

**Appendix J**  
**Finding of Adverse Effect for the New England Wind Project**  
**Construction and Operations Plan**

This page is intentionally blank.

## Table of Contents

<b>J</b>	<b>Finding of Adverse Effect for the New England Wind Project Construction and Operations Plan .....</b>	<b>J-1</b>
J.1	Description of the Undertaking .....	J-1
J.1.1	Background.....	J-4
J.1.2	Undertaking .....	J-4
J.1.3	Area of Potential Effects.....	J-7
J.2	Steps Taken to Identify Historic Properties.....	J-20
J.2.1	Technical Reports .....	J-20
J.2.2	Consultation and Coordination with the Parties and Public.....	J-23
J.3	Application of the Criteria of Adverse Effect .....	J-26
J.3.1	Assessment of Effects on Historic Properties in the Visual Area of Potential Effects .....	J-27
J.3.2	Assessment of Effects on Historic Properties in the Marine Area of Potential Effects .....	J-35
J.3.3	Assessment of Effects on Shipwrecks and Potential Shipwrecks .....	J-37
J.3.4	Assessment of Effects on Historic Properties within the Terrestrial Area of Potential Effects .....	J-37
J.3.5	Assessment of Effects on Historic Properties .....	J-37
J.4	Measures to Avoid, Minimize, or Mitigate Adverse Effects.....	J-38
J.5	Phased Identification .....	J-40
J.6	National Historic Landmarks and the National Historic Preservation Act Section 106 Process.....	J-41
J.7	References .....	J-42

## List of Tables

Table J-1:	Vertical and Horizontal Extent of the Marine Area of Potential Effects for the Proposed Project.....	J-7
Table J-2:	Summary of Cultural Resources Investigations and Cultural Resources for the Proposed Project.....	J-20
Table J-3:	Public Scoping Meetings .....	J-24

## List of Figures

Figure J-1:	Proposed Wind Development Area Relative to Rhode Island and Massachusetts Lease Areas.....	J-2
Figure J-2:	Proposed Project Overview .....	J-3
Figure J-3:	Proposed Phase 2 Variants .....	J-6
Figure J-4:	Marine Area of Potential Effects.....	J-9
Figure J-5:	Terrestrial Area of Potential Effects.....	J-10
Figure J-6:	Terrestrial Area of Potential Effects, Phase 1 Landfall Sites .....	J-11
Figure J-7:	Terrestrial Area of Potential Effects, West Barnstable Substation Area .....	J-12
Figure J-8:	Terrestrial Area of Potential Effects, Phase 2 Landfall Sites .....	J-13
Figure J-9:	Offshore Visual Area of Potential Effects.....	J-16
Figure J-10:	Onshore Visual Area of Potential Effects, Barnstable Substation Sites .....	J-18
Figure J-11:	Onshore Visual Area of Potential Effects, Centerville River Bridge .....	J-19

## List of Attachments

Attachment J-1: Memorandum of Agreement

Attachment J-2: Entities Invited to be Consulting Parties

Attachment J-3: Consulting Parties to the New England Wind Project

## Abbreviations and Acronyms

ACHP	Advisory Council on Historic Preservation
ADLS	aircraft detection and lighting system
APE	area of potential effects
BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
COP	construction and operations plan
EIS	environmental impact report
ESP	electrical service platform
ft	feet
mi	mile
MOA	Memorandum of Agreement
MW	megawatt
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NPR	National Park Service
NRHP	National Register of Historic Places
OCS	Outer Continental Shelf
OECC	offshore export cable corridor
OECR	onshore export cable route
Q&A	questions and answers
ROD	Record of Decision
ROW	right-of-way
SCV	South Coast Variant
SFH	Shootflying Hill
SHPO	State Historic Preservation Officer
SWDA	Southern Wind Development Area
TCP	traditional cultural property
USC	U.S. Code
WTG	wind turbine generator
ZVI	zone of visual influence

## **J Finding of Adverse Effect for the New England Wind Project Construction and Operations Plan**

The Bureau of Ocean Energy Management (BOEM) has made a Finding of Adverse Effect (Finding) under Section 106 of the National Historic Preservation Act (NHPA) pursuant to Code of Federal Regulations, Title 36, Section 800.5 (36 CFR § 800.5) for the New England Wind Project (proposed Project), consisting of construction and installation (construction), operations and maintenance (operations), and conceptual decommissioning (decommissioning) of an offshore wind energy project, as described in the proposed Project's Construction and Operations Plan (COP). BOEM finds that the undertaking would adversely affect the following historic properties:

- Gay Head Lighthouse;
- Nantucket Historic District National Historic Landmark (Nantucket District NHL);
- Chappaquiddick Island traditional cultural property (TCP);
- Moshup's Bridge and Vineyard Sound TCP;
- Nantucket Sound TCP, including 19 ancient submerged landform features that contribute to the TCP;
- Edwin Vanderhoop Homestead (Aquinnah Cultural Center);
- Gay Head–Aquinnah Shops Area; and
- 30 ancient submerged landform features on the Outer Continental Shelf (OCS) outside of these TCPs, for a total of 49 adversely affected ancient submerged landform features when combined with those that contribute to the Nantucket Sound TCP.

Resolution of adverse effects on historic properties will be codified through a Memorandum of Agreement (MOA) pursuant to 36 CFR § 800.6(c) (see Attachment J-1).

### **J.1 Description of the Undertaking**

In the proposed Project COP (originally submitted on June 2, 2020, and comprehensively revised in December 2021 and April and May 2022 and August 2023), Park City Wind, LLC (Park City Wind or the applicant) proposes construction, operations, and decommissioning of an offshore wind energy project that would generate at least 2,036 megawatts (MW) and up to 2,600 MW of wind energy in two phases within BOEM Renewable Energy Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501,<sup>1</sup> hereafter together referenced as the Southern Wind Development Area (SWDA) (Figures J-1 and J-2). If approved by BOEM, the applicant would construct and operate wind turbine generators (WTG) and electrical service platforms (ESP), an export cable to shore, and associated facilities for a 30-year term. BOEM is conducting its environmental and technical reviews of the COP (Epsilon 2023) under the National Environmental Policy Act (NEPA) for its decision regarding approval, disapproval, or approval with modifications of the proposed Project COP. The Draft Environmental Impact Statement (EIS) and COP for the proposed Project are available on the Project-specific website (<https://www.boem.gov/renewable-energy/state-activities/new-england-wind-formerly-vineyard-wind-south>). The EIS considers the potential impacts of the proposed Project, including impacts on cultural resources.

---

<sup>1</sup> The developer of the Vineyard Wind 1 Project (Vineyard Wind 1, LLC) will assign spare or extra positions in the southwestern portion of OCS-A 0501 to the applicant for the proposed Project if those positions are not developed as part of the Vineyard Wind 1 Project.

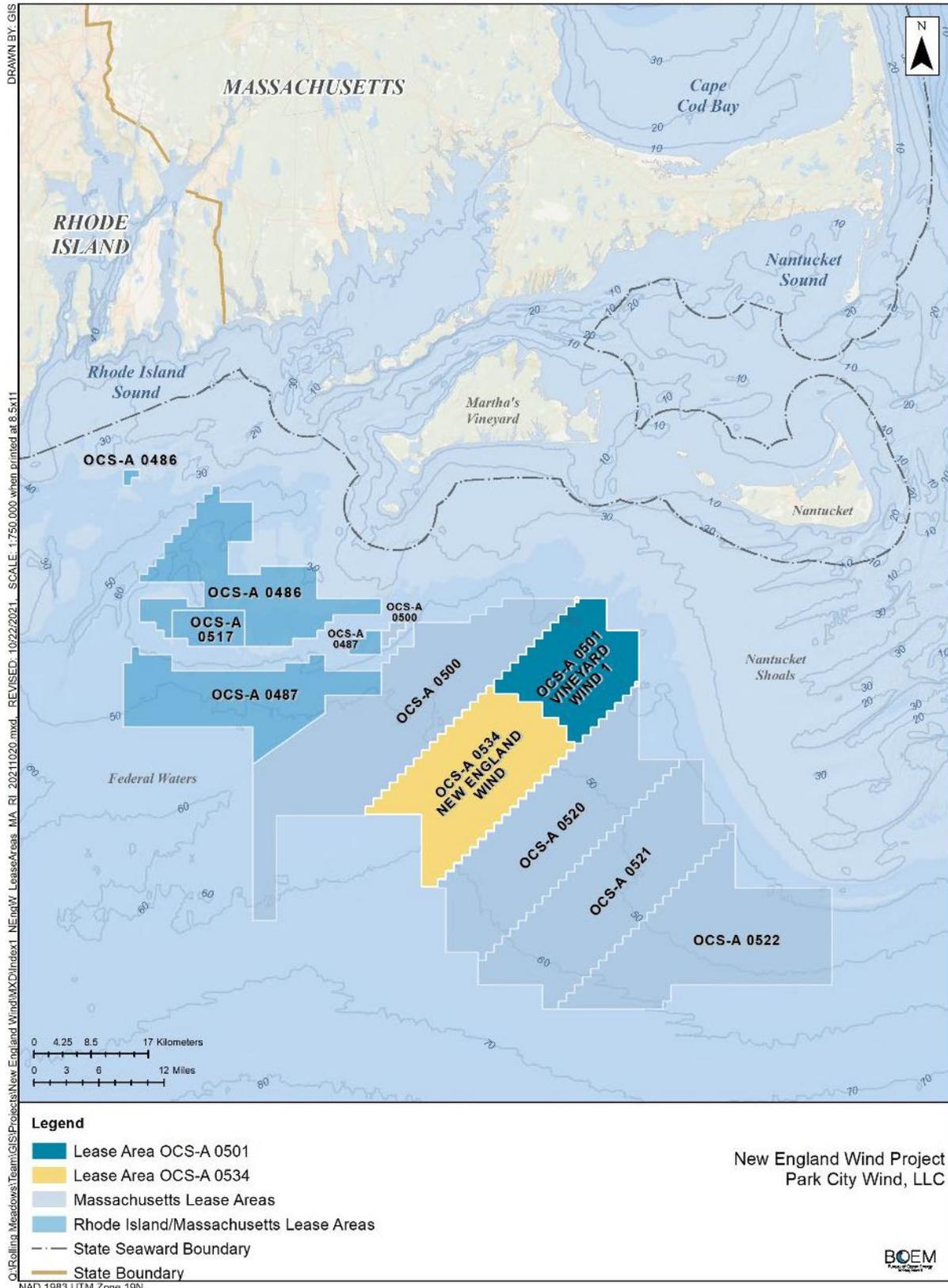


Figure J-1: Proposed Wind Development Area Relative to Rhode Island and Massachusetts Lease Areas

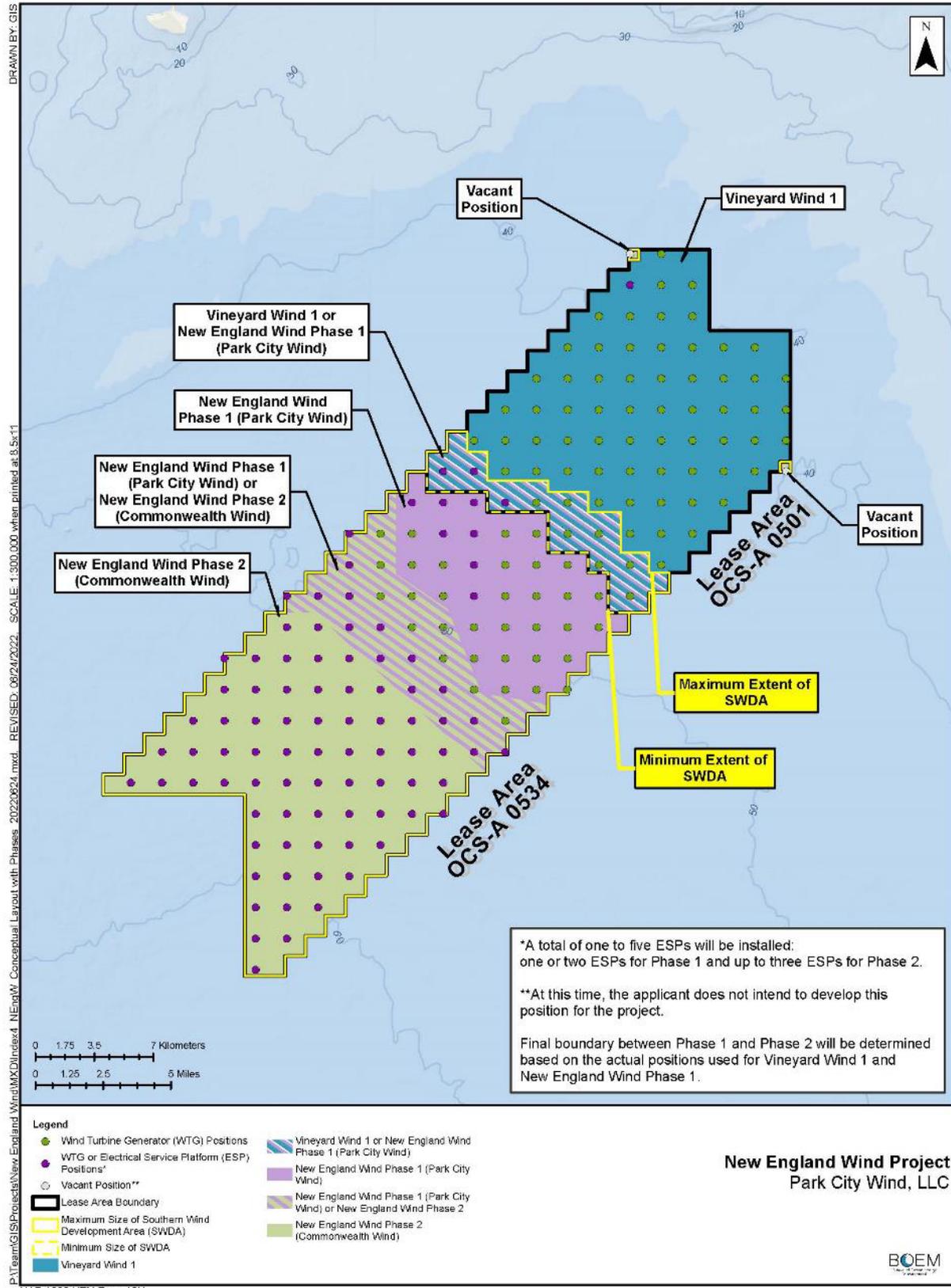


Figure J-2: Proposed Project Overview

BOEM has determined that construction, operations, and decommissioning constitute an undertaking subject to Section 106 of the NHPA (U.S. Code, Title 54 Section 306108 [54 USC § 306108]) and its implementing regulations (36 CFR Part 800), and that the activities proposed under the COP have the potential to affect historic properties.

### **J.1.1 Background**

In 2014, BOEM prepared an environmental assessment to analyze the environmental impacts associated with issuing commercial wind leases and approving site assessment activities within the Massachusetts wind energy area (BOEM 2014). Additionally, in May 2012, BOEM executed the Massachusetts and Rhode Island Programmatic Agreement (BOEM 2012a) and concurrently conducted a NHPA Section 106 review of its decision to issue commercial leases within the Massachusetts wind energy area (BOEM 2012b). On April 1, 2015, BOEM held a competitive leasing process as prescribed in 30 CFR § 585.211 and awarded Lease Area OCS-A 0501 to Vineyard Wind 1, LLC. Subsequently, Vineyard Wind submitted a Site Assessment Plan for the installation of meteorological buoys, which BOEM reviewed under NHPA Section 106, resulting in its October 6, 2017, *Finding of No Historic Properties Affected* (BOEM 2017a).

On June 28, 2021, BOEM assigned 65,296 acres of Lease Area OCS-A 0501 to Vineyard Wind 1, LLC. The remaining 101,590 acres, which were designated Lease Area OCS-A 0534 and where most of the proposed Project would be developed, were assigned to the applicant (Figure J-1).<sup>2</sup> A small portion of Lease Area OCS-A 0501 not used for development of Vineyard Wind 1 Project may also be developed as part of the proposed Project. The applicant has the exclusive right to submit a COP for activities within Lease Area OCS-A 0534.<sup>3</sup> On September 21, 2021, a restructuring of the project's parent company resulted in Avangrid Renewables taking full ownership of Lease Area OCS-A 0534. In October 2021, the project name changed from Vineyard Wind South to New England Wind to reflect the restructuring of the proposed Project's parent company.

### **J.1.2 Undertaking**

The applicant proposes to construct, operate, and eventually decommission the proposed Project, which would consist of up to 130 WTG and up to 5 ESP positions and would be developed in two phases. Phase 1, including the Park City Wind Project, would deliver approximately 804 MW through the installation of 41 to 62 WTGs and one to two ESPs immediately southwest of the Vineyard Wind 1 Project, which is currently under construction. Phase 2, including the Commonwealth Wind Project, would deliver at least 1,232 MW through the installation of an additional 64 to 88 WTG/ESP positions, immediately southwest of Phase 1. The applicant would install five offshore export cables (two for Phase 1 and three for Phase 2) in an offshore export cable corridor (OECC) that would transmit the electricity generated by the WTGs to landing sites (one for each phase) in the Town of Barnstable, Massachusetts, and then to onshore export cable routes (OECR) (one for each phase) and two substation sites in the Town of Barnstable for interconnection with the regional electrical grid (Figures J-3 and J-4). Other proposed Project components would include onshore operations facilities within existing developed ports in the region.

---

<sup>2</sup> Except for the description of lease area, which now reflects the two different lease areas, the terms, conditions, and stipulations of the two leases, including the lease effective date of April 1, 2015, remain the same.

<sup>3</sup> Lessees may request to assign a portion of their lease to another qualified legal entity.

If technical, logistical, or other unforeseen issues prevent all Phase 2 export cables from being installed in the proposed OECC, the applicant would develop and use the Western Muskeget Variant (Figure J-3) for one cable.

If technical, logistical, grid interconnection, or other unforeseen issues prevent all Phase 2 export cables from interconnecting at a substation site in the Town of Barnstable, the applicant would develop and use the South Coast Variant (SCV) in place of or in addition to the currently proposed Phase 2 OECC and OECR. The SCV OECC would extend from the SWDA to a landing site and OECR in Bristol County, Massachusetts (Figure J-3). The applicant has provided information on the portion of the SCV OECC outside of the 3-nautical-mile (3.4-mile) limit of territorial waters (i.e., “federal waters”). The applicant has not provided information on grid interconnection routes, onshore cable routes, landfall locations, and nearshore cable routes in Bristol County. Therefore, this Finding of Adverse Effect only evaluates the portion of the SCV in federal waters.

Additionally, the applicant has identified an alternate Phase 2 onshore substation site called the Old Falmouth Road site; however, the applicant does not have site control. Therefore, this Finding of Adverse Effect does not evaluate the Old Falmouth Road site.

If the applicant determines that the SCV or the Old Falmouth Road site is necessary, phased identification and evaluation of historic properties for the remainder of the SCV or the Old Falmouth Road site would be completed at that time, pursuant to 36 CFR § 800.4(b)(2). BOEM would conduct Section 106 consultation for the remainder of the SCV or the Old Falmouth Road site with the federally recognized tribal nations, Massachusetts State Historic Preservation Officer (SHPO), Advisory Council on Historic Preservation (ACHP), and other identified consulting parties, and the effects of the SCV or the Old Falmouth Road site to historic properties would be evaluated in a separate Finding and supplemental NEPA analysis.

If the SCV or the Old Falmouth Road site is used and information pertaining to identification of historic properties would not be available until after the Record of Decision (ROD) is issued, BOEM will use the MOA (Attachment J-1) to establish commitments for phased identification and evaluation of historic properties within the area of potential effects (APE) in accordance with BOEM’s existing *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* and ensure potential historic properties are identified, effects assessed, and adverse effects resolved prior to construction.

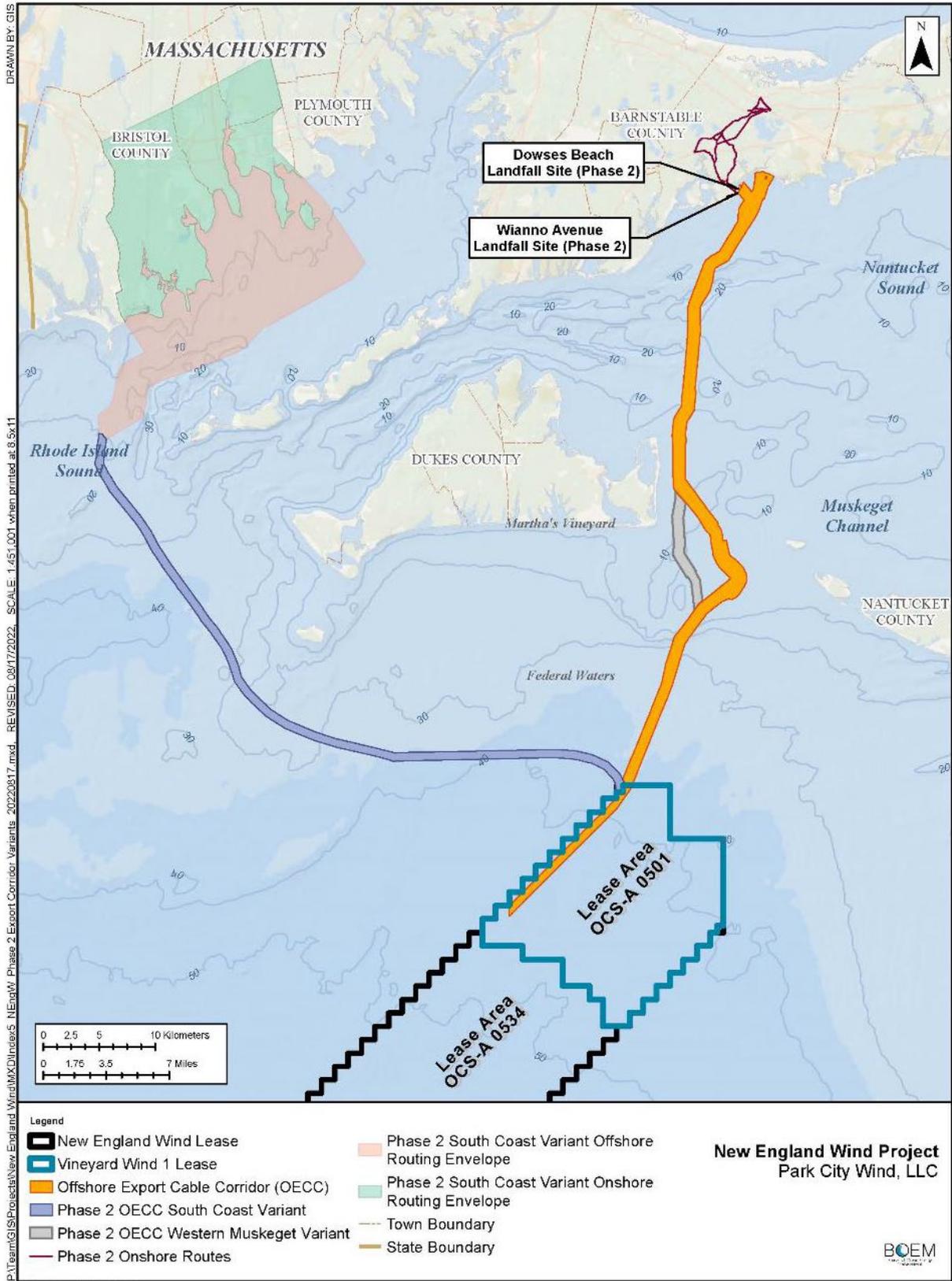


Figure J-3: Proposed Phase 2 Variants

### J.1.3 Area of Potential Effects

The APE for this undertaking is defined by the Section 106 implementing regulations (36 CFR § 800.16[d]).

The geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

BOEM (2020a) defines the undertaking’s APE as the following:

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

The SWDA, OECC, and terrestrial facilities make up the footprint of the proposed Project. The terrestrial archaeological resources portion of the APE (terrestrial APE), the marine archaeological resources portion of the APE (marine APE), and the APE for visual effects analysis (visual APE) are defined based on these proposed Project component footprints.

#### J.1.3.1 Marine Area of Potential Effects

The marine APE includes the footprint for activities within the SWDA and OECC (Figure J-4). This includes areas affected by vessel anchors, the work zones around WTG and ESP positions, scour protection, inter-array cables, inter-link cables, offshore export cables, the portion of the SCV OECC in federal waters, and the Western Muskeget Variant of the OECC. Phase 1 would occupy 37,066 to 57,081 acres of the SWDA, while Phase 2 would occupy the remaining 54,857 to 74,873 acres, depending on the number of WTG and ESP positions used for each phase. Water depths in the SWDA range from 141 to 203 feet, and effects on the seafloor resulting from lift boat/jack-up vessels would be contained to the work zone around the WTGs and ESP(s) positions and OECC. The vertical APE is based on the maximum proposed disturbance depth defined within the proposed Project design envelope and varies by component, while the horizontal depth reflects the impacted area. Table J-1 summarizes the vertical and horizontal APE from each proposed Project offshore component.

**Table J-1: Vertical and Horizontal Extent of the Marine Area of Potential Effects for the Proposed Project**

Facility	APE	Extent (feet)
Cables	Vertical (below seafloor surface)	10
(Inter-array, inter-link, and OECC)	Horizontal	Entire SWDA and OECC
WTGs	Vertical	279
	Horizontal <sup>a</sup>	591
ESPs	Vertical	279
	Horizontal <sup>a</sup>	591

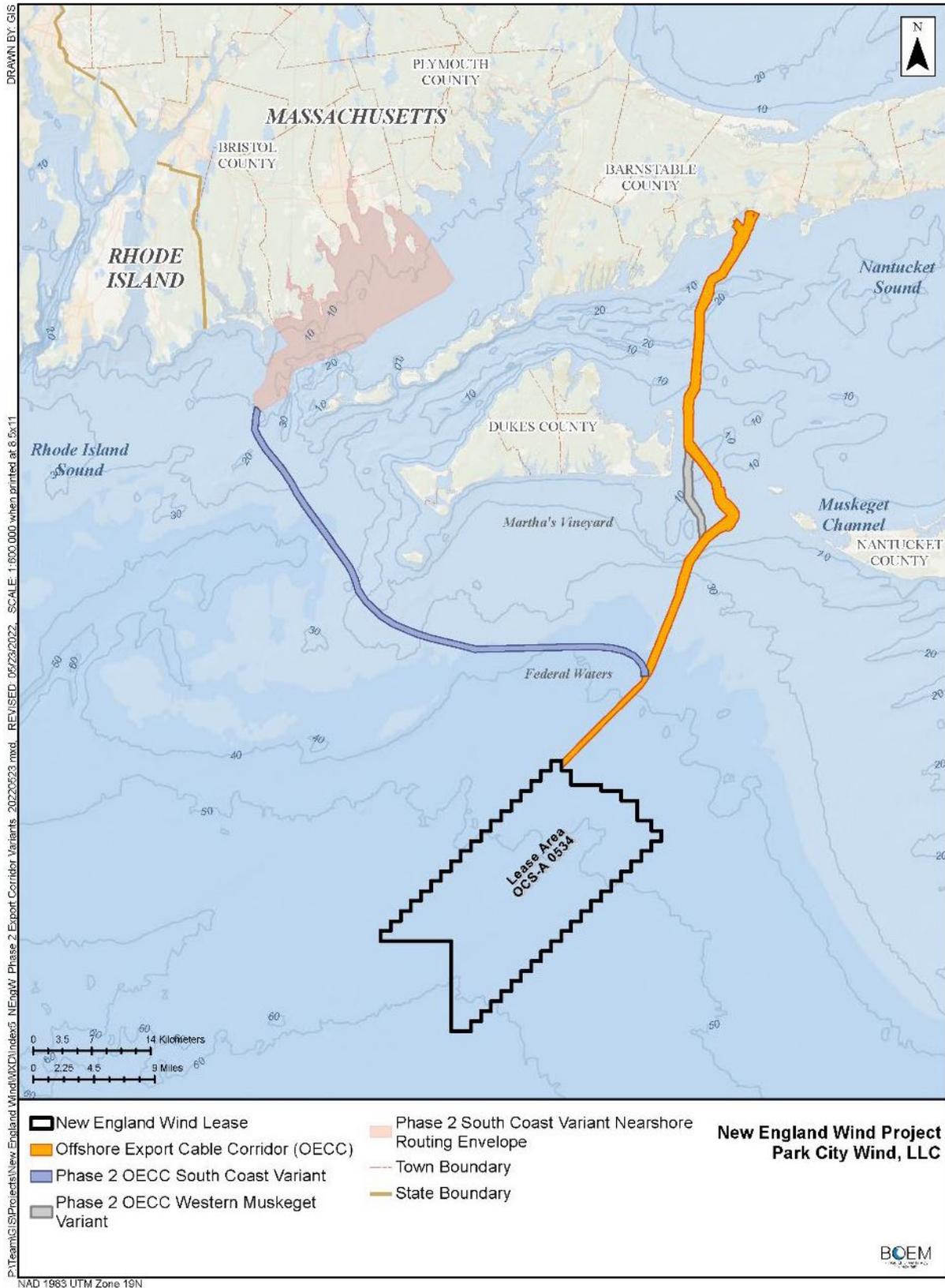
APE = area of potential effects; ESP = electrical service platform; OECC = offshore export cable corridor; SWDA = Southern Wind Development Area; WTG = wind turbine generator

<sup>a</sup> This is the maximum radius work zone around each WTG and ESP foundation where construction would occur.

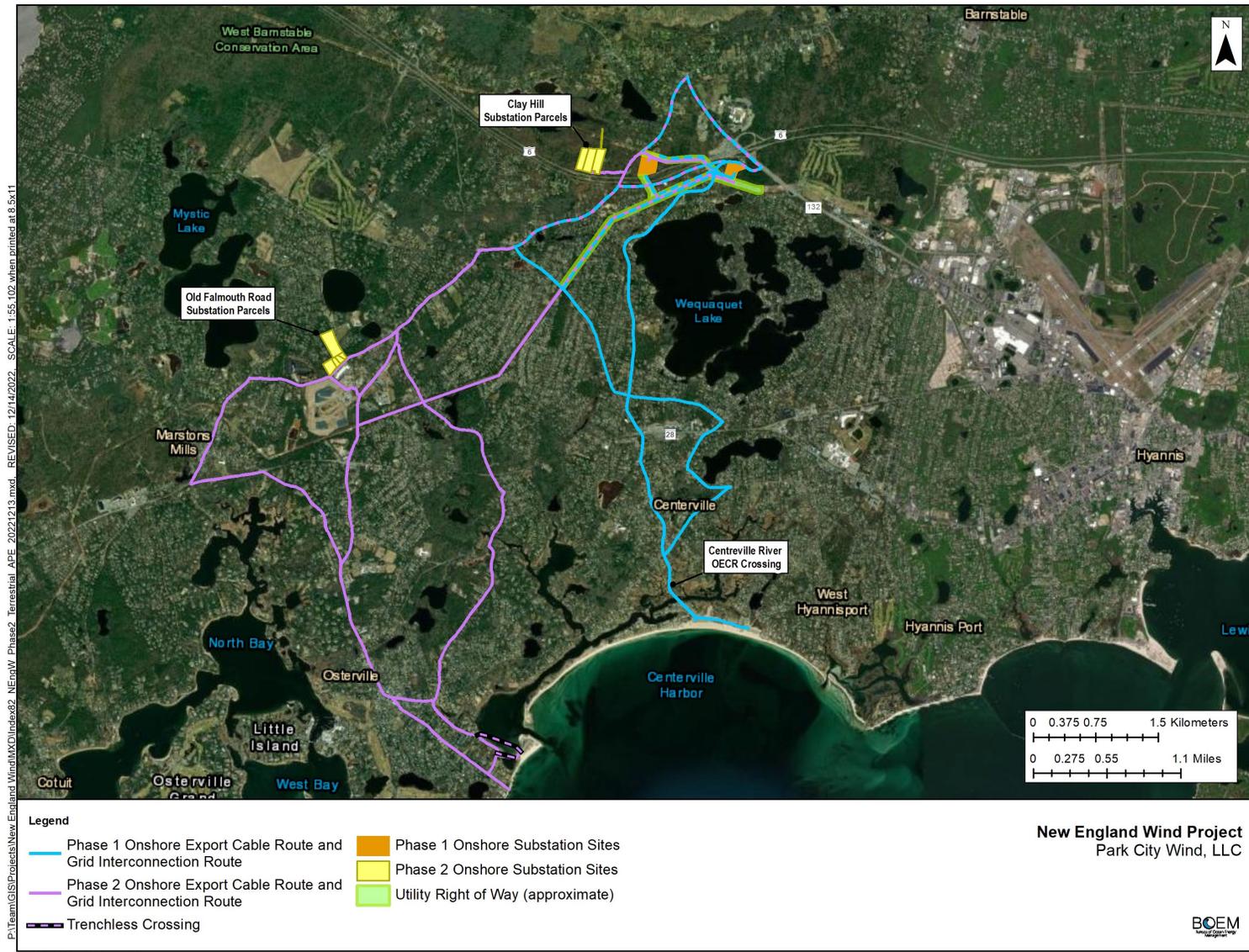
The vertical APE for the cables is 10 feet below the seafloor surface, which is the maximum penetration depth of the anchors that may be used by vessels during cable installation. The target burial depth of the cables is 5 to 8 feet. The horizontal APE for the OECC is defined as the entire length and width of the OECC, which would extend up to 62.7 miles from the northernmost ESP in the SWDA to landfall sites in Barnstable County, with an average width of approximately 3,609 feet. If the applicant chooses to construct the SCV, the associated OECC would extend up to approximately 60 miles from the SWDA to a landfall site in Bristol County, including approximately 40 miles in federal waters. Because the applicant has only identified the federal waters portion of the SCV OECC (that portion beyond the 3-nautical-mile [3.5-mile] limit of the shore), the marine APE evaluated in this document only includes that area.

### **J.1.3.2 Terrestrial Area of Potential Effects**

The terrestrial APE includes areas of potential ground disturbance associated with the onshore construction and operations of the proposed undertaking. The terrestrial APE is presented as part of the proposed Project design envelope, which includes the proposed substation sites, areas in and around the proposed landfall sites, as well as the OECC in the Town of Barnstable. Figures J-5 through J-8 show the terrestrial APE for both phases.



**Figure J-4: Marine Area of Potential Effects**



OECR = onshore export cable route

**Figure J-5: Terrestrial Area of Potential Effects**



Figure J-6: Terrestrial Area of Potential Effects, Phase 1 Landfall Sites

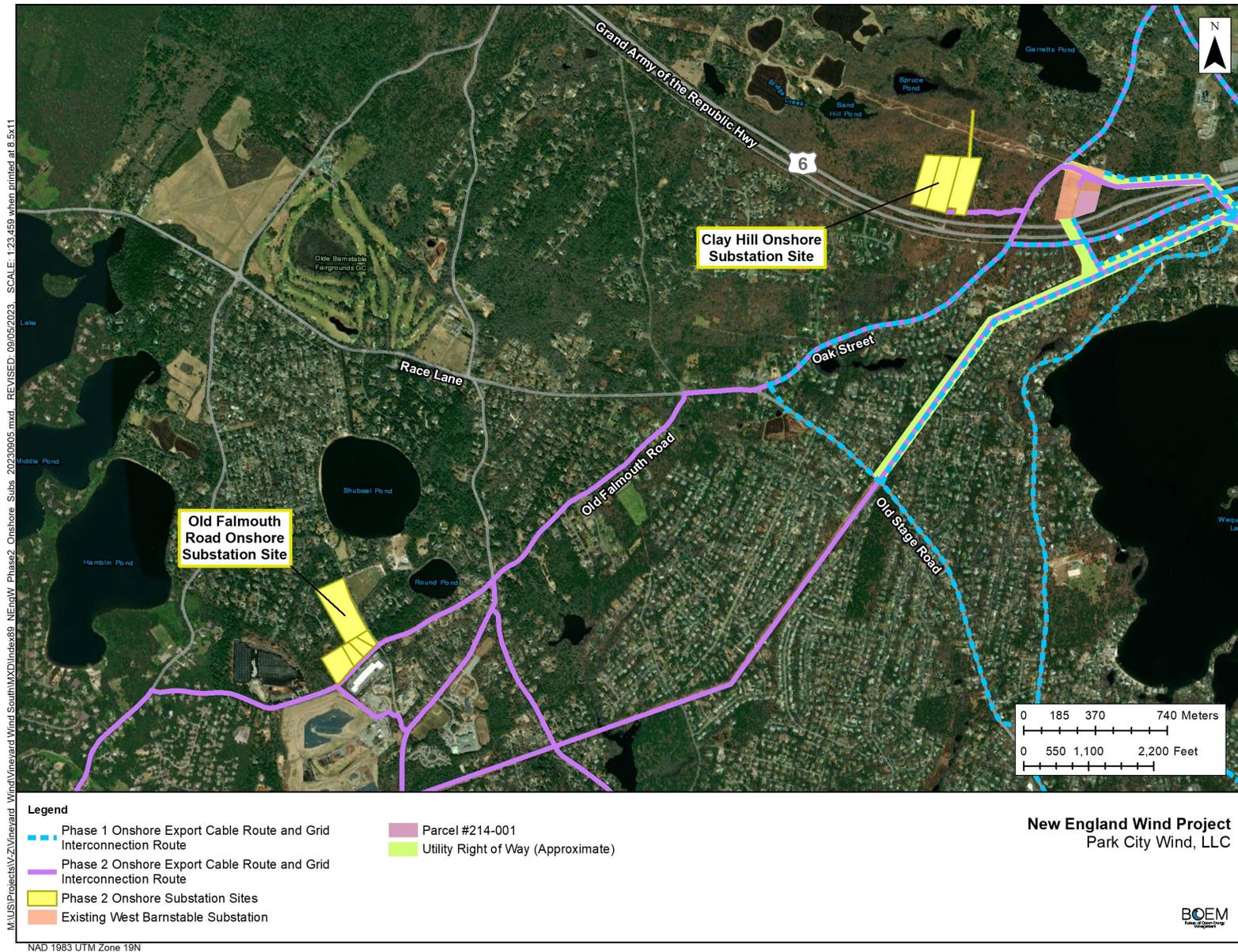


Figure J-7: Terrestrial Area of Potential Effects, West Barnstable Substation Area

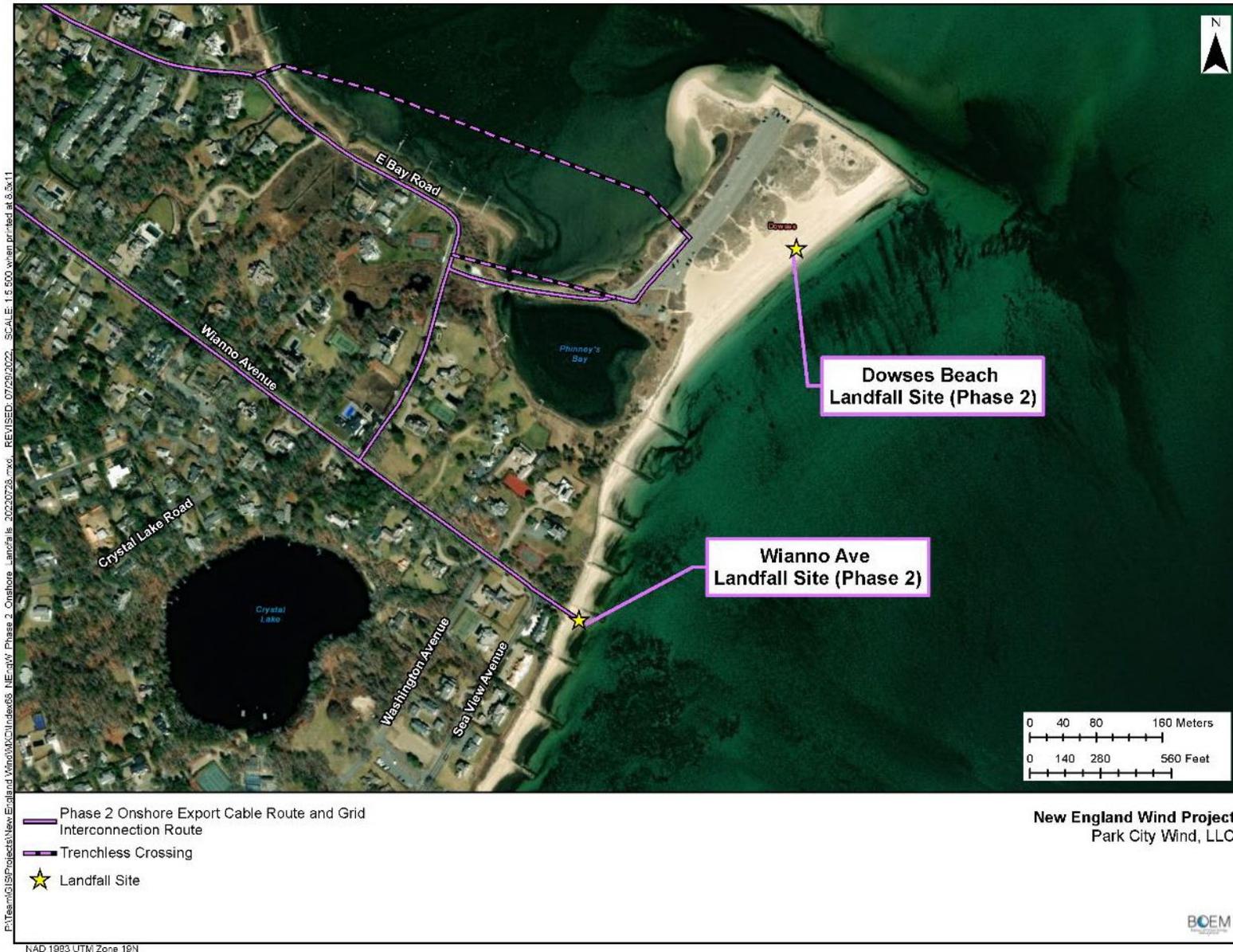


Figure J-8: Terrestrial Area of Potential Effects, Phase 2 Landfall Sites

## Phase 1

The potential Phase 1 landfall sites at Covell's Beach or Craigville Beach, OECR and grid interconnection route options, 6 and 8 Shootflying Hill Road, the existing West Barnstable Substation, Parcel #214-001, and any temporary or permanent construction or staging areas, both onshore and offshore, comprise the APE for Phase 1's direct physical effects (Figures J-5 through J-7). During Phase 1, ground-disturbing activities would occur at the selected landfall site, along the OECR (including the Centerville River crossing and associated construction, staging, and laydown areas) and grid interconnection route, and at the onshore substation sites and associated parcels. The cable landfall would be accomplished with trenchless methods. The Phase 1 OECR would follow one of two potential routes depending on which landing site is chosen. These routes would extend approximately 4 to 6.5 miles in a northward direction to the Phase 1 onshore substation site near the existing West Barnstable Substation. The OECR would be installed underground primarily through trenching within or adjacent to existing roads and utility right-of-way (ROW). The OECR would include manhole covers at the landfall sites and along the selected route.

The Phase 1 onshore substation would be constructed at 8 Shootflying Hill Road on a privately owned 6.7-acre parcel of land. It would result in ground-disturbing activities associated with the removal of the existing Knights Inn Motel and its associated parking lot, and construction of the substation. The applicant has also secured an option to purchase a 1-acre parcel at 6 Shootflying Hill Road, immediately northeast of the proposed substation site, which would be used for an improved access road to the onshore substation site.

The Phase 1 OECR would cross the Centerville River. The applicant's preferred crossing methods are trenchless (microtunnel, horizontal directional drilling, and direct pipe), and would not disturb the surface or river bottom (COP Volume I, Section 3.3.1.10.2; Epsilon 2023). If these methods prove infeasible, the applicant would construct a utility bridge northeast (upstream) of the existing Craigville Beach Road bridge. The utility bridge would be an aboveground, independent structure parallel to and approximately 3 feet from the existing road bridge.

The applicant has secured an approximately 2.8-acre parcel, identified as assessor map parcel #214-001, immediately southeast of the West Barnstable Substation. This parcel could be used as the northern terminus of a trenchless OECR crossing of State Route 6.

## Phase 2

During Phase 2, ground-disturbing activities would occur at the selected landfall site at either Dowses Beach or Wianno Avenue (Figure J-8), along the OECR and grid interconnection route (Figure J-5), and at the Clay Hill (preferred site) or Old Falmouth Road<sup>4</sup> (alternate site) onshore substation sites. Both Phase 2 landfall sites in the Town of Barnstable, all potential Phase 2 OECR and grid interconnection route options, and any temporary or permanent construction or staging areas, both onshore and offshore, are included in the APE (Figure J-6). The Clay Hill substation would require 13.6 acres of land disturbance including the removal of a non-historic residence, site grading, and installation of stormwater features (COP Volume I, Section 4.2.2.3; Epsilon 2023). The potential landfall sites at Dowses Beach and Wianno Avenue, one to two OECR and grid interconnection routes, existing West Barnstable Substation,

---

<sup>4</sup> If the applicant determines that the Old Falmouth Road site is necessary, phased identification and evaluation of historic properties for the remainder of the SCV or the Old Falmouth Road site would be completed at that time, pursuant to 36 CFR § 800.4(b)(2).

and onshore substation at either Clay Hill or Old Falmouth site comprise the APE for Phase 2's direct physical effects.

### **J.1.3.3 Visual Area of Potential Effects**

Using BOEM's (2020a) definitions, the visual area of effects is the viewshed from which renewable energy structures, whether offshore or onshore, would be visible (Figure J-9). As such, the APE will include areas from which the proposed undertaking would, with some certainty, be visible and recognizable under a reasonable range of meteorological conditions.

#### **Offshore Visual Area of Potential Effects**

The WTGs would be the tallest and most visible component of the proposed undertaking, with a nacelle-top height of 725 feet above mean lower low water and a maximum vertical blade-tip extension of 1,171 feet mean lower low water for both phases. As a result, the visual APE for the WTGs encompasses that of the ESPs, which would be substantially shorter. With this height, curvature of the earth, and during optimal viewing conditions (i.e., an absence of haze, fog, sea spray, etc.), the maximum theoretical distance from which the top of the nacelles (where required Federal Aviation Administration hazard lighting would be placed) could potentially be visible is 37.5 miles.

Taking into consideration this range of visibility, the applicant identified a zone of visual influence (ZVI). The ZVI includes land areas within the 37.5-mile maximum theoretical area of nacelle visibility where proposed WTGs could most likely be visible, based on topography, vegetation, and existing structures. While blade tips extending above nacelle top could theoretically be visible from larger distances, the ZVI represents ideal viewing conditions where the proposed WTGs would most likely be perceptible by viewers in reality. The applicant identified portions of the ZVI where both the nacelle and blades could be visible and where only the blades (i.e., the portion of the blades that extend above the nacelle) would be visible using geographic information system viewshed analyses that incorporated light detection and ranging data. EIS Section 3.17, Scenic and Visual Resources, and EIS Appendix I, Seascape and Landscape Visual Impact Assessment, used 40 nautical miles (46 miles) as the limit for seaward views.

Studies of onshore and offshore visibility (Sullivan et al. 2012, 2013) suggest that the extinction point for views of WTGs and other structures is much less than 40 nautical miles (46 miles); therefore, 40 nautical miles is used here as an intentionally conservative outer limit for visibility.

Mainland landfall sites, export cables within the OECC, and inter-array and inter-link cables within the SWDA would all be below the surface of the ocean or land, and thus would not generate visual effects beyond the temporary presence of construction vessels.

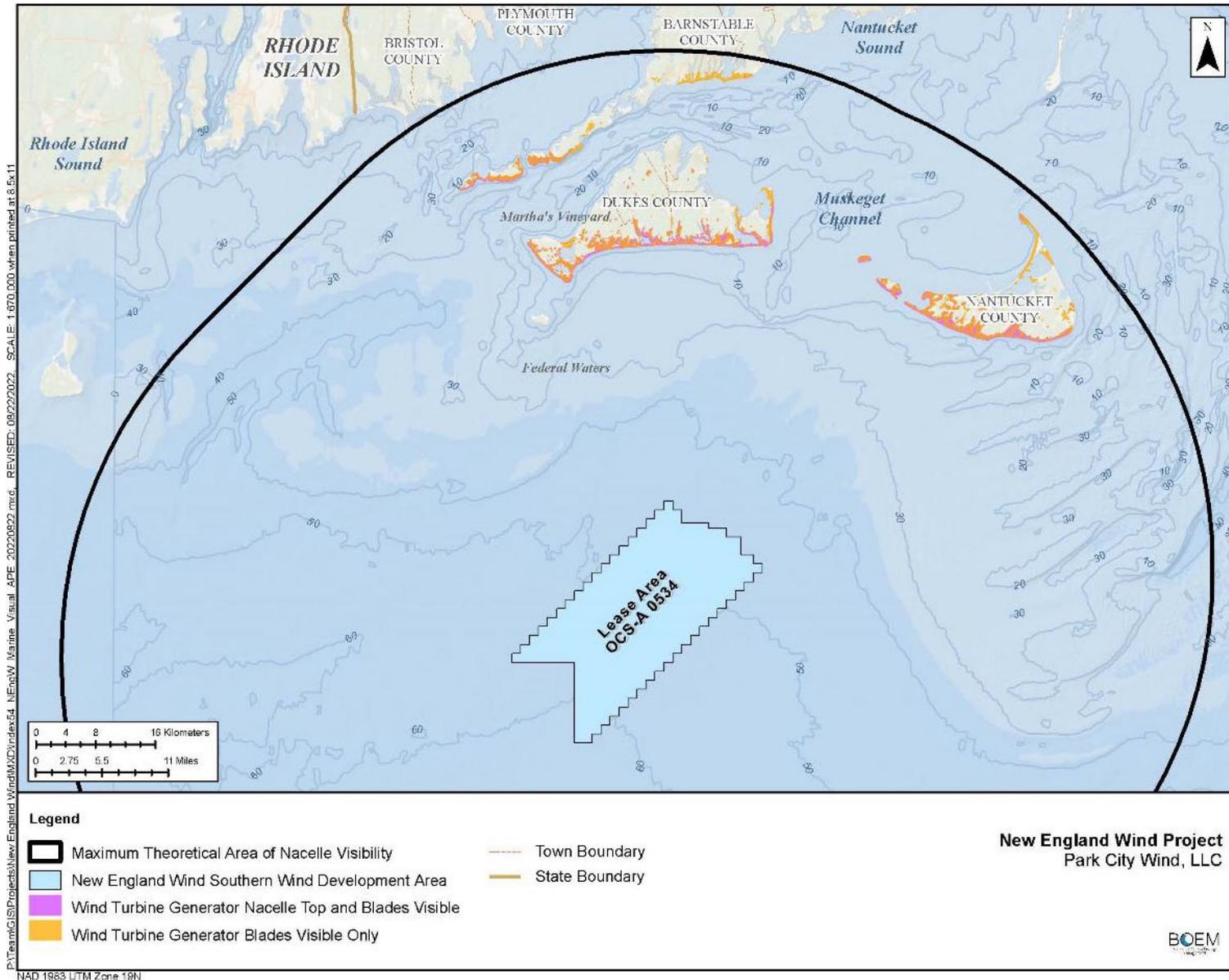


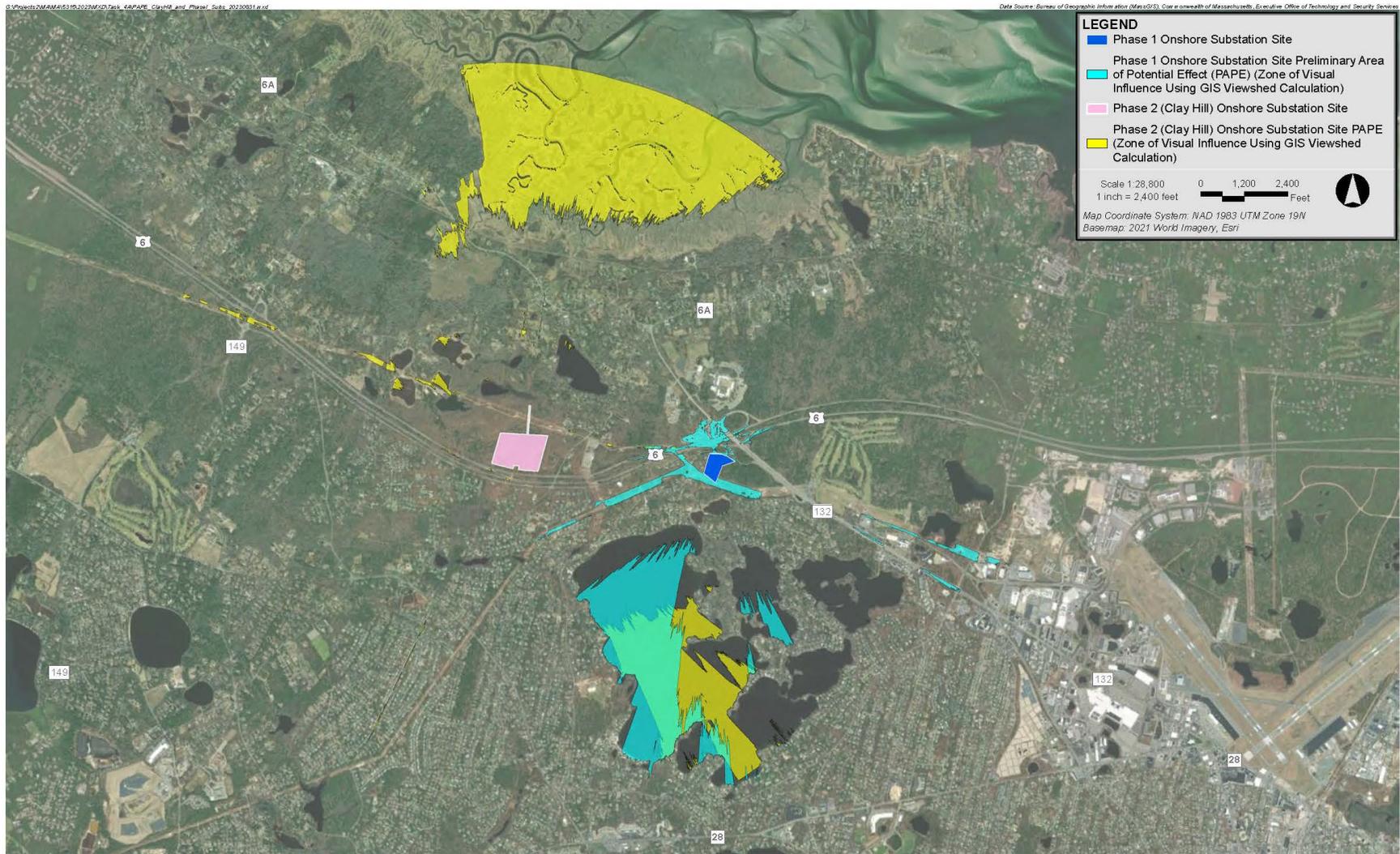
Figure J-9: Offshore Visual Area of Potential Effects

### **Onshore Area of Potential Effects for Direct Visual Effects**

The proposed undertaking onshore facilities would generate direct visual effects near the onshore substation sites and parcels and at the Centerville River crossing, if an aboveground crossing technique is used for the Phase 1 OECR (Figures J-10 and J-11). A 0.25-mile buffer surrounding these sites encompasses the potential visual effects from the proposed undertaking construction and operations. After construction, the applicant would plant vegetative screening on the western and northern boundaries of the 8 Shootflying Hill Road onshore substation site to limit visibility from existing residences. The eastern boundary would be developed into a perimeter access drive, and the abutting land is undeveloped wooded land. The entire site would have a perimeter access fence, and the western edge could have attenuation walls, if necessary.

In addition to the bridge structure itself, the Centerville River utility bridge would include a 9-foot anti-climb fence that would constitute the most visible element of the proposed bridge structure. Overall, the placement of the bridge adjacent to the existing bridge; as well as existing topography, vegetation, and the winding course of the river, would largely obscure it from view. A 100-foot buffer surrounding the existing Centerville River bridge has been defined as the visual APE for this portion of the proposed undertaking's footprint.

The Phase 2 Clay Hill substation is located along Route 6. The highway and mature vegetation surrounding the site would obscure most views of the substation. Geographic Information System viewshed modeling of the Clay Hill site suggested that within a 0.5-mile buffer surrounding the site, there would be limited visibility of the substation equipment except in select spots along Route 6. A 1,000-foot buffer surrounding the Clay Hill substation has been defined as the visual APE for this portion of the proposed undertaking's footprint.



**Figure J-10: Onshore Visual Area of Potential Effects, Barnstable Substation Sites**



## J.2 Steps Taken to Identify Historic Properties

### J.2.1 Technical Reports

The applicant has conducted onshore and offshore cultural resource investigations (Table J-2) to identify known and previously undiscovered cultural resources within the marine, terrestrial, and visual portions of the APE. BOEM has reviewed all of the reports summarized in Table J-2 and found them to be sufficient. Collectively, BOEM finds that these reports represent a good-faith effort to identify historic properties within the proposed undertaking’s APE. All of the documents summarized in Table J-2 will be shared with consulting parties and are hereby incorporated by reference.

**Table J-2: Summary of Cultural Resources Investigations and Cultural Resources for the Proposed Project**

Project Area/APE	Studies <sup>a</sup>	Summary of Findings
Offshore	Marine Archaeological Assessment Report for the New England Wind Offshore Wind Farm for OCS-A 0534 Construction and Operations Plan (COP Volume II-D; Epsilon 2023)	<ul style="list-style-type: none"> <li>The applicant’s cultural resources consultant conducted a marine archaeological resources assessment of high-resolution geophysical survey data collected by multiple non-intrusive survey campaigns by third party marine survey contractors within the SWDA.</li> <li>Three potential shipwrecks were identified within the SWDA, which are recommended for avoidance.</li> <li>Sixteen ancient submerged landform features were identified within the SWDA. Avoidance is recommended to the extent feasible.</li> </ul>
Offshore	Marine Archaeological Assessment Report for the OECC (COP Volume II-D, Appendix A; Epsilon 2023)	<ul style="list-style-type: none"> <li>The applicant’s cultural resources consultant conducted a marine archaeological resources assessment for the proposed OECC, as well as support for high-resolution geophysical surveys and geotechnical activities for the OECC.</li> <li>Survey activities were conducted over five seasons from 2016 to 2020 (extending to February 2021).</li> <li>One potential shipwreck was identified within the SWDA, which is recommended for avoidance.</li> <li>Sixteen ancient submerged landform features, identified as Channel Groups 8-18, 21-22, 29, and 30, are considered to belong to the Nantucket Sound TCP. Avoidance is recommended to the extent feasible.</li> </ul>
Offshore	Marine Archaeological Assessment Report in Support of the South Coast Variant Offshore Export Cable Corridor Construction and Operations Plan (COP Volume II-D, Appendix E; Epsilon 2023)	<ul style="list-style-type: none"> <li>The applicant’s cultural resources consultant conducted a marine archaeological resources assessment of the proposed SCV of the OECC, as well as to provide archaeological support for high-resolution geophysical marine surveys and subsequent geotechnical activities for the OECC.</li> <li>Two potential shipwrecks were identified within the SCV OECC, which are recommended for avoidance.</li> <li>Seventeen ancient submerged landform features were identified within the SCV OECC. Avoidance is recommended to the extent feasible.</li> </ul>
Onshore	Terrestrial Archaeology Reports: Phase 1 Report: Archaeological Reconnaissance Survey, Vineyard Wind 501 South Phase 1 Onshore Development Area, Potential Export Cable Routes and Proposed Substation (June 1, 2020) (COP Appendix III-G; Epsilon 2023)	<ul style="list-style-type: none"> <li>The Phase 1 Reconnaissance Report survey was conducted for the potential export cable routes and proposed substation project in the Town of Barnstable.</li> <li>The study area consisted of the preliminary APE and a 0.5-mile buffer.</li> <li>Archival research identified 16 archaeological sites, including 8 pre-Contact sites, 7 post-Contact sites, and 1 site multicomponent within and/or adjacent to the study area.</li> <li>Zones of high archaeological sensitivity were identified in the proposed landfall sites at Covell’s and Craigville beaches and the southern end of the OECC in Barnstable.</li> <li>Small zones of high sensitivity for pre-Contact sites are at the southern end of Long Pond and north shore of Wequaquet Lake.</li> <li>Zones of high and moderate sensitivity within the north portion of the APE are the substation at 8 Shootflying Hill Road, a section of existing utility ROW, and west of Wequaquet Lake.</li> </ul>

Project Area/APE	Studies <sup>a</sup>	Summary of Findings
		<ul style="list-style-type: none"> <li>• Zones of high sensitivity for post-Contact archaeological resources exist along the export cabling routes near an NRHP-listed property along Phinneys Lane.</li> <li>• Zones of moderate sensitivity for pre- and post-Contact resources are within the potential export cabling routes along the Eversource ROW; Shootflying Hill; Great Marsh and Old Stage Roads; Main, South Main, and Oak Streets; and Phinneys Lane.</li> <li>• Archaeological monitoring of Project construction activities was recommended within the identified zones of high and moderate archaeological sensitivity along existing roads in the proposed Project area. The consultant also recommended an intensive archaeological survey for the proposed substation at the 8 Shootflying Hill Road and Parcel #214-001.</li> </ul>
Onshore	Terrestrial Archaeology Report–Phase 1 Report: Intensive Archaeological Survey New England Wind Phase 1 (Park City Wind)/New England Wind 1 Connector Onshore Project Components (COP Appendix III-G; Epsilon 2023)	<ul style="list-style-type: none"> <li>• The Phase 1 Intensive Archaeological Survey was conducted in the locations of four proposed onshore components in the Town of Barnstable.</li> <li>• The four onshore proposed Project components are 6.7-acre and 1.0-acre parcels for a substation site at 6 and 8 Shootflying Hill Road, a trenchless crossing entry bore and a 1,960-square-foot temporary work zone for an OECR crossing of the Centerville River within a 0.28-acre residential lot at 2 Short Beach Road, a trenchless exit pit and 400-foot-long pipe laydown north of the Centerville River in the shoulder of Craigville Beach Road, and a 2.8-acre parcel (Parcel #214001) for a proposed trenchless crossing under Route 6.</li> <li>• Two pre-Contact find spots and a site were identified and recommended not eligible for NRHP listing.</li> <li>• No additional archaeological investigations are recommended. Archaeological monitoring of other components within areas of moderate or high archaeological sensitivity would be conducted during construction.</li> </ul>
Onshore	Technical Memorandum, Vineyard Wind 501 South Phase 2 Onshore Export Cable Routing and Substation Envelope, Cultural Resources Archaeological Due Diligence Study, June 1, 2020; Revised March 26, 2021 (COP Appendix III-G; Epsilon 2023)	<ul style="list-style-type: none"> <li>• Due diligence study of the Phase 2 OECR and substation envelope was conducted. Portions overlap with Phase 1 potential cable routes.</li> <li>• No NRHP-listed archaeological sites are within the study area.</li> <li>• Forty-two pre-Contact and 15 post-Contact sites have been identified within the study area.</li> <li>• The recorded pre-Contact sites can be considered to form four broad groups or clusters within different physiographic settings in the Phase 2 study area: Centerville Harbor, Cotuit/West Bay and North Bay, Santuit River, and the Race Lane and Wequaquet Lake clusters.</li> <li>• The post-Contact sites are within the Cotuit/West Bay and North Bay, Marstons Mills, Race Lane and Prospect Street, Wequaquet Lake, and Garretts Pond (north of Route 6) sections of Barnstable.</li> <li>• Based on the results of the due diligence review and the reconnaissance of the study area, the Phase 2 onshore export cable routing and substation envelope contains areas of moderate to high archaeological sensitivity.</li> </ul>
Onshore	Archaeological Reconnaissance Survey New England Wind Phase 2 (Commonwealth Wind)/New England Wind 2 Connector, December 2021, Revised April 2022 (COP Appendix III-G; Epsilon 2023)	<ul style="list-style-type: none"> <li>• The Phase 1 Reconnaissance Report survey was conducted for the Phase 2 connector and OECRs to identify known pre-Contact, Contact, and post-Contact cultural resources within 0.5-mile study area and the APE.</li> <li>• The proposed Project area for this survey consisted of two alternate cable landfall sites at Dowses Beach and Wianno Avenue and potential OECRs along existing roadways and utility ROWs in Barnstable.</li> <li>• Research identified no NRHP-listed archaeological site. Fifteen recorded pre-Contact and 13 post-Contact archaeological sites were identified within the OECR study area.</li> <li>• Of the research identified sites, four pre-Contact, five post-Contact, and one site with pre-Contact, Contact, and post-Contact components may</li> </ul>

Project Area/APE	Studies <sup>a</sup>	Summary of Findings
		<p>be located within and/or adjacent to the Phase 2 onshore export cabling route options.</p> <ul style="list-style-type: none"> <li>• A combined windshield/walkover survey was conducted to further refine zones of archaeological sensitivity initially delineated in a due diligence study for the Phase 2 potential OECRs.</li> <li>• Archaeological monitoring of Project construction areas within the staging areas required for horizontal directional drilling in the landfall area and during installation of OECR and other components within the identified zones of high and moderate archaeological sensitivity are recommended.</li> </ul>
Onshore	<p>Technical Memorandum, New England Phase 2 Potential Onshore Substation Sites, Cultural Resources Archaeological Due Diligence Study, September 2022 (COP Appendix III-G; Epsilon 2023)</p>	<ul style="list-style-type: none"> <li>• Due diligence study of the Phase 2 OECR and substation envelope was conducted. Portions overlap with Phase 1 potential cable routes.</li> <li>• No NRHP-listed archaeological sites are within the study area.</li> <li>• Forty-two pre-Contact and 15 post-Contact sites have been identified within the study area.</li> <li>• The recorded pre-Contact sites can be considered to form four broad groups or clusters within different physiographic settings in the Phase 2 study area: Centerville Harbor, Cotuit/West Bay and North Bay, Santuit River, and the Race Lane and Wequaquet Lake clusters.</li> <li>• The post-Contact sites are within the Cotuit/West Bay and North Bay, Marstons Mills, Race Lane and Prospect Street, Wequaquet Lake, and Garretts Pond (north of Route 6) sections of Barnstable.</li> <li>• Based on the results of the due diligence review and the reconnaissance of the study area, the Phase 2 Onshore Export Cable Routing and Substation Envelope contains areas of moderate to high archaeological sensitivity.</li> </ul>
Onshore	<p>New England Wind Phase 1 and Phase 2 Onshore Cabling Route and Substation New England Wind Offshore Wind Energy Project Procedures Guiding the Discovery of Unanticipated Archaeological Resources and Human Remains, February 2022, revised August 2022 (COP Appendix III-G; Epsilon 2023)</p>	<ul style="list-style-type: none"> <li>• This included procedures guiding the unanticipated discovery of cultural resources and human remains during the Phase 1 and Phase 2 onshore terrestrial elements of the proposed Project.</li> </ul>
Onshore	<p>Technical Memorandum, New England Wind Phase 2/New England Wind 2 Connector Potential Onshore Substation Site Parcel 1 and 2, December 2022 (COP Appendix III-G; Epsilon 2023)</p>	<ul style="list-style-type: none"> <li>• This included a due diligence study of Parcels 1 and 2 east of the Clay Hill onshore substation site.</li> <li>• No NRHP-listed archaeological sites are within the parcels.</li> <li>• Parcels 1 and 2 are within the Race Lane and Wequaquet Lake section of the proposed Project Phase 2 OECR envelope, which contains recorded pre-Contact and post-Contact sites.</li> <li>• Two pre-Contact and three post-Contact sites have been identified within the study area, defined as a 0.5-mile buffer around the parcels.</li> <li>• Based on the results of the due diligence review and the reconnaissance of the study area, Parcels 1 and 2 contain areas of low to high archaeological sensitivity.</li> </ul>
Onshore	<p>Technical Memorandum, New England Wind Phase 2 Potential Onshore Substation Parcel 5 and Additional Phase 2 Onshore Cable Route Segments, March</p>	<ul style="list-style-type: none"> <li>• This included a due diligence study of Parcel 5 west of the Clay Hill onshore substation and additional Phase 2 OECR segments under consideration.</li> <li>• No NRHP-listed archaeological sites are within the study area.</li> <li>• Parcel 5 and the additional Phase 2 onshore cable route segments are within the Race Lane and Wequaquet Lake section of the proposed Project Phase 2 OECR envelope, which contains recorded pre-Contact and post-Contact sites.</li> </ul>

Project Area/APE	Studies <sup>a</sup>	Summary of Findings
	2023 (COP Appendix III-G; Epsilon 2023)	<ul style="list-style-type: none"> <li>Two pre-Contact and three post-Contact sites have been identified within the 0.5-mile study area around Parcel 5.</li> <li>Based on the results of the due diligence review and the reconnaissance of the study area, Parcels 1 and 2 contain areas of high to moderate archaeological sensitivity, with some small zones of low sensitivity near the existing West Barnstable Substation.</li> </ul>
Onshore	Technical Report, Intensive (Locational) Archaeological Survey New England Wind Phase 2/ New England Wind 2 Connector Onshore Project Components Proposed Substation December 2022, Revised May 2023 (COP Appendix III-G; Epsilon 2023)	<ul style="list-style-type: none"> <li>This included an intensive, locational, archaeological survey of the 20.6-acre proposed Clay Hill onshore substation.</li> <li>A total of 53 pieces of pre-Contact, period unknown, cultural material were recovered from three sites.</li> <li>No subsurface archaeological features or diagnostic artifacts were found.</li> <li>The three sites are recommended as not eligible for listing in the State Register of Historic Places or the NRHP.</li> <li>No additional archaeological investigations were recommended.</li> </ul>
Onshore	2023 Intensive Archeological Surveys for New England Wind Phase 1 and 2 Facilities, July 2023 (COP Appendix III-G; Epsilon 2023)	<ul style="list-style-type: none"> <li>This included an intensive archaeological survey of the five proposed Project Phase 1 and 2 facilities.</li> <li>Pedestrian survey of the five proposed facilities found minimal evidence of prior disturbance.</li> <li>Two pre-Contact archaeological resources were found in subsurface testing.</li> <li>Neither find is recommended eligible for listing in the State Register of Historic Places or NRHP.</li> <li>The five proposed Phase 1 and Phase 2 onshore facilities would not affect any potentially significant archaeological resources; no additional archaeological investigations are recommended.</li> </ul>
Visual	New England Wind Visual Impact Assessment (COP Appendix III-H.a; Epsilon 2023)	<ul style="list-style-type: none"> <li>The applicant’s consultants conducted a visual impact assessment to identify potential visibility of the proposed Project’s offshore facilities and determine the difference in landscape quality with and without the proposed Project in place.</li> </ul>
Visual	New England Wind Historic Properties Visual Impact Assessment (COP Appendix III-H.b; Epsilon 2023)	<ul style="list-style-type: none"> <li>The Historic Properties Visual Impact Assessment identified a variety of historic properties that the proposed Project may affect. These include NHLs, properties listed on the NRHP, TCPs, properties on the Massachusetts State Register of Historic Places, and properties on the Inventory of Historic and Archaeological Assets of the Commonwealth.</li> <li>It was determined that the proposed Project would have a visual impact on the Gay Head Lighthouse and the Vineyard Sound and Moshup’s Bridge TCP. Additionally, BOEM determined the proposed Project would have a visual impact on the Nantucket Historic District NHL, the Nantucket Sound TCP, the Chappaquiddick Island TCP, the Gay Head–Aquinnah Shops Area, and the Edwin Vanderhoop Homestead (Aquinnah Cultural Center).</li> </ul>

APE = area of potential effects; BOEM = Bureau of Ocean Energy Management; COP = Construction and Operations Plan; NHL = National Historic Landmark; NRHP = National Register of Historic Places; OECC = offshore export cable corridor; OECC = onshore export cable route; ROW = right-of-way; SWDA = Southern Wind Development Area; TCP = traditional cultural property

<sup>a</sup> Not all reports are publicly available due to sensitive information.

## J.2.2 Consultation and Coordination with the Parties and Public

### J.2.2.1 Early Coordination

Since 2009, BOEM has coordinated OCS renewable energy activities offshore Massachusetts with its federal, state, local, and tribal government partners through its Intergovernmental Renewable Energy Task Force. Additionally, BOEM has met regularly with federally recognized tribes that may be affected

by renewable energy activities in the area since 2011, specifically during planning for the issuance of leases and review of site assessment activities. BOEM also hosts public information meetings to help keep interested stakeholders updated on major renewable energy milestones. Information pertaining to BOEM’s Massachusetts Intergovernmental Renewable Energy Task Force meetings is available at <https://www.boem.gov/Massachusetts-Renewable-Energy-Task-Force-Meetings/>, and information pertaining to BOEM’s overall stakeholder engagement efforts (separate from stakeholder engagement associated with individual offshore wind projects) is available at <https://www.boem.gov/renewable-energy/state-activities/public-information-meetings>.

### J.2.2.2 National Environmental Policy Act Scoping and Public Hearings

#### Public Scoping–First Round

On June 30, 2021, BOEM issued a Notice of Intent (NOI) to prepare an EIS consistent with NEPA regulations (42 USC § 4321 et seq.) to assess the potential impacts of the Proposed Action and alternatives (86 *Federal Register* 34782 [June 30, 2021]). The NOI commenced a public scoping process for identifying issues and potential alternatives for consideration in the EIS. During the formal scoping period, from June 30 through July 30, 2021, three virtual public scoping meetings were held on the dates as outlined in Table J-3.

**Table J-3: Public Scoping Meetings**

Date	Time
July 19, 2021	Presentation, public statements, and Q&A at 5:30 p.m. eastern daylight time
July 23, 2021	Presentation, public statements, and Q&A at 1:30 p.m. eastern daylight time
July 26, 2021	Presentation, public statements, and Q&A at 5:30 p.m. eastern daylight time

Q&A = questions and answers

During the formal scoping period, federal agencies, state and local governments, and the general public had the opportunity to submit written and oral comments that would help BOEM identify potential significant resources and issues, impact-producing factors, reasonable alternatives (e.g., size, geographic, seasonal, or other restrictions on construction and siting of facilities and activities), and potential mitigation measures to analyze in the EIS, as well as to provide additional information. BOEM also indicated its intent to use the NEPA process to fulfill its review obligations under Section 106 of the NHPA (54 USC § 300101 et seq.), in lieu of the procedures set forth in 36 CFR §§ 800.3 through 800.6 for the proposed undertaking, as permitted by 36 CFR § 800.8(c), which requires federal agencies to assess the effects of projects on historic properties. Additionally, BOEM informed its Section 106 consultation by seeking public comment and input through the NOI regarding the identification of historic properties or potential effects on historic properties from activities associated with approval of the COP.

#### Public Scoping–Second Round

On August 19, 2021, the applicant (then operating as Vineyard Wind, LLC) notified BOEM of the potential need to establish an OECC for Phase 2 of the proposed Project, beyond those previously identified in the COP. The applicant also notified BOEM of the proposed Project’s name change (Section J.1.1). On November 22, 2021, BOEM issued a Notice of Additional Public Scoping and Name Change to announce the project name change, and to assess the potential impacts of the Phase 2 OECC alternative routes (86 *Federal Register* 66334 [November 22, 2021]). This notice commenced a second public scoping process, from November 22 through December 22, 2021, that was similar in intent and purpose to the first scoping process, focusing on the newly proposed Phase 2 OECC alternative routes. Information, including a video presentation was posted to BOEM’s website at <https://www.boem.gov/renewable-energy/state-activities/new-england-wind-formerly-vineyard-wind-south> to provide supporting information on the Phase 2 OECC alternatives.

Through the NEPA scoping process, BOEM received a total of 17 comments regarding cultural, historical, and archaeological, or tribal resources during the public scoping periods. These are presented in BOEM's Scoping Summary Report for the proposed undertaking (BOEM 2022a), available at <https://www.boem.gov/renewable-energy/state-activities/new-england-wind-virtual-meeting-room>.

### **J.2.2.3 National Historic Preservation Act Section 106 Consultations**

After receipt of the COP submission from the applicant, BOEM contacted 63 governments and organizations, providing information on the proposed undertaking and inviting each of them to be a consulting party to the NHPA Section 106 review of the COP (Attachment J-2). Entities that responded positively to BOEM's invitation or were subsequently made known to BOEM and added as consulting parties are listed in Attachment J-2. BOEM initiated NHPA Section 106 consultation with letters to these entities on June 14, 2021. BOEM used this correspondence to also notify these parties of the intention to use the NEPA substitution process for Section 106 consultation purposes, as described in 36 CFR § 800.8(c), and provided its *National Environmental Policy Act (NEPA) Substitution for Section 106 Consulting Party Guide* (BOEM 2021a). Additional notifications were sent on November 22, 2021, to describe the proposed Project design changes and project name change, following the additional scoping period. Additionally, parties were again invited to participate after BOEM held an initial NHPA Section 106 consultation meeting virtually on March 3, 2022.

BOEM has held the following government-to-government consultation meetings as of the time of publication of this Finding:

- August 13, 2021: with the Delaware Nation, the Delaware Tribe of Indians, the Mashantucket (Western) Pequot Tribal Nation, the Mashpee Wampanoag Tribe of Massachusetts, and the Wampanoag Tribe of Gay Head (Aquinnah);
- November 4, 2021: with the Delaware Nation, the Mashantucket (Western) Pequot Tribal Nation, the Mashpee Wampanoag Tribe of Massachusetts, and the Wampanoag Tribe of Gay Head (Aquinnah);
- May 2, 2022, and June 2, 2022: with the Wampanoag Tribe of Gay Head (Aquinnah);
- May 26, 2022: with the Mashantucket (Western) Pequot Tribal Nation, the Mashpee Wampanoag Tribe of Massachusetts, and the Wampanoag Tribe of Gay Head (Aquinnah); and
- June 2, 2022: the BOEM Director met in-person with the Mashpee Wampanoag Tribe of Massachusetts.

In correspondence and consultation meetings, BOEM requested information from consulting parties on defining the APE and identifying historic properties that may be potentially affected by the proposed undertaking. BOEM held an initial Section 106 virtual consultation meeting with federally recognized tribes and consulting parties on March 3, 2022, introducing the proposed Project, NEPA substitution in the Section 106 process, the preliminary APE, Section 110(f) consultation requirements, and BOEM's compliance with these requirements. On December 16, 2022, the historic properties assessment/analysis reports (Marine Archaeological Resources Assessment, Terrestrial Archaeological Resources Assessment, Historic Resources Visual Effects Assessment, and Cumulative Historic Resources Visual Effects Assessment) were distributed to federally recognized tribes and consulting parties. BOEM held a second Section 106 virtual consultation meeting with federally recognized tribes and consulting parties on February 8, 2023, reviewing the historic properties assessments, delineation of the APE, and updated Section 106 schedule. On March 23, 2023, BOEM held a separate second Section 106 virtual consultation meeting with federally recognized tribes who were not able to attend the February 8, 2023, meeting.

On May 26, 2023, BOEM provided the edited Finding of Adverse Effect, Historic Preservation Treatment Plans, and MOA along with comment letters received to date for federally recognized tribes

and consulting parties' review with comments requested by June 25, 2023. BOEM held a third Section 106 virtual consultation meeting with federally recognized tribes and consulting parties on June 15, 2023, reviewing the APE summary, Finding of Adverse Effect, proposed Historic Preservation Treatment Plans and mitigations, revised MOA, and the updated Section 106 schedule. On July 18, 2023, BOEM provided the federally recognized tribes and consulting parties a summary of the comments received for the review periods ending February 21, 2023, and June 25, 2023, from consulting parties under the NHPA Section 106 consultation process for the proposed Project and their responses. Meeting summaries and access to recordings of the meetings were made available to consulting parties following each meeting. A fourth Section 106 consultation meeting was held on September 14, 2023 providing consulting parties with updates to the proposed Project, summaries of edits to documents, and opportunities to provide comments on the revised MOA and Historic Preservation Treatment Plans. A fifth Section 106 consultation meeting was held on December 13, 2023, reviewing the Terrestrial Archaeological Resources Assessment addendum updates and revised MOA.

BOEM will continue meeting with consulting parties to take into account the effects of the undertaking on historic properties and to reach resolution of adverse effects through preparation and implementation of a MOA.

### **J.3 Application of the Criteria of Adverse Effect**

The Criteria of Adverse Effect under NHPA Section 106 (36 CFR § 800.5(a)(1)) states that an undertaking has an adverse effect on a historic property:

when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association...Adverse Effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Adverse effects on historic properties include, but are not limited to (36 CFR § 800.5(a)(2)):

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

Based on the studies conducted to identify historic properties within the proposed Project's marine APE, terrestrial APE, and visual APE and the assessment of effects upon those properties determined with

consulting parties, BOEM has found the proposed Project would have an adverse effect on seven historic properties within the visual APE and 49 ancient submerged landform features identified within the marine APE, including the SWDA, OECC, and SCV. The assessment of visual effects considers the findings of the applicant's visual simulations and visual effects simulations of the proposed Project (COP Appendix III-H.b; Epsilon 2023), as well as BOEM's Cumulative Historic Resources Visual Effects Assessment (BOEM 2022b), which evaluated the visual effects of the proposed undertaking in relation to the visual effects from all other offshore wind projects in the Rhode Island and Massachusetts Lease Areas. The assessments in this section consider the four criteria established for potential inclusion in the National Register of Historic Places (NRHP) (NPS 1995), which identify historic properties:

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

### **J.3.1 Assessment of Effects on Historic Properties in the Visual Area of Potential Effects**

#### **J.3.1.1 Gay Head Lighthouse, Martha's Vineyard**

Gay Head Lighthouse is located on the southwestern most portion of the island of Martha's Vineyard, marking Devil's Bridge rocks, the shoals of the south shore of the island, and the entrance to Vineyard Sound from Buzzard's Bay on the route to Boston Harbor from the south. It was listed on the NRHP in 1987 as part of the Lights of Massachusetts Thematic Resources Area and is significant under the NRHP's Criteria A and C as a historic maritime structure and aid to navigation (DiStefano and Salzman 1981; Massachusetts Historical Commission 2015; and COP Section 6.2, Appendix III-H.b; Epsilon 2023).

Constructed in 1855-1856, the Gay Head Lighthouse was once one of the ten most important lights on the Atlantic Coast and originally contained one of the country's first Fresnel lenses. The brick and sandstone tower meets Criterion A for its association with the island's maritime history as an aid to navigation. The structure also meets Criterion C as an example of a 19th century maritime structure constructed of bricks using the clay from the Gay Head Cliffs. The 1856 lighthouse, a brick tower 45 feet in height, is the only remaining structure at the site; the original brick Keeper's House was replaced by a wooden house in 1906 and was torn down in 1961. Although the lighthouse was moved from its original location 150 feet east in 2015 and its setting and location are partially compromised, the structure retains integrity of design, material, workmanship, feeling, and association (DiStefano and Salzman 1981; Massachusetts Historical Commission 2015; and COP Section 6.2, Appendix III-H.b; Epsilon 2023).

The applicant's visual effects study concluded that the proposed Project would adversely affect the maritime setting of the Gay Head Lighthouse and its viewshed through the introduction of new elements out of character with the historic setting, feeling, and association, thereby diminishing its integrity. The applicant's analysis of the visibility of the proposed Project used the algorithm presented in OCS Study BOEM 2017-037 (BOEM 2017b). Based on the applicant's analysis, the project would be visible from the Gay Head Lighthouse, on average, 18 percent of the time annually (36 percent during the day and nearly 0 percent at night annually, due to use of an aircraft detection and lighting system [ADLS]) (COP Appendix III-H.b, Section 4.2; Epsilon 2023).

BOEM's (2022b) study of cumulative visual effects from offshore wind projects concluded that the proposed undertaking comprised approximately 17 percent of all theoretically visible WTG blade tips. The study also analyzed the number of WTGs theoretically visible from the Gay Head Lighthouse using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that the proposed WTGs would comprise none of the WTGs visible within 20 nautical miles (23 miles), 24 percent of all WTGs visible at 20 to 30 nautical miles (23 to 34.5 miles), and 15 percent of all WTGs visible beyond 30 nautical miles (34.5 miles). In clear weather, proposed WTGs would be visible from the Gay Head Lighthouse and the surrounding property in views to the southeast. In views to the south, proposed WTGs would be theoretically visible in the far left of the observer's field of view and would be less noticeable to the casual observer than WTGs associated with other projects located in closer proximity to the Gay Head Lighthouse. The proposed WTGs would disappear from the field of view as the observer turns to the west. Overall, the undertaking would contribute minimally to the cumulative visual effects of offshore wind on the Gay Head Lighthouse (BOEM 2022b; COP Appendix III-H.b; Epsilon 2023).

In summary, other projects' WTGs would occupy the majority of the horizon line, and all of the open ocean horizon visible in 124-degree southward views from the Gay Head Lighthouse. WTGs associated with other projects are situated in front of the proposed Project's WTGs. While the proposed Project's WTGs would contribute to visual impacts on clear days by creating additional visual clutter on the southeast horizon, they would be visible less often due to weather conditions, and less visually prominent than other projects' WTGs due to distance (BOEM 2022b).

### **J.3.1.2 Edwin Vanderhoop Homestead (Aquinnah Cultural Center)**

The Edwin Vanderhoop Homestead (also known as the Aquinnah Cultural Center; GAY.40/NRHP06000784) is a late 19th century two-story wood-frame, vernacular residence constructed sometime between 1890 and 1897. In 2006, the Edwin Vanderhoop Homestead was restored and opened as the Aquinnah Cultural Center. The property is eligible under Criteria A and C and is significant at the local level in the areas of architecture, Native American ethnic history, and social history.

The applicant's assessment of the visual effects of the proposed Project on the Edwin Vanderhoop Homestead/Aquinnah Cultural Center found that the setting, as it related to Criterion C, would be affected through the introduction of new elements; however, the view from the Homestead toward the SWDA is partially obstructed by topography and mature tree growth to the southeast. The view of the SWDA is possible to the south.

The applicant's visual effects study concluded that the proposed Project would adversely affect the maritime setting of the Edwin Vanderhoop Homestead and its viewshed through the introduction of new elements out of character with the historic setting, feeling, and association, thereby diminishing its integrity under Criterion C. (COP Appendix III-H.b; Epsilon 2023).

BOEM has concluded that the undertaking adversely affects the maritime setting of the Edwin Vanderhoop Homestead (Aquinnah Cultural Center) and its viewshed through the introduction of new ocean-founded visual elements out of character with the historic setting, feeling, and association, thereby diminishing its integrity. Existing topography and mature tree growth to the south and west partially obstruct the ocean view.

Based on reported visibilities at Martha's Vineyard Airport accounting for the use of ADLS, the applicant estimated that the ocean view from the Edwin Vanderhoop Homestead (Aquinnah Cultural Center), to the south and the west would be obstructed by the undertaking's new ocean-founded visual elements less than 42 percent of the time annually (COP Appendix III-H.b, Section 6.2; Epsilon 2023). Using the analysis for Gay Head Lighthouse, approximately 855 feet north of the Vanderhoop property, and using BOEM's

(2017b) visibility algorithm, the proposed Project would be visible at least 18 percent of the time annually (36 percent during the day and nearly 0 percent at night annually, due to use of ADLS) (COP Appendix III-H.b, Section 4.2; Epsilon 2023).

BOEM's (2022b) study of cumulative visual effects from offshore wind projects concluded that for the Edwin Vanderhoop Homestead (Aquinnah Cultural Center), the proposed undertaking comprised approximately 17 percent of all theoretically visible WTG blade tips. The study also analyzed the number of WTGs theoretically visible from the Edwin Vanderhoop Homestead (Aquinnah Cultural Center) using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that the proposed WTGs would comprise none of the WTGs visible within 20 nautical miles (23 miles), 24 percent of all WTGs visible at 20 to 30 nautical miles (23 to 34.5 miles), and 15 percent of all WTGs visible beyond 30 nautical miles (34.5 miles). In clear weather, proposed WTGs would be visible from the Edwin Vanderhoop Homestead (Aquinnah Cultural Center) and the surrounding property in views to the southeast. In views to the south, proposed WTGs would be theoretically visible in the far left of the observer's field of view and would be less noticeable to the casual observer than WTGs associated with other projects located in closer proximity to the Homestead. The proposed WTGs would disappear from the field of view as the observer turns to the west. Overall, the undertaking would contribute minimally to the cumulative visual effects of offshore wind on Edwin Vanderhoop Homestead (Aquinnah Cultural Center) (BOEM 2022b; COP Appendix III-H.b; Epsilon 2023).

In summary, other projects' WTGs would occupy the majority of the horizon line, and all of the open ocean horizon visible in 124-degree southward views from the Edwin Vanderhoop Homestead (Aquinnah Cultural Center). WTGs associated with other projects are situated in front of the undertaking's WTGs. While the proposed Project's WTGs would contribute to visual impacts on clear days by creating additional visual clutter on the southeast horizon, they would be visible less often due to weather conditions, and less visually prominent than other projects' WTGs due to distance (BOEM 2022b).

### **J.3.1.3 Gay Head–Aquinnah Shops Area**

A cluster of nine commercial buildings, the Gay Head–Aquinnah Shops Area (Aquinnah Shops Area; GAY.B), was constructed during the early to mid-20th century. The buildings overlook the Atlantic Ocean at the western tip of a circle formed by the intersection of Lighthouse Road and South Road and line the north and south sides of the walkway leading up to the Clay Cliffs of Aquinnah Scenic Overlook. The buildings form a U-shape and were constructed due to the increase of tourism to the cliffs that began during the early 20th century.

The applicant's visual effects study concluded that the proposed Project would adversely affect the maritime setting of the Gay Head–Aquinnah Shops Area and its viewshed through the introduction of new elements out of character with the historic setting, feeling, and association, thereby diminishing its integrity under Criterion C (Epsilon 2023).

BOEM has concluded that the undertaking would adversely affect the maritime setting of the Aquinnah Shops Area and its viewshed through the introduction of new ocean-founded visual elements that are out of character with the historic setting, feeling, and association, thereby diminishing its integrity. The undertaking is partially visible to the west from the Aquinnah Shops Area, owing to the Aquinnah Cliffs located to the north, west, and south of the Gay Head–Aquinnah Shops Area. Existing power lines and other modern elements already within the foreground of portions of the view are not located on the ocean, the association and historic feeling of which is integral to this property's setting; thus, their existence does not serve to remove nor offset the effect on the property resulting from the introduction of new

ocean-founded visual elements in the proposed Project COP (Appendix III-H.b, Section 6.2; Epsilon 2023)(COP Appendix III-H.b, Section 6.2; Epsilon 2023).

Based on reported visibilities at Martha’s Vineyard Airport and accounting for the use of ADLS, the applicant estimated that the ocean view from the Aquinnah Shops Area to the south and the west would be obstructed by the undertaking’s new ocean-founded visual elements less than 42 percent of the time annually (COP Section 4.2, Appendix III-H.b; Epsilon 2023). Using the additional analysis for Gay Head Lighthouse, approximately 706 feet north-northeast of the Aquinnah Shops Area property, and using BOEM’s (2017b) visibility algorithm, the undertaking would be visible at least 18 percent of the time annually (36 percent during the day and nearly 0 percent at night annually, due to use of ADLS) (COP Section 4.2, Appendix III-H.b; Epsilon 2023).

BOEM’s (2022b) study of cumulative visual effects from offshore wind projects concluded that for the Aquinnah Shops Area, the undertaking comprised approximately 17 percent of all theoretically visible WTG blade tips. The study also analyzed the number of WTGs theoretically visible from the Aquinnah Shops Area using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that the proposed WTGs would comprise none of the WTGs visible within 20 nautical miles (23 miles), 24 percent of all WTGs visible at 20 to 30 nautical miles (23 to 34.5 miles), and approximately 15 percent of all WTGs visible beyond 30 nautical miles (34.5 miles). In clear weather, proposed WTGs would be visible from the Aquinnah Shops Area and the surrounding property in views to the southeast. In views to the south, proposed WTGs would be theoretically visible in the far left of the observer’s field of view and would be less noticeable to the casual observer than WTGs associated with other projects located in closer proximity to the Aquinnah Shops Area. The undertaking’s WTGs would disappear from the field of view as the observer turns to the west. Overall, the undertaking would contribute minimally to the cumulative visual effects of offshore wind on Aquinnah Shops Area (BOEM 2022b; COP Appendix III-H.b; Epsilon 2023).

In summary, other projects’ WTGs would occupy the majority of the horizon line, and all of the open ocean horizon visible in 124-degree southward views from the Aquinnah Shops Area. WTGs associated with other projects are situated in front of the undertaking’s WTGs. While the proposed Project’s WTGs would contribute to visual impacts on clear days by creating additional visual clutter on the southeast horizon, they would be visible less often due to weather conditions, and less visually prominent than other projects’ WTGs due to distance (BOEM 2022b).

#### **J.3.1.4 Nantucket Historic District National Historic Landmark**

Situated approximately 30 miles south of Cape Cod, Massachusetts, the Nantucket District NHL comprises the entirety of the islands of Nantucket, Tuckernuck, and Muskeget. Combined, the three islands occupy approximately 28,000 acres, and contain 5,027 contributing resources (which constitute approximately half of the total number of contributing and non-contributing resources) located within the historic district. In 1955, Nantucket became one of the first local historic districts in Massachusetts and one of the earliest local historic districts in the nation through special legislation initiated by the town and enacted by the Commonwealth of Massachusetts. The Nantucket District NHL was listed on the NRHP in 1967, with several more recent updates, notably in 1975 and 2012 (Chase-Harrell and Pfeiffer 2012; Heintzelman 1975; and COP Appendix III-H.b, Section 6.3; Epsilon 2023).

According to the 2012 Landmark nomination,

The 1966 National Historic Landmark nomination for Nantucket focused entirely on its association with the American whaling industry (NHL Criterion 1) and the remarkable survival of the architecture and ambiance of an early whaling port (NHL Criterion 4), and the period of significance ended with the decline of whaling on

Nantucket. While whaling built Nantucket, other factors preserved it; tourism replaced whaling as the island's economic mainstay, and historic preservation took early root on the island. With the passage of time, the importance of these factors in preserving the island's character has become apparent, and it is the purpose of this update to establish the national significance of tourism and historic preservation as well as whaling on Nantucket and to extend the period of significance to 1975, when the last element of governmental protection of the island was set in place by the expansion of the National Historic Landmark District to include the entirety of the island. This expansion followed the 1971 expansion of the local historic district to encompass the entire island as well as the outlying islands of Tuckernuck and Muskeget. These updates also recognize Nantucket's Native American and African-American communities and the important roles that they played in the whaling industry and the social history of the island (Chase-Harrell and Pfeiffer 2012).

The Nantucket District NHL is significant under Criterion A for its association with the development of Nantucket and the whaling industry, Criterion C for architectural examples including Georgian, Federal, Greek Revival, Italianate, Shingle and Colonial Revival, and Criterion D for the potential archaeological remains associated with Native American pre- and post-Contact use as well as historical archaeology. Despite modern construction and intrusions, it retains integrity of location, design, setting, material, workmanship, feeling, and association (Chase-Harrell and Pfeiffer 2012; Heintzleman 1975; and COP Section 6.3, Appendix III-H.b; Epsilon 2023).

The applicant's assessment of the visual effects of the proposed Project on the Nantucket District NHL found that the maritime setting of the Nantucket District NHL and its viewshed would be altered through the introduction of new elements; however, the applicant concluded that the undertaking would ultimately have no adverse effect on the Nantucket District NHL (COP Appendix III-H.b; Epsilon 2023). Specifically, the applicant found that the proposed Project would not be distinguishable, even in ideal weather conditions. Views to the southern direction would be affected, but the WTGs would appear as cloud shadows or other atmospheric phenomena (COP Appendix III-H.b; Epsilon 2023).

BOEM has concluded that the undertaking would adversely affect the Nantucket District NHL through the introduction of new ocean-founded visual elements that are out of character with the historic setting, feeling, and association of the resource, thereby diminishing its integrity. While the proposed undertaking is only partially visible from the Nantucket District NHL, and meteorological conditions would often obscure the view of the proposed Project, making it visible primarily during ideal weather conditions, the existence of the undertaking's visual elements ultimately are out of character and thus adversely affect the NHL.

Based on reported visibilities at Nantucket Memorial Airport and accounting for the use of ADLS, the applicant estimated that the ocean view from the Nantucket District NHL would be obstructed by the undertaking's new ocean-founded visual elements less than 37 percent of the time annually (COP Appendix III-H.b, Section 4.2; Epsilon 2023). Based on BOEM's (2017b) visibility algorithm, the proposed Project would be visible from the Nantucket District NHL approximately 14 percent of the time annually (27 percent during the day and nearly 0 percent at night due to use of ADLS (COP Appendix III-H.b, Section 4.2; Epsilon 2023)

BOEM's (2022b) study of cumulative visual effects from offshore wind projects concluded that for the Nantucket District NHL, the undertaking comprised between 15 and 21 percent of all theoretically visible WTG blade tips, while theoretically visible nacelle-top lights from the proposed Project would comprise 0 to 25 percent of total theoretically visible nacelle-top lights, depending on location. The study also analyzed the number of WTGs theoretically visible from the Nantucket District NHL using three different

tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that none of the proposed Project's WTGs would be within 20 nautical miles (23 miles) of the Nantucket District NHL, while proposed Project WTGs would comprise 26 percent of all WTGs visible within 20 to 30 nautical miles (23 to 34.5 miles), and 13 percent of the WTGs visible beyond 30 nautical miles (34.5 miles). The WTGs associated with the undertaking would be visible from the Nantucket District NHL in views to the southwest. Views are mostly limited to beachfront areas, and views from the interior portion of the NHL would be rare due to screening by topography and/or vegetation. An observer can experience panoramic views of the open ocean from the beachfront and would also potentially experience views of WTGs from more than one project as they travel between the northwest and southeast shoreline. Overall, the undertaking would contribute less than other projects to the cumulative visual effects of offshore wind on Nantucket District NHL. Also, WTGs would not be visible from approximately 80 percent of the Nantucket District NHL, which means only about 20 percent of the island would experience adverse visual effects on their southern viewshed (COP Appendix III-H.b; Epsilon 2023).

In summary, WTGs from other projects would occupy a greater extent of the horizon line and would be closer and more frequently visible than the undertaking's WTGs due to atmospheric and weather conditions. None of the proposed undertaking's WTGs would be in the nearest distance zone (10 to 20 nautical miles [11.5 to 23 miles]). All of the undertaking's WTGs would be behind WTGs from other projects and would be visible less frequently and less noticeable to the casual observer in clear conditions (BOEM 2022b).

### **J.3.1.5 Chappaquiddick Island Traditional Cultural Property**

BOEM determined Chappaquiddick Island to be potentially eligible for listing on the NRHP as a TCP (BOEM 2020b). The designation does not contain specific boundaries. BOEM found that the TCP is significant under Criterion A for "its association with and importance in maintaining the continuing cultural identity of the community" (BOEM 2020b). BOEM considers eight locations to comprise contributing elements of the Chappaquiddick Island TCP. Of these eight areas, six are considered to be within the APE. The traditional viewsheds would be altered by the introduction of human-made structures where no structures previously existed.

The applicant's assessment of the visual effects of the proposed Project on the Chappaquiddick Island TCP found that the setting would be minimally altered through the introduction of new elements, and specifically, the undertaking would only be visible from a portion of Chappaquiddick Island, as well as Norton Point and Katama Bay. Views to the north, east, and west from these locations would not be affected. The applicant stated that views of the proposed Project would be intermittent and only possible during ideal weather conditions, where the proposed Project would be barely distinguishable at the horizon line, especially without foreknowledge of the proposed Project.

Based on reported visibilities at Martha's Vineyard Airport and accounting for the use of ADLS, the applicant estimated that the ocean view from the Chappaquiddick Island TCP would be obstructed by the proposed undertaking's new ocean-founded visual elements less than 42 percent of the time in a given year (COP Appendix III-H.b; Section 4.2; Epsilon 2023). By comparison, using BOEM's (2017b) visibility algorithm, the proposed Project would be visible from the Chappaquiddick Island TCP approximately 22 percent of the time annually (43 percent during the day and nearly 0 percent at night due to the use of ADLS) (COP Appendix III-H.b, Section 4.2; Epsilon 2023).

BOEM has concluded that the TCP's traditional viewshed would be adversely affected through the introduction of the undertaking's new ocean-founded visual elements that are out of character with the historic setting, feeling, and association of the resource, thereby diminishing its integrity.

BOEM's (2022b) study of cumulative visual effects from offshore wind projects that the proposed WTGs would comprise between 6 and 16 percent of all visible WTGs and 20 to 23 percent of total nacelle tops theoretically visible from the Chappaquiddick Island TCP (which includes the Chappaquiddick Lots). This study also analyzed the number of WTGs theoretically visible from the Chappaquiddick Island TCP using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that the proposed WTGs would comprise none of the proposed WTGs within 10 to 20 nautical miles (11.5 to 23 miles), 27 percent of all WTGs visible at 20 to 30 nautical miles (23 to 34.5 miles), and 10 percent of all WTGs visible beyond 30 nautical miles (34.5 miles). An observer would be able to experience panoramic views of the ocean from the beachfront and some inland waters of the Chappaquiddick Island TCP. In clear weather, the WTGs associated with the undertaking would be visible from portions of the Chappaquiddick Island TCP in views to the south. Views of undertaking and other projects' WTGs from the interior of the TCP would be rare, due to screening by topography and/or vegetation. The proposed WTGs and other offshore wind project WTGs would appear similar as the observer moves between the east and west beachfront areas of the property. Overall, in clear conditions the undertaking would contribute approximately less than a quarter of the cumulative visual effects of offshore wind development on Chappaquiddick Island TCP. However, although WTGs would not be visible from 41 percent of the Chappaquiddick Island TCP, 59 percent of the island would have adverse visual effects on their southern viewshed (BOEM 2022b; COP Appendix III-H.b; Epsilon 2023).

In summary, WTGs from other projects would occupy a greater extent of the horizon line and are situated in front of the proposed Project WTGs. The proposed Project's WTGs would occupy a smaller extent of the horizon line and would be less noticeable to other project WTGs in a similar distance zone due to proximity. Both proposed Project and other project WTGs are unlikely to be missed by the casual observer, but the overall view would still be dominated by sea and sky (BOEM 2022b).

### **J.3.1.6 Vineyard Sound and Moshup's Bridge Traditional Cultural Property**

The Vineyard Sound Moshup's Bridge TCP is considered eligible for listing in the NRHP under all four Criteria (A through D).

The maritime setting of Vineyard Sound and Moshup's Bridge TCP is an integral element to the resource's historical and cultural significance. The majority of the inland area of the TCP would have no visibility of the proposed undertaking, as it would be limited by the topographic changes and mature vegetation cover. The nearest WTG or ESP position is located approximately 16.8 miles to the south from the TCP. The proposed undertaking would be visible across the seascape portion of the TCP. Therefore, the proposed Project would have an adverse effect on the Vineyard Sound and Moshup's Bridge TCP by changing the character of the TCP's traditional setting. Finally, the proposed undertaking would only be visible from the TCP's southern view. All other views from the TCP would remain unaffected (COP Appendix III-H.b, Section 4.2; Epsilon 2023).

Based on reported visibilities at Martha's Vineyard Airport and accounting for the use of ADLS, the ocean view from the Vineyard Sound and Moshup's Bridge TCP would be obstructed by the proposed undertaking's new ocean-founded visual elements less than 42 percent of the time annually (COP Section 4.2, Appendix III-H.b; Epsilon 2023). By comparison using the additional analysis for Gay Head Lighthouse, and using BOEM's (2017b) visibility algorithm the proposed Project would be visible at least 18 percent of the time annually (36 percent during the day and nearly 0 percent at night due to use of ADLS) (COP Appendix III-H.b; Epsilon 2023).

BOEM's (2022b) study of cumulative visual effects from offshore wind projects evaluated the Vineyard Sound and Moshup's Bridge TCP from a viewpoint on the cliffs near Squibnocket Point. BOEM's study

concluded that the undertaking comprised 15 percent of all theoretically visible WTG blade tips from Squibnocket Point and 16 percent of theoretically visible nacelle-top lights, depending on viewer location. The study also analyzed the number of WTGs theoretically visible from the Vineyard Sound and Moshup's Bridge TCP using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that the proposed undertaking's WTGs would comprise 3 percent of all WTGs visible at 10 to 20 nautical miles (11.5 to 23 miles), 29 percent of all WTGs visible at 20 to 30 nautical miles (23 to 34.5 miles), and 4 percent of all WTGs visible beyond 30 nautical miles.

No visual simulations were prepared specifically for the Vineyard Sound and Moshup's Bridge TCP, but the Aquinnah Cultural Center, used for the analysis point of the Gay Head Lighthouse due to its distance of less than 0.2 mile and comparable views of the proposed Project and other offshore wind projects. Squibnocket Point is approximately 4.5 miles closer to the undertaking than the Aquinnah Cultural Center and would have unobstructed ocean views of the proposed WTGs. When viewed from Squibnocket Point, the WTGs from the undertaking and other projects would be marginally larger and more prominent than if viewed from the Aquinnah Cultural Center. An observer would be able to experience panoramic views of the ocean from the bluffs at Squibnocket Point. In clear weather, this view would include the proposed undertaking's WTGs to the southeast. However, WTGs from other projects would be in between the observer and the proposed Project's WTGs. Views from the proposed undertaking and other projects' WTGs from the interior of the TCP would be rare, due to screening by topography and/or other vegetation. The proposed undertaking's WTGs and other offshore wind project WTGs would appear similar as the observer moves across the bluffs along Squibnocket Point. Overall, the undertaking would contribute less than one-quarter of the cumulative visual effects of offshore wind on the TCP (BOEM 2022b; COP Appendix III-H.b; Epsilon 2023).

In summary, other projects' WTGs would occupy the majority of the horizon line and the entirety of the horizon line visible in 124-degree southward views from Squibnocket Point. WTGs associated with other projects are situated in front of the undertaking's WTGs. While the proposed undertaking's WTGs would contribute to visual impacts on clear days by creating additional visual clutter on the southeast horizon, they would be visible less often due to weather conditions, and less visually prominent than other projects' WTGs due to distance and the proposed undertaking's location behind WTGs from other projects. The WTGs from the proposed undertaking and other projects would be plainly visible to an observer, but the overall view would still be dominated by sea and sky (BOEM 2022b).

### **J.3.1.7 Nantucket Sound Traditional Cultural Property**

The Nantucket Sound TCP has been determined eligible for listing in the NRHP under all four criteria (A through D); however, the boundary has not been fully defined.

The applicant's assessment of the visual effects of the proposed Project on the Nantucket Sound TCP found that the setting would be minimally altered through the introduction of new elements, and specifically, the undertaking would only be visible intermittently from the southern end of Nantucket Sound. Views to the north, east, and west from Nantucket Sound would not be affected. The applicant stated that views of the proposed Project would be intermittent and only possible during ideal weather conditions, where the proposed Project would be slightly visible above the horizon line.

Based on reported visibilities at Martha's Vineyard Airport and accounting for the use of ADLS, the applicant estimated that the ocean view from the Nantucket Sound TCP would be obstructed by the proposed undertaking's new ocean-founded visual elements less than 42 percent of the time in a given year (COP Appendix III-H.b; Section 4.2; Epsilon 2023). By comparison using BOEM's (2017b) visibility algorithm, the proposed Project would be visible from the Nantucket Sound TCP approximately

22 percent of the time annually (43 percent during the day and nearly 0 percent at night due to the use of ADLS) (COP Appendix III-H.b, Section 4.2; Epsilon 2023).

BOEM has concluded that the TCP's traditional viewshed would be adversely affected through the introduction of the undertaking's new ocean-founded visual elements that are out of character with the historic setting, feeling, and association of the resource, thereby diminishing its integrity.

BOEM's (2022b) study of cumulative visual effects from offshore wind projects concluded that the proposed WTGs would comprise between approximately 12 percent of all visible WTG blade tips and 3 percent of all visible nacelle-top lights from the East Beach location. This study also analyzed the number of WTGs theoretically visible from the Nantucket Sound TCP using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that the proposed Project's WTGs would comprise none of all WTGs within 20 nautical miles (23 miles), 23 percent of all WTGs visible at 20 to 30 nautical miles (23 to 34.5 miles), and 15 percent of the WTGs visible beyond 30 nautical miles (34.5 miles). An observer would be able to experience panoramic views of the ocean from the beachfront and some inland waters of the Nantucket Sound TCP. In clear weather, the WTGs associated with the undertaking would be visible from portions of the Nantucket Sound TCP in views to the southeast. Views of undertaking and other projects' WTGs from the interior of the TCP would be rare, due to screening by topography and/or vegetation. The proposed WTGs and other offshore wind project WTGs would appear similar as the observer moves between the east and west beachfront areas of the property. Overall, in clear conditions the undertaking would contribute less than 25 percent of the cumulative visual effects of offshore wind development on Nantucket Sound TCP (BOEM 2022b).

In summary, WTGs from other projects would occupy a greater extent of the horizon line, meaning proposed Project WTGs would be less noticeable than other project WTGs in similar distance zone due to proximity. Both proposed Project and other project WTGs are unlikely to be missed by the casual observer, but the overall view would still be dominated by sea and sky (BOEM 2022b).

### **J.3.2 Assessment of Effects on Historic Properties in the Marine Area of Potential Effects**

This section discusses effects on ancient submerged landforms as contributing elements to the Nantucket Sound TCP. Documentary and field research conducted as part of the marine APE cultural resource investigations demonstrate that submerged portions of the proposed Project area were subaerial during and immediately following the last glacial maximum. The cultural resources investigations in the marine APE identified ancient submerged landform features (including stream channel, lake, and estuarine landscape features) within the marine APE that have the potential to contain pre-Contact Native American archaeological sites dating prior to the inundation of the OCS during the late Pleistocene and early Holocene (COP Appendix II-D, Section 5; Epsilon 2023). A 2020 archaeological geotechnical campaign conducted in part as a due diligence measure to identify archaeological potential, did not find any direct evidence of pre-Contact Native American cultural materials. However, the ancient landforms are considered archaeologically sensitive due to the potential for undiscovered archaeological materials to be present (COP Appendix II-D, Section 5; Epsilon 2023). A total of 15 ancient submerged landform features were identified in the marine APE for the SWDA, 16 ancient submerged landform features in the marine APE for the OECC, 3 ancient submerged landform features in the marine APE for the Western Muskeget Variant OECC, and 17 ancient submerged landform features in the marine APE for the SCV.

If archaeological resources are present within the identified ancient landforms and they retain sufficient integrity, these resources could be eligible for listing on the NRHP under Criterion D. During the last glacial maximum, at around 24,000 before present (B.P.), sea levels dropped approximately 180 to 85 feet below today's level. Sea level did not reach a near modern level until approximately 3,000 B.P. in the

New England area. Consequently, a large amount of land on the OCS was exposed and existed as terrestrial land during the late Pleistocene and early Holocene. Native American oral histories and archaeological evidence demonstrate that Native American populations were present in the New England region, over 86 nautical miles (99 miles) inland from the coast at the time that the OCS was exposed. It is logical to assume that these people would have also occupied the now-submerged landscape on the OCS (Tuttle et al. 2019). Due to current technological constraints, very little archaeological information has been recovered from late Pleistocene and early Holocene archaeological sites on the OCS. As a result, very little archaeological material has been recovered related to Native American adaptations and lifeways on the then coastal plain and coast. Any archaeological information preserved within these sites, if present, would likely yield significant information important in the pre-Contact history of the region, making the sites eligible for NRHP listing under Criterion D.

In addition to the archaeological potential of these resources, all 19 ancient landforms identified along the OECC, and the Western Muskeget Variant are contributing elements to the Nantucket Sound TCP due to their cultural significance to Native American tribes (COP Appendix A, Vol II-D, Epsilon 2023). Nantucket Sound is eligible for listing in the NRHP as a TCP and as a historic and archaeological property that has yielded and has the potential to yield important information. Although the exact boundary is not precisely defined, the ACHP determination indicated that the sound is eligible as an integral, contributing feature of a larger district under all NRHP Criteria.

An additional 15 ancient submerged landform features were identified within the SWDA, outside of Nantucket Sound, on the OCS. Although these landforms are not contributing elements to the Nantucket Sound TCP, they have the potential for preserved, pre-Contact cultural materials that date to late Pleistocene and early Holocene. This is particularly true of the small, isolated paleo-streams valleys that were identified in the northern and western portions of the SWDA, locations that carry high potential for intact archaeological deposits. Due to their location on the OCS, these landforms would have been exposed during the last glacial maximum, and any cultural materials within these landforms would almost certainly date to the Paleoindian Period—as it is currently defined dating to 12,000 years B.P., if not earlier—and may thus contain the remains of or other cultural materials associated with, some of the first peoples of the Americas.

Federally recognized tribes have stated that all of the ancient submerged landform features identified within the marine APE, regardless of whether or not they contain archaeological data, are significant resources as vestiges of the landscape occupied by their ancestors and as the locations where events from tribal oral histories occurred. As a result, the ancient landform features identified within the marine APE could be eligible for listing on the NRHP under Criterion A of the NRHP Criteria due to their association with significant events, or series of events, significant to the cultural traditions and history of local Native American tribes.

The proposed Project would be able to avoid two of the 15 ancient submerged landform features present within the marine archaeology APE in the SWDA and would result in direct physical effects on the 49 other ancient submerged landforms that cannot be avoided, including 19 features that are contributing elements to the Nantucket Sound TCP. Direct physical effects on these resources would threaten the viability of the affected portion of these resources as both potential repositories of archaeological information as well as the cultural significance of these landforms to local Native American tribes. The severity of effects would depend on the horizontal and vertical extent of effects relative to the size of the intact ancient submerged landform. Due to the size of the offshore remote sensing survey areas in the OECC and SWDA, the full extent or size of individual ancient landforms cannot be defined. However, based on available information, construction of the proposed undertaking would result in the physical damage or destruction of at least a portion of each of the ancient landforms that cannot be avoided.

There are 17 ancient submerged landforms within the SCV footprint in federal waters. It may not be possible to avoid the ancient submerged landforms in the SCV. If avoidance is not possible, the proposed undertaking would result in the physical damage or destruction of at least a portion of the identified resources that cannot be avoided and adverse effects on these ancient submerged landforms.

Based on the information available from the marine archaeological resources surveys of the marine APE and the assessment of effects upon those properties, BOEM has found that the undertaking would result in direct adverse physical effects on 49 of the ancient submerged landforms that cannot be avoided in the OECC and SWDA. Two ancient submerged landforms will be avoided and would not be adversely affected. The undertaking would result in the permanent, physical destruction of or damage to all or part of each of the 49 ancient landforms that cannot be avoided. In addition, 19 of the 49 ancient submerged landforms that would be adversely affected by construction of the undertaking are located in Nantucket Sound and are likely contributing elements to the Nantucket Sound TCP.

### **J.3.3 Assessment of Effects on Shipwrecks and Potential Shipwrecks**

Archaeological surveys within the marine archaeology portion of the APE identified eight potential shipwrecks in the OECC, SWDA, SCV, and Western Muskeget Variant, combined (COP Volume II-D, Section 5; COP Volume II-D, Section 5; and Appendix A; Epsilon 2023). All eight potential shipwrecks will be avoided with sufficient buffers by all proposed Project activities that are part of the undertaking; as a result, there would be no adverse effects on these potential historic properties.

### **J.3.4 Assessment of Effects on Historic Properties within the Terrestrial Area of Potential Effects**

Both reconnaissance and intensive level archaeological surveys were conducted within the terrestrial archaeology portion of the APE for Phase 1. These surveys identified no NRHP eligible or listed sites. No additional archaeological investigations of the onshore components are planned. As currently designed, BOEM finds there will be no adverse effects on historic properties within the Phase 1 terrestrial archaeology APE.

The Phase 2 archaeological survey is still pending for the proposed onshore substation sites(s) and additional route segments and potential additional parcels near the onshore substation. This is part of a phased identification and evaluation of historic properties pursuant to 36 CFR § 800.4(b)(2). BOEM will conduct Section 106 consultation for the remainder of the Phase 2 terrestrial archaeology APE with the Massachusetts SHPO, ACHP, federally recognized tribal nations, and other identified consulting parties.

### **J.3.5 Assessment of Effects on Historic Properties**

Based on the information available to BOEM from the studies conducted to identify historic properties within the visual APE for the undertaking and the assessment of effects upon those properties determined in consultation with the consulting parties, BOEM finds that the undertaking would have a direct adverse visual effect on the Gay Head Lighthouse, Edwin Vanderhoop Homestead (Aquinnah Cultural Center), the Gay Head–Aquinnah Shops Area, the Nantucket District NHL, the Chappaquiddick Island TCP, and the Nantucket Sound TCP. The undertaking would affect the character of the properties' setting that contributes to their historic significance by introducing visual elements that are out of character with the historic setting of the properties. However, BOEM determined that due to the distance and open viewshed, the integrity of the properties would not be so diminished as to disqualify any of them for NRHP eligibility.

The adverse effects on the viewshed of the aboveground historic properties would occupy the space for approximately 30 years, but they are unavoidable for reasons discussed in Section J.4.3. This application of the Criteria of Adverse Effect and determination that the effects are direct is based on pertinent NRHP

Bulletins, subsequent clarification and guidance by the National Park Service (NPS) and ACHP, and other documentation, including professionally prepared viewshed assessments and computer-simulated photographs and video.

#### **J.4 Measures to Avoid, Minimize, or Mitigate Adverse Effects**

BOEM will stipulate measures to avoid, minimize, or mitigate adverse effects on historic properties identified in the APE as adversely affected by the proposed Project. Specifically, BOEM will stipulate measures to avoid known terrestrial archaeological resources and submerged archaeological and ancient submerged landforms, as well as minimize visual effects on historic properties. BOEM will also stipulate measures that would be triggered in cases where avoidance of known ancient submerged landforms is not feasible or in cases where there is post-review discovery of previously unknown terrestrial or marine archaeological resources that are not currently found to be adversely affected by the Project. BOEM, with the applicant, will develop and implement one or more historic property treatment plans in consultation with consulting parties that have a demonstrated interest in specific historic properties to address impacts on ancient submerged landforms if they cannot be avoided. Historic property treatment plans will also be prepared to mitigate visual adverse effects and cumulative visual adverse effects.

As part of the NRHP Section 106 process, the applicant has committed to the following measures to avoid, minimize, or mitigate adverse effects, as conditions of approval of the COP:

1. Painting the WTGs no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in accordance with *Federal Aviation Administration Advisory Circular 70/7460-1M* (Federal Aviation Administration 2020) and BOEM's (2021b) *Guidelines for Lighting and Marking of Structures Supporting Renewable Energy Development* to minimize daytime visibility.
2. Installing ADLS to reduce the duration of nighttime lighting. The system would activate aviation warning lights only when an aircraft is in the vicinity of the SWDA, resulting in nighttime visibility of the project from adversely affected historic properties to an estimated less than 13 minutes annually (less than 0.1 percent of annual nighttime hours).
3. Preparing unanticipated discovery plans for both onshore and offshore archaeological resources and human remains.
4. Conducting additional archaeological investigations on unavoidable ancient submerged landforms in the OECC and SWDA.
  - a. OECC
    - i. Target three distinct types of ancient submerged landforms for investigation:
      1. A preserved fluvial margin terrace within the nearshore zone (Channel Groups 8 through 15);
      2. A preserved fluvial margin along Muskeget Channel (Channel Groups 16 through 22); and
      3. A preserved kettle/pond lake feature preserved in the offshore portion of the OECC leading into the SWDA (Channel Groups 29 through 30).
    - ii. Each location will be tested using closely spaced vibracoring designed to examine these ancient submerged landforms at a higher spatial resolution.

- iii. If either the Western Muskeget Variant or SCV are to be used, any ancient submerged landforms that cannot be avoided will be mitigated following the same methods and protocols as those outlined for the OECC.
- b. SWDA
  - i. Vibracore up to 6 meters below the seafloor is recommended to recover sediments related to the stratigraphic units of interest.
  - ii. Proposing a combined, broad brush and detailed approach to resolve these adverse effects:
    1. Collecting 1-2 cores at the majority of the submerged, ancient landforms to sample identified horizons; and/or
    2. Collecting a series of closely spaced cores at 2-4 select (not all) ancient submerged landforms based on similar geomorphic characteristics.
  - c. All results would be delivered to the consulting tribes (state- and federally recognized), BOEM, Massachusetts Bureau of Underwater Archaeological Resources, Massachusetts Historical Commission, and any other relevant consulting parties in the form of a technical report with supporting digital data files.
  - d. Tribal representatives will have the opportunity to be present for all stages of work.
5. Minimizing effects by primarily siting the OECR and grid intersection routes within existing ROWs and below roadways.
6. Conducting archaeological monitoring of construction activities in areas of moderate or high archaeological sensitivity in the Phase 1 terrestrial archaeological APE.
7. Conducting archaeological monitoring of construction activities within the staging areas required for the horizontal direct drilling in the landfall area and during installation of OECR and other components (duct banks, splice vaults) within the identified zone of moderate and high archaeological sensitivity in the Phase 2 terrestrial archaeological APE.
8. Avoiding known shipwrecks and potentially significant debris fields by no less than 164 feet (50 meters).
9. Providing funding to support the ongoing maintenance of the Gay Head – Aquinnah Shops Area and Edwin Vanderhoop Homestead and Gay Head Lighthouse.
10. Conducting survey of the Chappaquiddick Island TCP and developing a geographic information system database of contributing resources, as well as developing interpretive materials.
11. Funding development of public education materials related to Moshup and Moshup’s Bridge, scholarships and fees for professional training or certification in fields related to the TCP, and future planning and implementation of efforts to mitigate the negative impacts of climate change.
12. Conducting additional archaeological investigations of ancient submerged landforms in the SWDA, export cable corridor routes, and the Nantucket Sound TCP.

The NHPA Section 106 consultation process is ongoing for the proposed Project and will culminate in an MOA (see Attachment J-1) detailing avoidance, minimization, and mitigation measures to resolve adverse effects on historic properties to which the consulting parties agree. BOEM will continue to consult in good faith with the Massachusetts State Historic Preservation Office and other consulting parties to resolve adverse effects.

## J.5 Phased Identification

Information pertaining to the identification of historic properties associated with the grid interconnection routes, onshore cable routes, landfall locations, and nearshore cable routes for the SCV in Bristol County added to the proposed Project in April 2022, will not be available until after the ROD is potentially issued and the COP is potentially approved. Information pertaining to the Old Falmouth Road onshore substation site added to the proposed Project in August 2023 will also not be available until after the ROD is potentially issued and the COP is potentially approved. If the SCV or Old Falmouth Road site are selected, the applicant will be required to complete surveys pursuant to 36 CFR § 800.4(b)(2) and in accordance with BOEM's existing *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585*, and ensure potential historic properties are identified, effects assessed, and adverse effects resolved prior to construction. BOEM would conduct Section 106 consultation with federally recognized tribal nations, the Massachusetts SHPO, ACHP, and other identified consulting parties. The SCV and Old Falmouth Road site effects on historic properties would be evaluated in a separate supplemental NEPA analysis.

The MOA will specify the Section 106 consultation process BOEM would conduct in the event either the SCV or Old Falmouth Road site is selected for the final proposed Project design, pursuant to 36 CFR § 800.4(b)(2). If BOEM identifies no additional historic properties or determines that no historic properties are adversely affected due to the selection of one or both of these alternatives, BOEM, with the assistance of the applicant, will notify and consult with the signatories, invited signatories, and consulting parties by providing a written summary of the surveyed area including any maps, a summary of any additional surveys and research conducted to identify historic properties and assess effects, and copies of the surveys. BOEM and the applicant will allow the signatories, invited signatories, and consulting parties 30 calendar days to review and comment on the proposed change, BOEM's determination, and the documents. After the 30-calendar-day review period has concluded and no comments require additional consultation, the applicant will notify the signatories and consulting parties that BOEM has received concurrence from the Massachusetts SHPO regarding the finding of effect and, if any comments are received, provide a summary of the comments and BOEM's responses. BOEM, with the assistance of the applicant, will conduct any consultation meetings if requested by the signatories or consulting parties.

If BOEM determines new adverse effects on historic properties will occur due to the selection of one or both of these alternatives based on the results of the archaeology surveys, BOEM with the assistance of the applicant, will notify and consult with the signatories, invited signatories, and consulting parties regarding BOEM's finding and the proposed measures to resolve the adverse effect(s) including the development of a new treatment plan(s) following the consultation process set forth in the MOA. The applicant will notify all signatories, invited signatories, and consulting parties about the selection of one of these alternatives, the results of the surveys and copies of the surveys, BOEM's determination, and the proposed resolution measures for the adverse effect(s). The signatories, invited signatories, and consulting parties will have 30 calendar days to review and comment on the survey reports, the results of the survey reports, the adverse effect finding, and the proposed resolution of adverse effect(s), including a draft treatment plan(s). BOEM, with the assistance of the applicant, will conduct additional consultation meetings, if necessary, during consultation on the adverse effect finding and during drafting and finalization of the treatment plan(s). BOEM, with the assistance of the applicant, will respond to the comments and make necessary edits to the documents. The applicant will send the revised draft final documents to the other signatories, invited signatories, and consulting parties for review and comment during a 30-calendar-day review and comment period. With this same submittal of draft final documents, the applicant will provide a summary of all the comments received on the documents and BOEM's responses. BOEM, with the assistance of the applicant, will respond to the comments on the draft final documents and make necessary edits to the documents. The applicant will notify all the signatories, invited signatories, and consulting parties and will provide the final document(s) including the final

treatment plan(s) and a summary of comments and BOEM’s responses to comments, if it receives any on the draft final documents, after BOEM has received concurrence from the Massachusetts SHPO on the finding of new adverse effect(s), and BOEM has accepted the final treatment plan(s).

## **J.6 National Historic Landmarks and the National Historic Preservation Act Section 106 Process**

The NPS, which administers the NHL program for the Secretary of the Interior, describes NHLs and requirements for NHLs as follows:

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

NHPA Section 110(f) applies specifically to NHLs. BOEM is fulfilling its responsibilities to give a higher level of consideration to minimizing harm to NHLs by implementing the special set of requirements for protecting NHLs in compliance with NHPA Section 110(f) and 36 CFR § 800.10, which, in summary:

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

The Historic Resources Visual Effects Assessment (BOEM 2022b) identified one NHL in the visual APE for the proposed Project: the Nantucket Historic District, described in Section J.3.4. BOEM has determined that the proposed Project would result in an adverse effect on the Nantucket Historic District NHL. BOEM is considering for these purposes:

- The magnitude of the undertaking’s harm to the historical, archaeological, and cultural qualities of the NHL;
- The public interest in the NHL and in the undertaking as proposed; and
- The effect a mitigation action would have on meeting the goals and objectives of the undertaking (NPS 2013).

BOEM will identify and finalize mitigation measures specific to the NHL in consultation with consulting parties. These measures must be reasonable in cost and not be determined using inflexible criteria, as described by NPS (2013). In addition, mitigation of adverse effects and minimization of harm to the NHL would need to meet the following requirements:

- Reflect the heightened, national importance of the properties and be appropriate in magnitude, extent, nature, and location of the adverse effect;
- Focus on addressing diminished historic resource integrity with outcomes that are in the public interest; and
- Comply with the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings (NPS 2017).

BOEM has already invited the ACHP and NPS NHL staff, under the Secretary of the Interior, to consult on the proposed Project and these parties have accepted. Through consultation, BOEM would continue to consider additional minimization measures, to the maximum extent feasible and require mitigation of adverse effects on the NHL that remain after the application of minimization efforts. BOEM would identify and finalize mitigation measures specific to the NHL with consulting parties through either the development of an MOA and/or as conditions of approval of the ROD under NEPA.

## J.7 References

- BOEM (Bureau of Ocean Energy Management, Office of Renewable Energy Programs). 2012a. *Programmatic Agreement Regarding the “Smart from the Start” Atlantic Wind Energy Initiative: Leasing and Site Assessment Activities offshore Massachusetts and Rhode Island*. May 23, 2012. Accessed: August 19, 2022. Retrieved from: [https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/HP/MA-RI-PA\\_Executed.pdf](https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/HP/MA-RI-PA_Executed.pdf)
- BOEM (Bureau of Ocean Energy Management, Office of Renewable Energy Programs). 2012b. NHPA Section 106 consultation for BOEM.
- BOEM (Bureau of Ocean Energy Management, Office of Renewable Energy Programs). 2014. *Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts: Revised Environmental Assessment*. OCS EIS/EA BOEM 2014-603. Accessed: October 2021. Retrieved from: <https://www.boem.gov/Revised-MA-EA-2014/>
- BOEM (Bureau of Ocean Energy Management). 2017a. *Finding of No Historic Properties Affected For the Approval of the Offshore MW Site Assessment Plan on the Outer Continental Shelf Offshore Massachusetts*. Accessed: August 17, 2022. Retrieved from: <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/HP/Vinyard-Wind-106-Findings-and-Appendix-A-to-J.pdf>
- BOEM (Bureau of Ocean Energy Management). 2017b. *Visualization Simulations for Offshore Massachusetts and Rhode Island Wind Energy Area Meteorological Report*. OCS Study BOEM 2017-037. Accessed: August 11, 2022. Retrieved from: <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/MeteorologicalReportFinal.pdf>

- BOEM (Bureau of Ocean Energy Management). 2020a. *Guidelines for Providing Archaeological and Historical Property Information Pursuant to 30 CFR Part 585*. U.S. Department of the Interior, Office of Renewable Energy Programs. Accessed: August 17, 2022. Retrieved from: <https://www.boem.gov/sites/default/files/documents/about-boem/Archaeology%20and%20Historic%20Property%20Guidelines.pdf>
- BOEM (Bureau of Ocean Energy Management). 2020b. *Finding of Adverse Effect for the Vineyard Wind I Project Construction and Operations Plan*. Revised November 13, 2020. Accessed: August 17, 2022. Retrieved from: <https://www.boem.gov/sites/default/files/documents/oil-gas-energy/Vineyard-Wind-Finding-of-Adverse-Effect.pdf>
- BOEM (Bureau of Ocean Energy Management). 2021a. *National Environmental Policy Act (NEPA) Substitution for Section 106 Consulting Party Guide*. Accessed: August 5, 2022. Retrieved from: [https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/BOEM\\_NEPASubstitution\\_ConsultingPartyGuide\\_Final.pdf](https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/BOEM_NEPASubstitution_ConsultingPartyGuide_Final.pdf)
- BOEM (Bureau of Ocean Energy Management). 2021b. *Guidelines for Lighting and Marking of Structures Supporting Renewable Energy Development*. Sterling, VA: U.S. Department of the Interior, Bureau of Ocean Energy Management. Accessed: January 27, 2022. Retrieved from: <https://www.boem.gov/sites/default/files/documents/renewable-energy/2021-Lighting-and-Marking-Guidelines.pdf>
- BOEM (Bureau of Ocean Energy Management). 2022a. *Scoping Summary Report for the New England Wind Project*.
- BOEM (Bureau of Ocean Energy Management). 2022b. *Historic Properties Cumulative Visual Effects Assessment for the New England Wind Project under NHPA Section 106 of the National Historic Preservation Act*.
- Chase-Harrell, P., and B. Pfeiffer. 2012. Nantucket Historic District National Historic Landmarks Program Nomination Form (Updated). Accessed: August 20, 2022. Retrieved from: <https://www.nantucket-ma.gov/DocumentCenter/View/37711/National-Historic-Landmark-Registration-Report-PDF>
- DiStefano, V., and N. Salzman. 1981. Gay Head Light: Lights of Massachusetts Thematic Group Nomination. Massachusetts Historical Commission.
- Epsilon (Epsilon Associates, Inc.). 2023. Draft New England Wind Construction and Operations Plan for Lease Area OCS A 0534. New England Wind Project. Retrieved from: <https://www.boem.gov/renewable-energy/state-activities/new-england-wind-ocs-0534-construction-and-operations-plan>
- Federal Aviation Administration. 2020. "Obstruction Marking and Lighting. Advisory Circular AC 70/7460-1M." Effective 11/16/2020. Accessed: April 13, 2022. Retrieved from: [https://www.faa.gov/regulations\\_policies/advisory\\_circulars/index.cfm/go/document.current/documentnumber/70\\_7460-1](https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.current/documentnumber/70_7460-1)
- Heintzelman, P. 1975. Nantucket Historic District National Historic Landmarks Program Nomination Form (Updated).
- Massachusetts Historical Commission. 2015. *Technical Amendment: Gay Head Light, Lighthouses of Massachusetts Thematic Group Nomination*. Massachusetts Historical Commission, Boston.

- NPS (National Park Service). 1995. How to Apply the National Register Criteria for Evaluation. National Register Bulletin. Revised for internet, 1995. Accessed: August 20, 2022. Retrieved from: [https://www.nps.gov/subjects/nationalregister/upload/NRB-15\\_web508.pdf](https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf)
- NPS (National Park Service). 2013. “Federal Preservation Institute: Section 110 of the National Historic Preservation Act.” Accessed: August 2022. Retrieved from: <https://www.nps.gov/fpi/Section110.html>
- NPS (National Park Service). 2017. The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Restructuring Historic Buildings. Accessed: August 20, 2022. Retrieved from: <https://www.nps.gov/tps/standards/treatment-guidelines-2017.pdf>
- Sullivan, R.G., L.B. Kirchler, T. Lahti, S. Roche, K. Beckman, B. Cantwell, and P. Richond. 2012. Wind turbine visibility and visual impact threshold distances in western landscapes. In: Proceedings, National Association of Environmental Professionals, 37th Annual Conference, May 21–24, 2012, Portland (OR).
- Sullivan, R.G., L.B. Kirchler, J. Cothren, and S.L. Winters. 2013. “Offshore Wind Turbine Visibility and Visual Impact Threshold Distances.” *Environmental Practice*. Accessed: May 2020. Retrieved from: [https://blmwyomingvisual.anl.gov/docs/EnvPractice\\_Offshore%20Wind%20Turbine%20Visibility%20and%20Visual%20Impact%20Threshold%20Distances.pdf](https://blmwyomingvisual.anl.gov/docs/EnvPractice_Offshore%20Wind%20Turbine%20Visibility%20and%20Visual%20Impact%20Threshold%20Distances.pdf)
- Tuttle, M.C., S.E. Holland, N. Scholl, and K. Smith. 2019. Marine Archaeological Services in Support of the Vineyard Wind Offshore Wind Energy Project Construction and Operations Plan for Lease Area OCS-A 0501 and Offshore Export Cable Corridor Offshore Massachusetts (COP Volume II-C). Prepared by Gray & Pape, Inc., for Vineyard Wind, LLC (Revised May 24, 2019). Construction and Operations Plan Volume II-C. Retrieved from: <https://www.boem.gov/vineyard-wind>

## **ATTACHMENT J-1: MEMORANDUM OF AGREEMENT**

This page is intentionally blank.

**MEMORANDUM OF AGREEMENT  
AMONG  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**WHEREAS**, the Bureau of Ocean Energy Management (BOEM) is considering whether to authorize construction and operation of the New England Wind Project (Project) pursuant to Section 8(p)(1)(C) of the Outer Continental Shelf (OCS) Lands Act (43 U.S. Code [USC] § 1337(p)(1)(C)), as amended by the Energy Policy Act of 2005 (Public Law No. 109–58) and in accordance with Renewable Energy Regulations at 30 Code of Federal Regulations (CFR) Part 585; and

**WHEREAS**, BOEM has determined that the Project constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA), as amended (54 USC § 306108), and its implementing regulations (36 CFR Part 800); and

**WHEREAS**, BOEM is considering whether to approve with conditions the Construction and Operations Plan (COP) submitted by Park City Wind LLC, hereafter referred to as the Lessee; and

**WHEREAS**, BOEM has determined that the construction, operation, maintenance, and eventual decommissioning of the Project, planned for up to 130 offshore wind turbine generators (WTGs), up to five electrical service platforms (ESPs; also known as offshore substations), up to three new or upgraded onshore substations, offshore export cables within an offshore export cable corridor (OECC), and onshore export cables in an onshore export cable route (OECR), has the potential to adversely affect historic properties as defined under 36 CFR § 800.16(l); and

**WHEREAS**, the Project consists of two distinct phases, Phase 1 and Phase 2. Phase 1 will occupy 150 to 231 kilometers<sup>2</sup> (km<sup>2</sup>) (37,066 – 57,081 acres) of the wind development area and have 41 to 62 WTGs and one or two ESP(s) and Phase 2 will occupy 222 to 303 km<sup>2</sup> (54,857 – 74,873 acres) immediately southwest of Phase 1 and contain 64 to 88 WTG/ESP positions. Two offshore export cables will be installed for Phase 1 and three will be installed for Phase 2, transmitting electricity to landing sites (one for each phase) in the Town of Barnstable, Massachusetts, and then to onshore export cable routes (one for each phase) and one or more substation sites in the Town of Barnstable. Phase 1 and Phase 2 are in the same Area of Potential Effects (APE), and this Memorandum of Agreement (MOA) covers Phase 1 and Phase 2 of the Project; and

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

**WHEREAS**, following BOEM’s issuance of the NEPA Record of Decision (ROD), pursuant to 30 CFR §§ 585.408 – .411, and subject to BOEM’s approval, Park City Wind LLC may segregate and assign that portion of the lease Phase 2 occupies to an affiliated legal entity (hereinafter referred to as the assignee), in which case Park City Wind LLC intends to retain Phase 1; and

**WHEREAS**, if Lease Number OCS-A 0534 is assigned and segregated following issuance of the ROD, BOEM would assign a unique lease number to the new lease, and BOEM would consider the terms of its decision in the ROD to apply to activities of both Lessees and would issue separate letters approving the COP to each Lessee; and

**WHEREAS**, throughout this document the term ‘Tribal Nation’ has the same meaning as a federally recognized ‘Indian Tribe,’ as defined in 36 CFR § 800.16(m); and

**WHEREAS**, BOEM recognizes its government-to-government obligation to consult with Tribal Nations that may attach religious and cultural significance to historic properties that may be affected by the proposed undertaking; in addition, BOEM will comply with the American Indian Religious Freedom Act (AIRFA), Native American Graves Protection and Repatriation Act (NAGPRA), Executive Orders 13007 and 13175, and the Memorandum of Understanding to Protect Sacred Sites (November 2021); and

**WHEREAS**, BOEM invited the following federally recognized Tribal Nations to consult on this Project: the Delaware Nation, the Delaware Tribe of Indians, the Mashantucket (Western) Pequot Tribal Nation, the Mashpee Wampanoag Tribe of Massachusetts, the Mohegan Tribe of Indians of Connecticut, the Narragansett Indian Tribe, the Shinnecock Indian Nation, and the Wampanoag Tribe of Gay Head (Aquinnah); and

**WHEREAS**, the Mashpee Wampanoag Tribe of Massachusetts, Mashantucket (Western) Pequot Tribal Nation, and Wampanoag Tribe of Gay Head (Aquinnah) accepted BOEM’s invitation to consult and BOEM invited these Tribal Nations to sign this Memorandum of Agreement (MOA) as invited signatories; and

**WHEREAS**, the Wampanoag Tribe of Gay Head (Aquinnah) participated in Section 106 consultations with BOEM, but after careful internal deliberation, including ongoing review of the Tribes’ Indigenous Knowledge as it applies to this and other windfarm projects, stands in opposition to the Project’s approval and has declined to sign the MOA; and

**WHEREAS**, BOEM acknowledges that Tribal Nations possess special expertise in assessing the National Register of Historic Places (NRHP) eligibility of properties with religious and cultural significance to the Tribe(s) pursuant to 36 CFR § 800.4(c)(1); and

**WHEREAS**, BOEM consulted with Tribal Nations to identify properties of religious and cultural significance to Tribal Nations that may be eligible for listing in the NRHP, including sacred sites, cultural landscapes, and traditional cultural places (TCPs), that may be affected by this undertaking; and

**WHEREAS**, BOEM consulted with the Mashpee Wampanoag Tribe, Mashantucket (Western) Pequot Tribal Nation, and Wampanoag Tribe of Gay Head (Aquinnah) in government-to-government and technical meetings with Tribal Historic Preservation Officers (THPOs) and BOEM staff regarding potential effects to sites of religious and cultural significance to these Tribal Nations, including the development of this MOA and mitigation measures; and

**WHEREAS**, the Wampanoag Tribe of Gay Head (Aquinnah) and the Mashpee Wampanoag Tribe identified the Vineyard Sound and Moshup’s Bridge TCP as a sacred site with multiple contributing historic properties; and

**WHEREAS**, BOEM notified in advance the Tribal Nations and the THPOs, the State Historic Preservation Officers (SHPOs) of Massachusetts and Rhode Island, and the Advisory Council on Historic

Preservation (ACHP) on June 10, 2021, of its decision to use NEPA substitution and followed the standards for developing environmental documents to comply with Section 106 consultation for this Project pursuant to 36 CFR § 800.8(c), and posted this decision in the *Federal Register* (Fed. Reg.) with BOEM's Notice of Intent to prepare an EIS for the Project on June 30, 2021; and

**WHEREAS**, BOEM, in accordance with 36 CFR § 800.3, invited ACHP to consult on the Project on June 16, 2021, and ACHP accepted on June 18, 2021, and chose to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii). ACHP began involvement through FAST-41, then through NEPA substitution following the June 30, 2021, Notice of Intent, and finally through participation through Section 106; and

**WHEREAS**, BOEM, in accordance with 36 CFR § 800.3, invited the Massachusetts SHPO to consult on the Project on June 11, 2021, and the Massachusetts SHPO accepted on July 8, 2021; and

**WHEREAS**, BOEM, in accordance with 35 CFR § 800.3, invited the Rhode Island SHPO to consult on the Project on June 11, 2021, which Rhode Island SHPO accepted on July 15, 2021, before advising on February 21, 2023, that it concluded its participation in Section 106 consultation due to the lack of effects on Rhode Island properties; and

**WHEREAS**, the Project is within a commercial lease area that was subject to previous NHPA Section 106 review by BOEM regarding the issuance of the commercial lease and approval of site assessment activities. Both NHPA Section 106 reviews for the lease issuance and the approval of the site assessment plan were conducted pursuant to the programmatic agreement (PA) and concluded with No Historic Properties Affected for lease issuance on May 23, 2012, and site assessment approval on May 10, 2018, consistent with the PA regarding the review of OCS renewable energy activities offshore Massachusetts and Rhode Island (*Programmatic Agreement Among the U.S. Department of the Interior, Bureau of Ocean Energy Management; the State Historic Preservation Officers of Massachusetts and Rhode Island; The Mashpee Wampanoag Tribe; the Narragansett Indian Tribe; the Wampanoag Tribe of Gay Head (Aquinnah); and the Advisory Council on Historic Preservation; Regarding the "Smart from the Start" Atlantic Wind Energy Initiative: Leasing and Site Assessment Activities Offshore Massachusetts and Rhode Island*), and this PA expired on May 12, 2022; and

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

**WHEREAS**, BOEM identified eight submerged historic properties and 51 ancient submerged landform features (ASLFs) in the marine APE; no historic properties in the terrestrial APE; and 20 aboveground historic properties (including three TCPs) in the offshore Project components' portion of the visual APE and seven historic properties in the onshore Project components' portion of the visual APE; and

**WHEREAS**, BOEM identified one National Historic Landmark (NHL) within the visual APE for offshore development: the Nantucket Historic District; and

**WHEREAS**, within the range of the Project alternatives analyzed in the EIS, BOEM determined three aboveground historic properties and one NHL would be subject to visual adverse effects from WTGs; three TCPs would be subject to visual and physical adverse effects; no submerged historic properties would be subject to adverse effects; 49 ASLFs may be adversely affected by physical disturbance in the lease area and from export cable construction in the marine APE; and no historic properties in the terrestrial APE would be adversely affected with implementation of the undertaking; and

**WHEREAS**, BOEM determined that the implementation of the avoidance measures identified in the MOA will avoid adverse effects on 13 aboveground historic properties in the offshore visual APE, seven historic properties in the onshore visual APE, and eight submerged historic properties and two ASLFs in the marine APE; and

**WHEREAS**, BOEM determined all the ASLFs identified in the marine APE are eligible for listing in the NRHP under Criteria A and D; and

**WHEREAS**, under each of the Project alternatives analyzed in the EIS, BOEM has determined that the undertaking will have an adverse effect on 49 formerly subaerially exposed ASLFs with the potential to contain pre-Contact period archaeological resources within (Channel Groups 8-30, nonsequential; and Channel Groups 18, 19, 20, 32,) and outside (SAL06-19 and SCV-OECC-SAL1-17) the boundaries of the Nantucket Sound TCP, the Chappaquiddick Island TCP, and the Vineyard Sound and Moshup's Bridge TCP; and

**WHEREAS**, under each of the Project alternatives analyzed in the EIS, BOEM determined the undertaking would visually adversely affect three TCPs: the Nantucket Sound TCP, the Chappaquiddick Island TCP, and the Vineyard Sound and Moshup's Bridge TCP, and that the visual adverse effect would be cumulative with the potential adverse effects from other reasonably foreseeable offshore wind energy projects; and

**WHEREAS**, under each of the Project alternatives analyzed in the EIS, BOEM determined the Project would visually adversely affect four aboveground historic properties including one NHL: the Nantucket Historic District NHL, the Gay Head Lighthouse, the Edwin Vanderhoop Homestead (Aquinnah Cultural Center), which are listed in the NRHP; and the Gay Head – Aquinnah Shops Area, which is eligible for listing in the NRHP, and that the visual adverse effect would be cumulative with the potential adverse effects from other reasonably foreseeable offshore wind energy projects; and

**WHEREAS**, the Lessee provided additional information about the South Coast Variant (SCV) route in the U.S. Outer Continental Shelf (i.e., those waters beyond the 3-nautical mile [3.5-mile] limit from shore), including information on marine and terrestrial archaeology resources, as part of a COP supplemental filing in April 2022 (Epsilon 2022). Information pertaining to identification of historic properties in the portion of the SCV in state waters (i.e., those waters within the 3-nautical-mile limit from shore) or onshore will not be available until after the ROD is issued; and

**WHEREAS**, if the Lessee chooses to construct the SCV, BOEM would conduct additional analysis of potential effects on historic properties through deferred and phased identification pursuant to 36 CFR § 800.4(b)(2), 36 CFR § 800.5(a)(4), and Stipulation V (Phased Identification); and

**WHEREAS**, the Lessee identified two potential Phase 2 onshore substations as part of a COP supplemental filing in August 2023 (Epsilon 2023) and provided additional information about one of those sites: Clay Hill. BOEM determined that no historic properties would be affected and consulted with Tribal Nations, Massachusetts SHPO, ACHP, and other consulting parties; and

**WHEREAS**, information pertaining to identification of historic properties at the second potential site, Old Falmouth Road, will not be available until after the ROD is issued; and

**WHEREAS**, if the Lessee chooses to utilize the Old Falmouth Road site, BOEM would conduct additional analysis of potential effects on historic properties through deferred and phased identification pursuant to 36 CFR § 800.4(b)(2), 36 CFR § 800.5(a)(4), and Stipulation V (Phased Identification); and

**WHEREAS**, when the Lessee acquires site control of the select areas of the terrestrial APE in Massachusetts, BOEM will conduct additional analysis of potential effects on historic properties through deferred and phased identification pursuant to 36 CFR § 800.4(b)(2), 36 CFR § 800.5(a)(4), and Stipulation V (Phased Identification); and

**WHEREAS**, BOEM will conduct Section 106 consultation for the remainder of the SCV, the Old Falmouth Road site, and the select areas of the terrestrial APE with Tribal Nations, Massachusetts SHPO, ACHP, and other consulting parties pursuant to Stipulation V (Phased Identification); and

**WHEREAS**, the Massachusetts SHPO concurred with BOEM's finding of adverse effect on April 25, 2023; and

**WHEREAS**, in accordance with 36 CFR § 800.3, BOEM invited other federal agencies, state and local governments, and additional consulting parties with a demonstrated interest in the undertaking to participate in this consultation; the lists of those accepting or declining to participate by either written response or no response to direct invitation are found in Attachment 2, Lists of Invited and Participating Consulting Parties; and

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

**WHEREAS**, construction of the Project requires a Department of the Army permit from the U.S. Army Corps of Engineers (USACE) for activities that result in the discharge of dredged or fill material into waters of the U.S. pursuant to Section 404 of the Clean Water Act (33 USC § 1344), and work and structures in navigable waters of the U.S. and structures from the mean high water mark to the seaward limit of the OCS pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 USC § 403); and

**WHEREAS**, BOEM invited USACE to consult because USACE will issue permits for the Project under Section 404 of the Clean Water Act (33 USC § 1344) and Section 10 of the Rivers and Harbors Act (33 USC § 403); and

**WHEREAS**, the USACE designated BOEM as the lead federal agency pursuant to 36 CFR § 800.2(a)(2) to act on its behalf for purposes of compliance with NHPA Section 106 for this Project (in a letter dated July 14, 2021), and BOEM invited the USACE to sign this MOA as a concurring party; and

**WHEREAS**, the Bureau of Safety and Environmental Enforcement (BSEE) designated BOEM as the lead federal agency pursuant to 36 CFR § 800.2(a)(2) to act on its behalf for purposes of compliance with Section 106 for this Project (per electronic communication dated November 21, 2023), and BOEM invited BSEE to sign this MOA as a concurring party; and

**WHEREAS**, BOEM notified and invited the Secretary of the Interior (represented by the National Park Service [NPS]) to consult regarding this Project pursuant to NHPA Section 106 regulations, including consideration of the potential effects on the NHL (Nantucket Historic District) as required under NHPA Section 110(f) (54 USC § 306107) and 36 CFR § 800.10, the NPS accepted BOEM's invitation to consult on July 7, 2021, and BOEM invited NPS to sign this MOA as a concurring party; and

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

**WHEREAS**, BOEM has planned and is taking action to minimize harm, as required by NHPA Section 110(f) and 36 CFR § 800.10, to the one adversely affected NHL in the visual APE, Nantucket Historic District, as explained in BOEM's *Finding of Adverse Effect for the New England Wind Project Construction and Operations Plan* (hereafter, the Finding of Effect, and dated August 2023), with measures including (but not limited to) using non-reflective white and light gray paint on offshore structures and using navigational lighting that minimizes the visibility of the Project from the NHL; and

**WHEREAS**, pursuant to 36 CFR § 800.6(c)(2)(iii), BOEM invited the Lessee to sign as an invited signatory because the Lessee is assuming a responsibility under the MOA to implement certain stipulations; and

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

**WHEREAS**, required signatories and invited signatories (hereafter referred to as "signatories") agree, consistent with 36 CFR § 800.6(b)(2), that adverse effects will be resolved in the manner set forth in this MOA; and

**WHEREAS**, BOEM conducted five consulting party meetings, on March 3, 2022; February 8, 2023; June 15, 2023; September 14, 2023; and December 13, 2023, and conducted an additional consulting party meeting with Tribal Nations on March 23, 2023; and

**WHEREAS**, BOEM sought and considered the views of the public regarding NHPA Section 106 for this Project through the NEPA process by holding virtual public scoping meetings when initiating the NEPA and NHPA Section 106 review on July 19, 23, and 26, 2021, and virtual public hearings related to the Draft EIS on January 27, February 1, and February 6, 2023; and

**WHEREAS**, BOEM made the first Draft MOA available to the public for review and comment from December 23, 2022, to February 21, 2023, using BOEM's Project website, and BOEM did receive comments from the public; and

**NOW, THEREFORE**, BOEM, the Mashpee Wampanoag Tribe, the Mashantucket (Western) Pequot Tribal Nation, the Massachusetts SHPO, and the ACHP agree that the undertaking shall be implemented in accordance with the following stipulations to consider the adverse effects of the undertaking on historic properties and resolve those adverse effects, pursuant to 36 CFR § 800.6(c).

## STIPULATIONS

BOEM, with the assistance of the Lessee, will ensure that the following measures are carried out as conditions of its approval of the undertaking:

### I. SEGREGATION AND ASSIGNMENT

- A. If that portion of Lease OCS-A 0534 that Phase 2 occupies is segregated and assigned in accordance with 30 CFR §§ 585.408 – 585.411 to an assignee, BOEM will ensure that approval of any activity on future leases includes conditions binding the Lessee to the terms of this MOA as they apply to the segregated and assigned portion of the lease that Phase 2 occupies. BOEM will ensure that the assignee will be bound by the terms of this MOA applicable to Phase 2 of the undertaking, including responsibility for 60 percent of all financial obligations set forth in Attachment 14 to this MOA. The assignee will notify the signatories in writing that it agrees to the terms of this MOA and intends to sign the MOA as an invited signatory.
1. BOEM will consider any necessary amendments to the MOA that result from the segregation of, and assignment of part of the original lease, in accordance with Stipulation XVIII (Amendments). However, an amendment under Stipulation XVIII will not be necessary if BOEM determines the legal entity's participation does not change the undertaking in a manner that would require any modifications to the stipulations set forth in this MOA. In such a case, BOEM will document the segregation and assignment of the lease and the assignee's becoming a signatory to the MOA in a written notification to the signatories and consulting parties and include a copy of the assignee's executed signature page as an invited signatory.
- B. Upon lease segregation and assignment of Lease OCS-A 0534 to an assignee, the Lessee (Park City Wind LLC) and this assignee will thereafter together be referred to as "the Lessee" and will both assume and implement all stipulations assigned to the Lessee in this MOA.

### II. MEASURES TO AVOID ADVERSE EFFECTS TO IDENTIFIED HISTORIC PROPERTIES

- A. Marine APE
1. BOEM will include the following measures to avoid adverse effects within the marine APE as conditions of approval of the COP:
    - i. The Lessee must avoid the eight potential shipwrecks and potentially significant debris fields identified during marine archaeological surveys. Three potential shipwrecks in the Southern Wind Development Area (SWDA) (PSW-01 – 03) must be avoided by a 50-meter radius buffer from the extent of the site or magnetic field. One potential shipwreck in the OECC (PSW-06) must be avoided by a 100-meter radius buffer from the sonar target boundary. Two potential shipwrecks in the Western Muskeget Variant (PSW-04 and 05) must be avoided by a 50-meter radius buffer from the sonar target boundary. Two potential shipwrecks (PSW-07 and 08) in the SCV, if used, must be avoided by a 60-meter radius buffer from the sonar target boundary. (See Attachment 3, Historic Property Treatment Plan for Submerged Historical Properties.)
    - ii. The Lessee must avoid two ASLFs (SAL-04 and SAL-05) identified during marine archaeological resource assessments (MARA) for the Project. These two ASLFs are located below the proposed vertical APE and outside the horizontal extents of the WTG work zones.
    - iii. To demonstrate the avoidance of archaeological sites SAL-04 and SAL-05 (identified in Stipulation II.A.1.ii) and submerged historic properties (identified

in Stipulation II.A.1.i), the Lessee must provide as-placed and as-laid maps with both the horizontal and vertical extents of all seafloor impacts. These seafloor impacts may include anchoring activities (location of all anchors, anchor chains, cables, and wire ropes, including sweep but excluding the vertical extent of anchor penetration on the seafloor<sup>1</sup>), cable installation (including trenching depths and seafloor footprint of the installation vessel), and WTG installation (anchoring and spudding/jack-up vessel placement) but excluding the vertical extent of anchor penetration on the seafloor. The as-built or as-laid position plats must be submitted at a scale of 1-in. = 1,000-ft., with Differential Global Positioning System (DGPS) accuracy demonstrating that these seafloor disturbing activities complied with the avoidance criteria applied to the archaeological sites or historic properties established in this MOA. These documents and maps must be submitted to BOEM for consulting parties to review no later than 90 days after completion of all the seafloor disturbing/construction activities.

- iv. The Lessee must prepare and submit annual reports to BOEM during construction of the Project that describe implementation of avoidance buffers.

**B. Visual APE**

1. BOEM will include the following avoidance measure to avoid adverse effects within the visual APE as a condition of approval of the COP:
  - i. To maintain avoidance of adverse effects on historic properties in the visual APE where BOEM determined there would be no adverse effects or where no effects would occur, the Lessee must ensure Project structures are within the Project design envelope (PDE), sizes, scale, locations, lighting prescription, and distances that were used to inform the definition of APE for the Project and for determining effects in the Finding of Effect (see the Project COP). If the Project is modified, BOEM will follow Stipulation VII (Project Modifications).

**III. MEASURES TO MINIMIZE ADVERSE EFFECTS TO IDENTIFIED HISTORIC PROPERTIES**

**A. Visual APE**

1. BOEM has undertaken planning and actions to minimize adverse effects to aboveground historic properties in the visual APE. BOEM will include the following measures to minimize adverse effects within the visual APE as conditions of approval of the COP:
  - i. The Lessee must use uniform WTG design, speed, height, and rotor diameter to reduce visual contrast and decrease visual clutter.
  - ii. The Lessee must use uniform WTG spacing of 1 nautical mile (1.15 mile) by 1 nautical mile (1.15 mile) in the north-to-south and east-to-west direction to decrease visual clutter.
  - iii. The Lessee must apply a consistent paint color to the WTGs, no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in accordance with Federal Aviation Administration Advisory Circular 70/7460-1M (2020) and BOEM's *Guidelines for Lighting and Marking of Structures Supporting*

---

<sup>1</sup> The sweep of anchor chains, cables or wire ropes will be depicted as two-dimensional "sweep areas," excluding depiction of precise locations where anchor chains, cables, or wire ropes contact the seafloor. The sweep areas must demonstrate avoidance of archaeological sites SAL-04 and SAL-05 and all submerged historic properties.

*Renewable Energy Development* (April 28, 2021) to help reduce potential visibility of the turbines against the horizon during daylight hours.

- iv. The Lessee must equip all WTGs and ESPs with an aircraft detection lighting system (ADLS) to reduce the duration of nighttime lighting. The system will activate aviation warning lights only when an aircraft is in the vicinity of the SWDA, resulting in an estimated reduction of nighttime visibility of the Project from adversely affected historic properties to less than 13 minutes annually (or less than 0.1 percent of annual nighttime hours). The WTGs and ESPs will be lit and marked in accordance with Federal Aviation Administration and U.S. Coast Guard lighting standards, consistent with BOEM's *Guidelines for Marking of Structures*, to reduce light intrusion.

B. Terrestrial APE

1. BOEM has undertaken planning and actions to minimize adverse effects to historic properties in the terrestrial APE. BOEM will include the following measures to minimize adverse effects within the terrestrial APE as conditions of approval of the COP:
  - i. To minimize adverse effects, the Lessee will site the Onshore Export Cable Route (OECR) and grid interconnection cable routes within existing roadways and/or public utility rights-of-way, unless infeasible or impracticable to do so.
2. Where intensive archaeological testing has not occurred, the Lessee must conduct archaeological monitoring of construction activities in the areas of moderate or high archaeological sensitivity in the Phase 1 terrestrial archaeological APE in coordination with Tribal Nations (see Attachment 13, Onshore Archaeological Monitoring Plan).
3. Where intensive archaeological testing has not occurred, the Lessee must conduct archaeological monitoring of construction activities within the staging areas required for the horizontal directional drilling in the landfall area and during installation of OECR and other components (i.e., duct banks, splice vaults) within the identified zone of moderate and high archaeological sensitivity in the Phase 2 terrestrial archaeological APE in coordination with Tribal Nations (see Attachment 13, Onshore Archaeological Monitoring Plan).

**IV. MEASURES TO MITIGATE ADVERSE EFFECTS TO IDENTIFIED HISTORIC PROPERTIES**

A. Marine APE

1. The Lessee cannot commit to avoiding 49 ASLFs: SAL-06 through SAL-19 in the SWDA; Channel Groups 8-30 (non-sequential) in the OECC; Channel Groups 18, 19, 20 in the Western Muskeget Variant; and SCV-OECC-SAL1 through SCV-OECC-SAL17 in the SCV. To resolve the adverse effects to the ASLFs, BOEM will include the following as conditions of approval of the COP and require fulfillment of the following as mitigation measures prior to seafloor disturbing activities in the SWDA or OECC, and if used, in the Western Muskeget Variant or SCV. The Lessee must fund and fulfill mitigation measures in accordance with Attachment 4, Historic Property Treatment Plan for Ancient Submerged Landforms and Features; Attachment 9, Historic Property Treatment Plan for Nantucket Sound TCP; and Attachment 14, Mitigation Funding Options.
  - i. Pre-construction Geoarchaeology: The Lessee must fulfill commitments for additional archaeological investigations of unavoidable ASLFs to better ascertain their chronological setting, archaeological period association, environmental setting, and evidence of human habitation. This will require the acquisition of

additional vibracores within the upper 6 meters (19 feet) of the seabed. The results of this data will be used along with Tribal ecological knowledge and oral histories by the Lessee to develop a detailed description of the landscape at the time of potential occupation. The Lessee will provide reasonable compensation for participating Tribes, if requested by a Tribal Nation. The Lessee's Qualified Marine Archaeologist (QMA) will sample a variety of ASLFs, representing a variety of landforms. The locations and numbers of vibracores taken from the SWDA, OECC, Western Muskeget Variant (if used), and SCV (if used) will be determined based on a review of available geophysical and geotechnical data and with input from consulting Tribal Nations as well as Massachusetts Bureau of Underwater Archaeology (BUAR) and Massachusetts SHPO, if applicable, as described in Attachments 4 and 14 of this MOA. Cores from the OECC will be examined by the QMA at a suitable laboratory facility. The Lessee must invite consulting Tribal Nations to participate during core opening and processing and must provide compensation and travel and per diem costs. If any unanticipated discovery is found during the implementation of this mitigation measure, then BOEM, with the assistance of the Lessee, will follow Stipulation XIV (Post Review Discoveries). The Lessee must complete collection of vibracores prior to commencing seabed disturbing activities within the ASLFs.

- a. The Lessee's Pre-construction Geoarchaeology effort must be conducted in accordance with BOEM's "Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585." The qualified professional archaeologists leading the research must meet the Secretary of the Interior's (SOI) professional qualification standards for archaeology (62 Fed. Reg. 33,708) and BOEM's standards for Qualified Marine Archaeologists.
  - b. The Lessee must provide the draft technical report and presentation to the consulting Tribal Nations and, in state waters, Tribal Nations, Massachusetts BUAR, and Massachusetts SHPO, for review. Parties will have the opportunity to consult on the approach and focus of these products prior to the initial draft being completed.
  - c. The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XVI (Monitoring and Reporting).
- ii. ASLF Post-construction Seafloor Assessment: The Lessee must fulfill commitments for post-construction seafloor assessment via visual inspection survey of impacted, high-potential ASLFs where ground disturbance occurred, as described in Attachment 4. The Lessee, with the assistance of BOEM, will make the final selection of ASLFs in consultation with Tribal Nations.
- a. Assessment: The post-construction seafloor assessment will consist of a QMA conducting or overseeing a Remotely Operated Vehicle (ROV) to view the seafloor in areas where previously identified ASLFs exist and where construction activities will permanently disturb the ASLFs and potentially displace material culture. The Lessee must submit the QMA's survey design to BOEM and Tribal Nations for review and comment prior to deployment.
  - b. Three-Dimensional (3D) Model: The Lessee must develop a 3D model to define the spatial relationship of Project components and installation methodology (e.g. cable installation via trenching or jetting) relative to the ASLFs considered for the post-construction seafloor assessment. The

- 3D model must identify portions of ASLFs within the vertical APE that will be impacted and that possess a high potential for preserved evidence of human occupation. The Lessee will coordinate with BOEM and Tribal Nations on the results of this effort to select locations for the post-construction seafloor assessment.
- c. Documentation: The QMA must document the impacts within 90 days following the installation of any inter-array cables and export cables that impact the previously identified ASLFs selected for the post-construction seafloor assessment. Documentation of the impacted ASLFs must include the use of standard archaeological methodologies.
  - d. Methods: This inspection must cover not only the immediate physical impacts to the seafloor but also any berms created during trenching or cable installation activities and anchoring activities. These methodologies may include, but are not limited to, establishing a permanent datum, mapping, photo, video, and 3D photogrammetry. For position accuracy, the ROV should be tracked using an Ultra-Short Base Line (USBL) positioning system, where it is feasible.<sup>2</sup>
  - e. Reporting: In the final report for each of these investigations, the QMA must note the seafloor conditions (visibility), environmental conditions (e.g. sand, mud, shell hash bottom), sea state, and how much time has passed since the construction activities were concluded in the area of the ASLF. The Lessee must produce a series of as-laid or as-placed plats that will show the location of the infrastructure in relation to the ASLF and should include both horizontal and vertical penetration into the ASLF. The maps must also include the location of any sites or artifacts identified because of the visual inspection. If sites are identified on state-owned submerged bottomlands, a copy of the notification to the state, a copy of the site file, and the site trinomial must be provided as part of the final report. The QMA must include all logs and other data associated with the ROV visual inspection of the seafloor.
    - 1) Identification of potential cultural material during the ROV inspection will not constitute a “discovery” nor trigger the reporting and consultation requirements established in Attachment 12, Unanticipated Discoveries Plan for Submerged Archaeological Resources. If human remains, or potential human remains, are identified during the ROV inspections, the Lessee must adhere to the Unanticipated Discoveries Plan for Submerged Archaeological Resources. The Lessee must provide Tribal Nations and BOEM with draft and final technical reports, including 3D models and resulting seafloor impact assessments.
    - 2) The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XVI (Monitoring and Reporting).
  - f. Timing: This mitigation measure must be completed no later than 90 calendar days post-final cable burial. If unanticipated issues arise during offshore construction that prevent this measure from being completed within 90 calendar days post-final cable burial, the Lessee must notify

---

<sup>2</sup> USBL transducers must be placed at least 1 meter (m) below the lowest point on the vessel’s hull and cannot be used in water depths less than 5m.

- BOEM, propose an alternate completion timeframe, and reach agreement with BOEM on that timeframe.
- g. Tribal Monitors: The Lessee must notify Tribal Nations 30 days prior to initiation of the post-construction seafloor assessment and provide them with an opportunity to participate as monitors either via live feed or on the vessel (depending upon vessel space, monitors' offshore safety training and certification, monitors' availability, and health and safety concerns), during the post-construction seafloor inspection of the previously identified ASLFs in the APE (as described above). The Lessee must compensate Tribal Nations for participation in the monitoring activities.
  - iii. Tribal Focused Mitigation: The Lessee must fulfill commitments to mitigation supporting tribal objectives. Proposed measures consist of a detailed presentation describing the scientific methods and processes undertaken as part of offshore preconstruction surveys and archaeological assessments to document the ASLFs in Nantucket Sound; a digital database comprised of ASLF data analysis and mapping that documents the geographical location and vertical placement of ASLFs; workshops for each participating Tribal Nation to consist of training in the use of GIS and the set up and configuration of GIS software; and an option of having an in-person presentation of the ASLF study results for each Tribal Nation as requested. The final selection and implementation of the measures by the Lessee must be done in consultation with the Tribal Nations.

B. Visual APE

- 1. BOEM will include the following as conditions of approval of the COP and as mitigation measures to resolve the adverse effects, including direct, indirect, and cumulative effects, on the following historic properties in Massachusetts that will be visually adversely affected:

- Gay Head Lighthouse;
- Edwin Vanderhoop Homestead (Aquinnah Cultural Center);
- Gay Head – Aquinnah Shops Area;
- Chappaquiddick Island TCP;
- Moshup's Bridge and Vineyard Sound TCP (including the multiple contributing properties); and
- Nantucket Sound TCP.

See Attachment 14 for funding amounts for each mitigation effort, reflecting good faith estimates, based on the experience of qualified consultants with similar activities and comparable historic properties. Tasks associated with the mitigation of visual adverse effects can occur during and/or after Project construction, unless otherwise specified. Mitigation measures under Stipulation III.B must be completed within five years of MOA execution, unless a different timeline is agreed upon by the MA SHPO and accepted by BOEM. The Lessee must fund mitigation measures in accordance with Attachment 14 and pursuant to the following measures.

- i. The Lessee must fulfill mitigation measures prior to initiating offshore construction in accordance with Attachment 5, Historic Property Treatment Plan for the Edwin Vanderhoop Homestead and Gay Head – Aquinnah Shops Area. The Lessee must fund (see Attachment 14) and commence the following prior to initiation of construction of any offshore project elements on the OCS included as part of this undertaking:

- a. Ongoing Maintenance of Edwin Vanderhoop Homestead and Gay Head – Aquinnah Shops Area: The Lessee must provide funding to support the ongoing maintenance of the Edwin Vanderhoop Homestead and Gay Head – Aquinnah Shops Area, primarily consisting of the upkeep of buildings, structures, pathways, hardscapes, and softscapes in and around the Edwin Vanderhoop Homestead and Aquinnah Shops Area with the goal of protecting these historic properties for future generations.
  - b. The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XVI (Monitoring and Reporting).
- ii. The Lessee must fulfill mitigation measures prior to initiating offshore construction in accordance with Attachment 6, Historic Property Treatment Plan for Chappaquiddick Island TCP. The Lessee must fund (see Attachment 14) and commence the following prior to initiation of construction of any offshore project elements on the OCS included as part of this undertaking:
- a. Survey and GIS Database of Contributing Resources to TCP: The Lessee must fulfill commitments to conduct a photographic survey of up to 20 contributing sites and/or features to the TCP and develop a GIS database of contributing resources. The scope of work will include consulting with the Chappaquiddick Tribe of the Wampanoag Nation (Chappaquiddick Wampanoag Tribe, a historical Massachusetts Tribe) and Massachusetts SHPO to define the objectives and scope of work, to develop a Request for Proposals (RFP) and select a consultant, to identify contributing resources that can be made public, and to develop the GIS database and preferred data layers. The identified contributing, non-sensitive properties shall be documented on appropriate Massachusetts Historical Commission (MHC) survey forms.
    - 1) The Lessee must provide the draft MHC survey forms and GIS database to the Chappaquiddick Wampanoag Tribe and MHC for review.
    - 2) All work must be completed by professionals meeting the qualifications specified in the SOI's Professional Qualifications Standards (36 CFR Part 61) and with demonstrated professional experience consulting with Tribal Nations and descendent communities. The GIS work will be developed by professionals with demonstrated experience and will be overseen by a qualified Geographic Information Systems Professional.
  - b. Development of Interpretive Materials: The Lessee must fulfill commitments to develop and incorporate digital media and interpretive materials, including ArcGIS story maps or other presentations, in conjunction with the GIS database. The scope of work will include consulting with the Chappaquiddick Wampanoag Tribe to define the objectives and scope of work and to develop an RFP and select a consultant. The scope will also include hosting a meeting with the Chappaquiddick Wampanoag Tribe to review selected contributing features to the TCP, preparing and presenting a draft ArcGIS story map, and introducing and training members of the Chappaquiddick Wampanoag Tribe on how the digital media platform functions.
    - 1) The Lessee must provide the draft interpretive materials to the Chappaquiddick Wampanoag Tribe for review.

- 2) All work must be completed by professionals meeting the qualifications specified in the SOI's Professional Qualifications Standards (36 CFR Part 61) and with demonstrated professional experience consulting with Tribal Nations and descendent communities.
- c. The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XVI (Monitoring and Reporting).
- iii. The Lessee must fulfill mitigation measures prior to initiating offshore construction in accordance with Attachment 7, Historic Property Treatment Plan for Gay Head Lighthouse. The Lessee must fund (see Attachment 14) and commence the following prior to initiation of construction of any offshore project elements on the OCS included as part of this undertaking:
  - a. Ongoing Maintenance: The Lessee must fulfill commitments to provide funding to assist with ongoing repairs and maintenance of Gay Head Lighthouse, including painting, annual maintenance of grounds and turf, repairs and maintenance to pathways for public circulation, including an existing Americans with Disabilities Act-compliant pathway, and other minor repairs.
- iv. The Lessee must fulfill mitigation measures prior to initiating offshore construction in accordance with Attachment 8, Historic Property Treatment Plan for Vineyard Sound and Moshup's Bridge TCP. The Lessee must fund (see Attachment 14) and commence at least one of the following prior to initiation of construction of any offshore project elements on the OCS included as part of this undertaking:
  - a. Scholarships and Training for Tribal Resource and/or Environmental Stewardship: The Lessee must fulfill commitments to fund scholarships and fees for professional training or certification in fields related to the TCP. Examples of fields that could be applicable for professional training or certification include but are not limited to, anthropology, archaeology, astronomy, aquaculture, biology, ethnohistory, history, marine construction/fisheries/ sciences, or Native American studies.
  - b. Coastal Resilience and Habitat Restoration: The Lessee must fulfill commitments to fund future planning and implementation of efforts to help mitigate negative impacts of climate change.
- v. The Lessee must fulfill mitigation measures prior to seafloor disturbing activities in the SWDA or OECC, and if used, in the Western Muskeget Variant or SCV in accordance with Attachment 9, Historic Property Treatment Plan for Nantucket Sound TCP. The Lessee must fund (see Attachment 14) and commence the following prior to initiation of construction of any offshore project elements on the OCS included as part of this undertaking:
  - a. Nineteen of the adversely affected ASLFs in the Project OECC and Western Muskeget Variant are potential contributors to the Nantucket Sound TCP. The Lessee must fulfill commitments to additional archaeological investigation described above in Stipulation IV.A.1 and in Attachment 4, Historic Property Treatment Plan for Ancient Submerged Landforms and Features.

## V. PHASED IDENTIFICATION

- A. BOEM will defer and phase the identification of historic properties, assessment of effects, and resolution of adverse effects within select areas of the terrestrial APE in Massachusetts (depicted in Figure 1.1-2 in Attachment 10, New England Wind Phased Identification Plan), the SCV, and the Phase 2 Old Falmouth Road substation site pursuant to 36 CFR §§ 800.4(b)(2) and 800.5(a)(4). BOEM determined deferred and phased identification was necessary for those select areas of the terrestrial APE where the Lessee does not yet have site control and for the SCV and the Phase 2 Old Falmouth Road substation site if the Lessee selects those alternatives. The final identification of historic properties, assessment of effects, and resolution of adverse effects within the select areas of the terrestrial APE, SCV, and the Phase 2 Old Falmouth Road onshore substation will occur after the Final EIS and ROD. The following measures will be implemented.
1. BOEM, with the assistance of the Lessee, will invite any additional consulting parties that may want to consult on this phased identification based on any new information regarding the specific location of the SCV or the selection of the Phase 2 Old Falmouth Road onshore substation or if the Lessee secures site control to the selected areas within the terrestrial APE.
  2. The Lessee must conduct the phased identification of historic properties within the marine, terrestrial, and visual portions of the APE, as applicable, in accordance with state guidelines, BOEM's most recent *Guidelines for Providing Archaeological and Historic Property Information Pursuant to Title 30 Code of Federal Regulations Part 585*, and consistent with Attachment 10, New England Wind Phased Identification Plan. The Lessee must coordinate with the consulting Tribal Nations, Massachusetts SHPO, and consulting parties prior to the initiation of any such identification efforts.
    - i. BOEM will delineate any marine, terrestrial, and visual portions of the APE for the SCV, if selected.
    - ii. BOEM will delineate the terrestrial and visual portions of the APE for the Phase 2 Old Falmouth Road onshore substation, if selected.
    - iii. BOEM requires that the Lessee complete identification efforts and document those efforts in technical reports that address the identification of historic properties and sites of religious and cultural significance and include an evaluation of effects applying the criteria of adverse effect pursuant to 36 CFR § 800.5(a).
  3. BOEM will consult with Tribal Nations, Massachusetts SHPO, the ACHP, and consulting parties on the results of historic property identification surveys that were not addressed prior to the execution of this MOA.
  4. BOEM will treat all identified potential historic properties as eligible for inclusion in the NRHP unless BOEM determines, and the Massachusetts SHPO concurs, that a property is ineligible, pursuant to 36 CFR § 800.4(c).
  5. If BOEM identifies no additional historic properties or determines that no historic properties are adversely affected as a result of this deferred and phased identification, BOEM, with the assistance of the Lessee, will notify and consult with the signatories and consulting parties following the consultation process set forth here in this stipulation.
    - i. BOEM, with the assistance of the Lessee, will notify all the signatories and consulting parties about the surveys of portions of the terrestrial APE, the SCV, or the Phase 2 Old Falmouth Road onshore substation and BOEM's determination by providing a written summary of the surveys including any maps, a summary of the surveys and/or research conducted to identify historic properties and assess effects, and copies of the surveys.

- ii. BOEM, with the assistance of the Lessee, will provide Tribal Nations, the Massachusetts SHPO, the ACHP, and consulting parties with 60 calendar days to review and comment on the survey reports, the results of the surveys, BOEM's determination, and the documents.
  - iii. After the 60-calendar day review period has concluded and if no comments require additional consultation, BOEM, with the assistance of the Lessee, will notify the signatories and consulting parties that the Massachusetts SHPO has concurred with BOEM's determination. If comments are received, the Lessee will provide a summary of comments and BOEM's responses to signatories and consulting parties.
  - iv. BOEM, with the assistance of the Lessee, will conduct any consultation meetings if requested by the signatories or consulting parties during this 60-calendar day review period.
  - v. This MOA will not need to be amended if no additional historic properties are identified and/or determined to be adversely affected.
6. If BOEM determines new adverse effects to historic properties will occur, BOEM, with the assistance of the Lessee, will notify and consult with the signatories and consulting parties regarding BOEM's finding. BOEM will determine through consultation with the signatories and consulting parties and the Lessee measures for avoidance, minimization, and mitigation in order to resolve adverse effects following the consultation process set forth in this stipulation.
- i. BOEM, with the assistance of the Lessee, will notify all signatories and consulting parties about the surveys and BOEM's determination by providing a written summary of the results including any maps, a summary of the surveys and/or research conducted to identify historic properties and assess effects, copies of the surveys, BOEM's determination, and the proposed resolution measures for the adverse effect(s).
  - ii. The signatories and consulting parties will have 60 calendar days to review and comment on the documents including the adverse effect finding and the proposed resolution of adverse effect(s), including a draft treatment plan(s).
  - iii. BOEM, with the assistance of the Lessee, will conduct a consultation meeting during this 60-calendar review period and conduct any additional consultation meetings as necessary or requested.
  - iv. BOEM, with the assistance of the Lessee, will respond to the comments and make necessary edits to the documents.
  - v. BOEM, with the assistance of the Lessee, will send the revised draft final documents to the signatories and consulting parties for review and comment during a 30-calendar day review and comment period. With this same submittal of draft final documents, BOEM, with the assistance of the Lessee, will provide a summary of all the comments received on the documents and BOEM's responses.
  - vi. BOEM, with the assistance of the Lessee, will respond to the comments on the draft final documents and make necessary edits to the documents.
  - vii. BOEM, with the assistance of the Lessee, will notify all signatories and consulting parties and provide the final document(s), including the final treatment plan(s) and a summary of comments and BOEM's responses thereto, if BOEM receives any comments on the draft final documents, after BOEM has received concurrence from the Massachusetts SHPO on the finding of new adverse effect(s), and BOEM has accepted the final treatment plan(s).
  - viii. The Lessee must implement the final measures to resolve adverse effects per the final treatment plan(s) as applicable and based on consultation.

- ix. The MOA will not need to be amended after the treatment plan(s) is accepted by BOEM.
7. If the SHPO disagrees with BOEM's determination regarding whether an affected property is eligible for inclusion in the NRHP, or if the ACHP or the SOI so request, the agency official will obtain a determination of eligibility from the SOI pursuant to 36 CFR Part 63 (36 CFR § 800.4(c)(2)).
8. If a Tribal Nation that attaches religious and cultural significance to a property off tribal lands does not agree, it may ask the ACHP to request the agency official to obtain a determination of eligibility pursuant to 36 CFR Part 63 (36 CFR § 800.4(c)(2)).
9. If any of the consulting parties object to the findings or resolutions made pursuant to these measures, BOEM will resolve any such objections pursuant to the dispute resolution process set forth in Stipulation XVII, Dispute Resolution.

## **VI. REVIEW PROCESS FOR DOCUMENTS**

- A. The following process will be used for as-placed and as-laid maps (Stipulation II.A.1.iii) and technical reports (Stipulations IV.A.1.i.b; IV.A.1.ii.e; IV.B.1.ii.b; and V.A.5 and 6) produced in accordance with the Stipulations of this MOA:
  1. Draft Document
    - i. The Lessee must provide the document to BOEM for technical review and approval.
      - a. BOEM will have 15 calendar days to complete their technical review.
      - b. If BOEM does not provide approval, they will submit comments back to the Lessee, who will have 15 calendar days to address the comments.
    - ii. After BOEM has reviewed and approved the document, BOEM, with the assistance of the Lessee, will provide the draft document to the signatories and consulting parties, except the ACHP, for review and comment.
      - a. Consulting parties will have 30 calendar days, or another time frame agreed upon by the signatories and consulting parties, to review and comment.
      - b. BOEM, with the assistance of the Lessee, will coordinate a meeting with consulting parties to facilitate comments on the document if requested by a consulting party.
      - c. BOEM will consolidate comments received and provide them to the Lessee within 15 calendar days of receiving comments from consulting parties.
      - d. BOEM, with the assistance of the Lessee, will respond to the comments and make necessary edits to the documents.
    - iii. If BOEM requires substantial edits to the draft document, the Lessee must make those revisions and resubmit the document as a draft for revision under Stipulation VIII.A.1 (Submission of Documents).
  2. Draft Final Document
    - i. The Lessee must provide BOEM with the draft final document for technical review and approval.
      - a. BOEM will have 15 calendar days to complete their technical review.
      - b. If BOEM does not provide approval, they will submit comments back to the Lessee, who will have 15 calendar days to address the comments.
    - ii. BOEM, with the assistance of the Lessee, will provide the final draft document to the signatories and consulting parties, except the ACHP, for review and comment. With this same submittal of draft final documents, BOEM, with the

assistance of the Lessee, will provide a summary of all comments received on the documents and BOEM's responses.

- a. Signatories and consulting parties will have 30 calendar days, or another time frame agreed upon by the signatories and consulting parties, to review and comment.
- b. BOEM, with the assistance of the Lessee, will coordinate a meeting with signatories and consulting parties to facilitate comments on the document if requested by a consulting party.
- c. BOEM will consolidate comments received and provide them to the Lessee within 15 calendar days of receiving comments from consulting parties.
- d. BOEM, with the assistance of the Lessee, will respond to the comments and make necessary edits to the documents.

3. Final Document

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

## **VII. PROJECT MODIFICATIONS**

A. If the Lessee proposes any modifications to the Project that expand the Project beyond the PDE included in the COP and/or outside the defined APEs, or if the proposed modifications would change BOEM's final Section 106 determinations and findings for this Project, the Lessee must notify and provide BOEM with information concerning the proposed modifications. The Lessee must not proceed with the proposed modifications until the following process under Stipulation VII.A is concluded. BOEM will determine if these modifications require alteration of the conclusions reached in the Finding of Effect and, thus, require additional consultation with the signatories and consulting parties. If BOEM determines additional consultation is required, the Lessee must provide the signatories and consulting parties with the information concerning the proposed changes, and the signatories and consulting parties will have 30 calendar days from receipt of this information to comment on the proposed changes. BOEM will consider any comments from signatories and consulting parties prior to agreeing to any proposed changes. Using the procedure below, BOEM will, as necessary, consult with the signatories and consulting parties to identify and evaluate historic properties in any newly affected areas, assess the effects of the modification, and resolve any adverse effects. Any project modification followed pursuant to Stipulation VII (Project Modifications) would not require an amendment to the MOA.

1. If the Project is modified and BOEM identifies no additional historic properties or determines no historic properties are adversely affected due to the modification, BOEM, with the assistance of the Lessee, will notify and consult with the signatories and consulting parties following the consultation process set forth in this Stipulation VII.A.1.
  - i. The Lessee must notify all signatories and consulting parties about this proposed change and BOEM's determination by providing a written summary of the Project modification including any maps, a summary of any additional surveys

- and/or research conducted to identify historic properties and assess effects, and copies of the surveys.
- ii. BOEM and the Lessee will provide the signatories and consulting parties with 30 calendar days to review and comment on the proposed change, BOEM's finding, and the documents.
  - iii. After the 30-day calendar review period has concluded and no comments require additional consultation, the Lessee must notify the signatories and consulting parties that BOEM has approved the Project modification and, if the Lessee received any comments, provide a summary of the comments and BOEM's responses.
  - iv. BOEM, with the assistance of the Lessee, will conduct any consultation meetings if requested by the signatories or consulting parties.
  - v. This MOA will not need to be amended if no additional historic properties are identified or adversely affected.
2. If BOEM determines new adverse effects on historic properties will occur due to a Project modification, BOEM, with the assistance of the Lessee, will notify and consult with the signatories and consulting parties regarding BOEM's finding and the proposed measures to resolve the adverse effect(s) including the development of a new treatment plan(s) following the consultation process set forth in this Stipulation VII.A.2.
- i. The Lessee must notify all signatories and consulting parties about this proposed modification, BOEM's determination, and the proposed resolution measures for the adverse effect(s).
  - ii. The signatories, and consulting parties will have 30 calendar days to review and comment on the adverse effect finding and the proposed resolution of adverse effect(s), including a draft treatment plan(s).
  - iii. BOEM, with the assistance of the Lessee, will conduct additional consultation meetings, if necessary, during consultation on the adverse effect finding and during drafting and finalization of the treatment plans(s).
  - iv. BOEM, with the assistance of the Lessee, will respond to comments and make necessary edits to the documents.
  - v. The Lessee must send the revised draft final documents to the signatories and consulting parties for review and comment during a 30-calendar day review and comment period. With the submittal of draft final documents, the Lessee will provide a summary of all the comments received on the documents and BOEM's responses.
  - vi. BOEM, with the assistance of the Lessee, will respond to the comments on the draft final documents and make necessary edits to the documents.
  - vii. After BOEM has received concurrence from the appropriate SHPOs on the finding of new adverse effect(s), BOEM has accepted the final treatment plan(s), and BOEM has approved the Project modification, the Lessee must notify all signatories and consulting parties that BOEM has approved the Project modification. The Lessee must provide the final document(s) including the final treatment plan(s) and a summary of comments and BOEM's responses thereto, if BOEM receives any comments on the draft final documents. The MOA will not need to be amended after the treatment plan(s) is accepted by BOEM.
3. If any of the signatories or consulting parties object to determinations, findings, or resolutions made pursuant to these measures (Stipulation VII.A.1 and VII.A.2), BOEM

will resolve any such objections pursuant to the dispute resolution process set forth in Stipulation XVIII, Amendments.

## VIII. SUBMISSION OF DOCUMENTS

- A. Tribal Nations, ACHP, NPS, and consulting parties
  - 1. All submittals to Tribal Nations, ACHP, NPS, and consulting parties will be submitted electronically unless a specific request is made for the submittal to be provided in paper format.
- B. Massachusetts SHPO
  - 1. All submittals to Massachusetts SHPO will be in paper format and delivered by U.S. mail, delivery service, or by hand.
  - 2. Plans and specifications submitted to Massachusetts SHPO must measure no larger than 11- by 17-inch format (unless another format is agreed to in consultation); therefore, all documents produced that will be submitted to Massachusetts SHPO under this MOA must meet this format.

## IX. CURATION

- A. BOEM, with the assistance of the Lessee, will ensure that for collections from federal lands or the OCS:
  - 1. Any archaeological materials removed from federal lands or the OCS as a result of the actions required by this MOA shall be curated in accordance with 36 CFR Part 79, “Curation of Federally Owned and Administered Archaeological Collections,” ACHP’s *Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites* published in the *Federal Register* (64 Fed. Reg. 27085-27087 [May 18, 1999]), or other provisions agreed to by the consulting parties and following applicable state guidelines. Other provisions may include curating materials of Native American heritage with Tribal Nations. No excavation is allowed to be initiated before acceptance and approval of a curation plan. The curation plan must be developed through consultation with the Tribal Nations, agencies, and property owners and finalized within one year after completion of the associated construction activities.
    - i. In the event artifacts and material culture associated with the Pre-Contact periods within the coastal and marine environments are identified and recovered during pre-construction, construction, operation, maintenance, and decommissioning of the proposed Project under this MOA, including for mitigation or resulting from post-review discovery including but not limited to vibrocore sampling, those materials, if they are not replaced on the seafloor, will be housed at a curatorial facility in consultation with the Tribal Nations. These collection and curation directions do not apply to the post-construction seafloor inspection mitigation.
  - 2. If suspected human remains are encountered, the Lessee must comply with the Advisory Council on Historic Preservation’s (ACHP) *Policy Statement on Burial Sites, Human Remains, and Funerary Objects* (March 2023).
- B. BOEM, with the assistance of the Lessee, will ensure that for collections from state, local government, and private lands:
  - 1. Archaeological materials from state or local government lands in the APE and the records and documentation associated with these materials shall be curated within the state of their origin at a repository acceptable to the Massachusetts SHPO, or an approved and certified repository, in accordance with the standards and guidelines required by the Massachusetts SHPO. Curating materials of Native American heritage with Tribal

Nations should be considered as an acceptable option. Lands as described here may include the seafloor in state waters. No excavation is allowed to be initiated before acceptance and approval of a curation plan. The curation plan will be developed through consultation with the Tribal Nations, agencies, and property owners and finalized within one year after completion of the associated construction activities.

- i. In the event artifacts and material culture associated with the Pre-Contact periods within the coastal and marine environments are identified and recovered from state property during pre-construction, construction, operation, maintenance, and decommissioning of the proposed Project under this MOA, including for mitigation or resulting from post-review discovery including but not limited to vibracore sampling, those materials, if they are not replaced on the seafloor, may be housed at a curatorial facility in consultation with the Tribal Nations and SHPO and local government(s). These collection and curation directions do not apply to the post-construction seafloor inspection mitigation.
2. Collections from private lands that would remain private property: In cases where archaeological survey and testing are conducted on private land, any recovered collections remain the property of the landowner. In such instances, BOEM and the Lessee, in coordination with the SHPO and affected Tribal Nation(s), will encourage landowners to donate the collection(s) to an appropriate public or Tribal entity. To the extent a private landowner requests that the materials be removed from the site, the Lessee must seek to have the materials donated to the repository identified under Stipulation IX.B.1 through a written donation agreement developed in consultation with the consulting parties. BOEM, assisted by the Lessee, will seek to have all materials from each state curated together in the same curation facility within the state of origin. In cases where the property owner wishes to transfer ownership of the collection(s) to a public or Tribal entity, BOEM and the Lessee will ensure that recovered artifacts and related documentation are curated in a suitable repository as agreed to by BOEM, Massachusetts SHPO, and affected Tribal Nation(s), and following applicable state guidelines. To the extent feasible, the materials and records resulting from the actions required by this MOA for private lands shall be curated in accordance with 36 CFR Part 79. No excavation is allowed to be initiated before acceptance and approval of a curation plan.
3. If suspected human remains are encountered, the Lessee must comply with the ACHP's *Policy Statement on Burial Sites, Human Remains, and Funerary Objects (March 2023)* and Attachments 11 and 12.

## **X. EXPERTISE AND QUALIFICATIONS**

- A. SOI Standards for Archaeology and Historic Preservation. The Lessee must ensure all work carried out pursuant to this MOA meets the *Secretary of the Interior's Standards for Archaeology and Historic Preservation* (48 Fed. Reg. 44,716, September 29, 1983), and considers the suggested approaches to new construction in the SOI's Standards for Rehabilitation.
- B. SOI Professional Qualification Standards. The Lessee must ensure that all work carried out pursuant to this MOA is performed by or under the direct supervision of historic preservation professionals who meet the *Secretary of the Interior's Professional Qualifications Standards* (48 Fed. Reg. 44,738–44,739). A “qualified professional” is a person who meets the relevant standards outlined in such SOI's standards. The Lessee must provide documentation to BOEM demonstrating that the consultants retained for services pursuant to this MOA meet these standards prior to the implementation of mitigation measures.
- C. Tribal Consultation Experience. BOEM, with the assistance of the Lessee, will ensure that all work carried out pursuant to this MOA that requires consultation with Tribal Nations is

performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations.

- D. Investigations of ASLFs. The Lessee must ensure that the additional investigations of ASLFs will be conducted, and the reports and other materials are produced by one or more qualified marine archaeologists and geological specialists who meet the *Secretary of the Interior's Professional Qualifications Standards* and have experience both in conducting high-resolution geophysical (HRG) surveys and processing and interpreting the resulting data for archaeological potential, as well as collecting, subsampling, and analyzing cores.
- E. BOEM Acknowledgement of the Special Expertise of Tribal Nations. BOEM recognizes that all tribal participants and knowledge need not conform to the SOI's standards and acknowledges that Tribal Nations possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to Tribal Nations, pursuant to 36 CFR § 800.4(c)(1). To further apply this expertise, BOEM, with the assistance of the Lessee, will incorporate indigenous knowledge and indigenous traditional ecological knowledge (ITEK) into the documents and review processes when such knowledge is received from Tribal Nations in consultation and during implementation of the MOA, consistent with the Office of Science and Technology Policy and Council on Environmental Quality memorandums (Executive Branch policy) on ITEK and federal decision making (November 15, 2021), "Guidance for Federal Departments and Agencies on Indigenous Knowledge" (November 30, 2022), and "301 DM 7 Departmental Responsibilities for Consideration and Inclusion of Indigenous Knowledge in Department Actions and Scientific Research" (December 5, 2023). Tribal Nations will also be afforded the opportunity to review the application of their knowledge in documents produced under the MOA pursuant to Stipulation VIII (Submission of Documents).

## XI. DURATION

- A. This MOA will expire at (1) the decommissioning of the Project in the lease area, as defined in the lease with BOEM (Lease Number OCS-A 0534) or (2) 33 years from the date of COP approval, whichever occurs first. Prior to such time, BOEM may consult with the other signatories and invited signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation XVIII (Amendments).

## XII. VIBRATION MONITORING

- A. The Lessee must comply with local conditions to minimize vibration impacts during installation of select portions of the Phase 1 onshore cable route duct bank, including that portion in the Centerville Historic District. These conditions will be specified in the Cape Cod Commission's Development of Regional Impact Review approval and may include limiting use of vibratory construction methods and performing pre- and post-construction surveys, if requested by property owners.

## XIII. TERRESTRIAL ARCHAEOLOGICAL MONITORING

- A. Implementation of Terrestrial Archaeological Monitoring Plan. The Lessee must implement the archaeological monitoring plan found in Attachment 13, Onshore Archaeological Monitoring Plan, which applies to areas designated as having high or moderate sensitivity where intensive archaeological testing has not occurred and identified for archaeological monitoring.
- B. In the event of a post-review discovery during archaeological monitoring, the process identified under Stipulation XIV (Post-Review Discoveries) applies.

#### **XIV. POST-REVIEW DISCOVERIES**

- A. Implementation of Post-Review Discovery Plans: If historic properties are discovered that may be historically significant or unanticipated effects on historic properties are found, BOEM and BSEE, with the assistance of the Lessee, will implement the post-review discovery plans found in Attachment 11, New England Wind Terrestrial Unanticipated Discovery Plan, and Attachment 12, New England Wind Unanticipated Discoveries Plan for Submerged Archaeological Resources.
1. The signatories acknowledge and agree that it is possible that additional historic properties may be discovered during implementation of the Project, despite the completion of a good faith effort to identify historic properties throughout the APEs.
- B. All Post-Review Discoveries: In the event of a post-review discovery of a historic property or unanticipated effects to a historic property prior to or during construction, operation and maintenance, or decommissioning of the Project, the Lessee must implement the following actions, which are consistent with the post-review discovery plans (Attachments 11 and 12):
1. Immediately halt all ground- or seafloor-disturbing activities within the area of discovery in accordance with all safety procedures and emergency shut down protocols while considering whether stabilization and further protections are warranted to keep the discovered resource from further degradation or impact.
  2. Notify BOEM and BSEE simultaneously in writing via report within 72 hours of the discovery.
  3. Keep the location of the discovery confidential and take no action that may adversely affect the discovered property until BOEM or the archaeologist or QMA (as described in Attachments 11 and 12) has made an evaluation and instructed the Lessee on how to proceed.
  4. Conduct any additional investigations as directed by BOEM or the archaeologist or QMA to determine, in consultation with the Massachusetts SHPO and applicable federally recognized Tribal Nations, if the resource is eligible for listing in the NRHP (30 CFR § 585.702(b)). BOEM will also be notified about the transmittal of information on the archaeological site to SHPO. BOEM will direct the Lessee to complete additional investigations, as BOEM deems appropriate, if:
    - i. The site has been impacted by the Project activities; or
    - ii. Effects on the site from the Project activities cannot be avoided.
  5. If investigations indicate that the resource is eligible for listing in the NRHP, BOEM, with the assistance of the Lessee, will work with the other relevant signatories and consulting parties to this MOA who have a demonstrated interest in the affected historic property on the further avoidance, minimization, or mitigation of adverse effects.
  6. If there is any evidence that the discovery is from an indigenous society or appears to be a burial site, the Lessee, notwithstanding provision XIII.B.3, will contact the Tribal Nations as identified in the notification lists included in the post-review discovery plans within 72 hours of the discovery with details of what is known about the discovery and consult with the Tribal Nations pursuant to the post-review discovery plan.
  7. If BOEM incurs costs in addressing the discovery, under Section 110(g) of the NHPA, BOEM may charge the Lessee reasonable costs for carrying out historic preservation responsibilities, pursuant to its delegated authority under the OCS Lands Act (30 CFR § 585.702 (c)-(d)).

## **XV. EMERGENCY SITUATIONS**

- A. In the event of an emergency or disaster that is declared by the President or the Governor of Massachusetts, which represents an imminent threat to public health or safety or creates a hazardous condition due to impacts from this Project's infrastructure damaged during the emergency and affecting historic properties in the APEs, the Lessee must notify BOEM. BOEM will then, with the assistance of the Lessee, notify the consulting Tribal Nations, Massachusetts SHPO, and the ACHP of the condition that has initiated the situation and the measures taken to respond to the emergency or hazardous condition. BOEM will make this notification as soon as reasonably possible but not later than 48 hours from when it becomes aware of the emergency or disaster. Should the consulting Tribal Nations, Massachusetts SHPO, or the ACHP desire to provide technical assistance to BOEM, they will submit comments within seven calendar days from notification if the nature of the emergency or hazardous condition allows for such coordination.

## **XVI. MONITORING AND REPORTING**

- A. By July 31 of each calendar year following the execution of this MOA until it expires or is terminated, the Lessee must prepare and, following BOEM's review and agreement to share this summary report, provide all signatories and consulting parties to this MOA a summary report detailing work undertaken pursuant to the MOA. Such report will include a description of how the stipulations relating to avoidance and minimization measures (Stipulations II and III) were implemented, any scheduling changes proposed, any problems encountered, and any disputes and objections received in BOEM's efforts to carry out the terms of this MOA. The Lessee can satisfy its reporting requirement under this stipulation by providing the relevant portions of the annual compliance certification required under 30 CFR § 285.633. If requested by the signatories, BOEM will convene an annual meeting with the other signatories and consulting parties to discuss the annual report, the implementation of this MOA, and other related requested topics.

## **XVII. DISPUTE RESOLUTION**

- A. If any signatory or consulting party to this MOA objects to any actions proposed or the manner in which the terms of this MOA are implemented, they must notify BOEM in writing of their objection. BOEM will consult with such party, and potentially with other interested parties, to resolve the objection. If BOEM determines that such objection cannot be resolved, BOEM will:
1. Forward all documentation relevant to the dispute, including BOEM's proposed resolution, to the ACHP, requesting that the ACHP provide BOEM its advice on the resolution of the objection within 30 calendar days of receiving adequate documentation. Prior to reaching a final decision on the dispute, BOEM will prepare a written response that considers any timely advice or comments regarding the dispute from the ACHP, signatories and/or consulting parties, and provide each of them with a copy of the written response. BOEM will then make its final decision and proceed accordingly.
  2. Make a final decision on the dispute and proceed accordingly if ACHP does not provide its advice regarding the dispute within the 30-calendar day time period. Prior to reaching such a final decision, BOEM will prepare a written response that considers any timely comments regarding the dispute from the signatories, invited signatories, and/or consulting parties to the MOA and provide each of them and the ACHP with a copy of such written response.
- B. BOEM's and the Lessee's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

- C. At any time during the implementation of the measures stipulated in this MOA, should a member of the public object in writing to the signatories regarding the manner in which the measures stipulated in this MOA are being implemented, that signatory must notify BOEM. BOEM will review the objection and may notify the other signatories as appropriate and respond to the objector.

#### **XVIII. AMENDMENTS**

- A. This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by the signatories is filed with the ACHP.
- B. Revisions to any attachment may be proposed by any signatory by submitting a draft of the proposed revisions to all signatories with a notification to the consulting parties. The signatories will consult for 30 calendar days (or another time period agreed upon by all signatories) to consider the proposed revisions to the attachment. If the signatories unanimously agree to revise the attachment, BOEM will provide a copy of the revised attachment to the other signatories and consulting parties. Revisions to any attachment to this MOA will not require an amendment to the MOA.

#### **XIX. COORDINATION WITH OTHER FEDERAL AGENCIES**

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

#### **XX. TERMINATION**

- A. If any signatory to this MOA determines that its terms will not or cannot be carried out, that party will immediately consult with the other signatories and consulting parties to attempt to develop an amendment per Stipulation XVIII. If within 30-calendar days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.
- B. Once the MOA is terminated, and prior to work continuing on the undertaking, BOEM will either (a) execute a new MOA pursuant to 36 CFR § 800.6, or (b) request, take into account, and

respond to the comments of the ACHP under 36 CFR § 800.7. BOEM will notify the signatories as to the course of action it will pursue.

**XXI. ANTI-DEFICIENCY ACT**

- A. BOEM's obligations under this Memorandum of Agreement are subject to the availability of appropriated funds, and the stipulations of this MOA are subject to the provisions of the Anti-Deficiency Act. BOEM shall make reasonable and good faith efforts to secure the necessary funds to implement this MOA in its entirety. If compliance with the Anti-Deficiency Act alters or impairs BOEM's ability to implement the stipulations of this agreement, BOEM shall consult in accordance with the amendment and termination procedures found at Stipulations XVIII and XX of this agreement.

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

**[SIGNATURES COMMENCE ON FOLLOWING PAGE]**

**MEMORANDUM OF AGREEMENT  
AMONG MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**Signatory:**

Bureau of Ocean Energy Management (BOEM)

\_\_\_\_\_

Elizabeth Klein

Director

Bureau of Ocean Energy Management

Date: \_\_\_\_\_

**MEMORANDUM OF AGREEMENT  
AMONG MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**Signatory:**

Massachusetts State Historic Preservation Officer (SHPO)

\_\_\_\_\_

Date: \_\_\_\_\_

Brona Simon  
State Historic Preservation Officer  
Massachusetts Historical Commission

**MEMORANDUM OF AGREEMENT  
AMONG MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**Signatory:**

Advisory Council on Historic Preservation (ACHP)

\_\_\_\_\_  
Reid J. Nelson  
Executive Director  
Advisory Council on Historic Preservation

Date: \_\_\_\_\_

**MEMORANDUM OF AGREEMENT  
AMONG MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**Invited Signatory:**

Park City Wind LLC

\_\_\_\_\_ Date: \_\_\_\_\_  
[Name]  
[Title]  
[Affiliation]

**MEMORANDUM OF AGREEMENT  
AMONG MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**Invited Signatory:**

Mashantucket (Western) Pequot Tribal Nation

\_\_\_\_\_

Date: \_\_\_\_\_

[Name]

[Title]

Mashantucket (Western) Pequot Tribal Nation

**MEMORANDUM OF AGREEMENT  
AMONG MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION AND  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**Invited Signatory:**

Mashpee Wampanoag Tribe of Massachusetts

\_\_\_\_\_

Date: \_\_\_\_\_

[Name]

[Title]

Mashpee Wampanoag Tribe of Massachusetts

**MEMORANDUM OF AGREEMENT  
AMONG MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**Concurring Party:**

Chappaquiddick Wampanoag Tribe

\_\_\_\_\_

Date: \_\_\_\_\_

[Name]

[Title]

Chappaquiddick Wampanoag Tribe

**MEMORANDUM OF AGREEMENT  
AMONG MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**Concurring Party:**

United States Army Corps of Engineers (USACE)

\_\_\_\_\_

Date: \_\_\_\_\_

Justin R. Pabis, PE  
Colonel, Corps of Engineers  
District Engineer

**MEMORANDUM OF AGREEMENT  
AMONG MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**Concurring Party:**

Town of Aquinnah

\_\_\_\_\_

[Name]

[Title]

Town of Aquinnah

Date: \_\_\_\_\_

**MEMORANDUM OF AGREEMENT  
AMONG MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**Concurring Party:**

Bureau of Safety and Environmental Enforcement (BSEE)

\_\_\_\_\_ Date: \_\_\_\_\_

[Name]

[Title]

Bureau of Safety and Environmental Enforcement (BSEE)

**MEMORANDUM OF AGREEMENT  
AMONG MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**Concurring Party:**

National Park Service (NPS)

\_\_\_\_\_

Date: \_\_\_\_\_

[Name]

[Title]

National Park Service (NPS)

This page is intentionally blank.

**MEMORANDUM OF AGREEMENT  
AMONG MASHPEE WAMPANOAG TRIBE,  
MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,  
THE BUREAU OF OCEAN ENERGY MANAGEMENT,  
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT  
(LEASE NUMBER OCS-A 0534)**

**LIST OF ATTACHMENTS TO THE MOA**

ATTACHMENT 1 – AREA OF POTENTIAL EFFECTS MAPS

ATTACHMENT 2 – LISTS OF INVITED AND PARTICIPATING CONSULTING PARTIES

ATTACHMENT 3 – HISTORIC PROPERTY TREATMENT PLAN FOR SUBMERGED HISTORICAL PROPERTIES

ATTACHMENT 4 – HISTORIC PROPERTY TREATMENT PLAN FOR ANCIENT SUBMERGED LANDFORMS AND FEATURES

ATTACHMENT 5 – HISTORIC PROPERTY TREATMENT PLAN FOR THE EDWIN VANDERHOOP HOMESTEAD AND GAY HEAD – AQUINNAH SHOPS AREA

ATTACHMENT 6 – HISTORIC PROPERTY TREATMENT PLAN FOR CHAPPAQUIDDICK ISLAND TCP

ATTACHMENT 7 – HISTORIC PROPERTY TREATMENT PLAN FOR GAY HEAD LIGHTHOUSE

ATTACHMENT 8 – HISTORIC PROPERTY TREATMENT PLAN FOR VINEYARD SOUND AND MOSHUP’S BRIDGE TCP

ATTACHMENT 9 – HISTORIC PROPERTY TREATMENT PLAN FOR NANTUCKET SOUND TCP

ATTACHMENT 10 – NEW ENGLAND WIND PHASED IDENTIFICATION PLAN

ATTACHMENT 11 – NEW ENGLAND WIND TERRESTRIAL UNANTICIPATED DISCOVERY PLAN

ATTACHMENT 12 – NEW ENGLAND WIND UNANTICIPATED DISCOVERIES PLAN FOR SUBMERGED ARCHAEOLOGICAL RESOURCES

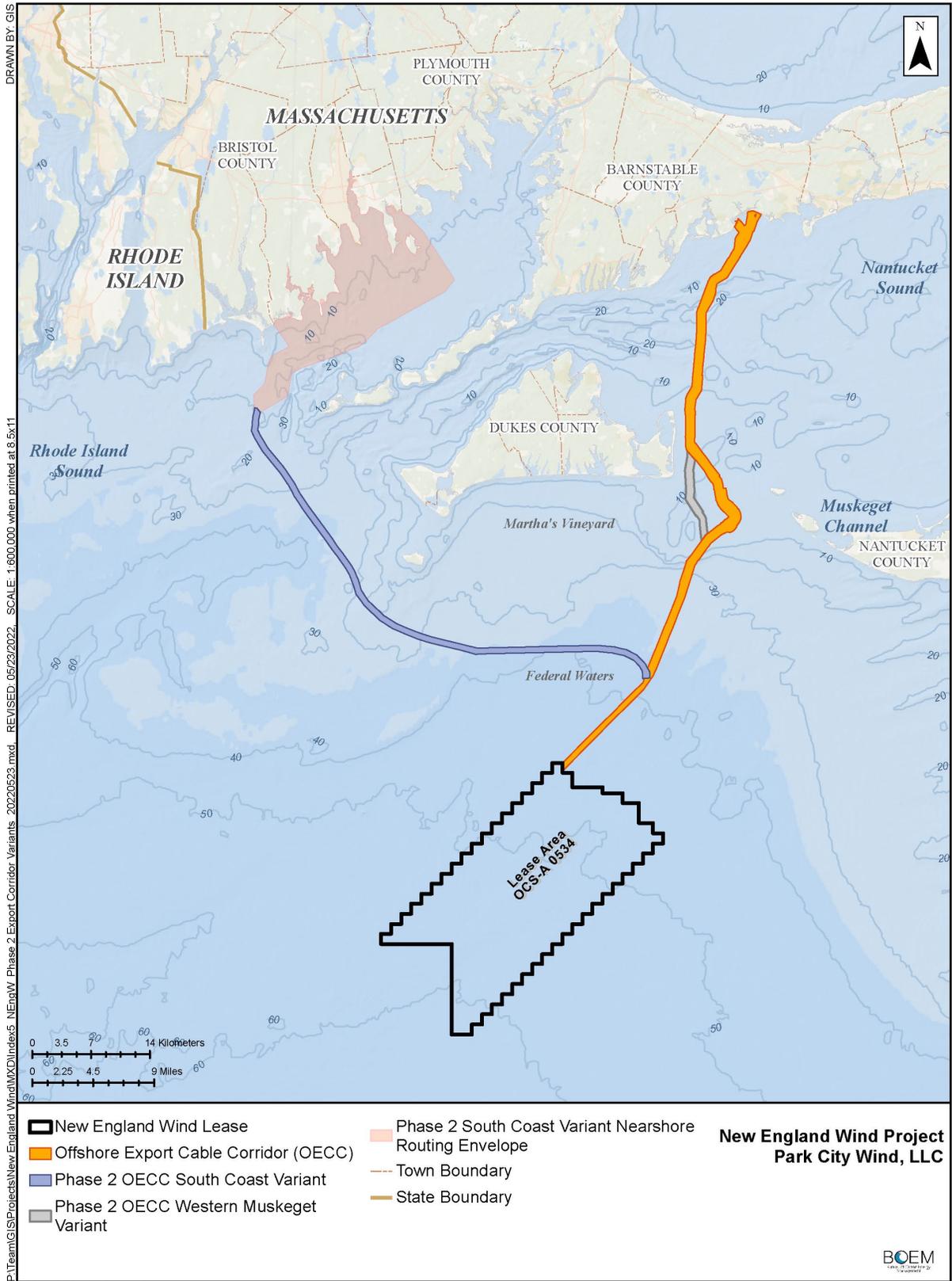
ATTACHMENT 13 – NEW ENGLAND WIND ONSHORE ARCHAEOLOGICAL MONITORING PLAN

ATTACHMENT 14 – NEW ENGLAND WIND MITIGATION FUNDING OPTIONS

This page is intentionally blank.

ATTACHMENT 1 – AREA OF POTENTIAL EFFECTS MAPS

This page is intentionally blank.



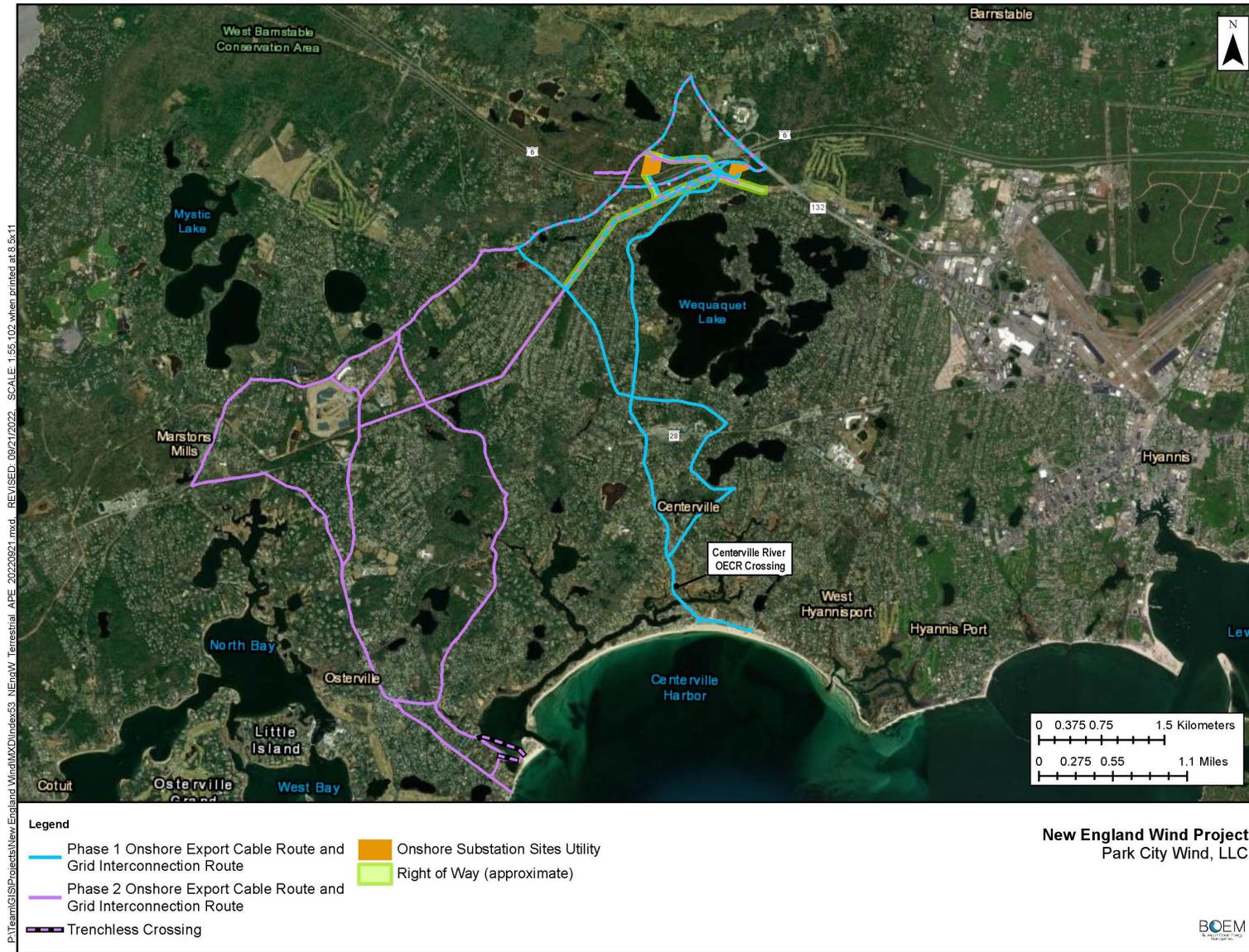
- New England Wind Lease
- Offshore Export Cable Corridor (OECC)
- Phase 2 OECC South Coast Variant
- Phase 2 OECC Western Muskeget Variant
- Phase 2 South Coast Variant Nearshore Routing Envelope
- Town Boundary
- State Boundary

**New England Wind Project  
Park City Wind, LLC**



NAD 1983 UTM Zone 19N

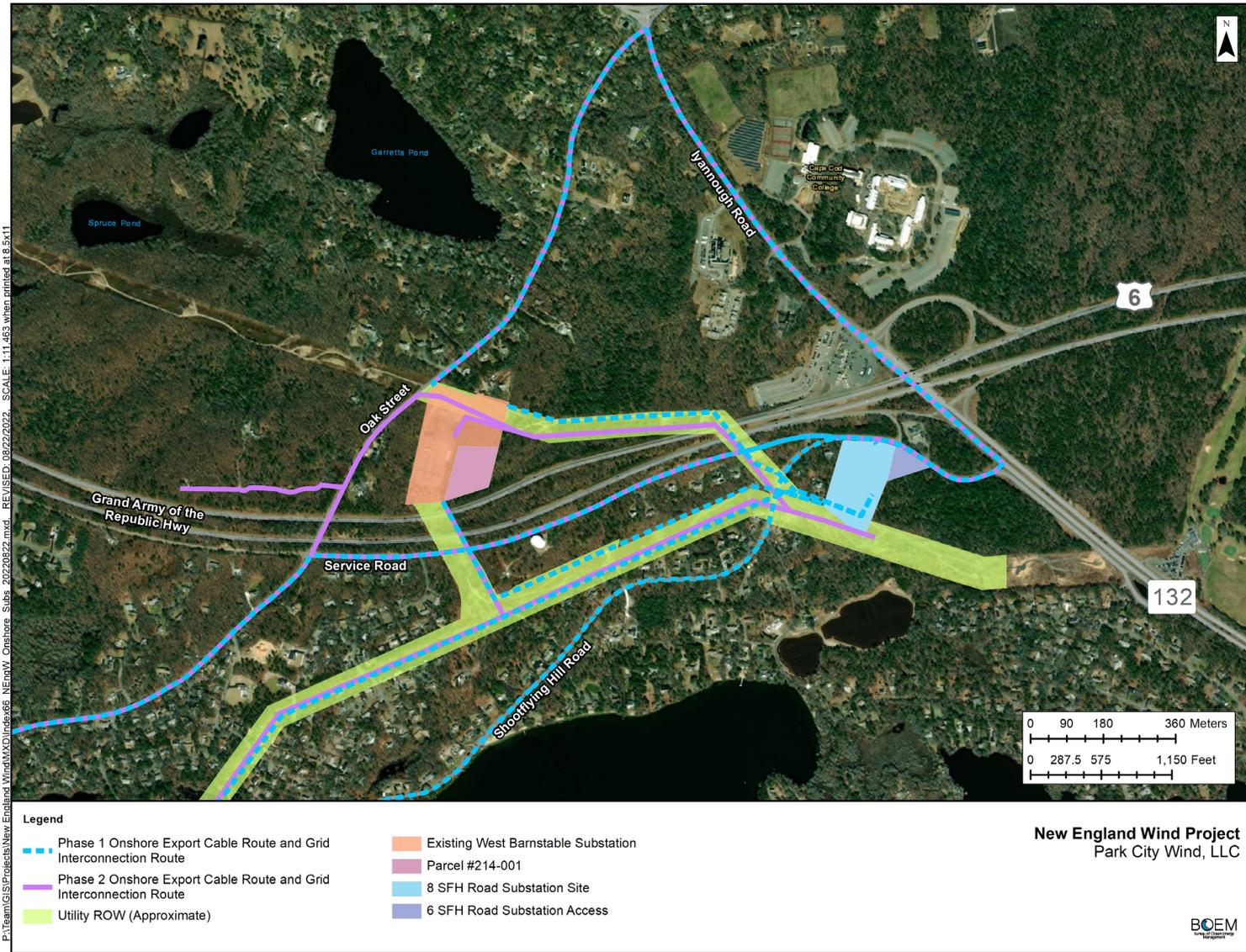
**Marine Area of Potential Effects**



**Terrestrial Area of Potential Effects**



Terrestrial Area of Potential Effects, Phase 1 Landfall Sites

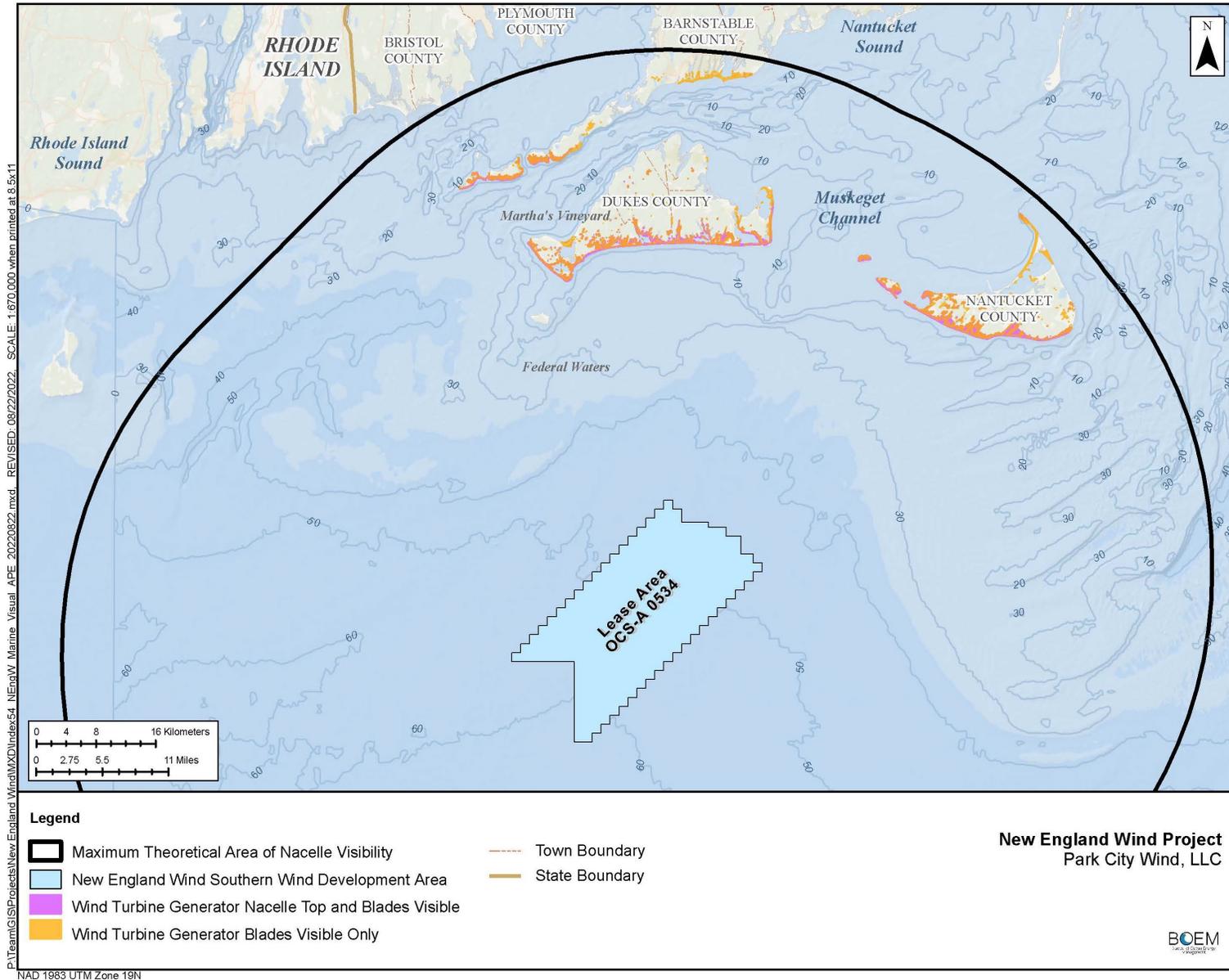


ROW = right-of-way; SFH = Shootflying Hill

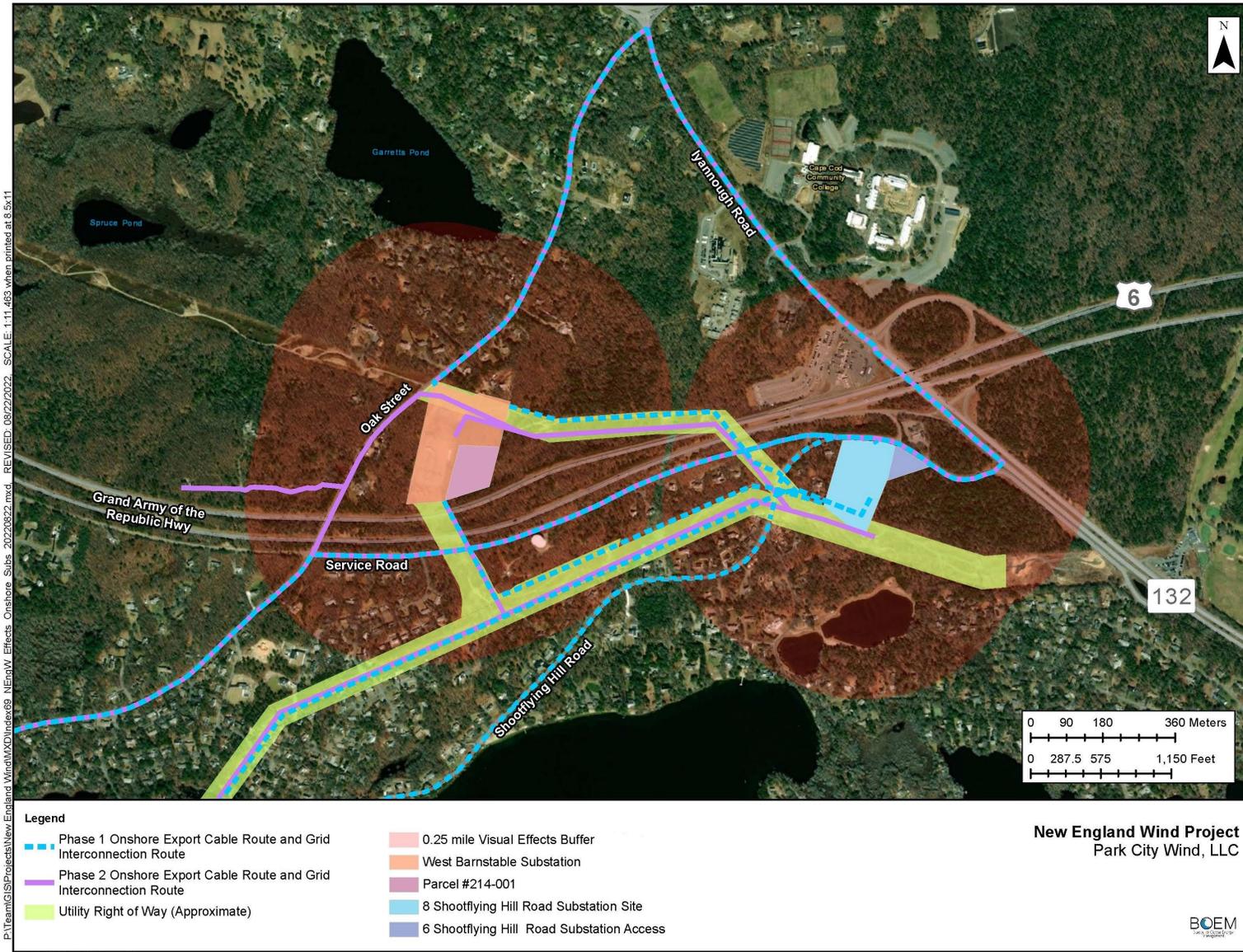
**Terrestrial Area of Potential Effects, West Barnstable Substation Area**



Terrestrial Area of Potential Effects, Phase 2 Landfall Sites



**Offshore Visual Area of Potential Effects**



**Onshore Visual Area of Potential Effects, Barnstable Substation Sites**



Onshore Visual Area of Potential Effects, Centerville River Bridge

ATTACHMENT 2 – LISTS OF INVITED AND PARTICIPATING CONSULTING PARTIES

This page is intentionally blank.

## Attachment 2-1: Entities Invited to be Consulting Parties

The following is a list of governments and organizations that BOEM contacted and invited to be a consulting party to the NHPA Section 106 review of the New England Wind Project (formerly Vineyard Wind South) between June 2021 and April 2022. During the consultations, additional parties were made known to BOEM and were added as they were identified. All counties and municipalities listed below are in Massachusetts unless otherwise specified.

- Advisory Council on Historic Preservation (ACHP)
- Alliance to Protect Nantucket Sound
- Avangrid
- Bureau of Safety and Environmental Enforcement
- Cape Cod Commission
- Non-federally recognized historic Massachusetts Chappaquiddick Tribe of the Wampanoag Nation
- City of New Bedford
- City of Fall River
- Connecticut Department of Economic and Community Development, State Historic Preservation Office
- County of Barnstable
- County of Bristol
- County of Dukes
- Cultural Heritage Partners
- The Delaware Nation
- Delaware Tribe of Indians
- Gay Head Lighthouse Advisory Board
- Historic District Commission (Nantucket)
- Maria Mitchell Association (Dark Skies Initiative)
- Martha's Vineyard Commission
- Mashantucket (Western) Pequot Tribal Nation
- Mashpee Wampanoag Tribe of Massachusetts
- Massachusetts Board of Underwater Archaeological Resources
- Massachusetts Commission on Indian Affairs
- Massachusetts Historical Commission
- Mohegan Tribe of Indians of Connecticut
- Nantucket Conservation Foundation
- Nantucket Historical Association
- Nantucket Historical Commission
- Nantucket Planning Commission
- Nantucket Preservation Trust
- Narragansett Indian Tribe
- National Oceanic and Atmospheric Administration, Habitat and Ecosystem Services Division
- National Park Service
- Office of the Deputy Assistant Secretary of the Navy for Environment
- Preservation Massachusetts
- Rhode Island Historical Preservation & Heritage Commission
- The Shinnecock Indian Nation
- Town of Aquinnah
- Town of Barnstable
- Town of Barnstable Historical Commission
- Town of Chilmark
- Town of Dartmouth
- Town of Dighton
- Town of Edgartown
- Town of Fairhaven

- Town of Falmouth
- Town of Gosnold
- Town of Nantucket
- Town of Oak Bluffs
- Town of Tisbury
- Town of West Tisbury
- Town and County of Nantucket (via their counsel)
- Trustees, Martha's Vineyard and Nantucket
- U.S. Environmental Protection Agency
- U.S. Federal Aviation Administration
- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers
- U.S. Coast Guard
- U.S. Department of Defense
- Vineyard Power Cooperative
- Vineyard Wind
- Wampanoag Tribe of Gay Head (Aquinnah)

## **Attachment 2-2: Consulting Parties to the New England Wind Project**

The following is a current list of consulting parties to the NHPA Section 106 review of the New England Wind Project, as of April 22, 2022.

- Advisory Council on Historic Preservation (ACHP)
- Alliance to Protect Nantucket Sound
- Bureau of Safety and Environmental Enforcement
- Cape Cod Commission
- County of Dukes
- County of Bristol
- Gay Head Lighthouse Advisory Board
- Maria Mitchell Association (Dark Skies Initiative) (withdrew August 27, 2020)
- Martha's Vineyard Commission
- Mashantucket (Western) Pequot Tribal Nation
- Mashpee Wampanoag Tribe of Massachusetts
- Massachusetts Board of Underwater Archaeological Resources
- Massachusetts Historical Commission
- Nantucket Historical Commission (withdrew September 10, 2020)
- Nantucket Historic District Commission (withdrew September 10, 2020)
- Nantucket Planning and Economic Development Commission (withdrew September 10, 2020)
- Nantucket Preservation Trust (withdrew August 27, 2020)
- National Park Service
- Office of the Deputy Assistant Secretary of the Navy for Environment
- Park City Wind
- Rhode Island Historical Preservation & Heritage Commission
- Town and County of Nantucket (withdrew August 27, 2020)
- Town of Barnstable, Historical Commission
- U.S. Army Corps of Engineers
- U. S. Environmental Protection Agency
- Wampanoag Tribe of Gay Head (Aquinnah)

Some of the parties consulted over the course of the NHPA Section 106 review have voluntarily withdrawn from further participation in the consultation, as indicated by the withdrawal date in parentheses for each of those parties.

This page is intentionally blank.

ATTACHMENT 3 – HISTORIC PROPERTY TREATMENT PLAN FOR SUBMERGED HISTORICAL PROPERTIES

This page is intentionally blank.



# New England Wind Historic Property Treatment Plan for Submerged Historical Properties

*Submitted to:*  
BUREAU OF OCEAN ENERGY MANAGEMENT  
45600 Woodland Rd  
Sterling, VA 20166

*Submitted by:*  
Park City Wind LLC

*Prepared by:*



February 2024

# TABLE OF CONTENTS

---

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>1.0 BACKGROUND INFORMATION</b>	<b>3</b>
1.1 Project Overview	3
1.1.1 Bottom Disturbing Activities	4
1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)	6
1.3 Participating Parties	6
<b>2.0 SUMMARY OF HISTORIC PROPERTY (SUBMERGED HISTORICAL PROPERTIES)</b>	<b>7</b>
2.1 Potential Shipwreck Sites	7
2.1.1 Southern Wind Development Area (SWDA)	8
2.1.2 Offshore Export Cable Corridor (OECC)	10
2.1.3 Western Muskeget Variant	12
2.1.4 South Coast Variant	12
2.2 Historical Context	12
<b>3.0 MITIGATION MEASURES</b>	<b>14</b>
<b>4.0 IMPLEMENTATION</b>	<b>15</b>
<b>5.0 REFERENCES</b>	<b>16</b>

## List of Figures

---

Figure 1.1-1	New England Wind Overview	5
Figure 2.0-1	Potential shipwreck sites [REDACTED] identified within the SWDA	9
Figure 2.0-2	Potential shipwreck sites [REDACTED] identified within the OECC and Western Muskeget Variant	11
Figure 2.0-3	Potential shipwreck sites [REDACTED] identified within the South Coast Variant	13

## List of Tables

---

Table 2.1-1	Historic Properties (PSWs) included in the HPTP	7
-------------	---	---

## **EXECUTIVE SUMMARY**

---

This Historic Property Treatment Plan (HPTP) for Submerged Historical Properties (i.e., shipwrecks) potentially affected by the New England Wind project provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP) regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the MOA identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of the New England Wind project (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and is consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and MOA.

This HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent.

The timeline for implementation of the mitigation measures has been determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this HPTP.

This HPTP is organized into the following sections:

### **Executive Summary**

#### **Section 1.0 Background Information**

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

#### **Section 2.0 Summary of Historic Property**

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (New England Wind COP) and the Marine Archaeological Resource Assessment Reports (Volume II-D of the COP and Appendix E of the COP Addendum).

#### **Section 3.0 Mitigation Measures**

This section provides a review of mitigation measures proposed by the Proponent as identified in the COP and through consultation with consulting parties.

#### **Section 4.0 Implementation**

This section establishes the process for executing the mitigation measures identified in Section 4.0.

#### **Section 5.0 References**

This section is a list of works cited for this HPTP.

## 1.0 BACKGROUND INFORMATION

---

### 1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and electrical service platform (ESP) positions. Four or five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km<sup>2</sup>) (101,590– 111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-1). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

In order to transmit the power to shore, four or five offshore export cables—two cables for Phase 1 (Park City Wind) and two or three cables for Phase 2 (Commonwealth Wind) will connect the SWDA to shore. Unless technical, logistical, grid interconnection, or other unforeseen issues arise, all New England Wind offshore export cables will be installed within a shared Offshore Export Cable Corridor (OECC) that will travel from the northwestern corner of the SWDA along the northwestern edge of Lease Area OCS-A 0501 (through Vineyard Wind 1) and then head northward along the eastern side of Muskeget Channel toward landfall sites in the Town of Barnstable. The total length of the export cable route is approximately 101 km (Electrical Service

Platform to shore). The OECC for New England Wind is largely the same OECC proposed in the approved Vineyard Wind 1 COP, but it has been widened to the west along the entire corridor and to the east in portions of Muskeget Channel. The two Vineyard Wind 1 offshore export cables will also be installed within the New England Wind OECC. To avoid cable crossings, the Phase 1 cables are expected to be located to the west of the Vineyard Wind 1 cables and, subsequently, the Phase 2 cables are expected to be installed to the west of the Phase 1 cables.

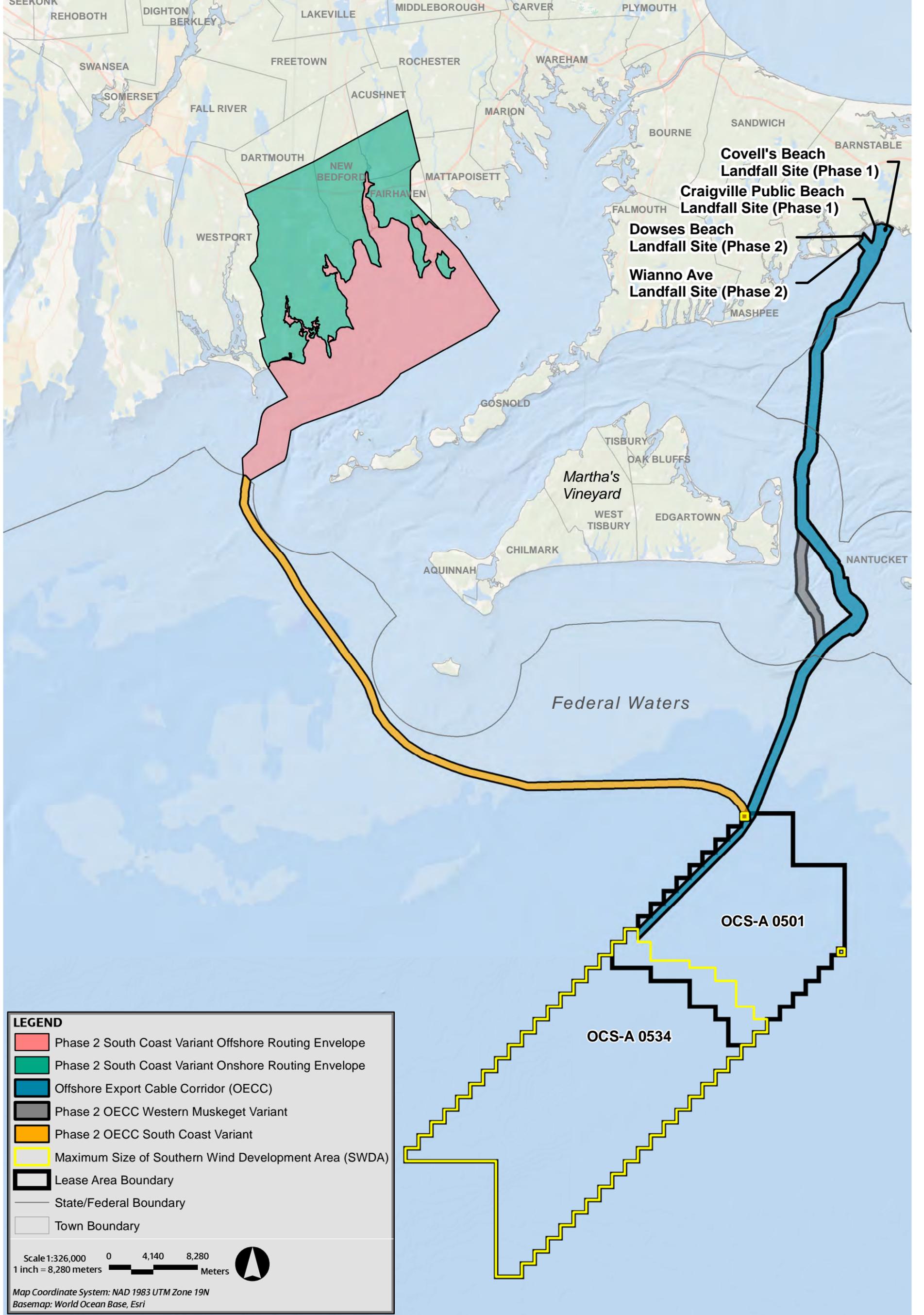
While the Proponent intends to install all Phase 2 offshore export cables within this OECC, the Proponent has identified two variations of the OECC that may be employed for Phase 2: the Western Muskeget Variant (which passes along the western side of Muskeget Channel) and the South Coast Variant (which connects to a potential second grid interconnection point) (see Figure 1.1-1). These variations are necessary to provide the Proponent with commercial flexibility should technical, logistical, grid interconnection, or other unforeseen issues arise during the COP review and engineering processes. If it becomes necessary to employ the South Coast Variant and a second grid interconnection point is secured, the Proponent understands that BOEM would conduct a supplemental review of those portions of the South Coast Variant not otherwise considered in the Final Environmental Impact Statement.

This undertaking has the potential to affect submerged cultural resources; therefore, BOEM requires a marine archaeological resource assessment (MARA). The MARA for New England Wind (see COP Volume II-D and Appendix E of the COP Addendum for the South Coast Variant) is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act (NEPA). The Area of Potential Effects (APE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.

Best Management Practices within the MARA include involvement of a Qualified Marine Archaeologist (QMA) in the design, interpretation, and reporting phases of the non-intrusive, high-resolution geophysical (HRG) survey following BOEM's Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585 (BOEM 2020). The responsibility of the QMA is to identify potential submerged cultural resources that may be eligible for listing in the National Register of Historic Places (NRHP) within the APE. SEARCH provided technical expertise to the Proponent as the QMA for the SWDA, while Gray & Pape served as the QMA for the OECC and subject matter expert (SME) for that portion of the project.

### **1.1.1 Bottom Disturbing Activities**

The APE for offshore wind projects includes the depth and breadth of the seabed potentially impacted by any bottom-disturbing activities. Bottom-disturbing activities within the SWDA are described in Section 1.1 of the MARA (see COP Volume II-D), bottom-disturbing activities within the OECC are described in Section 1.2 of Appendix A of the MARA, and bottom-disturbing activities



This page is intentionally blank.

within the South Coast Variant are defined in Section 1.1 of the South Coast Variant MARA (Appendix E of the COP Addendum). These activities include WTG and ESP foundation installation; scour protection installation; offshore export, inter-array and inter-link cable installation; sand wave dredging in the OECC; vessel anchoring; use of jack-up vessels; and cable protection installation. Potential shipwrecks will be avoided with the implementation of avoidance buffers from the target boundaries as described in Section 2.0 and 3.0.

## **1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)**

This Historic Property Treatment Plan (HPTP) has been developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the MOA with BOEM, the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP), and participating Tribal Nations regarding the New England Wind project.

The MARA reports provided in Volume II-D of the COP and Appendix E of the COP Addendum describe measures to avoid and minimize adverse effects to identified historic properties. Based on this, identified submerged historical properties will be avoided by the Project.

The conditions of COP approval and MOA include measures to avoid adverse effects to identified historic properties and will include measures to minimize adverse effects. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the conditions of COP approval and the MOA as well as with applicable local, state, and federal regulations and permitting requirements.

## **1.3 Participating Parties**

The NEPA substitution process was utilized by BOEM to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM conducted a series of Section 106-specific meetings with consulting parties.

The Proponent has also conducted outreach meetings with various consulting parties to review the findings of the analysis to date and discuss proposed avoidance measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted outreach with the following parties:

- ◆ The Massachusetts Board of Underwater Archaeological Resources
- ◆ Participating Tribal Nations

## 2.0 SUMMARY OF HISTORIC PROPERTY (SUBMERGED HISTORICAL PROPERTIES)

The Proponent identified three potential shipwreck sites (PSWs) within the SWDA [REDACTED] and one PSW site within main OECC, [REDACTED]. In addition, two PSWs were identified within the Western Muskeget Variant, [REDACTED] and two possible shipwreck sites were identified within the South Coast Variant (SCV) OECC (Figure 2.0-3). The following figures and tables provide the locations within the Project area as well as site and target dimensions extracted from the geophysical datasets and supporting documents.

Further details on the PSWs are included in the MARA for the SWDA and the OECC (Volume II-D of the COP) and the MARA for the South Coast Variant (Appendix E of the COP Addendum). This supporting document details the field investigation history and geophysical datasets acquired.

### 2.1 Potential Shipwreck Sites

A discussion of the PSWs follows with an overview of site locations in the SWDA, OECC, Western Muskeget Variant, and South Coast Variant (see Table 2.1-1, Figure 2.0-1, Figure 2.0-2 and Figure 2.0-3).

**Table 2.1-1 Historic Properties (PSWs) included in the HPTP**

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

**Table 2.1-1 Historic Properties (PSWs) included in the HPTP (Continued)**

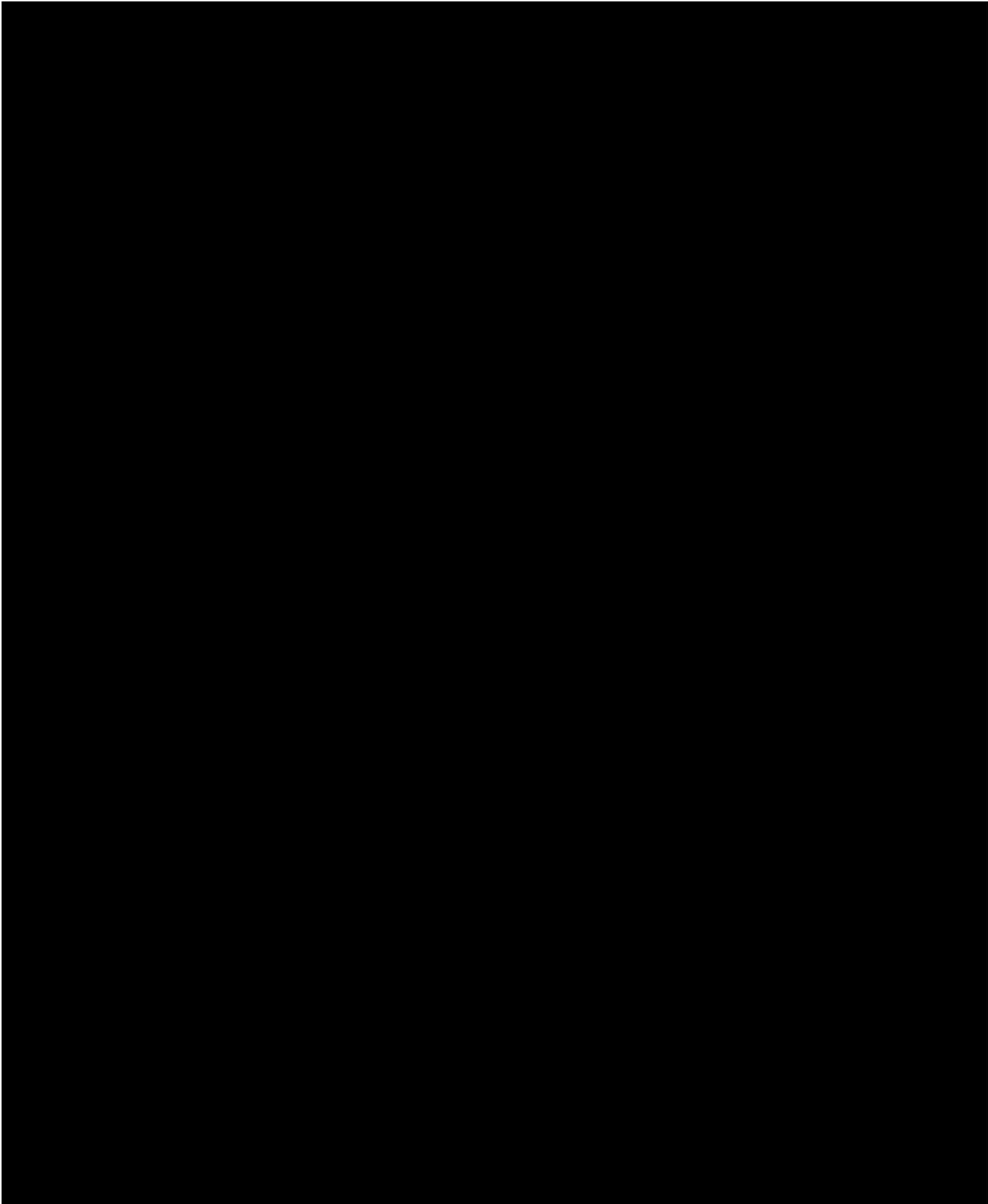
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			

**2.1.1 Southern Wind Development Area (SWDA)**

[REDACTED]

[REDACTED]

[REDACTED]



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

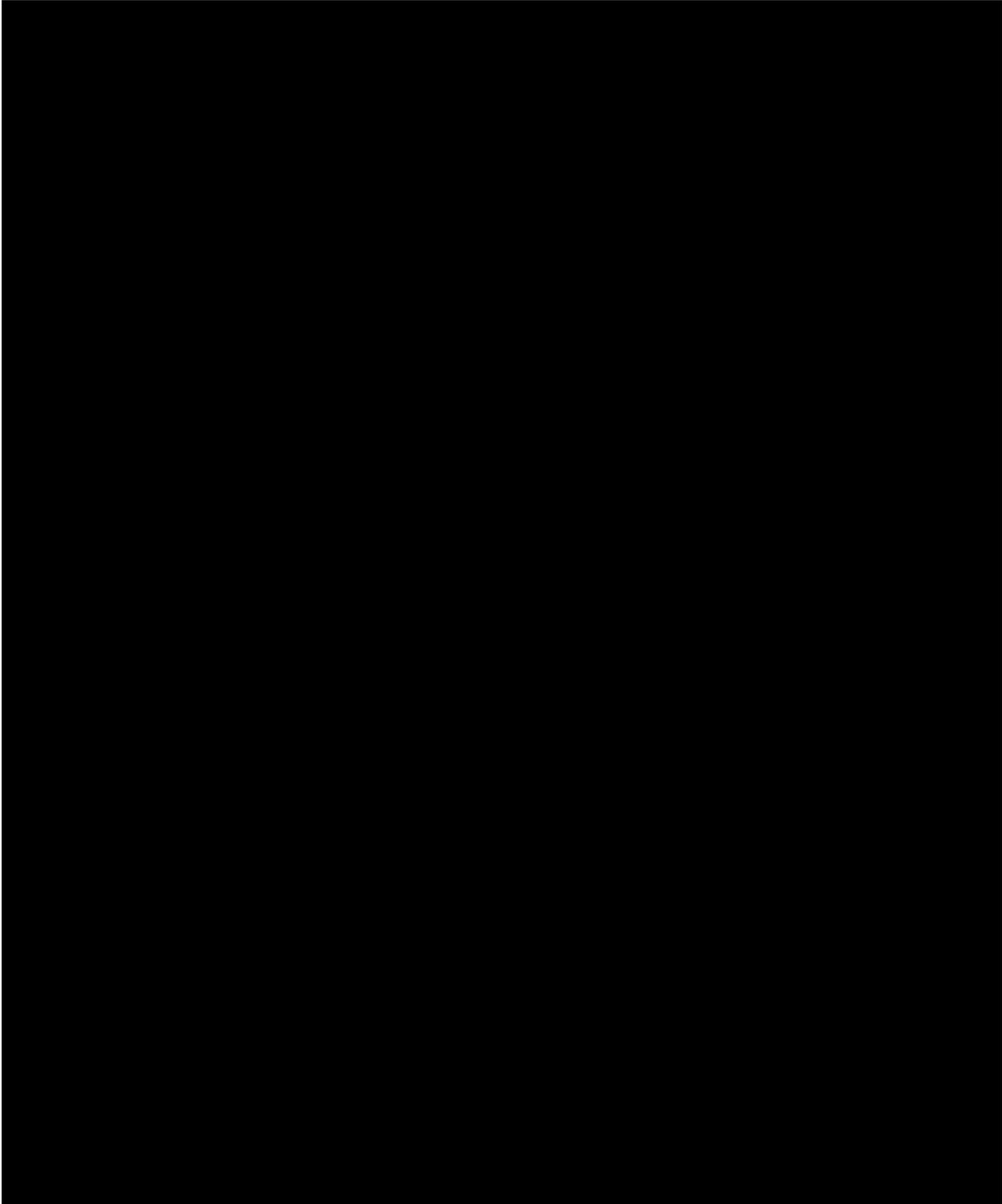
[REDACTED]

**2.1.2 Offshore Export Cable Corridor (OECC)**

[REDACTED]

[REDACTED]

[REDACTED]



**2.1.3 Western Muskeget Variant** [REDACTED]

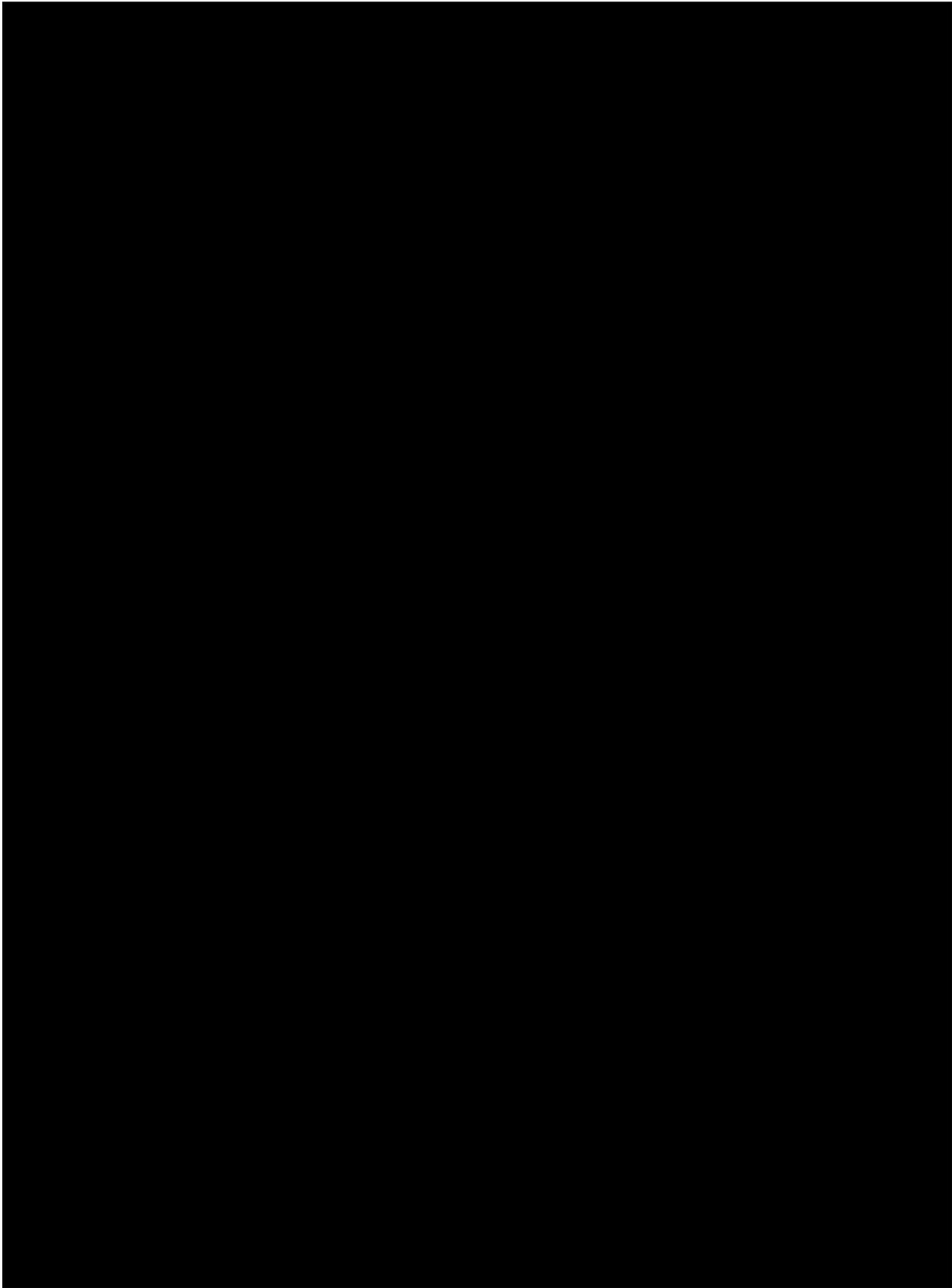
[REDACTED]

**2.1.4 South Coast Variant** [REDACTED]

[REDACTED]

**2.2 Historical Context**

The waters off southern New England historically and through modern day witnessed a high degree of vessel traffic. The strong weather events and dangerous shoals common in the North Atlantic have contributed heavily to vessel losses in the region. Maritime accidents and shipwrecking events have included yachts and pleasure boats sailing from Block Island, Martha's Vineyard, and the coasts of Rhode Island and Narragansett Bay; fishing vessels operating out of Long Island and Martha's Vineyard; cargo vessels moving goods and fuel out of New York City and Providence; war time losses; and other maritime casualties. Extensive commercial traffic in and around the project areas since the Settlement Period (starting ~1620) equates to possible historical and modern debris scattered on and below the seafloor south of Cape Cod.



### 3.0 MITIGATION MEASURES

---

PSWs will be avoided with the implementation of avoidance buffers from the target boundaries. Avoidance buffers are 50-60 m from the edge of the target for the sites where fairly well-defined acoustic targets are present, while site PSW-3 has a 100 m recommended buffer due to the more widely scattered target and anomaly distribution in the area. This avoidance plan complies with the Massachusetts Board of Underwater Archaeological Resources (MBUAR) Policy Guidance for Establishing Shipwreck and Underwater Resource Avoidance Protection Plans. Given the planned avoidance, there would be no adverse effect to submerged historical properties. Accordingly, no mitigation measures are proposed in this HPTP.

For the avoidance of all historic properties, the Proponent will provide as-placed and as-laid maps with both the horizontal and, to the extent feasible, vertical impact of all seafloor impacts. These seafloor impacts include anchoring activities, cable installation (including trenching depths and seafloor footprint of the installation vessel), and WTG installation (anchoring and spudding/jack-up vessel placement). The as-built or as-laid placement plans should be submitted at a scale of 1 inch = 1,000 feet, with differential global positioning system accuracy demonstrating that these seafloor disturbing activities did not impact the avoidance criteria applied to the historic property. These documents and maps should be submitted to BOEM no later than 90 days after completion of post-installation inspection surveys for BOEM and consulting parties to review.

## **4.0 IMPLEMENTATION**

---

The Proponent will implement the planned avoidance of the potential shipwreck sites.

The Proponent will prepare and submit annual reports to BOEM during construction of New England Wind. These reports will describe implementation of avoidance buffers.

## 5.0 REFERENCES

---

- Code of Federal Regulations (CFR), 30 CFR Part 585.626(5), <https://www.ecfr.gov/current/title-30/part-585/subject-group-ECFRf8a2719ff779a7d>, accessed Jan 2022, Content of the Construction and Operations Plan.
- Bureau of Ocean Energy Management, 2020. Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585, United States Department of the Interior, May 27, 2020, 23 pp.
- Geo SubSea, Gray & Pape, SEARCH, 2022. Proposed Cultural Resource Mitigation for Submerged, Ancient Landforms (draft), New England Wind Project, 87 pp.
- Gray & Pape, Inc., 2021. Marine Archaeological Resources Assessment in Support of the New England Wind Construction and Operations Plan for the Offshore Export Cable Corridor, December 2021, 191 pp. (Appendix A of SEARCH, INC. MARA).
- Massachusetts Board of Underwater Archaeological Resources (MBUAR). Policy Guidance for Establishing Shipwreck and Underwater Resource Avoidance Protection Plans.
- Park City Wind LLC, 2021/2022. Draft New England Wind Construction and Operations Plan for Lease OCS-A 0534, Volumes I (371 pp.), II (361 pp.), and III (934 pp.), December 2021/March 2022.
- SEARCH, INC., 2021. Marine Archaeological Resources Assessment for the New England Wind Offshore Wind Farm for OCS-A 0534 Construction and Operations Plan (SWDA Focus), December 2021, 194 pp.
- 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>. Accessed January 2022.

This page is intentionally blank.

ATTACHMENT 4 – HISTORIC PROPERTY TREATMENT PLAN FOR ANCIENT SUBMERGED  
LANDFORMS AND FEATURES

This page is intentionally blank.



# New England Wind Historic Property Treatment Plan for Submerged Ancient Landforms

*Submitted to:*  
BUREAU OF OCEAN ENERGY MANAGEMENT  
45600 Woodland Rd  
Sterling, VA 20166

*Submitted by:*  
Park City Wind LLC

*Prepared by:*



February 2024

# TABLE OF CONTENTS

---

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>1.0 BACKGROUND INFORMATION</b>	<b>3</b>
1.1 Project Overview	3
1.1.1 Bottom Disturbing Activities	6
1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)	6
1.3 Participating Parties	6
<b>2.0 SUMMARY OF HISTORIC PROPERTY (SUBMERGED ANCIENT LANDFORMS)</b>	<b>8</b>
2.1 Submerged Ancient Landforms	8
2.1.1 Physical Description and Existing Conditions	8
2.1.2 Historic Context	11
2.1.3 NRHP Criteria	11
<b>3.0 MITIGATION MEASURES</b>	<b>15</b>
3.1 Pre-Construction Geoarchaeology	15
3.1.1 Purpose and Intended Outcome	15
3.1.2 Scope of Work	16
3.1.3 Research Questions	17
3.1.3.1 The Geographical Environment	17
3.1.3.2 The Operational Environment	18
3.1.3.3 The Modified Environment	18
3.1.3.4 Nantucket Sound Paleoenvironment	19
3.1.4 Core Analysis Methodology	19
3.1.5 Standards	21
3.1.6 Documentation	22
3.1.7 Sampling Sensitivity	22
3.2 Post-Construction Seafloor Assessment	22
3.3 Tribal Focused Mitigation	23
3.4 Post-Installation Maps	24
3.5 Funds and Accounting	25
<b>4.0 IMPLEMENTATION</b>	<b>26</b>
4.1 Timeline	26
4.2 Organizational Responsibilities	26
4.2.1 Bureau of Ocean Energy Management (BOEM)	26
4.2.2 Avangrid Renewables, LLC	26
4.2.3 Massachusetts Historical Commission (MHC); Massachusetts State Historic Preservation Officer; Massachusetts Bureau of Underwater Archaeological Resources	27

## TABLE OF CONTENTS (CONTINUED)

---

---

4.2.4	Tribal Nations	27
4.2.5	Other Parties	27
<b>5.0</b>	<b>REFERENCES</b>	<b>28</b>

### List of Figures

---

Figure 1.1-1	New England Wind Overview	5
Figure 2.1-1	SAL avoidance areas interpreted and mapped in the SWDA	12
Figure 2.1-2	SAL avoidance areas interpreted and mapped in the OECC and Western Muskeget Variant	13
Figure 2.1-3	SAL avoidance areas interpreted and mapped in the South Coast Variant	14

### List of Tables

---

Table 2-1	Historic Properties (SALs) included in this HPTP	9
-----------	--	---

## **EXECUTIVE SUMMARY**

---

This Historic Property Treatment Plan (HPTP) for Submerged Ancient Landforms (SALs) adversely affected by the New England Wind project provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP), and participating Tribal Nations regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the MOA will identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of the New England Wind project (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and will be consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and MOA.

This HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent.

The timeline for implementation of the mitigation measures has been determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this HPTP.

This HPTP is organized into the following sections:

### **Executive Summary**

#### **Section 1.0 Background Information**

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

#### **Section 2.0 Summary of Historic Property**

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (New England Wind COP) and the Marine Archaeological Resource Assessment Reports (Volume II-D).

#### **Section 3.0 Mitigation Measures**

This section provides a review of mitigation measures proposed by the Proponent as identified in the COP and through the consultation process.

#### **Section 4.0 Implementation**

This section establishes the process for executing the mitigation measures identified in Section 4.0.

#### **Section 5.0 References**

This section is a list of works cited for this HPTP.

## 1.0 BACKGROUND INFORMATION

---

### 1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and electrical service platform (ESP) positions. Five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km<sup>2</sup>) (101,590– 111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-1). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

In order to transmit the power to shore, five offshore export cables—two cables for Phase 1 (Park City Wind) and three cables for Phase 2 (Commonwealth Wind) will connect the SWDA to shore. Unless technical, logistical, grid interconnection, or other unforeseen issues arise, all New England Wind offshore export cables will be installed within a shared Offshore Export Cable Corridor (OECC) that will travel from the northwestern corner of the SWDA along the northwestern edge of Lease Area OCS-A 0501 (through Vineyard Wind 1) and then head northward along the eastern side of Muskeget Channel toward landfall sites in the Town of Barnstable. The total length of the export cable route is approximately 101 km (Electrical Service Platform to shore). The OECC for

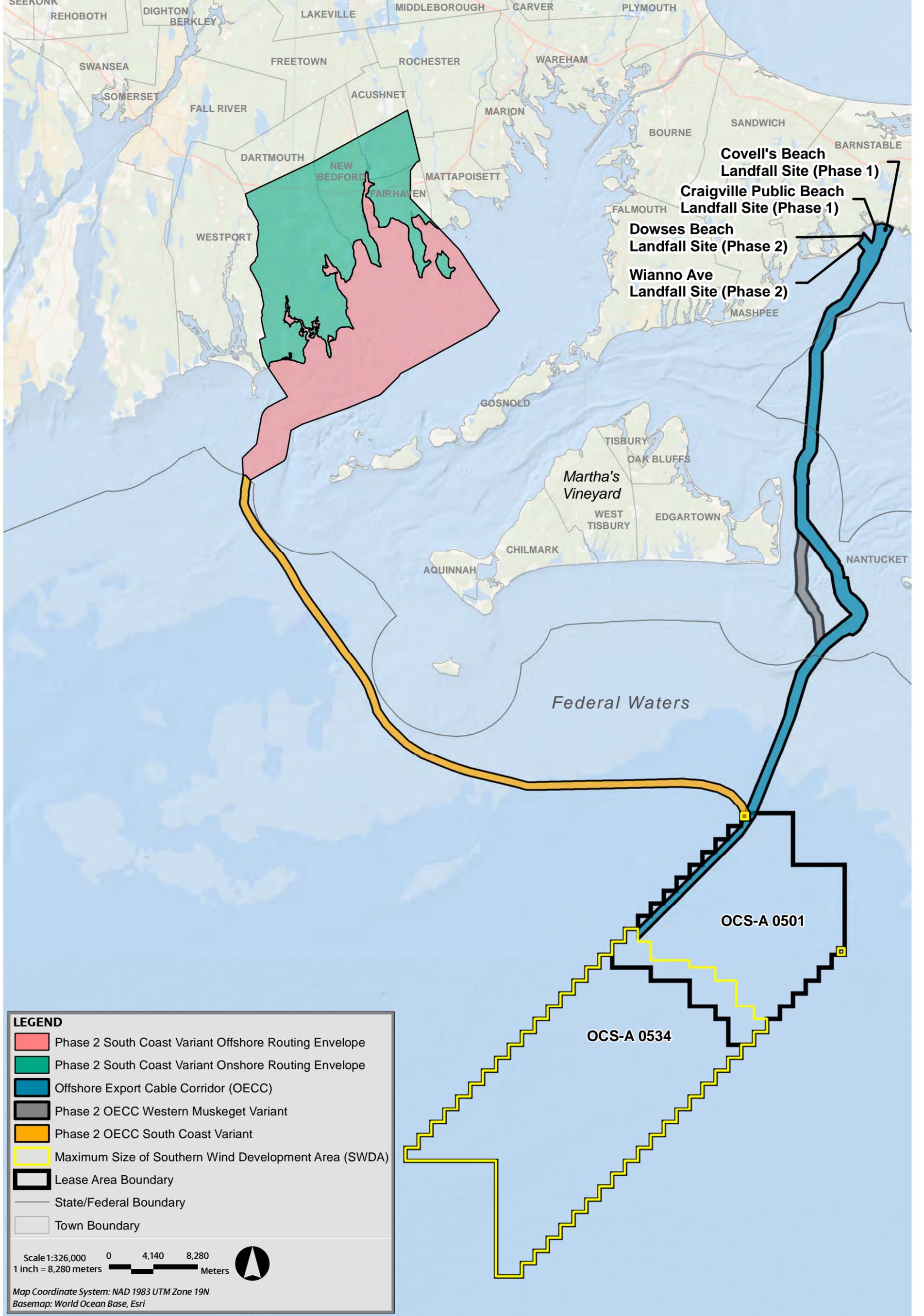
New England Wind is largely the same OECC proposed in the approved Vineyard Wind 1 COP, but it has been widened to the west along the entire corridor and to the east in portions of Muskeget Channel. The two Vineyard Wind 1 offshore export cables will also be installed within the New England Wind OECC. To avoid cable crossings, the Phase 1 cables are expected to be located to the west of the Vineyard Wind 1 cables and, subsequently, the Phase 2 cables are expected to be installed to the west of the Phase 1 cables.

While the Proponent intends to install all Phase 2 offshore export cables within this OECC, the Proponent has identified two variations of the OECC that may be employed for Phase 2: the Western Muskeget Variant (which passes along the western side of Muskeget Channel) and the South Coast Variant (which connects to a potential second grid interconnection point) (see Figure 1.1-1). These variations are necessary to provide the Proponent with commercial flexibility should technical, logistical, grid interconnection, or other unforeseen issues arise during the COP review and engineering processes. If it becomes necessary to employ the South Coast Variant and a second grid interconnection point is secured, the Proponent understands that BOEM would conduct a supplemental review of those portions of the South Coast Variant not otherwise considered in the Final Environmental Impact Statement.

This Undertaking has the potential to affect submerged cultural resources; therefore, BOEM requires a marine archaeological resource assessment (MARA). The MARA for New England Wind (see COP Volume II-D and Appendix E of the COP Addendum for the South Coast Variant) is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act (NEPA). The Area of Effects (APE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.

Best Management Practices within the MARA include involvement of a Qualified Marine Archaeologist (QMA) in the design, interpretation, and reporting phases of the non-intrusive, high-resolution geophysical (HRG) survey following BOEM's Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585 (BOEM 2020) and the Massachusetts Board of Underwater Archaeological Resources (MBUAR) Policy Guidance on Archaeological Investigations and Related Survey Standards for the Discovery of Underwater Archaeological Resources. The responsibility of the QMA is to identify potential submerged cultural resources that may be eligible for listing in the National Register of Historic Places (NRHP) within the APE. SEARCH provided technical expertise to the Proponent as the QMA for the SWDA, while Gray & Pape served as the QMA for the OECC and subject matter expert (SME) for that portion of the project.

This page is intentionally blank.



This page is intentionally blank.

### **1.1.1 Bottom Disturbing Activities**

The APE for offshore wind projects includes the depth and breadth of the seabed potentially impacted by any bottom-disturbing activities. Bottom-disturbing activities within the SWDA are described in Section 1.1 of the MARA (see COP Volume II-D), bottom-disturbing activities within the OECC are described in Section 1.2 of Appendix A of the MARA, and bottom-disturbing activities within the South Coast Variant are defined in Section 1.1 of the South Coast Variant MARA (Appendix E of the COP Addendum). These activities include WTG and ESP foundation installation; scour protection installation; offshore export, inter-array and inter-link cable installation; sand wave dredging in the OECC; vessel anchoring; use of jack-up vessels; and cable protection installation.

## **1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)**

This Historic Property Treatment Plan (HPTP) has been developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the MOA with the BOEM, the Massachusetts State Historic Preservation Officer (MA SHPO), the Advisory Council on Historic Preservation (ACHP), and participating Tribal Nations regarding the New England Wind project.

The MARA reports provided in Volume II-D of the COP and Appendix E of the COP Addendum describes measures to avoid and/or minimize adverse effects to identified historic properties. This HPTP describes the proposed plans to resolve the remaining adverse effects after application of the above-referenced measures. The mitigation measures reflect a refinement of the mitigation framework proposed by the Proponent (see Appendix O of MARA in Volume II-D of the COP).

The conditions of COP approval and MOA include measures to avoid adverse effects to identified historic properties and will include measures to minimize adverse effects. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the conditions of COP approval and the MOA as well as with applicable local, state, and federal regulations and permitting requirements.

## **1.3 Participating Parties**

The NEPA substitution process was utilized by BOEM to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM conducted a series of Section 106-specific meetings with consulting parties.

The Proponent has also conducted outreach meetings with the consulting parties to review the findings of the analysis to date and discuss proposed mitigation measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted outreach with the following parties:

- ◆ The Wampanoag Tribe of Gay Head (Aquinnah)
- ◆ Mashpee Wampanoag Tribe
- ◆ Narragansett Indian Tribe
- ◆ Mashantucket Pequot
- ◆ Mohegan Tribe of Indians
- ◆ Shinnecock Indian Nation
- ◆ Delaware Tribe of Indians
- ◆ The Massachusetts Board of Underwater Archaeological Resources (MBUAR)

Additionally, any work related to this HPTP conducted in Massachusetts state waters will require issuance of a Special Use Permit (SUP) by MBUAR; this scope of work will be reviewed and commented on by MBUAR as part of the SUP application process.

## 2.0 SUMMARY OF HISTORIC PROPERTY (SUBMERGED ANCIENT LANDFORMS)

Submerged ancient landforms (SALs) have been identified within the SWDA and the OECC. [REDACTED]

The following text, figures, and tables provide the SAL locations within the project areas as well as site descriptions extracted from the geophysical datasets and supporting documents.

Further details on the SALs are included in the MARA (Volume II-D of the COP). These supporting documents detail the field investigation history and geophysical datasets acquired.

### 2.1 Submerged Ancient Landforms

A discussion of the SALs that may be impacted follows with an overview of site locations in the SWDA and OECC in Figure 2.1-1 and Figure 2.1-2, respectively. SALs associated with the South Coast Variant are shown in Figure 2.1-3. Numerous additional SALs were identified and mapped outside the APE and are thus not adversely affected.

#### 2.1.1 *Physical Description and Existing Conditions*

SALs are interpreted as remnants of past terrestrial and shallow marine environments that existed along previous coastlines during lower stands of sea level. The landforms now appear buried below the seafloor at varying depths due to different processes acting upon the continental shelf over the past 15,000 years. These landforms are likely to have been living surfaces available to populations present on the OCS during times of lower sea level. While no intact archaeological artifacts, deposits, resources, or sites have been identified offshore, the SALs represent locations of higher significance with the potential to contain those cultural resources.

Table 2-1 below summarizes the SALs that are unavoidable by the Project [REDACTED]

This means that installation of a project component (WTG foundation, inter-array cable [IAC] or export cable [EC]) and the associated construction activities (spudding, anchoring, dredging) may impact the SAL.

**Table 2-1 Historic Properties (SALs) included in this HPTP**

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]



**Table 2-1 Historic Properties (SALs) included in this HPTP (Continued)**

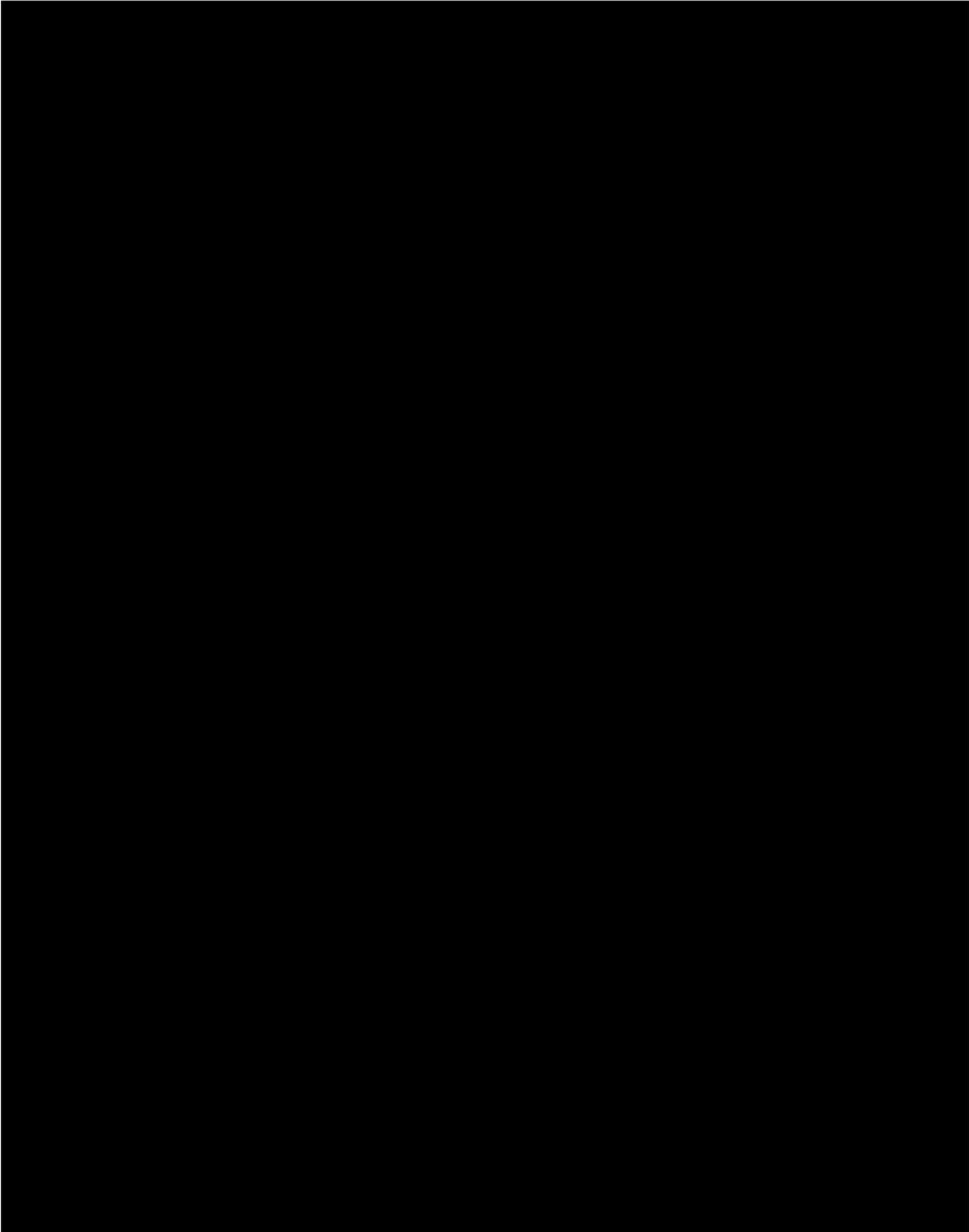
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

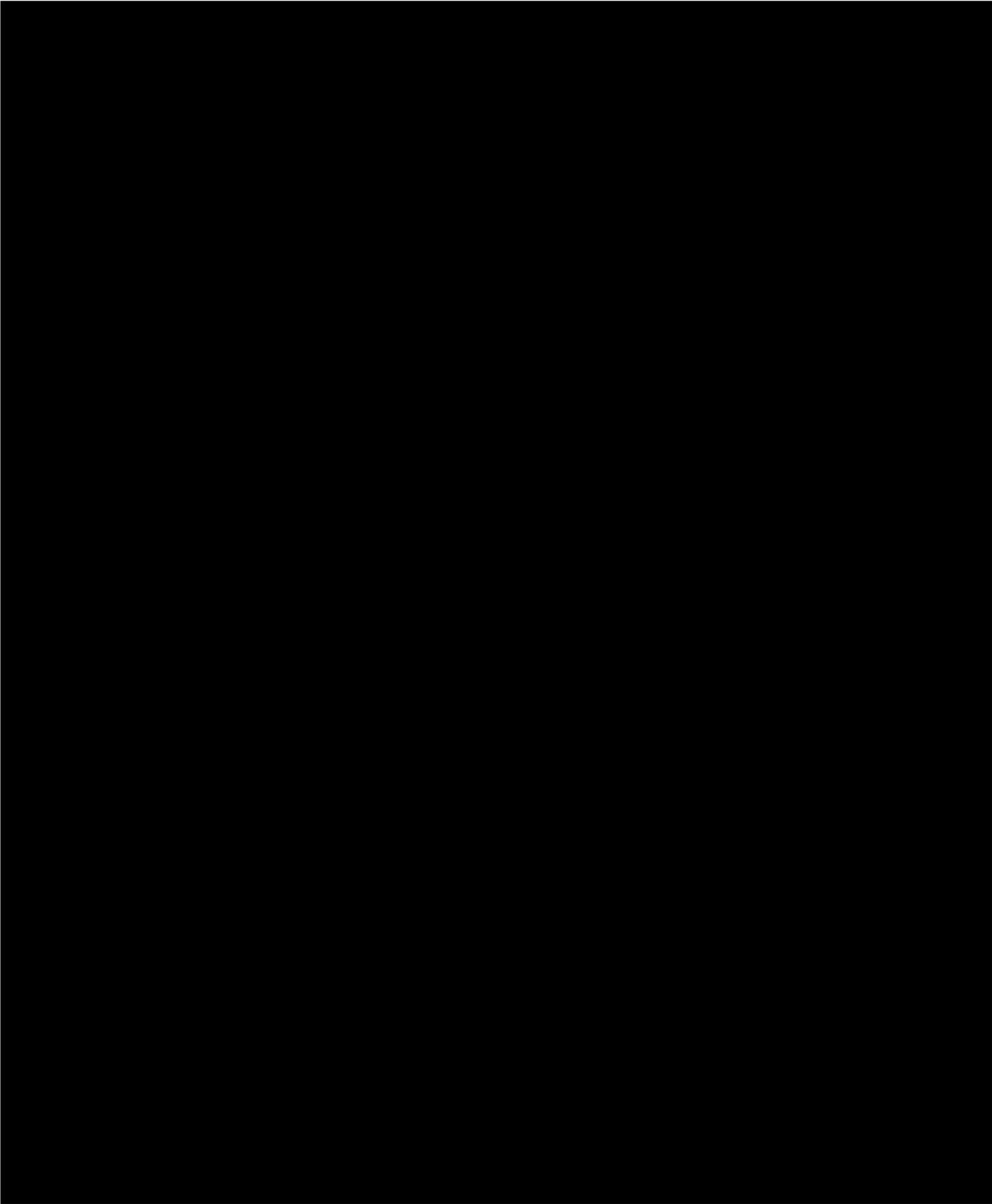
**2.1.2 Historic Context**

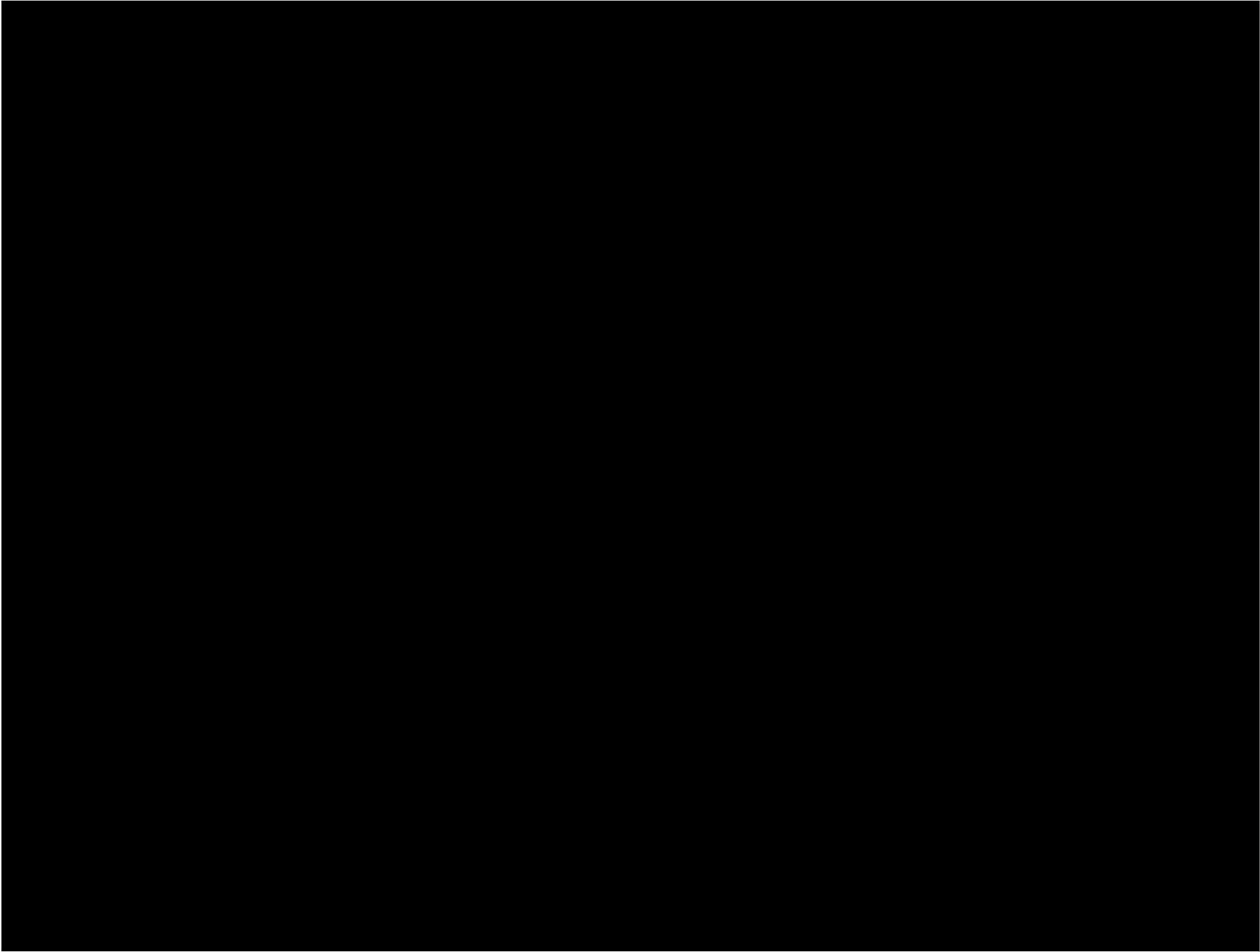
The identification of submerged paleolandscapes offers the potential to locate areas of archaeological interest and further our understanding of landscapes available for settlement by early cultural groups (Robinson et al. 2020). Using predictive models for shoreline migration, archaeologists can correlate dates and cultural periods with geological features on the submerged paleolandscape. Certain environmental factors are weighed when considering archaeological probability. Proximity to sources of fresh water, and thus the fauna that were drawn to them, was a significant determinant in the choice of pre-contact settlement locations (Gillam and Gillam 2016). Paleochannel terraces and floodplains exist intact on the OCS, as a result of sediment burial linked to large-scale flooding events by nearby water sources, and therefore retain the highest probability of containing intact pre-contact cultural resources (Joy 2018). Additionally, low-lying areas (e.g., estuaries) require low energy sea-level rise to become inundated; rapid sea-level rise would have submerged these environments quickly and deeply, possibly burying intact terrestrial soils. Therefore, these types of areas may possess a greater preservation potential than higher elevations, which are more likely to be affected by marine transgression and shoreface erosion. These portions of the preserved former terrestrial landscape are of cultural importance to Tribal Nations as they are likely to represent preserved remnants of the landscape their ancestors inhabited.

**2.1.3 NRHP Criteria**

These SALs are considered to be significant for their potential to aid in our understanding of pre-Contact settlement along the OCS and the cultural and historical significance of these features to Tribal Nations and are recommended eligible for listing in the NRHP under Criterion D.







## 3.0 MITIGATION MEASURES

---

This section provides details on the proposed mitigation measures at the historic properties to address the nature, scope, size, and magnitude of adverse effects including cumulative effects caused by the Project.

### 3.1 Pre-Construction Geoarchaeology

In order to mitigate adverse effects to SALs, New England Wind is proposing to conduct additional archaeological investigations on unavoidable submerged, ancient landforms in the SWDA and OECC. This work will be consistent with an archaeological mitigation-level effort to recover additional information on the SALs to better ascertain their chronological setting, archaeological period association, their environmental setting, and whether evidence of human habitation exists within them. As such, additional vibracores will be acquired within the upper 6 meters of the seabed. The results of the data will be used to develop a detailed description of the landscape at the time of potential occupation. Based on Tribal input, historic uses of indigenous flora and fauna, evidence of which may be recovered during the geoarchaeological campaign, may be better understood through the context of oral histories and ecological knowledge.

#### 3.1.1 *Purpose and Intended Outcome*

Prior to this study, geoarchaeological information for this area is limited at best. Recovery of physical samples through coring can provide data useful for reconstructing the environments across Nantucket Sound and the OCS. Current understanding of these landscapes is based on relative sea level curves, which may not accurately reflect the timing and extent of environmental changes related to sea level rise following the last glacial maximum (LGM). By developing a more comprehensive understanding of the landscape across the Project area, we may be able to identify specific environmental changes and how they may have impacted early inhabitants.

Coring and sediment sampling can transform the relative stratigraphic interpretation of acoustic data into a reconstruction of subsurface stratigraphy and environmental conditions at a given point offshore grounded by absolute dating and illustrated by grain size, pollen, macrobotanical, geochemical, and/or or point-count analysis. This information can be used to create a better understanding of the geographical, operational, and modified environments as described in the research questions below. In the case of the APE, these research questions will fulfill the need for mitigation of submerged, ancient landforms that cannot be avoided during construction activities. They can also be used to test broader hypotheses concerning the nature of the submerged landscape in Nantucket Sound, Muskeget Channel, and the OCS offshore Massachusetts. The results of such hypothesis testing also inform broader questions around human habitation on now-inundated landscapes within the Southern New England region of the OCS.

### **3.1.2 Scope of Work**

This mitigation scope has specifically been built upon ongoing Section 106 Mitigation Studies currently underway (Vineyard Wind 1), with the intent of not duplicating but expanding upon the data acquisition approaches and techniques for assessing paleo-landscapes and environments. The ongoing mitigation study includes limited sampling of all affected SALs across the OCS, providing a baseline of data points, while the current study, outlined below, provides for more in-depth testing of specific feature types (e.g., kettle ponds versus fluvial margins). The in-depth testing may result in improved identification of future features from geophysical data in the absence of coring or other ground disturbance.

For the current study, a variety of SAL types are planned for sampling: a preserved fluvial terrace in the nearshore zone in Nantucket Sound, a preserved fluvial margin in the Muskeget Channel area, a preserved kettle pond/lake feature in the offshore portion of the OECC, and potential preserved channel banks farther offshore in the SWDA.

Within the OECC, a select number of SALs will be tested using closely spaced vibracoring designed to examine these features at a higher spatial resolution. The exact number of cores in each location will be constrained by the landform size as estimated based on previous geophysical and geotechnical study. The total quantity of vibracores will range from 24-32 in the OECC, representing an average of 8-10 cores per submerged, ancient landform type. New England Wind may opt to use an alternate section of the OECC, known as the Western Muskeget Variant. The Western Muskeget Variant includes three submerged, ancient landforms identified within the interpreted Channel Groups that cannot be avoided; therefore, potential mitigation of this OECC variant would include supplemental acquisition of up to six cores (if ongoing engineering work indicates that the Western Muskeget Variant is likely to be used). Sampling and analyses for the Western Muskeget Variant cores will follow the same methods and protocols as those outlined for the proposed 24-32 cores from the OECC. The total number of vibracores to be collected in the OECC (including the Western Muskeget Variant) would be 30-38.

Geotechnical and geophysical surveys and the associated marine archaeological analyses were completed for the South Coast Variant. If ongoing engineering work indicates that the South Coast Variant is likely to be used, any submerged, ancient landforms that cannot be avoided will be mitigated by following the same methods and protocols as those outlined for the OECC. The total number of vibracores to be collected for the South Coast Variant would be 25-34. Sampling and analyses for the South Coast Variant cores will follow the same methods and protocols as those outlined for the proposed cores from the OECC described above.

Unlike the OECC, no previous geoarchaeological cores sampled the interpreted SALs. In the SWDA, a combination of collecting 1-2 cores at the majority of the SALs to sample identified horizons and collecting a series of closely spaced cores at 2-4 select (not all) SALs based on similar geomorphic characteristics will be utilized; up to 32 cores are anticipated.

The exact number of cores per SAL and their placement will be selected following a review of all available geophysical and geotechnical data, and specifically for their ability to provide data that will address the research questions outlined in the original mitigation plan. MBUAR, MHC, and Tribal Nation representatives are expected to participate during every stage of the study and will be given the opportunity to review and comment on proposed core locations and their input incorporated into the coring plan.

The Proponent will release a request for proposals (RFP) for consultant services to complete this scope of work and will consult with Participating Parties in defining objectives and scope of work, as well as in the consultant selection process.

### **3.1.3 Research Questions**

Coring and sediment sampling can transform the relative stratigraphic interpretation of acoustic data into a reconstruction of subsurface stratigraphy and environmental conditions at a given point offshore, grounded by absolute dating and illustrated by grain size, pollen, macrobotanical, geochemical, and/or or point-count analysis. This information can be used to create a better understanding of the geographical, operational, and modified environments as described in the research questions below. In the case of the APE, these research questions will fulfill the need for mitigation of submerged, ancient landforms that cannot be avoided during construction activities. They can also be used to test broader hypotheses concerning the nature of the submerged landscape in Nantucket Sound, Muskeget Channel, and the OCS offshore Massachusetts. The results of such hypothesis testing also inform broader questions around human habitation on now-inundated landscapes within the Southern New England region of the OCS.

#### **3.1.3.1 The Geographical Environment**

The geographical environment, which comprises the physical landscape, has been at least partially documented by the acoustic data as buried coastal features and/or the ravinement surface in the shallow subsurface. However, the data collected to date largely rely on the geophysical interpretation. Coring will allow for ground-truthing of the types of landscape features present. Answering this question will require a more intensive, targeted approach to testing specific submerged, ancient landforms. Based on previous coring efforts, three distinct submerged, ancient landform types were identified within the OECC that exhibit significant preservation potential, including: a preserved fluvial margin terrace within the nearshore zone [REDACTED], a preserved fluvial margin along Muskeget Channel [REDACTED] and a preserved kettle/pond lake feature preserved in the offshore portion of the OECC leading into the SWDA [REDACTED]

The three submerged, ancient landform types were consistently identified across multiple Channel Groups, suggesting that information from one Channel Group location may provide information about the submerged, ancient landform's role within the overall landscape at the time of subaerial exposure and potential human occupation or exploitation. Following Tribal Nation input on sampling locations, each of the three submerged, ancient landform types will be tested using closely spaced vibracores designed to examine these landforms at a higher spatial

resolution. The exact number of cores from each submerged, ancient landform type will be constrained by the landform size as estimated within the specific Channel Group selected for testing, and as mapped from previous geophysical and geotechnical study.

**Research Question 1.** What is the geomorphological and chronological setting of the submerged, ancient landform?

This research question will be addressed by geoarchaeological analysis of sediments recovered within vibracores, and as appropriate, radiocarbon dating of organic material recovered within the samples.

### **3.1.3.2 The Operational Environment**

As noted above, the operational environment consists of the resources available for human use in the environment. Resources may include plants, animals, minerals, and water. Generally, it is possible to paint a broad picture of the paleoenvironment based on palynological, macro-botanical, and microfossil evidence recovered from sediment cores.

**Research Question 2.** What was the paleoenvironmental setting at the time the submerged, ancient landform was exposed?

This question will be addressed through the analysis of palynological, macro-botanical, and microfossil samples recovered from cores within terrestrial-originating deposits. Pollen remains are relatively durable in sediments and will provide information on the past vegetation of the area and may even identify food or medicinal sources for past occupations. Macro-botanicals, when present, can complement palynological analysis to provide site-specific evidence for floral species present at a sample location. Microfossil analysis, particularly that seeking for diatoms, can offer information concerning hydrology at the site location; some taxa prefer freshwater, others saline, indicating whether or not any wetland deposits associated with these landforms were freshwater or coastal wetlands.

### **3.1.3.3 The Modified Environment**

The modified environment is one that shows direct evidence of human use. This evidence may include actual artifacts created by humans, plant or animal remains indicating their use as subsistence resources by human groups, or chemical changes to the soil resulting from human occupation.

**Research Question 3.** Is there evidence of human modification of the environment?

This research question will be addressed through bulk geochemical analysis of nitrogen, faunal analysis of any bone or shell materials suggesting use of these as subsistence resources, bulk geochemical analysis of sediments for elements consistent with human occupation of a land

surface such as nitrogen. Following completion of sampling, the remainder of the working half of each core will be screened where possible; coarser or consolidated sediments may require hand sorting.

#### **3.1.3.4 Nantucket Sound Paleoenvironment**

The additional work proposed herein has the ability to contribute information on the environmental history of Nantucket Sound and offshore waters south of the islands.

**Research Question 4.** How do the results of the additional archaeological mitigation investigation fit within the broader geomorphological and paleoenvironmental context of Nantucket Sound?

This research question will be addressed during the planned review and synthesis of existing data and through a comparison of the results of the proposed mitigation activities with results from geological studies in available literature.

#### **3.1.4 Core Analysis Methodology**

Core processing will occur at laboratories of opportunity in region for the SWDA; these will be decided upon pending vessel docking, scheduling, and through coordination with consulting parties. Cores from the OECC will be examined by the QMA at a suitable laboratory facility. Tribal Nations will be invited to participate during core opening and processing. Tribal Nation representatives participating in this effort will be compensated and provided with travel and per diem costs. Laboratory processing for the OECC and SWDA cores will be coordinated specifically to prevent scheduling conflicts, so that attendance to all activities is possible. Once the cores arrive at the laboratory, the sections will be cut open and split vertically in half, then logged and photographed by the Project QMA and team (including a geoarchaeologist). Half of the core will undergo a geoarchaeological assessment while the other half will be archived in climate-controlled conditions through draft report review by the relevant QMAs. Alternative length of time and location can be discussed during the consultation process and will include the requirements for long-term storage methods and core/sampling viability. The purpose of the geoarchaeological investigation of the vibracore samples is to identify elements of the preserved environments, as specified in the research questions (Section 3.3.3). Analysis will be focused on descriptive aspects that may be helpful in identifying whether a sample represented a marine sedimentary deposit or a coastal and/or terrestrial sedimentary deposit.

The core analysis will proceed in a stepwise fashion designed to maximize recovery of useful data from cores. Specific supplemental analyses (e.g., macro-botanical) will be conducted where appropriate.

#### **Stage One: Geographical Environmental Analysis**

1. Core splitting and scalar photography.
2. Geoarchaeological assessment of sediments in each core to identify preserved terrestrial landforms.

3. Selection of organic materials for radiocarbon dating if appropriate (see notes below).

### **Stage Two: Operational Environmental Analysis**

1. Macro-botanical and micro-botanical analysis of terrestrial sediments to identify floral species represented at the core location.
2. Macro- and micro-fossil analysis of terrestrial sediment to identify faunal species present at the core location, followed by a refinement of the interpretation of the geographical/geomorphological context for the core location (e.g., coastal wetland versus inland wetland, for example, or alluvial terrace versus shoreface).

### **Stage Three: Modified Environmental Analysis**

1. X-Ray Fluorescence (XRF) analysis for bulk elemental analysis of terrestrial landforms to seek geochemical evidence for human habitation.
2. Examination of any bone or shell materials present for evidence of human modification.
3. Screening of sediment for evidence of human activities.

Terrestrial-originating deposits, representing glacially or postglacially deposited sediments, will be identified based on observed characteristics, including evidence of soil formation and/or remnant soil horizons; a structure other than single grained or massive; lack, or near lack, of marine shell; and the presence of organic materials of a possible terrestrial origin. Marine sediments, representing reworked glacially deposited sediments, will be identified by characteristics, including a lack of evidence of soil formation; a single grained or massive structure; the presence of marine shells; and the lack, or near lack, of organic materials of a possible terrestrial origin.

Descriptions of the core samples will follow set standards in accordance with United States Department of Agriculture (USDA) terminology discussed in the Soil Survey Manual (Soil Survey Staff, 1993, 2010). Descriptions of the samples will be recorded while the soil is in a moistened condition and will include (when possible) soil horizon, Munsell color, texture, mottling, soil structure, ped coatings, sedimentary structure and bedding characteristics, moisture consistency, boundary type, and inclusions, such as organic material or cultural artifacts. These descriptions will be recorded in accordance with the observed master horizons (with suitable subdivisions), noting any possible lithologic discontinuities (Stafford, 2004; Stafford & Creasman, 2002). These analyses will provide context to the sample and, possibly, to the type of landform (marine or terrestrial) from which the sample originated.

Once the geomorphology is described, subsamples will be taken from each core, including radiocarbon dating, bulk core geochemical analysis, palynological analysis, and faunal analysis. The locations of these samples will be dependent upon what is identified in each core, as documented by the QMA and geoarchaeologist. Specifically, these subsampling techniques will occur within identified terrestrial-originating deposits. Radiocarbon sampling may include direct dating of larger fragments of carbon, or bulk carbon of the sediments themselves depending on

the availability of carbon within the identified soil horizons. These samples will aid in determining the age of the landform, including its uppermost and lowermost depositional ages. Samples will be collected and supplied to a third-party laboratory for Accelerator Mass Spectrometry (AMS) dating.

Soil samples for bulk core geochemical analysis within the cores will also be collected. These samples will then be sent to the Paleo Research Institute, Golden, Colorado, or similarly qualified facility, for processing using XRF or a similarly qualified facility. Human activity modifies a soil's chemical characteristics by altering the amount of carbon, phosphorus, nitrogen, or carbonates within the deposits, typically increasing the ratios of carbon and nitrogen. Bulk core geochemical analysis can aid in determining the presence or absence of humans on a landform.

Palynological samples within terrestrial-originating deposits will be collected. Pollen is relatively durable in sediments and will provide information on the past vegetation of the area and may even identify food or medicinal sources for past occupations. Likewise, macro-botanical samples recovered from terrestrial-originating deposits can provide localized information concerning floral assemblages from a core location, and as with pollen, may even identify food or medicinal sources used by past human populations. Samples will be sent to the Paleo Research Institute, Golden, Colorado, or a similarly qualified facility for processing and analysis.

Faunal analysis of shell and bone will be carried out after sub-sampling for geochemical and palynological analyses. These analyses will examine any shell and bone that may be recovered from core samples that suggests these materials were deposited during human subsistence activities. Evidence for subsistence activities can include the following: deposits containing taxa known to occupy different environmental contexts (such as shellfish mingled with large mammal bones); signs of burning on shell or bone, shell deposits with only one taxon suggesting intentional harvesting.

Sediment screening will occur once all other samples are collected as this will destroy the remainder of the working half. The archival half will not be included in any of the above screenings. In the unlikely event that an archeological resource(s) is found in the cores, New England Wind will discuss arranging permanent curation or other appropriate next steps for the archaeological resource(s) with MBUAR for portions of the Project within state waters, and BOEM and the Tribal Nations for both state and federal waters. In the unlikely event any artifacts are identified during screening, they will be treated as Unanticipated Discoveries.

### **3.1.5 Standards**

The Preconstruction Geoarchaeology work will be conducted in accordance with BOEM's *Guidelines for Providing Archaeological and Historic Property Information* Pursuant to 30 CFR Part 585. The qualified professional archaeologists leading the research will meet the Secretary of the Interior (SOI) professional qualification standards for archeology (62 FR 33708) and BOEM's standards for QMAs.

### **3.1.6 Documentation**

The Proponent will provide the following documentation to the Participating Parties for their review:

- ◆ Technical Report (draft and final versions).
- ◆ Technical Presentation (draft and final versions).

All results will be delivered to the Participating Parties in the form of technical reports with supporting digital data files. Separate reports will be prepared for the OECC and SWDA.

Draft products will incur one round of review with edits and suggestions addressed in a given time frame, and final products issued thereafter. The technical report is designed to provide all the detail surrounding the Pre-Construction Geoarchaeology study methods and results from the scientific standpoint. The technical presentation is designed for use by the consulting parties and government agencies and will explain how the study was accomplished and results achieved in a more informal, visual format. The approach and focus of these products will be discussed during the consultation and thus some objectives of these deliverables could change.

Products focused directly for the Tribal Nations are discussed in Section 3.3.

### **3.1.7 Sampling Sensitivity**

The Tribal Nations have expressed concern with disturbance of the subsurface within the Nantucket Sound Traditional Cultural Place (TCP) from pre-construction geoarchaeology surveys. In response to this feedback, the Proponent proposes a moderate quantity of vibracores to balance the collection of important information with the desire to minimize disturbances to SALs within the TCP.

## **3.2 Post-Construction Seafloor Assessment**

The MARA identifies multiple SALs that cannot be completely avoided by New England Wind. The Proponent proposes additional mitigation with the specific intent of identifying and assessing direct adverse effects to buried SALs as a result of construction activities. Impacts are expected to include bottom disturbance associated with WTG and ESP foundation installation; scour protection installation; offshore export, inter-array and inter-link cable installation; sand wave dredging in the OECC; vessel anchoring; use of jack-up vessels; and cable protection installation. To assess the full effects of construction, this assessment will be conducted as soon as practicable following completion of bottom-disturbing activities.

The post-construction seafloor assessment will be conducted via a visual inspection survey. The Proponent proposes to use remote operated vehicle (ROV) technology as the primary investigative tool to conduct the survey. The ROV will be tracked using an Ultra-Short Base Line (USBL) positioning system. This method will allow for the collection of data while avoiding unnecessary health and safety risks associated with diving. This survey would include

visual inspection of only those portions of the cable trench where it has intersected an interpreted SAL with a high preservation potential for evidence of human occupation, or where anchors and associated anchor chain sweep directly overlie an interpreted, buried, high potential SAL.

The Proponent's QMAs will develop a survey design that will be submitted to BOEM and Tribal Nations for review and comment prior to deployment. The Proponent will construct a 3D model defining the spatial relationship of project components and installation methodology (e.g., cable installation via jetting) relative to the SALs considered for the post-construction seafloor assessment. The 3D model will identify portions of the SALs within the vertical APE that will be impacted and possess a high preservation potential for evidence of human occupation. The Proponent will coordinate with BOEM and Tribal Nations on the results of this effort to select locations for the post-construction seafloor assessment.

Under the QMA's direction, the visual survey will inspect the installed cable centerline and be conducted to assess the presence/absence of displaced cultural materials, potentially from the SAL. This visual survey will address up to 3 impacted high potential SALs where ground disturbance occurred.

Tribes/Tribal Nations will be afforded the opportunity to participate as monitors during the post-construction seafloor inspections either via live feed<sup>1</sup> or on the vessel, depending upon vessel space, monitors' offshore safety training and certification, monitors' availability, and health and safety concerns. Tribal Nation representatives participating in this effort will be compensated and provided with travel and per diem costs.

Results from this survey will be documented in final reports from the QMAs for the SWDA and OECC. The post-construction seafloor assessment will be completed no later than 90 calendar days post-final cable burial. If unanticipated issues arise during the course of offshore construction that prevent this measure from being completed within 90 calendar days post-final cable burial, the Proponent will notify BOEM, propose an alternate completion timeframe, and reach agreement with BOEM on the timeframe.

### **3.3 Tribal Focused Mitigation**

The following ideas and mitigation plans have been proposed to support Tribal Nation objectives, to be further discussed during the consultation process.

- ◆ A detailed PowerPoint presentation will be generated to describe the scientific methods and processes undertaken as part of the offshore pre-construction surveys and archaeological assessment to document the buried and submerged, ancient landforms in Nantucket Sound. This will be a technical and descriptive visual document to record all aspects of how the submerged, ancient landform study was performed and describe the

---

<sup>1</sup> Every reasonable effort will be made to maintain a live feed; should technological issues arise where the live feed cannot be maintained, a recording will be provided.

results that were obtained. Input from the Tribal Nations will help shape the background and supporting material that is desired for inclusion.

- ◆ Results of the submerged, ancient landform data analysis and mapping will be assembled in a digital format for use by the Tribal Nations. This digital database will document the geographic location and vertical placement of the submerged, ancient landforms. A number of different geographical mapping software packages could be used for this, but we envision potentially interfacing the data in QGIS<sup>2</sup> (freeware) with the Tribal Nations.
- ◆ The Project proponent team will set up one workshop for each Tribal Nation to provide hands-on training for the use of the selected geographic information system (GIS) software. This would include assistance getting the GIS software configured on a computer (provided by the Tribal Nations) and the database loaded and operational. A tutorial on software use and guidance on viewing the information will be provided.
- ◆ Option of having a special in-person presentation of the submerged, ancient landform study results to the Tribal Nation representatives and community.

One presentation for each Tribal Nations could be planned and, as requested, tailored for the audience specified by each Tribe/Tribal Nation. Presentations would generally focus on the topic of the offshore environment and submerged landscapes. For example, Tribal Nations may request that a presentation be given during a meeting of the tribal leaders and historic preservation office personnel, delivered to high school level students, or as a collaborative presentation given at a national tribal meeting. These various events offer opportunities to share within and among Tribal Nations the knowledge that has been gained by the submerged landscape mitigation study. The Project proponent will develop the presentation resources to share with Tribal Nations and Tribal Nations will decide if they would like to provide an opportunity for MHC and MBUAR to participate and comment on draft materials where feasible<sup>3</sup>.

### **3.4 Post-Installation Maps**

For the avoidance of all historic properties, the Proponent will provide as-placed and as-laid maps with both the horizontal and, to the extent feasible, vertical impact of all seafloor impacts. These seafloor impacts include anchoring activities, cable installation (including trenching depths and seafloor footprint of the installation vessel), and wind turbine generator (WTG) installation (anchoring and spudding/jack-up vessel placement). The as-built or as-laid placement plats should be submitted at a scale of 1 inch = 1,000 feet, with differential global positioning system accuracy demonstrating that these seafloor disturbing activities did not impact the avoidance criteria applied to the historic property. These documents and maps should be submitted to BOEM no

---

<sup>2</sup> QGIS is powerful and open-source mapping software that allows users to import and create digital projects, charts, figures, and export all of the above for external use and is compatible with all ESRI ArcGIS products.

<sup>3</sup> MBUAR will receive the draft and final tech report as part of the requirements of the SUP.

later than 90 days after completion of post-installation inspection surveys for BOEM and consulting parties to review.

### **3.5 Funds and Accounting**

The Proponent is proposing \$1,800,000 in total funding for mitigation measures proposed by the Proponent in Sections 3.1 through 3.3 to resolve the adverse effects at the 49 SALs and Nantucket Sound TCP. This funding amount assumes unavoidable adverse effects to 49 SALs. However, Park City Wind may be able to avoid adverse effects to some, and potentially all, of the SALs. The funding amount presented is the total for both phases of New England Wind.

## 4.0 IMPLEMENTATION

---

### 4.1 Timeline

It is anticipated that the mitigation measures identified in Section 3.0 will commence prior to construction. The specific timeline prior to construction will be agreed upon by the Proponent and the Participating Parties and accepted by BOEM. Per Section 3.0, the Participating Parties will have a minimum of 45 days to review and comment on all draft reports or other work products developed for this HPTP. The Proponent assumes that the proposed scope of work will be completed within 5 years unless a different timeline is agreed upon by Participating Parties and accepted by BOEM.

### 4.2 Organizational Responsibilities

#### 4.2.1 *Bureau of Ocean Energy Management (BOEM)*

- ◆ BOEM is responsible for consultation related to dispute resolution if needed during implementation of the HPTP.

#### 4.2.2 *Avangrid Renewables, LLC*

- ◆ The Proponent will be responsible for implementing the HPTP.
- ◆ The Proponent will be responsible for considering the feedback provided by the parties identified.
- ◆ Annual reporting to BOEM on implementation of the HPTP.
- ◆ Reporting responsibilities will be further outlined in consultation with BOEM as the HPTP is developed.
- ◆ Funding the mitigation measures specified in Section 3.0.
- ◆ Completion of the scope(s) of work in Section 3.0.
- ◆ Ensuring all Standards in Section 3.0 are met.
- ◆ Providing the Documentation in Section 3.0 to the Participating Parties for review and comment.
- ◆ The Proponent will be responsible for ensuring that all work that requires consultation with Tribal Nations is performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations.

**4.2.3            *Massachusetts Historical Commission (MHC); Massachusetts State Historic Preservation Officer; Massachusetts Bureau of Underwater Archaeological Resources***

The state agencies will be participating consulting parties and provide subject matter expertise to support completion of the HPTP mitigation and compliance with all state regulations. Further, all work in Massachusetts state waters will be done under a Special Use Permit, issued to the QMAs by MBUAR.

**4.2.4            *Tribal Nations***

- ◆ Provide feedback on proposed geoarchaeological coring locations.
- ◆ Tribal Nations to provide input to shape the background and supporting material that is desired for inclusion in the PowerPoint presentation and digital database/GIS deliverable.
- ◆ Provide feedback on draft materials within 45 days.

**4.2.5            *Other Parties***

The Proponent does not anticipate additional Participating Parties.

## 5.0 REFERENCES

---

- Code of Federal Regulations (CFR), 30 CFR Part 585.626(5), <https://www.ecfr.gov/current/title-30/part-585/subject-group-ECFRf8a2719ff779a7d>, accessed Jan 2022, Content of the Construction and Operations Plan.
- Bureau of Ocean Energy Management, 2020. Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585, United States Department of the Interior, May 27, 2020, 23 pp.
- EGS (International) Ltd. 2021 Vineyard Wind LLC Geotechnical & Geophysical Campaign 2020. Prepared for Vineyard Wind, LLC.
- Geo SubSea, Gray & Pape, SEARCH, 2022. Proposed Cultural Resource Mitigation for Submerged, Ancient Landforms (draft), New England Wind Project, 87 pp.
- Gillam, J. Christopher, and Christopher John Gillam 2016 Archaeological Predictive Modeling along the Central Savannah River. *Legacy* 20(1):2225.
- Gray & Pape, Inc., 2021. Marine Archaeological Resources Assessment in Support of the New England Wind Construction and Operations Plan for the Offshore Export Cable Corridor, December 2021, 191 pp. (Appendix A of SEARCH, INC. MARA).
- Gray & Pape, Inc., 2022. Marine Archaeological Resources Assessment in Support of the South Coast Variant Offshore Export Cable Corridor Construction and Operations Plan, April 24, 2022, 254 pp.
- Joy, Shawn 2018 The Trouble with the Curve: Reevaluating the Gulf of Mexico Sea-level Curve. Unpublished Master's Thesis, Florida State University, Tallahassee, Fl.
- Massachusetts Board of Underwater Archaeological Resources (MBUAR). Policy Guidance on Archaeological Investigations and Related Survey Standards for the Discovery of Underwater Archaeological Resources
- Park City Wind LLC, 2021/2022. Draft New England Wind Construction and Operations Plan for Lease OCS-A 0534, Volumes I (371 pp.), II (361 pp.), and III (934 pp.), December 2021/March 2022/June 2022.
- Robinson, D.S., Gibson, C.L., Caccioppoli, B.J., King, J.W., 2020. Developing Protocols for Reconstructing Submerged Paleocultural Landscapes and Identifying Ancient Native American Archaeological Sites in Submerged Environments: Geoarchaeological Modeling. U.S. Department of the Interior, Bureau of Ocean Energy Management, Sterling, VA. OCS Study BOEM 2020-23. 175pp. [BOEM 2020-023.pdf](#)
- SEARCH, INC., 2021. Marine Archaeological Resources Assessment for the New England Wind Offshore Wind Farm for OCS-A 0534 Construction and Operations Plan (SWDA Focus), December 2021, 194 pp.

Stafford, C. Russell 2004 Modeling soil-geomorphic associations and Archaic stratigraphic sequences in the lower Ohio River valley. *Journal of Archaeological Science*. 31, (2004) 1053-1067

Stafford, C. Russell and Steve D. Creasman 2002 The Hidden Record: Late Holocene Landscapes and Settlement Archaeology in the Lower Ohio River Valley. *Geoarchaeology*. Vol. 17, No. 2, 117– 140 (2002)

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>. Accessed [January 2022](#).

ATTACHMENT 5 – HISTORIC PROPERTY TREATMENT PLAN FOR THE EDWIN VANDERHOOP  
HOMESTEAD AND GAY HEAD – AQUINNAH SHOPS AREA

This page is intentionally blank.



# **New England Wind Historic Property Treatment Plan for the Edwin Vanderhoop Homestead and the Gay Head – Aquinnah Shops Area**

*Submitted to:*

BUREAU OF OCEAN ENERGY MANAGEMENT  
45600 Woodland Rd  
Sterling, VA 20166

*Submitted by:*

Park City Wind LLC

*Prepared by:*

**Epsilon**  
ASSOCIATES INC.

February 2024

# TABLE OF CONTENTS

---

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>1.0 BACKGROUND INFORMATION</b>	<b>3</b>
1.1 Project Overview	3
1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)	6
1.3 Participating Parties	6
<b>2.0 SUMMARY OF HISTORIC PROPERTY (EDWIN VANDERHOOP HOMESTEAD AND GAY HEAD – AQUINNAH SHOPS AREA)</b>	<b>7</b>
<b>3.0 MITIGATION AND MINIMIZATION MEASURES</b>	<b>10</b>
3.1 Mitigation Measures	10
3.1.1 Vineyard Sound and Moshup’s Bridge Traditional Cultural Place (TCP) Mitigation	10
3.1.2 Ongoing Maintenance of Gayhead - Aquinnah Shops Area and Edwin Vanderhoop Homestead	10
3.2 Additional Minimization Measures	11
3.2.1 Uniform Layout and Paint Color Selection	11
3.2.2 Lighting	12
3.2.3 Aircraft Detection Lighting Systems (ADLS)	12
<b>4.0 IMPLEMENTATION</b>	<b>13</b>
4.1 Timeline	13
4.2 Organizational Responsibilities	13
4.2.1 Bureau of Ocean Energy Management (BOEM)	13
4.2.2 Avangrid Renewables, LLC	13
4.2.3 Participating Parties	13
4.2.4 Other Parties	13
<b>5.0 REFERENCES</b>	<b>14</b>

## List of Figures

---

Figure 1.1-1	New England Wind Overview	4
Figure 1.1-2	SWDA-Nearest Onshore Areas	5
Figure 2.0-1	Historic Property: Gay Head - Aquinnah Shops Area and Edwin Vanderhoop Homestead	8

## **EXECUTIVE SUMMARY**

---

This Historic Property Treatment Plan (HPTP) for the Edwin Vanderhoop Homestead and the Gay Head – Aquinnah Shops Area adversely affected by New England Wind provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP) regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the MOA identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of New England Wind (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and is consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and MOA.

This HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent.

The timeline for implementation of the mitigation measures has been determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this HPTP.

This HPTP is organized into the following sections:

### **Executive Summary**

#### **Section 1.0 Background Information**

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

#### **Section 2.0 Summary of Historic Property**

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (New England Wind COP) and the Historic Properties Visual Impact Assessment (Appendix III-H.b).

#### **Section 3.0 Mitigation Measures**

This section provides a review of mitigation measures proposed by the Proponent as identified in the COP and through consultation with consulting parties.

#### **Section 4.0 Implementation**

This section establishes the process for executing the mitigation measures identified in Section 4.0.

#### **Section 5.0 References**

This section is a list of works cited for this HPTP.

## 1.0 BACKGROUND INFORMATION

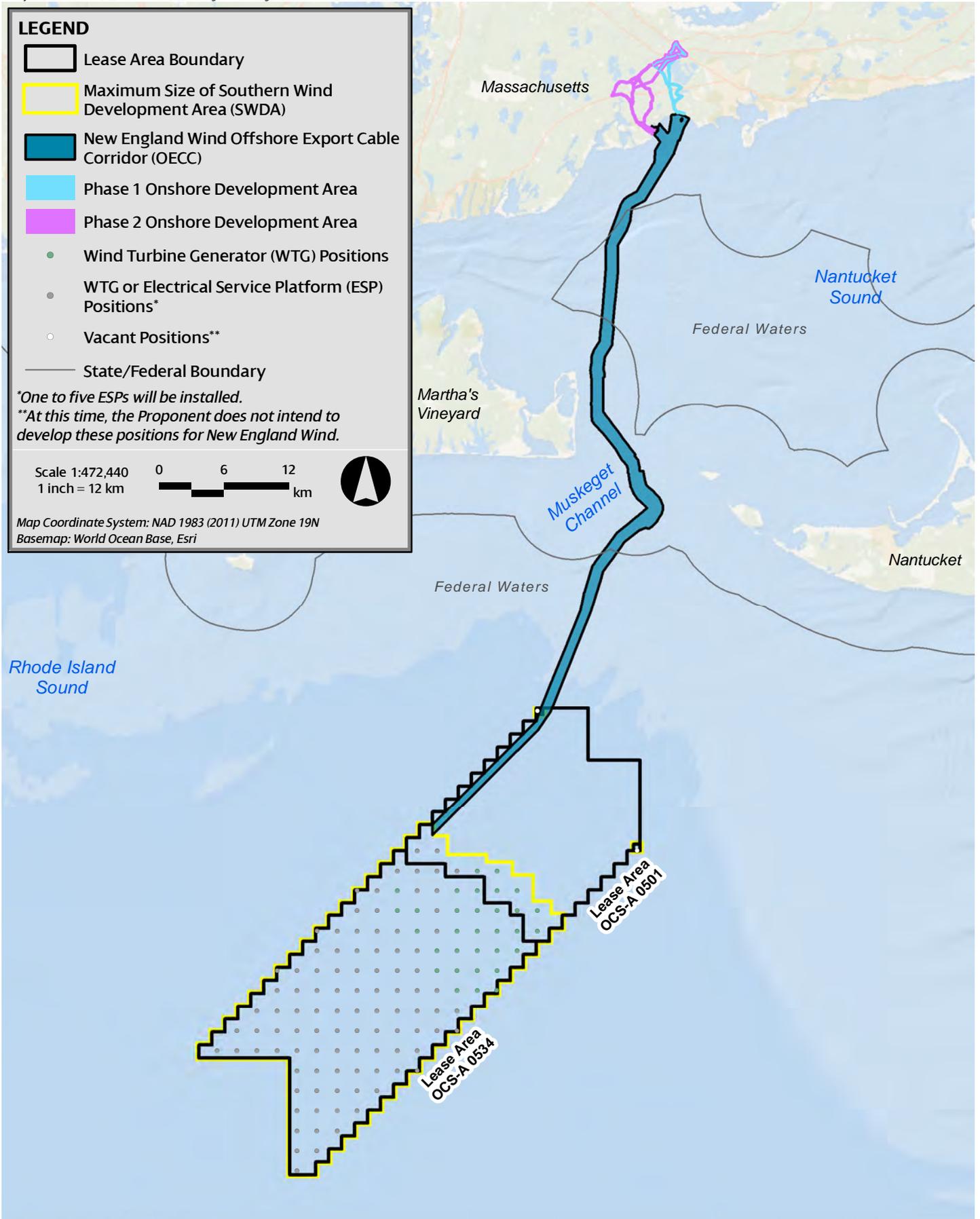
---

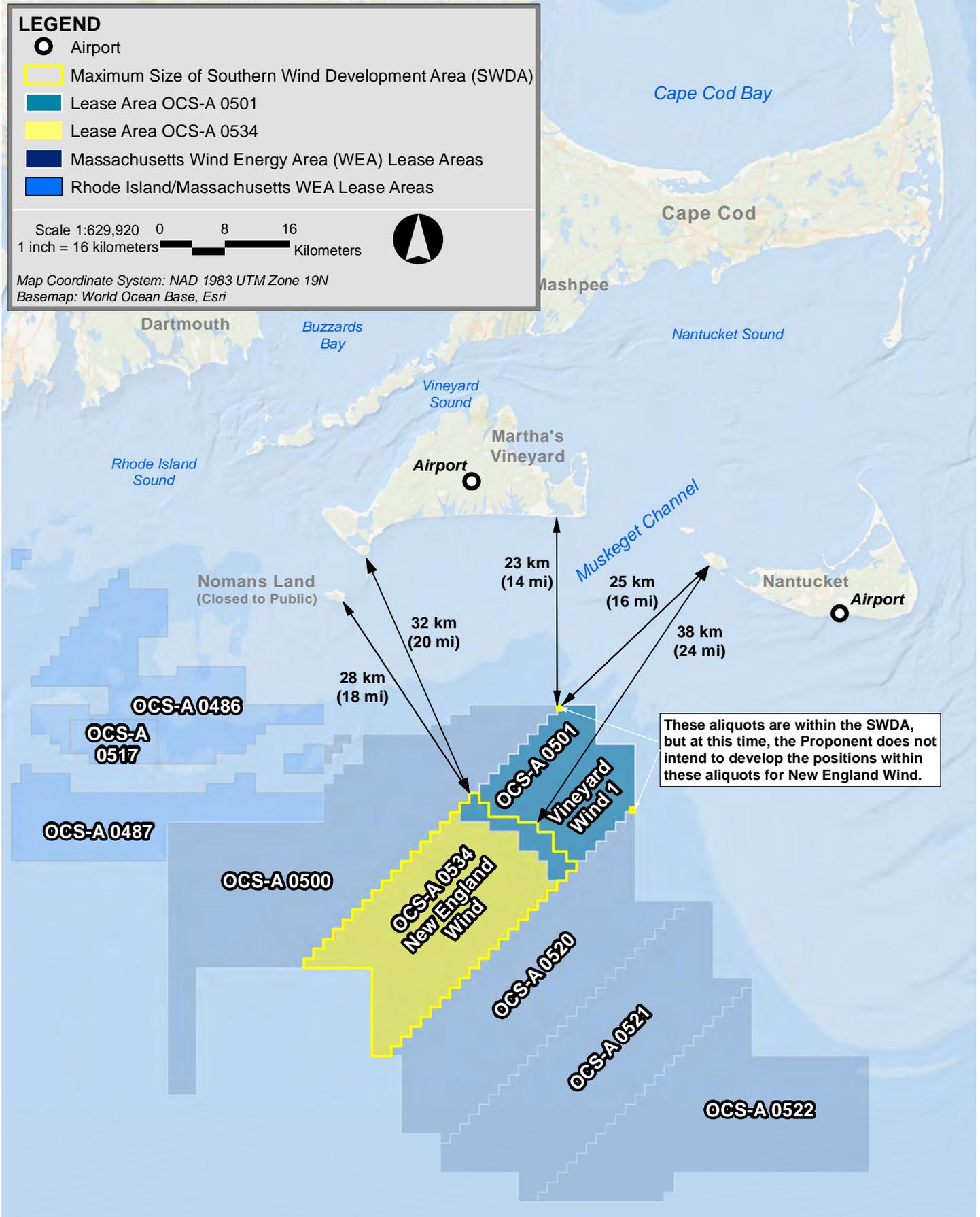
### 1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km<sup>2</sup>) (101,590– 111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-2). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

The Historic Properties Visual Impact Assessment (Appendix III-H.b of COP Volume III) for New England Wind is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act. The Area of Potential Effects (APE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.





## **1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)**

This Historic Property Treatment Plan (HPTP) has been developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the MOA with BOEM, the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP) regarding the New England Wind project.

The conditions of COP approval and MOA include measures to avoid and/or minimize adverse effects to identified historic properties, including planned distance of the Undertaking from historic properties, uniform Wind Turbine Generator (WTG) design, speed, height, and rotor diameter to reduce visual contrast, uniform spacing of WTGs to decrease visual clutter, and lighting and marking requirements to minimize visibility. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the conditions of COP approval and the MOA as well as with applicable local, state, and federal regulations and permitting requirements.

## **1.3 Participating Parties**

The National Environmental Policy Act (NEPA) substitution process was utilized by BOEM to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM conducted a series of Section 106-specific meetings with consulting parties.

The Proponent has also conducted outreach meetings with various consulting parties to review the findings of the analysis to date and discuss proposed mitigation measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted outreach with the following parties:

- ◆ The Town of Aquinnah
- ◆ The Wampanoag Tribe of Gay Head (Aquinnah)

## 2.0 SUMMARY OF HISTORIC PROPERTY (EDWIN VANDERHOOP HOMESTEAD AND GAY HEAD – AQUINNAH SHOPS AREA)

---

### Edwin Vanderhoop Homestead (GAY.40) 35 South Road, Aquinnah, NRIND

The Edwin Vanderhoop Homestead is individually listed on the National Register (Figure 2.0-1). The late 19<sup>th</sup> century Edwin Vanderhoop Homestead is a two-and-a-half story Victorian Eclectic style residence. The building's complex plan consists of a rectangular side-gable main block and several intersecting gable roof extensions. The house was constructed for Edwin Vanderhoop, son of William Adriann Vanderhoop, the first member of the family to settle in Gay Head. The Vanderhoops would become important figures in the development of Gay Head. The building is significant under Criteria A and C as an excellent example of a Victorian Eclectic style house and its association with the Vanderhoop family, a prominent local family. The Edwin Vanderhoop Homestead retains integrity of location, design, setting, material, workmanship, feeling, and association.

The Homestead is oriented to take advantage of the ocean view and the seaside setting is integral to its setting. The maritime setting of this resource, and its viewshed, would be altered through the introduction of new elements; however, view from the Homestead toward the SWDA is partially obstructed by topography and mature tree growth to the southeast. A view of the SWDA is possible to the south. The view of the Homestead to the north and east will be unaffected. A view of the Homestead to the south and the west (at an extreme angle) will be affected in ideal weather conditions.

The Homestead is located at the western end of Martha's Vineyard approximately 40.8 km (25.4 mi) from the nearest WTG or ESP. On average, based on airport reported visibilities and accounting for the proposed use of an Aircraft Detection Lighting System (ADLS), visibility from Martha's Vineyard Airport is 16 km (10 mi) or greater 42% of the time in a given year due to weather conditions (see Table 4-1 of Appendix III-H.b). This means that, at minimum, the SWDA will not be visible 58% of the year. In addition to general weather conditions, other factors such as haze and sea spray may further reduce visibility. Photo simulations B-1a to B-1g and C-1a to C-1d in Appendix III-H.a provide representative views of the SWDA.

Eligibility Criterion A would not be affected by the SWDA. Criterion C, as it relates to the setting of the Homestead, would be affected; however, this effect would primarily be the southern view and a portion of the western view. View of the Homestead to the north and east would remain unaffected. While only partial visibility of the SWDA is possible from the Homestead and variable visibility of the SWDA is possible depending upon weather conditions, it is conservatively determined that an adverse effect to the setting of the Homestead may occur.

This page is intentionally blank.

**LEGEND**

- Area of Potential Effects (APE) for Direct Visual Effects

**Martha's Vineyard Historic Property Index (Listed or Eligible Properties)\***  
 \*MACRIS data shown as of 4/15/2022; only historic properties that intersect with the APE are illustrated.

- National Register Property
- Inventory Area

Scale 1:90,000  
 1 inch = 7,500 feet

Map Coordinate System: NAD 1983 (2011) UTM Zone 19N  
 Basemap: 2019 World Imagery, Esri



This page is intentionally blank.

Gay Head – Aquinnah Shops Area (GAY.B) Aquinnah Circle, Aquinnah, NRDIS Eligible

The Gay Head – Aquinnah Shops Area (the “Shops”) is a cluster of nine commercial buildings overlooking the Atlantic Ocean (Figure 2.0-1). Constructed during the early to mid-20<sup>th</sup> century, the buildings form a U-shaped cluster along the north and south sides of a walkway extending to the Clay Cliffs of Aquinnah Scenic Overlook. The Aquinnah Shops Area is significant under Criteria A and C as a collection of mid-20<sup>th</sup> century roadside shops associated with the rise of the automobile era and increased tourism at Gay Head Cliffs. These buildings are part of a group of buildings developed as part of tourism at the Gay Head Cliffs starting in the 19<sup>th</sup> century with the arrival of steamships. Over time, buildings were developed and then later replaced. The present simple wood shingle gable roofed one to one-and-a-half story buildings are examples of roadside Americana developed in the mid-20<sup>th</sup> century as car travel became more popular and the buildings are sited to take advantage of the cliffside location as a tourist attraction. Despite some alterations to the buildings, the Gay Head – Aquinnah Shops Area retains integrity of location, setting, material, workmanship, feeling, and association.

The Shops were built to take advantage of the ocean view and the seaside setting is integral to their setting. The Shops located at the western end of Martha’s Vineyard are 40.9 km (25.4 mi) from the nearest WTG or ESP. The maritime setting of this resource, and its viewshed, would be altered through the introduction of new elements. However, existing powerlines and other modern elements are already within the foreground of the viewshed as opposed to the SWDA, which will only be partially visible, far off on the horizon. Additionally, existing topography and vegetation partially screen the SWDA from view. Photo simulations B-1a to B-1g and C-1a-C-1d in Appendix III-H.a, which are for a location in proximity to the Gay Head - Aquinnah Shops Area, provide representative views of the SWDA from the Gay Head - Aquinnah Shops Area.

The Shops were constructed as a means of capitalizing on tourism in Gay Head, in particular the Gay Head Cliffs, which are located to the north, west, and south of the Shops. The Gay Head overlook, where tourists view the Cliffs, is located to the north of the Shops and views to the north and east of the Cliffs are the primary viewsheds of the Gay Head Cliffs. A view to the south over the Shops towards the SWDA is possible from the overlook, but is not a significant viewshed as the Shops themselves conflict with the purpose of the overlook, which is to view the natural scenic character of the Cliffs and no view of the Cliffs is possible from this angle. Eligibility Criterion A would not be affected by the SWDA, but Criterion C, as it relates to setting of the Shops, would be affected. The primary viewpoints of the Shops are west or north from Aquinnah Circle; view of the SWDA is not possible with a northern view and the SWDA is only partially visible to the west at an extreme angle. While significant viewsheds will not be altered, it is conservatively determined that an adverse effect may occur.

## 3.0 MITIGATION AND MINIMIZATION MEASURES

---

Mitigation and minimization measures for the Edwin Vanderhoop Homestead and the Gay Head - Aquinnah Shops Area are detailed below.

### 3.1 Mitigation Measures

#### 3.1.1 *Vineyard Sound and Moshup's Bridge Traditional Cultural Place (TCP) Mitigation*

The Edwin Vanderhoop Homestead and Gay Head – Aquinnah Shops Area are located within the bounds of the Vineyard Sound and Moshup's Bridge Traditional Cultural Place (TCP). Thus, mitigation measures outlined in the HPTP for the Vineyard Sound and Moshup's Bridge TCP are also applicable to the historic resources listed in this HPTP. See the HPTP for the Vineyard Sound and Moshup's Bridge TCP in Attachment 8 of the MOA for more detail. Mitigation measures are subject to change as consultation is ongoing.

#### 3.1.2 *Ongoing Maintenance of Gayhead - Aquinnah Shops Area and Edwin Vanderhoop Homestead*

##### **Purpose and Intended Outcome**

In response to feedback provided by the Town of Aquinnah, the Proponent proposes to include funding to support the ongoing maintenance of the Aquinnah Shops Area and Edwin Vanderhoop Homestead with the goal of protecting these historic properties for future generations.

##### **Scope of Work**

The Town of Aquinnah expects that funding of ongoing maintenance work will primarily consist of the upkeep of buildings, structures, pathways, hardscapes, and softscapes in and around the Aquinnah Shops Area and Edwin Vanderhoop Homestead.

##### **Methodology**

The Town of Aquinnah will implement the ongoing maintenance and will hire an outside consultant if needed.

##### **Standards**

All work will be conducted in accordance with applicable standards. Examples of standards that may be applicable include:

- ◆ *Preservation Brief 17: Architectural Character – Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character* (Nelson, 1988);
- ◆ *Preservation Brief 47: Maintaining the Exterior of Small and Medium Size Historic Buildings*;

- ◆ The Secretary of the Interior’s *Standards for Treatment of Historic Properties* (36 CFR 68); and
- ◆ The Secretary of the Interior’s *Standards and Guidelines for Archeology and Historic Preservation Professional Qualifications Standards* (36 CFR Part 61), as applicable.

**Documentation**

The Proponent will provide the following documentation to the Participating Parties for their review:

- ◆ List of anticipated maintenance tasks. This list will be based on the information included under “Scope of Work” and will be developed with input from the Town of Aquinnah.
- ◆ Description of proposed funding mechanism.
- ◆ Annual progress report to BOEM describing the implementation of the mitigation measures, if needed. (If the mitigation measure is limited to a one-time payment, an annual progress report is not expected to be required.)

**Funds and Accounting**

At present, it is envisioned that the Proponent will provide the Town of Aquinnah with a one-time payment of \$200,000; the funds will be available to the Town of Aquinnah to withdraw from for annual maintenance activities over the life of the lease.

**3.2 Additional Minimization Measures**

The Proponent is also implementing the following minimization measures.

**3.2.1 Uniform Layout and Paint Color Selection**

The Proponent is avoiding and minimizing visual impacts to the maximum extent practicable. The WTGs for each phase will have uniform design, height, and rotor diameter and will be aligned and spaced consistently with other offshore wind facilities, thereby reducing potential for visual clutter. Additionally, the WTGs will be no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in color in accordance with BOEM and Federal Aviation Administration (FAA) guidance; the Proponent anticipates painting the WTGs off-white/light grey to reduce contrast with the sea and sky and thus, minimize daytime visibility of the WTGs. The conservative threshold for visibility in meteorological analyses is “the greatest distance at which an observer can just see a black object viewed against the horizon sky” (see Section 3.3 of Appendix III-H.a). The Phase 1 and Phase 2 WTGs will not be black; instead, the expected off-white/light grey color will be highly compatible with the hue, saturation, and brightness of the background sky. This lack of contrast between the WTGs and the background means that the percentage of the time

the structures might be visible is greatly reduced. Additionally, the upper portion of the ESP(s) will be a grey color which would appear muted and indistinct. Color contrast decreases as distance increases. Color contrast will diminish or disappear completely during periods of haze, fog, or precipitation.

### **3.2.2            *Lighting***

Lighting will be kept to the minimum necessary to comply with navigation safety requirements and safe operating conditions. Required marine navigation lights mounted near the top of each WTG/ESP foundation (or on the corners of each ESP) are expected to be visible only to distances of approximately 9.3 km (5 NM). As the closest coastal vantage point is at least 34.1 km (21.2 mi) from the nearest WTG, marine navigation lights will not be visible from shore.

### **3.2.3            *Aircraft Detection Lighting Systems (ADLS)***

Subject to BOEM approval, the Proponent also expects to use an ADLS that automatically turns on, and off, aviation obstruction lights in response to the detection of aircraft for the Phase 1 WTGs. For Phase 2, the Proponent would expect to use the same or similar approaches used for Vineyard Wind 1 and/or Phase 1 to reduce lighting, including the use of an ADLS. Based on historical use of the airspace, it is estimated that the aviation obstruction lights on both the nacelle and tower (if needed) will be activated for less than one hour per year (less than 0.1% of the nighttime hours) (see Appendix III-K). The effect of nighttime lighting from the aviation obstruction lights is acknowledged as part of the overall visibility and visual effect of the SWDA; however, the effect of nighttime lighting is substantially minimized through the use of ADLS. As stated previously, meteorological conditions will serve to obscure or block view of the SWDA providing additional minimization of the effect of nighttime lighting. For Phase 1, the onshore export cables to the onshore substation will be primarily installed underground and will typically be within public roadway layouts, although portions of the duct bank may be within existing utility rights-of-way (ROWs). From the onshore substation, grid interconnection cables will also be installed underground. Underground installation of onshore cables is also expected for Phase 2, thus minimizing potential visual effects to adjacent properties.

## 4.0 IMPLEMENTATION

---

### 4.1 Timeline

It is anticipated that the proposed funding will be provided prior to construction for each Phase of New England Wind. The specific timeline prior to construction will be agreed upon by the Proponent and the Participating Parties and accepted by BOEM. Per Section 3.0, the Participating Parties will have a minimum of 45 days to review and comment on all draft reports or other work products developed for this HPTP.

### 4.2 Organizational Responsibilities

#### 4.2.1 *Bureau of Ocean Energy Management (BOEM)*

- ◆ BOEM is responsible for consultation related to dispute resolution if needed during implementation of the HPTP.

#### 4.2.2 *Avangrid Renewables, LLC*

- ◆ The Proponent will be responsible for funding the ongoing maintenance activities (see Section 3.1.2) and for implementing the additional minimization measures (see Section 3.2).
- ◆ The Proponent will be responsible for considering the feedback provided by the parties identified.
- ◆ The Proponent will be responsible for ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations.
- ◆ Annual reporting to BOEM on implementation of the HPTP, if required. (If the mitigation measure is limited to a one-time payment, an annual progress report from the Proponent is not expected to be required.)

#### 4.2.3 *Participating Parties*

- ◆ Identify expected list of maintenance tasks.
- ◆ Participating Parties are responsible for providing feedback on the documentation items identified in Section 3.1.2 within 45 days.
- ◆ If required, provide an annual report on maintenance activities to BOEM and/or the Proponent.

#### 4.2.4 *Other Parties*

The Proponent does not anticipate additional consulting parties.

## 5.0 REFERENCES

---

- [BOEM] Bureau of Ocean Energy Management. 2020. Finding of adverse effect for the Vineyard Wind 1 Project Construction and Operations Plan. Revised November 13, 2020. Retrieved from: <https://www.boem.gov/sites/default/files/documents/oil-gas-energy/Vineyard-Wind-Findingof-Adverse-Effect.pdf>
- DiStefano V, Salzam N. 1980. Cape Poge Light National Register Nomination. Fields J. 2006. Captain William Martin House Form B – Building. Massachusetts Cultural Resources Information System (MACRIS Maps 3.0 Beta) Online mapping program (August 10, 2020). <https://maps.mhc-macris.net/>.
- Massachusetts Inventory of Historic and Archaeological Assets of the Commonwealth via Massachusetts Cultural Resources Information System (MACRIS) (August 10, 2020). Retrieved from: <http://mhc-macris.net/>.
- National Park Service. 2020. National Register of Historic Places. Retrieved from: <https://www.nps.gov/subjects/nationalregister/index.htm>
- NETROnline. 2020. Historic Aerials. Retrieved from: <https://www.historicaerials.com/>.
- Wood S, Purdum J, Egan B. 2014. Visualization simulations for offshore Massachusetts and Rhode Island Wind Energy Area - Meteorological report. OCS Study BOEM 2017-037. Retrieved from: <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/MeteorologicalReportFinal.pdf>

ATTACHMENT 6 – HISTORIC PROPERTY TREATMENT PLAN FOR CHAPPAQUIDDICK  
ISLAND TCP

This page is intentionally blank.



# **New England Wind Historic Property Treatment Plan for the Chappaquiddick Island Traditional Cultural Property**

*Submitted to:*

BUREAU OF OCEAN ENERGY MANAGEMENT  
45600 Woodland Rd  
Sterling, VA 20166

*Submitted by:*

Park City Wind LLC

*Prepared by:*

**Epsilon**  
ASSOCIATES INC.

February 2024

# TABLE OF CONTENTS

---

---

<b>EXECUTIVE SUMMARY</b>	<b>2</b>
<b>1.0 BACKGROUND INFORMATION</b>	<b>4</b>
1.1 Project Overview	4
1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)	7
1.3 Participating Parties	7
<b>2.0 SUMMARY OF HISTORIC PROPERTY (CHAPPAQUIDDICK ISLAND TRADITIONAL CULTURAL PLACE)</b>	<b>8</b>
<b>3.0 MITIGATION AND MINIMIZATION MEASURES</b>	<b>11</b>
3.1 Survey and Geographic Information System (GIS) Database of Contributing Resources to the TCP	11
3.2 Development of Interpretative Materials	13
3.3 Additional Minimization Measures	14
3.3.1 Uniform Layout and Paint Color Selection	14
3.3.2 Lighting	14
3.3.3 Aircraft Detection Lighting Systems (ADLS)	15
<b>4.0 IMPLEMENTATION</b>	<b>16</b>
4.1 Timeline	16
4.2 Organizational Responsibilities	16
4.2.1 Bureau of Ocean Energy Management (BOEM)	16
4.2.2 Avangrid Renewables, LLC	16
4.2.3 Tribes	17
4.2.4 Other Parties	17
<b>5.0 REFERENCES</b>	<b>18</b>

## List of Figures

---

Figure 1.1-1	New England Wind Overview	5
Figure 1.1-2	SWDA-Nearest Onshore Areas	6
Figure 2.0-1	Historic Property: Chappaquiddick Island TCP	9

## **EXECUTIVE SUMMARY**

---

This Historic Property Treatment Plan (HPTP) for the Chappaquiddick Island Traditional Cultural Place (TCP) adversely affected by New England Wind provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP) regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the MOA identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of New England Wind (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and is consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and MOA.

This HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent.

The timeline for implementation of the mitigation measures has been determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this HPTP.

This HPTP is organized into the following sections:

### **Executive Summary**

### **Section 1.0 Background Information**

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

### **Section 2.0 Summary of Historic Property**

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (New England Wind COP) and the Historic Properties Visual Impact Assessment (Appendix III-H.b).

### **Section 3.0 Mitigation Measures**

This section provides a review of mitigation measures proposed by the Proponent as identified in the COP and through the consultation process.

#### **Section 4.0 Implementation**

This section establishes the process for executing the mitigation measures identified in Section 4.0.

#### **Section 5.0 References**

This section is a list of works cited for this HPTP.

## 1.0 BACKGROUND INFORMATION

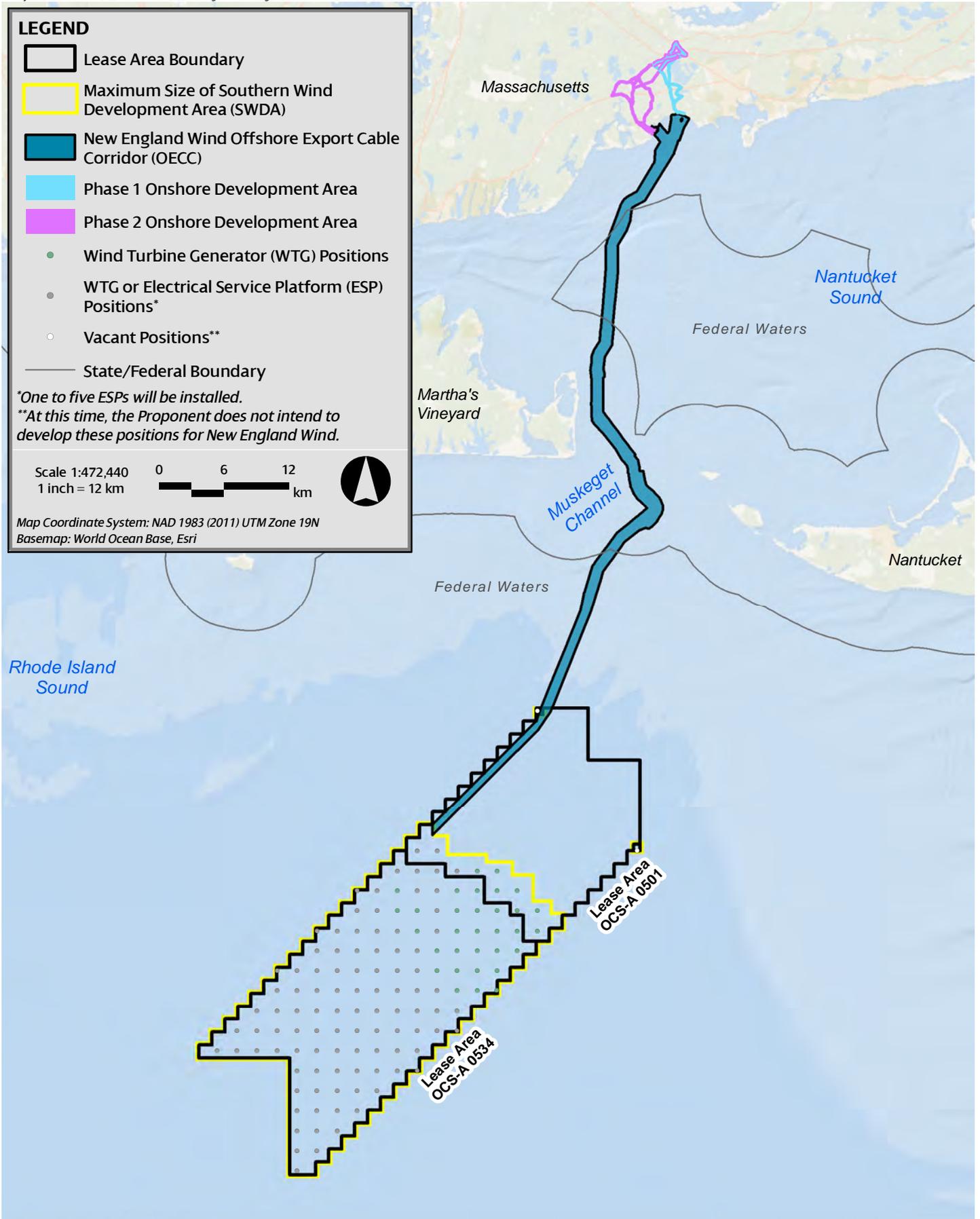
---

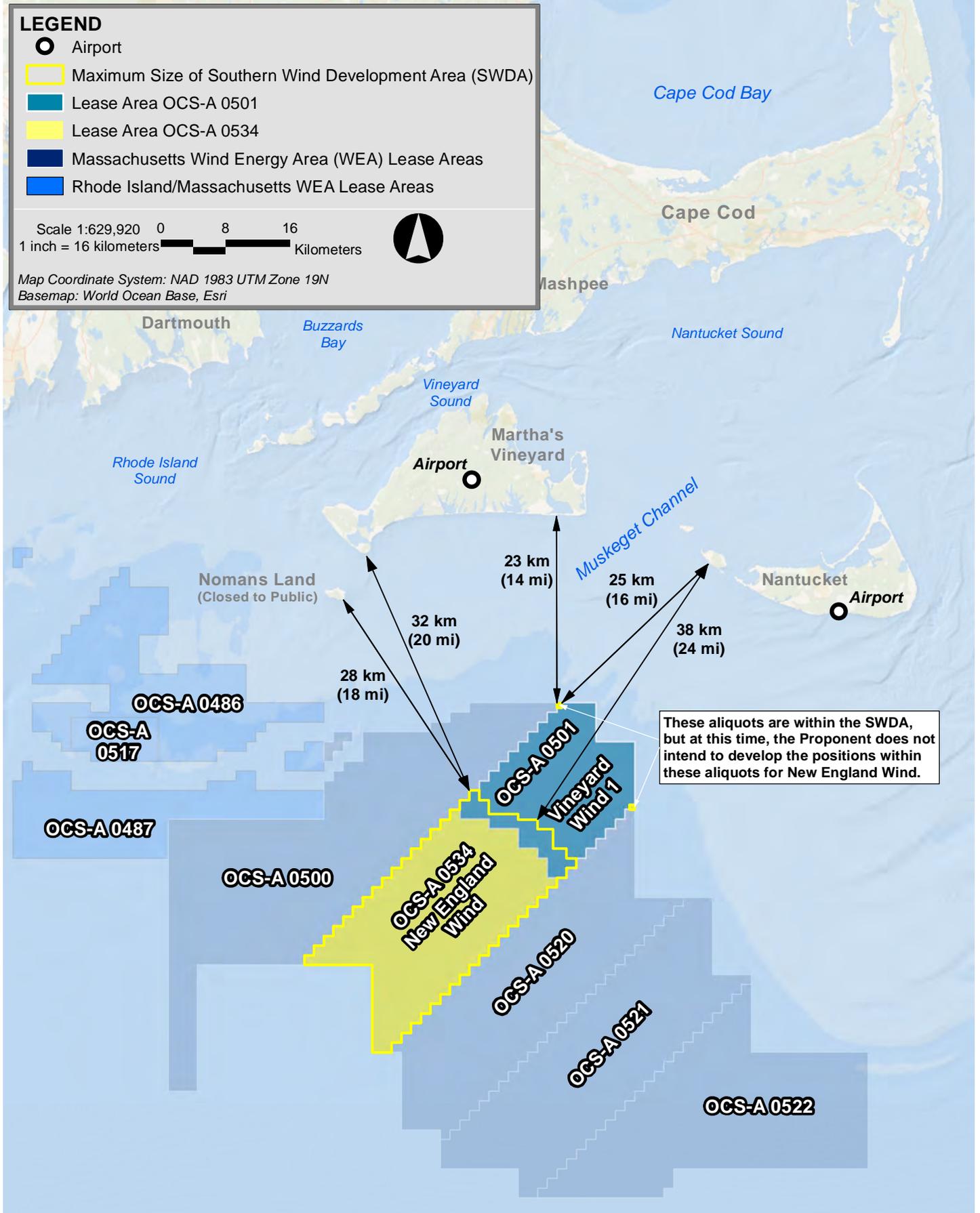
### 1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km<sup>2</sup>) (101,590– 111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-2). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

The Historic Properties Visual Impact Assessment (Appendix III-H.b of COP Volume III) for New England Wind is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act. The Area of Potential Effects (APE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.





## **1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)**

This Historic Property Treatment Plan (HPTP) has been developed in accordance with the Section 106 and Section 110(f) reviews (36 CFR 800) of the Undertaking and the Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the MOA with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP) and participating Tribal Nations and descendant communities regarding the New England Wind project.

The conditions of COP approval and MOA include measures to avoid and/or minimize adverse effects to identified historic properties, including planned distance of the Undertaking from historic properties, uniform WTG design, speed, height, and rotor diameter to reduce visual contrast, uniform spacing of WTGs to decrease visual clutter, and lighting and marking requirements to minimize visibility. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the conditions of COP approval and the MOA as well as with applicable local, state, and federal regulations and permitting requirements.

## **1.3 Participating Parties**

The National Environmental Policy Act (NEPA) substitution process was utilized by BOEM to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM conducted a series of Section 106-specific meetings with consulting parties.

The Proponent has also conducted outreach meetings with consulting parties to review the findings of the analysis to date and discuss proposed mitigation measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted outreach with the following parties:

- ◆ The Chappaquiddick Tribe of Wampanoag Nation

## 2.0 SUMMARY OF HISTORIC PROPERTY (CHAPPAQUIDDICK ISLAND TRADITIONAL CULTURAL PLACE)

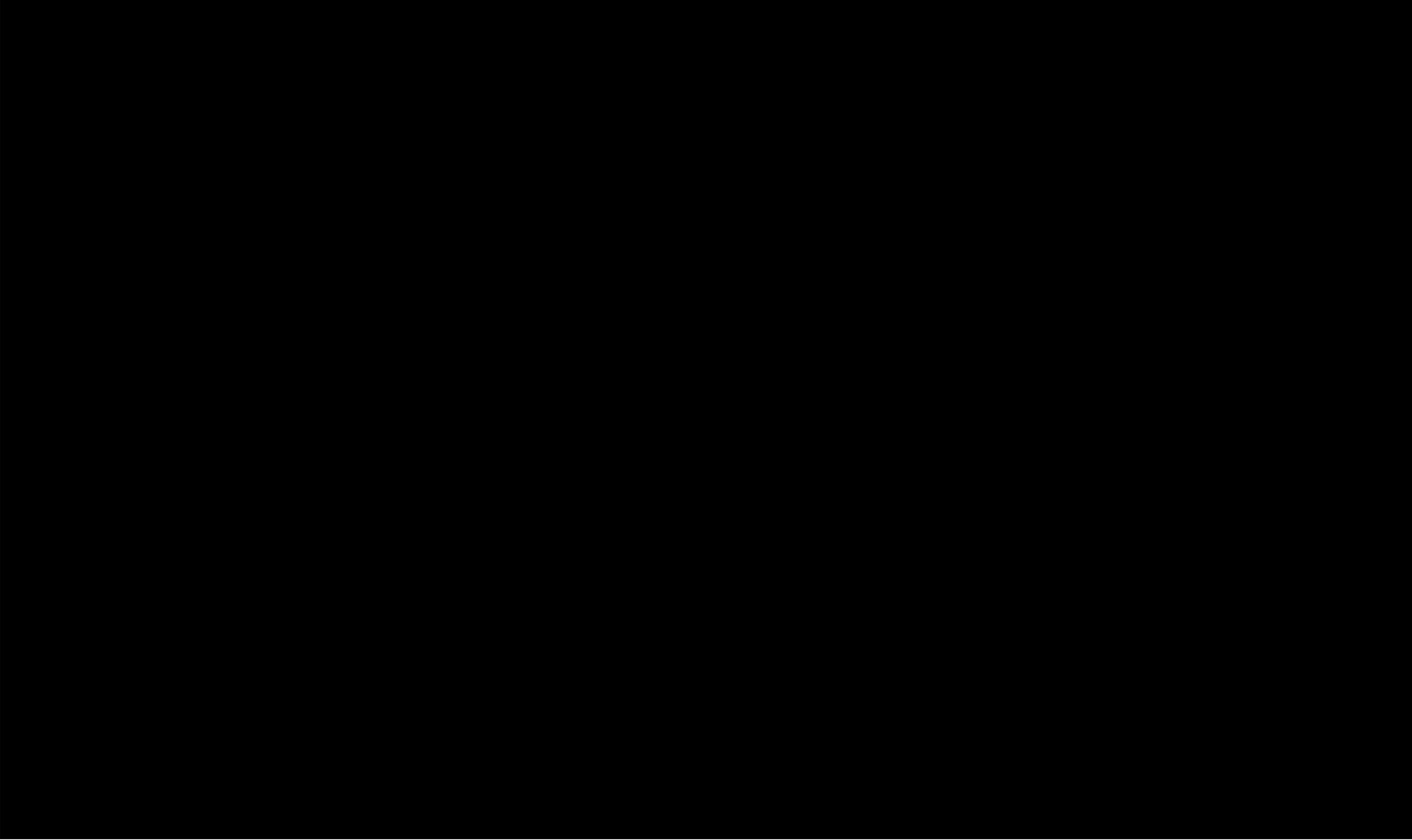
---

Chappaquiddick Island has been determined by BOEM to be potentially eligible for listing on the National Register as a Traditional Cultural Place (TCP; BOEM 2020). The designation does not contain specific boundaries, but would roughly encompass the Island of Chappaquiddick, Norton Point in Edgartown, and Katama Bay (Figure 2.0-1). According to BOEM (2020):

*“The TCP would be significant under Criterion A for its association with and importance in maintaining the continuing cultural identity of the community.”*



This page is intentionally blank.



This page is intentionally blank.

The setting of the Chappaquiddick Island TCP and its viewshed would be minimally altered through the introduction of new elements. The TCP is approximately 37.2 km (23.1 mi) from the nearest WTG or ESP. On average for all meteorological conditions, New England Wind WTGs/ESP(s) might be visible 22% of the time from the Chappaquiddick Island TCP. Photo simulations from Martha's Vineyard, in particular South Beach (Photo simulations B-3a to B-3g in Appendix III-H.a), demonstrate that the SWDA will be visible from a portion of Chappaquiddick Island as well as Norton Point and Katama Bay when looking southward. Views to the north, east, and west from these locations will not be affected. Further, visibility of the SWDA is limited to the areas along the coastline and within Katama Bay. Additionally, there will be no visual effect from New England Wind's undersea cables. Photo simulations B-4a to B-4e for Wasque Reservation and B-3a to B-3g for South Beach in Appendix III-H.a provide views toward the SWDA from the Chappaquiddick Island TCP.

Visibility of the SWDA will be intermittent and only possible during ideal weather conditions as even moderate haze obscures the SWDA from view. Even in ideal weather conditions, the WTGs will be barely distinguishable at the horizon line. Without foreknowledge of New England Wind, it would likely not be possible for an observer to understand what is visible as the WTGs appear as cloud shadows or other atmospheric phenomena. While significant viewsheds will not be altered, it is conservatively determined that an adverse effect may occur.

## 3.0 MITIGATION AND MINIMIZATION MEASURES

---

Mitigation and minimization measures for the Chappaquiddick Island TCP are detailed below.

### 3.1 Survey and Geographic Information System (GIS) Database of Contributing Resources to the TCP

#### Purpose and Intended Outcome

Physical features associated with, and contributing resources to, the TCP will be identified and organized into a non-proprietary spatial database to assist in prioritizing preservation efforts and as a public education product. This information shall be publicly accessible and therefore will not include locations of areas of archaeological sensitivity or locations of areas of religious or cultural sensitivity to Tribal Nations.

#### Scope of Work

The scope of work will be developed in accordance with the Participating Parties and is envisioned to include conducting a photographic survey of contributing features to the National Register eligible Chappaquiddick Island TCP (both those previously identified and yet to be determined) and developing a Geographic Information System (GIS) database of Contributing Resources to the TCP. As part of this mitigation measure, the Proponent will work with the Participating Parties to identify publicly available contributing resources. At present, eight contributing properties to the Chappaquiddick Island TCP have been identified; through the proposed survey, additional contributing properties may be identified.

The development of the GIS database will include drafting a preliminary platform, proposed interfaces, and database structure that accommodates the agreed upon narrative descriptions and characteristics requested to be documented. Examples of data layers could include:

- ◆ existing conditions
- ◆ identifying sites at risk due to coastal erosion, storm surge, or habitat degradation
- ◆ resources that provide contextual value

Up to 20 sites will be identified through the survey, though it is noted some may be excluded due to sensitivity concerns. Contributing properties identified shall be documented on appropriate MHC survey forms.

#### Methodology

The Proponent will prepare a request for proposal (RFP), in consultation with Participating Parties, and in accordance with National Register Bulletins #30 (Rural Historic Landscapes) and #38 (Traditional Cultural Properties). Participating Parties will be consulted in defining objectives and scope of work, as well as in the consultant selection process. The field investigation and

photographic survey will identify locations and features that contribute to the historic character of the Chappaquiddick TCP including natural landscape areas of historic activities (hunting, fishing, settlement areas) as well as historic buildings and structures, where applicable. The survey will include historical and archaeological background research on the history of the island and its occupation by the Chappaquiddick. The background research will assist in identifying areas of historic significance and provide information for the public education portion of the project. (No archaeological field excavations are proposed as part of this mitigation measure.)

### **Standards**

All work will be conducted in accordance with applicable standards and will be overseen by professionals meeting the qualifications specified in the Secretary of the Interior's *Professional Qualifications Standards* (36 CFR Part 61). All work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with Tribal Nations and descendant communities. The GIS work will be developed by professionals with demonstrated experience and will be overseen by a qualified Geographic Information Systems Professional. Professionals selected shall have demonstrated experience documenting Traditional Cultural Properties per National Register Bulletin #38 and Rural Historic Landscapes per National Register Bulletin #30.

### **Documentation**

The Proponent will provide the following documentation to the Participating Parties for their review:

- ◆ Draft proposed scope of work.
- ◆ RFP and consultant bids in response to RFP.
- ◆ MHC survey forms for contributing properties.
- ◆ Draft version of the GIS database.
- ◆ Final version of the GIS database.
- ◆ Annual progress report to BOEM describing the implementation of the mitigation measures.

### **Funds and Accounting**

The total funding amount for mitigation measures described in Sections 3.1 and 3.2 will not exceed \$200,000 for the New England Wind project.

## 3.2 Development of Interpretative Materials

### Purpose and Intended Outcome

The Proponent will develop and incorporate other digital media pertaining to the physical and cultural elements of the historic property in a manner that enhances intratribal and extra-tribal appreciation in conjunction with the GIS database described above. ArcGIS story maps or comparable presentations could include relevant publicly available archival data, oral histories, news stories, video footage, and public domain datasets.

### Scope of Work

The scope of work will be developed in accordance with the Participating Parties and is envisioned to include a plan for developing interpretative material including the following:

- ◆ Hosting a meeting with Participating Parties to review the selected contributing features to the National Register eligible Chappaquiddick TCP;
- ◆ Preparing and presenting a draft ArcGIS StoryMap (which would include a viewing of the end user's perspective); and
- ◆ Developing an introduction and providing training on how the digital media platform functions for the Participating Parties.

The scope of work will also include soliciting feedback during the meeting and agreeing to a schedule for incorporating comments and presenting a final product.

### Methodology

The Proponent will prepare an RFP and will consult with Participating Parties in defining objectives and scope of work, as well as in the consultant selection process.

### Standards

All work will be conducted in accordance with state and federal applicable standards and will be overseen by professionals meeting the qualifications specified in the Secretary of the *Interior's Professional Qualifications Standards* (36 CFR Part 61). All work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with Tribal Nations and descendant communities.

### Documentation

The Proponent will provide the following documentation to the Participating Parties for their review:

- ◆ Draft proposed scope of work.

- ◆ RFP and consultant bids in response to RFPs.
- ◆ A draft version of the interpretative materials.
- ◆ A final version of the interpretative materials.
- ◆ Annual progress report to BOEM describing the implementation of the mitigation measures.

### **Funds and Accounting**

The total funding amount for mitigation measures described in Sections 3.1 and 3.2 will not exceed \$200,000 for the New England Wind project.

## **3.3 Additional Minimization Measures**

The Proponent is also implementing the following minimization measures.

### **3.3.1 *Uniform Layout and Paint Color Selection***

The Proponent is avoiding and minimizing visual impacts to the maximum extent practicable. The WTGs for each phase will have uniform design, height, and rotor diameter and will be aligned and spaced consistently with other offshore wind facilities, thereby reducing potential for visual clutter. Additionally, the WTGs will be no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in color in accordance with BOEM and Federal Aviation Administration (FAA) guidance; the Proponent anticipates painting the WTGs off-white/light grey to reduce contrast with the sea and sky and thus, minimize daytime visibility of the WTGs. The conservative threshold for visibility in meteorological analyses is “the greatest distance at which an observer can just see a black object viewed against the horizon sky” (see Section 3.3 of Appendix III-H.a). The Phase 1 and Phase 2 WTGs will not be black; instead, the expected off-white/light grey color will be highly compatible with the hue, saturation, and brightness of the background sky. This lack of contrast between the WTGs and the background means that the percentage of the time the structures might be visible is greatly reduced. Additionally, the upper portion of the ESP(s) will be a grey color which would appear muted and indistinct. Color contrast decreases as distance increases. Color contrast will diminish or disappear completely during periods of haze, fog, or precipitation.

### **3.3.2 *Lighting***

Lighting will be kept to the minimum necessary to comply with navigation safety requirements and safe operating conditions. Required marine navigation lights mounted near the top of each WTG/ESP foundation (or on the corners of each ESP) are expected to be visible only to distances of approximately 9.3 km (5 NM). As the closest coastal vantage point is at least 34.1 km (21.2 mi) from the nearest WTG, marine navigation lights will not be visible from shore.

### **3.3.3 Aircraft Detection Lighting Systems (ADLS)**

Subject to BOEM approval, the Proponent also expects to use an Aircraft Detection Lighting System (ADLS) that automatically turns on, and off, aviation obstruction lights in response to the detection of aircraft for the Phase 1 WTGs. For Phase 2, the Proponent would expect to use the same or similar approaches used for Vineyard Wind 1 and/or Phase 1 to reduce lighting, including the use of an ADLS. Based on historical use of the airspace, it is estimated that the aviation obstruction lights on both the nacelle and tower (if needed) will be activated for less than one hour per year (less than 0.1% of the nighttime hours) (see Appendix III-K). The effect of nighttime lighting from the aviation obstruction lights is acknowledged as part of the overall visibility and visual effect of the SWDA; however, the effect of nighttime lighting is substantially minimized through the use of ADLS. As stated previously, meteorological conditions will serve to obscure or block view of the SWDA providing additional minimization of the effect of nighttime lighting. For Phase 1, the onshore export cables to the onshore substation will be primarily installed underground and will typically be within public roadway layouts, although portions of the duct bank may be within existing utility rights-of-way (ROWs). From the onshore substation, grid interconnection cables will also be installed underground. Underground installation of onshore cables is also expected for Phase 2, thus minimizing potential visual effects to adjacent properties.

## 4.0 IMPLEMENTATION

---

### 4.1 Timeline

It is anticipated that the mitigation measures identified in Sections 3.1 and 3.2 will commence prior to construction. The specific timeline prior to construction will be agreed upon by the Proponent and the Participating Parties and accepted by BOEM. Per Section 3.0, the Participating Parties will have a minimum of 45 days to review and comment on all draft reports or other work products developed for this HPTP. The Proponent assumes that the proposed scope of work will be completed within 5 years unless a different timeline is agreed upon by Participating Parties and accepted by BOEM.

### 4.2 Organizational Responsibilities

#### 4.2.1 *Bureau of Ocean Energy Management (BOEM)*

- ◆ BOEM is responsible for consultation related to dispute resolution if needed during implementation of the HPTP.
- ◆ BOEM will be responsible for sharing the annual summary report with Participating Parties.

#### 4.2.2 *Avangrid Renewables, LLC*

- ◆ The Proponent will be responsible for implementing the HPTP.
- ◆ The Proponent will be responsible for considering the feedback provided by the parties identified.
- ◆ Annual reporting to BOEM on implementation of the HPTP.
- ◆ Funding the mitigation measures specified in Section 3.0.
- ◆ Completion of the scope(s) of work in Section 3.0.
- ◆ Ensuring all Standards in Section 3.0 are met.
- ◆ Providing the Documentation in Section 3.0 to the Participating Parties for review and comment.
- ◆ The Proponent will be responsible for ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with Tribal Nations and descendant communities.

#### **4.2.3 Tribes**

- ◆ Identify resources of significance to support GIS database development mitigation measure (if selected).
- ◆ Provide feedback on draft materials within 45 days.

#### **4.2.4 Other Parties**

The Proponent does not anticipate additional consulting parties.

## 5.0 REFERENCES

---

- [BOEM] Bureau of Ocean Energy Management. 2020. Finding of adverse effect for the Vineyard Wind 1 Project Construction and Operations Plan. Revised November 13, 2020. Retrieved from: <https://www.boem.gov/sites/default/files/documents/oil-gas-energy/Vineyard-Wind-Findingof-Adverse-Effect.pdf>
- DiStefano V, Salzam N. 1980. Cape Poge Light National Register Nomination. Fields J. 2006. Captain William Martin House Form B – Building. Massachusetts Cultural Resources Information System (MACRIS Maps 3.0 Beta) Online mapping program (August 10, 2020). <https://maps.mhc-macris.net/>.
- Massachusetts Inventory of Historic and Archaeological Assets of the Commonwealth via Massachusetts Cultural Resources Information System (MACRIS) (August 10, 2020). Retrieved from: <http://mhc-macris.net/>.
- National Park Service. 2020. National Register of Historic Places. Retrieved from: <https://www.nps.gov/subjects/nationalregister/index.htm>
- NETROnline. 2020. Historic Aerials. Retrieved from: <https://www.historicaerials.com/>.
- Wood S, Purdum J, Egan B. 2014. Visualization simulations for offshore Massachusetts and Rhode Island Wind Energy Area - Meteorological report. OCS Study BOEM 2017-037. Retrieved from: <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/MeteorologicalReportFinal.pdf>

This page is intentionally blank.

ATTACHMENT 7 – HISTORIC PROPERTY TREATMENT PLAN FOR GAY HEAD LIGHTHOUSE

This page is intentionally blank.



# New England Wind Historic Property Treatment Plan for the Gay Head Lighthouse

*Submitted to:*

BUREAU OF OCEAN ENERGY MANAGEMENT  
45600 Woodland Rd  
Sterling, VA 20166

*Submitted by:*

Park City Wind LLC

*Prepared by:*

**Epsilon**  
ASSOCIATES INC.

February 2024

# TABLE OF CONTENTS

---

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>1.0 BACKGROUND INFORMATION</b>	<b>3</b>
1.1 Project Overview	3
1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)	6
1.2.1 Municipal Regulations	6
1.2.2 Preservation Easements and Restrictions	6
1.3 Participating Parties	7
<b>2.0 SUMMARY OF HISTORIC PROPERTY (GAY HEAD LIGHTHOUSE)</b>	<b>8</b>
<b>3.0 MITIGATION AND MINIMIZATION MEASURES</b>	<b>10</b>
3.1 Ongoing Maintenance of the Lighthouse	10
3.2 Additional Minimization Measures	12
3.2.1 Uniform Layout and Paint Color Selection	12
3.2.2 Lighting	12
3.2.3 Aircraft Detection Lighting Systems (ADLS)	12
<b>4.0 IMPLEMENTATION</b>	<b>14</b>
4.1 Timeline	14
4.2 Organizational Responsibilities	14
4.2.1 Bureau of Ocean Energy Management (BOEM)	14
4.2.2 Avangrid Renewables, LLC	14
4.2.3 The Gay Head Lighthouse Advisory Committee	14
4.2.4 Massachusetts Historical Commission (MHC); Massachusetts State Historic Preservation Officer	15
4.2.5 Wampanoag Tribe of Gay Head (Aquinnah)	15
4.2.6 Other Parties	15
<b>5.0 REFERENCES</b>	<b>16</b>

## List of Figures

---

Figure 1.1-1	New England Wind Overview	4
Figure 1.1-2	SWDA-Nearest Onshore Areas	5
Figure 2.0-1	Historic Property: Gay Head Lighthouse	9

## **EXECUTIVE SUMMARY**

---

This Historic Property Treatment Plan (HPTP) for the Gay Head Lighthouse adversely affected by New England Wind provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP) regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the MOA identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of New England Wind (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and is consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and MOA.

This HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent.

The timeline for implementation of the mitigation measures has been determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this HPTP.

This HPTP is organized into the following sections:

### **Executive Summary**

### **Section 1.0 Background Information**

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

### **Section 2.0 Summary of Historic Property**

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (New England Wind COP) and the Historic Properties Visual Impact Assessment (Appendix III-H.b).

### **Section 3.0 Mitigation Measures**

This section provides a review of mitigation measures proposed by the Proponent as identified in the COP and through consultation with consulting parties.

## **Section 4.0 Implementation**

This section establishes the process for executing the mitigation measures identified in Section 4.0.

## **Section 5.0 References**

This section is a list of works cited for this HPTP.

## 1.0 BACKGROUND INFORMATION

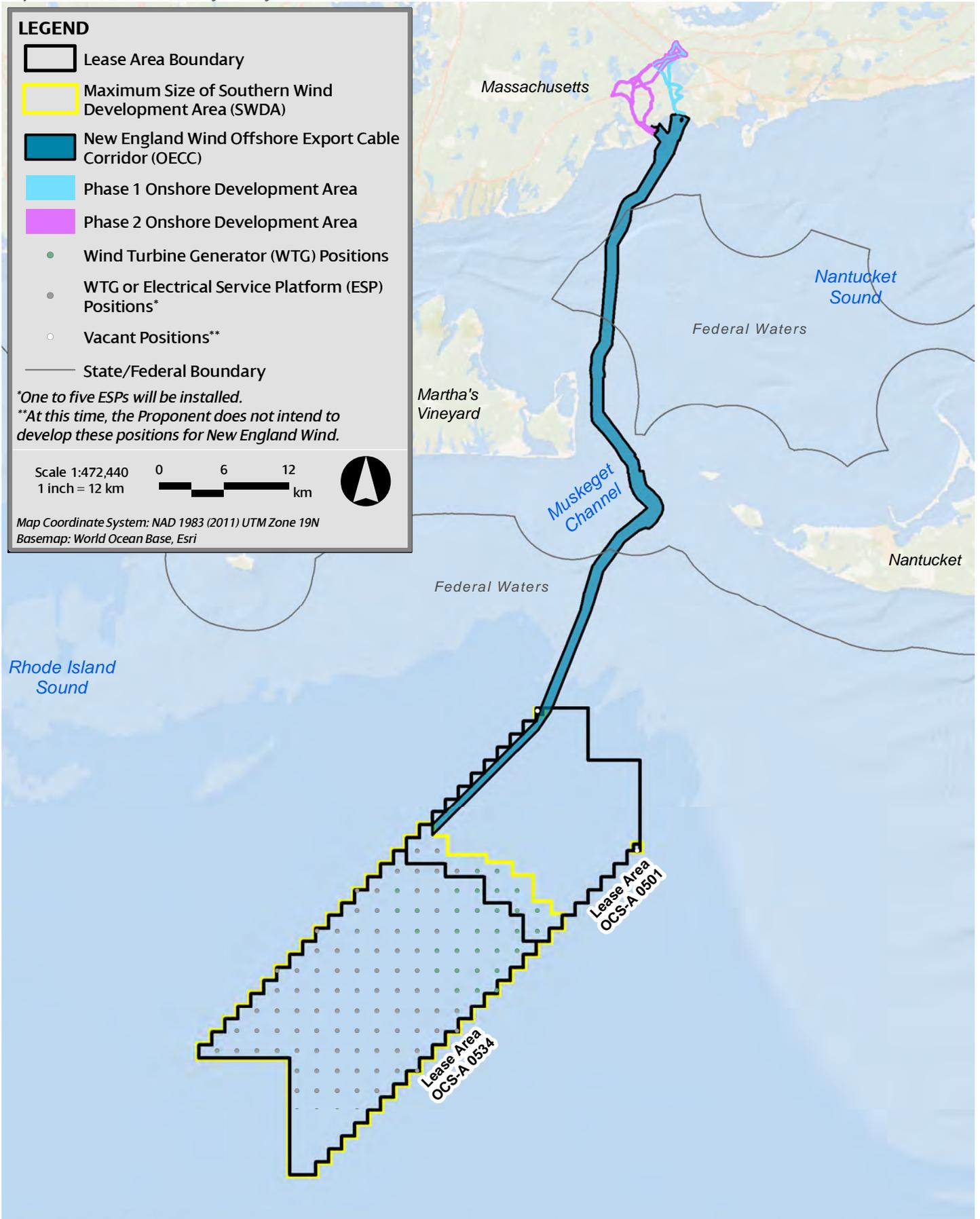
---

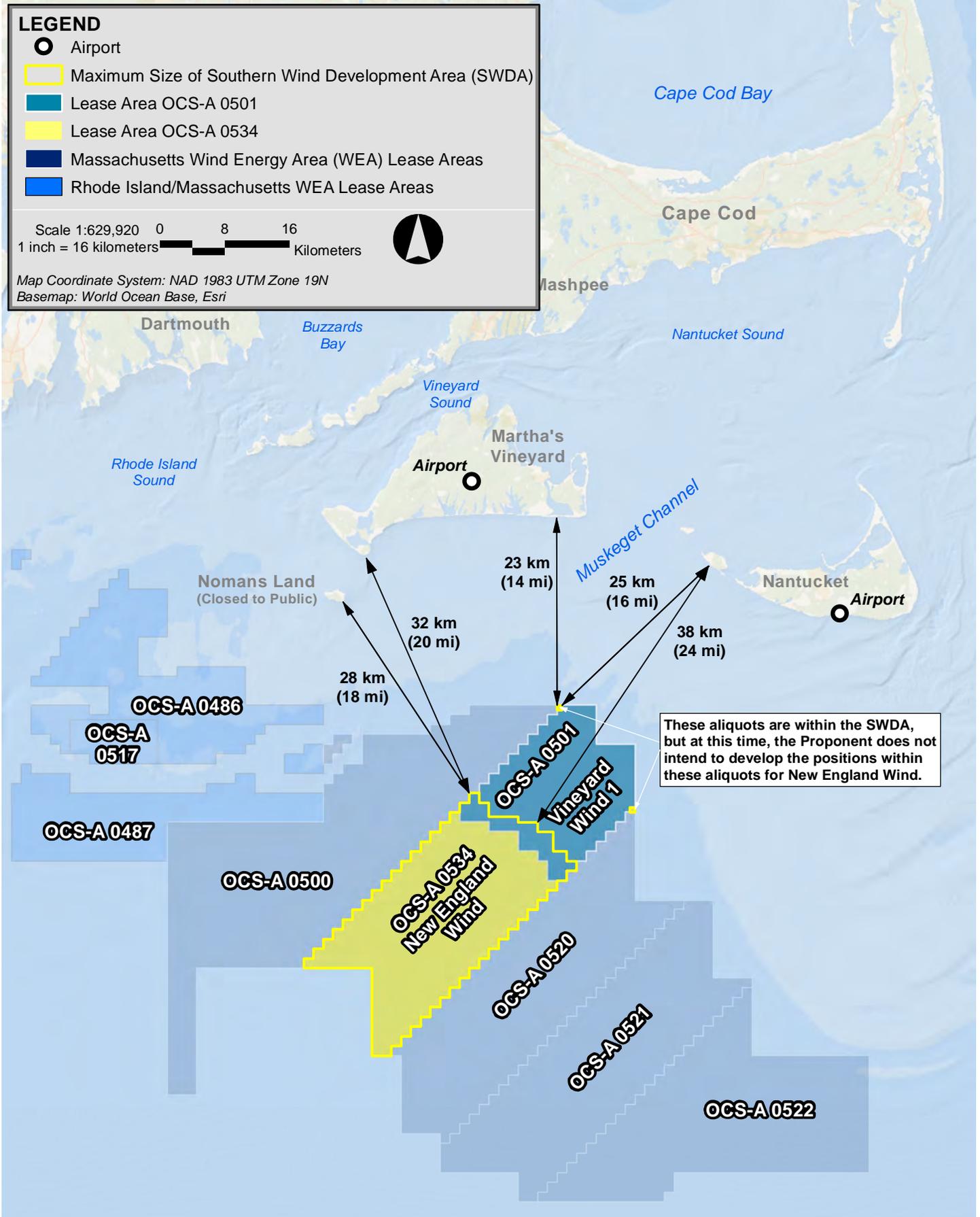
### 1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km<sup>2</sup>) (101,590– 111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-2). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

The Historic Properties Visual Impact Assessment (Appendix III-H.b of COP Volume III) for New England Wind is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act. The Area of Potential Effects (APE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.





## **1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)**

This Historic Property Treatment Plan (HPTP) has been developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the Memorandum of Agreement (MOA) with the BOEM, the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP) regarding the New England Wind project.

The conditions of COP approval and MOA include measures to avoid and/or minimize adverse effects to identified historic properties, including planned distance of the Undertaking from historic properties, uniform WTG design, speed, height, and rotor diameter to reduce visual contrast, uniform spacing of WTGs to decrease visual clutter, and lighting and marking requirements to minimize visibility. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the conditions of COP approval and the MOA as well as with applicable local, state, and federal regulations and permitting requirements.

### **1.2.1 *Municipal Regulations***

Consistent with the conditions of COP approval and MOA, before implementation any on-site mitigation measures will be coordinated with local municipalities, 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.

### **1.2.2 *Preservation Easements and Restrictions***

Any implementation of treatment plans will be in accordance with approvals through preservation restrictions where applicable.

Preservation easements and restrictions protect significant historic, archaeological, or cultural resources. The State of Massachusetts preservation restrictions are outlined in Massachusetts General Law Chapter 184, Sections 31-33. The MHC holds a Historic Preservation Restriction, and the United States Coast Guard (USCG) holds an Aid to Navigation Easement on the historic property per 10 USC 2668 Easements for Rights of Way. Any mitigation work associated with the historic property will comply with the conditions of all extant historic preservation easements. See Section 3.0 for additional information.

### 1.3 Participating Parties

The National Environmental Policy Act (NEPA) substitution process was utilized by BOEM to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM conducted a series of Section 106-specific meetings with consulting parties.

The Proponent has also conducted outreach meetings with various consulting parties to review the findings of the analysis to date and discuss proposed mitigation measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted outreach with the following parties:

- ◆ The Town of Aquinnah
- ◆ The Gay Head Lighthouse Advisory Committee
- ◆ The Wampanoag Tribe of Gay Head (Aquinnah)

## 2.0 SUMMARY OF HISTORIC PROPERTY (GAY HEAD LIGHTHOUSE)

---

The Gay Head Lighthouse, which is located on the southwestern-most portion of Martha's Vineyard (Figure 2.0-1), is listed on the National Register and is significant under Criteria A and C as a historic maritime structure and aid to navigation. Constructed in 1855–1856, the Gay Head Lighthouse was once one of the 10 most important lights on the Atlantic Coast and originally contained one of the country's first Fresnel lenses. The 14 m (45 ft) tall brick and sandstone tower meets Criterion A for its association with the island's maritime history as an aid to navigation. The structure also meets Criterion C as an example of a 19<sup>th</sup> century maritime structure. Although the Gay Head Lighthouse was moved from its original location 45.7 m (150 ft) east in 2015 and its setting and location are partially compromised, the structure retains integrity of design, material, workmanship, feeling, and association.

As a lighthouse, an ocean view toward the horizon is integral to its character and setting as well as its historic function. The maritime setting of this resource, and its viewshed, would be adversely affected through the introduction of new elements. The construction of the WTGs/ESP(s) would alter the experience of an observer of the lighthouse when the SWDA is visible. Views in the southern/southeastern direction would be affected; views toward the north, east, and west would not be affected.

Gay Head Lighthouse is 41.0 km (25.5 mi) from the nearest WTG or ESP. Photo simulations B-1a to B-1g and C-1a to C-1d in Appendix III-H.a, which are for a location in proximity to the Gay Head Lighthouse (the Aquinnah Cultural Center), provide representative views of the SWDA from the Gay Head Lighthouse. As described further in Section 4.2 of Appendix III-H.b, based on the methodology in BOEM 2017-037, and taking into account the proposed use of an Aircraft Detection Lighting Systems (ADLS), on average for all conditions, New England Wind's WTGs/ESP(s) could be visible 18% of the time from the Gay Head Lighthouse (see Table 4-2 of Appendix III-H.b). In addition to general weather conditions, other factors such as haze and sea spray may further reduce visibility.

Gay Head Lighthouse is located 45.7 m (150 ft) from its original location and is surrounded by a modern stone wall and fence. Although the structure has been moved from its original location (which has partially compromised its setting) and the SWDA is only partially visible from Gay Head Lighthouse (depending on and meteorological conditions), New England Wind introduces visual elements that are out of character with the historic setting, feeling, and association of the property. Therefore, eligibility Criterion A and Criterion C (as it relates to the setting of Gay Head Lighthouse and its clear horizon view) would be adversely affected by New England Wind. However, it should be noted that the adverse effect is inconsistent and weather dependent; for the vast majority of the time, the SWDA will not be visible.

**LEGEND**

 Area of Potential Effects (APE) for Direct Visual Effects

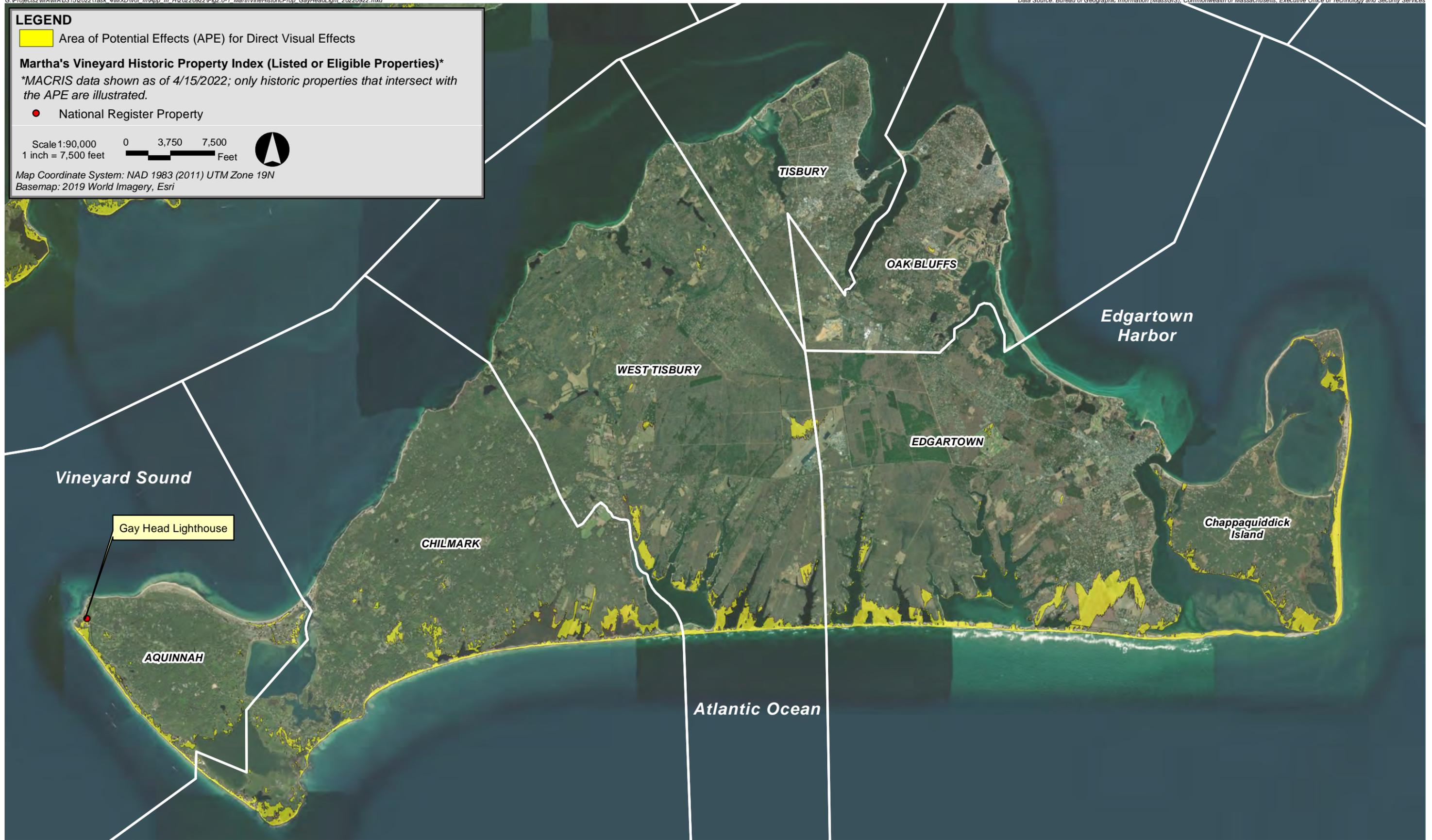
**Martha's Vineyard Historic Property Index (Listed or Eligible Properties)\***  
 \*MACRIS data shown as of 4/15/2022; only historic properties that intersect with the APE are illustrated.

 National Register Property

Scale 1:90,000  
 1 inch = 7,500 feet

0 3,750 7,500 Feet

Map Coordinate System: NAD 1983 (2011) UTM Zone 19N  
 Basemap: 2019 World Imagery, Esri



This page is intentionally blank.

## 3.0 MITIGATION AND MINIMIZATION MEASURES

---

Mitigation and minimization measures for the Gay Head Lighthouse are detailed below.

### 3.1 Ongoing Maintenance of the Lighthouse

#### **Purpose and Intended Outcome**

Based on multiple meetings conducted between the Proponent and representatives from the Gay Head Lighthouse Advisory Committee, the Proponent proposes to assist with ongoing repair and maintenance of the Gay Head Lighthouse through the provision of funds for ongoing maintenance work. The Proponent understands that support for such ongoing maintenance work is a priority for the Gay Head Lighthouse Advisory Committee and is required by existing agreements with MHC and the USCG.

#### **Scope of Work**

The Proponent has met with the Gay Head Lighthouse Advisory Committee on multiple occasions to identify and prioritize maintenance tasks. The Gay Head Lighthouse Advisory Committee expects that ongoing maintenance work will primarily consist of the following tasks:

- ◆ Painting (interior and exterior) and power washing of the structures, typically done every other year. Painting activities are expected to involve maintenance of existing conditions only; no changes in paint color are anticipated.
- ◆ Annual maintenance of the grounds and turf to preserve safe conditions for public use and to prevent water infiltration, erosion and washout that could inhibit public access and/or result in damage the lighthouse foundation and Gay Head Cliffs. Maintenance of the turf is also part of an existing agreement between the Gay Head Lighthouse Advisory Committee and the USCG.
- ◆ Repairing and maintaining pathways for public circulation, including maintaining an existing Americans with Disabilities Act (ADA) compliant pathway.
- ◆ Minor repairs due to public use and general wear and tear, such as replacing or repairing electrical outlets, railings, plaster, and/or fencing.

Written documentation of the existing conditions will be provided, as well as a summary of activities completed.

#### **Methodology**

This work will build off the mitigation work approved during the federal review of the Vineyard Wind 1 project. The Gay Head Lighthouse Advisory Committee will implement the ongoing maintenance and will hire an outside consultant when needed.

## Standards

All work will be conducted in accordance with applicable standards. Examples of standards that may be applicable include:

- ◆ United States Coast Guard Aid to Navigation (ATON) Access Easement (U. S. Department of Homeland Security and U. S. Coast Guard, 2005);
- ◆ *Preservation Brief 17: Architectural Character – Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character* (Nelson, 1988);
- ◆ *Preservation Brief 47: Maintaining the Exterior of Small and Medium Size Historic Buildings*;
- ◆ *National Register Bulletin 34: Guidelines for Evaluating and Documenting Historic Aids to Navigation*;
- ◆ *Historic Lighthouse Preservation Handbook*;
- ◆ *IALA-AISM Lighthouse Conservation Manual*;
- ◆ Preservation Restriction (RIGL Title 42, Section 42-45-9); and
- ◆ The Secretary of the Interior’s *Standards for Treatment of Historic Properties* (36 CFR 68);
- ◆ The Secretary of the Interior’s *Professional Qualifications Standards* (36 CFR Part 61), as applicable;
- ◆ The Secretary of the Interior’s *Standards for Treatment of Historic Properties* (36 CFR 68); and
- ◆ The Secretary of the Interior’s *Professional Qualifications Standards* (36 CFR Part 61), as applicable.

## Documentation

The Proponent will provide the following documentation to the Participating Parties for their review:

- ◆ List of anticipated maintenance tasks and a written agreement outlining the appropriate scope, standards, documentation, and decision-making for any potential additional maintenance activities not included in the list of anticipated maintenance tasks. This list will be based on the information included under “Scope of Work” and will be developed with input from the Town of Aquinnah and Gay Head Lighthouse Advisory Committee
- ◆ Description of proposed funding mechanism.
- ◆ Annual progress report to BOEM describing the implementation of the mitigation measures, if needed. (If the mitigation measure is limited to a one-time payment, an annual progress report is not expected to be required.)

## **Funds and Accounting**

At present, it is envisioned that the Proponent will provide the Town of Aquinnah with a one-time payment of \$200,000; the funds will be available to the Gay Head Lighthouse Advisory Committee to withdraw from for annual maintenance activities over the life of the lease.

## **3.2 Additional Minimization Measures**

The Proponent is also implementing the following minimization measures.

### **3.2.1 *Uniform Layout and Paint Color Selection***

The Proponent is avoiding and minimizing visual impacts to the maximum extent practicable. The WTGs for each phase will have uniform design, height, and rotor diameter and will be aligned and spaced consistently with other offshore wind facilities, thereby reducing potential for visual clutter. Additionally, the WTGs will be no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in color in accordance with BOEM and Federal Aviation Administration (FAA) guidance; the Proponent anticipates painting the WTGs off-white/light grey to reduce contrast with the sea and sky and thus, minimize daytime visibility of the WTGs. The conservative threshold for visibility in meteorological analyses is “the greatest distance at which an observer can just see a black object viewed against the horizon sky” (see Section 3.3 of Appendix III-H.a). The Phase 1 and Phase 2 WTGs will not be black; instead, the expected off-white/light grey color will be highly compatible with the hue, saturation, and brightness of the background sky. This lack of contrast between the WTGs and the background means that the percentage of the time the structures might be visible is greatly reduced. Additionally, the upper portion of the ESP(s) will be a grey color which would appear muted and indistinct. Color contrast decreases as distance increases. Color contrast will diminish or disappear completely during periods of haze, fog, or precipitation.

### **3.2.2 *Lighting***

Lighting will be kept to the minimum necessary to comply with navigation safety requirements and safe operating conditions. Required marine navigation lights mounted near the top of each WTG/ESP foundation (or on the corners of each ESP) are expected to be visible only to distances of approximately 9.3 km (5 NM). As the closest coastal vantage point is at least 34.1 km (21.2 mi) from the nearest WTG, marine navigation lights will not be visible from shore.

### **3.2.3 *Aircraft Detection Lighting Systems (ADLS)***

Subject to BOEM approval, the Proponent also expects to use an ADLS that automatically turns on, and off, aviation obstruction lights in response to the detection of aircraft for the Phase 1 WTGs. For Phase 2, the Proponent would expect to use the same or similar approaches used for Vineyard Wind 1 and/or Phase 1 to reduce lighting, including the use of an ADLS. Based on historical use of the airspace, it is estimated that the aviation obstruction lights on both the nacelle and tower (if needed) will be activated for less than one hour per year (less than 0.1% of

the nighttime hours) (see Appendix III-K). The effect of nighttime lighting from the aviation obstruction lights is acknowledged as part of the overall visibility and visual effect of the SWDA; however, the effect of nighttime lighting is substantially minimized through the use of ADLS. As stated previously, meteorological conditions will serve to obscure or block view of the SWDA providing additional minimization of the effect of nighttime lighting. For Phase 1, the onshore export cables to the onshore substation will be primarily installed underground and will typically be within public roadway layouts, although portions of the duct bank may be within existing utility rights-of-way (ROWs). From the onshore substation, grid interconnection cables will also be installed underground. Underground installation of onshore cables is also expected for Phase 2, thus minimizing potential visual effects to adjacent properties.

## 4.0 IMPLEMENTATION

---

### 4.1 Timeline

It is anticipated that the proposed funding will be provided prior to construction for each Phase of New England Wind. The specific timeline prior to construction will be agreed upon by the Proponent and the Participating Parties and accepted by BOEM. Per Section 3.0, the Participating Parties will have a minimum of 45 days to review and comment on all draft reports or other work products developed for this HPTP.

### 4.2 Organizational Responsibilities

#### 4.2.1 *Bureau of Ocean Energy Management (BOEM)*

- ◆ BOEM is responsible for consultation related to dispute resolution if needed during implementation of the HPTP.

#### 4.2.2 *Avangrid Renewables, LLC*

- ◆ The Proponent will be responsible for funding the Ongoing Maintenance of the Lighthouse (see Section 3.1) and for implementing the additional minimization measures (see Section 3.2).
- ◆ The Proponent will be responsible for considering the feedback provided by the parties identified.
- ◆ The Proponent will be responsible for ensuring that all work that requires consultation with Tribal Nations is performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations.
- ◆ Annual reporting to BOEM on implementation of the HPTP. (If the mitigation measure is limited to a one-time payment, an annual progress report from the Proponent is not expected to be required.)

#### 4.2.3 *The Gay Head Lighthouse Advisory Committee*

- ◆ Identify expected list of maintenance tasks.
- ◆ Provide feedback on documentation described in Section 3.1 within 45 days.
- ◆ If required under the terms of the Preservation Restriction, the Committee shall submit the scope of work for maintenance activities to MHC for review and approval.
- ◆ The Committee shall ensure that all maintenance activities are conducted in accordance with the Secretary of the Interior (SOI) Standards for Rehabilitation (36 CFR 68), as part of their consultation with MHC.

- ◆ If required, provide an annual report on annual maintenance activities to BOEM and/or the Proponent.

**4.2.4            *Massachusetts Historical Commission (MHC); Massachusetts State Historic Preservation Officer***

If necessary, the scope of work will be submitted under the terms of the Preservation Restriction and the scope of work will be submitted for compliance with the SOI Standards for Rehabilitation (36 CFR 68).

**4.2.5            *Wampanoag Tribe of Gay Head (Aquinnah)***

The Wampanoag Tribe of Gay Head (Aquinnah) may, at their sole discretion, participate in consultations for the development and finalization of the HPTP in recognition of the traditional cultural and religious significance of the historic property to the Tribal Nation.

**4.2.6            *Other Parties***

The Proponent does not anticipate additional consulting parties.

## 5.0 REFERENCES

---

- [BOEM] Bureau of Ocean Energy Management. 2020. Finding of adverse effect for the Vineyard Wind 1 Project Construction and Operations Plan. Revised November 13, 2020. Retrieved from: <https://www.boem.gov/sites/default/files/documents/oil-gas-energy/Vineyard-Wind-Findingof-Adverse-Effect.pdf>
- DiStefano V, Salzam N. 1980. Cape Poge Light National Register Nomination. Fields J. 2006. Captain William Martin House Form B – Building. Massachusetts Cultural Resources Information System (MACRIS Maps 3.0 Beta) Online mapping program (August 10, 2020). <https://maps.mhc-macris.net/>.
- Massachusetts Inventory of Historic and Archaeological Assets of the Commonwealth via Massachusetts Cultural Resources Information System (MACRIS) (August 10, 2020). Retrieved from: <http://mhc-macris.net/>.
- National Park Service. 2020. National Register of Historic Places. Retrieved from: <https://www.nps.gov/subjects/nationalregister/index.htm>
- NETROnline. 2020. Historic Aerials. Retrieved from: <https://www.historicaerials.com/>.
- Wood S, Purdum J, Egan B. 2014. Visualization simulations for offshore Massachusetts and Rhode Island Wind Energy Area - Meteorological report. OCS Study BOEM 2017-037. Retrieved from: <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/MeteorologicalReportFinal.pdf>

This page is intentionally blank.

ATTACHMENT 8 – HISTORIC PROPERTY TREATMENT PLAN FOR VINEYARD SOUND AND  
MOSHUP’S BRIDGE TCP

This page is intentionally blank.



# **New England Wind Historic Property Treatment Plan for the Vineyard Sound and Moshup's Bridge Traditional Cultural Property**

*Submitted to:*

BUREAU OF OCEAN ENERGY MANAGEMENT  
45600 Woodland Rd  
Sterling, VA 20166

*Submitted by:*

Park City Wind LLC

*Prepared by:*

**Epsilon**  
ASSOCIATES INC.

February 2024

# TABLE OF CONTENTS

---

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>1.0 BACKGROUND INFORMATION</b>	<b>3</b>
1.1 Project Overview	3
1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)	6
1.3 Participating Parties	6
<b>2.0 SUMMARY OF HISTORIC PROPERTY (VINEYARD SOUND AND MOSHUP’S BRIDGE TRADITIONAL CULTURAL PLACE)</b>	<b>7</b>
<b>3.0 MITIGATION AND MINIMIZATION MEASURES</b>	<b>11</b>
3.1 Scholarships and Training for Tribal Resource and/or Environmental Stewardship	11
3.2 Coastal Resilience and Habitat Restoration	12
3.3 Additional Minimization Measures	13
3.3.1 Uniform Layout and Paint Color Selection	13
3.3.2 Lighting	13
3.3.3 Aircraft Detection Lighting Systems (ADLS)	13
<b>4.0 IMPLEMENTATION</b>	<b>15</b>
4.1 Timeline	15
4.2 Organizational Responsibilities	15
4.2.1 Bureau of Ocean Energy Management (BOEM)	15
4.2.2 Avangrid Renewables, LLC	15
4.2.3 Tribal Nations	15
4.2.4 Other Parties	15
<b>5.0 REFERENCES</b>	<b>16</b>

## List of Figures

---

Figure 1.1-1	New England Wind Overview	4
Figure 1.1-2	SWDA-Nearest Onshore Areas	5
Figure 2.0-1	Historic Property: Vineyard Sound and Moshup’s Bridge TCP	8

## **EXECUTIVE SUMMARY**

---

This Historic Property Treatment Plan (HPTP) for the Vineyard Sound and Moshup's Bridge Traditional Cultural Place (TCP) adversely affected by New England Wind provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP) regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the MOA identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of New England Wind (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and is consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and MOA.

This HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent.

The timeline for implementation of the mitigation measures has been determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this HPTP.

This HPTP is organized into the following sections:

### **Executive Summary**

#### **Section 1.0 Background Information**

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

#### **Section 2.0 Summary of Historic Property**

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (New England Wind COP) and the Historic Properties Visual Impact Assessment (Appendix III-H.b).

#### **Section 3.0 Mitigation Measures**

This section provides a review of mitigation measures proposed by the Proponent as identified in the COP and through the consultation process.

#### **Section 4.0 Implementation**

This section establishes the process for executing the mitigation measures identified in Section 4.0.

#### **Section 5.0 References**

This section is a list of works cited for this HPTP.

## 1.0 BACKGROUND INFORMATION

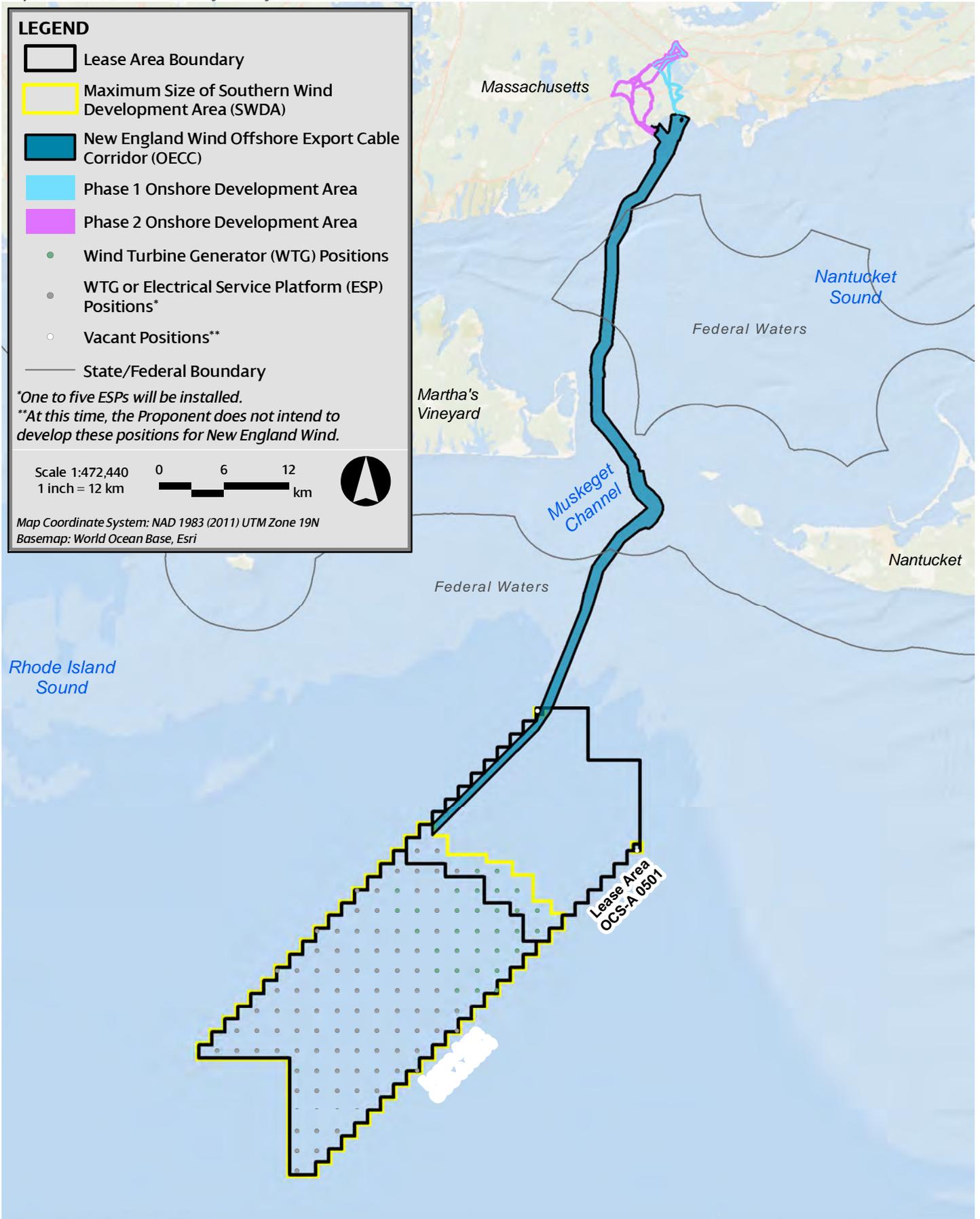
---

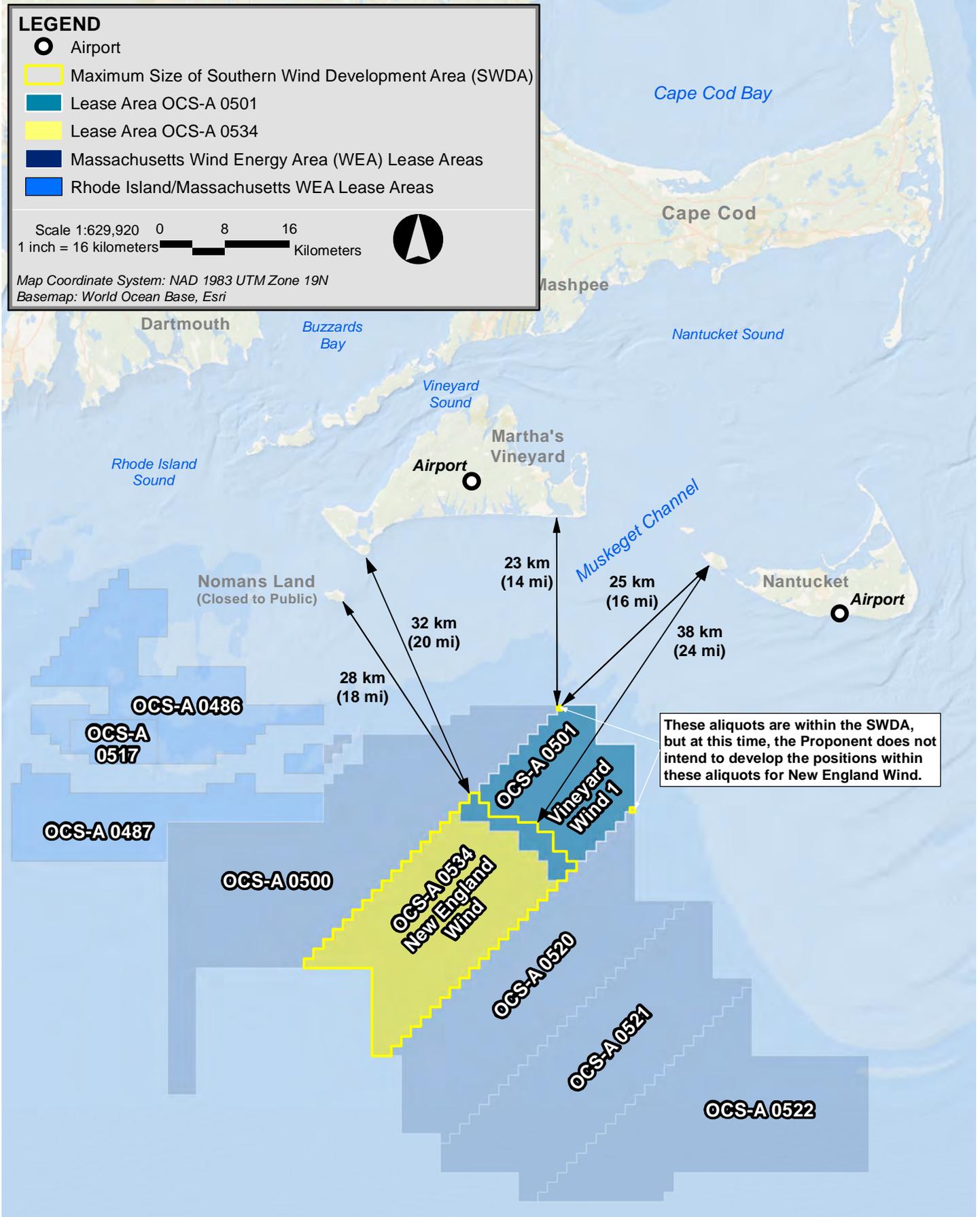
### 1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km<sup>2</sup>) (101,590– 111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-2). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

The Historic Properties Visual Impact Assessment (Appendix III-H.b of COP Volume III) for New England Wind is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act. The Area of Potential Effects (APE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.





## **1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)**

This Historic Property Treatment Plan (HPTP) has been developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the MOA with BOEM, the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP), and participating Tribal Nations regarding the New England Wind project.

The conditions of COP approval and MOA include measures to avoid and/or minimize adverse effects to identified historic properties, including planned distance of the Undertaking from historic properties, uniform WTG design, speed, height, and rotor diameter to reduce visual contrast, uniform spacing of WTGs to decrease visual clutter, and lighting and marking requirements to minimize visibility. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the conditions of COP approval and the MOA as well as with applicable local, state, and federal regulations and permitting requirements.

## **1.3 Participating Parties**

The National Environmental Policy Act (NEPA) substitution process was utilized by BOEM to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM conducted a series of Section 106-specific meetings with consulting parties and conducted an additional consulting party meeting with Tribal Nations.

The Proponent has also conducted outreach meetings with consulting parties to review the findings of the analysis to date and discuss proposed mitigation measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted outreach with the following parties:

- ◆ The Wampanoag Tribe of Gay Head (Aquinnah)
- ◆ The Mashpee Wampanoag Tribe
- ◆ The Town of Aquinnah
- ◆ The Massachusetts Board of Underwater Archaeological Resources (MBUAR)

## 2.0 SUMMARY OF HISTORIC PROPERTY (VINEYARD SOUND AND MOSHUP'S BRIDGE TRADITIONAL CULTURAL PLACE)

---

The Vineyard Sound and Moshup's Bridge Traditional Cultural Place (TCP) [REDACTED]

[REDACTED] The TCP is tied to the Wampanoag Nation creation story of geographical features within the area including the islands, shoals, and Vineyard Sound. The TCP is named for Moshup: a giant, teacher, and benevolent being responsible for the creation of the islands and waterways as well as Moshup's Bridge, which are shoals that run from Aquinnah to Cuttyhunk. Moshup is also responsible for geological features on Martha's Vineyard including the Gay Head Cliffs, which is a culturally significant location to the Aquinnah Tribe and the scene of continued cultural practices. [REDACTED]

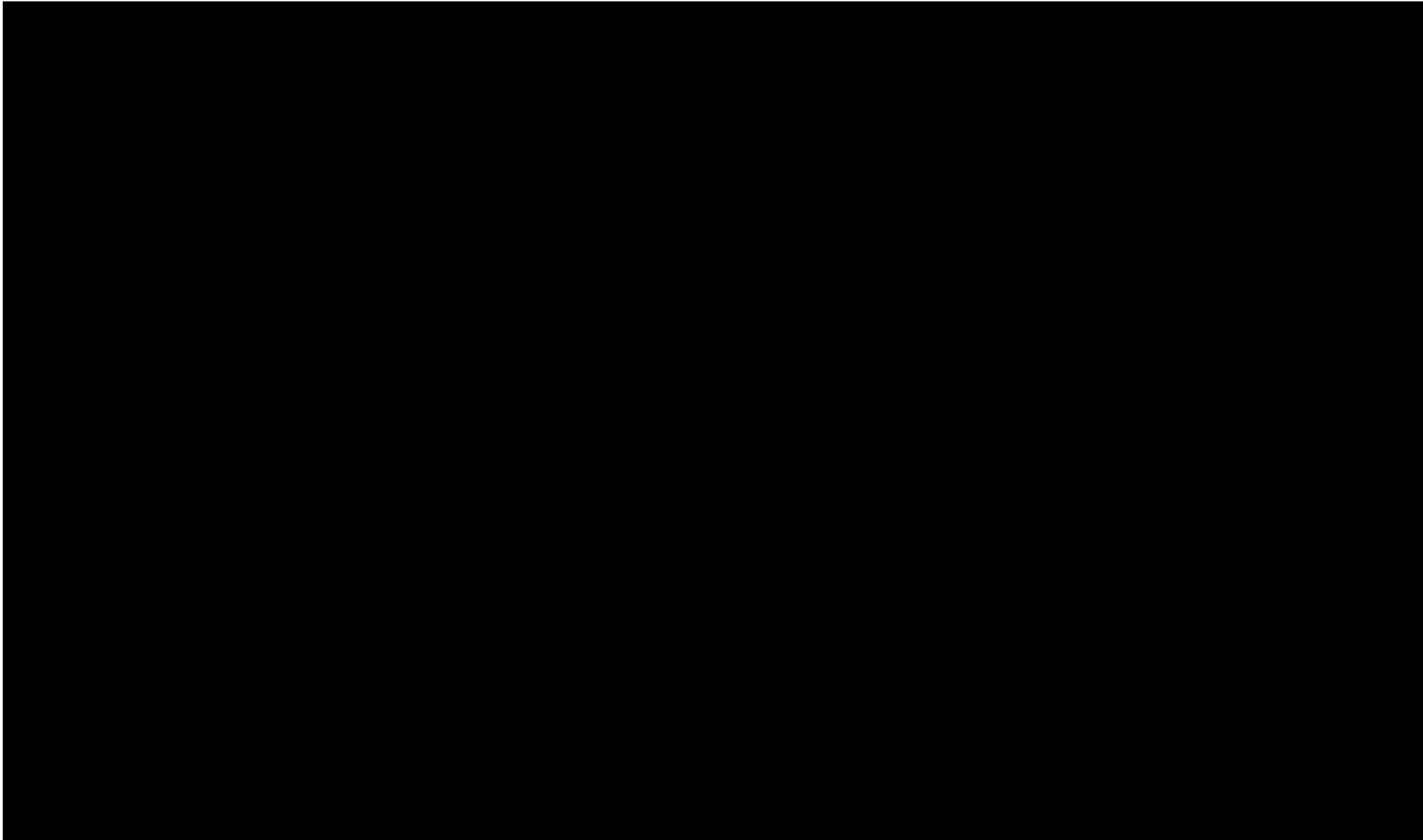
The TCP is more fully described in a Historic Resources Visual Impact Assessment (VIA) prepared by another lessee, which describes the role of Moshup in creating Vineyard Sound, the Aquinnah Cliffs, and Nomans Land:

*"In Aquinnah traditions, Moshup's long travels in ancient times wearied him. He dragged his toe as he strode from the area now known as Woods Hole towards the end of lands. The seas filled the deep furrow, forming Vineyard Sound and separating Noepe from the Elizabeth Islands (e.g. Sayet, 2012). Moshup made his home at the Aquinnah (Gay Head) Cliffs and gathered the Aquinnah people around him. He cast whales upon the shores of Aquinnah to provide for his people and the remains of his great meals created the bright colors of the clays and ancient bones and shells exposed along the cliffs' seaward margins.*

*Moshup taught the Aquinnah respect and charity, the expressions of which are associated with the continuing bounty of the seas and lands within and surrounding Aquinnah (WTGH/A website, 2020).*

*After some time Moshup, decided to build a bridge from Aquinnah to Cuttyhunk Island for use by the Aquinnah people (Perry, 2010). Challenged by the trickster Cheepie (Cheepi) to complete the bridge in one night, the Giant Moshup set to work, casting huge stones into the seas. Cheepie, concerned that Moshup would finish the bridge before sunrise, set a giant crab to attack the great giant as he waded in the waters. When the crab pinched Moshup's foot, the enraged giant cast the crab into the seas, forming Nomans Island (Perry, 2010). Undeterred, Cheepie tricked a crow by shining a bright torch before the sleeping bird's eyes, making him think the sun was rising. Upon hearing the crow's startled call, Moshup believed the dawn had broken and that he had failed Cheepie's challenge. The shoals between Aquinnah and Cuttyhunk are the remains of Moshup's great, if incomplete, bridge. Many variations of Moshup's story are told and retold by the Aquinnah people (Sayet, 2012). The centrality of Moshup's relationship to the landscape and seascape and the Aquinnah people's place within the world is expressed, in part, by an annual pageant for the celebration of the tribe's Moshup stories (NPS, 2010; Sayet, 2012; WTGH/A website, 2020)."*

This page is intentionally blank.



This page is intentionally blank.

The Vineyard Sound and Moshup's Bridge TCP is considered eligible for listing on the National Register under:

- ◆ Criterion A for its association with ancient and historic Native American exploration and settlement of Aquinnah, central events in Moshup's and the Aquinnah Tribe's history, and the character of the lands within;
- ◆ Criterion B for its association with Moshup;
- ◆ Criterion C as a distinguishable and significant component of Aquinnah lifeways, cosmology, economies, traditions, beliefs, and cultural practices; and
- ◆ Criterion D for its potential to yield information through archaeology, ethnography, and ethnohistory significant to understanding the Native American settlement, economies, land use, and cultural practices prior to and after the inundation of Vineyard Sound.

The maritime setting of this resource and its viewshed would be altered through the introduction of new elements. The TCP consists of a very large area with diverse landscapes including open water, shoreline areas, and heavily vegetated upland areas. As shown in the VIA (see photo simulations B-1a to B-1g of Appendix III-H.a of the New England Wind COP), the inland portions of the TCP will have limited visibility of the SWDA due to topographic changes and mature vegetation, with the vast majority of the inland area having no visibility of the SWDA. The TCP is approximately 27.0 km (16.8 mi) from the nearest WTG or ESP. The effect of visibility on the TCP is minimized by the size of the TCP itself, with only a portion of the TCP having visibility of the SWDA. However, as illustrated in the photo simulations in Appendix III-H.a, New England Wind will be visible across the seascape portion of the TCP, particularly in the area of the TCP between Martha's Vineyard and Nomans Land. As such New England Wind will change the character of the setting of the TCP. Due to the change of the TCP's setting, an adverse effect on the Vineyard Sound and Moshup's Bridge TCP has been determined.

There are a variety of mitigating factors affecting potential visibility of the SWDA and the adverse effect. Table 4-2 in Appendix III-H.b demonstrates that for the Gay Head Lighthouse (GAY. 900, within the proposed TCP and approximately 41.0 km [25.5 mi] from the closest New England Wind WTGs/ESP[s]), the average annual visibility of the WTGs/ESP(s) would be 18%. The average annual visibility was calculated assuming that New England Wind uses an Aircraft Detection Lighting System (ADLS) to control nighttime aviation obstruction lighting. The annual visibility from Gay Head Lighthouse does not account for other factors such as sea spray and low-contrast paint color, which will further reduce visibility. Additionally, the islands themselves will obscure visibility of the SWDA from portions within Vineyard Sound. Photo simulations B-1a to B-1g and C-1a to C-1d of the VIA (see Appendix III-H.a) show varying representative settings and potential visibility of the SWDA from within the TCP and demonstrate how the differing topography and vegetation within the TCP partially obscure visibility of the SWDA.

Nomans Land has visibility of the SWDA. Nomans Land, although vegetated, has a low elevation and the vegetation is not as dense or as tall as on the other islands. As mentioned previously, visibility from Nomans Land will be minimized due to distance, environmental factors, the proposed paint color, and the proposed ADLS. Further, Nomans Land is closed to the public, as it is a National Wildlife Refuge and a former bombing target with the presence of unexploded ordnance.

National Register Eligibility Criteria A, B, and D would not be affected by potential visibility of the SWDA. National Register Criterion C as it relates to the setting will be adversely affected by the SWDA. Please note that areas of particular significance such as the Gay Head Cliffs only have limited visibility at oblique angles as an observer viewing the Cliffs typically views them to the west in the opposite direction from the SWDA. Further, only one view from within the TCP would be affected—the southern view—while other views would be unaffected.

## **3.0 MITIGATION AND MINIMIZATION MEASURES**

---

Mitigation and minimization measures for Vineyard Sound and Moshup's Bridge TCP are detailed below.

### **3.1 Scholarships and Training for Tribal Resource and/or Environmental Stewardship**

#### **Purpose and Intended Outcome**

The Proponent proposes funding for scholarships and fees in fields of relation to the historic resource. Examples of fields that could be applicable for professional training or certification include, but are not limited to anthropology, archaeology, astronomy aquaculture, biology, ethnohistory, history, marine construction/fisheries/sciences, or Native American studies.

#### **Scope of Work**

The scope of work will be developed in accordance with the Participating Parties and is envisioned to include scholarship and training for Tribal resource stewardship purposes.

#### **Methodology**

The Proponent will prepare an RFP and will consult with Participating Parties in defining objectives and scope of work, as well as in the consultant selection process.

#### **Standards**

All work will be conducted in accordance with state and federal applicable standards. All work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally and state recognized Tribal Nations Professionals selected shall have demonstrated experience in education and training program management and fiscal reporting.

#### **Documentation**

The Proponent will provide the following documentation to the Participating Parties for their review:

- ◆ Draft proposed scope of work.
- ◆ RFP and consultant bids in response to RFP.
- ◆ Once complete, a summary report of the work completed will be distributed.
- ◆ Annual progress report to BOEM describing the implementation of the mitigation measures.

## **Funds and Accounting**

The proposed total funding amount for mitigation measures described in Sections 3.1 through 3.2 is \$500,000 for New England Wind. The funding amount presented is the total for both phases of New England Wind.

## **3.2 Coastal Resilience and Habitat Restoration**

### **Purpose and Intended Outcome**

Impacts to the TCP associated with climate change such as rising seas and water temperatures, expansion of invasive species, increased frequency and intensity of coastal storms etc., are expected to represent significant threats to the defining features of this historic property. The purpose and intended outcome of this mitigation measure is to provide funding for future planning and implementation of efforts to help mitigate the negative externalities associated with climate change.

### **Scope of Work**

The scope of work will be developed in accordance with the Participating Parties and is envisioned to include coastal resilience and habitat restoration purposes.

### **Methodology**

The Proponent will prepare an RFP and will consult with Participating Parties in defining objectives and scope of work, as well as in the consultant selection process.

### **Standards**

All work will be conducted in accordance with state and federal applicable standards. All work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally and state recognized Tribal Nations.

### **Documentation**

The Proponent will provide the following documentation to the Participating Parties for their review:

- ◆ Draft proposed scope of work.
- ◆ RFPs and consultant bids in response to RFP.
- ◆ Once complete, a summary report of the work completed will be distributed.
- ◆ Annual progress report to BOEM describing the implementation of the mitigation measures.

## **Funds and Accounting**

The proposed total funding amount for mitigation measures described in Sections 3.1 through 3.2 is \$500,000 for New England Wind. The funding amount presented is the total for both phases of New England Wind.

### **3.3 Additional Minimization Measures**

The Proponent is also implementing the following minimization measures.

#### **3.3.1 *Uniform Layout and Paint Color Selection***

The Proponent is avoiding and minimizing visual impacts to the maximum extent practicable. The WTGs for each phase will have uniform design, height, and rotor diameter and will be aligned and spaced consistently with other offshore wind facilities, thereby reducing potential for visual clutter. Additionally, the WTGs will be no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in color in accordance with BOEM and Federal Aviation Administration (FAA) guidance; the Proponent anticipates painting the WTGs off-white/light grey to reduce contrast with the sea and sky and thus, minimize daytime visibility of the WTGs. The conservative threshold for visibility in meteorological analyses is “the greatest distance at which an observer can just see a black object viewed against the horizon sky” (see Section 3.3 of Appendix III-H.a). The Phase 1 and Phase 2 WTGs will not be black; instead, the expected off-white/light grey color will be highly compatible with the hue, saturation, and brightness of the background sky. This lack of contrast between the WTGs and the background means that the percentage of the time the structures might be visible is greatly reduced. Additionally, the upper portion of the ESP(s) will be a grey color which would appear muted and indistinct. Color contrast decreases as distance increases. Color contrast will diminish or disappear completely during periods of haze, fog, or precipitation.

#### **3.3.2 *Lighting***

Lighting will be kept to the minimum necessary to comply with navigation safety requirements and safe operating conditions. Required marine navigation lights mounted near the top of each WTG/ESP foundation (or on the corners of each ESP) are expected to be visible only to distances of approximately 9.3 km (5 NM). As the closest coastal vantage point is at least 34.1 km (21.2 mi) from the nearest WTG, marine navigation lights will not be visible from shore.

#### **3.3.3 *Aircraft Detection Lighting Systems (ADLS)***

Subject to BOEM approval, the Proponent also expects to use an ADLS that automatically turns on, and off, aviation obstruction lights in response to the detection of aircraft for the Phase 1 WTGs. For Phase 2, the Proponent would expect to use the same or similar approaches used for Vineyard Wind 1 and/or Phase 1 to reduce lighting, including the use of an ADLS. Based on historical use of the airspace, it is estimated that the aviation obstruction lights on both the nacelle and tower (if needed) will be activated for less than one hour per year (less than 0.1% of

the nighttime hours) (see Appendix III-K). The effect of nighttime lighting from the aviation obstruction lights is acknowledged as part of the overall visibility and visual effect of the SWDA; however, the effect of nighttime lighting is substantially minimized through the use of ADLS. As stated previously, meteorological conditions will serve to obscure or block view of the SWDA providing additional minimization of the effect of nighttime lighting. For Phase 1, the onshore export cables to the onshore substation will be primarily installed underground and will typically be within public roadway layouts, although portions of the duct bank may be within existing utility rights-of-way (ROWs). From the onshore substation, grid interconnection cables will also be installed underground. Underground installation of onshore cables is also expected for Phase 2, thus minimizing potential visual effects to adjacent properties.

## 4.0 IMPLEMENTATION

---

### 4.1 Timeline

It is anticipated that the mitigation measures identified in Sections 3.1 and 3.2 will commence prior to construction. The specific timeline prior to construction will be agreed upon by the Proponent and the Participating Parties and accepted by BOEM. Per Section 3.0, the Participating Parties will have a minimum of 45 days to review and comment on all draft reports or other work products developed for this HPTP. The Proponent assumes that the proposed scope of work will be completed within 5 years unless a different timeline is agreed upon by Participating Parties and accepted by BOEM.

### 4.2 Organizational Responsibilities

#### 4.2.1 *Bureau of Ocean Energy Management (BOEM)*

- ◆ BOEM is responsible for consultation related to dispute resolution if needed during implementation of the HPTP.

#### 4.2.2 *Avangrid Renewables, LLC*

- ◆ The Proponent will be responsible for implementing the HPTP.
- ◆ The Proponent will be responsible for considering the feedback provided by the parties identified.
- ◆ Annual reporting to BOEM on implementation of the HPTP.
- ◆ Funding the mitigation measures specified in Section 3.0.
- ◆ Completion of the scope(s) of work in Section 3.0.
- ◆ Ensuring all Standards in Section 3.0 are met.
- ◆ Providing the Documentation in Section 3.0 to the Participating Parties for review and comment.
- ◆ The Proponent will be responsible for ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations.

#### 4.2.3 *Tribal Nations*

- ◆ Identify resources of significance to support the public education mitigation measure (if selected).
- ◆ Provide feedback on draft materials within 45 days.

#### 4.2.4 *Other Parties*

The Proponent does not anticipate additional consulting parties.

## 5.0 REFERENCES

---

- [BOEM] Bureau of Ocean Energy Management. 2020. Finding of adverse effect for the Vineyard Wind 1 Project Construction and Operations Plan. Revised November 13, 2020. Retrieved from: <https://www.boem.gov/sites/default/files/documents/oil-gas-energy/Vineyard-Wind-Findingof-Adverse-Effect.pdf>
- DiStefano V, Salzam N. 1980. Cape Poge Light National Register Nomination. Fields J. 2006. Captain William Martin House Form B – Building. Massachusetts Cultural Resources Information System (MACRIS Maps 3.0 Beta) Online mapping program (August 10, 2020). <https://maps.mhc-macris.net/>.
- Massachusetts Inventory of Historic and Archaeological Assets of the Commonwealth via Massachusetts Cultural Resources Information System (MACRIS) (August 10, 2020). Retrieved from: <http://mhc-macris.net/>.
- National Park Service. 2020. National Register of Historic Places. Retrieved from: <https://www.nps.gov/subjects/nationalregister/index.htm>
- NETROnline. 2020. Historic Aerials. Retrieved from: <https://www.historicaerials.com/>.
- Wood S, Purdum J, Egan B. 2014. Visualization simulations for offshore Massachusetts and Rhode Island Wind Energy Area - Meteorological report. OCS Study BOEM 2017-037. Retrieved from: <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/MeteorologicalReportFinal.pdf>

ATTACHMENT 9 – HISTORIC PROPERTY TREATMENT PLAN FOR NANTUCKET SOUND TCP

This page is intentionally blank.



# **New England Wind Historic Property Treatment Plan for the Nantucket Sound Traditional Cultural Property**

*Submitted to:*

BUREAU OF OCEAN ENERGY MANAGEMENT  
45600 Woodland Rd  
Sterling, VA 20166

*Submitted by:*

Park City Wind LLC

*Prepared by:*

**Epsilon**  
ASSOCIATES INC.

February 2024

# TABLE OF CONTENTS

---

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>1.0 BACKGROUND INFORMATION</b>	<b>3</b>
1.1 Project Overview	3
1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)	6
1.3 Participating Parties	6
<b>2.0 SUMMARY OF HISTORIC PROPERTY (NANTUCKET SOUND TRADITIONAL CULTURAL PLACE)</b>	<b>7</b>
<b>3.0 MITIGATION AND MINIMIZATION MEASURES</b>	<b>10</b>
3.1 Mitigation Measures	10
3.1.1 Submerged Ancient Landform (SAL) Study	10
3.2 Minimization Measures	10
3.2.2 Uniform Layout and Paint Color Selection	10
3.2.3 Lighting	11
3.2.4 Aircraft Detection Lighting Systems (ADLS)	11
<b>4.0 IMPLEMENTATION</b>	<b>12</b>
4.1 Timeline	12
4.2 Organizational Responsibilities	12
4.2.1 Bureau of Ocean Energy Management (BOEM)	12
4.2.2 Avangrid Renewables, LLC	12
4.2.3 Tribal Nations	12
4.2.3 Other Parties	12
<b>5.0 REFERENCES</b>	<b>13</b>

## List of Figures

---

Figure 1.1-1	New England Wind Overview	4
Figure 1.1-2	SWDA-Nearest Onshore Areas	5
Figure 2.0-1	Historic Property: Nantucket Sound TCP	9

## **EXECUTIVE SUMMARY**

---

This Historic Property Treatment Plan (HPTP) for the Nantucket Sound Traditional Cultural Place (TCP) adversely affected by New England Wind provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP) regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the MOA identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of New England Wind (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and is consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and MOA.

This HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent.

The timeline for implementation of the mitigation measures has been determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this HPTP.

This HPTP is organized into the following sections:

### **Executive Summary**

#### **Section 1.0 Background Information**

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

#### **Section 2.0 Summary of Historic Property**

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (New England Wind COP) and the Historic Properties Visual Impact Assessment (Appendix III-H.b).

#### **Section 3.0 Mitigation Measures**

This section provides a review of mitigation measures proposed by the Proponent as identified in the COP and through the consultation process.

## **Section 4.0 Implementation**

This section establishes the process for executing the mitigation measures identified in Section 4.0.

## **Section 5.0 References**

This section is a list of works cited for this HPTP.

## 1.0 BACKGROUND INFORMATION

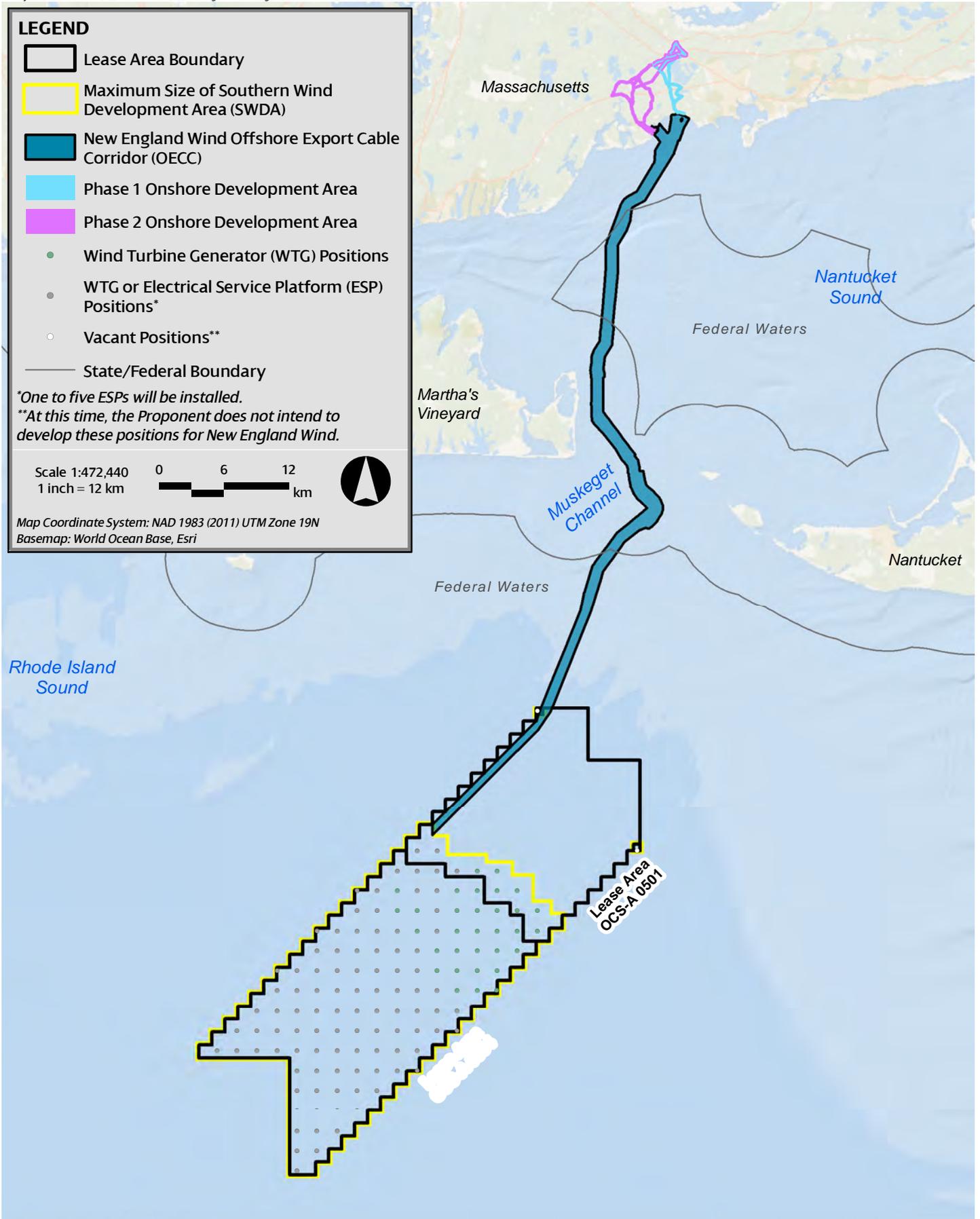
---

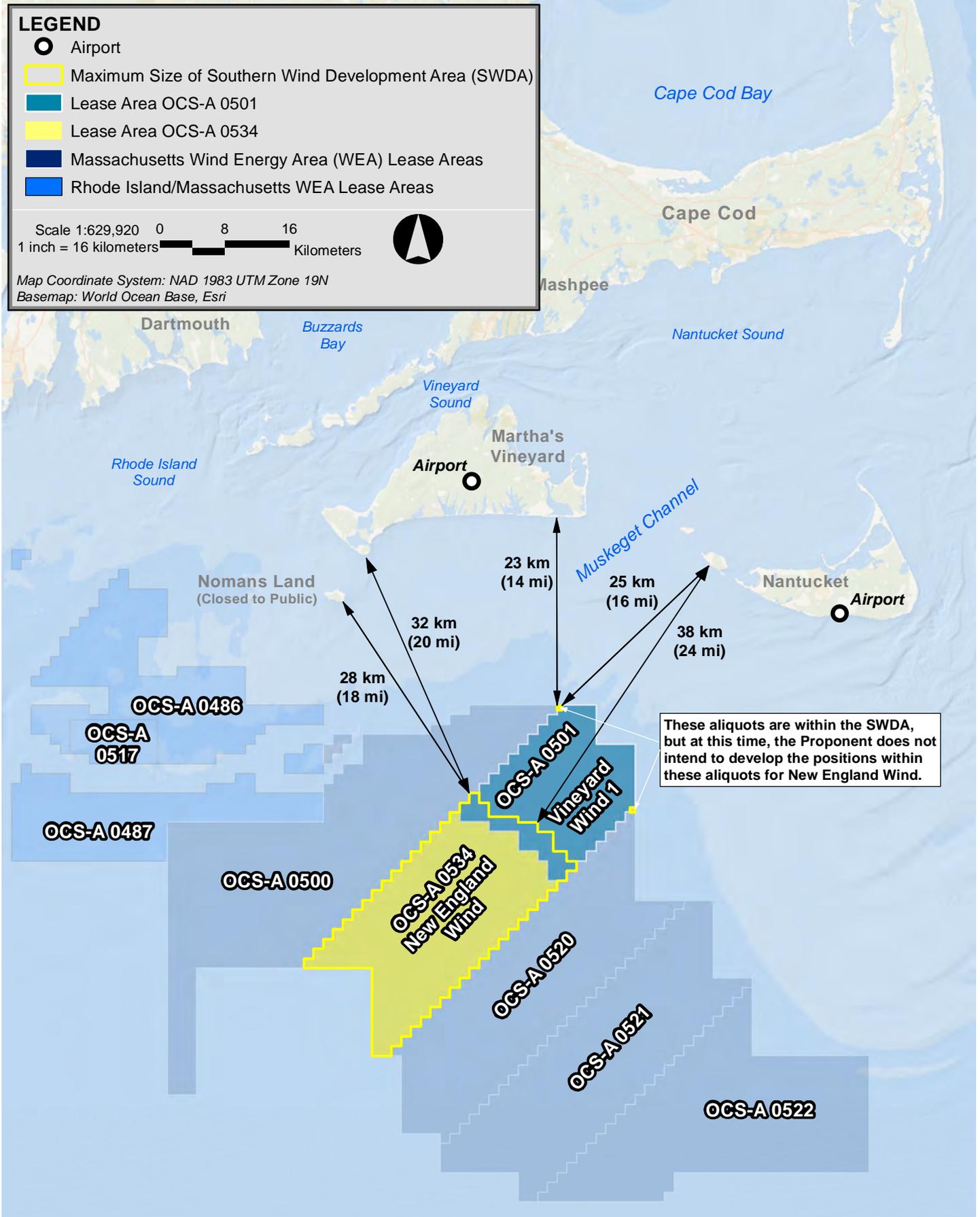
### 1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km<sup>2</sup>) (101,590– 111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-2). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

The Historic Properties Visual Impact Assessment (Appendix III-H.b of COP Volume III) for New England Wind is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act. The Area of Potential Effects (APE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.





## **1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)**

This Historic Property Treatment Plan (HPTP) has been developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the Memorandum of Agreement (MOA) with BOEM, the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation (ACHP), and participating Tribal Nations regarding the New England Wind project.

The conditions of COP approval and MOA include measures to avoid and/or minimize adverse effects to identified historic properties, including planned distance of the Undertaking from historic properties, uniform WTG design, speed, height, and rotor diameter to reduce visual contrast, uniform spacing of WTGs to decrease visual clutter, and lighting and marking requirements to minimize visibility. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the conditions of COP approval and the forthcoming MOA as well as with applicable local, state, and federal regulations and permitting requirements.

## **1.3 Participating Parties**

The National Environmental Policy Act (NEPA) substitution process was utilized by BOEM to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM conducted a series of Section 106-specific meetings with consulting parties.

The Proponent has also conducted outreach meetings with various consulting parties to review the findings of the analysis to date and discuss proposed mitigation measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted outreach with the following parties:

- ◆ The Wampanoag Tribe of Gay Head (Aquinnah)
- ◆ The Mashpee Wampanoag Tribe
- ◆ The Massachusetts Board of Underwater Resources (MBUAR)

## 2.0 SUMMARY OF HISTORIC PROPERTY (NANTUCKET SOUND TRADITIONAL CULTURAL PLACE)

---

Nantucket Sound has been determined eligible for listing on the National Register as a Traditional Cultural Place (TCP) by the Keeper of the National Register. Roughly bound by Vineyard Sound, Cape Cod, Martha's Vineyard, and Nantucket, the boundary for the National Register eligible property of Nantucket Sound as it relates to other waterways has not been fully defined (Figure 2.0-1). The Keeper in her review of eligibility criteria determined that:

*“Nantucket Sound is eligible for listing in the National Register as a traditional cultural property and as an historic and archeological property associated with and that has yielded and has the potential to yield important information about the Native American exploration and settlement of Cape Cod and the Islands. Although the exact boundary is not precisely defined, this determination answers the question for the area that prompted the request for this determination, the Sound itself. The Sound is eligible as an integral, contributing feature of a larger district, whose boundaries have not been precisely defined, under:*

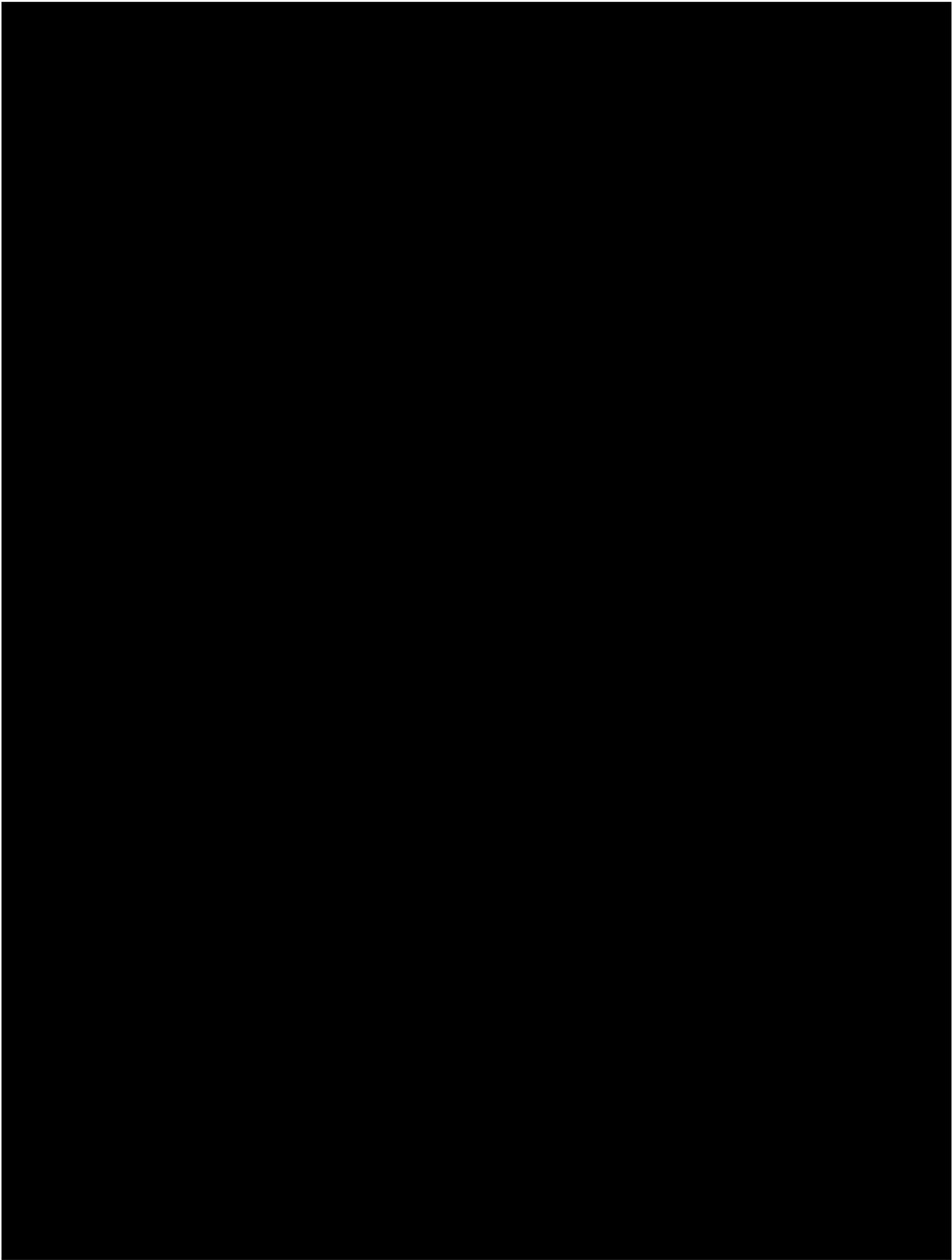
- ◆ *Criterion A for its associations with the ancient and historic period Native American exploration and settlement of Cape Cod and the Islands, and with the central events of the Wampanoags' stories of Maushop and Squant/Squannit;*
- ◆ *Criterion B for its association with Maushop and Squant/Squannit;*
- ◆ *Criterion C as a significant and distinguishable entity integral to Wampanoags' folklife traditions, practices, cosmology, religion, material culture, foodways, mentoring, and narratives; and,*
- ◆ *Criterion D for the important cultural, historical, and scientific information it has yielded and/or may be likely to yield through archeology, history, and ethnography about access to resources, patterns of settlement, mobility, and land use prior to and after 6,000 years ago as a result of the inundation of the Sound. It is also important for the significant information it provides and can provide about the cultural practices and traditions of the Native Americans of Cape Cod and the Islands in relationship with other peoples since ancient times.”*

Photo simulations from Nantucket (see photo simulations B-5a to B-5e in Appendix III-H.a) demonstrate that the SWDA will be visible at the extreme southern end of Nantucket Sound. Views of Nantucket Sound to the north, east, and west from within the Sound will not be affected. For large sections of Nantucket Sound, the SWDA will not be visible. Additionally, there will be no visual effect from New England Wind's undersea cables. For the southern view, visibility of the SWDA will be intermittent depending upon weather conditions and the WTGs would only be visible slightly above the horizon line.

Per BOEM guidance on April 12, 2022, views from the Wasque Reservation, which is within the Chappaquiddick Island TCP, are also representative of the views from the Nantucket Sound TCP at its southernmost end. The Chappaquiddick Island TCP/Nantucket Sound TCP is located approximately 23.1 miles from the closest WTG. On average for all meteorological conditions, New England Wind

WTGs/ESP(s) might be visible 22% of the time from the Chappaquiddick Island TCP (including the Wasque Reservation), which is representative of visibility from Nantucket Sound. While significant viewsheds will not be altered, it is conservatively determined that an adverse effect may occur.

Additionally, the offshore export cable corridor (OECC) for New England Wind passes through the Nantucket Sound TCP. Potential submerged ancient landforms (SALs) have been identified within portions of the OECC where it passes through the Nantucket Sound TCP. SALs are interpreted as remnants of past terrestrial and shallow marine environments that existed along previous coastlines during lower stands of sea level. The landforms now appear buried below the seafloor at varying depths due to different processes acting upon the continental shelf over the past 15,000 years. While no intact archaeological artifacts, deposits, resources, or sites have been identified offshore, the SALs represent locations of higher significance with the potential to contain those cultural resources. Further details on the SALs are included in the Submerged Ancient Landform HPTP, as well as in the Marine Archaeological Resources Assessment included as Volume II-D of the COP.



## **3.0 MITIGATION AND MINIMIZATION MEASURES**

---

Mitigation and minimization measures are proposed below, however; ongoing consultation has informed the importance of SALs and the SAL study proposed below and detailed in the SAL HPTP in Attachment 4 of the MOA will serve as the main focus of mitigation for the Nantucket Sound TCP.

### **3.1 Mitigation Measures**

#### **3.1.1 *Submerged Ancient Landform (SAL) Study***

As noted in Section 2.0, potential SALs have been identified within portions of the OECC where it passes through the Nantucket Sound TCP. In order to mitigate adverse effects to SALs, the Proponent is proposing to conduct additional archaeological investigations on unavoidable SALs in the OECC. Further details on the SALs and the proposed mitigation measures are included in the Submerged Ancient Landform HPTP in Attachment 4 of the MOA, as well as in the Marine Archaeological Resources Assessment included as Volume II-D of the COP.

### **3.2 Minimization Measures**

#### **3.2.2 *Uniform Layout and Paint Color Selection***

The Proponent is avoiding and minimizing visual impacts to the maximum extent practicable. The WTGs for each phase will have uniform design, height, and rotor diameter and will be aligned and spaced consistently with other offshore wind facilities, thereby reducing potential for visual clutter. Additionally, the WTGs will be no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in color in accordance with BOEM and Federal Aviation Administration (FAA) guidance; the Proponent anticipates painting the WTGs off-white/light grey to reduce contrast with the sea and sky and thus, minimize daytime visibility of the WTGs. The conservative threshold for visibility in meteorological analyses is “the greatest distance at which an observer can just see a black object viewed against the horizon sky” (see Section 3.3 of Appendix III-H.a). The Phase 1 and Phase 2 WTGs will not be black; instead, the expected off-white/light grey color will be highly compatible with the hue, saturation, and brightness of the background sky. This lack of contrast between the WTGs and the background means that the percentage of the time the structures might be visible is greatly reduced. Additionally, the upper portion of the ESP(s) will be a grey color which would appear muted and indistinct. Color contrast decreases as distance increases. Color contrast will diminish or disappear completely during periods of haze, fog, or precipitation.

### **3.2.3            *Lighting***

Lighting will be kept to the minimum necessary to comply with navigation safety requirements and safe operating conditions. Required marine navigation lights mounted near the top of each WTG/ESP foundation (or on the corners of each ESP) are expected to be visible only to distances of approximately 9.3 km (5 NM). As the closest coastal vantage point is at least 34.1 km (21.2 mi) from the nearest WTG, marine navigation lights will not be visible from shore.

### **3.2.4            *Aircraft Detection Lighting Systems (ADLS)***

Subject to BOEM approval, the Proponent also expects to use an Aircraft Detection Lighting System (ADLS) that automatically turns on, and off, aviation obstruction lights in response to the detection of aircraft for the Phase 1 WTGs. For Phase 2, the Proponent would expect to use the same or similar approaches used for Vineyard Wind 1 and/or Phase 1 to reduce lighting, including the use of an ADLS. Based on historical use of the airspace, it is estimated that the aviation obstruction lights on both the nacelle and tower (if needed) will be activated for less than one hour per year (less than 0.1% of the nighttime hours) (see Appendix III-K). The effect of nighttime lighting from the aviation obstruction lights is acknowledged as part of the overall visibility and visual effect of the SWDA; however, the effect of nighttime lighting is substantially minimized through the use of ADLS. As stated previously, meteorological conditions will serve to obscure or block view of the SWDA providing additional minimization of the effect of nighttime lighting. For Phase 1, the onshore export cables to the onshore substation will be primarily installed underground and will typically be within public roadway layouts, although portions of the duct bank may be within existing utility rights-of-way (ROWs). From the onshore substation, grid interconnection cables will also be installed underground. Underground installation of onshore cables is also expected for Phase 2, thus minimizing potential visual effects to adjacent properties.

## **4.0 IMPLEMENTATION**

---

### **4.1 Timeline**

It is anticipated that the mitigation measures identified in Section 3.1 will commence prior to construction. The specific timeline prior to construction will be agreed upon by the Proponent and the Participating Parties and accepted by BOEM. Per Section 3.0, the Participating Parties will have a minimum of 45 days to review and comment on all draft reports or other work products developed for this HPTP. The Proponent assumes that the proposed scope of work will be completed within 5 years unless a different timeline is agreed upon by Participating Parties and accepted by BOEM.

### **4.2 Organizational Responsibilities**

#### **4.2.1 *Bureau of Ocean Energy Management (BOEM)***

- BOEM is responsible for consultation related to dispute resolution if needed during implementation of the HPTP.

#### **4.2.2 *Avangrid Renewables, LLC***

- The Proponent will be responsible for implementing the HPTP.
- The Proponent will be responsible for considering the feedback provided by the parties identified.
- Annual reporting to BOEM on the implementation of the HPTP.
- Funding the mitigation measures specified in Section 3.0.
- Completion of the scope(s) of work in Section 3.0.
- The Proponent will be responsible for ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations.

#### **4.2.3 *Tribal Nations***

Tribal Nations to provide feedback on draft materials associated with the SAL study (if applicable) within 45 days.

#### **4.2.3 *Other Parties***

The Proponent does not anticipate additional consulting parties.

## 5.0 REFERENCES

---

- [BOEM] Bureau of Ocean Energy Management. 2020. Finding of adverse effect for the Vineyard Wind 1 Project Construction and Operations Plan. Revised November 13, 2020. Retrieved from: <https://www.boem.gov/sites/default/files/documents/oil-gas-energy/Vineyard-Wind-Findingof-Adverse-Effect.pdf>
- DiStefano V, Salzam N. 1980. Cape Poge Light National Register Nomination. Fields J. 2006. Captain William Martin House Form B – Building. Massachusetts Cultural Resources Information System (MACRIS Maps 3.0 Beta) Online mapping program (August 10, 2020). <https://maps.mhc-macris.net/>.
- Massachusetts Inventory of Historic and Archaeological Assets of the Commonwealth via Massachusetts Cultural Resources Information System (MACRIS) (August 10, 2020). Retrieved from: <http://mhc-macris.net/>.
- National Park Service. 2020. National Register of Historic Places. Retrieved from: <https://www.nps.gov/subjects/nationalregister/index.htm>
- NETROnline. 2020. Historic Aerials. Retrieved from: <https://www.historicaerials.com/>.
- Wood S, Purdum J, Egan B. 2014. Visualization simulations for offshore Massachusetts and Rhode Island Wind Energy Area - Meteorological report. OCS Study BOEM 2017-037. Retrieved from: <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/MeteorologicalReportFinal.pdf>

This page is intentionally blank.

ATTACHMENT 10 – NEW ENGLAND WIND PHASED IDENTIFICATION PLAN

This page is intentionally blank.



# New England Wind Phased Identification Plan for Terrestrial Archaeology

*Submitted to:*

BUREAU OF OCEAN ENERGY MANAGEMENT  
45600 Woodland Rd  
Sterling, VA 20166

*Submitted by:*

Park City Wind LLC

*Prepared by:*

**Epsilon**  
ASSOCIATES INC.

October 2023

## TABLE OF CONTENTS

---

---

<b>1.0</b>	<b>INTRODUCTION</b>	<b>1-1</b>
<b>2.0</b>	<b>PHASED IDENTIFICATION</b>	<b>2-5</b>
2.1	Section 106 Phased Identification Plan (PIP)	2-5
2.1.1	Phased Identification	2-5
2.1.2	Scope of Phased Identification	2-5
2.2	Schedule	2-7
<b>APPENDIX A</b>	<b>SENSITIVITY MAPS AT AREAS INCLUDED IN THIS PIP</b>	<b>1</b>

### List of Figures

---

Figure 1.1-1	Overview of Existing Terrestrial Archaeology Survey Areas for Phases 1 and 2	1-3
Figure 1.1-2	Remaining Terrestrial Archaeology Survey Areas for Phase 1 and Phase 2	1-4

### List of Tables

---

Table 2.2-1	Anticipated NEPA/Section 106 Milestones	2-7
-------------	---	-----

## 1.0 INTRODUCTION

---

New England Wind is the proposal to develop offshore renewable wind energy facilities in BOEM Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind.

The following document is a supplement to the New England Wind Terrestrial Archaeology Resource Assessment (TARA) distributed for National Historic Preservation Act (NHPA) Section 106 Consultation. The TARA is provided as Appendix III-G in Volume III of the New England Wind COP submitted to the Bureau of Ocean Energy Management (BOEM). Preparation of the remaining reports to be included in the TARA is ongoing while property access permissions are acquired to conduct additional Phase 1A and Phase 1B archaeological investigations. BOEM has determined, in accordance with Section 106 regulations (36 CFR § 800.4 (b)(2)), that a phased identification approach is appropriate for the survey, reporting, and consultation related to this outstanding archaeological investigation. The Phased Identification Plan (PIP) for Terrestrial Archaeology serves as a process document detailing the steps New England Wind expects to take to complete the required cultural resources survey and includes a schedule of associated milestones. Section IV of the Memorandum of Agreement (MOA) describes the consultation steps for phased identification of historic properties in accordance with BOEM's Guidelines for Providing Archaeological and Historic Property Information Pursuant to Title 30 Code of Federal Regulations Part 585.

New England Wind is fully described in Volume I of the COP and includes two Phases. Phase 1 potential Onshore Export Cabling Routes and Grid Interconnection Routes are sited along existing roadways or utility rights-of-ways (ROWs) and onshore cables will be installed underground. Wherever possible, expanded work zones and construction staging areas along the onshore routes will be located within previously developed areas, such as nearby parking lots. The proposed Phase 1 substation at 8 Shootflying Hill Road will connect to the existing West Barnstable Substation. An adjacent parcel at 6 Shootflying Hill Road, which is located immediately northeast of the proposed substation site, will be used for an improved access road to the onshore substation site. An additional parcel of land (Parcel #214-001) located immediately southeast of the existing West Barnstable Substation is expected to be utilized for Phase 1.

Phase 2 potential Onshore Export Cable Routes are sited along existing roadways or utility ROWs and will be installed underground. Wherever possible, expanded work zones and construction staging areas along the potential Onshore Export Cable Routes will be located within previously developed areas, such as nearby parking lots. Similar to Phase 1, Phase 2 includes an interconnection at the existing West Barnstable Substation.

Figure 1.1-1 indicates where Phase 1A and/or Phase 1B terrestrial archaeology surveys for Phase 1 and Phase 2 of New England Wind have been completed. Section 2.1.2 describes the limited locations where additional terrestrial archaeology survey is needed, and these proposed survey areas are shown on Figure 1.1-2. The following sections of this PIP focus on the outstanding terrestrial archaeological survey and reporting needs for the Phase 1 and Phase 2 Onshore PAPE.

**LEGEND**

- Town Boundary
- Existing West Barnstable Substation
- Utility ROW (approximate)

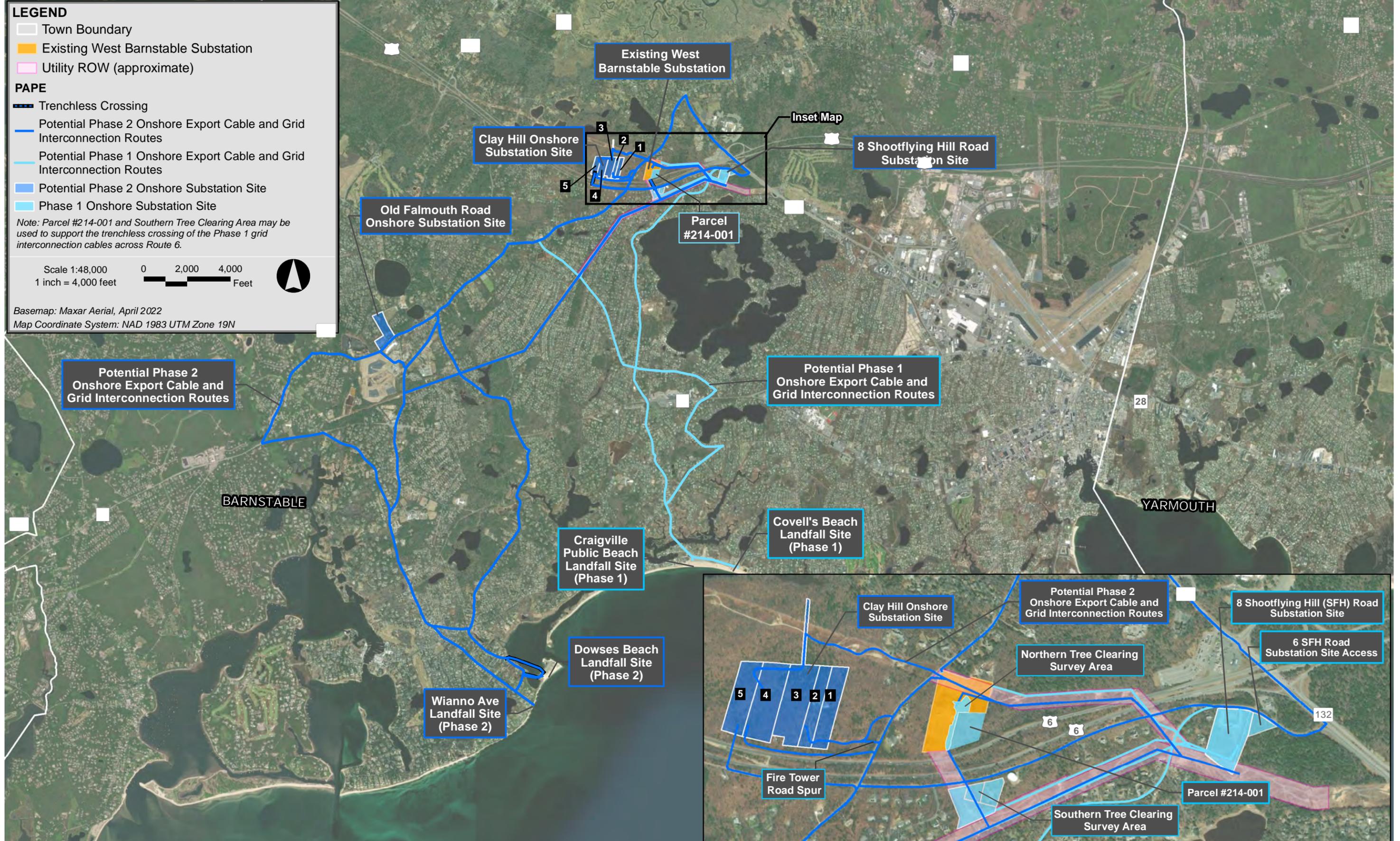
**PAPE**

- Trenchless Crossing
- Potential Phase 2 Onshore Export Cable and Grid Interconnection Routes
- Potential Phase 1 Onshore Export Cable and Grid Interconnection Routes
- Potential Phase 2 Onshore Substation Site
- Phase 1 Onshore Substation Site

*Note: Parcel #214-001 and Southern Tree Clearing Area may be used to support the trenchless crossing of the Phase 1 grid interconnection cables across Route 6.*

Scale 1:48,000  
1 inch = 4,000 feet

Basemap: Maxar Aerial, April 2022  
Map Coordinate System: NAD 1983 UTM Zone 19N



**Figure 1.1-1**  
Overview of Existing Terrestrial Archaeology Survey Areas for Phases 1 and 2



## 2.0 PHASED IDENTIFICATION

---

### 2.1 Section 106 Phased Identification Plan (PIP)

#### 2.1.1 *Phased Identification*

After the publication of the FEIS, issuance of the ROD and/or adoption of a Memorandum of Agreement (MOA), phased identification will occur for the following select areas of the terrestrial PAPE (see Figure 1.1-2):

- ◆ Phase 1 – Phase 1B Survey of Eversource ROW #343, #345, and #381
- ◆ Phase 2 – Phase 1B Survey of Western Workspace and Eastern Workspace associated with a potential trenchless crossing of East Bay
- ◆ Phase 2– Phase 1B Survey of small segment of Fire Tower Road
- ◆ Phase 2 – Phase 1B Survey of Additional Phase 2 Onshore Cable Route Segments (Eversource ROW #342 Survey Area and MassDOT ROW Survey Area)
- ◆ Phase 2 – Phase 1B Survey of the Old Falmouth Road onshore substation site

The anticipated schedule is described further in Section 2.2.

#### 2.1.2 *Scope of Phased Identification*

##### Overview

As detailed above, most Phase 1 and Phase 2 terrestrial archaeology assessments have been completed. A PIP is necessary for limited work associated with Phase 1 and Phase 2.

##### Phase 1

For Phase 1 of the Project, a Phase 1B Survey will be needed for the areas identified where grid interconnection may be possible. The areas remaining are owned by Eversource and require the Proponent be granted access to complete the survey. They are identified on Figure 1.1-2 as Eversource ROW #381, 345, and 343 Survey Areas.

##### Phase 2

For Phase 2 of the Project, a Phase 1B Survey will be conducted at two workspaces (see Figure 1.1-2) affiliated with the potential trenchless crossing of East Bay: Western Workspace and Eastern Workspace.

A Phase 1B survey will be conducted on a small segment of Fire Tower Road with moderate archaeological sensitivity where previous testing was not conducted as property access was not available.

Additionally, a Phase 1B Survey may be conducted at two potential onshore cable route segments in the immediate vicinity of the Clay Hill onshore substation site that may be used Figure 1.1-2 identifies these two additional segments as Eversource ROW #342 Survey Area and MassDOT ROW Survey Area. The areas remaining are owned by Eversource and MassDOT and require the Proponent be granted access to complete the survey. The Eversource ROW #342 Survey Area and MassDOT ROW Survey Area are less likely to be used and a survey will only be conducted if the Proponent determines that use of these segments is required.

Finally, a Phase 1B Survey may be conducted at the Old Falmouth Road onshore substation site. The Proponent does not have site control or the ability to access the Old Falmouth Road onshore substation site and currently does not expect to use this site. In the unlikely event that the Proponent plans to utilize the Old Falmouth Road onshore substation site, a Phase 1B Survey would be conducted. Additionally, if the Old Falmouth Road onshore substation site is selected for use, the Proponent would also conduct GIS-based viewshed modeling.

The remaining Phase 1B Surveys will be completed in accordance with the schedule in Section 2.2.

#### **Description of Survey Types and Methods**

A Phase 1B Survey will be completed in zones of high and moderate sensitivity with 50-x-50-cm shovel test pits placed at 10-m intervals along judgmentally placed transects. Some test pits may be placed in zones of low archaeological sensitivity to confirm that ranking (see Appendix B). If cultural material is found, additional test pits will be excavated at 2.5- or 5-m intervals in the cardinal direction around the test pits containing pre-contact cultural material. As part of the planned Phase 1B Surveys, National Register of Historic Places (NRHP) eligibility determinations and assessments of effects will be completed.

#### **Unanticipated Discoveries Plan**

The Proponent has prepared a plan for unanticipated discoveries (see “Procedures Guiding the Discovery of Unanticipated Archaeological Resources and Human Remains” in Attachment 12 of the MOA). This plan will be followed and implemented during all planned studies described in this PIP.

## 2.2 Schedule

Table 2.2-1 provides the anticipated NEPA/Section 106 milestones. Outstanding survey work included in this PIP will be conducted following the issuance of the ROD and MOA. These surveys following the ROD and MOA will only be completed if the Proponent secures property access and intends to impact these areas with Phase 1 and Phase 2 construction.

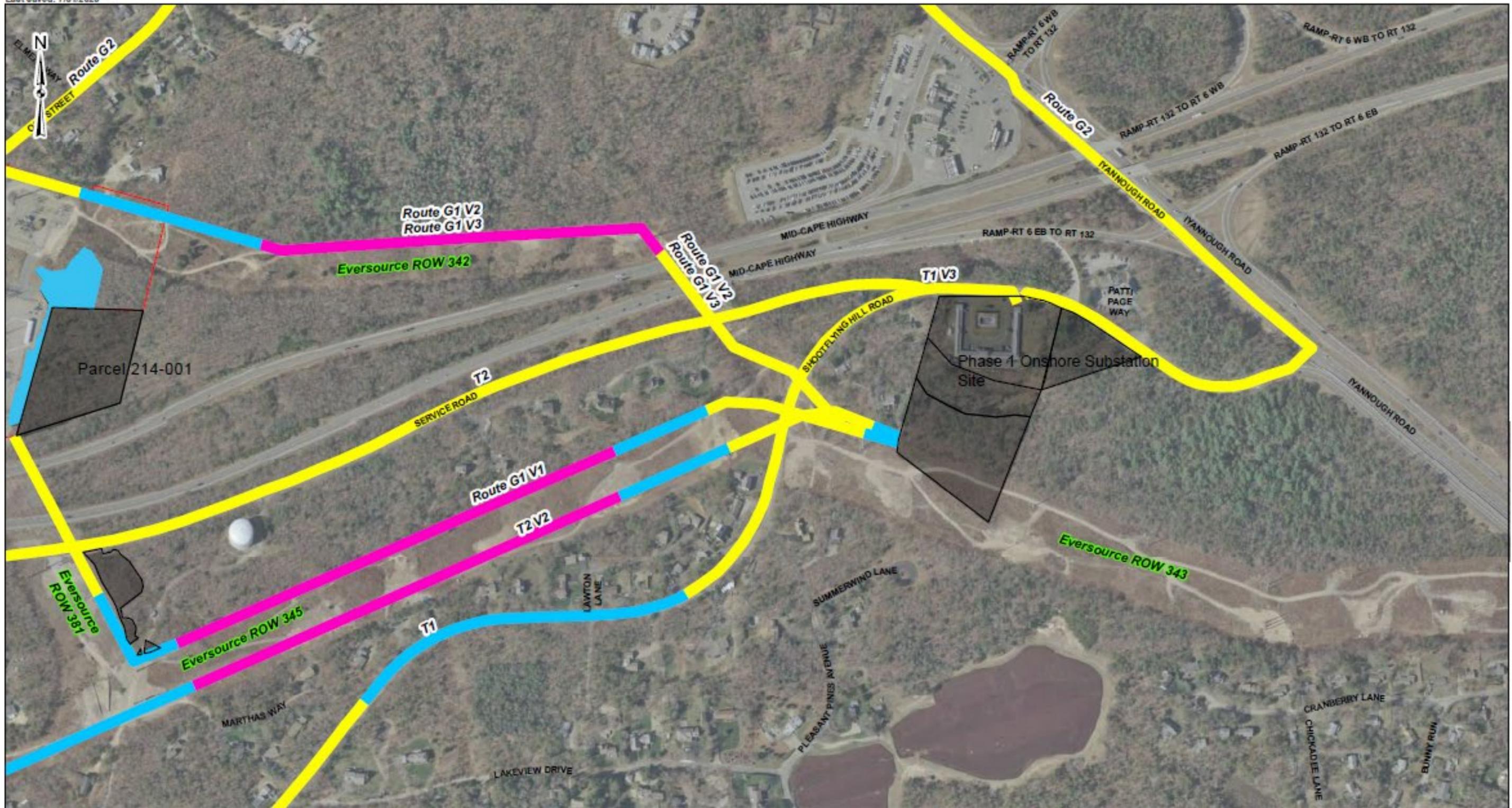
**Table 2.2-1 Anticipated NEPA/Section 106 Milestones**

<b>Upcoming NEPA/Section 106 Milestones</b>	
Final Environmental Impact Statement Published	Anticipated November 24, 2023
Record of Decision/Memorandum of Agreement	Anticipated December 26, 2023
Phased Identification Surveys and TARA Addendum	Anticipated post-ROD

## **APPENDIX A            SENSITIVITY MAPS AT AREAS INCLUDED IN THIS PIP**

---

Note: Appendix A provides the sensitivity maps of the remaining sites that may require further investigation. Proposed surveys will only take place in areas mapped as moderate or high sensitivity.



<b>New England Wind Phase 1</b> (Park City Wind)/New England Wind Connector 1 Barnstable, Massachusetts	
<b>PAL</b>	
PK: due diligence / assessment Epsilon: routes and parcels Basemap: USGS via ArcGIS Online	9-22-2020 4-20-2020 various
<small>                     PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL. THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.                 </small>	

<b>KEY:</b> Existing West Barnstable Substation	<b>Archaeological Assessment:</b> High Sensitivity - Monitoring Required Moderate Sensitivity - Monitoring Required Low Sensitivity - No Monitoring Required Areas Archaeologically Tested - No Monitoring Required
--	---

Green labels indicate remaining survey areas

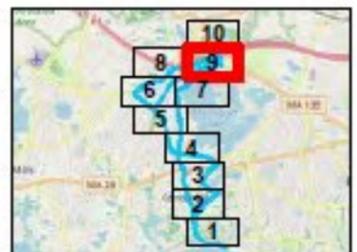
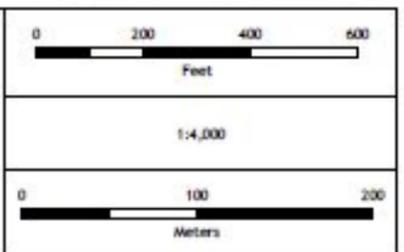


Figure A-1: Phase 1 Remaining Survey Needs and Zones of Archaeological Sensitivity

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(2B), cubolauec (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).



G:\Projects\076401 Vineyard Wind 601 South\Production\Mapping\Maps\GIS\Monitoring\Memo Phase 2 Sensitivity.mxd | Last saved: 10/8/2023

**New England Wind Phase 2  
(Commonwealth Wind)/New England Wind 2 Connector  
Barnstable, Massachusetts**

<b>PAI</b>	
PAI - due diligence / assessment	12-13-2021
Opinion: routes and parcels	12-6-2021
Base map: MassGIS	2019

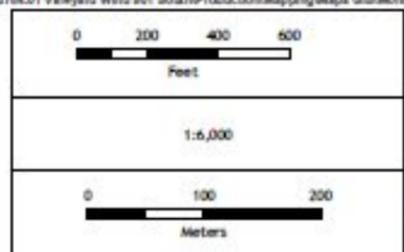
PAI makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of certain research or investigations conducted by PAI. THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

■ ■ Onshore Export Cable HDD Route

**Archaeological Assessment:**

- █ High Sensitivity - Monitoring Required
- █ Moderate Sensitivity - Monitoring Required
- █ Low Sensitivity - No Monitoring Required
- █ Areas Archaeologically Tested - No Monitoring Required

Green labels indicate remaining survey areas



**Figure A-2 : Phase 2 Remaining Survey Needs and Zones of Archaeological Sensitivity.**

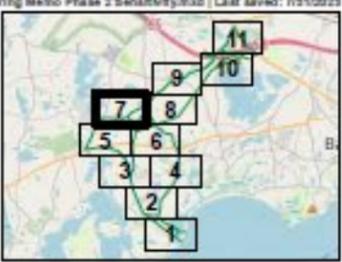
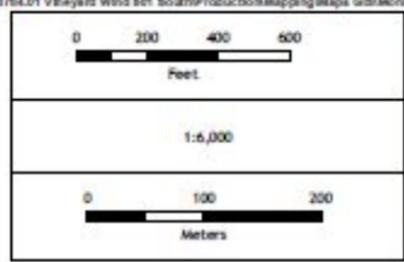
Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(28), subchapter (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).



<b>New England Wind Phase 2</b> (Commonwealth Wind)/New England Wind 2 Connector Barnstable, Massachusetts	
	Date: due diligence / assessment: 12-13-2021 Epsilon: routes and parcels: 12-4-2021 Basemap: MapGIS: 2019
<small>           PAL makes no warranty, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL. THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.         </small>	

■ Onshore Export Cable HDD Route  
 ■ Archaeological Assessment:  
 ■ High Sensitivity - Monitoring Required  
 ■ Moderate Sensitivity - Monitoring Required  
 ■ Low Sensitivity - No Monitoring Required  
 ■ Areas Archaeologically Tested - No Monitoring Required

Green labels indicate remaining survey areas



**Figure A-3 : Phase 2 Remaining Survey Needs and Zones of Archaeological Sensitivity.**  

 Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 87(2B), subchapters (d) and (e), and the Rhode Island Access to Public Records Act, R.I.G.L. 888-2, pursuant to Section 38-2-2(4)(B),(F) and (K).

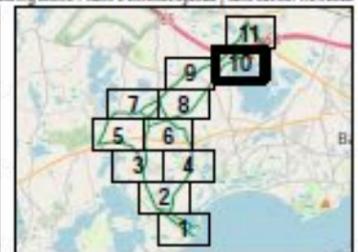
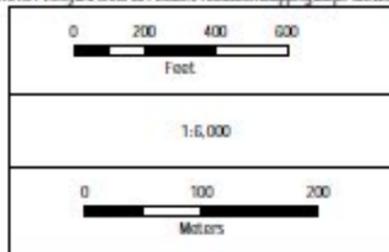


New England Wind Phase 2 (Commonwealth Wind)/New England Wind 2 Connector Barnstable, Massachusetts	
<b>PAL</b>	
PAI - due diligence / assessment	12-13-2021
Esri.com: routes and parcels	12-6-2021
Basemap: MassGIS	2019
<small>PAI makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAI. THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.</small>	

■ Onshore Export Cable HDD Route

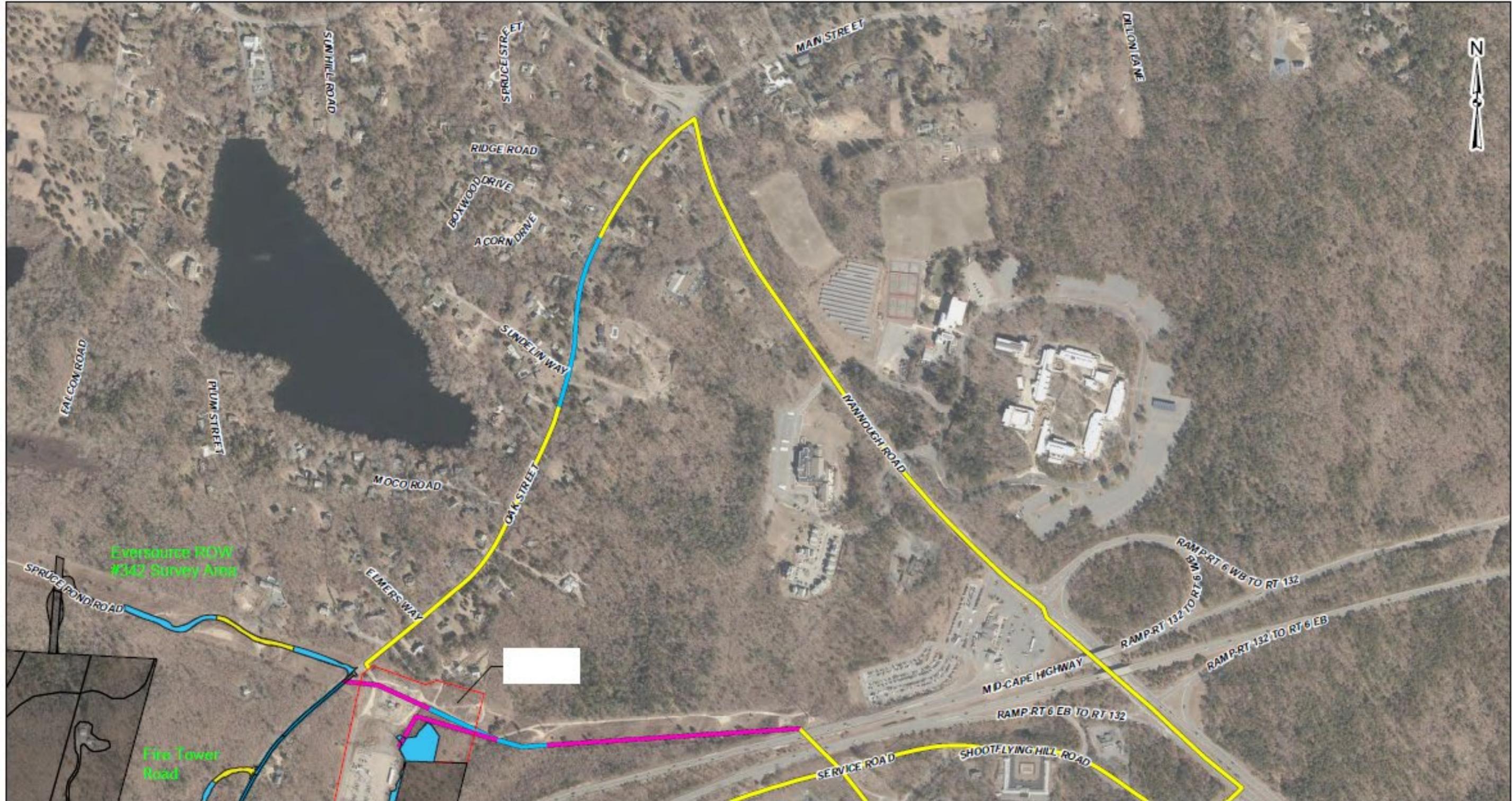
**Archaeological Assessment:**  
■ High Sensitivity - Monitoring Required  
■ Moderate Sensitivity - Monitoring Required  
■ Low Sensitivity - No Monitoring Required  
■ Areas Archaeologically Tested - No Monitoring Required

Green labels indicate remaining survey areas



**Figure A-4 : Phase 2 Remaining Survey Needs and Zones of Archaeological Sensitivity.**

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(2B), subclauses (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).



**New England Wind Phase 2**  
(Commonwealth Wind)/New England Wind 2 Connector  
Barnstable, Massachusetts

<b>PAL</b>	
PM - due diligence / assessment	12-13-2021
Location: routes and parcels	12-6-2021
Drawn by: MassGIS	2023

PA makes no warranty, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resources investigations conducted by PA. THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

■ Onshore Export Cable HDD Route

**Archaeological Assessment:**

- High Sensitivity - Monitoring Required
- Moderate Sensitivity - Monitoring Required
- Low Sensitivity - No Monitoring Required
- Areas Archaeologically Tested - No Monitoring Required

Green labels indicate remaining survey areas

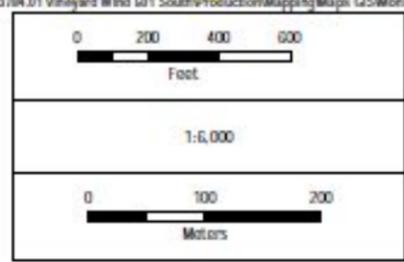


Figure A-5 : Phase 2 Remaining Survey Needs and Zones of Archaeological Sensitivity..

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 87(28), subchapter (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §88-2, pursuant to Section 88-2-2(4)(B),(F) and (K).

This page is intentionally blank.

ATTACHMENT 11 – NEW ENGLAND WIND TERRESTRIAL UNANTICIPATED DISCOVERY PLAN

This page is intentionally blank.

# **Procedures Guiding the Discovery of Unanticipated Onshore Archaeological Resources and Human Remains**

for the

## **New England Wind Phase 1 and 2 Project**

Barnstable, Massachusetts

Submitted to:



Bureau of Ocean Energy Management

U.S. Department of the Interior

Prepared for:

Park City Wind LLC

Prepared by:



The Public Archaeology Laboratory, Inc.

<https://www.palinc.com/>

**October 2023**

## Introduction

New England Wind is the proposal to develop offshore renewable wind energy facilities in BOEM Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent and will be responsible for the construction, operation, and decommissioning of New England Wind.

Phase 1 of New England Wind, which includes Park City Wind, will be developed immediately southwest of the Vineyard Wind 1 project. Two high-voltage alternating current (HVAC) offshore export cables will transmit electricity to a landfall site within paved parking areas at either Craigville Public Beach or Covell's Beach in Barnstable, Massachusetts. From the Phase 1 landfall site, onshore export cables (installed primarily within an underground duct bank) will deliver power to an onshore substation to be constructed on a 6.7 acre parcel located at 8 Shootflying Hill Road. From the new onshore substation, grid interconnection cables will connect the substation to the grid interconnection point at the existing West Barnstable Substation.

Phase 2, which includes Commonwealth Wind, will be immediately southwest of Phase 1 and will occupy the remainder of the Lease Area. Three HVAC offshore export cables will transmit electricity to landfall sites at Dowses Beach and/or Wianno Avenue in Barnstable, Massachusetts. Onshore export cables (connecting the landfall site[s] to the Phase 2 Clay Hill onshore substation site or, alternatively, the Old Falmouth Road site) and grid interconnection cables (connecting the substation[s] to the grid interconnection point at the existing West Barnstable Substation) are also expected to be installed underground, within public roadway layouts and utility rights-of-way (ROW). If technical, logistical, grid interconnection, or other unforeseen issues arise that preclude one or more Phase 2 export cables from interconnecting at the West Barnstable Substation, the Proponent may use the South Coast Variant of the Offshore Export Cable Corridor to interconnect at a second grid interconnection point along the South Coast of Massachusetts.

The Proponent is committed to the protection and preservation of cultural resources, in accordance with federal and state legislation, and is continuing that commitment during the construction of the upland

terrestrial elements of New England Wind including the upland cabling route and the substation. The Proponent recognizes that while sections of the onshore cabling route and substation parcels have previously been subject to archaeological investigations and other areas were previously disturbed by existing utilities and buildings, it is possible that significant archaeological resources and/or human remains may be discovered during construction activities, particularly during excavation. The Proponent also recognizes the importance of compliance with federal, state, and municipal laws and regulations regarding the treatment of human remains, if any are discovered.

The Public Archaeology Laboratory Inc. ("PAL") is assisting the Proponent in the implementation of this Plan and the procedures guiding the unanticipated discovery of cultural resources and human remains detailed herein. The procedures will be implemented for two separate phases of work. During installation of the onshore cabling under roadways and in rights-of-way, in areas designated as having moderate and high archaeological sensitivity, archaeologists and tribal monitors will be on-site monitoring construction (see Onshore Archaeological Monitoring Plan for the New England Wind Phase 1 and 2 Project). Therefore, some of the notification procedures outlined below will be streamlined. In areas where archaeological investigation has been completed, such as the substation and entry/exit pits for trenchless crossings, an archaeologist will not be present and all the notification procedures outlined below will be in effect. These procedures were developed in consultation with the Massachusetts Historical Commission ("MHC"), office of the State Historic Preservation Officer ("SHPO") and Tribal Nations. These procedures summarize the approach that the Proponent will use to address unanticipated discoveries of archaeological resources or human remains within the Project's Area of Potential Effect ("APE").

## **Standards/Guidelines and Laws/Regulations for Post-Review Discoveries of Archaeological Resources and Human Remains**

### ***Federal***

- National Historic Preservation Act of 1966, as amended (54 USC 306108), specifically Sections 110 and 106 and implementing regulations at 36 CFR 800.
- Secretary of the Interior's Standards for Archeology and Historic Preservation (48 CFR 44716-42);
- Advisory Council on Historic Preservation *Policy Statement on Burial Sites, Human Remains, and Funerary Objects* 2023.

- Advisory Council on Historic Preservation *Policy Statement on Burial Sites, Human Remains, and Funerary Objects: Explanation and Discussion* 2023.

### ***Massachusetts***

- Massachusetts General Laws Chapter 9 Sections 26A through 27C, as amended, and regulations at 950 CMR 70 and 71.
- Massachusetts Unmarked Burial Law (M.G.L. c. 7, s. 38A, c. 38, s.6, c. 9, ss. 26A & 27C, and c.114, s.17)
- Massachusetts Historical Commission: *KnowHow #4 What to do when Human Burials are Uncovered* (no date)
- Massachusetts Historical Commission: *Policy for Disposition of Non-Native Human Remains Which Are Over 100 Years Old or Older* (1990)

### **Consultation with Federal and State Agencies and Indian Tribes**

As part of the Project, Park City Wind LLC has been consulting with the Massachusetts SHPO, Tribal Nations, specifically the Mashpee Wampanoag Tribe, the Wampanoag Tribe of Gay Head/Aquinnah, and the Mashantucket (Western) Pequot Tribal Nation, and other interested stakeholders. All contact information for the SHPO, and the Tribal Nations and other stakeholders is listed in this plan. In the event any archaeological resources and/or human remains are encountered during construction of the Project, the Proponent and their cultural resource consultant will contact the relevant parties, as set forth in these Procedures.

### **Contractor Training**

The Proponent will inform the consulting Tribal Nations 30 days in advance of the contractor training schedule. Consulting Tribal Nations will participate in the contractor training if, within the 30-day window, they confirm it is necessary and that they are available to participate. Basic training is required to identify potential archaeological sites. The Proponent and its employees and contractors should have a basic understanding of the types of archaeological resources that could be present in the onshore section of the

project. The archaeological consultants and tribal representatives, if participating as described above, will prepare and give the Proponent and its contractor construction supervisors cultural and archaeological sensitivity training before the start of onshore construction so that the Proponent and their contractors are aware of the types of archaeological resources that may be encountered during construction. The purpose of this training will be to review state and federal regulations concerning archaeological resources and the general results of the archaeological investigations conducted within the onshore portions of the Project APE including types of artifacts and resources that may be present, provide an overview of the general and tribal cultural history of the area, and introduce contractors to the archaeological and tribal monitors. The procedures that will be followed if a significant cultural resource or archaeological deposit is discovered during construction will be reviewed during the training. Hard copies of this Archaeological Monitoring Plan will be printed and circulated to contractor supervisors at the contractor training for incorporation into construction documentation. Construction crews will be required to review the plan and have it with them during all construction activities.

## **Notification Procedures**

The following section details the protocols that will be followed in the event that archaeological resources or human remains are discovered during the construction process.

### ***Archaeological Discovery Protocol***

The following procedures will be adhered to in the event of a potential discovery of archaeological resources during construction.

1. In the event that suspected archaeological resources are uncovered during a construction activity, that activity shall immediately be halted until it can be determined whether the resources are cultural and, if so, whether they represent a potentially significant site. The Contractor will immediately notify the Resident Engineer of the potential discovery. Notification will include the specific construction area (e.g., trench wall, spoil pile, foundation excavation) in which the potential site is located.

2. The Resident Engineer will direct a Stop Work order to the Contractor's Site Foreman to flag or fence off the archaeological discovery location and direct the Contractor to take measures to ensure site security. Any discovery made on a weekend or overnight hours will be protected until all appropriate parties are notified of the discovery.
3. Upon notification or discovery of a possible archaeological site, the Resident Engineer will contact the Proponent's cultural resource consultants who will in turn be responsible for determining whether a visit to the area 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 Resident Engineer. If a site visit is necessary, the archaeologist will have a crew on site within 24 hours after notification.
4. If on-site archaeological investigations are required, the archaeologist will inform the Resident Engineer who then will inform the construction Contractor. The Proponent, the consulting Tribal Nations, the SHPO, and BOEM and BSEE will also be notified of the need to conduct archaeological investigations. No construction work at the discovery site that could affect the archaeological resource will be performed until the archaeological fieldwork is complete.
5. If the archaeologist determines a site visit is not required as the reported discovery is found to not be a potentially significant archaeological resource, the archaeologist will notify the Resident Engineer who will then notify the Contractor to resume work. If the archaeologist determines a site visit is required, the archaeologist and representatives of the consulting Tribal Nations will conduct a review of the discovery site. Since the area will have been partially disturbed by construction activities, the objective of cultural resource investigations will be to evaluate the discovery site quickly so that notifications and consultation can proceed.
6. The archaeologist and the representatives of the Tribal Nations, if present, will determine, based on any cultural materials or subsurface features found and the cultural sensitivity of the area in general, whether the site is potentially significant and requires immediate notification of the SHPO by telephone. If not, information about the site will be faxed or sent by express mail to the SHPO in order to ensure a quick site clearance. The Proponent, PAL, and the representatives of the Tribal Nations will work with the SHPO to ensure that a treatment plan

for the site is developed and implemented as quickly as possible. BOEM and BSEE will be notified of the results of the discovery review to facilitate consultations.

7. If the site is determined to be a significant archaeological resource threatened by onshore construction for the Project, the archaeologist at the direction of the Proponent and in consultation with the SHPO, BOEM and BSEE and the consulting Tribal Nations and any other relevant consulting parties, will develop and implement under a State Archaeologist's permit (950 CMR 70) a site mitigation plan.
8. The duration of any work stoppage will be contingent upon the significance of the identified cultural resource(s) and consultation among the Proponent, BOEM and BSEE, MHC, Tribal Nations, and other consulting parties to determine treatment to avoid, minimize, or mitigate adverse effects to the identified site.
9. Once all consulting parties have agreed that the treatment measures are complete, the Proponent's Resident Engineer will notify the contractor that construction work may proceed. The contractor will not resume work in the vicinity of the find until the Resident Engineer has granted clearance.

### ***Discovery of Human Remains Protocol***

If human remains are encountered during Project construction, they will be handled in accordance with the MHC's *KnowHow #4* (Appendix A) and guided by the policy statement adopted by the ACHP (*Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects* (Appendix B)). If any human remains are to be encountered, they will likely be discovered in excavations, possibly below areas where previous ground disturbance (e.g., road construction, existing utilities) has occurred.

Human remains will be treated with dignity and respect at all times. Skeletal remains and/or associated artifacts will be left in place and not disturbed. No remains or associated materials will be collected or removed until all notifications have been made, appropriate consultation has taken place, and a plan of action has been determined. The procedures that will be followed if human remains are unearthed during Project construction are:

1. If any personnel on the construction site identify human remains or possible human remains, all construction work in the immediate vicinity that could affect the integrity of the remains will cease immediately. The remains should not be touched, moved, or further disturbed. The Resident Engineer will be informed immediately and notified of the exact location of the remains, as well as of the time of discovery. The Resident Engineer will direct a Stop Work order to the Contractor's Site Foreman to take measures to ensure site security.
2. The Resident Engineer will be responsible for immediately contacting the Proponent and the archaeologist.
3. The archaeologist and the Proponent will be responsible for notifying the Office of the Chief Medical Examiner (OCME), the State Police, the State Archaeologist and BOEM and BSEE. If the archaeologist determines that the remains are obviously human and recent, this will be communicated to all the contacts, including the OCME. If the archaeologist considers that the remains appear to be over 100 years old, this will be indicated to the OCME, and the State Archaeologist so that they can coordinate and respond.
4. If the Medical Examiner determines the remains are less than 100 years old, their treatment becomes the responsibility of the State Police. If the Medical Examiner determines the remains are more than 100 years old, the Medical Examiner will notify the Massachusetts State Archaeologist. The Project Proponent and their archaeological consultant will notify the consulting Tribal Nations. The State Archaeologist will notify the Massachusetts Commission on Indian Affairs (MCIA) Commissioner. The State Archaeologist, the MCIA Commissioner, the Proponent's archaeological consultant, and representatives from the consulting Tribal Nations will determine if the remains are Native American
5. The Proponent, BOEM, BSEE, the State Archaeologist, and if the remains are Native American, the MCIA and the consulting Tribal Nations representatives will discuss whether there are prudent and feasible alternatives to protect the remains. The results of this consultation will be made in writing. If it is not possible to protect the remains, they may be excavated only under a Special Permit issued by the MHC after the review of a recovery plan that specifies a qualified research team, research

design, and plan for the disposition of the remains consistent with the results of consultation 950 CMR 70.20(2) and the Memorandum of Agreement for the Project.

6. If the remains are non-Native, the State Archaeologist will determine whether a skeletal analysis of the remains will be conducted and whether the remains will be deposited in a curatorial facility or reinterred. These decisions will be made in consultation with BOEM and BSEE and other interested parties as defined in the *Policy and Guidelines for Non-Native Human Remains Which Are Over 100 Years Old or Older* (MHC 1990) (Appendix C).
7. In all cases, due care will be taken in the excavation, transport, and storage of any remains to ensure their security and respectful treatment.

## **LIST OF CONTACTS**

### ***Park City Wind, LLC***

125 High Street

Boston, MA 02110

Contact: Mark Roll, Federal Permitting Manager, Offshore

Avangrid Renewables

Tel: (857) 301-0820

Email: [mark.roll@avangrid.com](mailto:mark.roll@avangrid.com)

### ***Massachusetts Historical Commission***

220 Morrissey Boulevard

Boston, Massachusetts 02125

Contact: Brona Simon, State Historic Preservation Officer

Tel: (617) 727-8470

Email: [brona.simon@state.ma.us](mailto:brona.simon@state.ma.us)

### ***Massachusetts Commission on Indian Affairs***

100 Cambridge Street, Suite 300

Boston, Massachusetts 02114

Contact: John A. Peters, Jr., Executive Director

(617) 573-1292

Email: [john.peters@state.ma.us](mailto:john.peters@state.ma.us)

### ***Massachusetts State Police, South Yarmouth Barracks***

1172 State Road

South Yarmouth, MA

Tel: (508) 398-2323

### ***Barnstable Police Department***

1200 Phinneys Lane

Hyannis, MA

Tel: (508) 775-0387

***Office of the Chief Medical Examiner, Sandwich Office***

1 Simpkins Road

Mashpee, MA 02649

Tel: (508) 539-2200

**TRIBAL NATIONS**

***Mashpee Wampanoag***

483 Great Neck Road South

Mashpee, MA 02649

Contact: David Weeden, Tribal Historic Preservation Officer

Tel: (508) 477-0208, Ext. 102

Email: [David.weeden@mwtribe-nsn.gov](mailto:David.weeden@mwtribe-nsn.gov)

***Wampanoag Tribe of Gay Head/Aquinnah***

20 Black Brook Road

Aquinnah, MA 02535-1546

Contact: Bettina Washington, Tribal Historic Preservation Officer

Tel: (508) 560-9014

Email: [thpo@wampanoagtribe-nsn.gov](mailto:thpo@wampanoagtribe-nsn.gov)

***Mashantucket (Western) Pequot Tribal Nation***

110 Pequot Trail

Mashantucket, Connecticut 06338

Contact: Michael Kickingbear Johnson, Tribal Historic Preservation Officer

Tel: 860-396-7575

Email: [mejohanson@mptn-nsn.gov](mailto:mejohanson@mptn-nsn.gov)

This page is intentionally blank.

ATTACHMENT 12 – NEW ENGLAND WIND UNANTICIPATED DISCOVERIES PLAN FOR  
SUBMERGED ARCHAEOLOGICAL RESOURCES

This page is intentionally blank.



# Construction and Operations Plan

Lease Area OCS-A0534

## Volume II-D Appendices

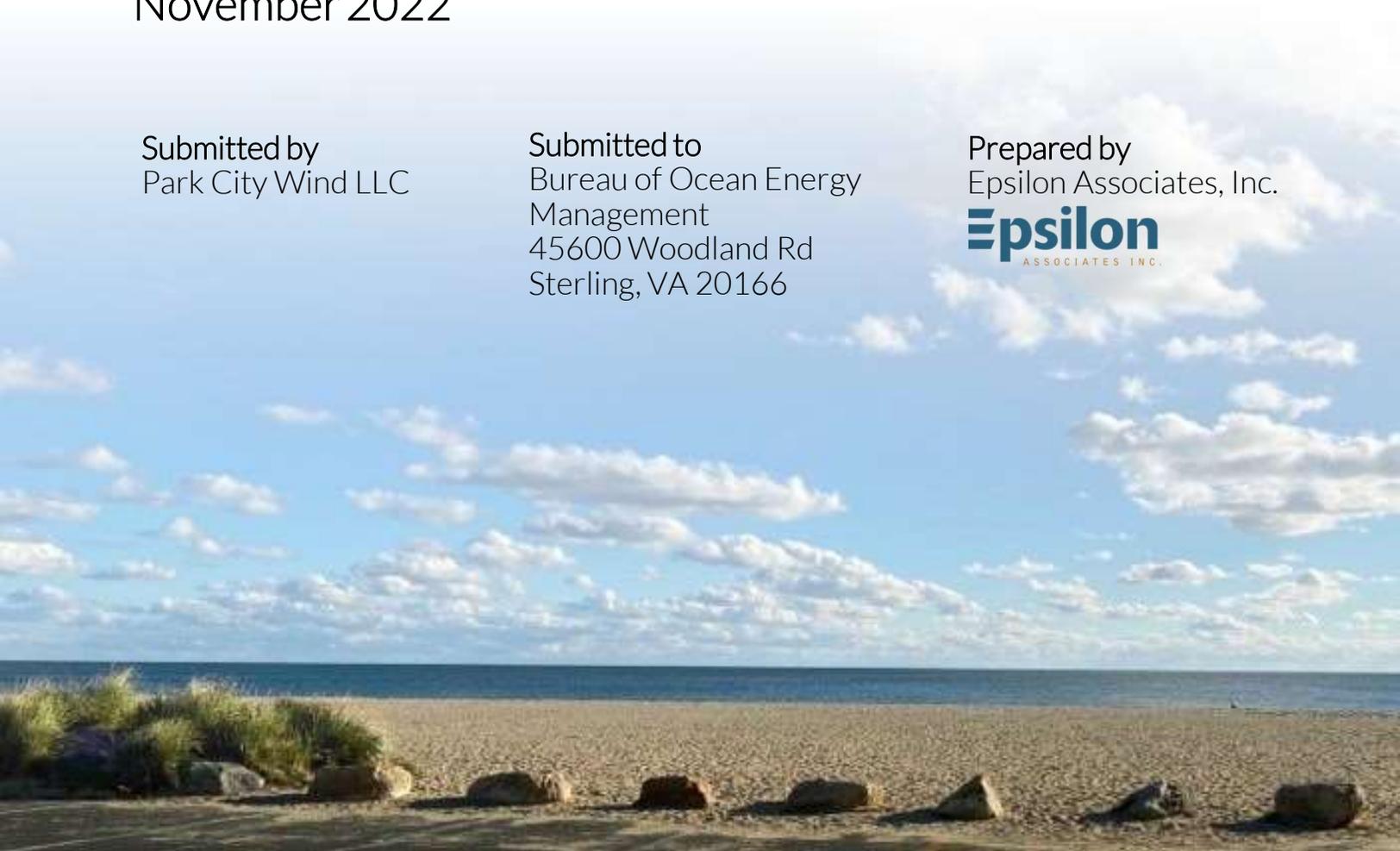
November 2022

Submitted by  
Park City Wind LLC

Submitted to  
Bureau of Ocean Energy  
Management  
45600 Woodland Rd  
Sterling, VA 20166

Prepared by  
Epsilon Associates, Inc.

**Epsilon**  
ASSOCIATES INC.





# **New England Wind Construction and Operations Plan for Lease Area OCS-A 0534 Volume II-D Appendices**

*Submitted to:*

BUREAU OF OCEAN ENERGY MANAGEMENT  
45600 Woodland Rd  
Sterling, VA 20166

*Submitted by:*

Park City Wind LLC

*Prepared by:*

**epsilon**  
ASSOCIATES INC.

*In Association with:*

Baird & Associates	JASCO Applied Sciences
Biodiversity Research Institute	Public Archaeology Laboratory, Inc.
Capitol Air Space Group	RPS
Geo SubSea LLC	Saratoga Associates
Geraldine Edens, P.A.	SEARCH, Inc.
Gray & Pape	Wood Thilsted Partners Ltd

November 2022

**APPENDIX H:**

**UNANTICIPATED SUBMERGED ARCHAEOLOGICAL  
DISCOVERIES PLAN**

## UNANTICIPATED DISCOVERIES OF ARCHAEOLOGICAL SITES, HISTORIC SITES, AND SUBMERGED CULTURAL RESOURCES, INCLUDING HUMAN REMAINS

---

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this undertaking and will be responsible for the construction, operation, and decommissioning of New England Wind. New England Wind constitutes a federal undertaking with the potential to affect submerged historic properties and is therefore subject to consultation under Section 106 of the National Historic Preservation Act (NHPA) (Title 54 U.S.C. § 306108). A preliminary area of potential effects (PAPE) was developed for the purposes of preparing a marine archaeological resources assessment (MARA) report. The PAPE for submerged portions of the proposed project covers an approximately 411–453 square kilometers (km<sup>2</sup>) (101,590–111,939 acres) in size depending upon the final footprint of Vineyard Wind 1.

Although a robust MARA was conducted, it is impossible to ensure that all cultural resources were discovered within the submerged portions of New England Wind. 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, operations and maintenance, and decommissioning. This Unanticipated Discoveries Plan (UDP) is subject to revisions based on consultations with interested parties and the provisions of any Memorandum of Agreement that may be executed for the Project pursuant to Section 106 of the National Historic Preservation Act or the Act's implementing regulations at 36 CFR Part 800. The implementation of the final UDP will be overseen by a qualified marine archaeologist (QMA), as designated by the Proponent, who meets or exceeds the Secretary of the Interior's *Professional Qualifications Standards* for archaeology.

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

- 1) Per Lease Stipulation 4.2.7.1, all bottom-disturbing activities in the immediate area of the discovery shall cease in accordance with all safety procedures and emergency shut down protocols and every effort will be made to avoid or minimize impacts to the cultural resource(s).
- 2) The marine contractor or other responsible party shall immediately notify the Proponent of the discovery.
- 3) The Proponent shall evaluate the nature of the discovery and will retain the services of a qualified marine archaeologist to assist in such evaluations and associated consultations.
- 4) The Proponent shall keep the location of the discovery confidential and take no action that may adversely affect the archaeological resource until BOEM has made an evaluation and instructs the applicant on how to proceed.
- 5) The Proponent shall conduct additional investigations as directed by BOEM to determine if the resources is eligible for listing in the National Register of Historic Places (30 CFR 585.802(b)).
- 6) Per Lease Stipulation 4.2.7.2, BOEM shall be notified of the potential archaeological resource within 24 hours of the discovery. The Proponent shall also notify the State Historic Preservation Officer (SHPO) of Massachusetts, the State Archaeologist and the Tribal Historic Preservation Officers (THPOs) or other designated representatives of the consulting tribal governments.
- 7) Per Lease Stipulation 4.2.7.3, within 72 hours of the discovery, the Proponent shall issue a report

in writing to BOEM providing available information concerning the nature and condition of the cultural resource and observed attributes relevant to the resource's potential eligibility for listing in the National Register of Historic Places. If the discovery is in state waters, MBUAR and MHC will be notified in writing.

- 8) The Proponent shall consult with BOEM, as feasible, to obtain technical advice and guidance for the evaluation of the discovered cultural resource.
- 9) If the impacted resource is determined by BOEM to be National Register eligible, a mitigation plan shall be prepared by the Proponent for the discovered cultural resource. This plan must be reviewed by BOEM prior to submission to the SHPOs and tribal representatives for their review and comment. The consulting parties are expected to respond with preliminary comments within two working days, with final comments to follow as quickly as possible.
- 10) Per Lease Stipulation 4.2.6, the Proponent may not impact a known archaeological resource 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 Park City Wind, LLC to resume construction.

Should the Proponent designate persons to serve as Onboard Representatives on each vessel during bottom-disturbing activities, training and resources will be produced to ensure the Onboard Representatives can identify potential submerged cultural resources. If training is elected, it will occur prior to all bottom-disturbing activities. Unanticipated discoveries are possible during any bottom-disturbing activities including anchoring and recovery, pre-construction surveys, visual inspections/seafloor imaging, etc. Any materials encountered (except potential human remains) should be photographed and placed immediately into seawater in a clean container that can be sealed. No photographs shall be taken of any potential human remains.

If human remains are encountered:

1. All work in the near vicinity of the human remains should cease and reasonable efforts should be made to avoid and protect the remains from additional impact. In cases of inclement weather, any recovered human remains should be protected with tarpaulins.
2. The State Police Detectives at the local District Attorney's Office, Office of the Chief Medical Examiner, State Archaeologist, Director of the MBUAR, and the Environmental Police should be immediately notified by the Proponent as to the findings.
3. A qualified professional archaeologist should be retained to investigate the reported discovery, inventory the remains and any associated artifacts, and assist in coordinating with 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 SHPO, and if applicable, 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.

**Notification Points of Contact** (to be updated annually):

**Office of the Chief Medical**

Examiner 720 Albany St.  
Boston, MA 02118  
Phone: (617)-267-6767

**David S. Robinson**

Director MBUAR  
251 Causeway Street  
Suite 900  
Boston, MA 02114  
Phone: (617)-626-1141  
david.s.robinson@mass.gov

**Brona Simon**

State Historic Preservation Officer & Executive  
Director  
Massachusetts Historical Commission  
220 Morrissey Boulevard  
Boston, MA 02125  
Phone: (617)-727-8470  
[brona.simon@state.ma.us](mailto:brona.simon@state.ma.us)

**Environmental Police**

Emergency 24/7 Statewide Dispatch  
251 Causeway Street  
Suite 101  
Boston, MA 02114  
Phone: (800)-632-8075

**John A. Peters**

Executive Director  
Massachusetts Commission on Indian Affairs  
100 Cambridge Street, Suite 300  
Boston, Massachusetts 02114  
Director Phone: (617) 573-1292  
[john.peters@state.ma.us](mailto:john.peters@state.ma.us)

**David Weeden**

Deputy Tribal Historic Preservation Officer  
Mashpee Wampanoag Indian Tribe  
Tribal Historic Preservation Department 483  
Great Neck Rd. South,  
Mashpee, MA 02649  
Phone: (508) 447-0208, ext. 102  
[dweeden@mwtribe.com](mailto:dweeden@mwtribe.com)

**Bettina M. Washington**

Tribal Historic Preservation Officer  
Wampanoag Tribe of Gay Head (Aquinnah)  
20 Black Brook Road Aquinnah, MA 02535  
Phone: (508) 560-9014  
thpo@wampanoagtribe-nsn.gov

**BOEM**

Bureau of Ocean Energy Management Office of  
Renewable energy Programs  
45600 Woodland Road (VAM-OREP)  
Sterling, VA 20166  
Phone: (703)-787-1085

**Dukes County District Attorney's Office**

81 Main Street  
Edgartown, MA 02539  
Phone: (508)-627-7780

**Jeff Enright, M.A., RPA**

Offshore Wind Sector Lead/Maritime  
Archaeology Sector Lead  
700 N 9<sup>th</sup> Ave.  
Pensacola, FL 32501  
Phone: (850)-607-2846  
jeff@searchinc.com

**Benjamin C. Wells, M.A., RPA**

Project Manager  
18 Lynbrook Ave.  
Tonawanda, NY 14150  
Phone: (570)-423-2758  
ben.wells@searchinc.com

ATTACHMENT 13 – NEW ENGLAND WIND ONSHORE ARCHAEOLOGICAL MONITORING PLAN

This page is intentionally blank.

# Onshore Archaeological Monitoring Plan

for the

## New England Wind Phase 1 and 2 Project

Barnstable, Massachusetts

Submitted to:



Bureau of Ocean Energy Management

U.S. Department of the Interior

Prepared for:

Park City Wind LLC

Prepared by:



The Public Archaeology Laboratory, Inc.

<https://www.palinc.com/>

**October 2023**

**TABLE OF CONTENTS**

1.0 EXECUTIVE SUMMARY .....3

2.0 BACKGROUND INFORMATION .....4

2.1 Project Overview.....4

2.2 Section 106 of the National Historic Preservation Act .....7

2.3 History of Archaeological Investigations .....8

3.0 ARCHAEOLOGICAL MONITORING OF CONSTRUCTION..... 13

3.1 Consultation and Archaeological Permit Application..... 13

3.2 Contractor Training ..... 13

3.3 Construction Monitoring..... 14

3.4 Laboratory Processing and Analyses..... 18

4.0 DOCUMENTATION AND REPORTING..... 19

5.0 REFERENCES..... 20

LIST OF CONTACTS..... 23

**LIST OF FIGURES**

Figure 2.1-1. New England Wind Overview.....5

Figure 2.3-1. New England Wind Phase 1 and 2 Project proposed onshore substations, cable routes and HDD locations with areas of archaeological sensitivity..... 10

Appendix A. Massachusetts Historical Commission KnowHow #4.....25

Appendix B. ACHP Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects.....27

Appendix C. MHC Policy for Disposition of Non-Native Human Remains.....34

Appendix D. New England Wind Phase 1 Archaeological Sensitivity Maps .....38

Appendix E. New England Wind Phase 2 Archaeological Sensitivity Maps ..... 48

## 1.0 EXECUTIVE SUMMARY

This Onshore Archaeological Monitoring Plan provides background data, a summary of previous cultural resources investigations, and the detailed steps archaeological monitors will implement during construction of onshore cable duct route segments and horizontal directional drilling (HDD) within moderate and high archaeologically sensitive areas of New England Wind Phases 1 and 2 in Barnstable, Massachusetts. This Onshore Archaeological Monitoring Plan identifies specific areas of proposed archaeological monitoring and outlines the notification process if construction or drilling exposes potentially significant archaeological properties. This plan is developed in accordance with the National Historic Preservation Act (NHPA) (54 USC 300101, et seq.) and Massachusetts General Laws Chapter 9 Sections 26A through 27C.

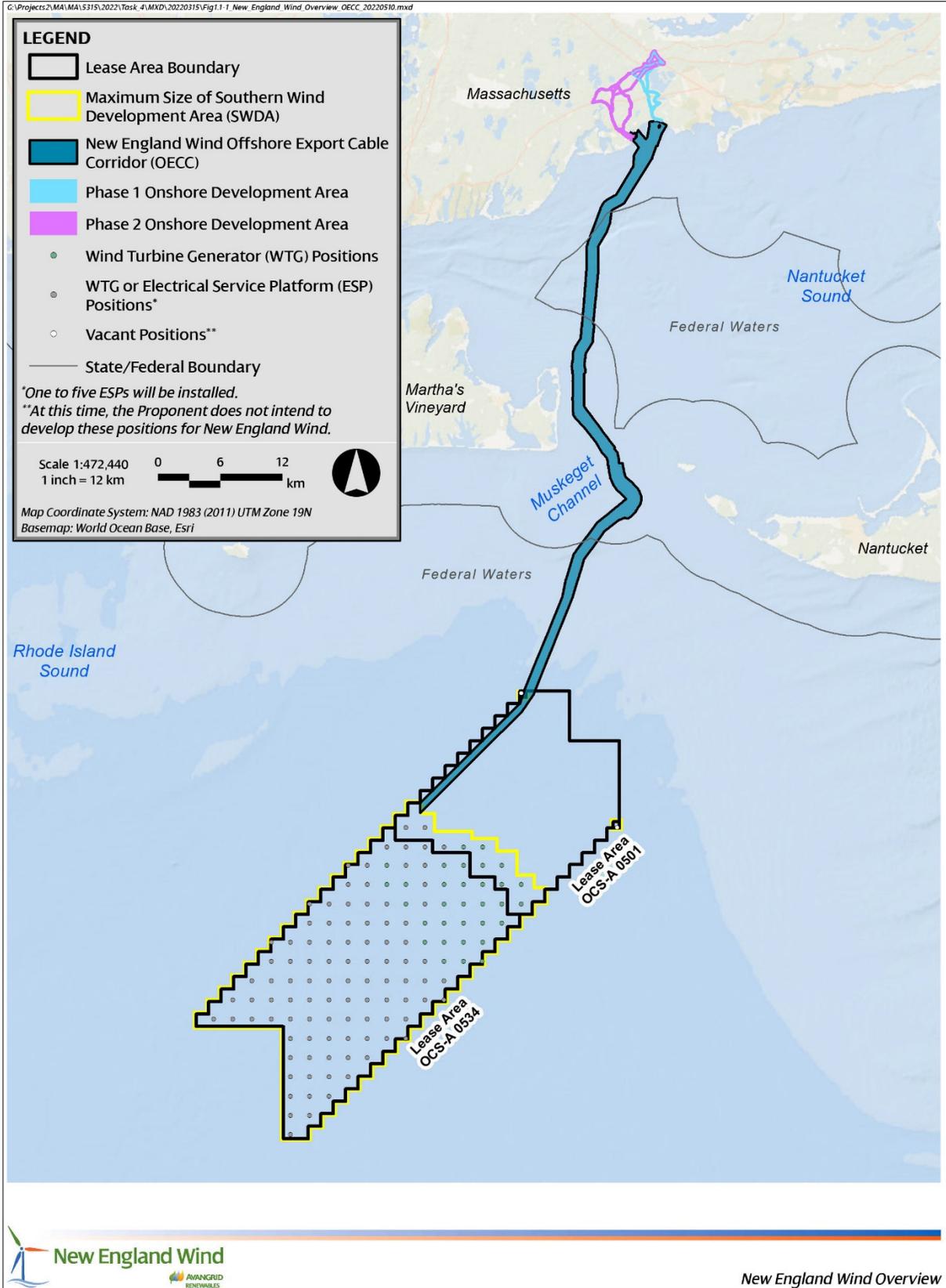
This plan complements other cultural resource plans prepared for the onshore components of the Project including Historic Property Treatment Plans for the Nantucket Sound and Chappaquiddick Island Traditional Cultural properties and *Procedures Guiding the Discovery of Unanticipated Archaeological Resources and Human Remains* (2023).

## 2.0 BACKGROUND INFORMATION

### 2.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in BOEM Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 2.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent and will be responsible for the construction, operation, and decommissioning of New England Wind.

New England Wind's proposed offshore renewable wind energy facilities are located in Lease Area OCS-A 0534. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of this application, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501. The SWDA may be approximately 411–453 square kilometers (km<sup>2</sup>) (101,590– 111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket. Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.



**Figure 2.1-1. New England Wind Overview.**

## **Phase 1 of New England Wind**

Phase 1, which includes Park City Wind, will be developed immediately southwest of the Vineyard Wind 1 project. The Phase 1 Envelope includes 41 to 62 WTGs and one or two ESP(s). Depending upon the capacity of the WTGs, Phase 1 will occupy 150–231 km<sup>2</sup> (37,066–57,081 acres) of the SWDA. The Phase 1 Envelope includes two WTG foundation types: monopiles and piled jackets. Strings of WTGs will connect with the ESP(s) via a submarine inter-array cable transmission system. The ESP(s) will also be supported by a monopile or jacket foundation. Two high-voltage alternating current (HVAC) offshore export cables up to 101 km (54 NM) in length (per cable) installed within the SWDA and an Offshore Export Cable Corridor (OECC) will transmit electricity from the ESP(s) to a landfall site at the Craigville Public Beach or Covell's Beach in the Town of Barnstable. Underground onshore export cables, located principally in roadway layouts, will connect the landfall site to a new Phase 1 onshore substation in Barnstable. Grid interconnection cables will then connect the Phase 1 onshore substation to the ISO New England (ISO-NE) electric grid at Eversource's existing 345 kilovolt substation in West Barnstable.

## **Phase 2 of New England Wind**

Phase 2, which includes Commonwealth Wind, will be immediately southwest of Phase 1 and will occupy the remainder of the SWDA. Phase 2 may include one or more projects, depending on market conditions. The footprint and total number of WTG and ESP positions in Phase 2 depends upon the final footprint of Phase 1; Phase 2 is expected to include 64 to 88 WTG/ESP positions (up to three positions will be occupied by ESPs) within an area ranging from 222–303 km<sup>2</sup> (54,857–74,873 acres). The Phase 2 Envelope includes three general WTG foundation types: monopiles, jackets (with piles or suction buckets), or bottom-frame foundations (with piles or suction buckets). Inter-array cables will transmit electricity from the WTGs to the ESP(s). The ESP(s) will also be supported by a monopile or jacket foundation (with piles or suction buckets).

Three HVAC offshore export cables, each with a maximum length of 116–124 km (63–67 NM) per cable, will transmit power from the ESP(s) to shore. Unless technical, logistical, grid interconnection, or other unforeseen issues arise, all Phase 2 offshore export cables will be installed within the same OECC as the Phase 1 cables from the northwestern corner of the SWDA to within approximately 2–3 km (1–2 mi) of shore, at which point the OECC for Phase 2 will diverge to the Dowses Beach Landfall Site and/or Wianno

Avenue Landfall Site in Barnstable.<sup>1</sup> Underground onshore export cables, located primarily within roadway layouts, will connect the landfall site(s) to one new onshore substation in the Town of Barnstable. Grid interconnection cables will then connect the onshore substation site to the West Barnstable Substation.

## **2.2 Section 106 of the National Historic Preservation Act**

Since the Project requires approval from BOEM, it is considered a federal undertaking and as such, must comply with Sections 106 and 110 of NHPA, as amended, and the National Environmental Policy Act of 1970 (NEPA). Section 106 of the NHPA requires federal agencies to identify and assess the effects of undertakings on historic resources and to resolve adverse effects by developing and evaluating alternatives that could avoid, minimize, or mitigate these impacts. Section 110 of the NHPA requires federal agencies to establish a historic preservation program for the identification, evaluation, and protection of historic properties under their control or ownership within an Area of Potential Effect (APE). An APE, as defined by 36 CFR § 800.16(d), is “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. Areas of potential effect are influenced by the scale and nature of an undertaking and may be different for various kinds of effects caused by the undertaking”.

Regulations under Section 106 (36 Code of Federal Regulations [CFR] 800.8(c)) allow the substitution of the NEPA reviews for the Section 106 process. Under this subsection, an agency can use the NEPA process and the documents it produces to comply with Section 106 in lieu of the procedures set forth in 36 CFR 800.3-800.6. In 2020, BOEM announced its intention to implement the NEPA substitution process for Section 106 review for renewable energy Construction and Operations Plans (COPs). Per the available guidance (Advisory Council on Historic Preservation [ACHP] and Council on Environmental Quality, 2013), the NEPA substitution process provides an opportunity for an agency to streamline its overall environmental and historic preservation review process.

---

<sup>1</sup> As described further in Section 4.1.3 of COP Volume I, the Proponent has identified two variations of the Phase 2 OECC in the event that technical, logistical, grid interconnection, or other unforeseen issues arise during the COP review and engineering processes that preclude one or more Phase 2 offshore export cables from being installed within all or a portion of the OECC.

## 2.3 History of Archaeological Investigations

To support BOEM's efforts to identify historic properties within the Project's Preliminary Area of Potential Effects (PAPE), the Proponent conducted a Terrestrial Archaeological Resources Assessment (TARA) including archaeological reconnaissance surveys with an archaeological sensitivity assessment (Figure 2.3-1) and Phase I site identification archaeological testing for components of the proposed Project. The TARA included archival research, the development of Project-specific environmental and cultural contexts, a review of previous land use studies, a field review to evaluate the potential for undiscovered archaeological sites to be present within Project work areas, and Phase I site identification subsurface archaeological testing in archaeologically sensitive areas (Ritchie 2020; 2021a, 2021b, 2022; Ritchie 2023).

### Phase 1

In 2020 an archaeological reconnaissance survey was conducted for the proposed Vineyard Wind OCS-A 0501 South Phase 1 Potential Export Cable Routes and Proposed Substation Project, currently referred to as the New England Wind Phase 1/Park City Wind Project, (the Project) in Barnstable, Massachusetts (Ritchie 2020). The reconnaissance survey evaluated potential onshore underground cable routes and substation sites being considered for the Phase 1 portion of 501 South. Project components included a transition zone between Nantucket Sound and land where horizontal directional drilling (HDD) will be used to install the cable at one of two landfall sites: Craigville Beach and Covell's Beach in Barnstable and Phase 1 potential onshore export cabling routes along existing roadways or utility rights-of-ways (ROWs). The proposed Phase 1 substation at 6-8 Shootflying Hill Road will connect to the existing West Barnstable Substation through a small parcel (Barnstable Assessor Parcel #214-001) adjacent to this existing substation.

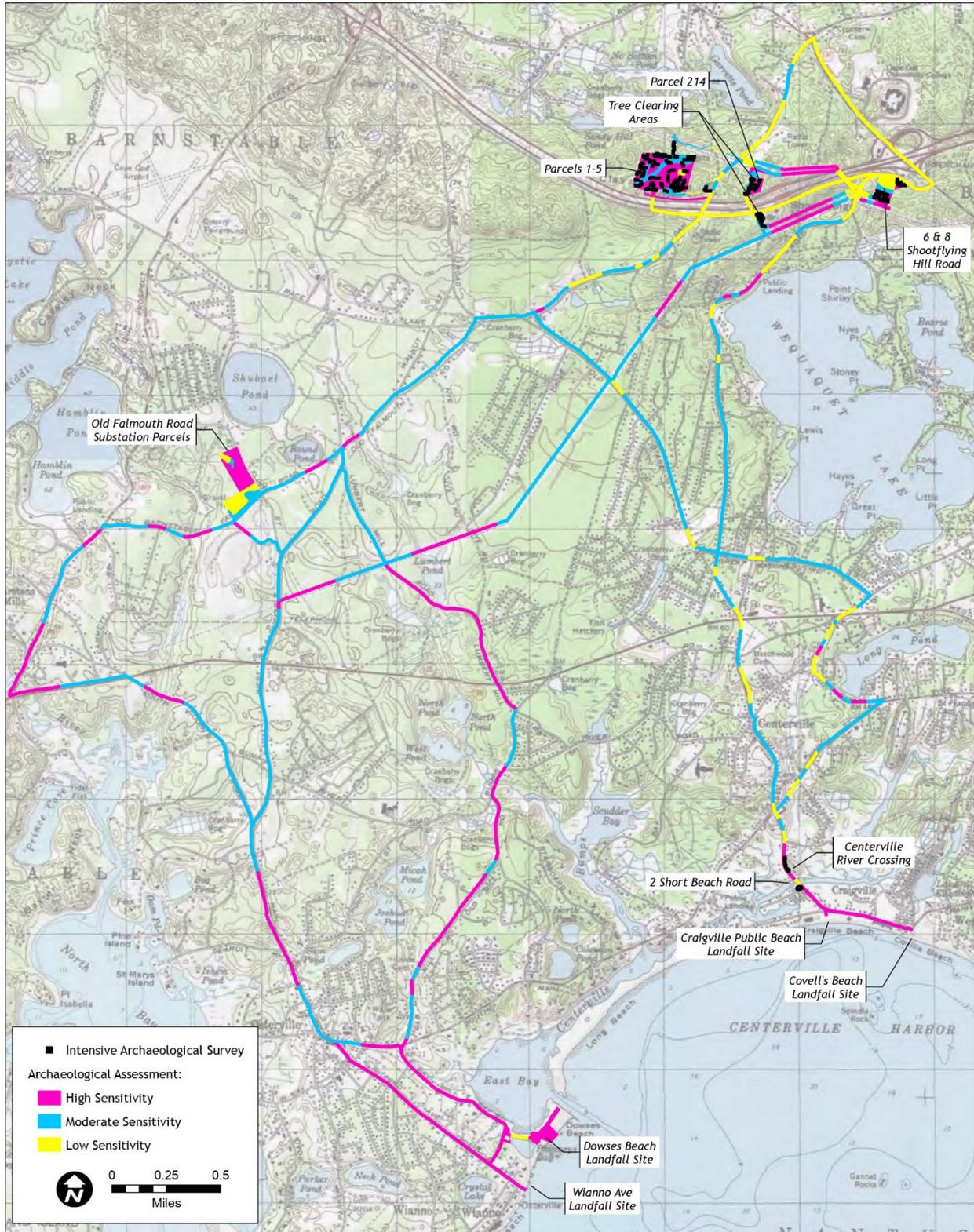
The sensitivity of the Project (see Figure 2.3-1) for pre-contact Native American archaeological resources was defined primarily by its location in the coastal zone and a section of the interior terminal moraine and outwash plain zones with freshwater ponds and wetlands. Sensitivity for post-contact archaeological resources was defined by the Project's location within zones of seventeenth century to Modern Period Euro-American settlement in Barnstable. The Project's cable route also follows or intersects some of the roads forming primary local transportation routes such as Shootflying Hill, Great Marsh, Iyannough (Routes 132/28) and Old Stage roads, Main, South Main and Oak streets, and Phinney's Lane.

In 2021, an intensive archaeological survey was conducted at the proposed locations of four onshore components of the New England Wind Phase 1 Project (formerly called Vineyard Wind Connector 2 Project) (Ritchie 2022). The four components are a 6.7 and a 1.28-acre parcel for a substation site at 6 and 8 Shootflying Hill Road; a trenchless crossing entry bore and a 1,960 square foot (sq ft) temporary work zone for an onshore export cable crossing of the Centerville River within a 0.28-acre residential lot at 2 Short Beach Road; a trenchless exit pit and 300-ft long pipe laydown area north of the Centerville River in the shoulder of Craigville Beach Road; and a 2.8-acre parcel (Parcel 214-001) for a proposed horizontal directional drill crossing under Route 6. Site The trenchless exit pit and 300-ft long pipe laydown were within the recorded location of Site 19-BN-253, a pre-contact Native American shell midden documented by an avocational archaeologist. In June 2023, intensive archaeological survey was conducted at a tree clearing area off Service Road along the northern portion of the onshore cable route (Ritchie 2023).

Pre-contact Native American archaeological resources were found in the proposed substation parcel at 8 Shootflying Hill Road, at the proposed trenchless crossing entry bore and temporary work zone at 2 Short Beach Road, and at the proposed HDD entry/exit pit location in Parcel 214. The 8 Shootflying Hill Road Find Spot is an isolated chipped stone tool (utilized flake) and a piece of chipping debris. The 2 Short Beach Road Find Spot consists of 8 pieces of chipping debris found in modified soil contexts within a developed residential property next to the Centerville River. Testing in June 2023 resulted in the identification of the Service Road Find Spot consisting of 3 pieces of lithic chipping debris.

These cultural resources have limited information content, are not associated with broad patterns in the prehistory of southern New England, and additional investigations would be unlikely to yield significant new information. They do not possess the qualities required for listing in the National Register of Historic Places under Criterion A, B, C, and D (36 CFR 60.4). They are not related to any significant persons or events (Criterion A and B), they are not unique in form or function (Criteria C) and the undiagnostic cultural material would not yield additional information pertinent to the history of the region (Criteria D).

Construction monitoring is not recommended for any of the proposed Phase 1 facilities areas that have been subject to intensive archaeological testing.



**Figure 2.3-1. New England Wind Phase 1 and 2 Project proposed onshore substations, cable routes and HDD locations with areas of archaeological sensitivity.**

## Phase 2

In June 2020, a field review was completed for the Phase 2 Onshore Routing and Substation Envelope in Barnstable, Massachusetts. This review was completed prior to the identification of specific landfall sites and onshore export and grid interconnection cable routes for Phase 2, therefore the review was focused on a broad area in Barnstable. The archival research identified no archaeological properties listed in the National Register of Historic Places in the Phase 2 Onshore Routing and Substation Envelope. A total of 42 pre-contact archaeological sites and 15 post-contact archaeological sites were identified within the study area. Further consultation with the Massachusetts Historical Commission (MHC) and Tribal Nations regarding the potential for the New England Wind Project to affect both known and unrecorded cultural resources that may be present within the study area was recommended.

In September 2021, an archaeological reconnaissance survey that incorporated the 2020 field review and research was conducted for the Phase 2 Onshore Development Area, also known as the New England Wind 2 Connector. The reconnaissance survey included the landfall sites, onshore export cable routes and grid interconnection routes, and the grid interconnection point at the West Barnstable substation. The exact location of the Phase 2 onshore substation site(s) was not determined at the time of the survey, but the site(s) were anticipated to be located generally along the onshore routes included in these studies. The archaeological reconnaissance survey for the Phase 2 onshore development area identified zones of low, moderate, and high archaeological sensitivity (Ritchie 2021b) (see Figure 2.3-1).

In April and October of 2022 an intensive archaeological survey was conducted on three parcels of land proposed for a Phase 2 substation (Ritchie 2023). The survey resulted in the identification of one archaeological site (Clay Hill Site) and two find spots (Clay Hill find spots 1 and 2).

In May and June 2023 intensive archaeological survey was conducted for Phase 2 facilities including two additional parcels for the proposed Phase 2 substation location, an interconnection easement from that proposed substation site to an Eversource Right-of-Way, and access routes from Oak Street to the proposed substation. The testing resulted in the identification of a lithic projectile point fragment (Find Spot 1).

As with the cultural resources found on the proposed onshore Phase 1 facilities locations, the cultural resources found at proposed onshore Phase 2 facilities locations have limited information content, are not associated with broad patterns in the prehistory of southern New England, and additional investigations would be unlikely to yield significant new information. They do not possess the qualities required for listing in the National Register of Historic Places under Criterion A, B, C, and D (36 CFR 60.4). They are not related to any significant persons or events (Criterion A and B), they are not unique in form or function (Criteria C) and the undiagnostic cultural material would not yield additional information pertinent to the history of the region (Criteria D).

Construction monitoring is not recommended for any of the proposed onshore Phase 2 facilities areas that have been subject to intensive archaeological testing.

### **3.0 ARCHAEOLOGICAL MONITORING OF CONSTRUCTION**

The Proponent acknowledges the sensitivity of the Project and is committed to protecting and preserving cultural resources, in accordance with federal and state legislation. The Proponent also recognizes that despite an archaeological reconnaissance survey and Phase I site identification archaeological testing, it is still possible that potentially significant archaeological resources, including human remains, could be discovered during onshore Project construction.

The following outlines the tasks and processes that will be followed as part of the onshore archaeological monitoring program for the New England Wind Phase 1 and 2 Project.

#### **3.1 Consultation and Archaeological Permit Application**

Archaeological and tribal monitoring by designated tribal monitors will be conducted in consultation with and under a permit issued by the Massachusetts State Archaeologist in the MHC, office of the Massachusetts State Historic Preservation Officer (SHPO). The Proponent will submit a new archaeological permit application to the MHC for the archaeological monitoring. The Proponent will submit the Archaeological Monitoring Plan, 30 days prior to implementation, to all consulting Tribal Nations with an interest in participating, specifically the Mashpee Wampanoag, the Wampanoag Tribe of Gay Head (Aquinnah), and the Mashantucket (Western) Pequot Tribal Nation for review. Any comments received from the Tribal Nations will be incorporated into the plan prior to implementation. Monitors will be supervised by an archaeologist that meets the Secretary of the Interior's *Professional Qualifications Standards for Archaeology and Historic Preservation* (36 CFR Appendix A to Part 61).

#### **3.2 Contractor Training**

The Proponent will inform the consulting Tribal Nations 30 days in advance of the contractor training schedule. Consulting Tribal Nations will participate in the contractor training if, within the 30-day window, they confirm it is necessary and that they are available to participate. The archaeological consultants and tribal representatives, if participating as described above, will prepare and give the Proponent and its

contractor construction supervisors cultural and archaeological sensitivity training before the start of onshore construction so that the Proponent and their contractors are aware of the types of archaeological resources that may be encountered during construction. The purpose of this training will be to review state and federal regulations concerning archaeological resources and the general results of the archaeological investigations conducted within the onshore portions of the Project APE including types of artifacts and resources that may be present, provide an overview of the general and tribal cultural history of the area, and introduce contractors to the archaeological and tribal monitors. The procedures that will be followed if a significant cultural resource or archaeological deposit is discovered during construction will be reviewed during the training. Hard copies of this Archaeological Monitoring Plan will be printed and circulated to contractor supervisors at the contractor training for incorporation into construction documentation. Construction crews will be required to review the plan and have it with them during all construction activities.

### **3.3 Construction Monitoring**

Construction monitoring by an archaeologist will be required in all areas designated as having high or moderate sensitivity except those that have been subject to intensive survey. The Proponent will inform the consulting Tribal Nations of the construction schedule, 30 days in advance of the start of construction, and allow them to monitor construction, at their discretion. The Tribes will be requested to notify the Proponent prior to the start of construction if a Tribal monitor will be available to monitor construction. Tribal monitors will coordinate directly with the New England Wind's Resident Engineer regarding construction schedules and will communicate any questions or concerns to the Resident Engineer.

Archaeological and tribal monitors will monitor excavation of each cable duct bank and HDD area that was determined to have moderate and high archaeological sensitivity, as shown on Figure 2.3-1, during the reconnaissance surveys of the Phase 1 and Phase 2 facilities but has not been subject to archaeological testing. Monitors will be present during all ground disturbing activities in those areas. If construction is occurring in more than one area, a monitor will be present in each area. The Resident Engineer will inform the archaeological monitor on a Friday every week if construction will be occurring in more than one area the following week.

Detailed maps with areas of sensitivity to be monitored during construction are shown for both Phase 1 and Phase 2 in Appendices D and E. Tribal monitors may request monitoring in areas that have not been designated as having moderate or high sensitivity, at their discretion. They should notify the Resident Engineer of that request who will respond to them within 24 hours. Archaeological and tribal monitors will document and record any archaeological features or other deposits (e.g. shell fragments, burned rock, chipping debris, pre-contact artifacts) visible in excavation trenches or at the drill sites. The following details the plan that the Proponent and their contractors will follow if archaeological and tribal monitors identify archaeological deposits during construction

### Archaeological Discoveries

1. Possible archaeological remains may be discovered by archaeological and tribal monitors during construction. If suspected artifacts or archaeological features are exposed during construction, both archaeological and tribal monitors will stop work in the vicinity of the discovery until it can be determined if the materials are cultural and whether they represent a potentially significant site or archaeological deposit.
2. Archaeological monitors will immediately notify the Resident Engineer. Notification will include the activity, specific work area including location/address and construction site and provide digital photographs of the find.
3. The Resident Engineer will issue an official Stop Work Order and direct the contractor to secure the area by flagging or fencing off the area of the archaeological discovery. Any discovery made on a weekend or overnight hours will be protected until all consulting parties have been notified of the discovery.
4. Archaeological and tribal monitors will determine if the site is potentially significant and notify the all consulting parties. The Proponent, their contractors, and archaeologists will work with the MHC and Tribal Nations (as necessary) and in consultation with BOEM and BSEE, develop and implement a site treatment plan.

5. Since the area of any potential discovery will have been partially disturbed by construction, the objective of cultural resource investigation will be to evaluate data quickly so consultation can proceed as soon as possible. If archaeological investigations are required, the Resident Engineer will inform the construction supervisor that no construction work in the immediate vicinity of the discovery can proceed until archaeological fieldwork is complete. The area will be fenced off and be off-limits for work, but will not be identified as an archaeological site *per se* to protect the resource(s).
6. The duration of any work stoppage will be contingent upon the significance of the identified cultural resource(s) and consultation among the Proponent, BOEM and BSEE, MHC, Tribal Nations, and other consulting parties to determine treatment to avoid, minimize, or mitigate adverse effects to the identified site.
7. Once all consulting parties have agreed that the treatment measures are complete, the Resident Engineer will notify the contractor that construction work may proceed. The contractor will not resume work in the vicinity of the find until the Resident Engineer has granted clearance.

#### Human Remains Discoveries

If human remains are encountered during Project construction, they will be handled in accordance with the MHC's *KnowHow #4* (Appendix A) and guided by the policy statement adopted by the ACHPI on Historic Preservation (*Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects* (Appendix B)).

Human remains will be treated with dignity and respect at all times. Skeletal remains and/or associated artifacts will be left in place and not disturbed. No remains or associated materials will be collected or removed until all notifications have been made, appropriate consultation has taken place, and a plan of action has been determined. The procedures that will be followed if human remains are unearthed during Project construction are:

1. If archaeological and/or tribal monitors identify human remains or possible human remains, all construction work in the vicinity of the find that could affect the integrity of the remains will cease.

The remains must not be touched, moved, or further disturbed. Archaeological and tribal monitors will document any such finds and notify the Resident Engineer immediately. No photographs or digital recording of human remains or associated funerary/ceremonial objects will be taken by construction contractors or construction personnel. Archeological and tribal monitors with the assistance of onsite contractors will take measures to ensure site security.

2. Archaeological monitors will record the location of the find, its time of discovery, and will immediately notify the Massachusetts State Police and regional Medical Examiner in accordance with Massachusetts general Laws. BOEM and BSEE will also be notified as soon as practicable.
3. If the Medical Examiner determines the remains are less than 100 years old, their treatment becomes the responsibility of the State Police. If the Medical Examiner determines the remains are more than 100 years old, the Medical Examiner will notify the Massachusetts State Archaeologist. The State Archaeologist, archaeological, and tribal monitors will determine if the remains are Native American and if they are the Massachusetts Commission on Indian Affairs (MCIA) is also notified.
4. The Proponent, BOEM, BSEE, the State Archaeologist, and if the remains are Native American, the the MCIA and consulting Tribal Nations will discuss whether there are prudent and feasible alternatives to protect the remains. The results of this consultation will be made in writing. If it is not possible to protect the remains, they may be excavated only under a Special Permit issued by the MHC after the review of a recovery plan that specifies a qualified research team, research design, and plan for the disposition of the remains consistent with the results of consultation 950 CMR 70.20(2).
5. If the remains are non-Native, the State Archaeologist will determine whether a skeletal analysis of the remains will be conducted and whether the remains will be deposited in a curatorial facility or reinterred. These decisions will be made in consultation with BOEM and BSEE and other interested parties as defined in the *Policy and Guidelines for Non-Native Human Remains Which Are Over 100 Years Old or Older* (MHC 1990) (Appendix C).

6. In all cases, due care will be taken in the excavation, transport, and storage of any remains to ensure their security and respectful treatment.

### 3.4 Laboratory Processing and Analyses

Any archaeological materials collected during monitoring activities will be processed. Processing activities include cleaning, identification, and cataloging of any recovered cultural materials; the preliminary analysis of spatial distributions of cultural materials; and artifact photography of diagnostic or representative artifact types. All materials will be returned to The Public Archaeology Laboratory Inc.'s (PAL) facilities for processing, cataloging, and curation, until a permanent repository is designated. The PAL facility is an approved curation facility for the Commonwealth of Massachusetts. All laboratory activities will be supervised by the PAL Laboratory Manager who meets the Secretary of the Interior's *Professional Qualifications Standards for Archaeology and Historic Preservation* (36 CF Appendix A to Part 61).

At a minimum the collected cultural materials will be stored in acid-free Hollinger boxes with box content lists and labels printed on acid-free paper. These boxes will be curated in accordance with the curation plan developed through consultation with the Tribal Nations, agencies, and other consulting parties per Stipulation X.B.1 of the Memorandum of Agreement for the Project.

## 4.0 DOCUMENTATION AND REPORTING

Archaeological monitors will prepare daily logs that summarize the results of monitoring activities for submission to the Proponent. Recorded data will include the date, archaeological and tribal monitors, work location and activity, observations and finds, and any other relevant comments. A weekly report will be compiled (which will include a weekly summary of activities and a look-ahead schedule) and forwarded electronically by email to all consulting parties, if requested.

On completion of the onshore construction monitoring, archaeological monitors will prepare an archaeological monitoring report that describes the methodology and results of the construction monitoring, discusses any archaeological deposits that were encountered during construction, and offers recommendations regarding the significance of any identified deposits and the need for additional work and consultation. Draft copies of the report will be submitted to the Proponent for review and then to BOEM and BSEE, the MHC, and the Tribal Nations within 60 days of completion of onshore construction. Any comments received within 30 days will be addressed in the final report to be submitted 60 days after the submission of the draft report. If necessary, archaeological site forms will be completed and submitted to the MHC. The report produced will meet the standards outlined in the Secretary of Interior's *Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716 1983), the procedures outlined in MHC's *Public Planning and Environmental Review: Archeology and Historic Preservation* and 950 CMR 70.14.

## 5.0 REFERENCES

### Advisory Council on Historic Preservation

- 2023 *Policy Statement on Burial Sites, Human Remains, and Funerary Objects*. Washington, D.C.
- 2023 *Policy Statement on Burial Sites, Human Remains, and Funerary Objects: Explanations and Discussion*. Washington, D.C.

### National Park Service

- 1983 *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716–44742)* National Park Service, U.S. Department of the Interior, Washington, D.C.

### Massachusetts Historical Commission

- 1985 *Public Planning and Environmental Review: Archeology and Historic Preservation*. Massachusetts Secretary of State, Boston, MA.

### The Public Archaeology Laboratory, Inc.

- 2023 *Procedures Guiding the Discovery of Unanticipated Archaeological Resources and Human Remains*.

### Ritchie, Duncan

- 2020 *Archaeological Reconnaissance Survey, Vineyard Wind 501 South Phase 1 Onshore Development Area Potential Export Cable Routes and Proposed Substation Project Barnstable, Massachusetts*. The Public Archaeology Laboratory, Inc. Report 3784. Submitted to Epsilon Associates, Inc. Maynard, MA.
- 2021a *Vineyard Wind South Phase 1 (Park City Wind)/Vineyard Wind Connector 2 Results of Archaeological Monitoring Craigville Beach Landfall Site Onshore Export Cable Route Substation (8 Shootflying Hill Road) Vineyard Wind South Phase I (Connector 2) Onshore Cabling Project, Barnstable, Massachusetts*. The Public Archaeology Laboratory, Inc. Report 3784.01. Submitted to Epsilon Associates, Inc. Maynard, MA.

- 2021b *Archaeological Reconnaissance Survey Vineyard Wind South Phase 2 Potential Onshore Export Cable Route Project, Barnstable, Massachusetts.* PAL Report No. 3784.01. Submitted to Epsilon Associates, Inc. Maynard, MA.
- 2022 *Intensive Archaeological Survey New England Wind Phase 1 (Park City Wind)/New England Wind 1 Connector Onshore Project Components, Barnstable, Massachusetts.* PAL Report No. 3784.01. Submitted to Epsilon Associates, Inc., Maynard, MA and Park City Wind LLC.
- 2023 *2023 Intensive Archaeological Surveys for New England Wind Phase 1 and 2 Facilities, Barnstable, Massachusetts.* PAL Report 3784.01 (D). Submitted to Epsilon Associates, Inc., Maynard, MA and Park City Wind LLC.

## APPLICABLE REGULATIONS AND GUIDELINES

### *Federal*

- National Historic Preservation Act of 1966, as amended (54 USC 306108), Sections 106 and 110, and implementing regulations at 36 CFR 800
- National Environmental Policy Act of 1970
- Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* (48 CFR 44716-42)
- Advisory Council on Historic Preservation: *Policy Statement on Burial Sites, Human Remains, and Funerary Objects 2023* (Appendix B)
- Advisory Council on Historic Preservations *Policy Statement on Burial Sites, Human Remains, and Funerary Objects: Explanation and Discussion 2023*.
- Advisory Council on Historic Preservation: *Recommended Approach for consultation on Recovery of Significant Information from Archaeological Sites* (64 FR 27085-27087)

### *Massachusetts*

- Massachusetts General Laws Chapter 9 Sections 26A through 27C, as amended, and regulations at 950 CMR 70 and 71.
- Massachusetts Unmarked Burial Law (M.G.L. c. 7, s. 38A, c. 38, s.6, c. 9, ss. 26A & 27C, and c.114, s.17)
- Massachusetts Historical Commission: *KnowHow #4 What to do when Human Burials are Uncovered* (no date) (Appendix A)
- Massachusetts Historical Commission: *Policy for Disposition of Non-Native Human Remains Which Are Over 100 Years Old or Older* (1990) (Appendix C)

## LIST OF CONTACTS

### ***Park City Wind, LLC***

125 High Street

Boston, MA 02110

Contact: Mark Roll, Federal Permitting Manager, Offshore

Avangrid Renewables

Tel: (857) 301-0820

Email: [mark.roll@avangrid.com](mailto:mark.roll@avangrid.com)

### ***Massachusetts Historical Commission***

220 Morrissey Boulevard

Boston, Massachusetts 02125

Contact: Brona Simon, State Historic Preservation Officer

Tel: (617) 727-8470

Email: [brona.simon@state.ma.us](mailto:brona.simon@state.ma.us)

### ***Massachusetts Commission on Indian Affairs***

100 Cambridge Street, Suite 300

Boston, Massachusetts 02114

Contact: John A. Peters, Jr., Executive Director

(617) 573-1292

Email: [john.peters@state.ma.us](mailto:john.peters@state.ma.us)

### ***Massachusetts State Police, South Yarmouth Barracks***

1172 State Road

South Yarmouth, MA

Tel: (508) 398-2323

***Barnstable Police Department***

1200 Phinneys Lane

Hyannis, MA

Tel: (508) 775-0387

***Office of the Chief Medical Examiner, Sandwich Office***

1 Simpkins Road

Mashpee, MA 02649

Tel: (508) 539-2200

**TRIBAL NATIONS**

***Mashpee Wampanoag***

483 Great Neck Road South

Mashpee, MA 02649

Contact: David Weeden, Tribal Historic Preservation Officer

Tel: (508) 477-0208, Ext. 102

Email: [David.weeden@mwtribe-nsn.gov](mailto:David.weeden@mwtribe-nsn.gov)

***Wampanoag Tribe of Gay Head/Aquinnah***

20 Black Brook Road

Aquinnah, MA 02535-1546

Contact: Bettina Washington, Tribal Historic Preservation Officer

Tel: (508) 560-9014

Email: [thpo@wampanoagtribe-nsn.gov](mailto:thpo@wampanoagtribe-nsn.gov)

***Mashantucket (Western) Pequot Tribal Nation***

110 Pequot Trail

Mashantucket, Connecticut 06338

Contact: Michael Kickingbear Johnson, Tribal Historic Preservation Officer

Tel: 860-396-7575

Email: [mejohanson@mptn-nsn.gov](mailto:mejohanson@mptn-nsn.gov)

## APPENDIX A

### MASSACHUSETTS HISTORICAL COMMISSION KNOWHOW #4

# KnowHow #4

INFORMATION AND ASSISTANCE FROM THE MASSACHUSETTS HISTORICAL COMMISSION

## ***What to Do When Human Burials are Accidentally Uncovered***

### **1. Why are bones sometimes found?**

In Massachusetts, many unmarked graves exist without gravestones, fences, tombstones, or other surface indications of their presence. These are chiefly the graves of prehistoric and historic Indians, which may never have been marked at all; and graves which had been identified at one time in the past, but the markings are no longer visible. As a result, bones are often found during ordinary ground disturbance activities such as the construction of new homes, utilities, or roads; in the agricultural or industrial use of a site; or the excavation of sand or gravel borrow. Bones are also sometimes found eroding out of areas exposed by natural erosion, floodwater scouring, or sand dune formation.

A new law has been enacted which establishes procedures to follow when human bones are accidentally discovered.

### **2. Who is involved?**

Private citizens, State and Local Police, Medical Examiners, State Archaeologist, and the Commission on Indian Affairs.

### **3. What should you do if you discover bones?**

Do not touch or disturb the bones. Notify the state or local police and the regional medical examiner about the discovery and location.

### **4. What does the Medical Examiner do?**

The Medical Examiner investigates the discovery to determine whether the bones are human, and whether they are recent or more than 100 years old. If the bones are less than 100 years old, a criminal investigation may be warranted. If the bones are more than 100 years old, the Medical Examiner then notifies the State Archaeologist, who immediately conducts an archaeological investigation of the site. Throughout these investigations, the police authorities must insure that the site is protected from further damage.

### **5. What does the State Archaeologist do?**

The State Archaeologist investigates the site to determine the age, cultural association and identity of the burial. If the State Archaeologist determines that the burial is that of a Native American, the Commission on Indian Affairs is notified. The State Archaeologist consults with the landowner to determine whether the burial can remain undisturbed. In the case of development projects, the owner and State Archaeologist discuss whether there are prudent and feasible steps the owner can take to protect the burial. If it is impossible to avoid future harm to the burial, the State Archaeologist removes the remains.

### **6. What does the Commission on Indian Affairs do?**

The archaeological investigation of Indian burials is monitored by the Commission on Indian Affairs to insure that the remains are treated respectfully.

Please remember: Once bones or artifacts are removed from the site, valuable information concerning the identity and age of the human remains is lost. Therefore, it is important not to disturb the site in any way until the State Archaeologist can conduct an investigation and record the discovery.

### **BIBLIOGRAPHY**

Massachusetts General Laws, Chapter 38, section 6; Chapter 9, sections 26A & 27C; Chapter 7, section 38A; Chapter 114, section 17; as amended by Chapter 659 of the Acts of 1983 and Chapter 386 of the Acts of 1989.

### **For Further Information:**

Please contact the State Archaeologist at the Massachusetts Historical Commission.

**William Francis Galvin**  
Secretary of the Commonwealth  
Chairman, Massachusetts Historical Commission  
Massachusetts Archives Building, 220 Morrissey Boulevard, Boston, MA 02125  
Phone: (617) 727-8470 Fax: (617) 727-5128  
Website: [www.sec.state.ma.us/mhc](http://www.sec.state.ma.us/mhc)

## APPENDIX B

### ACHP POLICY STATEMENT REGARDING TREATMENT OF BURIAL SITES, HUMAN REMAINS AND FUNERARY OBJECTS



**ADVISORY COUNCIL ON HISTORIC PRESERVATION  
POLICY STATEMENT ON BURIAL SITES, HUMAN REMAINS, AND FUNERARY OBJECTS**

**March 1, 2023**

**Preamble.** The Advisory Council on Historic Preservation (ACHP) developed this policy statement to establish a set of principles and rules that the ACHP will encourage federal agencies to adopt as they carry out their day-to-day responsibilities under Section 106 of the National Historic Preservation Act (NHPA). This statement also establishes a set of standards and guidelines that federal and state agencies, local entities, Indian Tribes, industry applicants, and other relevant entities should, at a minimum, seek to implement in order to provide burial sites, human remains, and funerary objects the consideration and protection they deserve.

This policy statement is not bound by geography, ethnicity, political or socioeconomic status, or a system of belief and recognizes that the respectful consideration for burial sites, human remains, and funerary objects is a human rights concern shared by all. However, the burial sites, human remains, and funerary objects of certain groups of people, including but not limited to Indian Tribes, Native Hawaiians, enslaved Africans and their descendants, and other Indigenous Peoples, have a higher probability of being unmarked and undocumented and thus more likely to be affected by development projects. As such, this policy statement emphasizes the need for consultation and coordination with those communities, including seeking consensus in decision making and providing deference to their practices, protocols, and preferences, where feasible.

Section 106 requires agencies to consult and seek agreement with consulting parties on measures to avoid, minimize, or mitigate adverse effects to historic properties. Accordingly, and consistent with Section 106, this policy does not recommend a specific outcome from the consultation process. Rather, it focuses on issues and perspectives that federal agencies should consider while carrying out their consultation and decision-making responsibilities. The ACHP will incorporate these principles in its work and encourages federal agencies and other entities to apply the principles in this policy any time there is potential to encounter burial sites, human remains, or funerary objects.

In many cases, burial sites, human remains, and funerary objects are subject to other applicable federal, Tribal, state, or local laws or protocols that may prescribe a specific outcome, such as the Native American Graves Protection and Repatriation Act (NAGPRA). In those scenarios, the federal agency should identify and follow all applicable laws or protocols and implement any prescribed outcomes. NHPA and NAGPRA are separate and distinct laws, with separate and distinct implementing regulations and categories of parties that must be consulted.<sup>1</sup> Compliance with one of these laws does not equate to or fulfill the compliance requirements of the other. Implementation of this policy and its principles does not, in any way, change, modify, or detract from NAGPRA or other applicable laws.

**Authority:** The authority for this policy stems from the ACHP's statutory responsibility to advise on matters relating to historic preservation (which includes the role of Indian Tribes, Tribal Historic

---

<sup>1</sup> The ACHP's publication [Consultation with Indian Tribes in the Section 106 Process: The Handbook](#) (2021) and the National Association of Tribal Historic Preservation Officers' publication [Tribal Consultation: Best Practices in Historic Preservation](#) (2005) provide additional guidance.

ADVISORY COUNCIL ON HISTORIC PRESERVATION  
401 F Street NW, Suite 308 | Washington, DC 20001-2637  
Phone: 202-517-0200 □ Fax: 202-517-6381 □ [achp@achp.gov](mailto:achp@achp.gov) □ [www.achp.gov](http://www.achp.gov)

Preservation Officers [THPOs], and Native Hawaiian organizations [NHOs] in that process), to advise the President and Congress regarding historic preservation matters, and to recommend methods to federal agencies to improve the effectiveness, coordination, and consistency of their historic preservation policies. While the ACHP recognizes that not all burial sites, human remains, and funerary objects may constitute or be associated with historic properties eligible for or listed in the National Register of Historic Places, the consideration and treatment of such places fall within the concerns of the historic preservation community.<sup>2</sup>

This policy statement recognizes the unique legal and political relationship between the federal government and federally recognized Indian Tribes as set forth in the Constitution of the United States, treaties, statutes, and court decisions, and acknowledges that the federal Indian trust responsibility is a legal obligation under which the United States “has charged itself with moral obligations of the highest responsibility and trust” toward Indian Tribes.<sup>3</sup> Part of the ACHP’s trust responsibility is to ensure that the regulations implementing Section 106 incorporate the procedural requirement that federal agencies consult with Indian Tribes and NHOs that attach religious and cultural significance to historic properties that may be affected by undertakings the federal agency proposes to carry out, license, permit, or assist.<sup>4</sup> In general, the trust responsibility establishes fiduciary obligations on the part of federal agencies to Tribes, including a duty to protect Tribal lands and cultural and natural resources for the benefit of Tribes and individual Tribal members.

The ACHP views its trust responsibility as encompassing all aspects of historic resources including intangible values.<sup>5</sup> As part of that trust responsibility, the ACHP offers this policy statement to inform how the Section 106 consultation process should consider burial sites, human remains, and funerary objects.

**Principles.** The care for and consideration of burial sites, human remains, and funerary objects is of significant social and moral consequence in the United States and U.S. territories. When burial sites, human remains, or funerary objects are or have the potential to be encountered during the planning or implementation of a proposed federal undertaking, the following principles should be adhered to:

**Principle 1:** Burial sites, human remains, and funerary objects should be treated with dignity and respect in all circumstances regardless of National Register eligibility or the circumstances of the action (i.e., exemptions, disaster, and emergencies). This includes, but is not limited to, all times prior to and during consultation, during field surveys, when handling must occur, in documenting and/or reporting, if treatment actions occur, and in all other forms of interaction.

**Principle 2:** Disturbing or disinterring burial sites, human remains, or funerary objects, when not requested by descendants, associated Indian Tribes or NHOs, or required by applicable law or regulation, should not be pursued unless there are no other alternatives available and only after consultation with descendants or other legally associated individuals or groups and fully considered avoidance of impact and preservation in place.

**Principle 3:** Only through consultation, which includes the early and meaningful exchange of information and a concerted effort to reach consensus, can informed decisions be made about the identification, documentation, National Register eligibility, and treatment of burial sites, human remains, and funerary objects.

---

<sup>2</sup> 54 U.S.C. §§ 304102 and 304108

<sup>3</sup> *Seminole Nation v. United States*, 316 U.S. 286 (1942)

<sup>4</sup> [“The Advisory Council on Historic Preservation’s Statement on Its Trust Responsibility”](#) (Advisory Council on Historic Preservation, 2004)

<sup>5</sup> [“Policy Statement Regarding the Council’s Relationship with Indian Tribes”](#) (Advisory Council on Historic Preservation, 2000)

**Principle 4:** To the maximum extent possible, decision making should give deference to the treatment requests of descendants or other legally associated individuals or groups. Where known, and in accordance with applicable law, cultural practices of the descendants or associated groups should be followed if burial sites, human remains, or funerary objects may be encountered, are inadvertently identified, impacted, or must be disinterred.

**Principle 5:** The Indigenous Knowledge held by an Indian Tribe, NHO, or other Indigenous Peoples is a valid and self-supporting source of information. To the fullest extent possible, deference should be provided to the Indigenous Knowledge and expertise of Indian Tribes, NHOs, and Indigenous Peoples in the identification, documentation, evaluation, assessment, and treatment of their burial sites, human remains, and funerary objects.

**Principle 6:** Burial sites, human remains, and funerary objects are important in and of their own right. They may also constitute or be part of a sacred site and may include or incorporate several possible elements of historic significance including religious and cultural significance. The integrity of burial sites, human remains, and funerary objects is best informed by those who ascribe significance to them.

**Principle 7:** Burial sites, human remains, and funerary objects are frequently associated with cultural practices, sacred sites, Indigenous Knowledge, and other forms of culturally sensitive actions and/or information unique to a people. Maximum effort should be taken to limit the disclosure of confidential or sensitive information through all available mechanisms including, but not limited to, the proper handling and labeling of records, limiting documentation to necessary information, and through the application of existing law.

**Principle 8:** The federal Indian boarding school system directly targeted American Indian, Alaska Native, and Native Hawaiian children in the pursuit of a policy of cultural assimilation that coincided with territorial dispossession. In partnership with the historic preservation community, federal agencies should seek to implement the recommendations identified in the Department of the Interior's Federal Indian Boarding School Investigative Report by supporting community-driven identification, documentation, interpretation, protection, preservation, reclamation, and co-management of burial sites, human remains, and funerary objects across that system, including marked and unmarked burial areas, and supporting repatriation where appropriate.

**Principle 9:** The legacies of colonization, including cultural assimilation, forced relocation, and slavery, have led to an uneven awareness of where and why practitioners are likely to encounter burial sites, human remains, and funerary objects across the United States and its territories. The historic preservation community has a key role in expanding public education to support greater awareness of and consideration for the histories and lifeways of Indian Tribes, Native Hawaiians, African Americans, and Indigenous Peoples including recognizing and respecting the historical trauma that these groups and individuals may experience.

**Principle 10:** Access to and/or repatriation of burial sites, human remains, and funerary objects should be enabled through fair, transparent, and effective mechanisms developed in conjunction with descendant communities to the fullest extent of the law.

**Principle 11:** Human remains and funerary objects may be relocated or removed from a location by or at the request of descendent communities for a variety of reasons. The continued presence of human remains or funerary objects may not be essential to the ongoing significance and integrity of a site or its relevance to a broad theme in history. The historic significance and integrity of such sites are best determined in consultation with lineal descendants and/or associated communities.

**Principle 12:** Climate change can impact the burial sites, sacred sites, cemeteries, and associated cultural practices significant to Indian Tribes, NHOs, and other groups of people. Climate plans should be developed in consultation and should include mechanisms to support the advanced identification and protection or treatment of these locations.

**Principle 13:** Respectful consideration of burial sites, human remains or funerary objects may require additional assistance from consulting parties to properly identify, document, evaluate for National Register eligibility, and/or conduct treatment actions. If a federal agency requests or relies on an Indian Tribe, NHO, or other party to carry out activities that are the federal agency's responsibility under the NHPA, the Indian Tribe, NHO, or other consulting party should be reimbursed or compensated.<sup>6</sup>

**Implementation of the Policy.** Implementation of this policy statement is the responsibility of the ACHP's leadership and staff; however, the ACHP recognizes that appropriate expertise and experience to ensure effective implementation may also reside in other parties. Accordingly, the ACHP commits to advancing consideration of burial sites, human remains, and funerary objects in the Section 106 process with its preservation partners through the following:

- A. Train ACHP staff regarding the implementation of this policy statement.
- B. Development of informational resources that address the NHPA, Section 106, and the following:
  - i. The Federal Indian Boarding School Initiative
  - ii. The intersection of NAGPRA
  - iii. Acquiring and managing sensitive information
  - iv. Climate change and burial sites, human remains, and funerary objects
  - v. Best practices in the treatment of marked and unmarked burial sites, human remains, and funerary objects.
- C. ACHP staff will seek opportunities to implement the policy principles into Section 106 agreement documents and program alternatives to advance consideration of burial sites, human remains, and funerary objects.
- D. The ACHP will advise federal agencies, Indian Tribes, Tribal and State Historic Preservation Officers, and NHOs in their development of historic preservation protocols for appropriate consideration of burial sites, human remains, and funerary objects.
- E. Encourage federal agencies and other relevant parties to give full and meaningful consideration to burial sites, human remains, and funerary objects consistent with this policy statement.

**Policy Review Period.** The ACHP commits to reviewing this policy statement approximately every five years from the date of its adoption to ensure its continued applicability. The ACHP executive director will seek input regarding the need to update this policy statement through appropriate ACHP committees, including Federal Agency Programs and Native American Affairs. Amendments shall be pursued when the executive director or ACHP members determine that such action is required and/or would significantly improve the policy statement. This policy statement shall be in effect until rescinded by ACHP members.

**Definitions.** The definitions provided below are meant to inform the application of this policy statement. However, terms such as burial site, intact, disturbance, and human remains, among others, often require the input of associated parties to more fully understand how to interpret or apply each term. The

---

<sup>6</sup> Consistent with ACHP's [Guidance on Assistance to Consulting Parties in the Section 106 Review Process](#), when the federal agency (or in some cases the applicant) seeks the views and advice of any consulting party in fulfilling its legal obligation to consult with them, the agency or applicant is not required to pay that party for providing its views.

definitions provided below are intended to be inclusive and to advance the preservation and protection of burial sites, human remains, and funerary items, as appropriate.

- **Burial Site:** Any location, whether originally below, on, or above the surface of the earth, where human remains are or have been located.
- **Confidential:** Information that is protected by law, regulation, or federal policy. Preserving authorized restrictions on information access and disclosure, including means for protecting personal privacy and proprietary information
- **Consultation:** The process of seeking, discussing, and considering the views of other participants and, where feasible, seeking agreement with them. A foundational activity in the Section 106 review process.
- **Consulting parties:** Persons or groups the federal agency consults with during the Section 106 process. They may include the State Historic Preservation Officer; Tribal Historic Preservation Officer; Indian Tribes and Native Hawaiian organizations; representatives of local governments; applicants for federal assistance, permits, licenses, and other approvals; and/or any additional consulting parties.<sup>7</sup> Additional consulting parties may include individuals and organizations with a demonstrated interest in the undertaking due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on historic properties.<sup>8</sup>
- **Culturally sensitive:** Tangible and intangible property and knowledge which pertains to the distinct values, beliefs, and ways of living for a culture. It often includes property and knowledge that is not intended to be shared outside the community of origin or outside of specific groups within a community.<sup>9</sup>
- **Disturbance:** Disturbance of burial sites that are listed in or eligible for listing in the National Register of Historic Places likely would constitute an adverse effect under Section 106. An adverse effect occurs when "an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, setting, materials, workmanship, feeling, or association".<sup>10</sup> Determination of what constitutes a "disturbance" should be defined in consultation with proper deference provided to the views and opinions of descendant individuals and/or communities.
- **Funerary objects:** Objects that, as part of the death rite or ceremony of a culture, are reasonably believed to be associated with human remains.
- **Historic property:** Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. It includes artifacts, records, and remains that are related to and located within such properties, and it includes properties of traditional religious and cultural importance to an Indian Tribe or Native Hawaiian organization and that meet the National Register of Historic Places criteria.<sup>11</sup>
- **Human remains:** The physical remains of a human body including cremains, fragmented human remains, hair, and fluid, among other components. When human remains are believed to be comingled with other material (such as soil or faunal), the entire admixture should be treated as human remains.
- **Indian Tribe:** An Indian Tribe, band, nation, or other organized group or community, including a Native village, Regional Corporation or Village Corporation, as those terms are defined in Section 3 of the Alaska Native Claims Settlement Act<sup>12</sup>, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.<sup>13</sup>
- **Indigenous Knowledge (IK):** Information provided by an Indian Tribe, Tribal member, Native Hawaiian, or other Indigenous person uniquely reflective of their knowledge, experience, understanding, or observation relating to cultural resources, practices, or actions. Indigenous Knowledge often constitutes sensitive information.

---

<sup>7</sup> Based on 36 CFR § 800.2(c)

<sup>8</sup> 36 CFR § 800.2(c)(6)

<sup>9</sup> "[Native American Archival Materials](#)," (First Archivist Circle, 2007)

<sup>10</sup> 36 CFR § 800.5(a)(1)

<sup>11</sup> 36 CFR § 800.16(1)

<sup>12</sup> 43 U.S.C. § 1602

<sup>13</sup> 36 CFR § 800.16(m)

- **Native Hawaiian:** Any individual who is a descendant of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the state of Hawaii.<sup>14</sup>
- **Native Hawaiian organization (NHO):** Any organization which serves and represents the interests of Native Hawaiians; has as a primary and stated purpose the provision of services to Native Hawaiians; and has demonstrated expertise in aspects of historic preservation that are significant to Native Hawaiians.<sup>15</sup>
- **Preservation in place:** Taking active steps to avoid disturbing a burial site, human remains, or funerary objects including, to the maximum extent practical, any access, viewsheds, setting, and/or ongoing cultural activity that may be associated with the location.
- **Section 106:** That part of the NHPA which establishes a federal responsibility to take into account the effects of undertakings on historic properties and to provide the ACHP a reasonable opportunity to comment with regard to such action.
- **Sensitive:** Information that may be protected by law, regulation, or federal policy; information that may be identified as sensitive by the sponsoring entity/original source.
- **State Historic Preservation Officer (SHPO):** The official appointed to administer a state's historic preservation program.<sup>16</sup>
- **Tribal Historic Preservation Officer (THPO):** The official appointed or designated to administer the Tribe's historic preservation program.<sup>17</sup>
- **Treatment:** Measures developed and implemented to avoid, minimize, or mitigate adverse effects to historic properties.

---

<sup>14</sup> 36 CFR § 800.16(s)(2)

<sup>15</sup> 36 CFR § 800.16(s)(1)

<sup>16</sup> 54 U.S.C. § 302301

<sup>17</sup> 54 U.S.C. § 302702

## APPENDIX C

### MHC POLICY FOR DISPOSITION OF NON-NATIVE HUMAN REMAINS



**The Commonwealth of Massachusetts**  
William Francis Galvin, Secretary of the Commonwealth  
Massachusetts Historical Commission

**POLICY AND GUIDELINES FOR  
THE DISPOSITION OF  
NON-NATIVE HUMAN REMAINS  
WHICH ARE ONE HUNDRED YEARS OLD OR OLDER**

**INTRODUCTION**

The unmarked burial law requires individuals and entities who discover an unmarked human burial or skeletal remains to cease any activity upon the site which would deface, alter, destroy or otherwise impair the integrity of the site until the State Archaeologist has conducted a site evaluation. G.L. c. 9, ss. 27C (1988 ed.). If the State Archaeologist determines that the remains are American Indian, the final disposition of the remains, after any skeletal analysis, may be reinterred at the discretion of the Commission on Indian Affairs. G.L. c.7, ss. 38(A) (1988 ed.). However, if the remains are non-native and are suspected of being one hundred years old or more, the previous section of the law required that such remains be deposited within a curatorial facility. G.L. c. 26A., ss. (7) (1988 ed.). This section of the law has been amended to provide reinterment as an option for non-native human remains. Specifically, Chapter 386 of the Acts of 1989 altered clause seven (7) of the first paragraph of section 26A of chapter 9 of the General laws by striking the sentence which mandates depositing such remains within a curatorial facility and inserting the following:

The state archaeologist shall determine whether a skeletal analysis of the remains shall be conducted. If he determines that such analysis shall be made after the completion of the said analysis, the state archaeologist shall determine whether the remains shall be deposited in a curatorial facility or reinterred in accordance with the provisions of section forty-three M of chapter one hundred and fourteen. It shall be the responsibility of the person, whose proposed action necessitates the removal of skeletal remains, to conduct and bear the financial costs of said skeletal analysis and reinterment.

Application of this section necessitates the State Archaeologist to make the decision whether such remains will be deposited in a curatorial facility or reinterred. In order to properly take into account all factors for purposes of making such a decision, the Massachusetts Historical Commission hereby implements the following policy:

**POLICY**

**Definitions**

With respect to this policy, the following terms are defined:

*Remains* shall mean the skeletal remains of human non-natives.

*Non-Native* means those who are not of American Indian descent.

*Reinterment* means the reentry of remains into the ground, a tomb or other enclosure for purposes of reburial.

220 Morrissey Boulevard, Boston, Massachusetts 02125  
(617) 727-8470 • Fax: (617) 727-5128  
[www.sec.state.ma.us/mhc](http://www.sec.state.ma.us/mhc)

*Interested Parties* shall include, but not be limited to, those of direct kinship to the deceased, those possessing a cultural, tribal, or religious affiliation, those whose interest stems from a cultural, tribal, or religious affiliation, those whose interest stems from a scientific, environmental, or educational purpose, the owner of the land upon which the burial site is located, and local or state governmental agencies.

### **Statement of Policy**

1. Remains shall be deposited in a curatorial facility unless an interested party files a statement with the State Archaeologist, pursuant to the outlined procedure, requesting that such remains be reinterred.
2. When a request for reinterment is received, the State Archaeologist shall consider all interested parties' views for purposes of issuing a decision as to whether the remains should be curated or reinterred.
3. Where the scientific research value of non-native human remains outweighs any objections that descendants may have to their study such remains will be retained in perpetuity for study in a curatorial facility and will not be reinterred.
4. If it is decided that the remains will be reinterred, the reinterment process should approximate the wishes of the deceased. For purposes of determining the intent of the deceased with respect to the type of reburial, archaeological and historical factors should be evaluated, as well as the methods employed in the original burial.
5. With respect to the reinterment process, the State Archaeologist shall maintain complete records of the archaeological investigation and analysis, the original burial site, and the final burial site.
6. The site chosen for reinterment should be protected from any disturbance to the land as a permanent burial ground or cemetery or by a deed restriction or easement which runs in perpetuity.
7. If it is decided that the remains should be reinterred, the proponent of the project whose action necessitated the removal of such remains shall bear the expense of reinterment.

### **Procedure**

1. *Request for Reinterment:* Interested parties may file a request for reinterment of remains with the State Archaeologist. Such request should be addressed to:

State Archaeologist  
Massachusetts Historical Commission  
220 Morrissey Boulevard  
Boston, MA 02125

Such request should include:

- A. Statement explaining how you qualify as an interested party with respect to the disposition of such remains.
- B. Reasoning as to why such remains should be reinterred.
- C. Specification with respect to the preferred reinterment site and reburial procedures.

2. *Statements Favoring Curation Over Reinterment:* Once a request for reinterment is filed, the State Archaeologist will consider any statements from interested parties which favor curation of such remains, as opposed to reinterment. Such statements should contain:

- A. Statement explaining how you qualify as an interested party with respect to the disposition of such remains.

B. Reasoning as to why such remains should be curated.

C. Specification as to which curatorial facility the remains should be deposited.

3. *State Archaeologist's Decision to Reinter or Curate:* In response to a request for interment, the State Archaeologist shall consider the following factors in rendering a decision with respect to either curation or reinterment of the remains:

A. Scientific and research value of such remains.

B. The completeness and adequacy of the analysis of the remains.

C. The public interest.

D. If reinterment, the appropriateness of the proposed burial site and procedures.

The State Archaeologist shall issue a written finding to all participating interested parties within sixty (60) days of receipt of a request for reinterment.

4. *Appeal Process:* Any interested party may appeal the decision of the State Archaeologist to the full Massachusetts Historical Commission by filing an appeal within thirty (30) days of the State Archaeologist's finding. Appeals should be addressed to:

Executive Director  
Massachusetts Historical Commission  
220 Morrissey Boulevard  
Boston, MA 02125

Such appeal will be discussed at the next meeting of the Massachusetts Historical Commission (Commission). The petitioner will be notified of the time and place of such meeting so that he or she has the opportunity to present arguments.

Once an appeal is filed, no action will be taken by the State Archaeologist with respect to the disposition of the remains until the Commission has rendered a decision on the appeal.

The Commission shall make its decision on the appeal within ninety (90) days of the Commission meeting.

2/14/90

## APPENDIX D

### NEW ENGLAND WIND PHASE 1 ARCHAEOLOGICAL SENSITIVITY MAPS



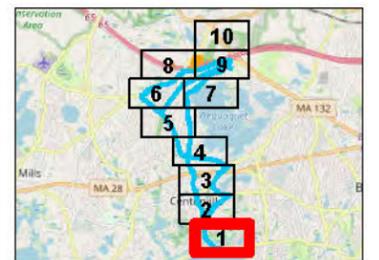
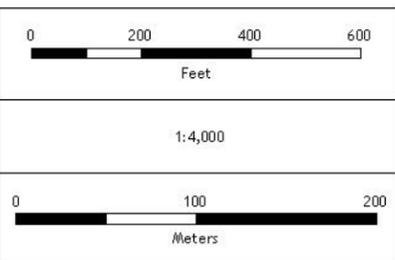
**New England Wind Phase 1  
 (Park City Wind)/New England Wind Connector 1  
 Barnstable, Massachusetts**

<b>PAL</b>	
PAL: due diligence / assessment	5-22-2020
Epsilon: routes and parcels	4-20-2020
Basemap: USGS via ArcGIS Online	various

PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
 THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

**KEY:**

Existing West Barnstable Substation	<b>Archaeological Assessment:</b>
High Sensitivity - Monitoring Required	Moderate Sensitivity - Monitoring Required
Low Sensitivity - No Monitoring Required	Areas Archaeologically Tested - No Monitoring Required



**Appendix D-1. New England Wind Phase 1 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

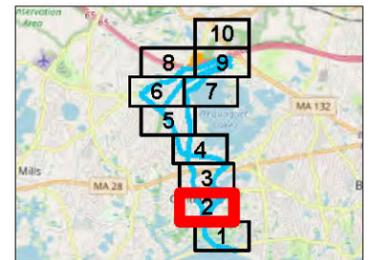
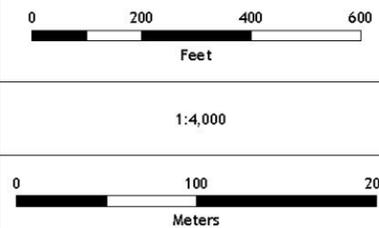


**New England Wind Phase 1  
 (Park City Wind)/New England Wind Connector 1  
 Barnstable, Massachusetts**

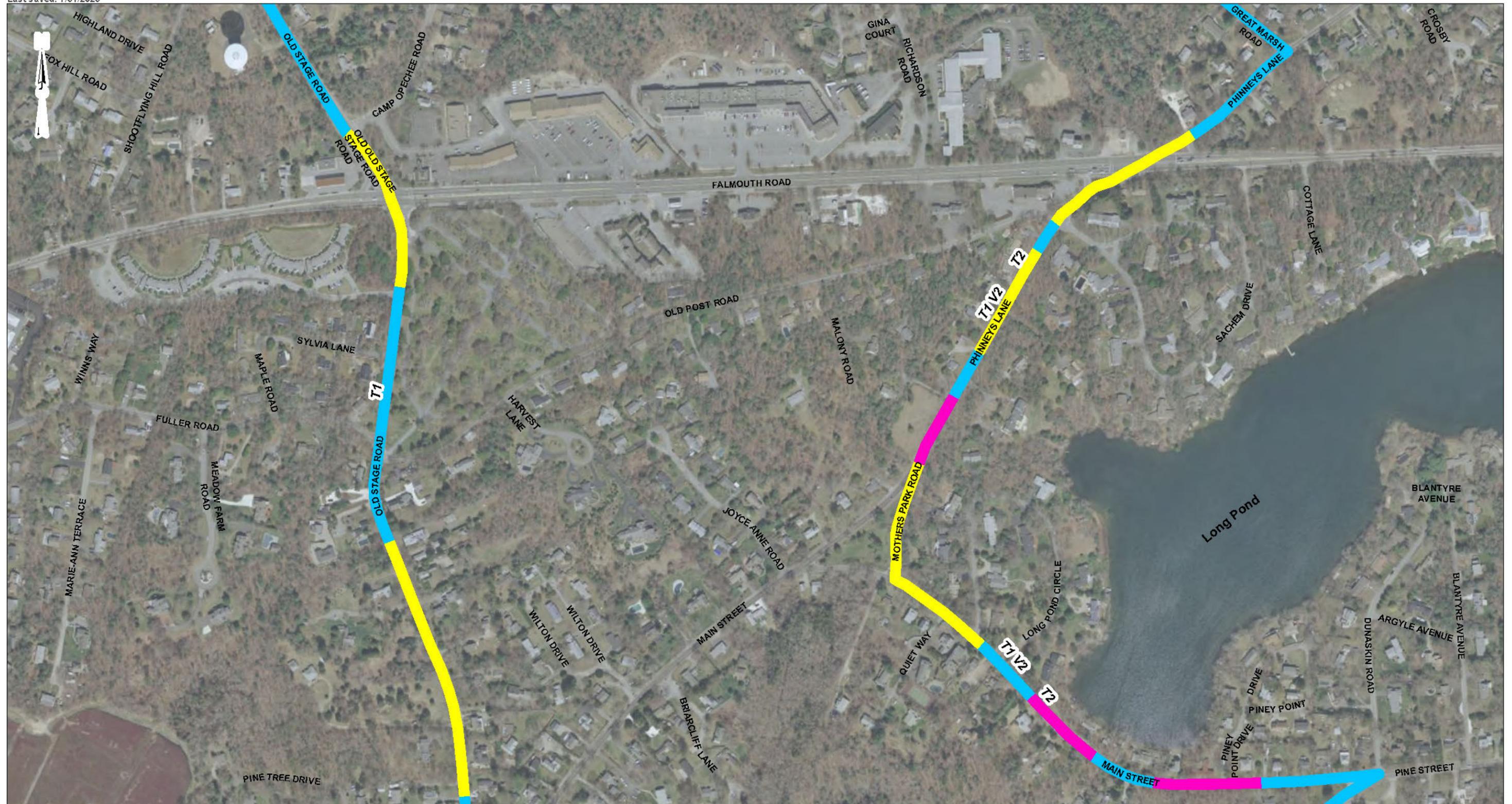
	PAL: due diligence / assessment	5-22-2020
	Epsilon: routes and parcels	4-20-2020
	Basemap: USGS via ArcGIS Online	various

PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
 THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY

- KEY:**
- Existing West Barnstable Substation
  - Archaeological Assessment:**
  - High Sensitivity - Monitoring Required
  - Moderate Sensitivity - Monitoring Required
  - Low Sensitivity - No Monitoring Required
  - Areas Archaeologically Tested - No Monitoring Required

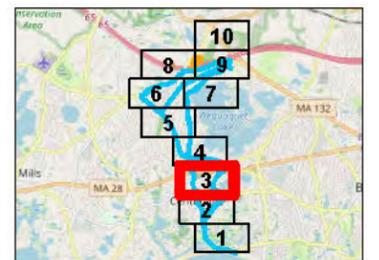
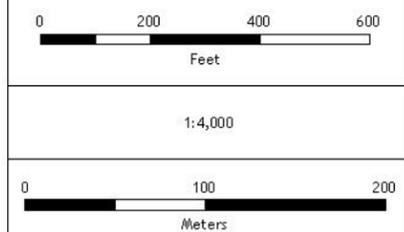


**Appendix D-2. New England Wind Phase 1 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**



	PAL: due diligence / assessment	5-22-2020
	Epsilon: routes and parcels	4-20-2020
	Basemap: USGS via ArcGIS Online	various
PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL. THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.		

<b>KEY:</b>	Existing West Barnstable Substation	Archaeological Assessment:
		High Sensitivity - Monitoring Required
		Moderate Sensitivity - Monitoring Required
		Low Sensitivity - No Monitoring Required
		Areas Archaeologically Tested - No Monitoring Required



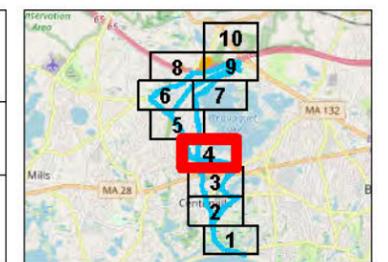
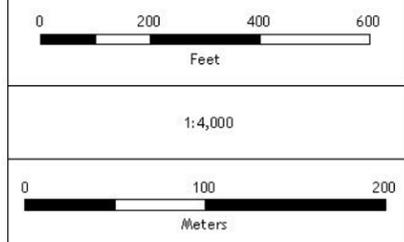
**Appendix D-3. New England Wind Phase 1 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(26), subclauses (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).



	PAL: due diligence / assessment	5-22-2020
	Epsilon: routes and parcels	4-20-2020
	Basemap: USGS via ArcGIS Online	various
PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL. THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.		

- KEY:**
- Existing West Barnstable Substation
  - Archaeological Assessment: High Sensitivity - Monitoring Required
  - Moderate Sensitivity - Monitoring Required
  - Low Sensitivity - No Monitoring Required
  - Areas Archaeologically Tested - No Monitoring Required

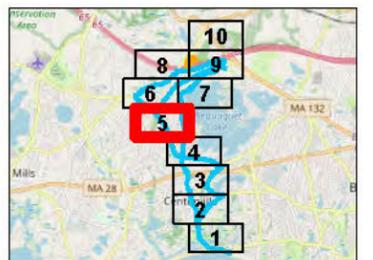
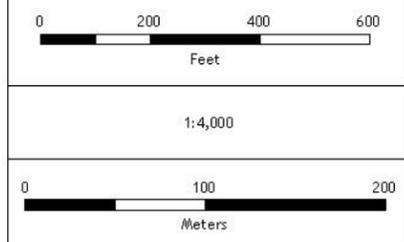


**Appendix D-4. New England Wind Phase 1 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**



PAL: due diligence / assessment	5-22-2020
Epsilon: routes and parcels	4-20-2020
Basemap: USGS via ArcGIS Online	various
PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL. THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.	

- KEY:**
- Existing West Barnstable Substation
  - Archaeological Assessment: High Sensitivity - Monitoring Required
  - Moderate Sensitivity - Monitoring Required
  - Low Sensitivity - No Monitoring Required
  - Areas Archaeologically Tested - No Monitoring Required



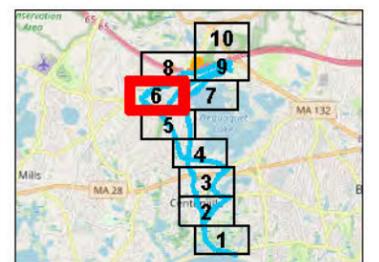
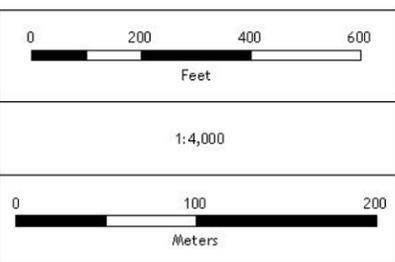
**Appendix D-5. New England Wind Phase 1 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**



	PAL: due diligence / assessment	5-22-2020
	Epsilon: routes and parcels	4-20-2020
	Basemap: USGS via ArcGIS Online	various
	PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL. THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.	

**KEY:**

Existing West Barnstable Substation	Archaeological Assessment:
High Sensitivity - Monitoring Required	Moderate Sensitivity - Monitoring Required
Low Sensitivity - No Monitoring Required	Areas Archaeologically Tested - No Monitoring Required

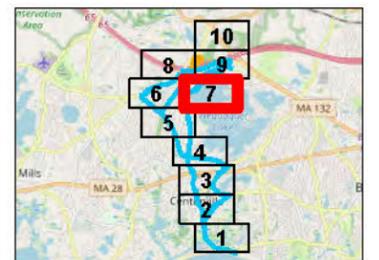
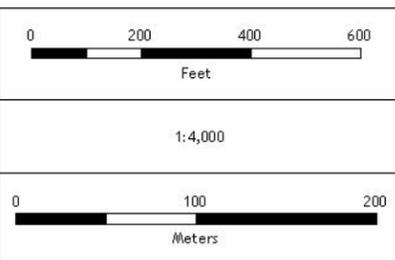


**Appendix D-6. New England Wind Phase 1 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**



<b>New England Wind Phase 1 (Park City Wind)/New England Wind Connector 1 Barnstable, Massachusetts</b>	
PAL: due diligence / assessment	5-22-2020
Epsilon: routes and parcels	4-20-2020
Basemap: USGS via ArcGIS Online	various
<small>PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.                  THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.</small>	

<b>KEY:</b>	Archaeological Assessment:
Existing West Barnstable Substation	High Sensitivity - Monitoring Required
	Moderate Sensitivity - Monitoring Required
	Low Sensitivity - No Monitoring Required
	Areas Archaeologically Tested - No Monitoring Required



**Appendix D-7. New England Wind Phase 1 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**



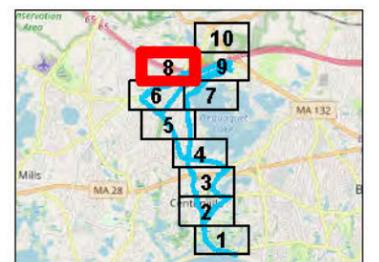
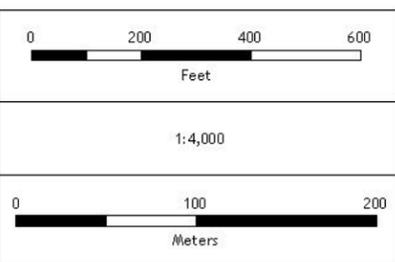
**New England Wind Phase 1  
 (Park City Wind)/New England Wind Connector 1  
 Barnstable, Massachusetts**

PAL: due diligence / assessment	5-22-2020
Epsilon: routes and parcels	4-20-2020
Basemap: USGS via ArcGIS Online	various

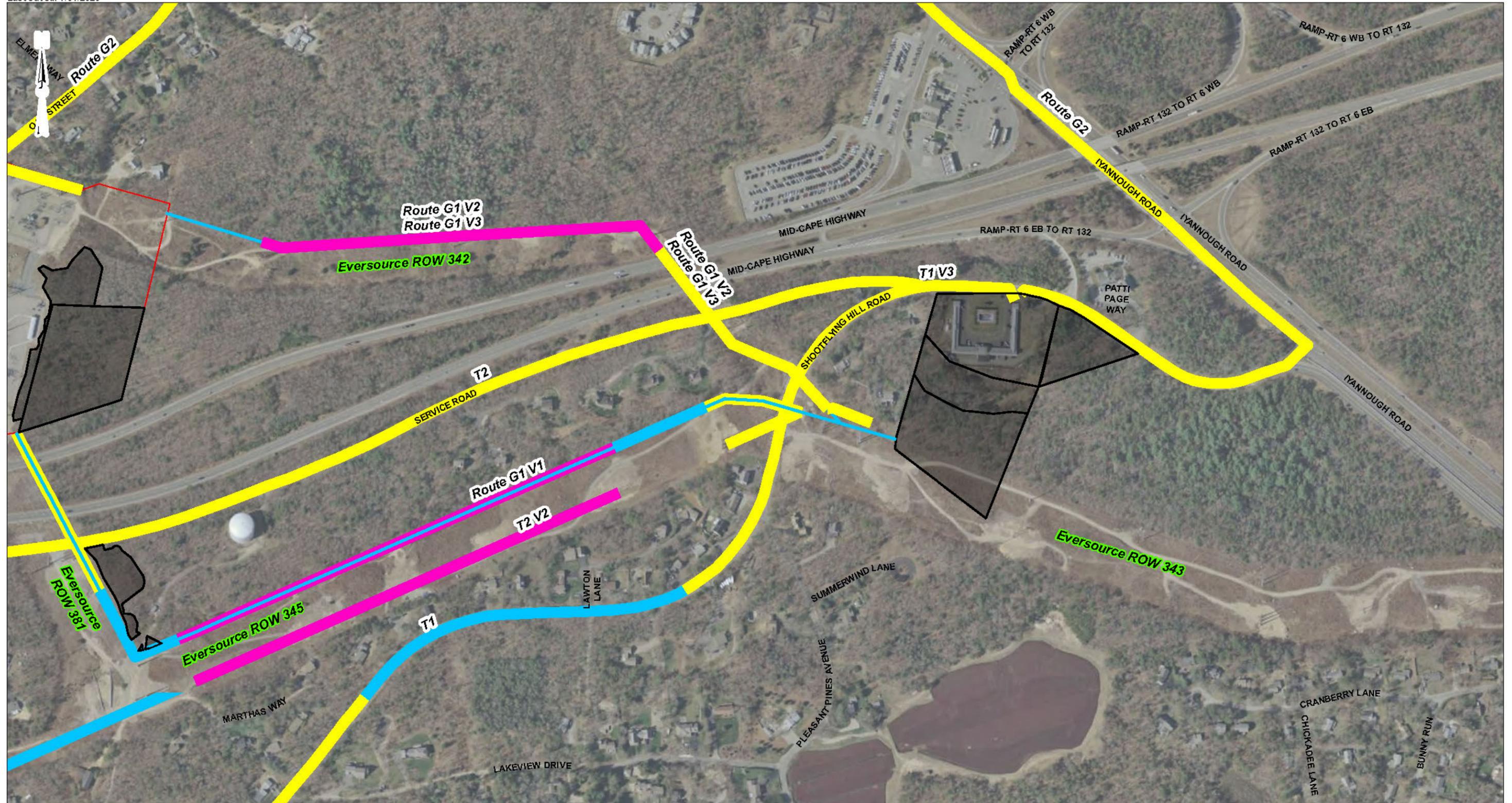
PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
 THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

**KEY:**

Existing West Barnstable Substation	<b>Archaeological Assessment:</b>
High Sensitivity - Monitoring Required	Moderate Sensitivity - Monitoring Required
Low Sensitivity - No Monitoring Required	Areas Archaeologically Tested - No Monitoring Required



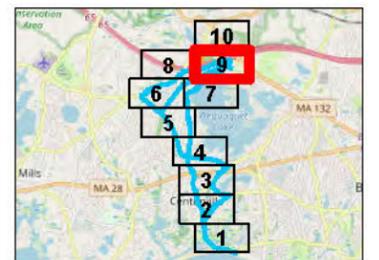
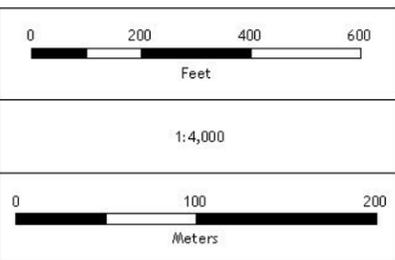
**Appendix D-8. New England Wind Phase 1 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**



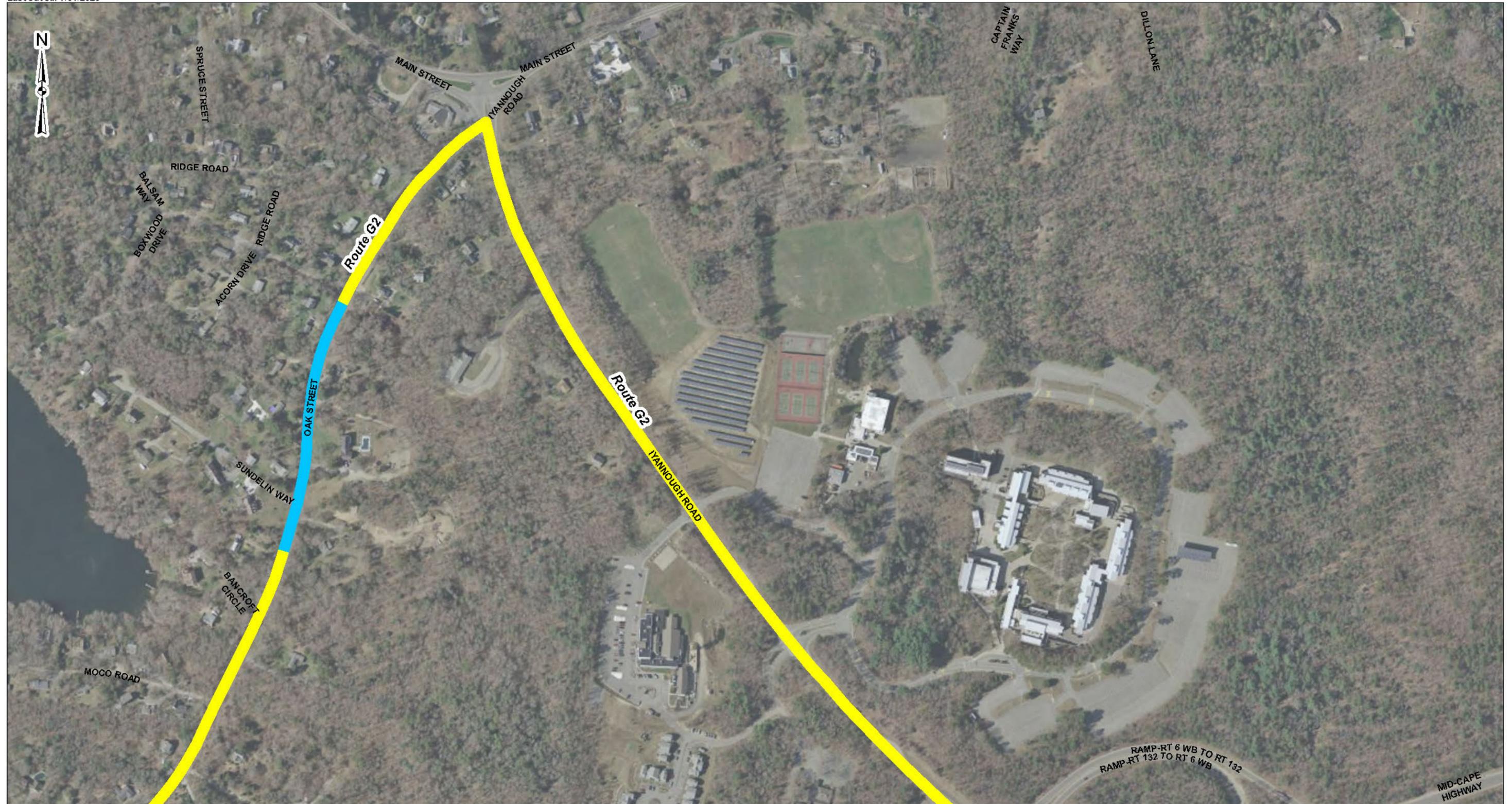
PAL: due diligence / assessment	5-22-2020
Epsilon: routes and parcels	4-20-2020
Basemap: USGS via ArcGIS Online	various
PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL. THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.	

**KEY:**

Existing West Barnstable Substation	Archaeological Assessment:
High Sensitivity - Monitoring Required	Moderate Sensitivity - Monitoring Required
Low Sensitivity - No Monitoring Required	Areas Archaeologically Tested - No Monitoring Required

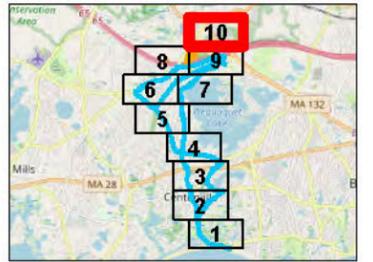
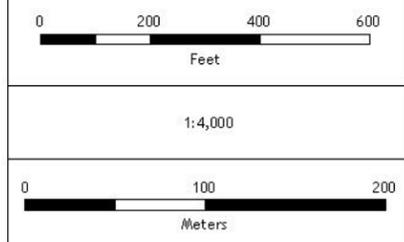


**Appendix D-9. New England Wind Phase 1 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**



<b>New England Wind Phase 1 (Park City Wind)/New England Wind Connector 1 Barnstable, Massachusetts</b>	
PAL: due diligence / assessment	5-22-2020
Epsilon: routes and parcels	4-20-2020
Basemap: USGS via ArcGIS Online	various
<small>PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.                  THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.</small>	

- KEY:**
- Existing West Barnstable Substation
  - Archaeological Assessment: High Sensitivity - Monitoring Required
  - Moderate Sensitivity - Monitoring Required
  - Low Sensitivity - No Monitoring Required
  - Areas Archaeologically Tested - No Monitoring Required



**Appendix D-10. New England Wind Phase 1 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

## APPENDIX E

### NEW ENGLAND WIND PHASE 2 ARCHAEOLOGICAL SENSITIVITY MAPS

This page is intentionally blank.



G:\Projects\3784.01 Vineyard Wind 501 South\Production\Mapping\Maps GIS\Monitoring Memo Phase 2 Sensitivity.mxd | Last saved: 10/5/2023

**New England Wind Phase 2  
(Commonwealth Wind)/New England Wind 2 Connector  
Barnstable, Massachusetts**

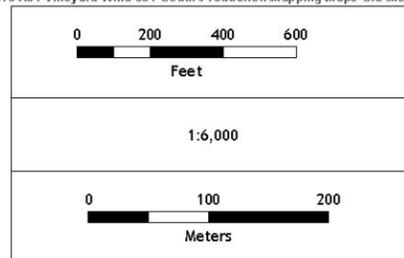
	PAL: due diligence / assessment	12-13-2021
	Epsilon: routes and parcels	12-6-2021
	Basemap: MassGIS	2019

PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY

Onshore Export Cable HDD Route

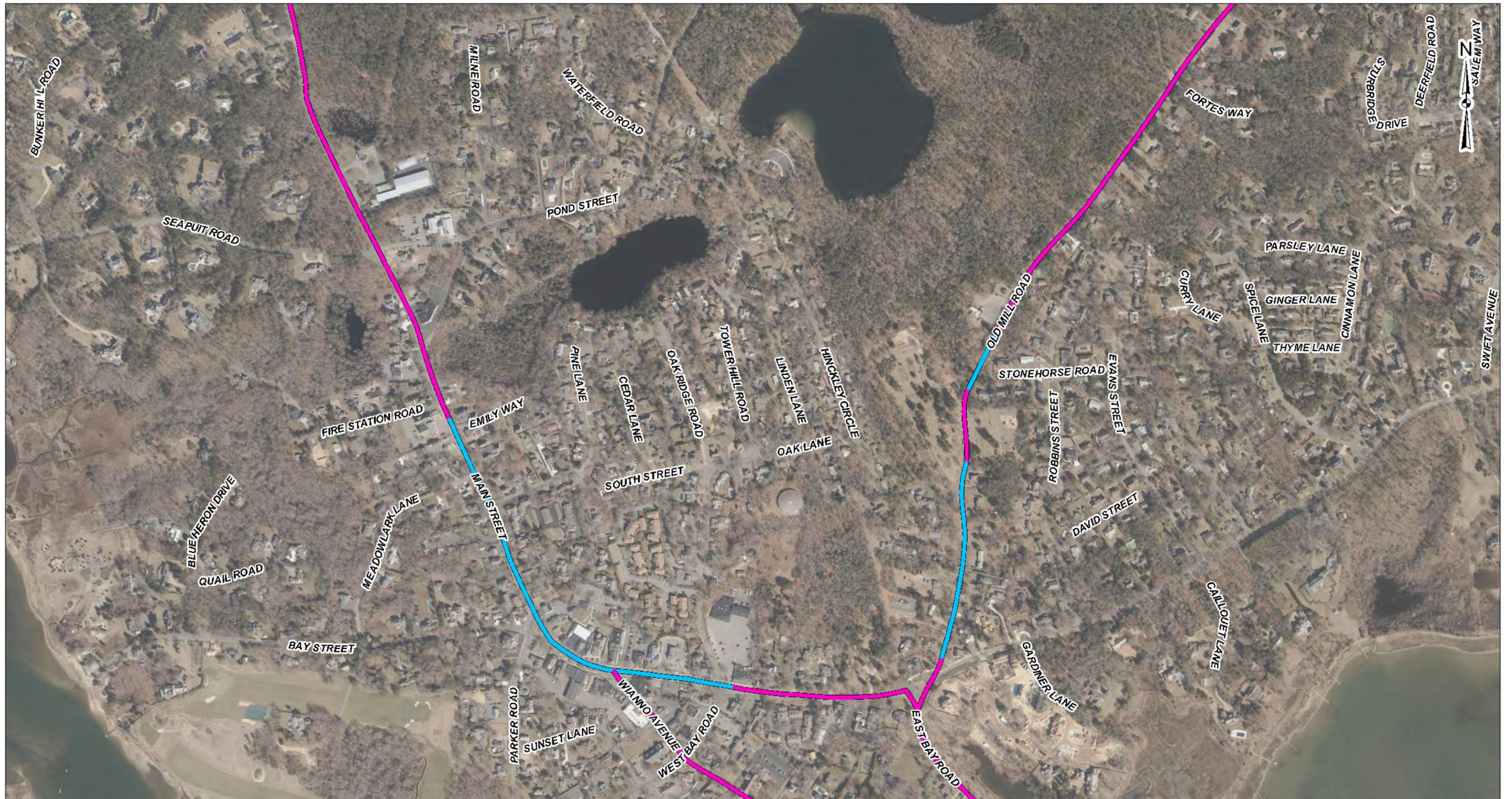
Archaeological Assessment:

- High Sensitivity - Monitoring Required
- Moderate Sensitivity - Monitoring Required
- Low Sensitivity - No Monitoring Required
- Areas Archaeologically Tested - No Monitoring Required



**Appendix E-1. New England Wind Phase 2 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(26), subclauses (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).



G:\Projects\3784.01 Vineyard Wind 501 South\Production\Maping\Maps GIS\Monitoring Memo Phase 2 Sensitivity.mxd | Last saved: 7/31/2023

**New England Wind Phase 2  
(Commonwealth Wind)/New England Wind 2 Connector  
Barnstable, Massachusetts**

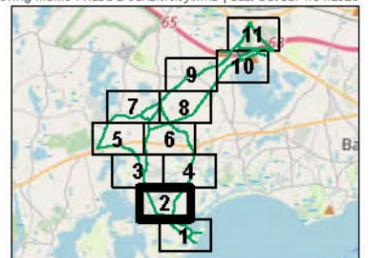
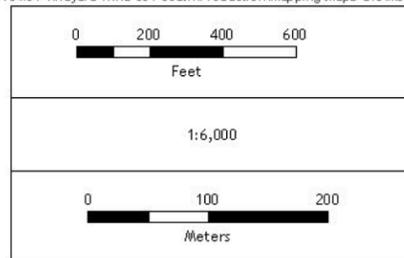
<b>PAL</b>	
PAL: due diligence / assessment	12-13-2021
Epsilon: routes and parcels	12-6-2021
Basemap: MassGIS	2019

PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

--- Onshore Export Cable HDD Route

Archaeological Assessment:

- █ High Sensitivity - Monitoring Required
- █ Moderate Sensitivity - Monitoring Required
- █ Low Sensitivity - No Monitoring Required
- Areas Archaeologically Tested - No Monitoring Required



**Appendix E-2. New England Wind Phase 2 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(26), subclauses (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).



G:\Projects\3784.01 Vineyard Wind 501 South\Production\Maping\Maps GIS\Monitoring Memo Phase 2 Sensitivity.mxd | Last saved: 7/31/2023

**New England Wind Phase 2  
(Commonwealth Wind)/New England Wind 2 Connector  
Barnstable, Massachusetts**

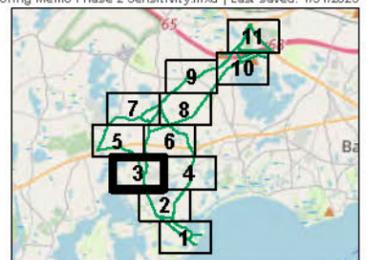
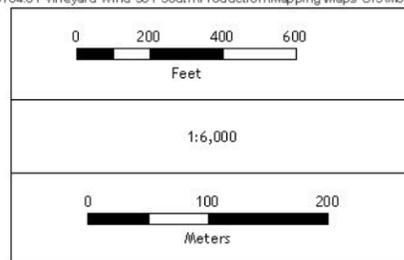
<b>PAL</b>	
PAL: due diligence / assessment	12-13-2021
Epsilon: routes and parcels	12-6-2021
Basemap: MassGIS	2019

PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

▬ Onshore Export Cable HDD Route

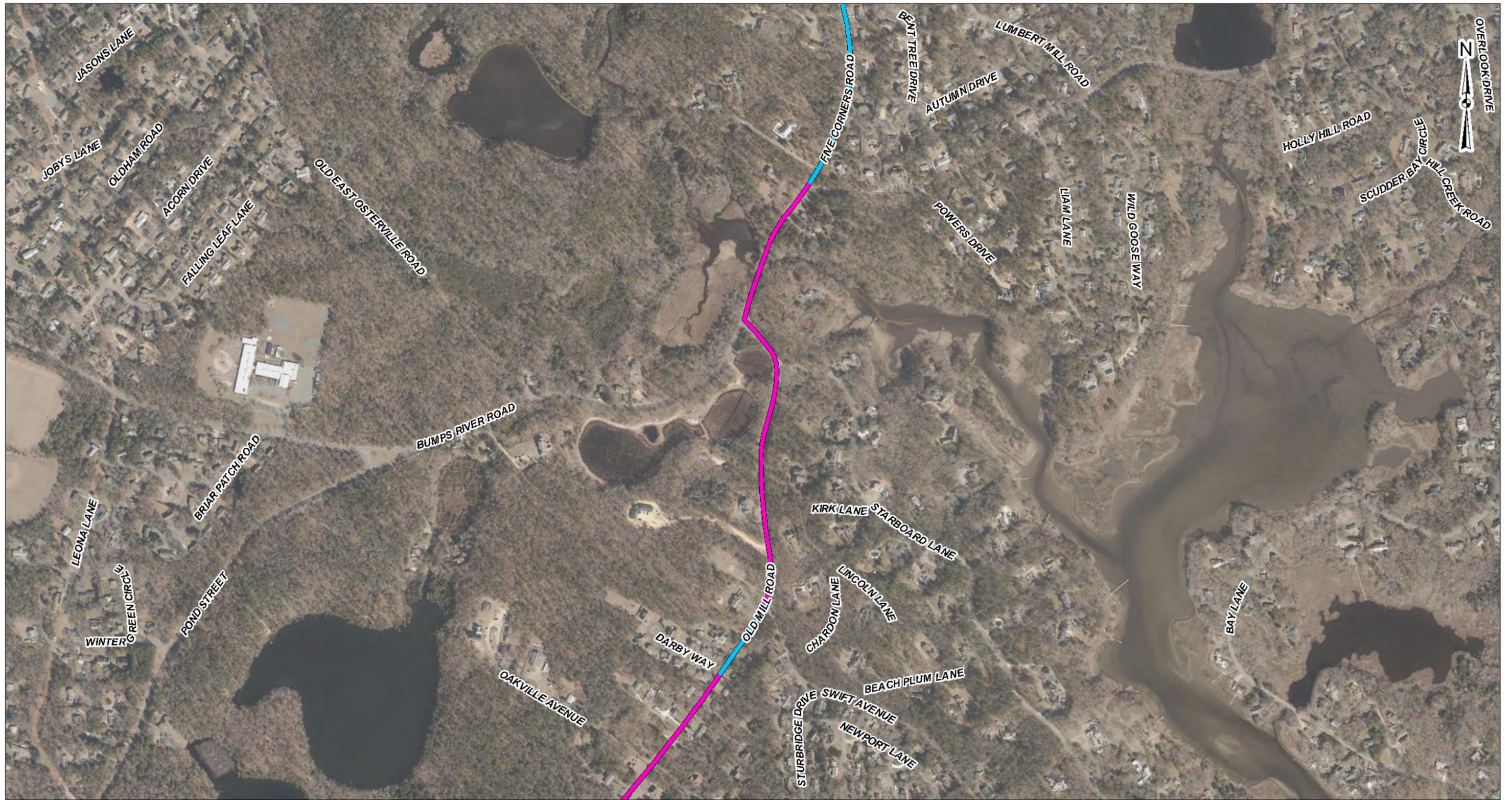
Archaeological Assessment:

- █ High Sensitivity - Monitoring Required
- █ Moderate Sensitivity - Monitoring Required
- █ Low Sensitivity - No Monitoring Required
- Areas Archaeologically Tested - No Monitoring Required



**Appendix E-3. New England Wind Phase 2 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(26), subclauses (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).



G:\Projects\3784.01 Vineyard Wind 501 South\Production\Maping\Maps GIS\Monitoring Memo Phase 2 Sensitivity.mxd | Last saved: 7/31/2023

**New England Wind Phase 2  
(Commonwealth Wind)/New England Wind 2 Connector  
Barnstable, Massachusetts**

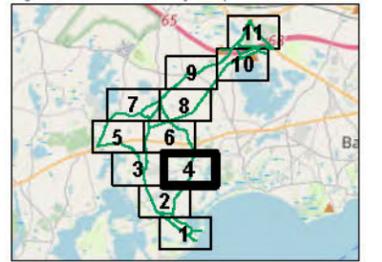
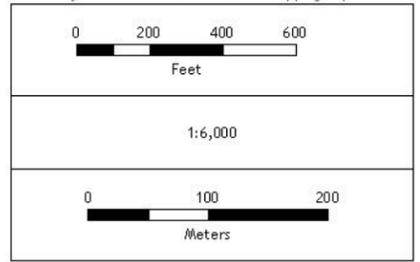
<b>PAL</b>	
PAL: due diligence / assessment	12-13-2021
Epsilon: routes and parcels	12-6-2021
Basemap: MassGIS	2019

PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

▬ Onshore Export Cable HDD Route

Archaeological Assessment:

- █ High Sensitivity - Monitoring Required
- █ Moderate Sensitivity - Monitoring Required
- █ Low Sensitivity - No Monitoring Required
- Areas Archaeologically Tested - No Monitoring Required



**Appendix E-4. New England Wind Phase 2 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(26), subclauses (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).



G:\Projects\3784.01 Vineyard Wind 501 South\Production\Maping\Maps GIS\Monitoring Memo Phase 2 Sensitivity.mxd | Last saved: 7/31/2023

**New England Wind Phase 2  
(Commonwealth Wind)/New England Wind 2 Connector  
Barnstable, Massachusetts**

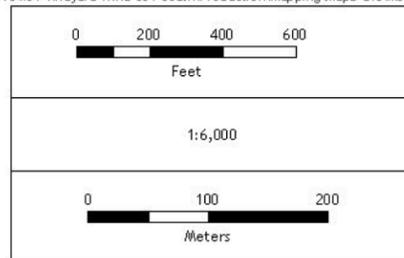
PAL: due diligence / assessment	12-13-2021
Epsilon: routes and parcels	12-6-2021
Basemap: MassGIS	2019

PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

Onshore Export Cable HDD Route

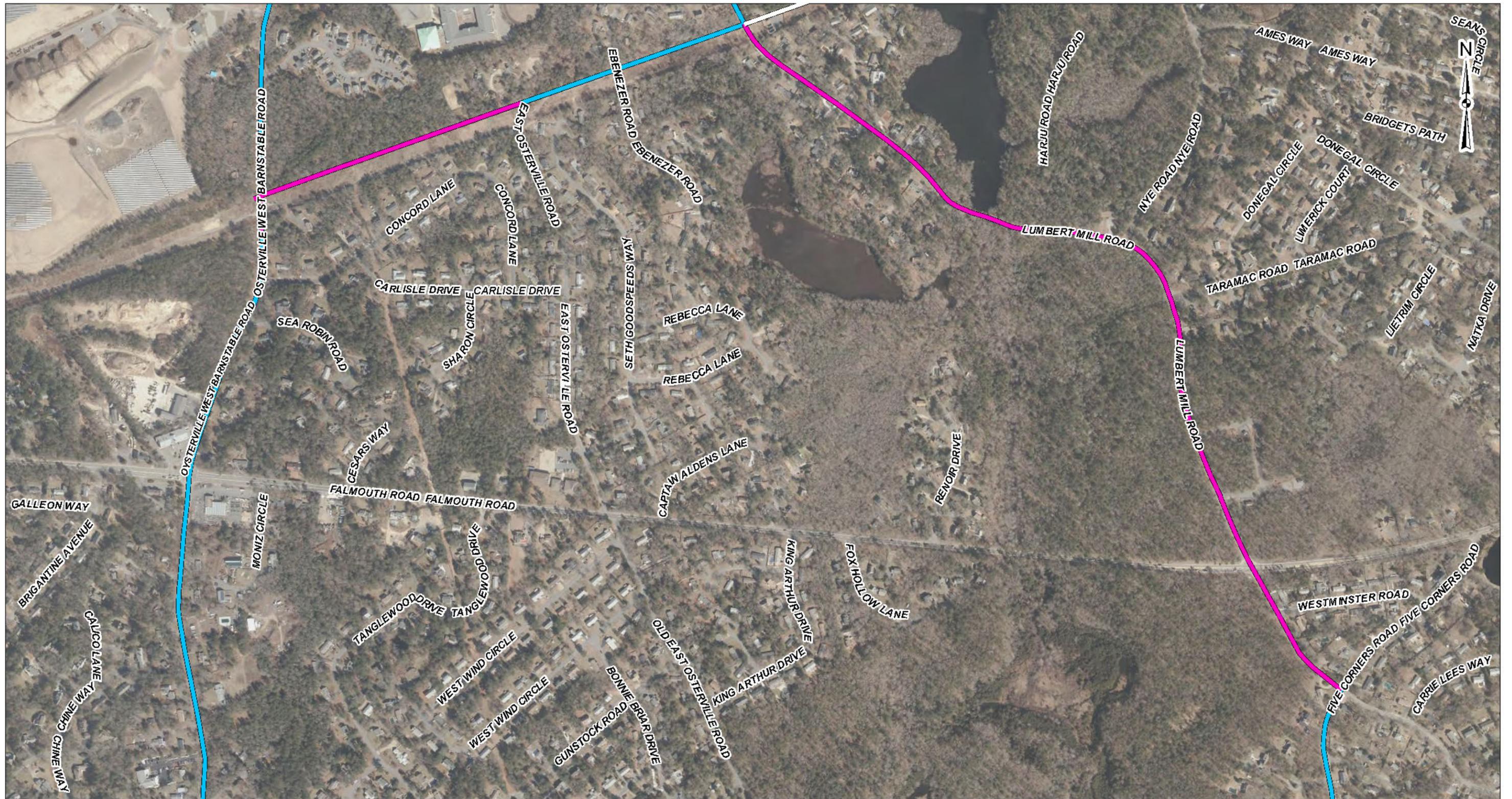
Archaeological Assessment:

- High Sensitivity - Monitoring Required
- Moderate Sensitivity - Monitoring Required
- Low Sensitivity - No Monitoring Required
- Areas Archaeologically Tested - No Monitoring Required



**Appendix E-5. New England Wind Phase 2 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(26), subclauses (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).



G:\Projects\3784.01 Vineyard Wind 501 South\Production\Mapping\Maps GIS\Monitoring Memo Phase 2 Sensitivity.mxd | Last saved: 7/31/2023

**New England Wind Phase 2  
(Commonwealth Wind)/New England Wind 2 Connector  
Barnstable, Massachusetts**

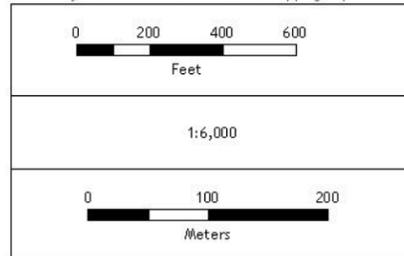
<b>PAL</b>	
PAL: due diligence / assessment	12-13-2021
Epsilon: routes and parcels	12-6-2021
Basemap: MassGIS	2019

PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

▬ Onshore Export Cable HDD Route

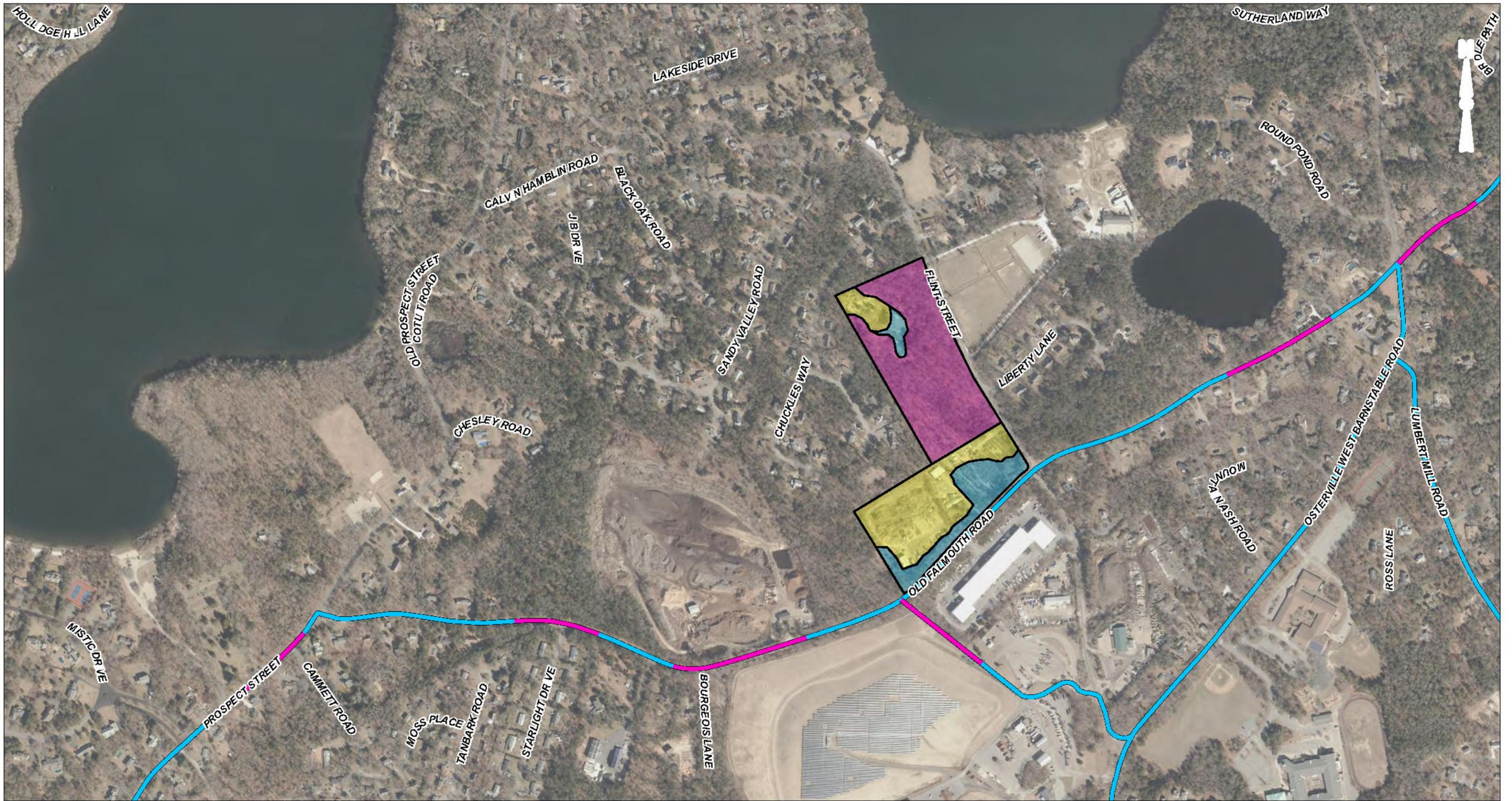
Archaeological Assessment:

- █ High Sensitivity - Monitoring Required
- █ Moderate Sensitivity - Monitoring Required
- █ Low Sensitivity - No Monitoring Required
- Areas Archaeologically Tested - No Monitoring Required



**Appendix E-6. New England Wind Phase 2 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(26), subclauses (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).



G:\Projects\3784.01 Vineyard Wind 501 South\Production\Mapping\Maps GIS\Monitoring Memo Phase 2 Sensitivity.mxd | Last saved: 7/31/2023

**New England Wind Phase 2  
(Commonwealth Wind)/New England Wind 2 Connector  
Barnstable, Massachusetts**

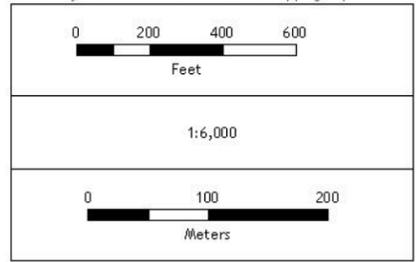
<b>PAL</b>	
PAL: due diligence / assessment	12-13-2021
Epsilon: routes and parcels	12-6-2021
Base map: MassGIS	2019

PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

**Onshore Export Cable HDD Route**

**Archaeological Assessment:**

- █ High Sensitivity - Monitoring Required
- █ Moderate Sensitivity - Monitoring Required
- █ Low Sensitivity - No Monitoring Required
- █ Areas Archaeologically Tested - No Monitoring Required



**Appendix E-7. New England Wind Phase 2 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(26), subclauses (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).



**New England Wind Phase 2  
(Commonwealth Wind)/New England Wind 2 Connector  
Barnstable, Massachusetts**

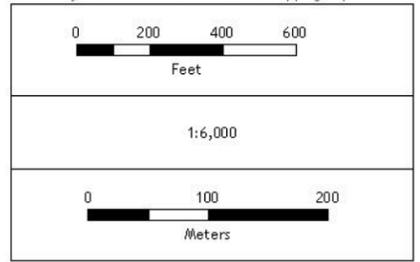
<b>PAL</b>	
PAL: due diligence / assessment	12-13-2021
Epsilon: routes and parcels	12-6-2021
Basemap: MassGIS	2019

PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

**Onshore Export Cable HDD Route**

**Archaeological Assessment:**

- █ High Sensitivity - Monitoring Required
- █ Moderate Sensitivity - Monitoring Required
- █ Low Sensitivity - No Monitoring Required
- Areas Archaeologically Tested - No Monitoring Required



**Appendix E-8. New England Wind Phase 2 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(26), subclauses (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).





G:\Projects\3784.01 Vineyard Wind 501 South\Production\Mapping\Maps GIS\Monitoring Memo Phase 2 Sensitivity.mxd | Last saved: 8/1/2023

**New England Wind Phase 2  
(Commonwealth Wind)/New England Wind 2 Connector  
Barnstable, Massachusetts**

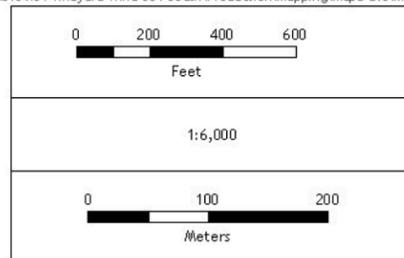
<b>PAL</b>	
PAL: due diligence / assessment	12-13-2021
Epsilon: routes and parcels	12-6-2021
Basemap: MassGIS	2019

PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

Onshore Export Cable HDD Route

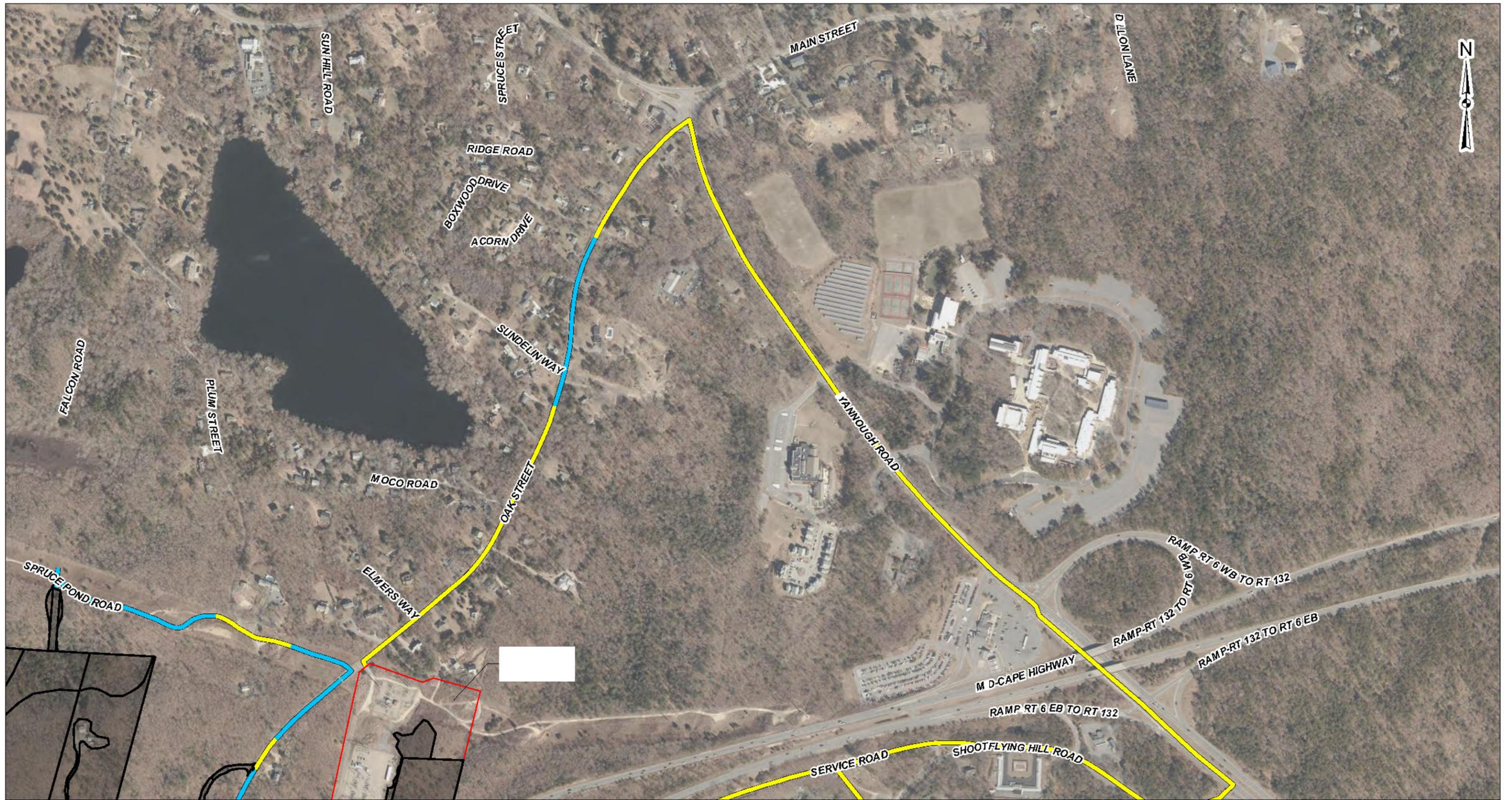
Archaeological Assessment:

- High Sensitivity - Monitoring Required
- Moderate Sensitivity - Monitoring Required
- Low Sensitivity - No Monitoring Required
- Areas Archaeologically Tested - No Monitoring Required



**Appendix E-10. New England Wind Phase 2 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(26), subclauses (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).



G:\Projects\3784.01 Vineyard Wind 501 South\Production\Mapping\Maps GIS\Monitoring Memo Phase 2 Sensitivity.mxd | Last saved: 8/1/2023

**New England Wind Phase 2  
(Commonwealth Wind)/New England Wind 2 Connector  
Barnstable, Massachusetts**

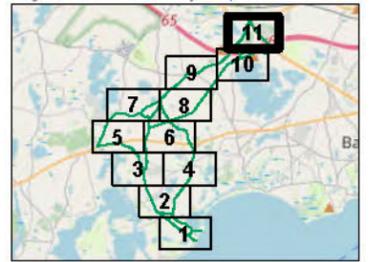
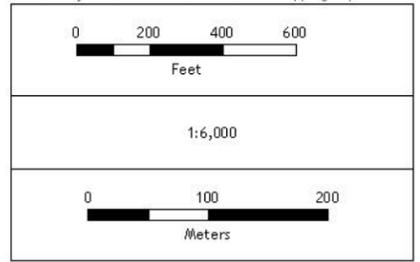
<b>PAL</b>	
PAL: due diligence / assessment	12-13-2021
Epsilon: routes and parcels	12-6-2021
Basemap: MassGIS	2019

PAL makes no warranties, either expressed or implied, regarding the fitness or suitability of this map for any other purpose than to depict the results of cultural resource investigations conducted by PAL.  
THIS MAP IS INTENDED FOR PLANNING PURPOSES ONLY.

— Onshore Export Cable HDD Route

**Archaeological Assessment:**

- █ High Sensitivity - Monitoring Required
- █ Moderate Sensitivity - Monitoring Required
- █ Low Sensitivity - No Monitoring Required
- Areas Archaeologically Tested - No Monitoring Required



**Appendix E-11. New England Wind Phase 2 Potential Onshore Export Cable Routes with Archaeological Sensitivity.**

Confidential Business Information. Not subject to disclosure under the Federal Freedom of Information Act, the Massachusetts Public Records Law pursuant to M.G.L. c. 4 §7(26), subclauses (d) and (g), and the Rhode Island Access to Public Records Act, R.I.G.L. §38-2, pursuant to Section 38-2-2(4)(B),(F) and (K).

This page is intentionally blank.

ATTACHMENT 14 – NEW ENGLAND WIND MITIGATION FUNDING OPTIONS

This page is intentionally blank.

## MITIGATION FUNDING AMOUNTS PROPOSED BY THE LESSEE FOR NEW ENGLAND WIND PROJECT<sup>1</sup>

The mitigation measures proposed in the individual HPTPs have been developed by individuals who meet the qualifications specified in the SOI's Qualifications Standards for Archeology, History, Architectural History, and/or Architecture (36 CFR 61). The proposed mitigation measures consider the nature, scope, and magnitude of adverse effects caused by the Project, and the qualifying characteristics of each historic property that would be affected. The following funding amounts were identified by the Lessee to execute the proposed mitigation measures. These budgets are good faith estimates, based on the experience of qualified consultants with similar activities and comparable historic properties. The proposed level of funding is appropriate to accomplish the identified preservation goals and result in meaningful benefits to the affected properties, resolving adverse effects. In addition to the funding outlined below, the Lessee will provide reasonable compensation, if requested by a Tribal Nation, for participation in the implementation of the HPTPs.

- \$1,800,000 for mitigation measures proposed by the Lessee and required by BOEM for mitigation to resolve adverse effects at the 49 SALs and Nantucket Sound TCP. This funding amount assumes unavoidable adverse effects to 49 SALs. However, the Lessee may be able to avoid adverse effects to some, and potentially all, of the SALs.
- \$500,000 proposed by the Lessee and required by BOEM for mitigation to resolve adverse effects at the Vineyard Sound and Moshup's Bridge TCP
- \$200,000 proposed by the Lessee and required by BOEM for mitigation to resolve adverse effects at the Edwin Vanderhoop Homestead and Gay Head-Aquinnah Shops Area
- \$200,000 proposed by the Lessee and required by BOEM for mitigation to resolve adverse effects at the Chappaquiddick Island TCP
- \$200,000 proposed by the Lessee and required by BOEM for mitigation to resolve adverse effects at the Gay Head Lighthouse

---

<sup>1</sup> The funding amounts presented are the totals for both phases of New England Wind. Distribution of the funding (including the schedule for distribution) will be dependent on financial close for each phase of New England Wind. If that portion of Lease OCS-A 0534 Phase 2 occupies is assigned and segregated in accordance with 30 CFR § 585.408 – 411 to an affiliated legal entity (the Assignee), the Assignee will be responsible for 60% of the funding amounts presented in this attachment.

This page is intentionally blank.

## ATTACHMENT J-2: ENTITIES INVITED TO BE CONSULTING PARTIES

The following is a list of governments and organizations that BOEM contacted and invited to be a consulting party to the NHPA Section 106 review of the New England Wind Project (formerly Vineyard Wind South) between June 2021 and April 2022. During the consultations, additional parties were made known to BOEM and were added as they were identified (Attachment J-3). All counties and municipalities listed below are in Massachusetts unless otherwise specified.

- Advisory Council on Historic Preservation (ACHP)
- Alliance to Protect Nantucket Sound
- Avangrid
- Bureau of Safety and Environmental Enforcement
- Cape Cod Commission
- Non-federally recognized historic Massachusetts Chappaquiddick Tribe of the Wampanoag Nation
- City of New Bedford
- City of Fall River
- Connecticut Department of Economic and Community Development, State Historic Preservation Office
- County of Barnstable
- County of Bristol
- County of Dukes
- Cultural Heritage Partners
- The Delaware Nation
- Delaware Tribe of Indians
- Gay Head Lighthouse Advisory Board
- Historic District Commission (Nantucket)
- Maria Mitchell Association (Dark Skies Initiative)
- Martha's Vineyard Commission
- Mashantucket (Western) Pequot Tribal Nation
- Mashpee Wampanoag Tribe of Massachusetts
- Massachusetts Board of Underwater Archaeological Resources
- Massachusetts Commission on Indian Affairs
- Massachusetts Historical Commission
- Mohegan Tribe of Indians of Connecticut
- Nantucket Conservation Foundation
- Nantucket Historical Association
- Nantucket Historical Commission
- Nantucket Planning Commission
- Nantucket Preservation Trust
- Narragansett Indian Tribe
- National Oceanic and Atmospheric Administration, Habitat and Ecosystem Services Division
- National Park Service
- Office of the Deputy Assistant Secretary of the Navy for Environment
- Preservation Massachusetts
- Rhode Island Historical Preservation & Heritage Commission
- The Shinnecock Indian Nation
- Town of Aquinnah
- Town of Barnstable
- Town of Barnstable Historical Commission
- Town of Chilmark
- Town of Dartmouth
- Town of Dighton
- Town of Edgartown
- Town of Fairhaven
- Town of Falmouth

- Town of Gosnold
- Town of Nantucket
- Town of Oak Bluffs
- Town of Tisbury
- Town of West Tisbury
- Town and County of Nantucket (via their counsel)
- Trustees, Martha's Vineyard and Nantucket
- U.S. Environmental Protection Agency
- U.S. Federal Aviation Administration
- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers
- U.S. Coast Guard
- U.S. Department of Defense
- Vineyard Power Cooperative
- Vineyard Wind
- Wampanoag Tribe of Gay Head (Aquinnah)

### **ATTACHMENT J-3: CONSULTING PARTIES TO THE NEW ENGLAND WIND PROJECT**

The following is a current list of consulting parties to the NHPA Section 106 review of the New England Wind Project, as of April 22, 2022.

- Advisory Council on Historic Preservation (ACHP)
- Alliance to Protect Nantucket Sound
- Bureau of Safety and Environmental Enforcement
- Cape Cod Commission
- Chappaquiddick Tribe of Wampanoag Nation
- Connecticut State Historic Preservation Office\*
- County of Dukes
- County of Bristol
- The Delaware Nation
- Delaware Tribe of Indians (withdrew August 21, 2023)
- Gay Head Lighthouse Advisory Board
- Maria Mitchell Association (Dark Skies Initiative) (withdrew August 27, 2020)
- Martha's Vineyard Commission
- Mashantucket (Western) Pequot Tribal Nation
- Mashpee Wampanoag Tribe of Massachusetts
- Massachusetts Board of Underwater Archaeological Resources
- Massachusetts Commission on Indian Affairs
- Massachusetts Historical Commission
- Mohegan Tribe of Indians of Connecticut
- Nantucket Historical Commission (withdrew September 10, 2020)
- Nantucket Historic District Commission (withdrew September 10, 2020)
- Nantucket Planning and Economic Development Commission (withdrew September 10, 2020)
- Nantucket Preservation Trust (withdrew August 27, 2020)
- National Park Service
- The Narragansett Indian Tribe
- Office of the Deputy Assistant Secretary of the Navy for Environment
- Park City Wind
- Preservation Massachusetts

- Rhode Island Historical Preservation & Heritage Commission\*
- The Shinnecock Indian Nation
- Town and County of Nantucket (withdrew August 27, 2020)
- Town of Aquinnah
- Town of Barnstable, Historical Commission
- U.S. Army Corps of Engineers
- U. S. Environmental Protection Agency
- Wampanoag Tribe of Gay Head (Aquinnah)

Some of the parties consulted over the course of the NHPA Section 106 review have voluntarily withdrawn from further participation in the consultation, as indicated by the withdrawal date in parentheses for each of those parties.

\* Connecticut State Historic Preservation Office and Rhode Island Historical Preservation & Heritage Commission were initially invited to consult. After the APE was defined, BOEM determined that they no longer needed to participate.