf

OW1 Ocean Wind 1 Offshore Wind Farm Project

RFP Request for Proposal ROD Record of Decision

SOI Secretary of the Interior

WFA Wind Farm Area

WTG Wind Turbine Generator

1.0 INTRODUCTION

This Historic Properties Treatment Plan (HPTP) was prepared to support fulfillment of Stipulation III.B of the Memorandum of Agreement (MOA) Among the Bureau of Ocean and Energy Management, The New Jersey State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Ocean Wind 1 Offshore Wind Farm Project. This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation actions to resolve adverse visual effects to five historic properties identified by the Bureau of Ocean Energy Management (BOEM) through Section 106 consultation for the Ocean Wind 1 Offshore Wind Farm (OW1), as identified in the Ocean Wind Visual Effects on Historic Properties (VEHP), dated March 2021 (HDR 2021). The mitigation measures and the process for implementation described herein were developed in consultation with the New Jersey Historic Preservation Officer (NJ HPO), federally recognized Tribes, the Advisory Council on Historic Preservation (ACHP), and other consulting parties. This HPTP outlines mitigation measures, implementation steps, and timeline for actions

Section 1.0 Introduction: Outlines the content of this HPTP.

Section 2.0 Background Information: Briefly summarizes the OW1 (the Undertaking) while focusing on cultural resources regulatory contexts (federal, tribal, state, and local, including preservation restrictions), identifies the five historic properties discussed in this HPTP that will be adversely affected by the Undertaking, and summarizes the pertinent conditions that guided the development of this document.

Section 3.0 Existing Conditions and Historic Significance: Provides a physical description of each historic property included in this HPTP. Set within its historic context, each resource is discussed in terms of the applicable National Register of Historic Places (NRHP) criteria, with a focus on the contribution of an ocean setting to its significance and integrity.

Section 4.0 Mitigation Measures: Presents specific steps to carry out the mitigation measures proposed by OW1 in the Construction and Operations Plan (COP). Each mitigation <u>measure</u> includes a detailed description, intended outcome, and specifications that include maximum cost, methods, standards, requirements for documentation, and reporting instructions. Property-specific challenges, if any have been identified, are outlined as well.

Section 5.0 Implementation: Establishes the process for executing mitigation measures at the historic properties, as identified in Section 4.0 of this HPTP. For each action, organizational responsibilities are outlined, a timeline is provided, and regulatory reviews are listed.

Section 6.0 References: A list of works cited in this HPTP.

2.0 BACKGROUND INFORMATION

BOEM has determined that approval, approval with modification, or disapproval of the Ocean Wind 1 Offshore Wind Farm COP constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA; 54 U.S.C. § 306108) and its implementing regulations (36 CFR § 800), and that the activities proposed under the COP have the potential to affect historic properties. The Ocean Wind 1 Offshore Wind Farm undertaking (the Undertaking) is defined as a wind-powered electric generating facility composed of up to 98 wind turbine generators (WTGs) and associated foundations, up to three offshore substations, and inter-array cables connecting the WTGs and the offshore substations (Figure 2-1).

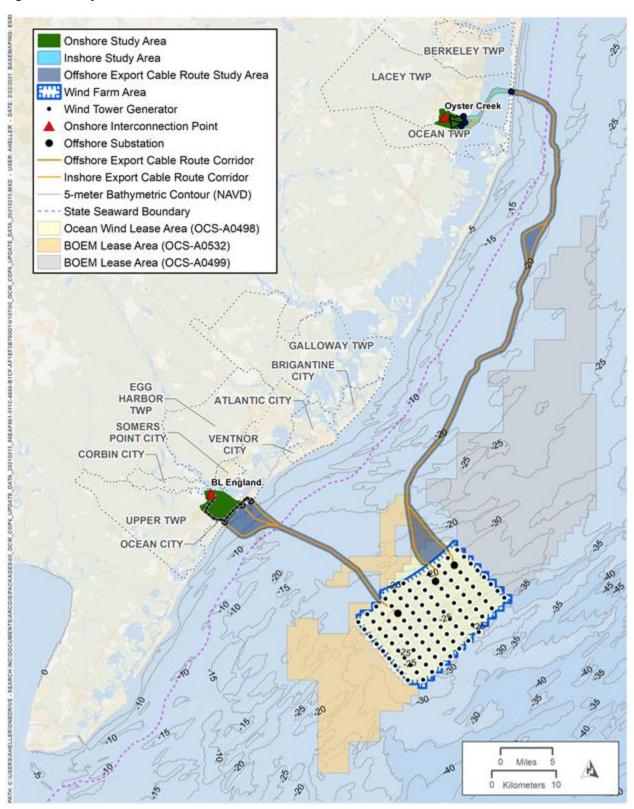
The WTGs, foundations, offshore substations, and inter-array cables will all be in federal waters on the Outer Continental Shelf (OCS), approximately 15 statute miles (mi) (13 nautical miles [nm]) southeast of Atlantic City, New Jersey. Cables will be buried below the seabed. Export cables from the offshore substations will extend along the seabed and connect to buried onshore export cables, which will connect to two interconnection points, at Oyster Creek and Bl England. Onshore cables will be buried within up to a 15-m-wide (50-ft-wide) construction corridor with a permanent easement up to 9.8-m-wide (30-ft-wide) for BL England. Two new onshore substations are proposed at Oyster Creek and BL England along with grid connections to the existing grid for each substation. Onshore substation locations would be sited on existing parcels containing decommissioned power facilities at BL England and Oyster Creek. The Oyster Creek and BL England onshore substation locations would require a permanent site up to 31.5 acres (ac) (12.7 hectares [ha]) and 13 ac (5.3 ha) respectively, for the substation equipment and buildings, energy storage, and stormwater management and associated landscaping. Underground or overhead transmission lines would connect the substations to the planned interconnection point (grid connections).

The maximum height of the offshore substations is 296 feet (ft) above mean lower low water (mllw) with a maximum length and width of 295 ft. The visible offshore components of the operational Undertaking will be located in Lease Area OCS-A 0532 (OCS-A 0498 prior to March 26, 2021) in water depths ranging from approximately 49 to 118 ft below mllw. See Figure 2-1, Project Location.

BOEM, as the lead federal agency for the NHPA Section 106 review, has defined the APE for the Undertaking as follows:

- The depth and breadth of the seabed potentially impacted by any bottom-disturbing activities;
- The depth and breadth of terrestrial areas potentially impacted by any ground disturbing activities;
- The viewshed from which renewable energy structures, whether located offshore or onshore, would be visible; and
- Any temporary or permanent construction or staging areas, both onshore and offshore.

Figure 2-1: Project Location



To support BOEM's efforts to identify historic properties within the APE, OW1 conducted a terrestrial archaeological resource assessment (TARA), marine archaeological resource assessment (MARA), and historic resources visual effects assessment (HRVEA) within the APE. The results of these investigations can be found in Volume II, Section 2.4 of the Ocean Wind 1 COP. Based on a review of these documents and consultations with NHPA Section 106 consulting parties, BOEM has determined that the undertaking will result in adverse effects to historic properties. Information about BOEM's assessment of adverse effects can be found in BOEM's Finding of Adverse Effect (FoAE) for the Undertaking.

In the FoAE, BOEM determined that the OW1 undertaking will have an adverse visual effect on five historic properties. BOEM has consulted with the Advisory Council on Historic Preservation (ACHP), New Jersey Historic Preservation Office (NJ HPO), federal recognized Native American Tribes, and other NHPA Section 106 consulting parties to seek ways to avoid, minimize, or mitigate adverse effects to historic properties. BOEM has decided to codify the resolution of adverse effects through an NHPA Section 106 MOA pursuant to 36 CFR § 800.8(c)(4)(i)(B). As defined in 36 CFR § 800.6 (c), a project-specific MOA records the terms and conditions agreed upon to resolve adverse effects of the undertaking (i.e., the approval, approval with modification, or disapproval of the OW1 COP). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation measures. The measures agreed upon by BOEM, the ACHP, and NJ HPO to resolve adverse effects to historic properties are recorded in the Memorandum of Agreement Among the Bureau of Ocean and Energy Management, The New Jersey State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Ocean Wind 1 Offshore Wind Farm Project.

Pursuant to the terms and conditions of the MOA, OW1 will implement applicant-proposed environmental protection measures to avoid potential visual impacts to historic properties (see MOA Stipulations I.B and II.A). This HPTP was developed by the applicant to fulfill Stipulation III.B of the MOA to resolve adverse visual effects to five historic properties. Mitigation measures implemented under this HPTP will be conducted in accordance with all agreed upon terms and conditions in the MOA and with applicable local, state, and federal regulations and permitting requirements. Responsibilities for specific compliance actions are described in further detail in Section 5.2, Organizational Responsibilities.

2.1 Municipal Regulations

Before implementation, any on-site mitigation measures will be coordinated with local cities, towns, and commissions to obtain approvals, as appropriate. These may include, but are not limited to building permits, zoning, land use, planning, historic commissions, and design review boards. See Table 2.1-1for local government administrative departments that will be contacted as part of the mitigation measures for the adversely affected historic properties. Additional information regarding compliance with local requirements appears below in Section 5.0, Implementation.

Table 2.1-1. Municipal Departments Requiring On-Site Mitigation Coordination

Historic Property	Municipality	Departments
Ocean City Music Pier	Ocean City	Construction Code Division, Planning Board,
Ocean City Wasic Fiel	Ocean City	Historic Preservation Commission
		Construction Division, Planning and
Riviera Apartments	Atlantic City	Development, Historic Preservation
		Commission
Vassar Square Condominiums	Ventnor City	Division of Construction Code Enforcement,
		Planning Board
114 S Harvard Avenue	Ventnor City	Division of Construction Code Enforcement,
		Planning Board
115 S Princeton Avenue	Ventnor City	Division of Construction Code Enforcement,
		Planning Board

2.2 Preservation Easements and Restrictions

Preservation easements and restrictions protect significant historic, archaeological, or cultural resources. Any mitigation work associated with a historic property will comply with the conditions of all extant historic preservation legislation (see Table 2.2-1). Additional information regarding compliance with extant preservation legislation appears below in Section 5.0, Implementation.

Table 2.2-1. Applicable State/Local Legislation for Historic Properties

Legislation	Legislation	Agency
New Jersey Register of Historic	Chapter 268, Laws of 1970	Department of Environmental
Places Act		Protection
New Jersey Conservation	Chapter 378, Laws of 1979	Department of Environmental
Restriction and Historic		Protection
Preservation Restriction Act		
New Jersey Economic Recovery	Chapter 156, Laws of 2020,	New Jersey Economic
Act of 2020, Historic Property	amended 2021	Development Authority
Reinvestment Program		
Municipal Land Use Law	Chapter 291, Laws of 1975	Municipal Historic Preservation
		Commissions/Planning Boards

2.3 Participating NHPA Section 106 Participating Parties

For the purposes of this HPTP, Participating Parties are defined as a subset of the NHPA Section 106 consulting parties that have a functional role in the process of fulfilling Stipulation III.B of the MOA and the mitigation measure implementation processes described herein. The roles of Participating Parties are identified for each mitigation measure in Section 4.0 of this document, including meeting participation and document reviews. Participating Parties with a demonstrated interested in the adversely affected historic properties are summarized in Table 2.3-1.

No other NHPA Section 106 consulting parties are anticipated to be Participating Parties for this Visual Effect HPTP. If BOEM determines additional consulting parties will participate in this plan, the plan will be updated to include those parties. The list of invited and participating of consulting parties is available as Attachment 3 of the MOA.

Table 2.3-1. Participating Parties involved with the Historic Property/s¹

Name	Relationship to Historic Property	Address
Absecon Lighthouse	Interested Party	31 S Rhode Island Ave, Atlantic City NJ 08401
Advisory Council on Historic Preservation	Federal Agency	Federal Property Management Section, 401 F St NW, Suite 308, Washington DC 20001
Atlantic County	Local Govt	1333 Atlantic Ave, Atlantic City NJ 08401
Cultural Heritage Partners	Interested Party	2101 L Street NW, Suite 800, Washington DC 20037
Delaware Nation	Tribal Govt	PO Box 825, Anadarko OK 73005
Delaware Tribe of Indians	Tribal Govt	5100 Tuxedo Blvd, Bartlesville OK 74006
Environmental Protection Agency	Federal Agency	Region 2, 290 Broadway, 25 th Fl, New York NY 10007
Garden State Seafood Association	Interested Party	1636 Delaware Ave, Cape May NJ 08204
Borough of Harvey Cedars	Local Govt	7606 Long Beach Blvd, PO Box 3185, Harvey Cedars NJ 08008
Linwood City	Local Govt	400 Poplar Ave, Linwood NJ 08221
Long Beach Island Historical Museum	Interested Party	129 Engleside Ave, Beach Haven NJ 08008
Margate City	Local Govt	9001 Winchester Ave, Margate NJ 08402
Stockbridge-Munsee Community Band of Mohican Indians	Tribal Govt	N8705 MohHeConNuck Rd, Bowler WI 54416
MThirtySix PLLC	Tribal Advocacy	700 Pennsylvania Ave SE, 2 nd Fl – The Yard, Washington DC 20003
National Park Service	Federal Agency	Region 1, 1234 Market Street, 20 th Fl, Philadelphia PA 19107
New Jersey Department of Environmental Protection – Historic Preservation Office	State Agency	Mail Code 501-048, NJDEP Historic Preservation Office, PO Box 420, Trenton NJ 08625-0420
Noyes Museum of Art	Interested Party	2200 Fairmount Ave, Atlantic City NJ 08401
Ocean City	Local Govt	861 Asbury Ave, Ocean City NJ 08226
Quality Home Center and Paneling	Interested Party	3300 Route 9 S, Rio Grande NJ 08242
Sea Isle City	Local Govt	233 John F Kennedy Blvd, Sea Isle City NJ 08243
Snyderman, Paul	Property Owner	Vassar Square Condominiums, 4800 Boardwalk, Ventnor City NJ 08406
City of Somers Point	Local Govt	1 W New Jersey Ave, Somers Point NJ 08244
Stafford Township	Local Govt	260 E Bay Ave, Manahawkin NJ 08050
US Coast Guard	Federal Agency	Sector Delaware Bay, 1 Washington Ave, Philadelphia PA 19147
US Coast Guard	Federal Agency	National Offshore Safety Advisory Committee, 2703 Martin Luther King Jr. Ave SE, Stop 7509, Washington DC 20593-7509
Wampanoag Tribe of Gay Head (Aquinnah)	Tribal Govt	20 Black Brook Rd, Aquinnah MA 02535

¹ Ongoing consultation may result in refinement of this list of Participating Parties.

3.0 EXISTING CONDITIONS AND HISTORIC SIGNIFICANCE

3.1 Historic Properties

This HPTP involves five resources, as identified below in Table 3.1-1. All five historic properties are located along the New Jersey shoreline within 16 miles of the Wind Farm Area (WFA), and ocean views are a character-defining feature of each property's significance.

Table 3.1-1. Historic Properties included in the Visual Effect HPTP

Name	Property Address	Potential Effect Recommendation	
Cape May County			
Ocean City Music Pier	811 Boardwalk, Ocean City	Adverse effect	
Atlantic County	Atlantic County		
Riviera Apartments	116 S. Raleigh Avenue, Atlantic City	Adverse effect	
Vassar Square Condominiums	4800 Boardwalk, Ventnor City	Adverse effect	
114 South Harvard Avenue	114 South Harvard Avenue, Ventnor City	Adverse effect	
115 South Princeton Avenue	115 South Princeton Avenue, Ventnor City	Adverse effect	

3.2 Adversely Affected Historic Properties

In Section 3.2, the resources are described generally both physically and historically, with a focus on the contribution of an ocean view to the properties' significance and integrity.

3.2.1 Physical Description and Existing Conditions

Ocean City Music Pier

The Ocean City Music Pier was constructed as a concert hall in 1928, after a fire destroyed much of the Ocean City boardwalk. The Ocean City Music Pier was determined eligible for the NRHP in 1990. NJ HPO online records do not include information on the building's NRHP significance; however, it appears to be significant under Criterion A for Entertainment and Recreation due to its long history as an entertainment venue on the Ocean City Boardwalk, and under Criterion C for Architecture. The Ocean City Music Pier continues to function as a music venue. The building includes an enclosed concert hall and attached open air loggia. The enclosed portion of the building features large arched windows, while the loggia has open arches. There are ocean views from both inside the concert hall and inside the loggia, although the views have changed somewhat over the years. Originally, the pier was built over the water and views were exclusively of the ocean. In 1993, a major beach restoration project imported 6.4 million cubic ft of sand to widen Peck Beach in Ocean City (USACE 2011). Since 1993, the pier has been over sand rather than water and the views to the north and south primarily include the beach, with water views visible at an angle. The building's primary entrance faces west and is accessed via the Ocean City Boardwalk, and the rear of the

building sits on piers driven into the sand. The project area is due east of the Ocean City Music Pier, approximately 15.2 mi away.

The Ocean City Music Pier is the only building in Ocean City located on the east side of the Boardwalk. The building has a direct relationship with the ocean due to its location. Location and setting are both character-defining features that are echoed in the building's design and construction, and directly relate to its significance under Criterion A for Entertainment and Recreation, and Criterion C for Architecture. As a result of its location and lack of development on its north, east and west sides, the views of the beach and ocean are unobstructed for people enjoying programs inside of the facility and people observing the building from the Boardwalk. The building's significance under Criterion A for Entertainment and Recreation is historically tied to its prominent location on the Boardwalk. The building is at the center of activity in Ocean City and although there are other entertainment venues in Ocean City, the music pier is arguably the most popular due to its location and setting (Pritchard 2012). The property's significance under Criterion C is for its Mediterranean Revival style. The open loggia and expansive arched windows with ocean views are key features of that significance. Given the proximity of the WFA to this property and that open shoreline and ocean views are character-defining features, the proposed project's introduction of a modern visual element to the music pier's setting may diminish its integrity of setting, feeling, and association as it relates to its significance. Therefore, the project has the potential for adverse effect on the Ocean City Music Pier.

Riviera Apartments, Atlantic City

The Riviera Apartments at 116 South Raleigh Avenue in Atlantic City is a nine-story apartment building dating to 1930. The building was originally recorded in 1980 and has an "Identified" status with the NJ SHPO. It was surveyed for OW1 in January 2021 and was recommended eligible under Criterion C for its Spanish-influenced Art Deco style of architecture. NJ SHPO records attribute the design to Philadelphia architect Harry Sternfeld, and describe the building as "the queen of Atlantic City's larger apartment houses—its concrete and tile decoration are exuberant and original, rare outside of New York." The building appears to have undergone very few changes over the years, maintaining its original form, massing, and Art Deco design details. The building is adjacent to the Atlantic City Boardwalk. Its primary façade (northeast elevation) does not face the ocean. Both the northeast and southeast elevations include bands of windows including bay windows to optimize ocean views. The building also includes rooftop balconies with ocean views. It is approximately 15.6 mi from the WFA.

The Riviera Apartments building sits directly on the Atlantic City Boardwalk. This area was developed by the time the Riviera Apartments were constructed; however, aerial imagery shows that the surrounding buildings were primarily modest single-family detached homes in the 1930s, likely two to three stories tall. The apartment building was the tallest building in the area and would have had clear ocean views. The building's design focused on both the northeast and southeast elevations, with the southwest elevation having the appearance of a wall that would typically be found facing an alley. The two elevations with design emphasis have numerous windows, including bay windows, that maximize light and views in the apartments. Under the apartment building's significance for Criterion C, the property's historic integrity of location, design, materials and workmanship are critical, and those will not be altered by the proposed Project. Integrity of setting, feeling, and association have the potential to be affected by the project. Both ground-

level views and views from inside the nine-story building may be affected by the introduction of the WFA on the horizon. The seascape was an important consideration in the selection of the location for this building, reflected in its design and siting. Therefore, the project has the potential for adverse effect on the Riviera Apartments.

Vassar Square Condominiums, Ventnor City

The Vassar Square Condominiums building at 4800 Boardwalk in Ventnor City is a high-rise building dating to 1969. The 21-story building is 218 ft (66.45 m) tall (CTUBH 2021) and was surveyed for OW1 in January 2021. The building was recommended eligible for the NRHP under Criterion C for Architecture, as a good example of mid-century high-rise design with Formalist architectural details (reinterpretations of classical building components). The building's units each have a cantilevered balcony with glass railings. Corner balconies have views in multiple directions. This is especially important for units at the rear of the building (northwest), which, despite their location, have ocean views due to the balcony design. Balconies on the northeast and southwest elevations angle outward to create an interesting dimensional effect across the wall plane. The angle also affords additional space on the balcony and increases the field of view from each unit. The building's upper levels are primarily glass and brick, while the ground level features stuccoed arches infilled with glass or metal grate. The building is approximately 16 mi from the WFA.

The Vassar Square Condominiums building sits directly on the Atlantic City Boardwalk. It sits on a deep lot with its longest elevations facing to the northeast and southwest. Although these elevations are perpendicular to the coastline, due to the building's height, extended balconies allow for ocean views along these longer elevations. When the building was originally constructed, the Vassar Square area primarily included single-family detached houses two to three stories tall. However, multistory and multi-unit buildings were becoming more common south of the Atlantic City core. Although there are several similarly sized buildings in the vicinity as of 2021, Vassar Square Condominiums offer ocean views from nearly all units. The building's design maximized ocean views for its residents. Each unit has a glass-railed balcony, and even those that are farthest from the beachfront have corner balcony designs that allow for at least partial water views. Under the property's significance for Criterion C, its historic integrity of location, design, materials and workmanship are critical, and those will not be altered by the proposed project. Integrity of setting, feeling, and association have the potential to be affected by the project. Both ground-level views along the Boardwalk and views from inside the building may be affected by the introduction of the WFA on the horizon. Because the seascape was an important consideration in the selection of the location for this building, the building's design maximized expansive ocean views, the proposed project may alter a characteristic of the property that qualifies it for NRHP-eligibility. Therefore, the project has the potential for adverse effect on the Vassar Square Condominiums building.

114 South Harvard Avenue, Ventnor City

The house at 114 South Harvard Avenue in Ventnor City is a two-and-a-half-story French Eclectic style building dating to 1925. The building was surveyed for OW1 in January 2021 and was recommended NRHP-eligible under Criterion C for Architecture as a good example of early twentieth-century beachfront housing in Ventnor City. The building appears to retain its original form and massing, and includes French Eclectic features such as textured stucco walls, a steeply pitched roof, flared eaves and multiple eave heights, and

an asymmetrical plan with a tower. The house is immediately adjacent to the beach and Boardwalk, and has open views toward the Atlantic Ocean. The building faces northeast toward South Harvard Avenue, with its southeast elevation facing the Boardwalk. The southeast elevation includes an enclosed ground-level sun room with arched windows facing the ocean. Above the sun room is a second-story porch with unobstructed water views. The WFA is approximately 15.7 miles southeast of the property.

With limited visual obstructions, the project is expected to be visible on the horizon from this location. The building does not directly face the water, but ocean views appear to have been an important consideration in the building's design, as it includes an ocean-facing sun room and a second-story deck on its southeast elevation. Under significance for Criterion C for Architecture, the property's historic integrity of location, design, materials and workmanship are critical, and those will not be altered by the proposed project. Integrity of setting, feeling, and association may be impacted by the project. Both ground-level views and views from inside the building may be affected by the introduction of the WFA on the horizon. The seascape was an important consideration in the building's design, and the proposed project may alter a characteristic of the property that qualifies it for NRHP eligibility. Therefore, the project has the potential for adverse effect on the house at 114 South Harvard Avenue in Ventnor City.

115 South Princeton Avenue, Ventnor City

The house at 115 South Princeton Avenue in Ventnor City is a two-and-a-half-story Mediterranean-eclectic style building dating to 1915. The building was surveyed for OW1 in January 2021 and was recommended NRHP-eligible under Criterion C for Architecture as a good example of early twentieth-century beachfront housing in Ventnor City. The building appears to retain its original form and massing, and classic Mediterranean features including stucco walls, tile roof, decorative tile inlay, and a prominent arched door opening with alcoves. The house is immediately adjacent to the beach and Boardwalk and has open views toward the Atlantic Ocean. The building faces southwest toward South Princeton Avenue, with its southeast elevation facing the Boardwalk. The southeast elevation includes an enclosed second-story sun room with arched windows facing the ocean. Views from this location are currently partially obstructed by trees. The WFA is approximately 15.7 miles southeast of the property.

Despite vegetative visual obstructions, the project is expected to be visible on the horizon from this location. The building does not directly face the water, but ocean views appear to have been an important consideration in the building's design, as it includes a ground-level patio and a second-story ocean-facing sun room on its southeast elevation. Under the property's significance for Criterion C for Architecture, its historic integrity of location, design, materials and workmanship are critical, and those will not be altered by the proposed project. Integrity of setting, feeling, and association may be affected by the project. Unlike the house at 114 South Harvard Avenue, the Charles Fischer House has extensive vegetative growth to mitigate potential visual effects. However, if vegetation is cleared, both ground-level views and views from inside the building may be affected by the introduction of the WFA on the horizon. The seascape was an important consideration in the building's design, and the proposed project may alter a characteristic of the property that qualifies it for NRHP eligibility. Therefore, the project has the potential for adverse effect on the house at 115 South Princeton Avenue in Ventnor City.

3.2.2 Historic Context

Ocean City, Cape May County

A barrier island, Ocean City (first known as Peck's Beach) was regularly used as a whaling camp by 1700. Later in the eighteenth century, John Townsend acquired much of the seven-mile-long island that featured several freshwater ponds, making it beneficial for grazing cattle (Miller 2003). It had its first permanent residence by 1850. In the post-Civil War period, Peck's Beach evolved into a tourist destination. Atlantic City, which featured a famous boardwalk and hotels in the 1870s, served as a model for Peck's Beach, albeit with exceptions. In 1879, a group of Methodists leaders—including Rev. Ezra B. Lake, Rev. James B. Lake, Rev. S. Wesley Lake, and Rev. William H. Burrell—founded Ocean City. The founders were intent of developing a Christian-influenced resort that, unlike Atlantic City, boasted no gambling or drinking (Esposito and Esposito 1996). One of the main attractions was a boardwalk completed in 1883. Development of transportation was key to the city's success as a tourist destination, as early twentieth-century options included a steamboat service, bridges, and a trolley (VisitNJShore.com 2021d). The national prosperity of the post-World War I period was reflected development of beachfront hotels. A fire destroyed much of Ocean City in 1927, including the city's beachside boardwalk (Ocean City, New Jersey 2021). The boardwalk was rebuilt in 1928– 1929. The Great Depression severely impacted the local New Jersey Shore economy (Bzdak 2001), but, bolstered by a post-World War II economic recovery, Ocean City was the largest town in Cape May County by 1960 (VisitNJShore.com 2021d).

Stone Harbor, Cape May County

The Lenni-Lenape tribe first traveled to Seven Mile Island from the mainland to fish and collect shells they used as currency. Seven Mile Island was sold to Aaron Leaming in 1722. After changing hands several times in the 1850s, the Seven Mile Beach Company purchased the island in 1887 and founded the communities of Avalon and Stone Harbor (VisitNJShore.com 2021b). The first permanent buildings were constructed in 1891, an inn and seven cottages. The community developed rapidly following the arrival of rail service in 1897. Prior to this, the only access to Avalon and Stone Harbor was by boat. In 1907, the local government made improvements including leveling off sand dunes, filling in marshes, and paving streets. The first automobile access to Stone Harbor was via a bridge at 96th Street ca. 1912. The Great Atlantic Hurricane of 1944 destroyed the town's boardwalk, theater building, and fishing pier (TheShoreBlog.com 2019). Stone Harbor was also heavily damaged by the Ash Wednesday Storm of 1962, which flooded and destroyed beachfront properties and caused major coastline loss, though to a lesser extent than experienced in Avalon to the immediate north (NPS 2019). Through conservation efforts, Stone Harbor has been able to combat coastal erosion successfully (VisitNJShore.com 2021b).

Atlantic City, Atlantic County

Atlantic City is located on Absecon Island, where the Lenni-Lenape tribe often visited to fish and collect shells they used as currency. Jeremiah Leeds built the first structure on the island in 1785, and his descendant had built seven permanent dwellings by 1850 (Town Square Publications 2010). The city incorporated in 1854 and rail development soon followed. The city grew quickly in the late nineteenth century as a resort town located near New York and Philadelphia. Unlike primarily residential communities on the New Jersey Shore, Atlantic City development included businesses, recreational spaces, and tourist

attractions like theaters and the Boardwalk. Half of the Boardwalk was destroyed in the Great Atlantic Hurricane of 1944. The city's popularity continued through the mid-twentieth century. but diminished in the 1950s when air travel allowed vacationers more options (ACFPL 2021). Atlantic City was heavily damaged by the Ash Wednesday Storm of 1962, which flooded and destroyed beachfront properties and roads and caused major coastline loss (NPS 2019). Another wave of large-scale development followed the city's gambling legalization in 1976 (ACFPL 2021).

Ventnor City, Atlantic County

Ventnor City is located immediately south of Atlantic City on Absecon Island. The name Ventnor City was chosen in 1889 in honor of Ventnor, England. The arrival of railroad service catalyzed development in the late nineteenth and early twentieth centuries. The city incorporated in 1903, and between 1910 and 1917, the number of buildings in Ventnor City increased from approximately 100 to nearly 1,300. New York-based architects John M. Carrère and Thomas Hastings created a downtown plan for Ventnor City ca. 1907–1908 using City Beautiful planning principles. Architect Frank Seeburger designed homes in what is now the John Stafford NRHP-listed historic district (Thomas 1986). The city's popularity continued through the first half of the twentieth century given its proximity to Atlantic City. Films advertising Ventnor City were shown in Reading Terminal in Philadelphia, highlighting the city's beaches, boardwalk, public buildings, and homes (Smith 1963). Ventnor City was heavily damaged by the Ash Wednesday Storm of 1962, which flooded and destroyed beachfront properties and roads and caused major coastline loss (NPS 2019). By the mid-1960s, Ventnor City was the second-largest municipality on Absecon Island, a primarily residential resort that catered to seasonal rentals (Smith 1963).

4.0 MITIGATION MEASURES

This section details the proposed mitigation measures to resolve adverse effects to historic properties stipulated in the MOA, and describes the purpose and intended outcome, scope of work, methodology, standards, deliverables and funds and accounting for each measure. The content of this section was developed on behalf of OW1 by individuals who meet Secretary of the Interior (SOI) Qualifications Standards for History, Architectural History and/or Architecture (62 FR 33708) and is consistent with fulfilling the mitigation measures such that they fully address the nature, scope, size, and magnitude of the visual adverse effect. Fulfillment of the mitigation measures will be led by individuals who meet SOI Qualifications Standards for History, Architectural History and/or Architecture. This document identifies which mitigation measures are likely to trigger need for compliance with the identified state/local level legislation.

4.1 Mitigation Measure – HABS Level II Documentation Ocean City Music Pier, Riviera Apartments, and Vassar Square Condominiums

4.1.1 Purpose and Intended Outcome

Documentation of the Ocean City Music Pier, Riviera Apartments, and Vassar Square Condominiums to Historic American Buildings Survey Level II standards will serve to record the historic properties' significance for the Prints and Photographs Division of the Library of Congress, whose holdings illustrate achievements in architecture, engineering, and landscape design in the United States and its territories. Upon review and acceptance by the National Park Service (NPS), documentation will be available to the public via the Library of Congress and state and local repositories, as appropriate.

4.1.2 Scope of Work

The scope of work for each of the three historic properties will consist of the following:

- Collect and review materials and drawings relating to the construction and history of the property;
- Draft a historical report of the property
- Photograph the property using large-format photography;
- Compile draft HABS documentation for review and comment by Participating Parties;
- Develop final HABS documentation, incorporating comments from the Participating Parties; and
- Upon acceptance of HABS documentation by (NPS), distribute HABS documentation packages to the NPS and agreed-upon repositories.

4.1.3 Methodology

OW1 will release a request for proposals (RFP) for consultant services and select a consultant to perform the Scope of Work listed in Section 4.1.2, for each of the three historic properties individually, for the historic properties as a group, or as part of a larger consultancy RFP for additional or all mitigation measures listed in Section 4.0. The chosen consultant should have staff that meet SOI Professional Qualifications for Architecture, Architectural History, or History. The large-format photographer should have experience with HABS-standard photography. A draft of the documents will be provided to the Participating Parties for

review and comment. A final package will be developed incorporating comments from the Participating Parties and will be distributed to the NPS and agreed-upon repositories.

4.1.4 Standards

The project will comply with following standards:

- Historic American Buildings Survey Guidelines for Historic Reports (updated 2020);
- Heritage Documentation Programs Photography Guidelines (updated 2015); and
- Preparing HABS/HAER/HALS Documentation for Transmittal (updated 2021).

4.1.5 Deliverables

The following documentation is to be provided for review by the Participating Parties:

Preliminary draft of HABS documentation.

The following documentation is to be provided to the NPS and agreed-upon repositories

Final HABS documentation.

4.1.6 Schedule

The following is a preliminary schedule for execution of the HABS Level II documentation based on the current BOEM timeline for completing the OW1 NEPA and NHPA Section 106 reviews. A more detailed schedule will be requested in the solicitation/request for proposal used to identify and select a consultant to perform the scope of work described in the HPTP. Once the consultant is identified and under contract, the consultant, OW1, and the Participating Parties will develop and agree upon a final delivery schedule.

Summer 2023	Solicitation/Request for Proposal for consultant and contracting
	consultant to perform documentation.
Fall 2023	Preliminary documentation submitted for 30-day review first by OW1 and
	then by BOEM. Consultant revisions completed.
Winter 2023	Draft deliverables for 30-day review by Participating Parties followed by
	submission of final deliverables.

4.1.7 Funds and Accounting

OW1 will be responsible for funding and implementation of this mitigation measure.

4.2 Mitigation Measure – HABS-like Level II Documentation 114 South Harvard Avenue and Charles Fischer House

4.2.1 Purpose and Intended Outcome

Documentation of the two Ventnor City private residences to Historic American Buildings Survey Level II standards, substituting digital photography for the HABS-standard large-format photography, will serve to record the historic properties' significance for state and local repositories. Upon review and acceptance by the NJHPO, documentation will be available to the public via state and local repositories, as appropriate.

4.2.2 Scope of Work

The scope of work for the each of the two historic properties will consist of the following:

- Collect and review materials and drawings relating to the construction and history of the property;
- Draft a historical report of the property
- Photograph the property using digital photography;
- Compile draft documentation for review and comment by Participating Parties;
- Develop final documentation, incorporating comments from the Participating Parties; and
- Upon acceptance of documentation by NJHPO, distribute documentation packages to the NJHPO and agreed-upon repositories.

4.2.3 Methodology

OW1 will release a RFP for consultant services and select a consultant to perform the Scope of Work listed in Section 4.2.2, for the two historic properties separately, for the two historic properties as a group, or as part of a larger consultancy RFP for additional or all mitigation measures listed in Section 4.0. The chosen consultant should have staff that meet SOI Professional Qualifications for Architecture, Architectural History, or History. The photographer should have experience with HABS-like digital photography. A draft of the documents will be provided to the Participating Parties for review and comment. A final package will be developed incorporating comments from the Participating Parties and will be distributed to the NPS and agreed-upon repositories.

4.2.4 Standards

The project will comply with following standards:

- Historic American Buildings Survey Guidelines for Historic Reports (updated 2020); and
- Preparing HABS/HAER/HALS Documentation for Transmittal (updated 2021).

4.2.5 Deliverables

The following documentation is to be provided for review by the Participating Parties:

Preliminary draft of HABS-like documentation

The following documentation is to be provided to the NJHPO and agreed-upon repositories:

Final HABS-like documentation

4.2.6 Schedule

The following is a preliminary schedule for execution of the HABS-like documentation based on the current BOEM timeline for completing the OW1 NEPA and NHPA Section 106 reviews. A more detailed schedule will be requested in the solicitation/request for proposal used to identify and select a consultant to perform the scope of work described in the HPTP. Once the consultant is identified and under contract, the consultant, OW1, and the Participating Parties will develop and agree upon a final delivery schedule.

Summer 2023 Solicitation/Request for Proposal for consultant and contracting

consultant to perform documentation.

Fall 2023 Preliminary documentation submitted for 30-day review first by OW1 and

then by BOEM. Consultant revisions completed.

Winter 2023 Draft deliverables for 30-day review by Participating Parties followed by

submission of final deliverables.

4.2.7 Funds and Accounting

OW1will be responsible for funding and implementation of this mitigation measure.

4.3 Mitigation Measure – Historic Structure Reports Ocean City Music Pier, 114 South Harvard Avenue, and Charles Fischer House

4.3.1 Purpose and Intended Outcome

A Historic Structure Report (HSR) includes the in-depth history of the building as well as immediate, short-term, and long-range preservation objectives based on the current condition of the building. An HSR helps inform consultation with stakeholders regarding historic property needs, such as repairs or restoration of exterior areas, weatherization and energy efficiency upgrades, or flood protection improvements. For example, the Ocean City Music Pier's location between the boardwalk and shoreline renders it vulnerable to sea level rise and flooding from storm events. Identifying and implementing appropriate flood protection or similar improvements could help preserve the building's integrity and offset potential adverse effects.

4.3.2 Scope of Work

The scope of work for each of the three historic properties will consist of the following:

- Review the existing conditions of the property;
- Document and photograph the existing conditions;
- Consult with the property owner to determine physical concerns, possible future plans;
- Compile relevant documentation collected for Mitigation Measures 4.1 or 4.2;
- Draft an HSR to be distributed to the Participating Parties for review and comment;

- Develop a final HSR, incorporating any comments from the Participating Parties; and
- Distribute the final HSR to the property owner.

4.3.3 Methodology

OW1 will release a RFP for consultant services and select a consultant to perform the Scope of Work listed in Section 4.3.2, for each of the three historic properties individually, for the historic properties as a group, or as part of a larger consultancy RFP for additional or all mitigation measures listed in Section 4.0. The chosen consultant should have staff that meet SOI Professional Qualifications for Architecture and Architectural History/History. This effort may also include participation from a structural engineer with demonstrated experience assessing historic buildings.. A draft of the documents will be provided to the Participating Parties for review and comment. A final report will be developed incorporating comments from the Participating Parties and will be distributed to the property owner and NJHPO.

4.3.4 Standards

The project will comply with following guidelines:

• National Park Service Preservation Brief 43: The Preparation and Use of Historic Structure Reports (2005).

4.3.5 Deliverables

The following documentation is to be provide for review by OW1 and BOEM:

Preliminary draft of HSR.

The following documentation is to be provided for review by the Participating Parties:

Draft of HSR.

The following documentation is to be provided to the NJHPO and property owner:

Final HSR.

4.3.6 Schedule

The following is a preliminary schedule for execution of the Ocean City Music Pier HSR based on the current BOEM timeline for completing the OW1 NEPA and NHPA Section 106 reviews. A more detailed schedule will be requested in the solicitation/request for proposal used to identify and select a consultant to perform the scope of work described in the HPTP. Once the consultant is identified and under contract, the consultant, OW1, and the Participating Parties will develop and agree upon a final delivery schedule.

Summer-Fall 2023 Solicitation/Request for Proposal for consultant and contracting

consultant to perform documentation.

Winter 2023-2024 Preliminary documentation submitted for 30-day review first by OW1 and

then by BOEM. Consultant revisions completed.

Spring 2024 Draft deliverables for 30-day review by Participating Parties followed by

submission of final deliverables.

4.3.7 Funds and Accounting

OW1will be responsible for funding and implementation of this mitigation measure.

4.4 Mitigation Measure – NJ/NRHP Nomination Historic Property/s based on owner preference

4.4.1 Purpose and Intended Outcome

Listing in the New Jersey and National Registers of Historic Places provides recognition of a resource as historically significant and worthy of preservation. Listing provides a degree of review and protection from public encroachment. Section 106 of the National Historic Preservation Act of 1966, as amended, provides for a review of ay federally licensed, financed, or assisted undertaking for properties listed in, or eligible for listing in, the National Register. The New Jersey Register law requires review of any state, county or municipal undertaking involving properties listed in the New Jersey Register.

4.4.2 Scope of Work

The scope of work for each historic property, as appropriate, will consist of the following:

- Compile relevant documentation collected for Mitigation Measures 4.1, 4.2, and 4.3;
- Draft an NRHP nomination to be distributed to the Participating Parties for review and comment;
- Develop a final NRHP nomination, incorporating any comments from the Participating Parties;
- Distribute the NRHP nomination to NJHPO; and
- Present NRHP nomination to New Jersey State Review Board for Historic Sites.

4.4.3 Methodology

OW1 will release a RFP for consultant services and select a consultant to perform the Scope of Work listed in Section 4.4.2, for each property individually, for historic properties as a group, or as part of a larger consultancy RFP for additional or all mitigation measures listed in Section 4.0. The chosen consultant should have staff that meet SOI Professional Qualifications for Architecture, Architectural History, or History. A draft of the documents will be provided to the Participating Parties for review and comment. The final nomination will be developed incorporating comments from the Participating Parties and will be submitted to the NJHPO.

4.4.4 Standards

The project will comply with following standards:

- NPS Bulletin 15: How to Apply the National Register Criteria for Evaluation (revised 1995); and
- NPS Bulletin 16A: How to Complete the National Register Registration Form (1997).

4.4.5 Deliverables

The following documentation is to be provided for review by OW1 and BOEM:

Preliminary draft of the NRHP nomination

The following documentation is to be provided for review by Participating Parties:

• Draft of the NRHP nomination

The following documentation is to be provided to the NJHPO:

NRHP nomination.

4.4.6 Schedule

The following is a preliminary schedule for execution of one or more National Register Nomination(s) based on the current BOEM timeline for completing the OW1 NEPA and NHPA Section 106 reviews. A more detailed schedule will be requested in the solicitation/request for proposal used to identify and select a consultant to perform the scope of work described in the HPTP. Once the consultant is identified and under contract, the consultant, OW1, and the Participating Parties will develop and agree upon a final delivery schedule.

Fall 2023	Solicitation/Request for Proposal for consultant and contracting
	consultant to perform documentation.
Winter 2023-2024	Preliminary documentation submitted for 30-day review first by OW1 and
	then by BOEM. Consultant revisions completed.
Spring 2024	Draft deliverables for 30-day review by Participating Parties followed by
	submission of final deliverables.

4.4.7 Funds and Accounting

OW1will be responsible for funding and implementation of this mitigation measure.

4.5 Mitigation Measure – Interpretive/Educational Content

4.5.1 Purpose and Intended Outcome

Based on input from Participating Parties during consultation, interpretive and educational materials consistent with agreed upon themes, target audiences, and objectives will be developed to disseminate the historic and architectural significance of the historic properties. Specific themes to be presented may include the history of the property; the architect of the property, and/or the role of the property/property type in the development of the municipality. Dissemination could take place in a variety of formats, including onsite interpretive materials, onsite signage, and/or web-based media. In each case, content would draw largely on HABS documentation, historic and present-day photographs, oral histories, and additional research materials uncovered during the course of previously conducted mitigation measures. Materials could be packaged or presented to reach not only passersby, but school audiences, local residents, and local history groups.

4.5.2 Scope of Work

The scope of work for each historic property, as appropriate, will consist of the following:

- Compile relevant documentation collected for Mitigation Measures 4.1–4.4;
- Determine and organize appropriate materials for presentation in collaboration with Participating Parties, property owners, and website manager;
- Deliver agreed upon interpretive and educational materials for review by OW1, BOEM, and Participating Parties;
- Deliver final signage content, as appropriate, for fabrication by OW1/contracted consultant; and
- Deliver final electronic materials, as appropriate, to property owners and agreed-upon website managers.

4.5.3 Methodology

OW1 will release a RFP for consultant services and select a consultant to perform the Scope of Work listed in Section 4.5.2, for each property individually, for historic properties as a group, or as part of a larger consultancy RFP for additional or all mitigation measures listed in Section 4.0. The chosen consultant should have staff that meet SOI Professional Qualifications for Architecture, Architectural History, or History. A draft of the documents will be provided to the Participating Parties, property owner, and website manager, as appropriate, for review and comment. The final interpretive and educational packages will be developed incorporating comments from the Participating Parties and will be submitted for fabrication by OW1 for interpretive signage, as appropriate, and to the property owners and agreed-upon website managers for electronic content.

4.5.4 Standards

The project will comply with following standards:

- Website standards, as determined by the property owner and website manager.
- Signage standards, as determined by the property owner and appropriate municipality.

4.5.5 Deliverables

The following preliminary draft documentation is to be provided for review by the OW1 and BOEM:

- Compilation of selected materials from Mitigation Measures 4.1–4.4.
- Any Interpretive signage, as appropriate.

The following draft documentation is to be provided for review by the Participating Parties:

- Compilation of selected materials from Mitigation Measures 4.1–4.4.
- Any Interpretive signage, as appropriate.

The following documentation is to be provided to the property owner and website manager:

Final electronic materials for website.

The following materials are to be provided to the property owner:

• Interpretive signage, as appropriate, upon fabrication by OW1.

4.5.6 Schedule

The following is a preliminary schedule for execution of interpretive and educational materials based on the current BOEM timeline for completing the OW1 NEPA and NHPA Section 106 reviews. A more detailed schedule will be requested in the solicitation/request for proposal used to identify and select a consultant to perform the scope of work described in the HPTP. Once the consultant is identified and under contract, the consultant, OW1, and the Participating Parties will develop and agree upon a final delivery schedule.

Fall 2023 Solicitation/Request for Proposal for consultant and contracting

consultant to perform tasks.

Winter 2023-2024 Preliminary documentation submitted for 30-day review first by OW1 and

then by BOEM. Consultant revisions completed.

Spring 2024 Draft deliverables for 30-day review by Participating Parties followed by

submission of final deliverables.

4.5.7 Funds and Accounting

OW1 will be responsible for funding and implementation of this mitigation measure.

5.0 IMPLEMENTATION

5.1 Timeline

This section of the HPTP identifies which mitigation measures identified within this HPTP must be implemented prior to the commencement of construction activities for the Undertaking. HABS Photography must be completed prior to construction. All other tasks can occur during and/or after construction. Mitigation measures within this HPTP are to be implemented within one year of its finalization, unless a different timeline is agreed upon by Participating Parties and accepted by BOEM and may be completed simultaneously, as applicable.

The proposed scope of work (see Section 4.0) must be completed within one year unless a different timeline is agreed upon by Participating Parties and accepted by BOEM. Documentation as outlined in Section 4.0 must be provided to Participating Parties for their review (see Section 5.2) no less than 30 days prior to commencement of project construction unless a different timeline is agreed upon by Participating Parties and accepted by BOEM. OW1must issue RFPs within 4 months of commencing mitigation measures pursuant to this HPTP.

5.2 Reporting

Following the execution of the MOA until it expires or is terminated, OW1 shall prepare and, following BOEM review and approval, provide all signatories, invited signatories, and consulting parties to the MOA a summary report detailing work undertaken pursuant to the MOA consistent with MOA Stipulation IX (Monitoring and Reporting), including the mitigation measures outlined in the final HPTP. This report will be prepared, reviewed, and distributed by January 31, and summarize the work undertaken during the previous year.

5.3 Organizational Responsibilities

5.3.1 BOEM

- Make all federal decisions and determine compliance with Section 106;
- Ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA, and in consultation with the Participating Parties;
- Consult with OW1, NJ SHPO, ACHP, and other consulting parties with demonstrated interest in the affected historic properties; and
- Review and approve the annual summary report prepared and distributed to the consulting parties by OW1.

5.3.2 Ocean Wind LLC

• Fund and implement the mitigation measures Stipulated in III.B of the MOA and described in Section 4.0 of this HPTP;

- Prepare Annual Reporting, submit reporting to BOEM for review and approval, and distribute to Consulting Parties per Section [4.0];
- Submit information for Participating Party review per Section 5.3;
- Creation and distribution of RFPs to solicit consultant support for mitigation measure fulfillment.;
- Proposal review and selection of a consultant who meets the qualifications specified in the SOI Qualifications Standards for History, Architectural History and/or Architecture (62 FR 33708);
- Initial review of Documentation for compliance with the Scope of Work, Methodology and Standards;
- Distribution of Documentation to Participating Parties for their review; and
- Review and comment on deliverables.

5.3.3 New Jersey SHPO

Consult, when necessary, on implementation of this HPTP.

5.3.4 Advisory Council on Historic Preservation

Consult, when necessary, on implementation of this HPTP.



6.0 REFERENCES

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Federal Regulations

Code of Federal Regulations (CFR). 2022. 40 CFR 1500 – National Environmental Policy Act Implementing Regulations. Available at https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A.

CFR. 2021a. 36 CFR 800 – Protection of Historic Properties [incorporating amendments effective December 15, 2021]. Available at https://www.ecfr.gov/current/title-36/chapter-VIII/part-800.

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State Regulations

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Public documents related to Ocean Wind1

https://www.boem.gov/ocean-wind

https://www.boem.gov/ocean-wind-1-construction-and-operations-plan

[Ocean Wind1 Final Environmental Impact Statement (FEIS)]

[Ocean Wind1 Record of Decision (ROD)]

General Information on Section 106

https://www.achp.gov/protecting-historic-properties/section-106-process/introduction-section-106

https://www.achp.gov/digital-library-section-106-landing/section-106-consultation-involving-national-historic-landmarks



Appendix F-5 Terrestrial Unanticipated Discoveries Plan Marine (Submerged) Unanticipated Discoveries Plan

Unanticipated Discoveries Plan for Terrestrial Resources for the Ocean Wind Offshore Wind Farm for Lease Area OCS A-0498 Construction and Operations Plan

Ocean Wind 1 Offshore Wind Farm

AUTHORED BY

HDR

WWW.HDRINC.COM

JUNE 2022

1. Introduction

Ocean Wind LLC (Ocean Wind), an affiliate of Ocean Wind Power North America LLC (Ocean Wind) is developing the Ocean Wind 1 Offshore Wind Farm Project (Project) pursuant to the Bureau of Ocean Energy Management (BOEM) requirements for the commercial lease of submerged lands for renewable energy development on the outer continental shelf (Lease Area OCS-A 0498).

The purpose of the Project is to develop an offshore wind generation project within the BOEM Lease Area, to deliver competitively priced renewable energy and additional capacity to meet State and regional renewable energy demands and goals.

The Project includes up to 98 wind turbine generators (WTGs), up to three offshore alternating current substations, array cables linking the individual turbines to the offshore substations, substation interconnector cables linking the substations to each other, offshore export cables, an onshore export cable system, two onshore substations, and connections to the existing electrical grid in New Jersey (underground cables or overhead transmission lines would be required to connect each onshore substation to the existing grid). The WTGs and offshore substations, array cables, and substation interconnector cables will be located in Federal waters approximately 13 nautical miles (nm, 15 statute miles) southeast of Atlantic City. The offshore export cables will be buried below the seabed surface within Federal and State waters. The onshore export cables, substations, and grid connections are intended to be located in Ocean, and Cape May Counties, New Jersey. The Project location is depicted in Figure 1-1. Project will be installed beginning in 2023 and operational in 2024.

Section 106 of the National Historic Preservation Act (Section 106, 54 USC 306108) requires federal agencies to take into account the effects of an undertaking on historic properties listed in or eligible for the National Register of Historic Places (NRHP). As the lead federal agency for this undertaking, BOEM has the responsibility for compliance with the NHPA and other federal statutes, regulations, and guidance relating to the protection of historic properties. Similarly, the State of New Jersey has promulgated regulations and guidance related to the protection of historic properties, including the properties listed in the State Register of Historic Places (SRHP). Ocean Wind is committed to the protection of historic properties in accordance with federal and state statues, regulations, and appropriate guidance.

To support BOEM's efforts to identify historic properties within the Project's Area of Potential Effects (APE), Ocean Wind has undertaken cultural resources studies to identify historic properties that may be affected by construction and operation of the Project. No archaeological properties listed in, eligible for, or recommended as eligible for inclusion in the NRHP or SRHP have been identified within the APE for terrestrial archaeological resources, and a majority of the APE has been previously disturbed by prior anthropogenic activity. Notwithstanding these conditions, Ocean Wind recognizes that it is possible that significant and unanticipated archaeological resources and/or human remains may be discovered during construction of onshore facilities, primarily during excavation. Ocean Wind also recognizes the importance of complying with federal, state, and municipal laws and regulations regarding the treatment of human remains, if any are discovered.

This Terrestrial Unanticipated Discoveries Plan (UDP) outlines the protocol/steps for dealing with potential unanticipated discoveries of cultural resources, including human remains, during the construction of the proposed Project.

The Protocol:

1. Presents to regulatory and review agencies the protocol the Lessee and its contractors and consultants will follow to prepare for and potentially respond to unanticipated cultural resource (i.e., terrestrial archaeological) discoveries; and

2. Provides guidance and instruction to Ocean Wind personnel and its contractors and consultants as to the proper procedures to be followed in the event of an unanticipated cultural resource (i.e., terrestrial archaeological) discovery.

The following terms are used throughout the Protocol:

- The Facility: The Facility collectively refers to all components of the onshore portions of the Project.
- Unanticipated Discovery/Unanticipated Cultural Resource Discovery: Any indications of the presence of
 archaeological materials including historic-period or pre-contact Native American artifacts, stone
 features, animal bone, and/or human remains. Common historic-period artifacts encountered may
 include bottles/glass, pottery/ceramics, stone foundations, hand-dug wells, brick, nails, miscellaneous
 metal fragments, or charcoal or ash-stained soils. Common pre-contact Native American artifacts
 encountered may include arrowheads/spearheads, stone (chert or "flint") chips or flakes, charcoal or
 ash-stained soils, rough gray, black, or brown pottery, and other stone tools/artifacts of obvious human
 origin.
- Potential Human Remains: Any indications of potential human remains, such as bones or bone fragments, that cannot definitely be determined to be non-human.
- Preliminary Area of Potential Effect (PAPE): All areas of potential soil disturbance associated with the construction and operation of the proposed Facility.
- Cultural Resources Compliance Manager (CRCM): The Lessee's designated on-site staff person responsible for monitoring compliance with permitting conditions and commitments during construction.
- Archaeologist: The Lessee's Secretary of the Interior (SOI) qualified cultural resources consultant.
 Review of any potential unanticipated discoveries will be conducted under the supervision of a Registered Professional Archaeologist (RPA).

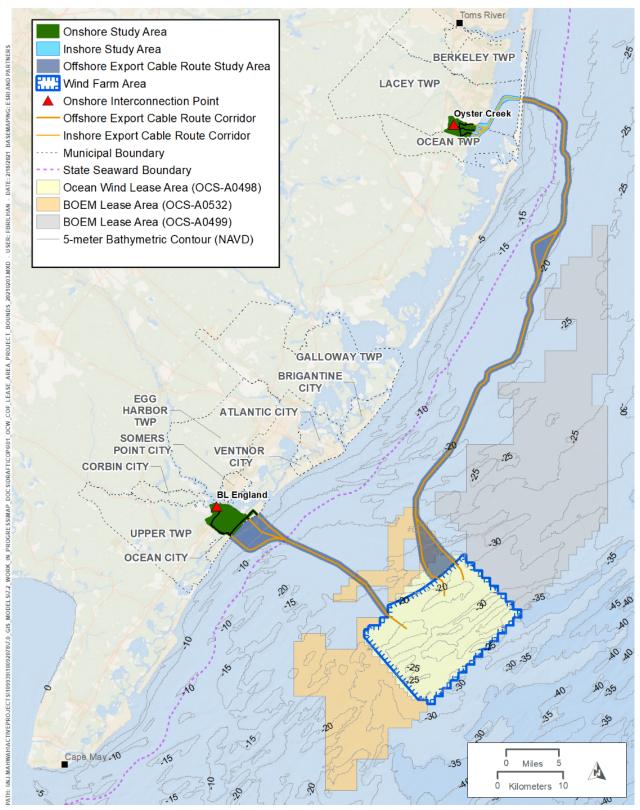


Figure 1-1. Lease Area and Project boundaries

2. Laws, Regulations, Standards, and Guidelines Relating to Unanticipated Discoveries of Archaeological Resources and/or Human Remains

- Section 106 of the National Historic Preservation Act of 1966, as amended (54 USC 300101) and Advisory Council on Historic Preservation (ACHP) implementing regulations (36 CFR 800);
- Secretary of the Interior's Standards for Archeology and Historic Preservation (48 CFR 44716-42);
- ACHP Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects (2007);
- Native American Graves Protection and Repatriation Act (NAGPRA)(25 USC 3001 et seq.);1 and
- New Jersey Register of Historic Places Act (New Jersey Administrative Code, Section 7:4).

3. Training and Orientation

The identification of archaeological resources, human remains, and burial sites is facilitated by training and orientation. All Project inspectors, resident engineers, and construction supervisors working on the Project's onshore excavation activities will be given basic training to facilitate their identification of archaeological sites, artifacts, features, and human remains prior to the start of Project-related excavation or construction activities. The training will be given by a SOI qualified archaeologist². Additional training will be conducted on an asneeded basis (e.g., for new construction supervisors) during Project construction.

The purpose of this training will be to review Ocean Wind's to provide an overview of the general cultural history of the Project area, so that both Ocean Wind employees and contractors will be aware of the types of archaeological resources that may be encountered in the field. In addition, the training program will emphasize the protocols to be followed, as outlined in this UDP, regarding actions to be taken and notification required in the event of an unanticipated discovery of archaeological resources and/or human remains.

4. Cultural Resources Compliance Manager

Prior to the start of excavation or other ground-disturbing activities, Ocean Wind will designate a Cultural Resources Compliance Manager (CRCM) to coordinate compliance activities described in the UDP including:

- Maintaining records related to unanticipated discoveries of archaeological resources and/or human remains, including records relating to the notification of appropriate parties, consultation, archaeological investigations, work stoppages, avoidance areas, and treatment or disposition of unanticipated discoveries; and
- Coordinating training in accordance with Section 3 of the UDP, including maintaining records of the qualifications of the archaeologist conducting the training, the names of employees or contractors that have completed the training, and the date the training was completed.

The CRCM will serve as the point-of-contact for all activities conducted in accordance with the UDP and will have authority to stop work as needed to comply with the UDP.

¹ Pursuant to 43 CFR Part 10, NAGPRA applies to human remains, sacred objects, and items of cultural patrimony (described as "cultural items" in the statute) located on federal or tribal lands or in the possession and control of federal agencies or certain museums. The Project's onshore infrastructure will not occupy federal or tribal lands. Notwithstanding the limits of NAGPRA's applicability, the principles described in NAGPRA and its implementing regulations will serve as guidance should remains or associated artifacts be identified as Native American, and to the extent such principles and procedures are consistent with any other applicable laws, guidelines, statutes, and requirements.

² As used in this UDP, an "archaeologist" is an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology (48 FR 44738 – 44739, September 1983).

5. Unanticipated Discovery Procedures

Although unlikely, there is the potential that undocumented archaeological resources may be inadvertently discovered during the course of Project construction activities. The procedures described in this section provide protocols for the inadvertent discovery of archaeological resources and the treatment of human remains during onshore construction. Ocean Wind will consult BOEM and other parties as necessary to determine if oversight of ground clearing activities by a SOI Qualified Archaeologist is warranted and the specific project locations where oversight is necessary based on the potential sensitivity for an unanticipated archaeological discovery.

5.1 Procedures for Unanticipated Archaeological Discoveries

- SOI qualified professional archaeologist will initially monitor all construction activities that could
 potentially impact archaeological deposits. Monitoring will be discontinued as soon as the
 archaeologist is satisfied that final construction will not disturb important deposits.
- 2. In the event that suspected archaeological resources are discovered during a construction activity, that activity shall immediately be halted until it can be determined whether the archaeological resources may represent a potentially significant site.
- 3. The employee(s) and/or contractor(s) will immediately notify the CRCM of the suspected unanticipated discovery.
- 4. The CRCM will direct ground-disturbing activities to be halted in an appropriate vicinity of the discovery. The area of work stoppage will be adequate to provide for the security, protection, and integrity of the potential resource. Vehicles, equipment, and unauthorized personnel will not be permitted to access the discovery site. At minimum, the immediate area of any terrestrial archaeological discovery will be protected by a temporary barrier and the location will be marked on Project maps as a restricted area.
- 5. The CRCM will notify an archaeologist who will in turn be responsible for determining whether a site visit is required. That determination may be made by viewing photographs of any object or soil discolorations sent to the archaeologist in combination with a verbal description from the CRCM.
- 6. If the archaeologist determines a site visit is not required as the reported discovery of archaeological resources is determined by the archaeologist to not be a potentially significant archaeological resource, the archaeologist will notify the CRCM who will then notify the employee(s) and/or contractor(s) to resume work.
- 7. If the archaeologist determines that a site visit is necessary, the site visit will be conducted within 48 hours of notification by the CRCM.
- 8. If a site visit is necessary, the archaeologist will conduct limited investigations to make a preliminary identification and assessment of the find. This may include photos, measurements, and limited hand excavation. The archaeologist will provide a summary report and initial recommendations within 72 hours of completing the site visit.
- 9. The CRCM will provide the qualified archaeologist's summary report and initial recommendations to the New Jersey State Historic Preservation Office (NJSHPO), and (as appropriate)³ the Absentee-Shawnee Tribe of Indians of Oklahoma, The Delaware Nation, Delaware Tribe of Indians, Eastern Shawnee Tribe of Oklahoma, Shawnee Tribe, Stockbridge-Munsee Community Band of Mohican Indians, Narragansett Indian Tribe, Shinnecock Indian Nation, Lenape Tribe of Delaware, Nanticoke Indian Association, Inc., Nanticoke Lenni-Lenape Tribal Nation, Powhatan Renape Nation, Ramapough Lenape Indian Nation, and Ramapough Mountain Indians.

³ Notification of and consultation with the Indian Tribes is appropriate when archaeological resources may be related to Native American use or occupation of the area.

- 10. Ocean Wind will consult with appropriate Parties to determine the treatment of the site. As necessary, and in consultation with the appropriate Parties, Ocean Wind may direct the archaeologist to conduct additional archaeological investigations and/or evaluate the site's eligibility for inclusion in the NRHP and SRHP.
- 11. Work in the vicinity of the resource will proceed once a Treatment Plan has been approved by the NJSHPO or the site is determined to be ineligible for the NRHP or SRHP.

Duration of any work stoppages will be contingent upon the significance of the identified archaeological resource(s) and consultation with appropriate Parties to determine the appropriate measures to avoid, minimize, or mitigate any adverse effects to the site.

5.2 Procedures for the Unanticipated Discovery of Human Remains

Treatment and disposition of any human remains that may be discovered will be managed in a manner consistent with NAGPRA (see footnote 1) and the ACHP's 2007 *Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects.* At all times, human remains will be treated with the utmost dignity and respect.

- 1. In the event that suspected human remains or a burial site are discovered during a construction activity, that activity shall immediately be halted.
- 2. The employee(s) and/or contractor(s) will immediately notify the CRCM of the suspected unanticipated discovery of human remains.
- 3. The CRCM will immediately direct any ground-disturbing activities to be halted within a minimum of 100 feet of the discovery. The immediate area of any human remains or suspected human remains will be protected by a temporary barrier and the location will be marked on Project maps as a restricted area.
- 4. The CRCM will notify the New Jersey State Police and the Medical Examiner with jurisdiction in the county and will arrange for inspection of the site.
- 5. The Medical Examiner and law enforcement will make an official determination on the nature of the remains, being either forensic or archaeological.
- 6. If the remains are determined to be forensic in nature, the Medical Examiner and law enforcement will notify Ocean Wind when work in the area may resume.
- 7. If human remains are determined to be archaeological and Native American, the CRCM will contact the Parties, and the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be developed in coordination with the landowner and Parties. Results of this consultation will be documented in writing. Avoidance is the preferred option and remains will only be removed following written concurrence from the NJSHPO.
- 8. If human remains are determined to be archaeological and non-Native American, the CRCM will contact the NJSHPO, and the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be developed in coordination with the landowner and NJSHPO. Results of this consultation will be documented in writing. Avoidance is the preferred option and remains will only be removed following written concurrence from the NJSHPO Avoidance is the preferred choice.
- 9. In all cases, due care will be taken in the excavation and subsequent transport and storage of the remains to ensure their security and respectful treatment.

6. Notification List

Contacts and a communication plan will be updated and provided during training.

Ocean Wind	Bureau of Ocean Energy	New Jersey State Historic
Katharine Perry	Sarah Stokely	Preservation Office
Environmental Manager	Lead Historian and Section 106	501 E. State Street
917-524-4633	Team Lead	Trenton, NJ 08609
	Bureau of Ocean Energy	609-984-0176
	Management	
	Office of Renewable Energy	
	Programs	
	45600 Woodland Road, VAM-	
	OREP	
	Sterling, Virginia 20166	
Ocean Wind	The Shinnecock Indian Nation	The Narragansett Indian
Compliance Manager	Ms. Shavonne Smith	Tribe
TBD	Director, Shinnecock	Mr. John Brown
	Environmental Department	Tribal Historic Preservation
	PO Box 5006	Officer
	Southampton NY 11969	P.O. Box 268
	Phone: (631) 283-6143	Charlestown, RI 02813
	ShavonneSmith@shinnecock.org	Phone: (401).364-1100 tashtesook@aol.com
	Jeremy Dennis, Junior THPO	
	P.O. Box 2338	
	Southampton NY 11968	
	jeremynative@gmail.com (631) 566-0486	
Eastern Shawnee Tribe of	The Delaware Nation	Lenape Tribe of Delaware
Oklahoma	Ms. Erin Paden	4164 N. Dupont Hwy., Suite
Mr. Brett Barnes	Historic Preservation Director	6
Cultural Preservation Director	P.O. Box 825	Dover, DE 19901-1573
70500 East 128 Road,	Anadarko, OK 73005	302-730-4601
Wyandotte, OK 74370	Phone: (405).247-2448 Ext. 1403	
Phone: (918) 238-5151	epaden@delawarenation-nsn.gov	

Delaware Tribe of Indians Ms. Susan Bachor Historic Preservation Representative Delaware Tribe Historic Preservation Office 126 University Circle Stroud Hall, Rm. 437 East Stroudsburg PA 18301 610.761.7452 sbachor@delawaretribe.org	Absentee-Shawnee Tribe of Indians of Oklahoma Mr. Devon Frazier Tribal Historic Preservation Officer 2025 South Gordon Cooper Drive Shawnee, OK 74801 405.275.4030 x6243 dfrazier@astribe.com	Stockbridge-Munsee Community Band of Mohican Indians Mr. Nathan Allison Tribal Historic Preservation Officer Stockbridge-Munsee Mohican Tribal Historic Preservation Extension Office 86 Spring Street Williamstown, MA 01267 Phone: (413).884-6029 nathan.allison@mohican- nsn.gov
Shawnee Tribe Ms. Tonya Tipton Tribal Historic Preservation Officer P.O. Box 189 29 S Hwy 69A Miami, OK 74355 Phone: (918).542-4030 x124 tonya@shawnee-tribe.com	Nanticoke Indian Association, Inc. Natasha Carmine 27073 John J Williams Highway Millsboro, DE 19966 info@nanticokeindians.org 302.945.3400	Nanticoke Lenni-Lenape Tribal Nation Mark Gould Principal Chief/Chairman 18 E Commerce Street Bridgeton, NJ 08302 tribalcouncil@nlltribe.com 856.455.6910
Powhatan Renape Nation Barabara Jefferson New Jersey Commission on American Indian Affairs, Commission Member, Representing Powhatan Renape Tribe NJ Commission on Indian Affairs, PO Box 300 Trenton, NJ 08625 609.633.9627	Ramapough Lenape Indian Nation Steven Burton89 New Jersey Commission on American Indian Affairs, Commission Member, Representing Ramapough Lenape Indian Nation NJ Commission on Indian Affairs, PO Box 300 Trenton, NJ 08625 609.633.9627	Ramapough Mountain Indians Dwaine Perry Chief 189 Stag Hill Road Mahwah, NJ 07430
New Jersey State Police Office of Forensic Sciences Forensic Anthropology Unit NJ Forensic Technology Center 1200 Negron Drive - Horizon Center Hamilton, NJ 08691 Phone: (609) 584-5054 x5656	Cape May County Medical Examiner Office Dr. Eric Duval and Dr. Charles Siebert Jr. County Medical Examiner 1175 DeHirsch Avenue Woodbine, NJ 08270 Phone: (609) 861-3355	Ocean County Medical Examiner Office County Medical Examiner P.O. Box 2191, Sunset Avenue Toms River, NJ 08754-2191 Phone: (732) 341-3424

Unanticipated Discoveries Plan for Submerged Cultural Resources for the Ocean Wind Offshore Wind Farm for Lease Area OCS A-0498 Construction and Operations Plan

Ocean Wind 1 Offshore Wind Farm

AUTHORED BY

JOSEPH GRINNAN, MA, RPA, BENJAMIN C. WELLS, MA, RPA, AND JEFFREY M. ENRIGHT, MA, RPA

JEFF ENRIGHT, MA, RPA QUALIFIED MARINE ARCHAEOLOGIST

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1. Introduction

Ocean Wind LLC (Ocean Wind) proposes to construct and operate the Ocean Wind 1 Offshore Wind Farm (Project) within the Bureau of Ocean Energy Management (BOEM) Renewable Energy Lease Area OCS A-0498 (Lease Area). The Project consists of the Ocean Wind 1 Offshore Wind Farm and two unique offshore export cable route (ECR) corridors, which traverse federal and state waters. The BL England ECR Corridor has a proposed landfall near Ocean City, New Jersey, while the two Oyster Creek ECR corridors have a proposed landfall near Lacey Township, New Jersey. Ocean Wind has submitted a Construction and Operations Plan (COP) for the Project to BOEM to support the development, operation, and eventual decommissioning of Project infrastructure, including offshore wind turbines, offshore substations, array cables, substation interconnector cables, and offshore export cables. SEARCH provided technical expertise to Ocean Wind's environmental consultant, HDR Engineering, Inc. (HDR), by providing a Qualified Marine Archaeologist (QMA) in accordance with Lease Agreement Stipulation Addendum C Section 2.1.1.2.

SEARCH developed this Unanticipated Discoveries Plan (UDP) to assist Ocean Wind and its contractors to preserve and protect potential cultural resources from adverse impacts caused by Project construction, operation and maintenance, and decommissioning activities. The UDP sets forth guidelines and procedures to be used in the event potential submerged cultural resource are encountered during bottom disturbing activities and assists Ocean Wind in its compliance with Section 106 of the National Historic Preservation Act (NHPA) (Title 54 U.S.C. § 306108), Native American Graves Protection and Repatriation Act (Title 25 U.S.C. § 3001 et seg.), Lease OCS A-0498 Lease Stipulations, and other relevant state and local laws as applicable. This UDP is subject to revisions based on consultations with interested parties pursuant to Section 106 of the National Historic Preservation Act or the Act's implementing regulations at 36 CFR Part 800.

2. Roles and Responsibilities

Implementation of the provisions and procedures in the UDP will require the coordinated efforts of Ocean Wind and their contractors during all construction, operations and maintenance, and decommissioning activities with the potential to impact the seafloor. The following sections identify key participants in the UDP and outlines their roles and responsibilities.

2.1 Ocean Wind

Implementation of the provisions and procedures outlined in this plan is ultimately the responsibility of Ocean Wind or its designee, who will be responsible for the following:

- Ensuring procedures and policies outlined in the UDP and UDP training materials are implemented;
- Identifying a responsible party within Ocean Wind tasked with overseeing implementation of the UDP during all project and contractor activities;
- Developing cultural resource and UDP awareness training programs for all project staff and contractors;
- Requiring all project and contractor staff complete cultural resource and UDP awareness training;
- Coordinating and facilitating communication between the QMA, project staff, and contractors if a
 potential cultural resource is encountered during project activities; and
- Participating in and/or facilitating consultations with state and federal agencies (BOEM, New Jersey Historic Preservation Office [NJ HPO], etc...), federally recognized Tribes'/Tribal Nations' Tribal Historic Preservation Offices (THPOs), and other consulting parties, as appropriate.

2.2 Qualified Marine Archaeologist

Ocean Wind's QMA to provide cultural resource advisory services during implementation of the UDP. The QMA will be responsible for the following:

- Assist Ocean Wind with the development and implementation of the procedures outlined in the UDP:
- Assist Ocean Wind in developing a cultural resource and UDP awareness training program and informational graphic;
- Review and document potential submerged cultural resources identified by the project and/or contractor staff:
- Assist Ocean Wind with the Section 106 consultation process that may arise as a result of an unanticipated submerged cultural resource; and
- Conduct archaeological investigation of unanticipated submerged cultural resources following coordination with appropriate consulting parties.

3. Training and Orientation

Ocean Wind will develop a training and orientation program for Project and contractor staff on cultural resources and UDP awareness prior to the start of bottom disturbing activities. The training will be sufficient to allow Project and contractor staff to identify common types of marine cultural resources and implement the UDP procedures. The training will be delivered as a standalone training and/or combined with the Project's or contractors' general health and safety (H&S) or environment, health, and safety (EHS) induction training. The training program may include, but not be limited to, the following elements:

- A review of applicable state and federal cultural resource laws and regulations;
- Characteristics of common types of submerged cultural resources found on the Atlantic Outer Continental Shelf (e.g. wooden shipwrecks, metal shipwrecks, downed aircraft, post-Contact artifacts, pre-Contact artifacts, bone and faunal remains, etc.);
- How to identify potential submerged cultural resources during bottom disturbing activities; and
- Procedures to follow and parties to notify if potential submerged cultural resources/materials are encountered during project activities.

The QMA will develop draft cultural resources and UDP awareness training in coordination with Ocean Wind. The training program will be provided to BOEM,, and the NJ HPO for review and comment before the training program is finalized. In additional to the training program, the QMA will generate an informational graphic summarizing the UDP and the materials discussed in the cultural resources and UDP awareness training program. The informational graphic will include:

- Images of common types of submerged cultural resources and materials;
- A flow chart depicting the UDP reporting process;
- A notice to all employees of their stop work authority if potential cultural resources are encountered;
 and
- Contact information for the Ocean Wind staff responsible for overseeing implementation of the UDP and the QMA.

The informational graphic will be placed in a conspicuous location on each project and contractor vessel where workers can see it and copies will be made available to project and/or contractor staff upon request.

4. Procedures for when Cultural Material are Observed

To support BOEM's efforts to identify historic properties within the Project's Area of Potential Effects (APE), Ocean Wind conducted an extensive marine archaeological resources assessment (MARA) of the APE. The MARA identified 19 potential submerged cultural resources (Targets 01-19) and 16 ancient submerged landform features (ASLFs) (Targets 20-35) within the APE. Ocean Wind anticipates avoidance of Targets 01-12, 14, and 16-19 and the associated recommended avoidance buffers. Ocean Wind anticipates avoidance of Targets 21-26, 28-31, and 33-35 is not possible. Ocean Wind anticipates construction activities may extend into the avoidance buffers for Targets 13 and 15, but would avoid the actual targets. Additionally, as the final design is not known, the degree of adverse effects to Targets 20-35 is currently unknown. Ocean Wind is developing a Mitigation Framework to aid in avoiding, minimizing, and/or mitigating adverse effects upon historic properties.

Even with the extensive preconstruction marine archaeological surveys, it is impossible to ensure that all cultural resources have been identified within the APE. Even at sites that have been previously identified and assessed, there is a potential for the discovery of previously unidentified archaeological components, features, or human remains that may require investigation and assessment. Furthermore, identified historic properties may sustain effects that were not originally anticipated. Therefore, a procedure has been developed for the treatment of unanticipated discoveries that may occur during site development.

The implementation of the final UDP will be overseen by Ocean Wind and a QMA who meets or exceeds the Secretary of the Interior's Professional Qualifications Standards for Archaeology [48 FR 44738-44739] and has experience in conducting HRG surveys and processing and interpreting data for archaeological potential [BOEM 2020]. See Figure 1 for a flow chart of the communications and notification plan for unanticipated discoveries.

If unanticipated submerged cultural resources are discovered, the following steps should be taken:

- Per Lease Stipulation 4.2.7.1, all bottom-disturbing activities in the immediate area of the discovery shall cease and every effort will be made to avoid or minimize impacts to the potential submerged cultural resource(s).
- 2. The project or contractor staff will immediately notify Ocean Wind of the discovery.
- 3. Ocean Wind will notify the QMA and provide them with sufficient information/documentation on the potential find to allow the QMA to evaluate the discovery and determine if the find is a cultural resource. If necessary, the QMA may request to visit the find site or the vessel that recovered the cultural material to inspect the find. If the find is a cultural resource, the QMA will provide a preliminary assessment as to its potential to be a historic property as defined in 36 CFR Part 800.
- 4. Per Lease Stipulation 4.2.7.1, BOEM shall be notified of the potential submerged cultural resource within 24 hours of the discovery. Ocean Wind shall also notify the State Historic Preservation Officer (SHPO) of New Jersey, the State Archaeologist, and the Tribal Historic Preservation Officers (THPOs) or other designated representatives of the consulting tribal governments.
- 5. Within 72 hours of being notified of the discovery, Ocean Wind shall issue a report in writing to BOEM providing available information concerning the nature and condition of the potential submerged cultural resource and observed attributes relevant to the resource's potential eligibility for listing in the National Register of Historic Places (NRHP).
- 6. Ocean Wind shall consult with BOEM, as feasible, to obtain technical advice and guidance for the evaluation of the discovered cultural resource.
- 7. If the impacted resource is determined by BOEM to be NRHP eligible, a mitigation plan shall be prepared by Ocean Wind for the discovered cultural resource. This plan must be reviewed by BOEM prior to submission to the NJ HPO and representatives from consulting federally recognized Tribes/Tribal Nations for their review and comment. The NJ HPO and Tribes/Tribal Nations will review

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- the plan and provide comments and recommendations within a one week, with final comments to follow as quickly as possible.
- 8. Per Lease Stipulation 4.2.6, Ocean Wind may not impact a known archaeological resource in federal waters without prior approval from BOEM. No development activities in the vicinity of the cultural resource will resume until either a mitigation plan is executed or, if BOEM determines a mitigation plan is not warranted, BOEM provides written approval to Ocean Wind to resume bottom disturbing activities. For discoveries in state waters, Ocean Wind will not impact a known archaeological resource with prior approval from BOEM, and the NJ HPO. If suspected human remains are encountered, the below procedures, which comply with the Advisory Council on Historic Preservation's (ACHP) *Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects*, should be followed.
- All work in the near vicinity of the human remains shall cease and reasonable efforts should be made
 to avoid and protect the remains from additional impact. Encountered potential material shall be
 protected, which may include keeping the remains submerged in an onboard tank of sea water or other
 appropriate material.
- The Onboard Representative shall immediately notify the County Medical Examiner, State
 Archaeologist, the Forensic Anthropology Unit of the New Jersey State Police, and Ocean Wind as to
 the findings.
- 3. Ocean Wind will notify the QMA and provide them with sufficient information/documentation on the potential find to allow the QMA to evaluate the discovery and determine if the find is a cultural resource. If necessary, the QMA may request to visit the vessel to inspect the potential human remains. If the find is a cultural resource, the QMA will provide a preliminary assessment. The QMA will document and inventory the remains and any associated artifacts, and assist in coordinating with federal, state, and local officials.
- 4. A plan for the avoidance of any further impact to the human remains and/or mitigative excavation, reinternment, or a combination of these treatments will be developed in consultation with the State Archaeologist, the NJ HPOBOEM, and appropriate Indian tribes or closest lineal descendants. All parties will be expected to respond with advice and guidance in an efficient time frame. Once the plan is agreed to by all parties, the plan will be implemented.

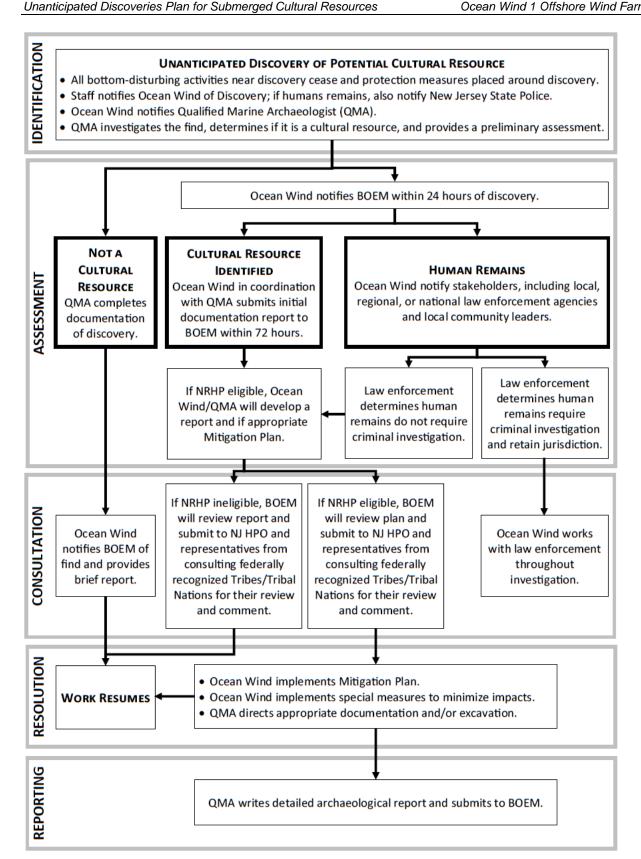


Figure 1. Communications and notification plan for unanticipated discoveries.

5. Archaeological Investigation of a Submerged Unanticipated Discovery

Archaeological investigation of a submerged unanticipated discovery may be necessary in order to evaluate the find, determine its eligibility for listing in the NRHP, and/or assess any construction impacts that may have occurred. The following is a recommended procedure for complying with the UDP and providing the BOEM, and NJ HPO with the necessary information to make informed decisions to approve continuation of bottom disturbing activities. After each step, consultation among the appropriate parties will occur.

- 1. Initial assessment of unanticipated discovery via a refined HRG survey and/or ROV investigation (Phase Ia reconnaissance survey).
 - a. May result in no further recommended action (i.e., target is not a historic property) or additional investigation.
- 2. Develop an avoidance zone based upon Step 1.
 - a. Minimally, construction activity will remain outside of the avoidance zone for a period of time necessary to allow archaeological investigation, if required.
 - Determine whether construction activity can remain outside of the avoidance zone permanently.
- 3. Identify the source, delineate the site boundary, and assess potential impacts that led to the unanticipated discovery (Phase Ib identification).
 - a. Accomplished utilizing archaeological/scientific diving and/or ROV investigation.
 - b. May result in no further recommended action (i.e., target is not a historic property) or additional investigation.
- 4. Determine eligibility for listing in the NRHP (Phase II NRHP evaluation).
 - a. Accomplished utilizing archaeological/scientific diving.
 - b. May require extensive excavation.
 - c. May require archival research.
- Develop a strategy to resolve adverse effects to the historic property that occurred as a result of the unanticipated discovery and to minimize or mitigate potential future adverse effects as construction proceeds.
- 6. On-site monitoring of bottom disturbing activities at the location.

Not all of these steps may be necessary, and the appropriate course of action will be determined at the time of discovery and in consultation with BOEM, and if applicable, NJ HPO.

6. Notification List

Contacts and a communication plan will be updated and provided during training.

Ocean Wind Katharine Perry Environmental Manager 917-524-4633	Bureau of Ocean Energy Management Sarah Stokely Lead Historian and Section 106 Team Lead Office of Renewable Energy Programs 45600 Woodland Road, VAM-OREP Sterling, Virginia 20166	New Jersey State Historic Preservation Office 501 E. State Street Trenton, NJ 08609 609-984-0176
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Ocean Wind Compliance Manager TBD	The Shinnecock Indian Nation Ms. Shavonne Smith Director, Shinnecock Environmental Department PO Box 5006 Southampton NY 11969 Phone: (631) 283-6143 ShavonneSmith@shinnecock.org Jeremy Dennis, Junior THPO P.O. Box 2338 Southampton NY 11968 jeremynative@gmail.com (631) 566-0486	The Narragansett Indian Tribe Mr. John Brown Tribal Historic Preservation Officer P.O. Box 268 Charlestown, RI 02813 Phone: (401).364-1100 tashtesook@aol.com
Eastern Shawnee Tribe of Oklahoma Mr. Brett Barnes Cultural Preservation Director 70500 East 128 Road, Wyandotte, OK 74370 Phone: (918) 238-5151	The Delaware Nation Ms. Erin Paden Historic Preservation Director P.O. Box 825 Anadarko, OK 73005 Phone: (405).247-2448 Ext. 1403 epaden@delawarenation-nsn.gov	Lenape Tribe of Delaware 4164 N. Dupont Hwy., Suite 6 Dover, DE 19901-1573 302-730-4601
Delaware Tribe of Indians Ms. Susan Bachor Historic Preservation Representative Delaware Tribe Historic Preservation Office 126 University Circle Stroud Hall, Rm. 437 East Stroudsburg PA 18301 610.761.7452 sbachor@delawaretribe.org	Absentee-Shawnee Tribe of Indians of Oklahoma Mr. Devon Frazier Tribal Historic Preservation Officer 2025 South Gordon Cooper Drive Shawnee, OK 74801 405.275.4030 x6243 dfrazier@astribe.com	Stockbridge-Munsee Community Band of Mohican Indians Mr. Nathan Allison Tribal Historic Preservation Officer Stockbridge-Munsee Mohican Tribal Historic Preservation Extension Office 86 Spring Street Williamstown, MA 01267 Phone: (413).884-6029 nathan.allison@mohican- nsn.gov
Shawnee Tribe Ms. Tonya Tipton Tribal Historic Preservation Officer P.O. Box 189 29 S Hwy 69A Miami, OK 74355 Phone: (918).542-4030 x124 tonya@shawnee-tribe.com	Nanticoke Indian Association, Inc. Natasha Carmine 27073 John J Williams Highway Millsboro, DE 19966 info@nanticokeindians.org 302.945.3400	Nanticoke Lenni-Lenape Tribal Nation Mark Gould Principal Chief/Chariman 18 E Commerce Street Bridgeton, NJ 08302 tribalcouncil@nlltribe.com 856.455.6910

Powhatan Renape Nation Barabara Jefferson New Jersey Commission on American Indian Affairs, Commission Member, Representing Powhatan Renape Tribe NJ Commission on Indian Affairs, PO Box 300 Trenton, NJ 08625 609.633.9627	Ramapough Lenape Indian Nation Steven Burton89 New Jersey Commission on American Indian Affairs, Commission Member, Representing Ramapough Lenape Indian Nation NJ Commission on Indian Affairs, PO Box 300 Trenton, NJ 08625 609.633.9627	Ramapough Mountain Indians Dwaine Perry Chief 189 Stag Hill Road Mahwah, NJ 07430
New Jersey State Police Office of Forensic Sciences Forensic Anthropology Unit NJ Forensic Technology Center 1200 Negron Drive - Horizon Center Hamilton, NJ 08691 Phone: (609) 584-5054 x5656	Cape May County Medical Examiner Office Dr. Eric Duval and Dr. Charles Siebert Jr. County Medical Examiner 1175 DeHirsch Avenue Woodbine, NJ 08270 Phone: (609) 861-3355	Ocean County Medical Examiner Office County Medical Examiner P.O. Box 2191, Sunset Avenue Toms River, NJ 08754- 2191 Phone: (732) 341-3424

7. References Cited

Advisory Council on Historic Preservation's (ACHP)

2007 Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects.

https://www.achp.gov/sites/default/files/policies/2018-06/ACHPPolicyStatementRegardingTreatment-ofBurialSitesHumanRemainsandFuneraryObjects0207.pdf, Digital article accessed December 9, 2021.

Bureau of Ocean Energy Management (BOEM)

2020 Guidelines for Providing Archaeological and Historical Property Information Pursuant to 30 CFR Part 585. United States Department of the Interior, Office of Renewable Energy Programs.