

FINDING OF NO HISTORIC PROPERTIES AFFECTED FOR THE EQUINOR WIND US, LLC OCS-A 0520 SITE ASSESSMENT PLAN AMENDMENT ON THE OUTER CONTINENTAL SHELF OFFSHORE MASSACHUSETTS

JANUARY 30, 2024

FINDING

The Bureau of Ocean Energy Management (BOEM), serving as lead Federal agency under the National Historic Preservation Act (NHPA), has made a Finding of No Historic Properties Affected for this undertaking, pursuant to 36 CFR Part 800.4(d)(1). No historic properties have been identified within the area of potential effects (APE).

DOCUMENTATION IN SUPPORT OF THE FINDING

1 Summary

This document describes BOEM's compliance with Section 106 of the National Historic Preservation Act (NHPA Section 106) and documents the agency's Finding of No Historic Properties Affected (Finding) under 36 CFR Part 800.4 (d)(1) for the undertaking of approving an amendment to the Beacon Wind LLC (previously Equinor Wind US, LLC [Equinor Wind]) Site Assessment Plan (SAP) on the Outer Continental Shelf (OCS) offshore Massachusetts within the Lease Area OCS-A 0520. BOEM has prepared this documentation in support of the Finding following the standards outlined at 36 CFR 800.11(d) and is providing this Finding and supporting documentation to NHPA Section 106 consulting parties to this undertaking. This Finding and supporting documentation will also be made available for public inspection by placement on BOEM's website at: <https://www.boem.gov/renewable-energy/state-activities/beacon-wind>.

2 Federal Involvement

The Energy Policy Act of 2005, Pub. L. No. 109-58, added Section 8(p)(1)(C) to the OCS Lands Act, which grants the Secretary of the Interior the authority to issue leases, easements, and rights-of-way on the OCS for the purpose of renewable energy development, including wind energy development. The Secretary delegated this authority to BOEM, and on April 22, 2009, BOEM promulgated final regulations implementing this authority at 30 CFR Part 585.

On February 6, 2012, BOEM published in the Federal Register a *Notice of Intent to Prepare an Environmental Assessment for Commercial Wind Lease Issuance and Site Characterization Activities on the Atlantic OCS Offshore Massachusetts*. On November 2, 2012, BOEM announced the availability of an environmental assessment (EA) for public review

and comment. On June 3, 2014, BOEM issued a Finding of No Significant Impact (FONSI) based on a *Revised Environmental Assessment for Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts* (BOEM 2014; referred to herein as the “2014 EA”) which covered Lease Area OCS-A 0520.

On December 13–14, 2018, BOEM held a competitive lease sale for Wind Energy Areas offshore Massachusetts. Equinor Wind was the winner of Lease Area OCS-A 0520. On December 8, 2020, Equinor Wind submitted a Site Assessment Plan (SAP) for the Lease Area in support of site assessment activities consisting of installation and operation of metocean equipment, with updated versions submitted April 27, 2021, and June 28, 2021. BOEM approved the SAP on September 24, 2021. BOEM approved Equinor’s assignment of the lease to a subsidiary, Beacon Wind LLC (Beacon Wind; hereinafter *Lessee*), on January 27, 2021.

On March 2, 2023, the Lessee submitted for BOEM review a SAP Amendment application for additional site assessment activities in Lease Area OCS-A 0520 (Tetra Tech 2023). The SAP activities proposed in this application consist of short-term deployment and subsequent removal of representative wind turbine/offshore substation foundation components. The repeated tests of a single suction bucket proposed in the SAP Amendment application will further assess site conditions. As BOEM’s 2014 EA did not include an analysis of the suction bucket installation technique, BOEM determined the need to prepare a new EA for approval of the SAP Amendment application. On November 7, 2023, BOEM (2023) published in the Federal Register a *Notice of Intent to Prepare an Environmental Assessment for Additional Site Assessment Activities on Beacon Wind, LLC’s Renewable Energy Lease* pursuant to the National Environmental Policy Act (NEPA). The Notice of Intent (NOI) can be found at www.regulations.gov, Docket No. BOEM-2023-062. BOEM intends to publish a Draft EA on its website (<https://www.boem.gov/renewable-energy/state-activities/beacon-wind>) and ultimately conclude the NEPA review in 2024.

Section 106 of the NHPA (54 U.S.C. §306108; NHPA Section 106) and its implementing regulations (36 CFR Part 800) require Federal agencies to consider the effects of their undertakings on historic properties listed or eligible for listing in the National Register of Historic Places (NRHP) and afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. BOEM determined the lease issuance and approval of the SAP both constituted undertakings with the potential to affect historic properties and were subject to the NHPA Section 106 review and consultation process pursuant to a programmatic agreement (PA) (i.e., *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*) (BOEM 2012). BOEM executed the Massachusetts and Rhode Island PA on May 23, 2012, with the State Historic Preservation Officers (SHPOs) of Massachusetts and Rhode Island, the ACHP, the Mashpee Wampanoag Tribe, The Narragansett Indian Tribe, and the Wampanoag Tribe of Gay Head (Aquinnah).

BOEM implemented this PA pursuant to 36 CFR §800.14(b) to fulfill its obligations under NHPA Section 106 for the undertakings of lease issuance and approval of site assessment activities on the OCS offshore Massachusetts and Rhode Island. The PA expired on May 12,

2022. BOEM concluded the NHPA Section 106 process with Findings of No Historic Properties Affected for commercial wind lease issuance and site assessment activities offshore Massachusetts on June 18, 2014, and for the SAP for Lease Area OCS-A 0520 on July 26, 2021 (BOEM 2021; Appendix A).

BOEM has determined that approval of the additional site assessment activities within Lease Area OCS-A 0520, proposed in the SAP Amendment application, also constitutes an NHPA Section 106 undertaking subject to review and consultation as the activities proposed in the original SAP did not encompass those that are proposed in the SAP Amendment application.

3 The Undertaking

On March 2, 2023, the Lessee submitted for BOEM review a SAP Amendment application for additional site assessment activities in Lease Area OCS-A 0520 (Tetra Tech 2023). The SAP activities proposed in this application consist of short-term deployment and subsequent removal of representative wind turbine/offshore substation foundation components (SAP Amendment Activities).

The SAP Amendment Activities include 35 deployments and removals of a single suction bucket at 26 selected areas planned for eventual installation of wind turbines within Lease Area OCS-A 0520 (Figure 1) as proposed in the Beacon Wind Project Construction and Operations Plan (COP; AECOM 2023). BOEM is evaluating the COP as a separate but related NHPA Section 106 undertaking, and it is currently undergoing review and consultations. The suction bucket would be similar to those considered within the Beacon Wind Project COP for the suction bucket jacket foundation, which may support wind turbines and/or offshore substations. The SAP Amendment Activities will be conducted to further assess the geological and geotechnical conditions and gather information to support the engineering design of wind turbine and offshore substation foundations that would potentially be installed within the Lease Area for the proposed Beacon Wind project.

On December 13, 2023, the U.S. Army Corps of Engineers (USACE) designated BOEM to be lead Federal agency to fulfill the agencies' collective responsibilities under NHPA Section 106.

3.1 Area of Potential Effects

As defined in the Section 106 regulations in 36 CFR §800.16(d), the area of potential effects (APE) is defined as “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.” BOEM (2020) further defines the APE for an undertaking to include the following areas:

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

The dimensions of the APE are influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking. The APE for this undertaking is defined as the depth and breadth of the seabed that could be affected by bottom/seafloor-disturbing activities associated with SAP Amendment Activities. The APE for site assessment and characterization activities includes the discrete horizontal and vertical areas of the seafloor that may directly affect historic properties on or below the seafloor, if present. The SAP Amendment Activities would be temporary and consist of no permanent structures that would be visible from onshore locations; as a result, there is no visual or viewshed portion of the APE associated with the undertaking.

The APE consists of 26 selected suction bucket testing locations, each measuring 984 feet (ft) x 984 ft (300 meters [m] x 300 m) (Figure 2). As discussed in more detail in the Undertaking section above, the 26 areas selected for testing are those proposed for eventual installation of wind turbines in the Beacon Wind Project COP (AECOM 2023; Tetra Tech 2023). The test suction bucket is anticipated to have a vertical impact of 33 to 39 ft (10 to 12 m), with a maximum vertical impact of up to 66 ft (20 m). The vessel that will complete the testing activities will utilize dynamic positioning and will therefore not result in any additional seabed disturbances. Proposed locations for test installations include: AW-42, AZ-40, BC-37, BC-41, BD-35, BE-33, BE-34, BE-36, BE-37, BF-30, BF-36, BG-33, BG-34, BG-35, BG-37, BG-38, BH-35, BJ-31, BK-26, BK-27, BK-28, BK-30, BM-28, BM-29, BM-31, and BN-28 (see Figure 1).

4 Consultation with Appropriate Parties and the Public

On November 14, 2023, BOEM initiated consultations via letters sent to ten federally recognized Tribes (i.e., Delaware Tribe of Indians, Eastern Shawnee Tribe of Oklahoma, Mashantucket [Western] Pequot Tribal Nation, Mashpee Wampanoag Tribe, Mohegan Tribe of Indians of Connecticut, Stockbridge-Munsee Community Band of Mohican Indians, The Delaware Nation, The Narragansett Indian Tribe, The Shinnecock Indian Nation, and Wampanoag Tribe of Gay Head [Aquinnah]) and six federal agencies (i.e., ACHP; USACE, New York District; Bureau of Safety and Environmental Enforcement [BSEE]; National Park Service [NPS]; Naval Facilities Engineering Systems Command [NAVFAC] Headquarters; and Naval History and Heritage Command [Underwater Archaeology Branch]). These Tribes and federal agencies were determined to be existing consulting parties to the NHPA Section 106 review of the Beacon Wind Project COP for Lease Area OCS-A 0520 (AECOM 2023), which is being evaluated by BOEM as a separate but related NHPA Section 106 undertaking currently undergoing review and consultations. As such, BOEM assumed the continued participation of the aforementioned Tribes and federal agencies as consulting parties to the NHPA Section 106 review of the present undertaking.

On November 15, 2023, the SHPOs of Delaware, Massachusetts, New York, and Rhode Island were notified of this undertaking due to BOEM's concurrent NHPA Section 106 consultations with these SHPOs on separate activities proposed to occur within Lease Area OCS-A 0520. Though the APE for the SAP Amendment Activities is limited to the OCS (i.e., not within any state lands or waters), SHPOs were extended an invitation to consult on the undertaking. The

New York SHPO accepted BOEM’s invitation to consult on November 29, 2023. The Delaware, Massachusetts, and Rhode Island SHPOs did not respond to BOEM’s invitation.

BOEM prepared this Finding of No Historic Properties Affected (Finding), consistent with 36 CFR §800.4(d)(1) and is providing it to the consulting parties as a notification of its Finding. Consulting parties were also provided with the SAP Amendment application Archaeological Site Characterization Report (Tetra Tech 2023, Appendix D) and a marine archaeology post-review discovery plan (PRDP) created specifically for the SAP Amendment Activities. See Section 5, *Description of Steps Taken to Identify Historic Properties*, for additional information.

For the history of BOEM’s NHPA Section 106 consultations for development of the PA, lease issuance, and original SAP, please refer to BOEM’s Finding of No Historic Properties Affected for the original SAP approval in Appendix A to this document.

5 Description of Steps Taken to Identify Historic Properties

BOEM’s renewable energy regulations require a lessee to provide the results of an archaeological resource identification survey with its SAP for the areas affected by the activities proposed in the plan (see 30 CFR §585.610(b)). BOEM provides guidelines for acquiring this information and documenting the results of these activities. See *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* at: <https://www.boem.gov/sites/default/files/documents/about-boem/Archaeology%20and%20Historic%20Property%20Guidelines.pdf>, which advise lessees to survey the entirety of the APE offshore. Additionally, BOEM requires lessees to provide the results of onshore historic property identification activities conducted in accordance with the standards and guidelines of the relevant SHPOs or Tribal Historic Preservation Officers, if on tribal lands.

BOEM has reviewed the SAP Amendment application and information provided in support of the plan, including an Archaeological Site Characterization Report (prepared by AECOM for Tetra Tech 2023, Appendix D), entitled the *Beacon Wind Project Marine Archaeological Site Characterization Report Site Assessment Plan Amendment for 26 Wind Turbine Foundation Testing Locations*.

5.1 Marine Archaeological Resources Assessment

The Lessee performed site High-Resolution Geophysical (HRG; i.e., gradiometer, side-scan sonar, and sub-bottom profiler) and geotechnical surveys within the Lease Area, encompassing the APE for the SAP Amendment Activities, between August 2020 to May 2021 for a marine archaeological resources assessment (MARA) in support of the original SAP and Beacon Wind Project COP (AECOM 2023). The surveys and MARA are consistent with BOEM’s *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* (BOEM 2020). A Qualified Marine Archaeologist (QMA) conducted an analysis of the remote sensing data to identify features or anomalies with potential to represent submerged cultural resources (i.e., archaeological resources and ancient submerged landform features [ASLFs]). This MARA report has been submitted to BOEM as part of the Beacon Wind Project COP (AECOM 2023), which is being evaluated by BOEM as a separate but related NHPA Section

106 undertaking currently undergoing review and consultations. As of December 2023, BOEM anticipates this MARA report will be sufficient for proceeding with consultations with Tribal Nations and consulting parties in February 2024 and will be distributed to these parties at that time.

In fulfillment of a MARA to support the SAP Amendment application, the Lessee submitted an Archaeological Site Characterization Report that provides the findings of the QMA's assessment of the presence or absence of historic properties within the extent of the APE (Tetra Tech 2023, Appendix D), consistent with BOEM's *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* (BOEM 2020). The Lessee's QMA reviewed background information for the Lease Area, including pre-Contact and historical contexts for the region, geological and paleoenvironmental background, and reported shipwreck losses and obstruction locations from several databases to identify submerged cultural resources within the APE. The QMA also reviewed the HRG and geotechnical data collected within the Lease Area for the MARA in support of the original SAP and Beacon Wind Project COP (AECOM 2023). No data gaps in the existing HRG datasets were identified within the 26 locations of the APE that encompass the 26 areas proposed for suction bucket testing in the SAP Amendment application. The QMA reviewed four magnetic anomalies, 23 acoustic contacts, and sub-bottom datasets within and near the APE. None of the magnetic anomalies or acoustic contacts were determined to be indicative of archaeological resources or ASLFs. None of the 26 locations of the APE overlap or intersect any of the ASLFs identified in the Beacon Wind Project COP (Figure 3; AECOM 2023). In summary, no archaeological resources or ASLFs have been identified within the APE for the SAP Amendment Activities.

6 The Basis for the Determination of No Historic Properties Affected

BOEM has undertaken an independent technical review of the Archaeological Site Characterization Report submitted as a MARA in support of the SAP Amendment application (Tetra Tech 2023). A good-faith effort has been made to identify historic properties through this archaeological assessment and no historic properties have been identified within the APE. Although the undertaking is not anticipated to affect any historic properties, effects may occur from an unanticipated, post-review discovery of a historic property during the completion of the SAP Amendment Activities. As such, BOEM would require inclusion of the following as a condition of SAP Amendment approval to ensure that any unanticipated finds are reported and reviewed under the NHPA:

- No Impact without Approval. The lessee must not knowingly impact a potential historic property without the Lessor's prior approval.
- Post-Review Discovery. If, while conducting site assessment activities, the Lessee discovers a potential historic property, such as the presence of a shipwreck (e.g., a sonar image or visual confirmation of an iron, steel, or wooden hull; wooden timbers; anchors; concentrations of historic objects; piles of ballast rock) or pre-contact archaeological site (e.g., stone tools, pottery) within the project area, the lessee must:
 - Immediately halt seafloor/bottom-disturbing activities within the area of discovery;
 - Notify the Lessor within 24 hours of discovery;

- Notify the Lessor in writing via report to the Lessor within 72 hours of its discovery;
- Keep the location of the discovery confidential; take no action that may adversely affect the potential historic property until the Lessor has made an evaluation and instructs the applicant on how to proceed; and conduct any additional investigations as directed by the Lessor to determine if the property is eligible for listing in the NRHP (30 CFR §585.802(b)). The Lessor would direct the Lessee to conduct such investigations if: (1) the site has been affected by the Lessee’s project activities; or (2) impacts to the site or to the APE cannot be avoided. If investigations indicate that the resource is potentially eligible for listing in the NRHP, the Lessor would instruct the Lessee as to how to protect the resource, or how to mitigate adverse effects to the site. If the Lessor incurs costs in protecting the resource, under Section 110(g) of the NHPA, the Lessor may charge the Lessee reasonable costs for carrying out preservation responsibilities under the OCS Lands Act (30 CFR §585.802(c & d)).

A marine archaeology PRDP created specifically for the SAP Amendment Activities was prepared and is being shared with consulting parties in conjunction with this Finding.

7 References

AECOM

2023 *Beacon Wind Project: Beacon Wind 1 and Beacon Wind 2 Construction and Operations Plan*. Prepared for Beacon Wind LLC. June. Available: <https://www.boem.gov/renewable-energy/state-activities/beacon-wind-farm-construction-and-operations-plan>.

Tetra Tech, Inc. (Tetra Tech)

2023 *Site Assessment Plan Amendment: Beacon Wind Massachusetts Wind Energy Lease Area OCS-A 0520*. Prepared for Beacon Wind LLC. March 2. Available: <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/BW-Foundation-Testing-SAP-Amendment.pdf>.

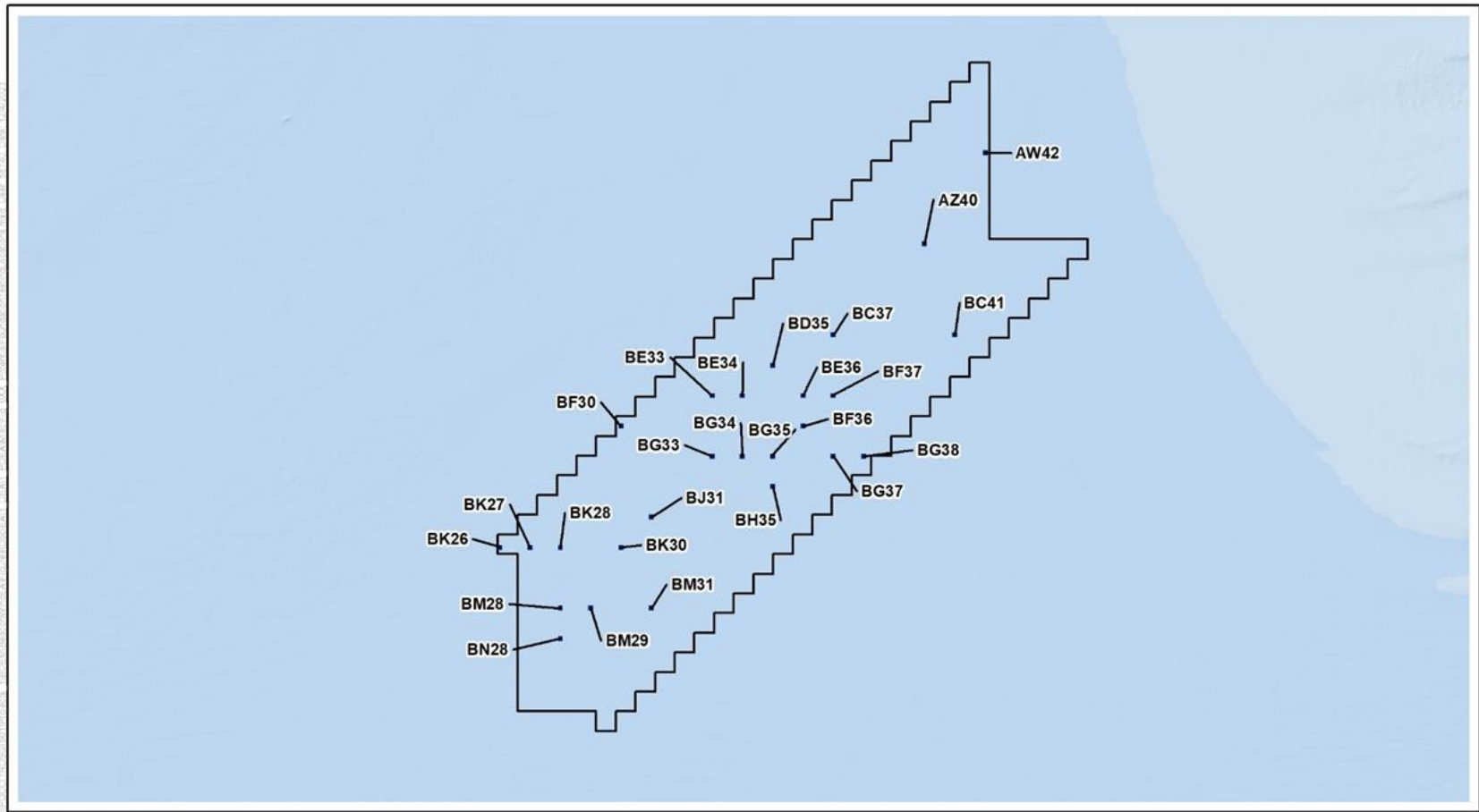
U.S. Bureau of Ocean Energy Management (BOEM)

2012 *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*. U.S. Department of Interior, Office of Renewable Energy Programs. May 23. Expired May 12, 2022. Available: https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/HP/MA-RI-PA_Executed.pdf.

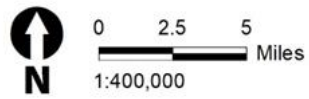
2014 *Revised Environmental Assessment for Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts*.

- U.S. Department of Interior, Office of Renewable Energy Programs. June. Available: <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/Revised-MA-EA-2014.pdf>.
- 2020 *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585*. U.S. Department of Interior, Office of Renewable Energy Programs. May 27. Available: <https://www.boem.gov/sites/default/files/documents/about-boem/Archaeology%20and%20Historic%20Property%20Guidelines.pdf>.
- 2021 *Finding of No Historic Properties Affected for the Equinor Wind US, LLC OCS-A 0520 Site Assessment Plan on the Outer Continental Shelf Offshore Massachusetts*. U.S. Department of Interior, Office of Renewable Energy Programs. July 26. Available: <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Finding-of-No-Historic-Properties-Affected-BeaconWind-SAP.pdf>. Attached to this document as Appendix A.
- 2023 *Notice of Intent to Prepare an Environmental Assessment for Additional Site Assessment Activities on the Beacon Wind Energy Lease Area OCS-A 0520, Massachusetts*. U.S. Department of Interior, Office of Renewable Energy Programs. November 7. Available: <https://www.federalregister.gov/documents/2023/11/07/2023-24610/notice-of-intent-to-prepare-an-environmental-assessment-for-additional-site-assessment-activities-on>.

8 Figures



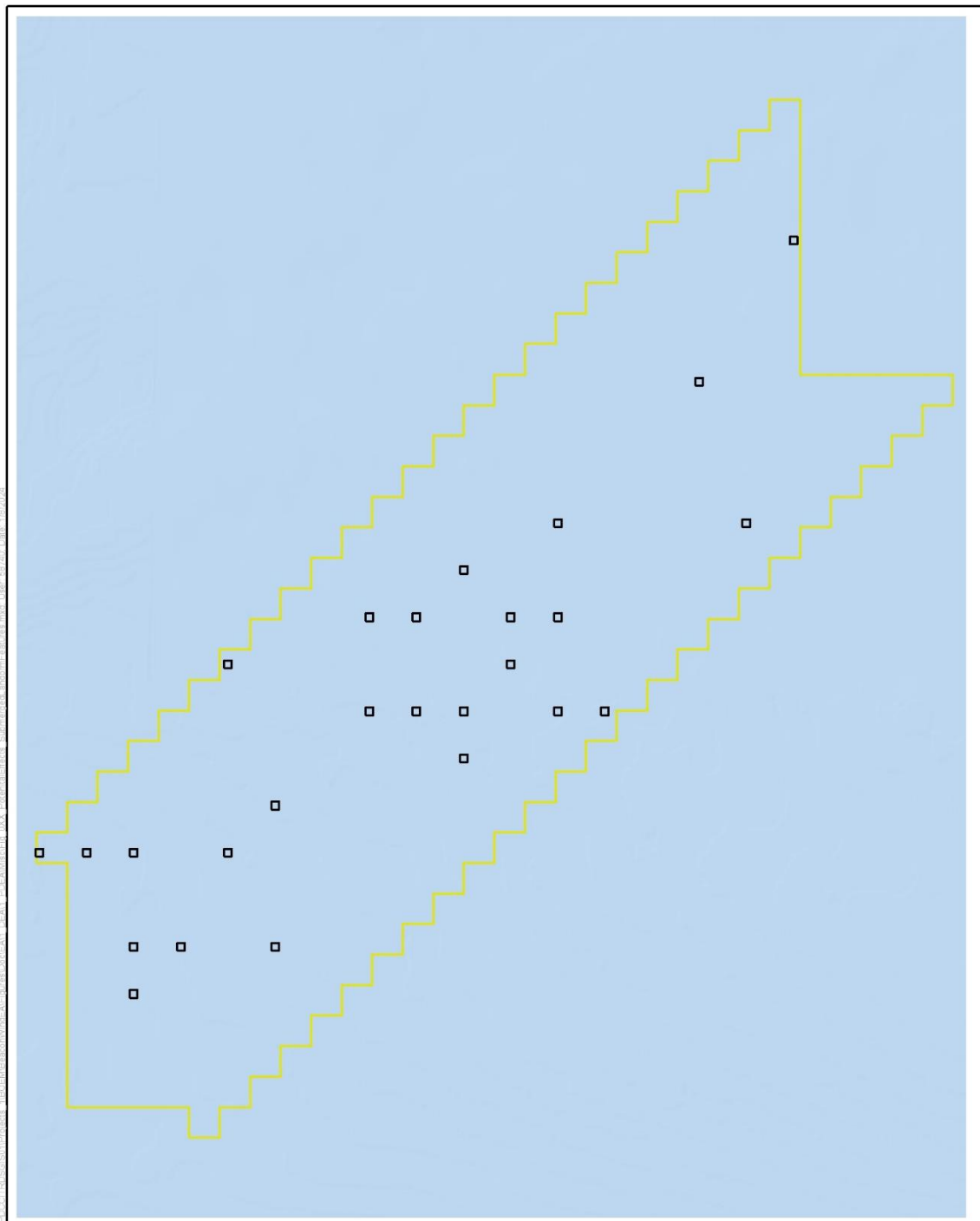
Potential Foundation Testing Location
 Lease Area OCS-A 0520



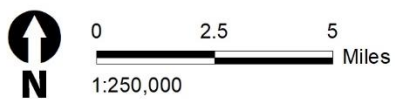
Source: AECOM 2023.



Figure 1. Foundation Testing Locations



APE
 Lease Area OCS-A 0520



Source: AECOM 2023.



Figure 2. Area of Potential Effects

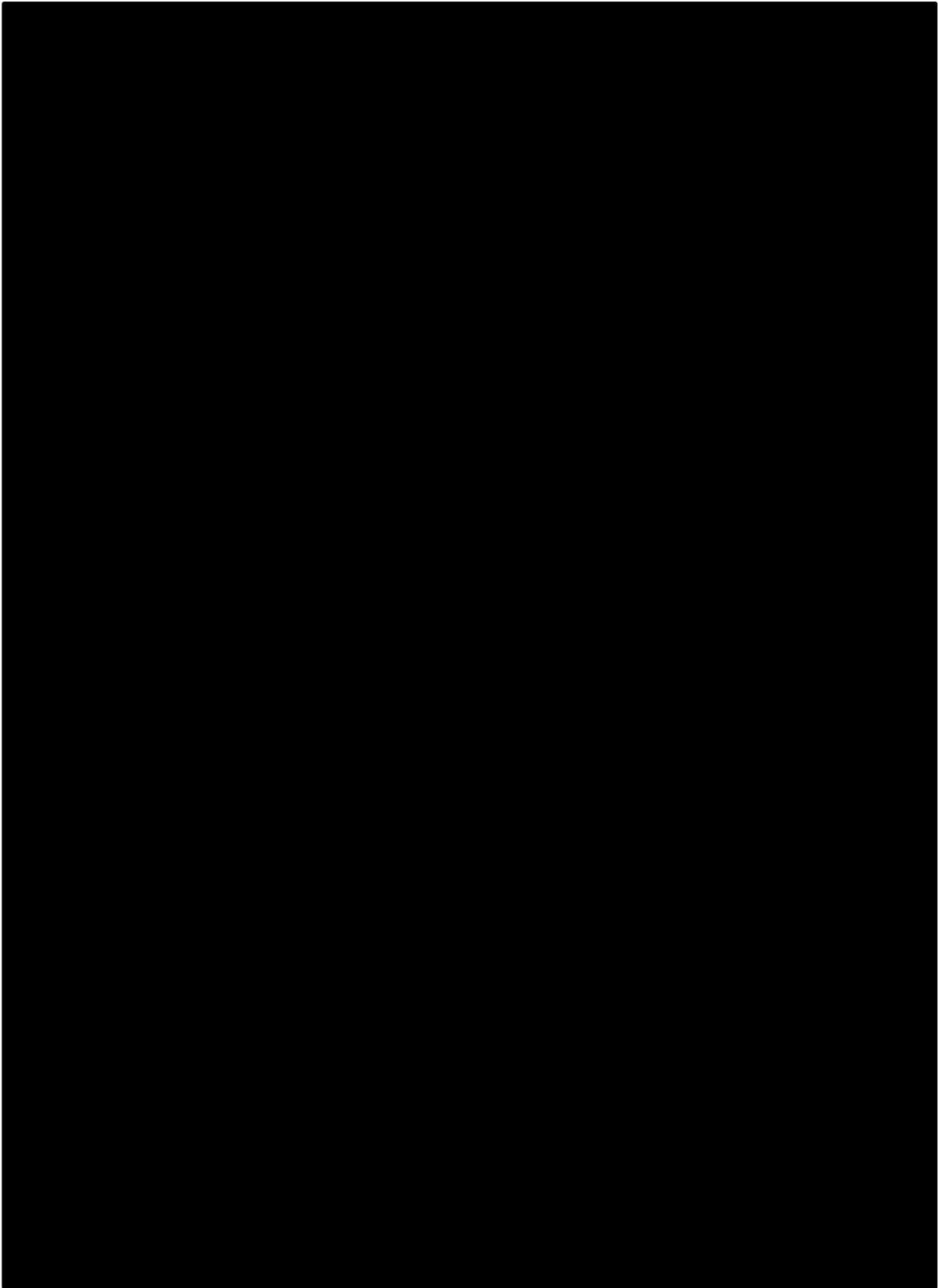


Figure 3. Foundation Testing Locations

9 Appendices

Appendix A: BOEM’s *Finding of No Historic Properties Affected for the Equinor Wind US, LLC OCS-A 0520 Site Assessment Plan on the Outer Continental Shelf Offshore Massachusetts* (BOEM 2021).