MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT

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

WHEREAS, BOEM determined that the 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 800), and consistent with the requirement to consult included in Stipulation II of the Programmatic Agreement (NJ-NY PA) regarding the review of OCS renewable energy activities offshore New Jersey and New York (*Programmatic Agreement Among The U.S. Department of the Interior, Bureau of Ocean Energy Management, The State Historic Preservation Officers of New Jersey and New York, The Shinnecock Indian Nation, and The Advisory Council on Historic Preservation Regarding Review of Outer Continental Shelf Renewable Energy Activities Offshore New Jersey and New York Under Section 106 of the National Historic Preservation Act*); and

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

WHEREAS, BOEM determined the construction, operation, maintenance, and eventual decommissioning of the Project, planned for up to 98 offshore Wind Turbine Generators (WTGs), up to three offshore substations, two onshore substations, offshore and onshore export cables, could potentially adversely affect historic properties as defined under 36 CFR 800.16(l); and

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

WHEREAS, BOEM notified in advance the New Jersey State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) on March 8, 2021, of their decision to use NEPA substitution and followed the standards for developing environmental documents to comply with the Section 106 consultation for this Project pursuant to 36 CFR 800.8(c), and ACHP responded with acknowledgement and guidance regarding NEPA substitution on March 23, 2021; and

WHEREAS, in accordance with 36 CFR 800.3, BOEM invited New Jersey SHPO to consult on the Project on March 30, 2021, and New Jersey SHPO accepted on April 21, 2021; and

WHEREAS, in accordance with 36 CFR 800.3, BOEM invited ACHP to consult on the Project on March 30, 2021; 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, which underwent Section 106 review pursuant to the NJ-NY PA and concluded with No Historic Properties Affected on October 18, 2017.

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

WHEREAS, BOEM identified 19 submerged historic properties and 16 ancient submerged landforms features (ASLFs) in the marine APE; six historic properties, all archaeological sites, in the terrestrial APE; and nine historic districts and 41 aboveground historic properties in the offshore Project components' portion of the visual APE and three historic properties in the onshore Project components' portion of the visual APE; and

WHEREAS, BOEM identified two National Historic Landmarks (NHLs) in the offshore Project components' portion of the visual APE, Lucy the Margate Elephant and Atlantic City Convention Hall, and BOEM determined the Project could potentially visually adversely affect these two NHLs due to their seaside locations and their character-defining ocean views will be altered and diminished; and

WHEREAS, BOEM has determined that the undertaking will adversely affect 13 ASLFs (Targets 21–26, 28–31, and 33–35) from physical disturbance in the lease area and export cable construction; and

WHEREAS, BOEM determined that the implementation of the avoidance measures identified in this MOA will avoid adversely affecting all nineteen submerged cultural resources (Targets 01–19) and three ASLFs in the marine APE (Targets 20, 27, and 32), all six historic properties in the terrestrial APE, nine historic districts and 23 aboveground historic properties in the offshore visual APE, and three historic properties in the onshore visual APE; and

WHEREAS, BOEM determined all of the ASLFs identified in the marine APE are eligible for the National Register of Historic Places (NRHP) under Criteria A and D and determined, under each of the Project alternatives analyzed in the EIS, that the undertaking will adversely affect the following 13 ASLFs: Targets 21 through 26, 28 through 31, and 33 through 35; and

WHEREAS, BOEM determined the Project would visually adversely affect 18 aboveground historic properties in New Jersey: Brigantine Hotel, Brigantine City, Atlantic County; Absecon Lighthouse, Atlantic City, Atlantic County; Atlantic City Boardwalk, Atlantic City, Atlantic County; Atlantic City Convention Hall, Atlantic City, Atlantic County; Ritz-Carlton Hotel, Atlantic City, Atlantic County; Haddon Hall/Resorts Casino Hotel, Atlantic City, Atlantic County; Riviera Apartments, Atlantic City, Atlantic County; Vassar Square Condominiums, Ventnor City, Atlantic County; House at 114 South Harvard Avenue, Ventnor City, Atlantic County; Lucy the Margate Elephant, Margate City, Atlantic County; Great Egg Coast Guard Station, Longport Borough, Atlantic County; Ocean City Boardwalk, Ocean City, Cape May County; Ocean City Music Pier, Ocean City, Cape May County; Hereford Lighthouse, North Wildwood, Cape May County; North Wildwood Life Saving Station, North Wildwood, Cape May County; U.S. Lifesaving Station #35, Stone Harbor Borough, Cape May County; Flanders Hotel, Ocean City, Cape May County; and Little Egg Harbor U.S. Life Saving Station #23 (U.S. Coast Guard Station #119), Little Egg Harbor Township, Ocean County; and

WHEREAS, upon receiving the Draft EIS, including Appendix N. Finding of Adverse Effects, ACHP notified BOEM that it will formally participate in this Section 106 consultation via letter sent on August 15, 2022; and

WHEREAS, New Jersey SHPO concurred with BOEM's finding of adverse effect on March 30, 2023; and

WHEREAS, BOEM determined that the undertaking will adversely affect Haddon Hall/Resorts Casino Hotel. BOEM issued an addendum to the Finding of Effect for the adverse effect determination for Haddon Hall/Resorts Casino Hotel and the New Jersey SHPO concurred with the findings on May 19, 2023; and

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

WHEREAS, BOEM invited the following federally recognized Tribes to consult on this Project: Absentee-Shawnee Tribe of Indians of Oklahoma, Eastern Shawnee Tribe of Oklahoma, Shawnee Tribe, Mashantucket (Western) Pequot Tribal Nation, the Narragansett Indian Tribe, the Rappahannock Tribe, and the Shinnecock Indian Nation; the Delaware Tribe of Indians, Delaware Nation, the Stockbridge-Munsee Community Band of Mohican Indians, and the Wampanoag Tribe of Gay Head (Aquinnah); and

WHEREAS, the Delaware Tribe of Indians, the Delaware Nation, Mashantucket (Western) Pequot Tribal Nation, the Stockbridge-Munsee Community Band of Mohican Indians, the Shinnecock Indian Nation, and the Wampanoag Tribe of Gay Head (Aquinnah) accepted BOEM's invitation to consult; and

WHEREAS, BOEM acknowledge that Tribes possess special expertise in assessing the NRHP eligibility of properties with tribal religious and cultural significance to the Tribe(s) pursuant to 36 CFR § 800.4(c)(1); and

WHEREAS, BOEM consulted with Tribes to identify properties of religious and cultural significance to Tribes that may be eligible for listing in the NRHP, including cultural landscapes and Traditional Cultural Places (TCPs), and that may be affected by these undertakings; and,

WHEREAS, the Delaware Tribe of Indians, the Delaware Nation, the Stockbridge-Munsee Community Band of Mohican Indians, and the Shinnecock Indian Nation have certain responsibilities assigned to them in this MOA in order to develop and finalize ethnographic studies for their respective federally recognized tribe and as agreed upon mitigation measures, and BOEM invited the Delaware Tribe of Indians, the Delaware Nation, the Stockbridge-Munsee Community Band of Mohican Indians, and the Shinnecock Indian Nation to sign this MOA as invited signatories; and

WHEREAS, BOEM invited the Mashantucket (Western) Pequot Tribal Nation and the Wampanoag Tribe of Gay Head (Aquinnah) to sign this MOA as concurring parties; and

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

WHEREAS, BOEM has consulted with the Lessee in its capacity as applicant seeking federal approval of the 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 United States Army Corps of Engineers (USACE) for activities which result in the discharge of dredged or fill material into jurisdictional wetlands and/or other waters of the United States pursuant to Section 404 of the Clean Water Act, and activities occurring in or affecting navigable waters of the United States pursuant to Section 10 of the Rivers and Harbors Act; and

WHEREAS, BOEM invited USACE to consult since USACE has authority to issue any needed permits for this Project under Section 404 of the Clean Water Act (33 USC 1344) and Section 10 of the Rivers and Harbors Act (33 USC 403); and

WHEREAS, the USACE designated BOEM as the Lead Federal Agency pursuant to 36 CFR 800.2(a)(2) to act on its behalf for purposes of compliance with Section 106 for this Project (in a letter dated October 17, 2022), BOEM invited the USACE to sign this MOA as a concurring party; and

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

WHEREAS, BOEM invited the New Jersey Historic Trust to consult because the organization agreed to be the t third-party administrator for the mitigation fund established under Stipulation III.C, and this MOA assigns certain responsibilities to the New Jersey Historic Trust in administering this mitigation fund, and BOEM invited the New Jersey Historic Trust to sign this MOA as an invited signatory; and

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

WHEREAS, 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 date of this MOA, and consulting parties who choose not to sign this MOA will continue to receive information if requested and have an opportunity to participate in consultation as specified in this MOA; and

WHEREAS, the signatories (required signatories and invited 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 Section 106 consultation meetings [March 8, 2022; May 4, 2022; November 30, 2022; February 22, 2023; April 24, 2023] and invited all the participating consulting parties listed in Attachment 2 to these meetings; and

WHEREAS, BOEM sought and considered the views of the public regarding Section 106 for this Project through the NEPA process by holding virtual public scoping meetings when initiating the NEPA and NHPA Section 106 review on April 13, 15, and 20, 2021 and virtual public hearings related to the Draft EIS on July 14, 20, and 26, 2022; and

WHEREAS, BOEM made the first Draft MOA available to the public for review and comment from June 24, 2022, to August 23, 2022, and provided updated versions of the Draft MOA to the public using BOEM's Project website; and

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

STIPULATIONS

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

I. MEASURES TO AVOID ADVERSE EFFECTS TO IDENTIFIED HISTORIC PROPERTIES

A. Marine APE

1. BOEM will include the following avoidance measures for adverse effects within the marine APE as conditions of approval of the Ocean Wind 1 COP:

    i. The Lessee will avoid known shipwrecks (Targets [Targets 1, 9, 12-14, 17, 18]) previously identified during marine archaeological surveys by a distance of no less than 50 meters from the known extent of the resource for placement of Project structures and when conducting seafloor-disturbing activities.

    ii. The Lessee will avoid potential shipwrecks (Targets 2-8, 10, 11, 15, 16, 19) and potentially significant debris fields previously identified during marine archaeological surveys by a distance of no less than 50 meters from the known extent of the resource, unless the buffer would preclude the installation of facilities at their engineered locations, but in no event would the buffer be less than 50 meters from the known extent of the resource.

    iii. The Lessee will avoid three ASLFs (Targets 20, 27, and 32). No additional avoidance buffer is required for these ASLFs given avoidance of the ASLFs is based on the defined spatial extent of each ASLF, which has been determined based on the maximum observed presence of the seismic reflector and unique buffer area designed to account for minimal positioning errors or lack of resolution.

B. Visual APE

1. BOEM will include the following avoidance measures for adverse effects within the visual APE as conditions of approval of the Ocean Wind 1 COP:

    i. To maintain avoidance of adverse effects to historic properties in the visual APE where BOEM determined no adverse effects or where no effects would occur, BOEM will require the Lessee to ensure Project structures are within the design envelope, sizes, scale, locations, lighting prescriptions, and distances that were used by BOEM to inform the definition of the APE for the Project and for determining effects in the Finding of Effect (see the Construction & Operations Plan: Ocean Wind 1 Offshore Wind Farm Project, May, 2023).

II. MEASURES TO MINIMIZE ADVERSE EFFECTS TO IDENTIFIED HISTORIC PROPERTIES

A. Visual APE

1. BOEM has undertaken planning and actions to minimize visual adverse effects to aboveground historic properties in the visual APE including minimizing harm to the two adversely affected NHLs (the Atlantic City Convention Hall and Lucy the Margate Elephant). The minimization measures below will minimize visual adverse effects to all adversely affected historic properties in the visual APE and will minimize the undertaking's cumulative visual adverse effects, that would add to the potential visual adverse effects of other reasonably foreseeable offshore wind energy developments. BOEM will include these minimization measures for adverse effects within the visual APE as conditions of approval of the Ocean Wind 1 COP:

    i. The Lessee will use uniform WTG design, speed, height, and rotor diameter to reduce visual contrast and decrease visual clutter.

    ii. The Lessee will use uniform spacing of 1 NM (1.15 mile) by 0.8 NM (0.92 mile) to decrease visual clutter, aligning WTGs to allow for safe transit corridors.

    iii. The Lessee will apply a paint color to the WTGs no lighter than RAL 9010 pure white and no darker than RAL 7035 light gray to help reduce potential visibility of the turbines against the horizon during daylight hours.

    iv. The Lessee will implement an aircraft detection lighting system (ADLS) to automatically activate lights when aircraft approach. The WTGs and OSS would be lit and marked in accordance with Federal Aviation Administration (FAA) and United States Coast Guard (USCG) lighting standards and consistent with BOEM's *Guidelines for Lighting and Marking of Structures Supporting Renewable Energy Development* (April 28, 2021) to reduce light intrusion.

III. MEASURES TO MITIGATE ADVERSE EFFECTS TO IDENTIFIED HISTORIC PROPERTIES

A. Marine APE

1. The Lessee cannot avoid 13 ASLFs (Targets 21–26, 28–31, and 33–35). To resolve the adverse effects to the 13 ASLFs, BOEM will include the following as conditions of approval of the Ocean Wind 1 COP. The Lessee will fund the mitigation measures detailed in Attachment 3 (Historic Property Treatment Plan for the Ocean Wind 1 Farm Ancient Submerged Landform Features, Federal Waters on the Outer Continental Shelf). Attachment 8 contains budgets for each mitigation effort in III.A.1, reflecting good faith estimates, based on the experience of qualified consultants with similar activities and comparable historic properties. The Lessee is not required to spend more than $3,948,718 for the activities listed in Stipulation III.A.1.i-iv, which is inclusive of all of the mitigation measures detailed in Attachment 3. The Lessee agrees to the following measures:

    i. Preconstruction Geoarchaeology. The Lessee will fulfill the following commitments in accordance with Attachment 3: collaborative review of existing geophysical and geotechnical data with consulting Tribes; selection of coring locations in consultation with Tribes; collection of two to three vibracores within each affected ASLF that has not been previously sampled, with a sampling focus on areas that will be disturbed by Project

construction activities; written verification to BOEM that the samples collected are sufficient for the planned analyses and consistent with the agreed scope of work; collaborative laboratory analyses at a laboratory located in Rhode Island or New Jersey; screening of recovered sediments for debitage or micro-debitage associated with indigenous land uses; third-party laboratory analyses, including micro- and macro-faunal analyses, micro- and macro-botanical analyses, radiocarbon dating of organic subsamples, and chemical analyses for potential indirect evidence of indigenous occupations; temporary curation of archival core sections; draft reports for review by consulting Tribes; and final reporting. Signatories will be notified of completion of this measure. The collection of vibracores must be completed prior to commencing seabed disturbing activities.

ii. Open-Source GIS and Story Maps. The Lessee will fulfill the following commitments in accordance with Attachment 3: consultation with the Tribes to determine the appropriate open-source GIS platform; review of candidate datasets and attributes for inclusion in the GIS; data integration; development of custom reports or queries to assist in future research or tribal maintenance of the GIS; work Sessions with consulting Tribes to develop Story Maps content, and inclusion of stories associated with other federally recognized Tribes; training session with Tribes to review GIS functionality; review of Draft Story Maps with Tribes; delivery of GIS to Tribes; and delivery of Final Story Maps. Signatories will be notified of completion of this measure. This measure may be completed during or post-construction, to be completed within five years after the MOA is executed.

iii. ASLF Post-Construction Seafloor Impact Inspection. The Lessee will fulfill the following commitments in accordance with Attachment 3: development of a 3D model throughout ASLFs designated for review; development of the remotely operated vehicle (ROV) investigation methodology, including consultation with BOEM; ROV inspection of the seafloor along impacted portions of the selected ASLFs; review of candidate datasets and attributes for inclusion in the GIS; delivery of data interpretive technical report draft; delivery of final technical report. The Lessee will provide consulting Tribes and BOEM, draft and final technical reports including 3D models and resulting seafloor impact assessments. Signatories will be notified of completion of this measure. This measure must be completed as early as possible and no later than one-month post-construction. If unanticipated issues arise during the course of offshore construction that prevent this measure from being completed within one-month post-construction, the Lessee must notify BOEM and propose an alternate completion timeframe for consulting Tribes and BOEM approval.

iv. Ethnographic Study with the Delaware Tribe of Indians, the Delaware Nation, and the Stockbridge-Munsee Community Band of Mohican Indians. The Lessee will fulfill the following commitments in accordance with Attachment 3: funding ethnographic researcher selected by Delaware Tribe of Indians for 2-year period; funding for researcher travel to New Jersey for research and site visits; funding for Delaware Tribe of Indians, Delaware Nation, and Stockbridge Munsee technology upgrades associated with analysis of GIS data; funding for Delaware Tribe of Indians historic preservation oversight and indirect costs; funding for Delaware Nation and Stockbridge-Munsee Community Band of Mohican Indians THPO collaboration; provide relevant ASLF GIS data layers to Delaware Tribe of Indians for use in this study as well as provide a tutorial on the data; hold quarterly progress update calls lasting approximately one-half hour with Delaware Tribe of Indians, Delaware Nation, and Stockbridge-Munsee Community Band of Mohican Indians until the final technical reports are issued; delivery of Final

deliverables consisting of one confidential report that may contain sensitive resource information and one report that could be made available to the public (both reports will be distributed by the Tribes, at their discretion); and funding for a presentation to highlight the results of the study to be coordinated and executed by Delaware Tribe of Indians, Delaware Nation, and Stockbridge-Munsee Community Band of Mohican Indians. Other consulting parties will be notified of completion of this measure. This measure may be completed pre, during or post-construction, and must be completed within five years after the MOA is executed.

v. Ethnographic Study with the Shinnecock Indian Nation. The Lessee will fulfill the following commitments in accordance with Attachment 3: funding ethnographic researcher selected by Shinnecock Indian Nation for 2-year period; funding for researcher travel for research and site visits; funding for Shinnecock Indian Nation technology upgrades associated with analysis of GIS data; funding for Shinnecock Indian Nation historic preservation oversight and indirect costs; provide relevant ASLF GIS data layers to Shinnecock Indian Nation for use in this study as well as provide a tutorial on the data; hold quarterly progress update calls lasting approximately one-half hour with Shinnecock Indian Nation until the final technical reports are issued; delivery of Final deliverables consisting of one confidential report that may contain sensitive resource information and one report that could be made available to the public (both reports will be distributed by the Shinnecock Indian Nation, at their discretion); and funding for a presentation to highlight the results of the study to be coordinated and executed by Shinnecock Indian Nation. Other consulting parties will be notified of completion of this measure. This measure may be completed pre, during or post-construction, and must be completed within five years after the MOA is executed.

B. Visual APE

1. BOEM will include the measures under III.B.5 as conditions of approval of the Ocean Wind 1 COP and as mitigation measures to resolve the adverse effects, including direct, indirect, and cumulative effects, to the 18 historic properties that will be visually adversely affected (Brigantine Hotel, Brigantine City, Atlantic County; Absecon Lighthouse, Atlantic City, Atlantic County; Atlantic City Boardwalk, Atlantic City, Atlantic County; Atlantic City Convention Hall, Atlantic City, Atlantic County; Ritz-Carlton Hotel, Atlantic City, Atlantic County; Haddon Hall/Resorts Casino Hotel, Atlantic City, Atlantic County; Riviera Apartments, Atlantic City, Atlantic County; Vassar Square Condominiums, Ventnor City, Atlantic County; House at 114 South Harvard Avenue, Ventnor City, Atlantic County; Lucy the Margate Elephant, Margate City, Atlantic County; Great Egg Coast Guard Station, Longport Borough, Atlantic County; Ocean City Boardwalk, Ocean City, Cape May County; Ocean City Music Pier, Ocean City, Cape May County; Hereford Lighthouse, North Wildwood, Cape May County; North Wildwood Life Saving Station, North Wildwood, Cape May County; U.S. Lifesaving Station #35, Stone Harbor Borough, Cape May County; Flanders Hotel, Ocean City, Cape May County; and Little Egg Harbor U.S. Life Saving Station #23 (U.S. Coast Guard Station #119), Little Egg Harbor Township, Ocean County).

2. Attachment 8 contains budgets for each mitigation effort in III.B.5, reflecting good faith estimates, based on the experience of qualified consultants with similar activities and comparable historic properties.

3. Mitigation measures under III.B.5 must be completed within four years of MOA execution, unless a different timeline is agreed upon by interested consulting parties and accepted by BOEM and may be completed simultaneously, as applicable. Tasks associated with the Historic Context Mitigation Measures can occur during and/or after construction.

4. NHPA Section 110(f): Consistent with NHPA Section 110(f) and as described in EIS Appendix H, the Finding of Effect, BOEM has undertaken planning and actions as may be necessary to minimize harm to NHLs.

5. The Lessee will fund the following mitigation measures in accordance with Attachment 4 (Historic Properties Treatment Plan for the Ocean Wind 1 Offshore Wind Farm Project Historic Properties Subject to Adverse Effects Cape May and Atlantic Counties, New Jersey) and the following:

    i. Multi-property and Multi-county Mitigation Measures
        a. Historic Context addressing early 20th century New Jersey Shore Hotels. To resolve adverse effects to Brigantine Hotel, Atlantic County, Ritz-Carlton Hotel, Atlantic County, and Flanders Hotel, Cape May County, the Lessee will coordinate with BOEM to consult with New Jersey SHPO and interested Consulting Parties and property owners to determine what properties or areas will be the subject of the historic context and appropriate information to include. The review process for this Historic Context will be conducted pursuant to Stipulation VI. The final Historic Context will be provided to the New Jersey SHPO and interested Consulting Parties and property owners.

        b. Historic Context addressing Mid-century High-rise residential buildings at the New Jersey shore. To resolve adverse effects on Riviera Apartments, Atlantic City, Atlantic County and Vassar Square Condominiums, Ventnor City, Atlantic County, the Lessee will coordinate with BOEM to consult with New Jersey SHPO and interested Consulting Parties and property owners to determine what properties or areas will be the subject of the historic context and appropriate information to include. The review process for this Historic Context will be conducted pursuant to Stipulation VI. The final Historic Context will be provided to the New Jersey SHPO and interested Consulting Parties and property owners.

        c. Historic Context addressing Boardwalks of the New Jersey Shore, with intensive-level surveys and National Register evaluations of Atlantic City Boardwalk, Ocean City Boardwalk, and Wildwood Boardwalk. To resolve adverse effects on Atlantic City Boardwalk, and Ocean City Boardwalk, the Lessee will prepare a historic context and complete intensive-level surveys and National Register evaluations of Atlantic City boardwalk, Ocean City boardwalk, and Wildwood boardwalk. The historic context will consider significance of historic boardwalks as potential cultural landscapes, including traditional cultural uses, consistent with NPS guidance in *National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties*. The Lessee, in coordination with BOEM, will consult with New Jersey SHPO and interested Consulting Parties and property owners to determine what properties or areas will be the subject of survey and evaluation, and appropriate information to include. The review process for this Historic Context will be conducted pursuant to Stipulation VI. The final Historic Context will be provided to the New Jersey SHPO and interested Consulting Parties and property owners.

ii. Lucy the Margate Elephant. The Lessee agrees to the following measures:

1) Funding for Visitor Experience and Public Access for Lucy the Margate Elephant. The Lessee will: determine priority projects in collaboration with the representatives for the property owner; use already available plans or develop plans appropriate to the identified project, and ensure the plans submitted for review are prepared by professionals meeting Secretary of the Interior (SOI) Professional Qualifications for Architecture or Architectural History with experience applying the SOI Standards for the Treatment of Historic Properties; ensure the project is carried out by qualified contractors who will execute plans; and take necessary steps to ensure planned work is completed. As a publicly owned property, any proposed mitigation projects at Lucy the Margate Elephant are subject to review under the New Jersey Register of Historic Places Act.

iii. Atlantic County Historic Properties Mitigation

a. Absecon Lighthouse, Atlantic City, Atlantic County.

1) Funding for Visitor Experience and Public Access for Absecon Lighthouse. As property owner, the NJ Department of Environmental Protection, State Parks, Forests & Historic Sites program will: determine priority projects in collaboration with the tenant, the Inlet Public Private Association (IPPA). Following this collaboration, the Lessee will determine priority projects with NJ Department of Environmental Protection, State Parks, Forests & Historic Sites program; use already available plans or develop plans appropriate to the identified project; ensure the plans submitted for review are prepared by professionals meeting SOI Professional Qualifications for Architecture or Architectural History with experience applying the SOI Standards for the Treatment of Historic Properties; ensure the project is carried out by qualified contractors, who will execute plans; and take necessary steps to ensure planned work is completed. The Lessee will provide funds to the NJ Department of Environmental Protection, State Parks, Forests & Historic Sites Program consistent with Attachment 8. As a publicly owned property, any proposed mitigation projects at Absecon Lighthouse are subject to review under the New Jersey Register of Historic Places Act.

b. Atlantic City Boardwalk, Atlantic City, Atlantic County.

1) Funding for Visitor Experience and Public Access for Atlantic City Boardwalk. The Lessee will: determine priority projects in collaboration with the representatives for the property owner; use already available plans or develop plans appropriate to the identified project, and ensure the plans submitted for review are prepared by professionals meeting SOI Professional Qualifications for Architecture or Architectural History with experience applying the SOI Standards for the Treatment of Historic Properties; ensure the project is carried out by qualified contractors who will execute plans; and take necessary steps to ensure planned work is completed.

C. Mitigation Fund

1. The Lessee will establish and contribute funding to a separate mitigation fund consistent with Attachment 8 to resolve visual adverse effects to the following 15 historic properties: Brigantine Hotel, Brigantine City, Atlantic County; Atlantic City Convention Hall, Atlantic City, Atlantic County; Ritz-Carlton Hotel, Atlantic City, Atlantic County; Haddon Hall/Resorts Casino Hotel, Atlantic City, Atlantic County; Riviera Apartments, Atlantic City, Atlantic County; Vassar Square Condominiums, Ventnor City, Atlantic County; House at 114 South Harvard Avenue, Ventnor City, Atlantic County; Great Egg Coast Guard Station, Longport Borough, Atlantic County; Ocean City Boardwalk, Ocean City, Cape May County; Ocean City Music Pier, Ocean City, Cape May County; Hereford Lighthouse, North Wildwood, Cape May County; North Wildwood Life Saving Station, North Wildwood, Cape May County; U.S. Lifesaving Station #35, Stone Harbor Borough, Cape May County; Flanders Hotel, Ocean City, Cape May County; and Little Egg Harbor U.S. Life Saving Station #23 (U.S. Coast Guard Station #119), Little Egg Harbor Township, Ocean County). This mitigation fund is separate from and not related to the mitigation measures listed under Stipulation III.A and B.

   i. Fund Establishment. BOEM will require the Lessee to establish a mitigation fund to resolve visual adverse effects to historic properties in New Jersey, including two NHLs. Attachment 8 provides a basis for the total funding amount, based on input of qualified consultants with experience fulfilling activities similar to those that can be funded through the mitigation fund and for historic properties comparable to those adversely effected by the Project.

   ii. Fund Amount and Application to Mitigation of Adverse Effects. In order to mitigate the undertaking's visual adverse effects to historic properties, the Lessee must provide the total amount of $1,185,000 of funding in support of historic preservation and public interpretive and commemorative activities; see Attachment 8. The amount contributed on behalf of each individual historic property is based on previously proposed measures discussed with consulting parties (see June 24, 2022 Draft Environmental Impact Statement Appendix N Finding of Effect) including, but not limited to, activities such National Register Nominations, Historic American Building Survey and Historic American Engineer Record, Historic Structure Reports, and/or applicable preservation, public access, or interpretation activities, and included in Appendix H to the Project EIS. BOEM believes these measures would be appropriate to fully address the nature, scope, size, and magnitude of adverse effects including cumulative effects caused by the Project, NRHP-qualifying characteristics of each historic property that would be affected, and the heightened significance and concerns of the NHL. In the specific context of this undertaking, including the privately owned properties involved, the signatories agree that it is appropriate to provide flexibility to implement these or other specific activities for preservation, interpretation, and commemoration to mitigate adverse effects to historic properties, and the signatories agree that the level of funding identified in Attachment 8 is appropriate.

   iii. Depositing the Fund and the Allocation of Funds through Grants. Within 90 days of the Lessee receiving a no objection to the complete Facility Design Report/Fabrication and Installation Report, the Lessee must pay this amount to an escrow account. Those funds will be deposited into a fund which will be managed by a third-party administrator, the New Jersey Historic Trust, for the purpose of providing grants until the fund balance is expended. Notwithstanding the additional obligations of the Lessee under this MOA including reporting on the implementation of mitigation fund, the Lessee's deposit of

such funds into this mitigation fund will satisfy the Lessee's obligations as it relates to mitigation for visual adverse effects to the historic properties listed in Stipulation III.C.1, unless additional consultation is required in the event of unallocated funds, as described below. These grants are to support mitigation activities for the preservation, interpretation, or commemoration of historic sites, buildings, or events. Grants will be awarded for the long-term protection, preservation, and commemoration of adversely affected historical properties in the following order of preference. Grants must first be awarded to the historic properties listed in Stipulation III.C.1. If after 2 years from the date the administrator begins accepting grant applications there are funds still unapplied, then grants may be awarded for activities for any adversely affected historic property identified in Appendix N, Finding of Effect.

iv. Unallocated Funds. If after five years from the date the administrator begins accepting applications any funds are unallocated, then BOEM will consult with the consulting parties on appropriate use of the remaining funds to resolve adverse effects. BOEM will ensure the mitigation fund operating procedures clarify that the remaining funds are prioritized for historic properties listed under Stipulation III.C.1 that have not received any funds from this mitigation fund and then funds may be applied to activities for any adversely affected historic property identified in Appendix N, Finding of Effect The signatories agree that the existence of unapplied funds does not constitute a breach of this agreement.

v. Fund Administration and Monitoring. The New Jersey Historic Trust will serve as the third-party administrator of the fund and will oversee the funded activities consistent with this MOA. BOEM will consult with the third-party administrator and New Jersey SHPO prior to allowing the third-party administrator to issue any grants to ensure the grants will be awarded for preservation-related activities. The third-party administrator's fees and administrative costs will be paid from the fund and must not exceed 6 percent of the fund amount. BOEM with the assistance of the third-party administrator must ensure, through the annual reporting process (see Stipulation XV), that all granted funds are used exclusively for the purposes described in Stipulation III.C.1 for direct costs of preservation, interpretation, or commemoration of the historic properties adversely affected by the undertaking and the mitigation fund administrator must prohibit the use of grant funds for indirect costs, such as accountant fees, employee salary or benefits, or legal fees. In the case of the need for a replacement of the fund administrator, BOEM and the Lessee will consult on the selection of this fund administrator with the consulting parties and BOEM will choose the replacement administrator.

vi. Mitigation Fund Operating Procedures and Reporting. BOEM will consult with the third-party administrator to develop operating procedures for the mitigation fund, and BOEM will review and approve the final operating procedures no later than 2 years after the MOA is executed. BOEM will provide the final operating procedures to the consulting parties. The mitigation fund operating procedures will clarify when and how the third-party administrator will start accepting grants including the time period for application, how the applications will be screened, and the criteria for grant funding eligibility. BOEM will ensure that the third-party administrator has procedures under which it will provide a copy of all grants made and an annual report on expenditure of funds and activities to BOEM, New Jersey SHPO, and the Lessee. The Lessee will summarize the third-party administrator's annual report to describe funded mitigation activities, progress, completion, and outcomes in the annual report per Stipulation XI,

with sufficient detail for BOEM to ensure that the mitigation is being implemented according to this section (III.C.1).

vii. Grant-supported Mitigation Standards. BOEM will ensure that the operating procedures include the following, where applicable.

a. In such cases where Historic Architectural Building Survey (HABS) documentation and HABS-like documentation mitigation would be selected as the appropriate mitigation measure, the grantee shall first consult with historic property owner to identify photographic documentation specifications.

b. Where Historic Structure Report mitigation is included within a grant, the documentation shall be prepared in accordance with the *Historic Structure Reports and Preservation Plans: A Preparation Guide – Second Edition*, as may be amended, and the project team must include an individual meeting the SOI's professional qualifications standards for historic architecture.

c. Where funding for visitor experience, public access, climate resiliency, or comparable actions would be granted, all projects must meet the SOI standards for the Treatment of Historic Properties and these projects should not constitute adverse effects themselves on the historic properties.

IV. PHASED IDENTIFICATION

A. Information pertaining to identification of historic properties within certain portions of the Marine APE related to Alternatives B-1, B-2, C-1, C-2, and D will not be available until after the ROD is issued and the COP is approved. The analysis for all other alternatives is complete, including the Preferred Alternative, (Alternative A in combination with Alternative E). If Alternative B-1, B-2, C-1, C-2, or D is selected, BOEM will implement the following consultation steps for phased identification and evaluation of historic properties within the Marine APE in accordance with BOEM's existing *Guidelines for Providing Archaeological and Historic Property Information Pursuant to Title 30 Code of Federal Regulations Part 585*. Survey efforts shall comply with the New Jersey Historic Preservation Office Requirements for Phase I Archaeological Survey at N.J.A.C. 7:4-8.4. Reports of archaeological survey results shall conform to the Requirements for Archaeological Survey Reports - Standards for Report Sufficiency at N.J.A.C. 7:4-8.5. The final identification of historic properties within the marine APE may occur after publication of the Draft EIS, but prior to the initiation of construction. In this circumstance, the Signatories agree that the following describes how BOEM will conduct phased identification and of historic properties, pursuant to 36 CFR § 800.4(b)(2).

1. If Alternative C-1 is selected, previously un-surveyed areas associated with one WTG and potentially the inter-array cable routing will need to be surveyed for marine archaeology in the Marine APE. If Alternative C-2 is selected, previously un-surveyed areas associated with 22 WTG positions and potentially the inter-array cable routing will need to be surveyed for marine archaeology. If Alternative B-1, B-2, or D is selected, previously un-surveyed areas associated with the inter-array cable will need to be surveyed for marine archaeology.

2. For identification of historic properties within the marine archaeological, portions of the APE, supplemental technical studies will be conducted by the Lessee in accordance with state guidelines and recommendations presented in BOEM's most recent *Guidelines*. The

developer will coordinate with the New Jersey SHPO prior to the initiation of any such identification efforts.

i. BOEM will require that identification efforts for historic properties associated with marine archaeology in the Marine APE be documented in a technical report that addresses the identification of historic properties and includes an evaluation of effects due to the Project.

3. BOEM will consult with the signatories, invited signatories, and consulting parties on the results of historic property identification surveys for any portions of the APE that were not addressed in the pre-COP approval consultations.

4. BOEM will treat all identified potential historic properties as eligible for inclusion in the NRHP unless BOEM determines, and the New Jersey SHPO agrees, that a property is ineligible, pursuant to 36 CFR § 800.4(c) and Stipulation II.D of the NJ-NY PA.

5. If BOEM identifies no additional historic properties or determines that no historic properties are adversely affected due to the selection of one of these alternatives, BOEM, with the assistance of the Lessee, will notify and consult with the signatories, invited signatories, and consulting parties following the consultation process set forth here in this stipulation.

   a. BOEM, with the assistance of the Lessee, will notify all the signatories, invited signatories, and consulting parties about the selected alternative and BOEM's determination by providing a written summary of the alternative including any maps, a summary of the surveys and/or research conducted to identify historic properties and assess effects, and copies of the surveys.

   b. BOEM, with the assistance of the Lessee, will allow the signatories, invited signatories, and consulting parties 30 calendar days to review and comment on the survey reports, the results of the surveys, BOEM's determination, and the documents.

   c. After the 30-calendar review period has concluded and no comments require additional consultation, BOEM with the assistance of the Lessee, will notify the signatories and consulting parties that the New Jersey SHPO has concurred with BOEM's determination, if they received any comments, provide a summary of the comments and BOEM's responses. If the New Jersey SHPO objects, then BOEM will resolve any such objections pursuant to the dispute resolution process set forth in Stipulation XVI.

   d. BOEM, with the assistance of the Lessee, will conduct any consultation meetings if requested by the signatories or consulting parties.

6. If BOEM determines newly identified potentially eligible historic properties in the Marine APE could be adversely effected due to the selection of one of these alternatives, BOEM with the assistance of the Lessee 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 here in this stipulation.

   i. BOEM, with the assistance of the Lessee, will notify all signatories, invited signatories, and consulting parties about the selected alternative and BOEM's determination by providing a written summary of the alternative 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, invited signatories, and consulting parties will have 30 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 additional consultation meetings, if necessary, during consultation on the adverse effect finding and during drafting and finalization of the treatment plan(s).

iv. BOEM, with the assistance of 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 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 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 the signatories, invited 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 to comments, if they receive any on the draft final documents, after BOEM has received agreement from the New Jersey SHPO on the finding of new adverse effect(s), and BOEM has accepted the final treatment plan(s).

viii. The MOA will not need to be amended after the treatment plan(s) is accepted by BOEM.

7. If the New Jersey SHPO disagrees with BOEM's determination regarding whether an affected property is eligible for inclusion in the NRHP, or if the ACHP or the Secretary so request, the agency official will obtain a determination of eligibility from the Secretary pursuant to 36 CFR Part 63 (36 CFR § 800.4(c)(2)).

V. VIBRATION MONITORING

A. If the 5th Street cable route option, one of the options currently proposed for BL England interconnection and reviewed as part of the undertaking, is selected by the Lessee as the preferred cable route, BOEM will require the Lessee to:

1. Employ the expertise of a qualified vibration expert to identify construction approaches to avoid or minimize vibration impacts to foundations of historic properties adjacent to right-of-way construction areas for the 5th Street cable route option. BOEM and the Lessee will offer New Jersey SHPO an opportunity to review and comment on these construction approaches.

2. Avoid instances of slate sidewalk remnants in the Ocean City Historic District, or remove them prior to construction activities and replace them following completion of construction activities.

3. Prepare and implement a Vibration Monitoring Plan that will identify:

   i. Construction means and methods to avoid or minimize vibration impacts and how they will be carried out in such a way as to ensure vibrations do not reach a level that causes structural or architectural damage to historic properties.

   ii. Process for identification of historic properties adjacent to the 5th Street cable route option that are potentially vulnerable to vibration, as well as required qualifications for vibration expert conducting vulnerability assessment, process for describing the results of this assessment, and process for making the findings of this assessment available to consulting parties.

   iii. Approach to perform a condition assessment on potentially vulnerable properties adjacent to the cable route prior to construction and again when construction of the cable route is complete.

   iv. If damage is identified by the owner of a potentially vulnerable property during construction, the process for how property owners will be able to notify the Lessee, including establishment of a reasonable period within which the Lessee will respond. If onshore cable route construction activities are resulting in structure or architectural damage to historic properties, the Lessee will stop construction until appropriate safeguards can be put in place.

   v. Process for temporary removal of slate sidewalk remnants prior to construction and replacement of slate sidewalk remnants after construction and how the process will be carried out in such a way as to ensure construction activities will not damage these features of the Ocean City Historic District.

B. If any structural or architectural damage to historic properties occurs during cable route construction, the Lessee will be required to assess the cause of the damage, identify and provide for any necessary repairs, consistent with the SOI's Standards for the Treatment of Historic Properties. BOEM with the assistance of the Lessee will notify and consult with the signatories, invited signatories, and consulting parties regarding instances of damage and repair. BOEM will offer New Jersey SHPO the opportunity to review and comment on the consistency of any repairs with the Standards.

VI. REVIEW PROCESS FOR DOCUMENTS

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

1. Draft Document

   i. The Lessee shall provide the document to BOEM for technical review and approval.

      a. BOEM has 15 calendar days to complete its technical review.

      b. If BOEM does not provide approval, it shall submit its comments back to the Lessee, who will have 15 calendar days to address the comments.

   ii. BOEM, with the assistance of the Lessee, shall provide the draft document to consulting parties, except the ACHP, for review and comment.

a. Consulting parties shall have 30 calendar days to review and comment.

b. BOEM, with the assistance of the Lessee, shall coordinate a meeting with consulting parties to facilitate comments on the document if requested by a consulting party.

c. BOEM shall consolidate comments received and provide them to 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.

2. Draft Final Document

i. The Lessee shall provide BOEM with the draft final document for technical review and approval.

a. BOEM has 15 calendar days to complete its technical review.

b. If BOEM does not provide approval, it shall submit its comments back to the Lessee, who will have 15 calendar days to address the comments.

ii. BOEM, with the assistance of the Lessee, shall provide the draft final document to consulting parties, except the ACHP, for review and comment. With this same submittal of draft final documents, the Lessee will provide a summary of all the comments received on the documents and BOEM's responses.

a. Consulting parties have 30 calendar days to review and comment.

b. BOEM, with the assistance of the Lessee, shall coordinate a meeting with consulting parties to facilitate comments on the document if requested by a consulting party.

c. BOEM shall consolidate comments received and provide them to 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 shall provide BOEM with the final document for approval.

a. BOEM has 15 calendar days to complete its technical review.

b. If BOEM does not provide approval, it shall submit its comments back to the Lessee, who will have 15 calendar days to address the comments.

c. BOEM, with the assistance of the Lessee, shall provide the final document to consulting parties, except the ACHP, within 30 calendar days of approving the final document. With this same submittal of final documents, the Lessee will provide a summary of all the comments received on the documents and BOEM's responses.

VII. SUBMISSION OF DOCUMENTS

A. New Jersey SHPO, ACHP, NPS, Tribes, and Consulting Parties

1. All submittals to the New Jersey SHPO, ACHP, NPS, Tribes, and consulting parties will be submitted electronically unless a specific request is made for the submittal be provided in paper format.

VIII. PROJECT MODIFICATIONS

A. If the Lessee proposes any modifications to the Project that expands the Project beyond the Project Design Envelope included in the COP and/or occurs outside the defined APEs or the proposed modifications would change BOEM's final Section 106 determinations and findings for this Project, the Lessee shall notify and provide BOEM with information concerning the proposed modifications. BOEM will determine if these modifications require alteration of the conclusions reached in the Finding of Effect and, thus, will require additional consultation with the signatories, invited signatories and consulting parties. If BOEM determines additional consultation is required, the Lessee will provide the signatories, invited signatories, and consulting parties with the information concerning the proposed changes, and they will have 30 calendar days from receipt of this information to comment on the proposed changes. BOEM shall take into account any comments from signatories, invited signatories, and consulting parties prior to agreeing to any proposed changes. Using the procedure below, BOEM will, as necessary, consult with the signatories, invited signatories, and consulting parties to identify and evaluate historic properties in any newly affected areas, assess the effects of the modification, and resolve any adverse effects. Any project modification followed pursuant to Stipulation VIII would not require an amendment to the MOA.

1. If the Project is modified and BOEM identifies no additional historic properties or determines that no historic properties are adversely affected due to the modification, BOEM, with the assistance of the Lessee, will notify and consult with the signatories, invited signatories, and consulting parties following the consultation process set forth in this Stipulation VII.A.1.

    i. The Lessee will notify all the signatories, invited signatories, and consulting parties about this proposed change and BOEM's determination by providing a written summary of the project modification including any maps, a summary of any additional surveys and/or research conducted to identify historic properties and assess effects, and copies of the surveys.

    ii. BOEM and the Lessee will allow the signatories, invited signatories, and consulting parties 30 calendar days to review and comment on the proposed change, BOEM's determination, and the documents.

    iii. After the 30-calendar day review period has concluded and if no comments require additional consultation, the Lessee will notify the signatories and consulting parties that BOEM has approved the project modification and, if they received any comments, provide a summary of the comments and BOEM's responses.

    iv. BOEM, with the assistance of the Lessee, will conduct any consultation meetings if requested by the signatories or consulting parties.

2. If BOEM determines new adverse effects to historic properties will occur due to a Project modification, BOEM with the assistance of the Lessee will notify and consult with the signatories, invited signatories, and consulting parties regarding BOEM's finding and the

proposed measures to resolve the adverse effect(s) including the development of a new treatment plan(s) following the consultation process set forth in this Stipulation VII.A.2.

i. The Lessee will notify all signatories, invited signatories, and consulting parties about this proposed modification, BOEM's determination, and the proposed resolution measures for the adverse effect(s).

ii. The signatories, invited signatories, and consulting parties will have 30 calendar days to review and comment on the adverse effect finding and the proposed resolution of adverse effect(s), including a draft treatment plan(s).

iii. BOEM, with the assistance of the Lessee, will conduct additional consultation meetings, if necessary, during consultation on the adverse effect finding and during drafting and finalization of the treatment plan(s).

iv. BOEM, with the assistance of the Lessee, will respond to the comments and make necessary edits to the documents.

v. The Lessee 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 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. The Lessee will notify all the signatories, invited signatories, and consulting parties that BOEM has approved the project modification and will provide the final document(s) including the final treatment plan(s) and a summary of comments and BOEM's responses to comments, if they receive any on the draft final documents, after BOEM has received agreement from the New Jersey SHPO on the finding of new adverse effect(s), BOEM has accepted the final treatment plan(s), and BOEM has approved the Project modification.

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

IX. CURATION

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

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

1. Archaeological materials from state or local government lands in the APE and the records and documentation associated with these materials shall be curated within the state of their origin at a repository preferred by the New Jersey SHPO, or an approved and certified repository, in accordance with the standards and guidelines required by the New Jersey SHPO. Lands as described here may include the seafloor in state waters. The terrestrial APE for the Project, where archaeological materials could originate, is located only within New Jersey. No excavation should be initiated before acceptance and approval of a curation plan.

2. Collections from private lands that would remain private property: In cases where archaeological survey and testing are conducted on private land, any recovered collections remain the property of the land owner. In such instances, BOEM and the Lessee, in coordination with the SHPO, and affected Tribe(s), will encourage land owners 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 will seek to have the materials donated to the repository identified under Stipulation VII.B.1 through a written donation agreement developed in consultation with the consulting parties. BOEM, assisted by 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, New Jersey SHPO, and affected Tribe(s), and following applicable State guidelines. To the extent feasible, the materials and records resulting from the actions required by this MOA for private lands, shall be curated in accordance with 36 CFR 79. No excavation should be initiated before acceptance and approval of a curation plan.

X. PROFESSIONAL STANDARDS AND QUALIFICATIONS

A. Secretary's Standards for Archaeology and Historic Preservation. The Lessee will ensure that all work carried out pursuant to this MOA will meet the SOI Standards for Archaeology and Historic Preservation, 48 FR 44716 (September 29, 1983), taking into account the suggested approaches to new construction in the SOI's Standards for Rehabilitation.

B. SOI Professional Qualifications Standards. The Lessee will ensure that all work carried out pursuant to this MOA is performed by or under the direction supervision of historic preservation professionals who meet the SOI's Professional Qualifications Standards (48 FR 44738-44739). A "qualified professional" is a person who meets the relevant standards outlined in such SOI's Standards. BOEM, or its designee, will ensure that consultants retained for services pursuant to the MOA meet these standards.

C. Investigations of ASLFs. The Lessee will ensure that the additional investigations of ASLFs will be conducted and reports and other materials produced by one or more qualified marine archaeologists and geological specialists who meet the SOI's Professional Qualifications Standards and has experience both in conducting High Resolution Geophysical (HRG) surveys and processing and interpreting the resulting data for archaeological potential, as well as collecting, subsampling, and analyzing cores.

D. Tribal Consultation Experience. BOEM with the assistance of the Lessee will ensure that all work carried out pursuant to this MOA that requires consultation with Tribes is performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes.

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, acknowledging 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).

XI. DURATION

A. This MOA will expire at (1) the decommissioning of the Project in the lease area, as defined in the Lessee's lease with BOEM (Lease Number OCS-A 0498) or (2) 25-years from the date of COP approval, whichever occurs first. Prior to such time, BOEM may consult with the other signatories and invited signatories to reconsider the terms of the MOA and amend it in accordance with Amendment Stipulation (Stipulation XIV).

XII. TERRESTRIAL ARCHAEOLOGICAL MONITORING

A. Implementation of Terrestrial Archaeological Monitoring Plan. The Lessee will implement the archaeological monitoring plan found in Attachment 5 (Terrestrial Archaeological Monitoring Plan), which applies to areas identified for archaeological monitoring.

B. In the event of a post-review discovery during archaeological monitoring, the process identified under Stipulation XII. Post-Review Discoveries will apply.

XIII. POST-REVIEW DISCOVERIES

A. Implementation of Post-Review Discovery Plans. If properties are discovered that may be historically significant or unanticipated effects on historic properties found, BOEM with the assistance of the Lessee shall implement the post-review discovery plans found in Attachment 6 (Post-Review Discovery Plan for Submerged Cultural Resources for the Ocean Wind 1 Offshore Wind Farm for Lease OCF A-0498 Construction and Operations Plan) and Attachment 7 (Post-Review Discovery Plan for Terrestrial Cultural Resources for the Ocean Wind 1 Offshore Wind Farm for Lease OCF A-0498 Construction and Operations Plan).

B. 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. All Post-Review Discoveries. In the event of a post-review discovery of a property or unanticipated effects to a historic property prior to or during construction, operation, maintenance, or decommissioning of the Project, the Lessee will implement the following actions which are consistent with the post-review discovery plans in Attachments 6 and 7:

1. Immediately halt all ground- or seafloor-disturbing activities within the area of discovery;

2. Notify BOEM in writing via report within 72 hours of the discovery;

3. Keep the location of the discovery confidential and take no action that may adversely affect the discovered property until BOEM or its designee has made an evaluation and instructs the lessee on how to proceed; and

4. Conduct any additional investigations as directed by BOEM or its designee to determine if the resource is eligible for listing in the NRHP (30 CFR 585.702(b)). BOEM will direct the Lessee to complete additional investigations, as BOEM deems appropriate, if:

    i. the site has been impacted by the Lessee Project activities; or

ii. impacts to the site from the Lessee Project activities cannot be avoided.

5. If investigations indicate that the resource is eligible for the NRHP, BOEM, with the assistance of the Lessee, will work with the other relevant signatories, invited signatories, and consulting parties to this MOA who have a demonstrated interest in the affected historic property and on the further avoidance, minimization or mitigation of adverse effects.

6. If there is any evidence that the discovery is from an indigenous society or appears to be a preserved burial site, the Lessee will contact the Tribes as identified in the notification lists included in the post-review discovery plans within 72 hours of the discovery with details of what is known about the discovery, and consult with the Tribes pursuant to the post review discovery plan.

7. If BOEM incurs costs in addressing the discovery, under Section 110(g) of the NHPA, BOEM may charge 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)).

XIV. EMERGENCY SITUATIONS

A. In the event of an emergency or disaster that is declared by the President or the Governor of New Jersey, 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, BOEM with the assistance of the Lessee will notify the consulting Tribes, New Jersey SHPO, and the ACHP of the condition which 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 no later than 48 hours from when it becomes aware of the emergency or disaster. Should the consulting Tribes, New Jersey SHPO, or the ACHP desire to provide technical assistance to BOEM, they shall submit comments within seven calendar days from notification if the nature of the emergency or hazardous condition allows for such coordination.

XV. MONITORING AND REPORTING

A. At the beginning of each calendar year by January 31, following the execution of this MOA until it expires or is terminated, the Lessee will prepare and, following BOEM's review and agreement to share this summary report, provide all signatories, invited signatories, and consulting parties to this MOA a summary report detailing work undertaken pursuant to the MOA. Such report shall include a description of how the stipulations relating to avoidance and minimization measures (Stipulations I and II) were implemented; any scheduling changes proposed; any problems encountered; and any disputes and objections received in BOEM's efforts to carry out the terms of this MOA. 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, invited signatory, and consulting parties to discuss the annual report, the implementation of this MOA, and other requested topics.

XVI. DISPUTE RESOLUTION

A. Should any signatory, invited signatory, or consulting party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, they must notify BOEM in writing of their objection. BOEM shall consult with such party to resolve the objection. If BOEM determines that such objection cannot be resolved, BOEM will:

1. Forward all documentation relevant to the dispute, including the BOEM's proposed resolution, to the ACHP. The ACHP shall provide BOEM with its advice on the resolution of the objection within 30 calendar days of receiving adequate documentation. Prior to reaching a final decision on the dispute, BOEM shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories, invited signatories, and/or consulting parties, and provide them with a copy of this written response. BOEM will make a final decision and proceed accordingly.

2. If the ACHP does not provide its advice regarding the dispute within the 30 calendar-day time period, BOEM may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, BOEM shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories, invited signatories, or consulting parties to the MOA, and provide them and the ACHP with a copy of such written response.

B. BOEM's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

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

XVII. AMENDMENTS

A. This MOA may be amended when such an amendment is agreed to in writing by all signatories and invited signatories. The amendment will be effective on the date a copy signed by all of the signatories and invited signatories is filed with the ACHP.

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

XVIII. TERMINATION

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

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

XIX. COORDINATION WITH OTHER FEDERAL AGENCIES

A. In the event that another federal agency not initially a party to or subject to this MOA receives an application for funding/license/permit for the undertaking as described in this MOA, that agency may fulfill its Section 106 responsibilities by stating in writing it concurs with the terms of this MOA and notifying the signatories and invited signatories that it intends to do so. Such federal agency may become a signatory, invited signatory, or a concurring party (collectively referred to as signing party) to the MOA as a means of complying with its responsibilities under Section 106 and based on its level of involvement in the undertaking. To become a signing party to the MOA, the agency official must provide written notice to the signatories and invited signatories that the agency agrees to the terms of the MOA, specifying the extent of the agency's intent to participate in the MOA. The participation of the agency is subject to approval by the signatories and invited signatories who must respond to the written notice within 30 calendar days or the approval will be considered implicit. Any necessary amendments to the MOA as a result will be considered in accordance with the Amendment Stipulation (Stipulation XVII).

B. Should the signatories and invited signatories approve the federal agency's request to be a signing party to this MOA, an amendment under Stipulation XVII will not be necessary if the federal agency's participation does not change the undertaking in a manner that would require any modifications to the stipulations set forth in this MOA. BOEM will document these conditions and involvement of the federal agency in a written notification to the signatories, invited signatories, and consulting parties, and include a copy of the federal agency's executed signature page, which will codify the addition of the federal agency as a signing party in lieu of an amendment.

XX. ANTI-DEFICIENCY ACT

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

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

[SIGNATURES COMMENCE ON FOLLOWING PAGE]

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT

Signatory:

Bureau of Ocean Energy Management (BOEM)

ELIZABETH KLEIN

Digitally signed by ELIZABETH KLEIN
Date: 2023.06.29 12:44:10 -04'00'

Date: 6/29/23

Elizabeth Klein
Director
Bureau of Ocean Energy Management

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND OFFSHORE WIND FARM PROJECT

Signatory:

New Jersey State Historic Preservation Officer (SHPO)

Katherine J. Marcopul

Date: 6/29/2023

Katherine J. Marcopul, Ph.D., CPM
Administrator and
Deputy State Historic Preservation Officer
New Jersey Department of Environmental Protection

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT

Signatory:

Advisory Council on Historic Preservation (ACHP)

Date: June 30, 2023

Reid J. Nelson
Executive Director
Advisory Council on Historic Preservation

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND OFFSHORE WIND FARM PROJECT

Invited Signatory:

Ocean Wind LLC (lessee), by its agent Orsted Wind Power North America LLC

Peter Allen
Head of Finance Authorized Person
Ocean Wind LLC

Date: June 26, 2023

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT

Invited Signatory:

The Delaware Tribe of Indians

_____ Date:_____

Brad KillsCrow
Chief
The Delaware Tribe of Indians

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND OFFSHORE WIND FARM PROJECT

Invited Signatory:

The Delaware Nation

Deborah Dotson
President of the Executive Committee
The Delaware Nation

Date: 07/19/2023

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT

Invited Signatory:

The Stockbridge-Munsee Community Band of Mohican Indians

_____ Date:_____

Shannon Holsey
President
The Stockbridge-Munsee Community Band of Mohican Indians

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT

Invited Signatory:

The Shinnecock Indian Nation

_____ Date:_____

Bryan Polite
Chairman
The Shinnecock Indian Nation

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND OFFSHORE WIND FARM PROJECT

Invited Signatory:

The New Jersey Historic Trust

_____ Date:___June 26, 2023

Dorothy Guzzo
Executive Director
The New Jersey Historic Trust

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT

Concurring Party:

Mashantucket Pequot Tribal Nation

_____ Date:_____

Rodney Butler
Chairman
Mashantucket Pequot Tribal Nation

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT

Concurring Party:

Wampanoag Tribe of Gay Head (Aquinnah)

_____ Date:_____

Cheryl Andrews-Maltais
Chairwoman
Wampanoag Tribe of Gay Head (Aquinnah)

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND OFFSHORE WIND FARM PROJECT

Concurring Party:

Organization: Save Lucy Committee, Inc.

Richard D Helfant

Date: 6/9/23

Name Richard D Helfant
Title Executive Director/CEO
Organization Save Lucy Committee, Inc.

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT

Concurring Party:

Organization

Marty Small, Sr.

Name Marty Small Sr.
Title Mayor
Organization City of Atlantic City

Date: 7/31/23

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT

Concurring Party:

Organization

_____ Date:_____

Name
Title
Organization

MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT

LIST OF ATTACHMENTS TO THE MOA

ATTACHMENT 1 – APE MAPS

ATTACHMENT 2 – LISTS OF INVITED AND PARTICIPATING CONSULTING PARTIES

ATTACHMENT 3 – HISTORIC PROPERTY TREATMENT PLAN FOR THE OCEAN WIND 1 FARM ANCIENT SUBMERGED LANDFORM FEATURES, FEDERAL WATERS ON THE OUTER CONTINENTAL SHELF

ATTACHMENT 4 – HISTORIC PROPERTIES TREATMENT PLAN FOR THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT, HISTORIC PROPERTIES SUBJECT TO ADVERSE VISUAL EFFECT, CAPE MAY AND ATLANTIC COUNTIES, NEW JERSEY

ATTACHMENT 5 – TERRESTRIAL ARCHAEOLOGICAL MONITORING PLAN

ATTACHMENT 6 – POST-REVIEW DISCOVERY PLAN FOR SUBMERGED CULTURAL RESOURCES FOR THE OCEAN WIND 1 OFFSHORE WIND FARM FOR LEASE OCS A-0498 CONSTRUCTION AND OPERATIONS PLAN

ATTACHMENT 7 – POST-REVIEW DISCOVERY PLAN FOR TERRESTRIAL RESOURCES FOR THE OCEAN WIND 1 OFFSHORE WIND FARM FOR LEASE AREA OCS A-0498 CONSTRUCTION AND OPERATIONS PLAN

ATTACHMENT 8 – MITIGATION FUNDING AMOUNTS

This page intentionally left blank.

ATTACHMENT 1 – APE MAPS

This page intentionally left blank.

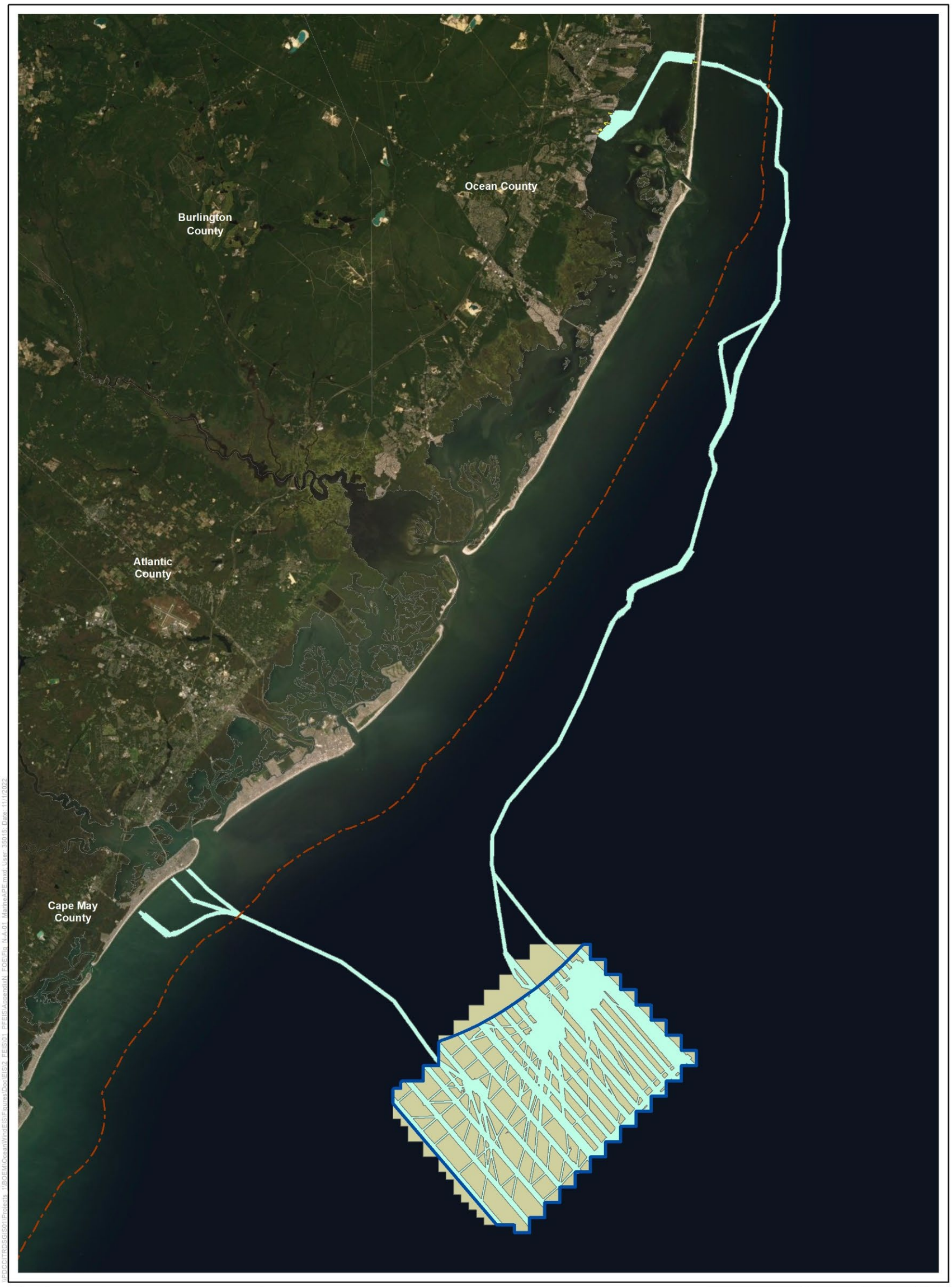


Figure 1 Marine Archaeological Resources APE for Activities within the Lease Area

Figure 2 **Marine Archaeological Resources APE for Activities within the Oyster Creek Export Cable Route Corridor**

Figure 3 Marine Archaeological Resources APE for Activities within the BL England Export Cable Route Corridor

Figure 4 **Terrestrial Archaeological Resources APE with Onshore Cable and Landfall Site Alternatives for BL England**

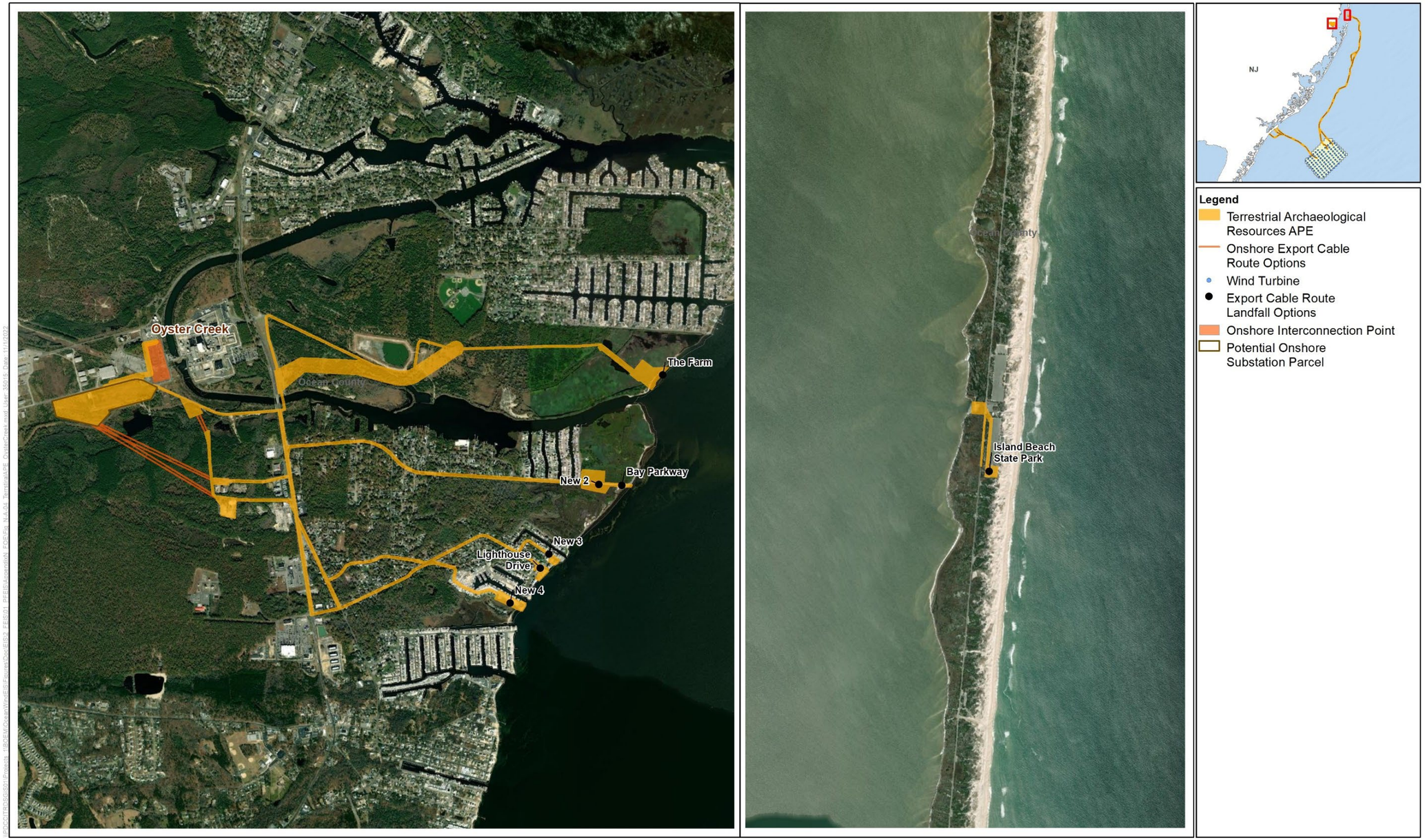


Figure 5 **Terrestrial Archaeological Resources APE with Onshore Cable and Landfall Site Alternatives for Oyster Creek**

This page intentionally left blank.

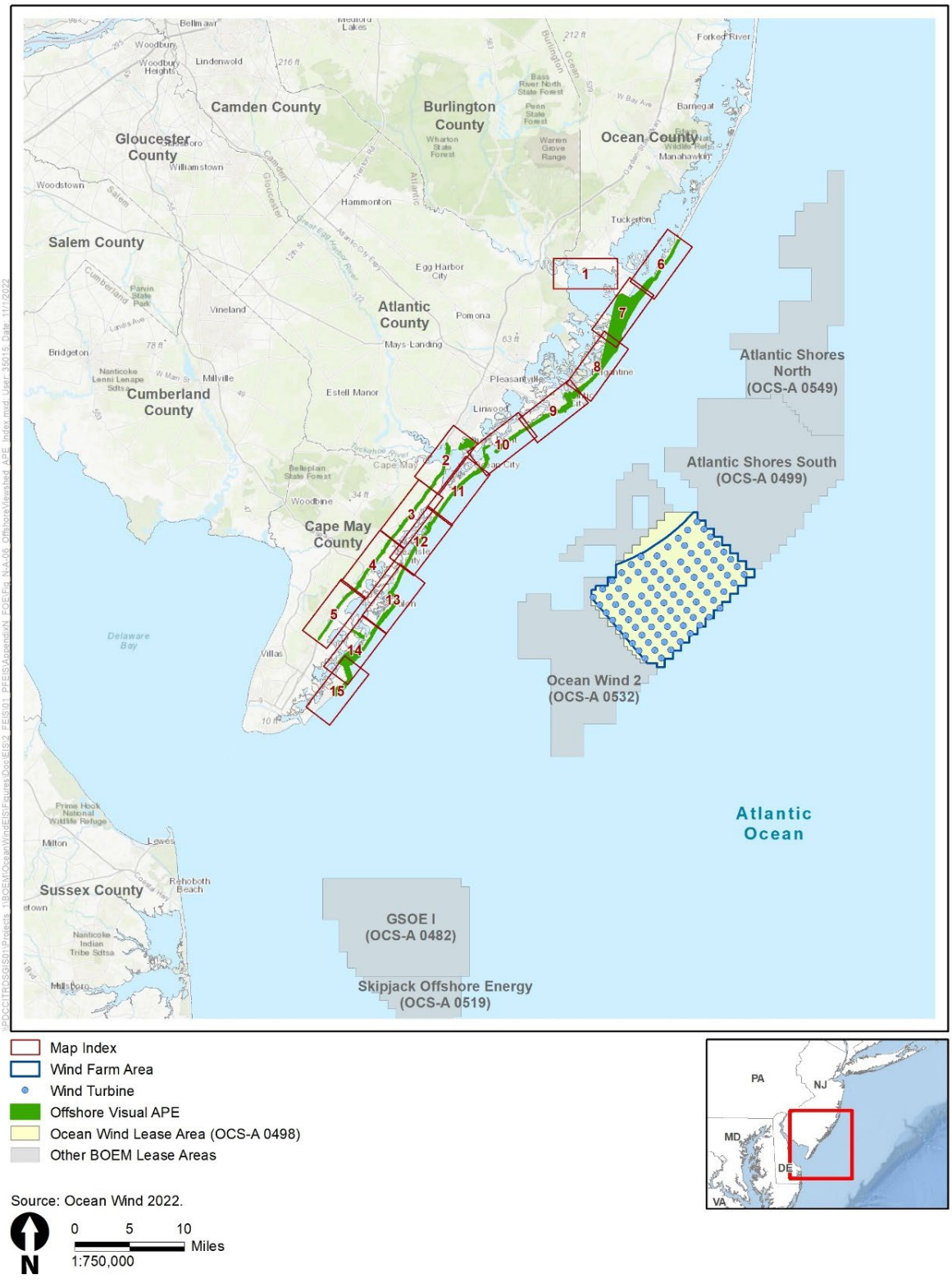
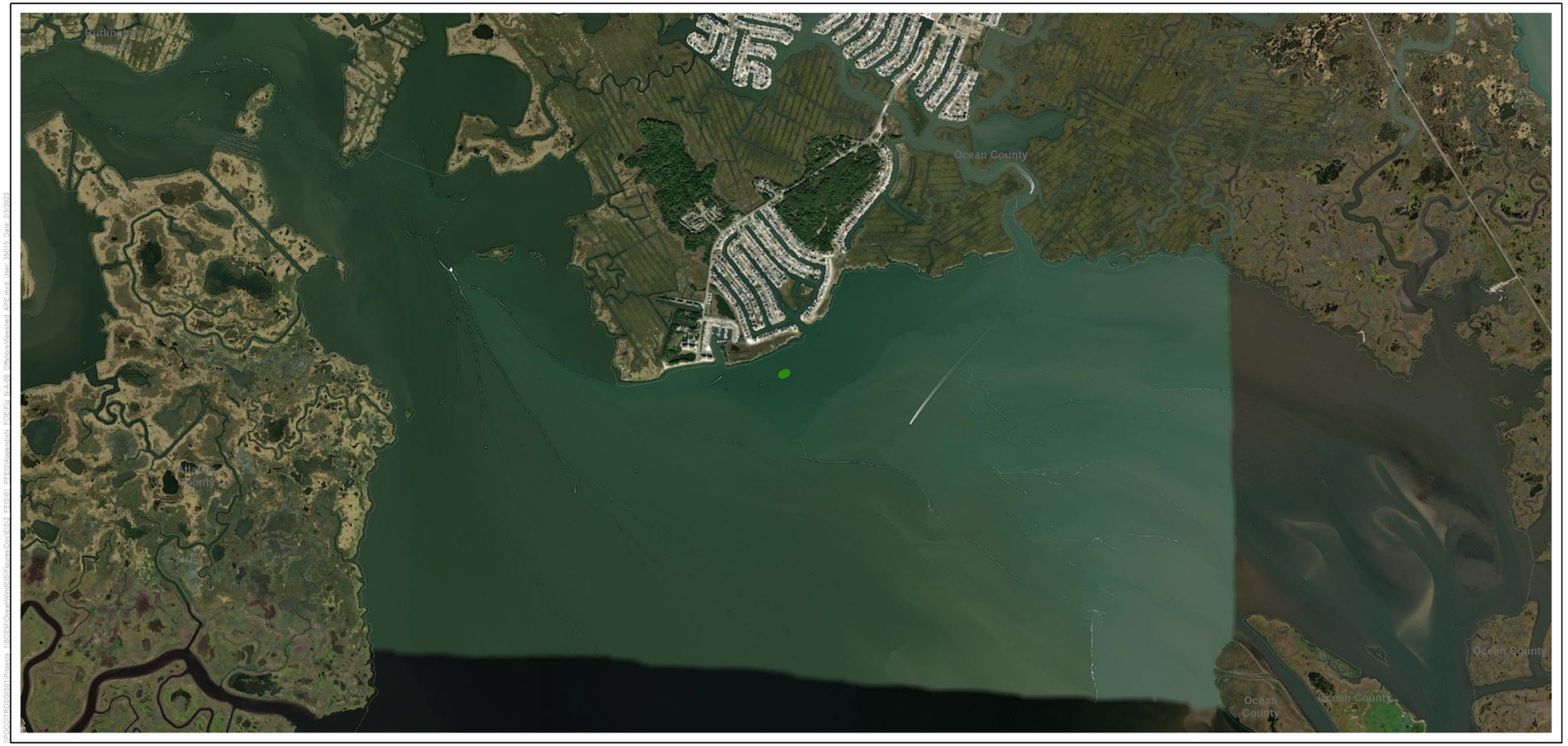


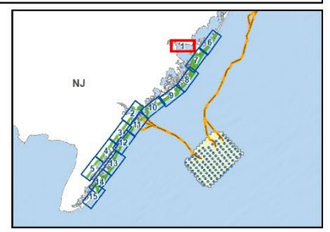
Figure 6 Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Index

This page intentionally left blank.



Legend

- Offshore Visual APE (Not to Scale)
- Wind Turbine
- Export Cable Route Landfall Options
- Onshore Interconnection Point
- Onshore Export Cable Route
- Onshore Export Cable Route Options
- Inshore Export Cable Route
- Offshore Export Cable Route
- Potential Onshore Substation Parcel
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects



Sheet: 1 of 15

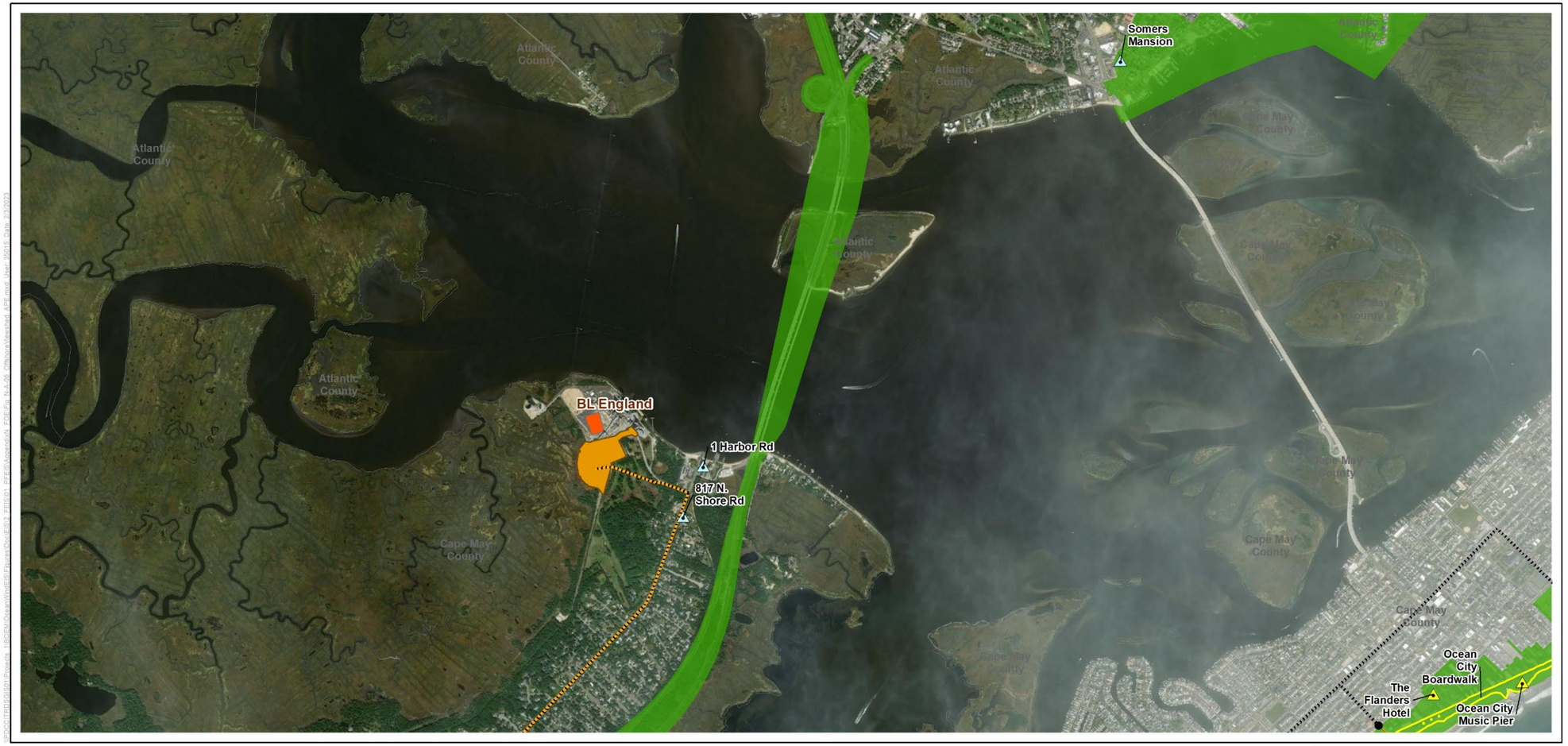
ICF

N

0 1,000 2,000 Feet

1:24,000

Figure 6 Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 1

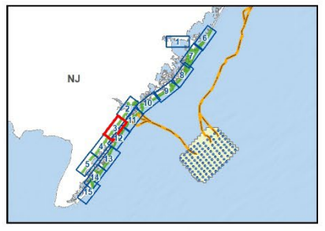


Sheet: 2 of 15

Figure 6 **Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 2**

Legend

- Offshore Visual APE
- Wind Turbine
- Export Cable Route Landfall Options
- Onshore Interconnection Point
- Onshore Export Cable Route
- Onshore Export Cable Route Options
- Inshore Export Cable Route
- Offshore Export Cable Route
- Potential Onshore Substation Parcel
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects



Sheet: 3 of 15

ICF

N

0 1,000 2,000 Feet

1:24,000

Figure 6 **Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 3**

Sheet: 4 of 15

Figure 6 **Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 4**

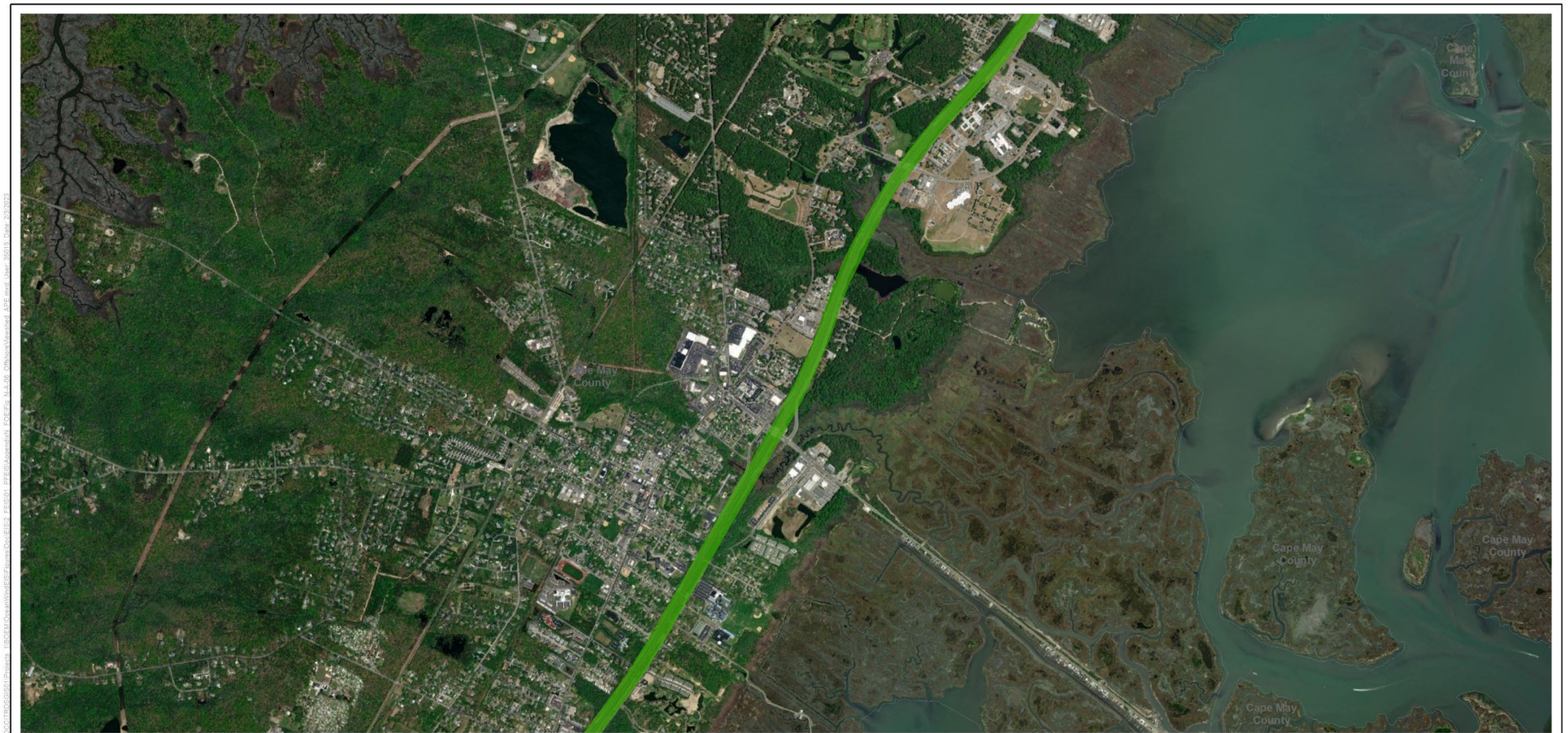
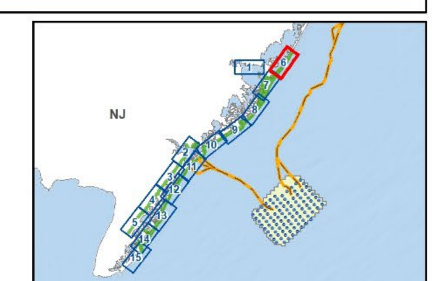


Figure 6 **Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 5**

Legend

- Offshore Visual APE
- Wind Turbine
- Export Cable Route Landfall Options
- Onshore Interconnection Point
- Onshore Export Cable Route
- Onshore Export Cable Route Options
- Inshore Export Cable Route
- Offshore Export Cable Route
- Potential Onshore Substation Parcel
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects



Sheet: 6 of 15

ICF

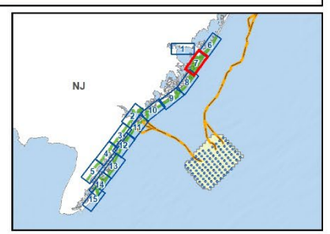
N

0 1,000 2,000 Feet
1:24,000

Figure 6 Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 6

Legend

- Offshore Visual APE
- Wind Turbine
- Export Cable Route Landfall Options
- Onshore Interconnection Point
- Onshore Export Cable Route
- Onshore Export Cable Route Options
- Inshore Export Cable Route
- Offshore Export Cable Route
- Potential Onshore Substation Parcel
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects



0 1,000 2,000 Feet
1:24,000

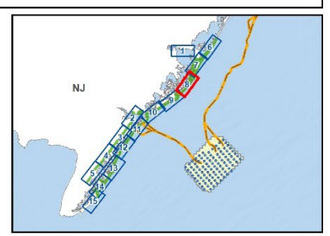
N

Sheet: 7 of 15

Figure 6 Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 7

Legend

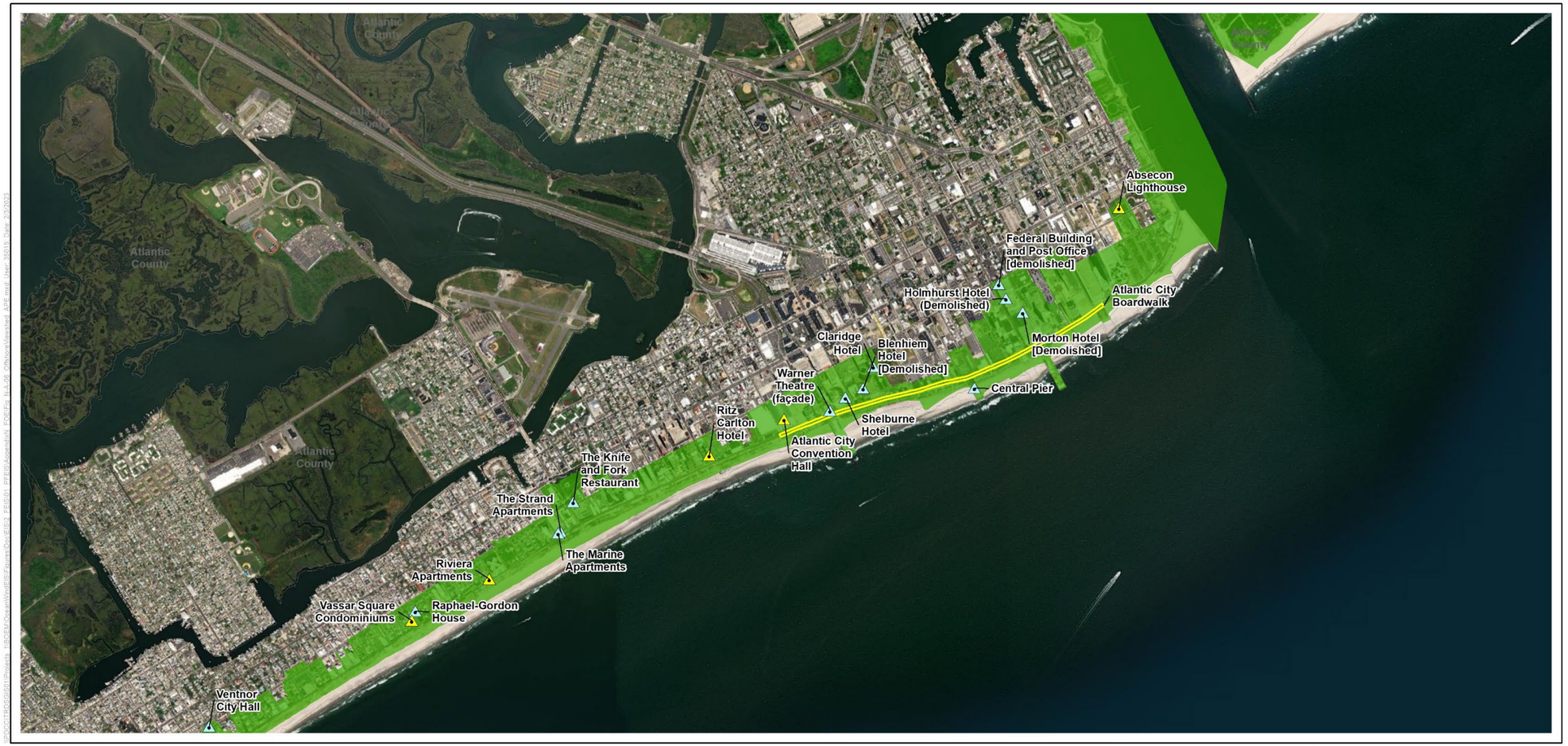
- Offshore Visual APE
- Wind Turbine
- Export Cable Route Landfall Options
- Onshore Interconnection Point
- Onshore Export Cable Route
- Onshore Export Cable Route Options
- Inshore Export Cable Route
- Offshore Export Cable Route
- Potential Onshore Substation Parcel
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects



0 1,000 2,000 Feet
1:24,000

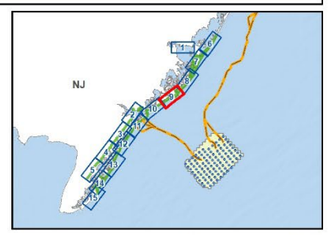
Sheet: 8 of 15

Figure 6 **Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 8**



Legend

- Offshore Visual APE
- Wind Turbine
- Export Cable Route Landfall Options
- Onshore Interconnection Point
- Onshore Export Cable Route
- Onshore Export Cable Route Options
- Inshore Export Cable Route
- Offshore Export Cable Route
- Potential Onshore Substation Parcel
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects



0 1,000 2,000 Feet
1:24,000

Sheet: 9 of 15

Figure 6 **Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 9**

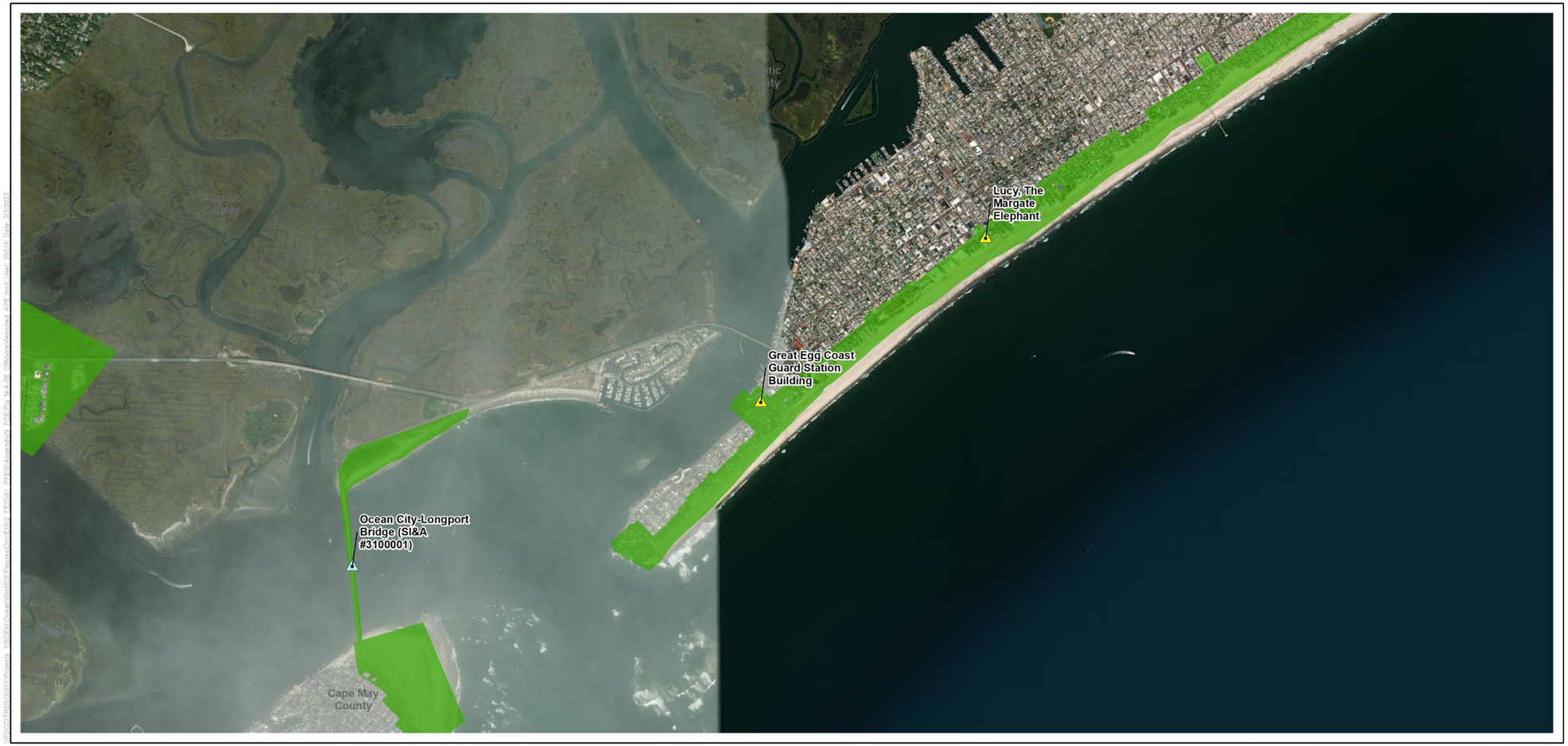
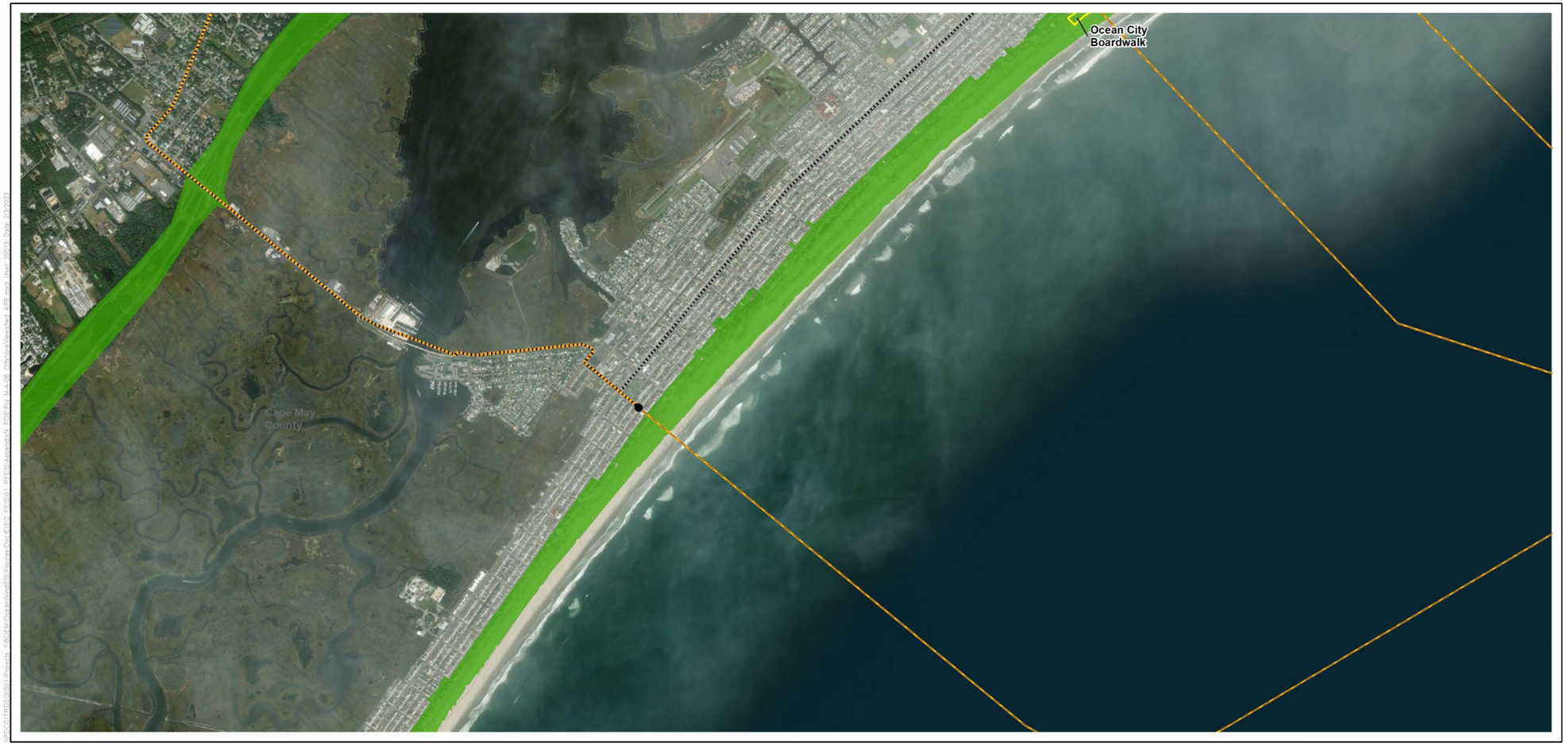
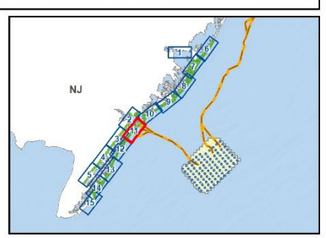


Figure 6 **Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 10**



Legend

- Offshore Visual APE
- Wind Turbine
- Export Cable Route Landfall Options
- Onshore Interconnection Point
- Onshore Export Cable Route
- Onshore Export Cable Route Options
- Inshore Export Cable Route
- Offshore Export Cable Route
- Potential Onshore Substation Parcel
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects



0 1,000 2,000 Feet
1:24,000

Sheet: 11 of 15

Figure 6 **Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 11**

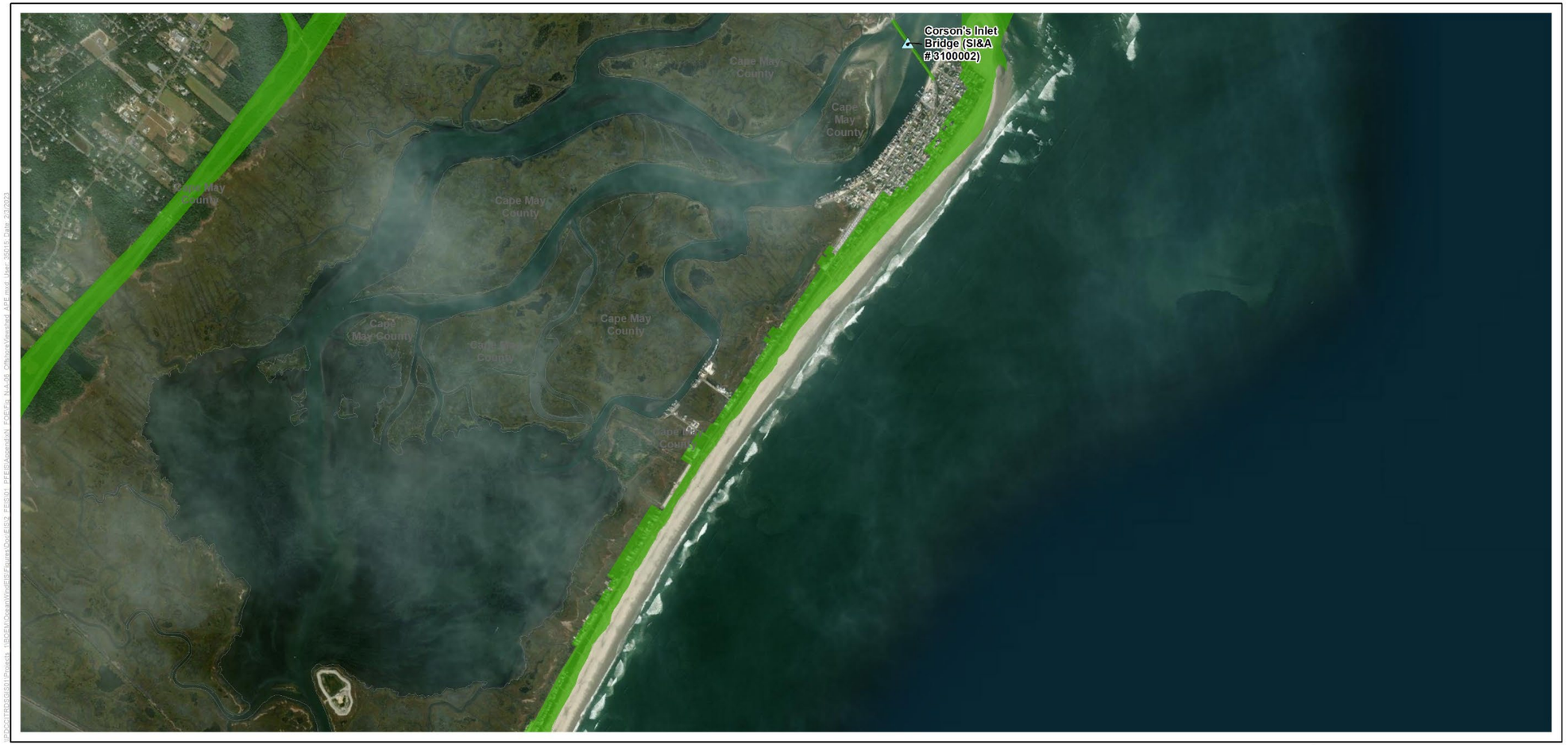
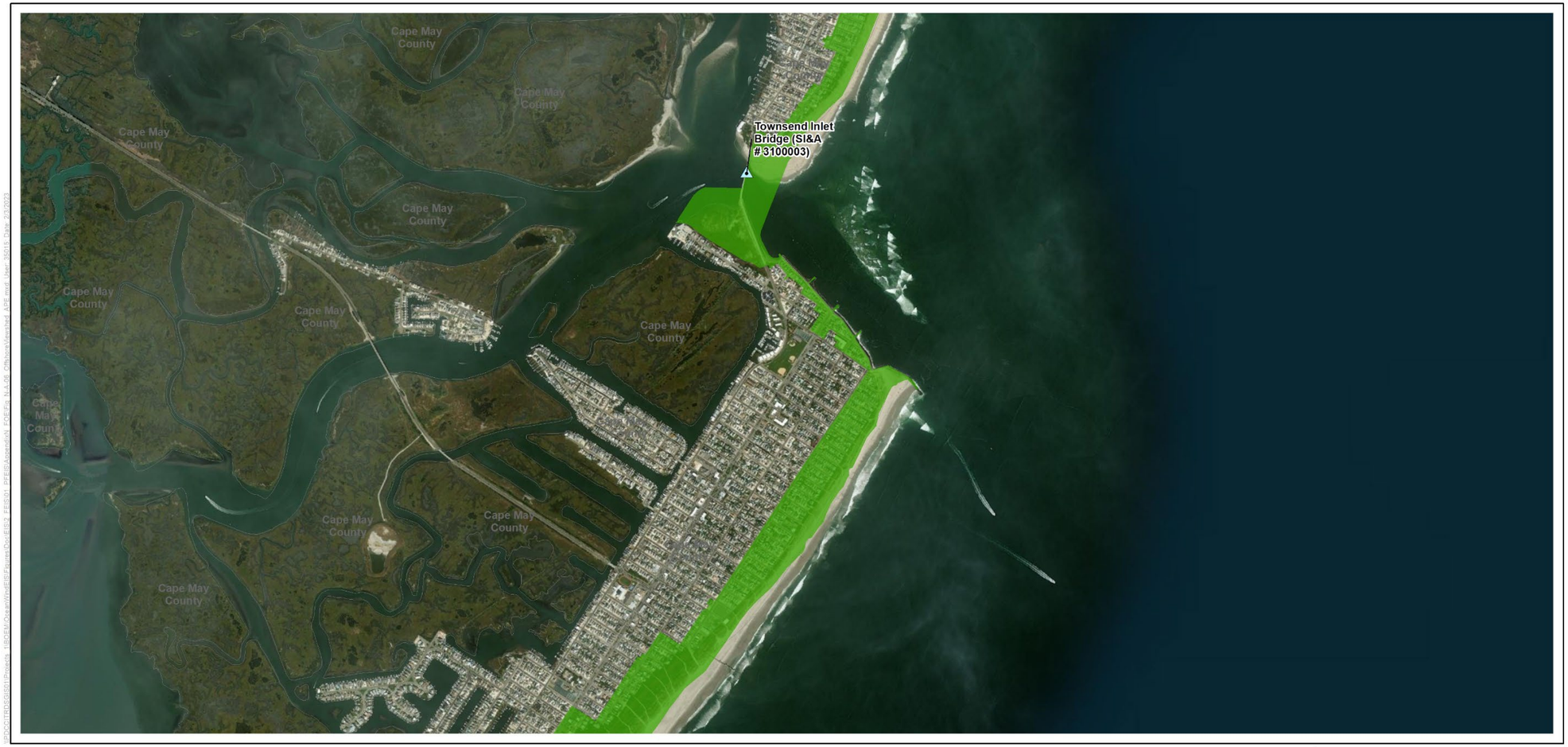
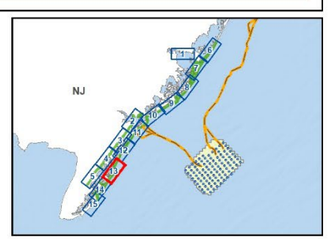


Figure 6 **Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 12**



Legend

- Offshore Visual APE
- Wind Turbine
- Export Cable Route Landfall Options
- Onshore Interconnection Point
- Onshore Export Cable Route
- Onshore Export Cable Route Options
- Inshore Export Cable Route
- Offshore Export Cable Route
- Potential Onshore Substation Parcel
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects

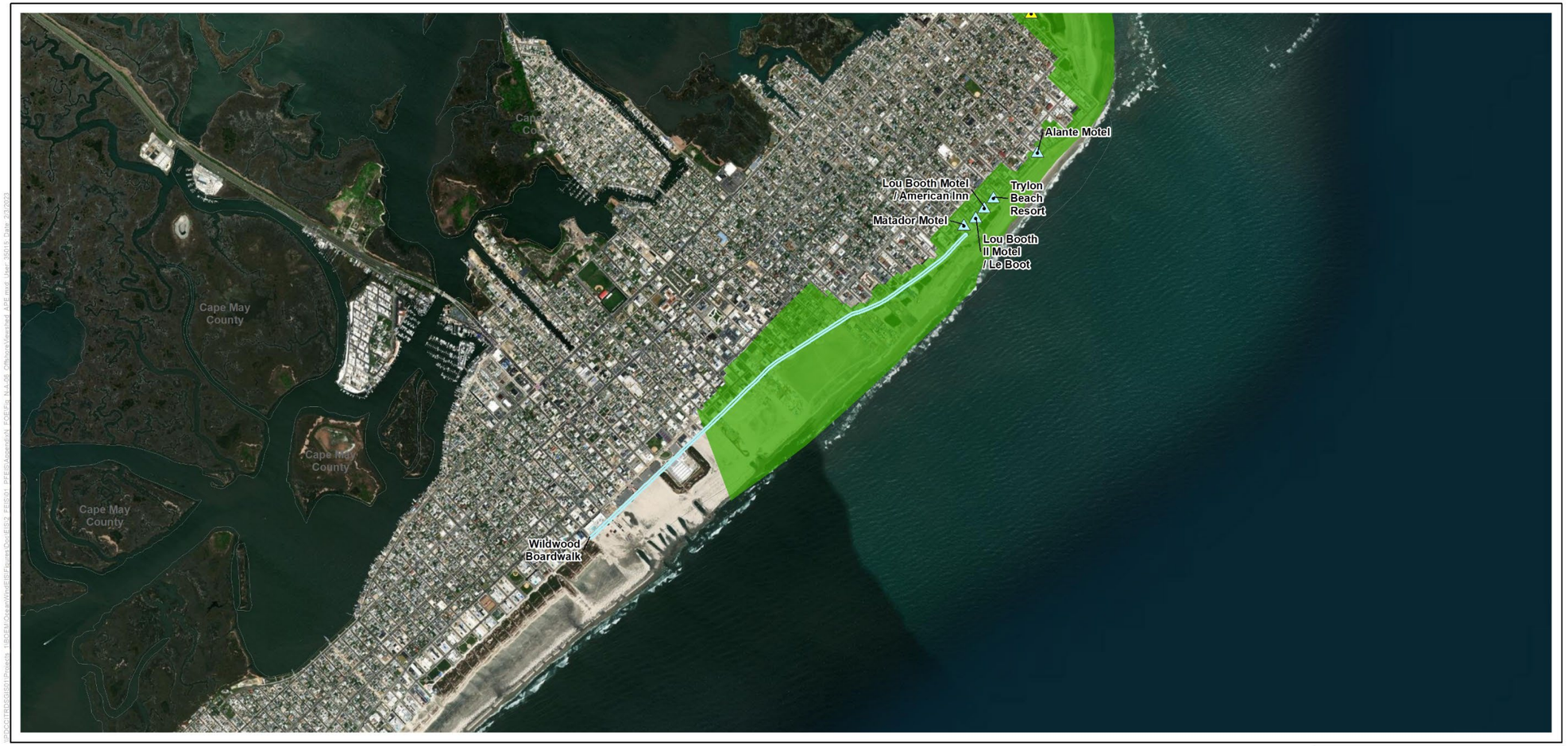


0 1,000 2,000 Feet
1:24,000

Sheet: 13 of 15

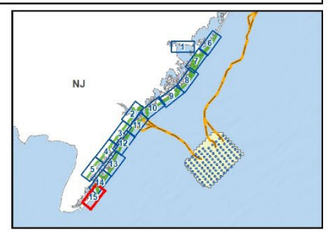
Figure 6 **Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 13**

Figure 6 **Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 14**



Legend

- Offshore Visual APE
- Wind Turbine
- Export Cable Route Landfall Options
- Onshore Interconnection Point
- Onshore Export Cable Route
- Onshore Export Cable Route Options
- Inshore Export Cable Route
- Offshore Export Cable Route
- Potential Onshore Substation Parcel
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects
- Historic properties recommended adverse visual effects
- Historic properties recommended no adverse visual effects



0 1,000 2,000 Feet
1:24,000

Sheet: 15 of 15

Figure 6 Offshore Visual APE with Historic Properties Adversely Affected and Foreseeable Future Project Areas—Sheet 15

This page intentionally left blank.

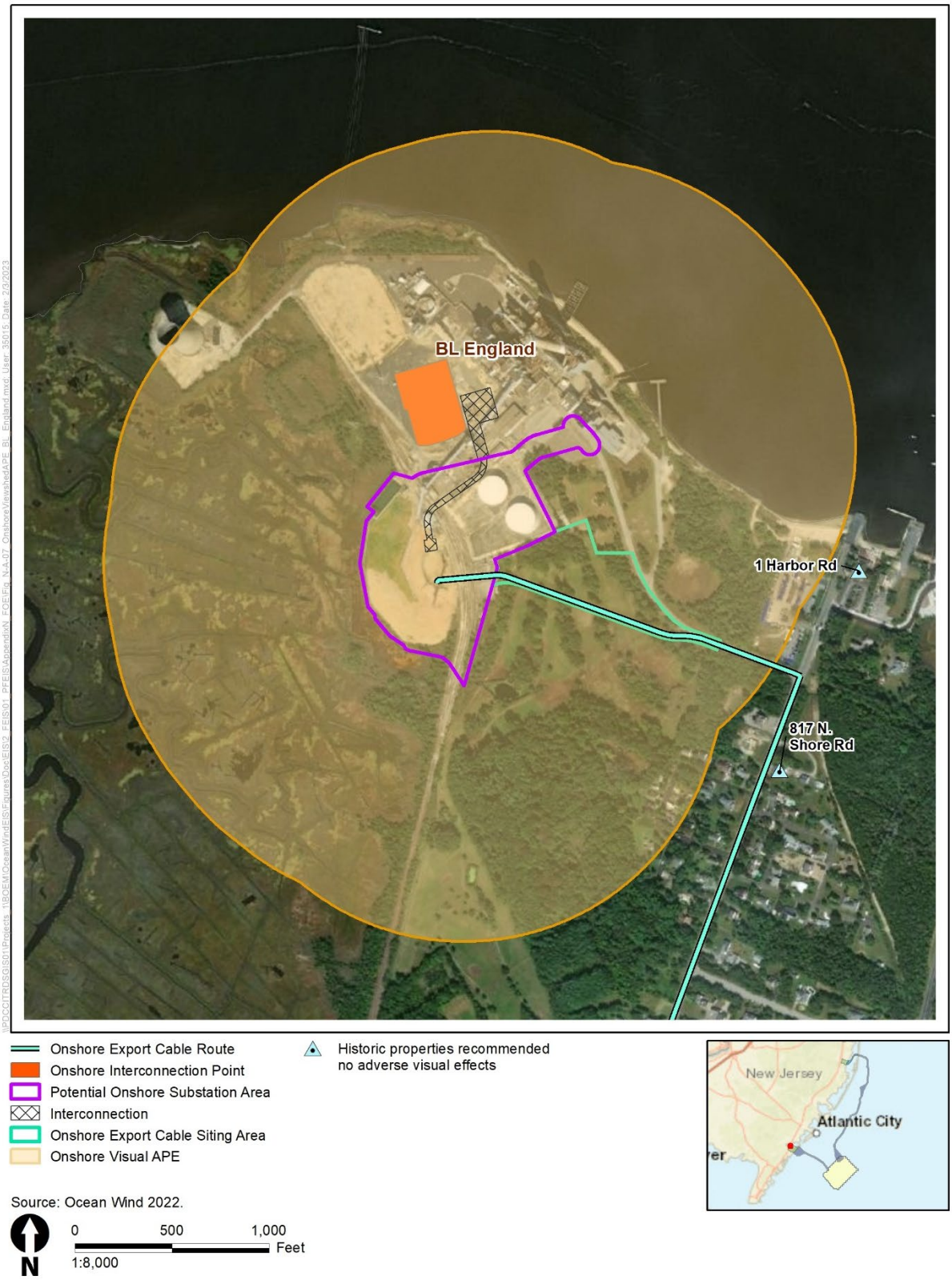


Figure 7 Onshore Visual APE for BL England Substation

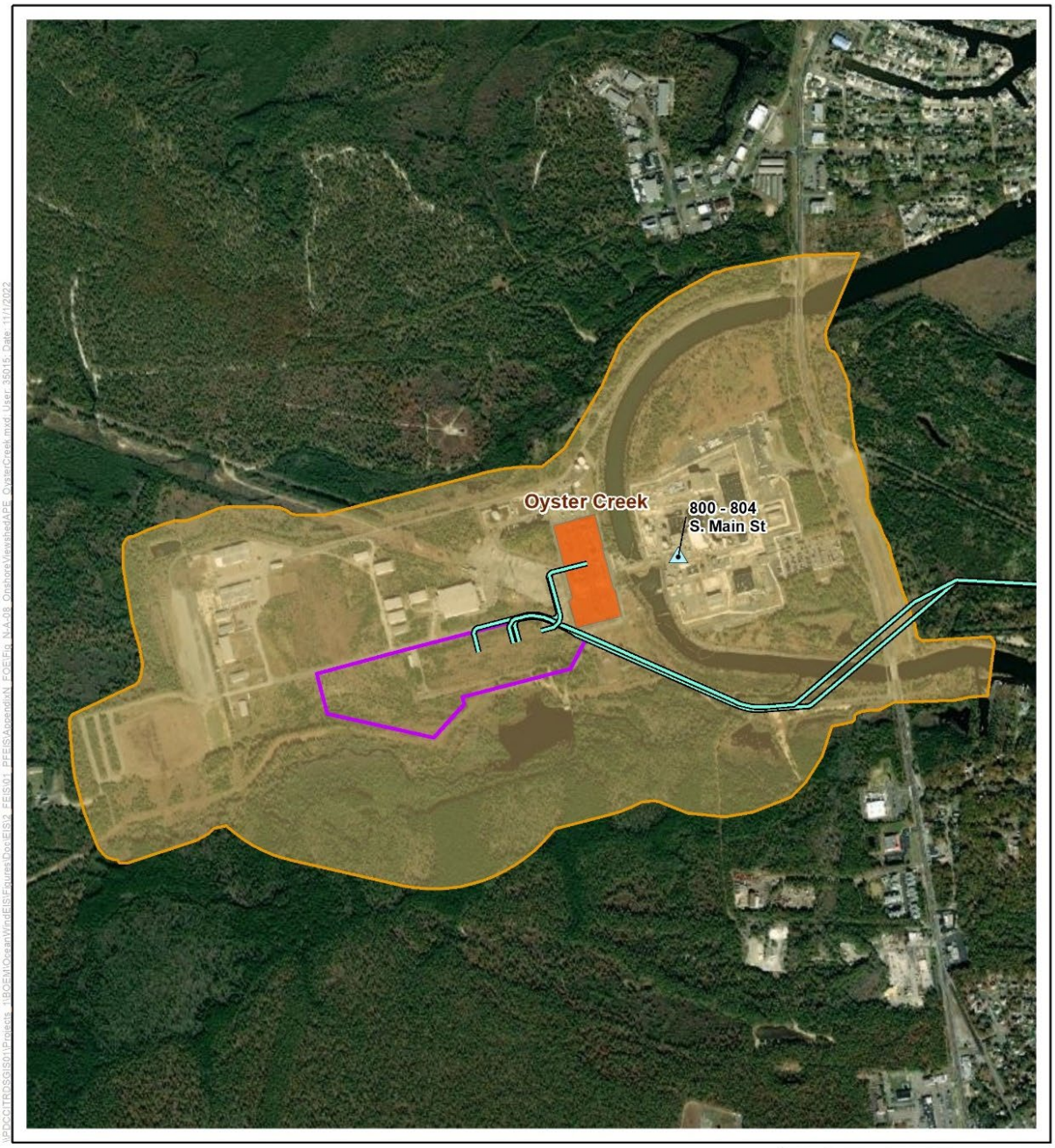


Figure 8 Onshore Visual APE for Oyster Creek Substation

ATTACHMENT 2 – LIST OF CONSULTING PARTIES

Table 1. Consulting Parties Invited to Consult in the NHPA Section 106 Consultation

Participants in the Section 106 Process	Invited Parties
SHPOs and State Agencies	NJDEP, Historic Preservation Office
	NJDEP, Office of Historic Sites & Parks
	NJDLPS, Marine Service Bureau
	New Jersey Casino Reinvestment Development Authority
	New Jersey Historic Trust
Federal Agencies	ACHP
	NOAA
	USACE
	USCG
	USEPA
	USFWS
	National Park Service
	National Park Service, Region 1
Federally Recognized Tribes	Absentee-Shawnee Tribe of Indians of Oklahoma
	Delaware Tribe of Indians
	Eastern Shawnee Tribe of Oklahoma
	Shawnee Tribe
	The Delaware Nation
	Mashantucket (Western) Pequot Tribal Nation
	The Narragansett Indian Tribe
	The Rappahannock Tribe
	The Shinnecock Indian Nation
	Stockbridge-Munsee Community Band of Mohican Indians
Non-Federally Recognized Tribes	Lenape Indian Tribe of Delaware
	Nanticoke Indian Association, Inc.
	Nanticoke Lenni-Lenape Tribal Nation
	Nanticoke Lenni-Lenape Tribe
	Powhatan Renape Nation
	Ramapough Lenape Indian Nation
	Ramapough Mountain Indians
Local Governments	Absecon City
	Atlantic City
	Atlantic County
	Atlantic County, Department of Regional Planning and Development

Participants in the Section 106 Process	Invited Parties
	Avalon Borough
	Barnegat Light Borough
	Barnegat Township
	Beach Haven Borough
	Brigantine Beach City
	Cape May City
	Cape May County
	Cape May Point Borough
	Dennis Township
	Eagleswood Township
	Egg Harbor City
	Egg Harbor Township
	Galloway Township
	Hamilton Township
	Hammonton Town
	Harvey Cedars Borough
	Linwood City
	Little Egg Harbor Township
	Long Beach Township
	Longport Borough
	Lower Township
	Margate City
	Middle Township
	North Wildwood City
	Ocean City
	Ocean County
	Pleasantville City
	Sea Isle City
	Ship Bottom Borough
	Somers Point City
	Stafford Township
	Stone Harbor Borough
	Surf City Borough
	Tuckerton Borough
	Upper Township
	Ventnor City
	West Cape May Borough
	West Wildwood Borough

Participants in the Section 106 Process	Invited Parties
	Wildwood City
	Wildwood Crest Borough
	Woodbine Borough
Nongovernmental Organizations or Groups	Absecon Historical Society
	Absecon Lighthouse
	American Legion Stephen C. Ludlam Post 331
	Atlantic City Convention Center
	Atlantic County
	Atlantic County Historical Society
	Avalon History Center
	Barnegat Light Museum
	Barnegat Lighthouse State Park
	Brigantine Beach Historical Museum
	Cape May Lighthouse
	Caribbean Motel
	Converse Cottage
	Donald & June Feith (114 South Harvard Avenue, Ventnor City, New Jersey)
	Dr. Edward H. Williams House
	Eagleswood Historical Society
	Emlen Physick Estate
	Flanders Condominium Association
	Friends of Barnegat Lighthouse
	Friends of the Cape May Lighthouse
	Friends of the World War II Tower
	Greater Cape May Historic Society
	Greater Egg Harbor Township Historical Society
	Hereford Inlet Lighthouse
	Historic Cold Spring Village
	Legacy Vacation Resorts
	Linwood Historical Society
	Long Beach Island Historical Association
	Long Beach Island Historical Association
	Longport Historical Society
	Madison Hotel
	Max Gurwicz Enterprises
	Museum of Cape May County
	New Jersey Lighthouse Society

Participants in the Section 106 Process	Invited Parties
	New Jersey Maritime Museum
	Ocean City Historical Museum
	Ocean City Music Pier
	Ocean County Historical Society
	Patriots for the Somers Mansion
	Preservation New Jersey
	Raphael-Gordon House
	Ritz Condominium Association
	Rutgers University, Department of Marine and Coastal Sciences, School of Environmental and Biological Sciences
	Save Lucy Committee, Inc.
	Stone Harbor Museum
	The Museum of Cape May County
	The Noyes Museum of Art
	Tuckerton Historical Society
	Vassar Square Condominium Association
	Wildwood Crest Historical Society
	Wildwood Historical Society

Table 2. Consulting Parties Who Accepted BOEM's Invitation to Consult

Participants in the Section 106 Process	Interested Consulting Parties
SHPOs and State Agencies	NJDEP, Historic Preservation Office
	NJDEP, Office of Historic Sites & Parks
	New Jersey Historic Trust
Federal Agencies	ACHP
	USACE
	USEPA
	USCG
	National Park Service
	U.S. Naval History and Heritage Command
Federally Recognized Tribes	Delaware Nation
	Delaware Tribe of Indians
	Mashantucket (Western) Pequot Tribal Nation
	Stockbridge-Munsee Community Band of Mohican Indians
	The Shinnecock Indian Nation
	Wampanoag Tribe of Gay Head (Aquinnah)

Participants in the Section 106 Process	Interested Consulting Parties
Local Governments	Atlantic County
	Cape May City
	Cape May County
	Harvey Cedars Borough
	Linwood City
	Margate City
	North Wildwood City
	Ocean City
	Sea Isle City
	Somers Point City
	Stafford Township
Non-governmental Organizations or Groups	Absecon Lighthouse
	Donald & June Feith (114 South Harvard Avenue, Ventnor City, New Jersey)
	Flanders Condominium Association
	Garden State Seafood Association
	Long Beach Island Historical Association
	Save Lucy Committee, Inc.
	Ritz Condominium Association
	Rutgers University, School of Environmental and Biological Sciences
	The Noyes Museum of Art
	Vassar Square Condominiums

Table 3. Parties Invited to Consult under Section 106 and That Did Not Accept the Invitation to Consult

Participants in the Section 106 Process	Invited Consulting Parties
State Agencies	NJDEP, Office of Historic Sites & Parks
	NJDLPS, Marine Service Bureau
	New Jersey Casino Reinvestment Development Authority
Federal Agencies	NOAA
	USFWS
	National Park Service, Region 1
Federally Recognized Tribes	Absentee-Shawnee Tribe of Indians of Oklahoma
	Eastern Shawnee Tribe of Oklahoma
	Shawnee Tribe
	The Narragansett Indian Tribe
	The Rappahannock Tribe
Non-Federally Recognized Tribe	Lenape Indian Tribe of Delaware
	Nanticoke Indian Association, Inc.
	Nanticoke Lenni-Lenape Tribal Nation
	Nanticoke Lenni-Lenape Tribe
	Powhatan Renape Nation
	Ramapough Lenape Indian Nation
	Ramapough Mountain Indians
Local Governments	Absecon City
	Atlantic City
	Atlantic County, Department of Regional Planning and Development
	Avalon Borough
	Barnegat Light Borough
	Barnegat Township
	Beach Haven Borough
	Brigantine Beach City
	Cape May Point Borough
	Dennis Township
	Eagleswood Township
	Egg Harbor City
	Egg Harbor Township
	Galloway Township
	Hamilton Township
	Hammonton Town
	Linwood City
	Little Egg Harbor Township

Participants in the Section 106 Process	Invited Consulting Parties
	Long Beach Township
	Longport Borough
	Lower Township
	Middle Township
	Ocean County
	Pleasantville City
	Ship Bottom Borough
	Stone Harbor Borough
	Surf City Borough
	Tuckerton Borough
	Upper Township
	Ventnor City
	West Cape May Borough
	West Wildwood Borough
	Wildwood City
	Wildwood Crest Borough
	Woodbine Borough
Nongovernmental Organizations or Groups	Absecon Historical Society
	Atlantic City Convention Center
	Atlantic County
	Atlantic County Historical Society
	Avalon History Center
	Barnegat Light Museum
	Barnegat Lighthouse State Park
	Brigantine Beach Historical Museum
	Cape May Lighthouse
	Caribbean Motel
	Converse Cottage
	Dr. Edward H. Williams House
	Eagleswood Historical Society
	Emlen Physick Estate
	Friends of Barnegat Lighthouse
	Friends of the Cape May Lighthouse
	Friends of the World War II Tower
	Greater Cape May Historic Society
	Greater Egg Harbor Township Historical Society
	Hereford Inlet Lighthouse
	Historic Cold Spring Village

Participants in the Section 106 Process	Invited Consulting Parties
	Legacy Vacation Resorts
	Linwood Historical Society
	Longport Historical Society
	Madison Hotel
	Max Gurwicz Enterprises
	Museum of Cape May County
	New Jersey Lighthouse Society
	New Jersey Maritime Museum
	Ocean City Historical Museum
	Ocean City Music Pier
	Ocean County Historical Society
	Patriots for the Somers Mansion
	Preservation New Jersey
	Raphael-Gordon House
	Stone Harbor Museum
	The Museum of Cape May County
	Tuckerton Historical Society
	Wildwood Crest Historical Society
	Wildwood Historical Society

ATTACHMENT 3 – HISTORIC PROPERTY TREATMENT PLAN FOR THE OCEAN WIND 1 FARM ANCIENT SUBMERGED LANDFORM FEATURES, FEDERAL WATERS ON THE OUTER CONTINENTAL SHELF

This page intentionally left blank.

Ocean Wind 1
An Ørsted & PSEG project

Historic Property Treatment Plan

for the

Ocean Wind 1 Farm

Ancient Submerged Landform Features
Federal Waters on the Outer Continental Shelf

Submitted to:

BOEM
Bureau of Ocean Energy Management

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

Prepared for:

Ocean Wind 1
An Ørsted & PSEG project

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

Prepared by:

SEARCH

www.searchinc.com

May 2023

ABSTRACT

Federal Undertaking:	Ocean Wind 1 Offshore Wind Farm Project
Location:	Outer Continental Shelf, New Jersey
Federal and State Agencies:	Bureau of Ocean Energy Management U.S. Army Corps of Engineers New Jersey Department of Environmental Protections/State Historic Preservation Office Advisory Council on Historic Preservation
ACHP Project No.:	
Regulatory Process:	National Environmental Policy Act Section 106 of the National Historic Preservation Act
Regulatory Action:	Cultural Resources Mitigation pursuant to Bureau of Ocean Energy Management approval of the *Ocean Wind 1 Wind Farm Construction and Operations Plan*
Potential Adverse Effect Finding for:	13 Properties in Cape May, Ocean, and Atlantic Counties
Date:	May 2023

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADLS	Aircraft Detection Lighting System
APE	Area of Potential Effects
BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
FEIS	Final Environmental Impact Statement
FR	Federal Regulation
HDR	HDR, Inc.
HPTP	Historic Properties Treatment Plan
MOA	Memorandum of Agreement
N/A	Not Applicable
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
NJ DEP	New Jersey Department of Environmental Protection
NJHPO	New Jersey State Historic Preservation Office(r)
NPS	National Park Service
NRHP	National Register of Historic Places
OCS	Outer Continental Shelf
OCW1	Ocean Wind1 Offshore Wind Farm Project
QMA	Qualified Marine Archaeologist
PRDP	Post-Review Discoveries Plan
RFP	Request for Proposals
ROD	Record of Decision
SOI	Secretary of the Interior
TCP	Traditional Cultural Property
USCG	United States Coast Guard
WTG	Wind Turbine Generator

1.0 INTRODUCTION

Executive Summary

This Historic Properties Treatment Plan (HPTP) provides background data, historic property information, and detailed steps that will be implemented to carry out the potential cultural resources mitigation actions identified by the Bureau of Ocean Energy Management (BOEM) for the Ocean Wind 1 Offshore Wind Farm (OCW1). The mitigation actions have been developed in consultation with the New Jersey State Historic Preservation Officer (NJHPO) and other National Historic Preservation Act (NHPA) Section 106 review consulting parties and issued in accordance with 36 CFR §§ 800.8, 800.10. This HPTP outlines the mitigation measures, implementation steps, and timeline for actions.

Section 1.0 Introduction: Outlines the content of this HPTP.

Section 2.0 Cultural Resources Regulatory Context: Briefly summarizes the OCW1 (the Undertaking) while focusing on cultural resources regulatory contexts (federal, tribal, state, and local, including preservation restrictions), identifies the 13 historic properties discussed in this HPTP that will be adversely affected by the Undertaking, and summarizes the pertinent conditions that guided the development of this document.

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

Section 4.0 Mitigation Measures: Presents specific steps to carry out the mitigation actions identified proposed by OCW1 in the COP. Each mitigation action includes a detailed description, intended outcome, and specifications that include maximum cost, methods, standards, requirements for documentation, and reporting instructions. Property-specific challenges, if any have been identified, are outlined as well.

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

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

2.0 CULTURAL RESOURCES REGULATORY CONTEXT

Project Overview: Ocean Wind 1 Offshore Wind Farm (OCW1)

BOEM has determined that approval, approval with modification, or disapproval of the OCW1 COP constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA; 54 U.S.C. § 306108) and its implementing regulations (36 CFR 800), and that the activities proposed under the COP have the potential to affect historic properties. The OCW1 undertaking is defined as a wind-powered electric generating facility composed of up to 98 wind turbine generators (WTGs) and associated foundations, up to three offshore substations, and inter-array cables connecting the WTGs and the offshore substations (**Figure 2-1**). The WTGs, foundations, offshore substations, and inter-array cables will all be in federal waters on the Outer Continental Shelf (OCS), approximately 15 statute miles (mi) (13 nautical miles [nm]) southeast of Atlantic City, New Jersey. Cables will be buried below the seabed.

Export cables from the offshore substations will extend along the seabed and connect to buried onshore export cables, which will connect to two interconnection points, at Oyster Creek and BL England. Onshore cables will be buried within and up to a 15-meters (m)-wide (50-feet[ft]-wide) construction corridor with a permanent easement up to 9.8-m-wide (30-ft-wide) for BL England. Two new onshore substations are proposed at Oyster Creek and BL England along with grid connections to the existing grid for each substation. Onshore substation locations would be sited on existing parcels containing decommissioned power facilities at BL England and Oyster Creek. The Oyster Creek and BL England onshore substation locations would require a permanent site up to 31.5 acres (ac) (12.7 hectares [ha]) and 13 ac (5.3 ha) respectively, for the substation equipment and buildings, energy storage, and stormwater management and associated landscaping. Underground or overhead transmission lines would connect the substations to the planned interconnection point (grid connections).

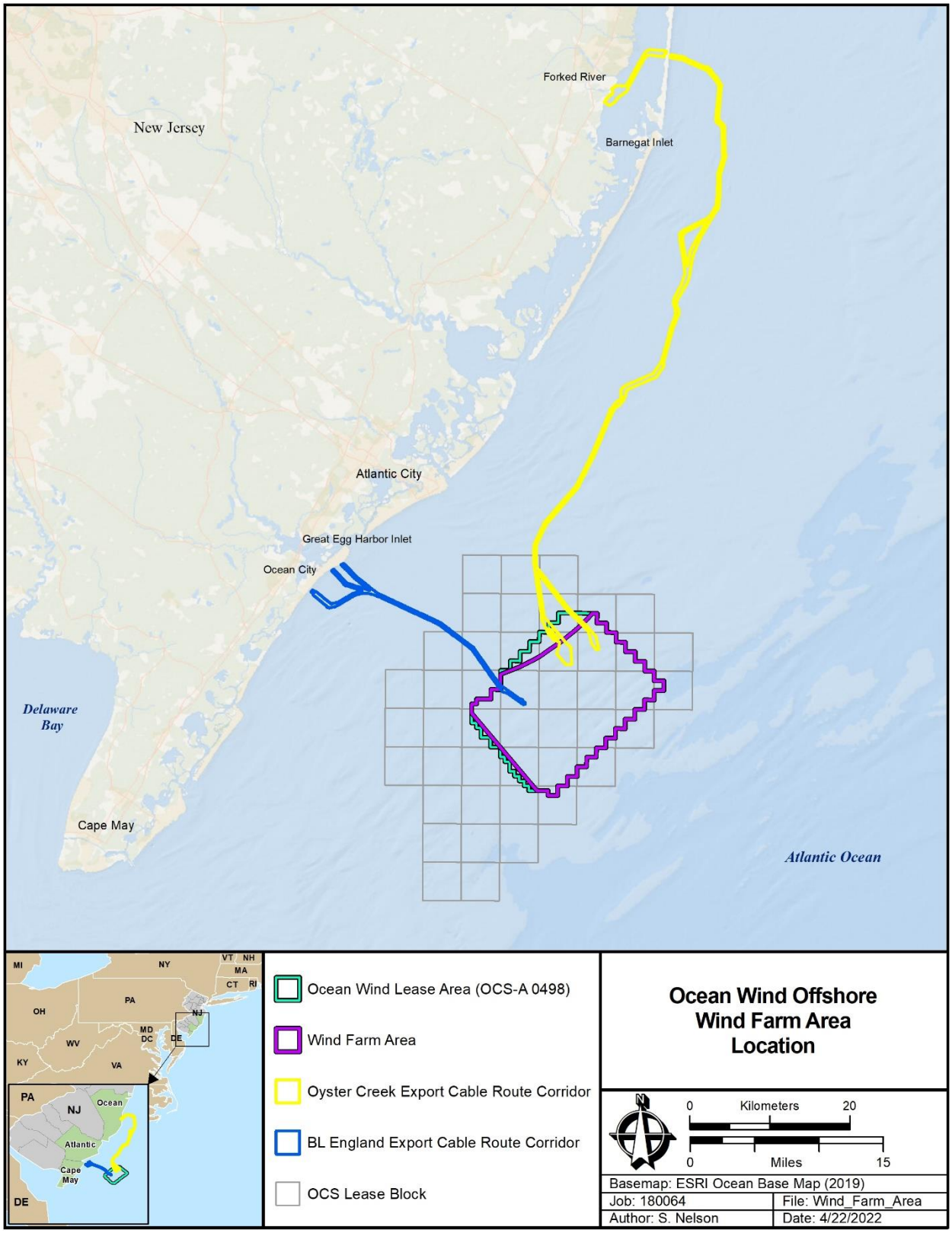


Figure 2-1. Project Location

Section 106 of the National Historic Preservation Act (NHPA)

This HPTP was developed based on coordination with BOEM and reflects consultations conducted by BOEM with multiple consulting parties, including the NJHPO and Tribes for whom the historic properties have traditional cultural and religious significance. BOEM developed through consultation with the Tribes, the NJHPO, the ACHP, and the consulting parties an NHPA Section 106 Memorandum of Agreement (MOA) to resolve adverse effects to historic properties. As defined in 36 CFR § 800.6 (c), a project specific MOA records the terms and conditions agreed upon to resolve adverse effects of the undertaking. If BOEM chooses to approve the OCW1 COP or approve the COP with modifications, implementation of the NHPA Section 106 MOA will be included as terms and conditions for COP approval.

OCW1 will implement the following applicant-proposed environmental protection measures to avoid and minimize potential impacts to marine archaeological resources:

- Tribal representatives were involved, and will continue to be involved, in marine survey protocol design, execution of the surveys, and review of the results;
- An anchoring plan for vessels will be developed prior to construction to identify avoidance/no-anchorage areas around historic properties to avoid anchoring impacts to these resources; and
- A Post-Review Discoveries Plan (PRDP) will be implemented that will include stop-work and notification procedures to be followed if a potentially significant archaeological resource is encountered during construction (refer to the Project's Marine Archaeological Resource Assessment Report [COP Appendix F-1]).

This HPTP describes the measures to resolve the remaining adverse effects after application of the above-listed measures.

All activities implemented under this HPTP will be conducted in accordance with any conditions imposed by BOEM in its ROD and with applicable local, state, and federal regulations and permitting requirements. Responsibilities for specific compliance actions are described in further detail in Section 5.0, Organizational Responsibilities.

Participating NHPA Section 106 Consulting Parties

BOEM initiated consultation under Section 106 with invitations to potential consulting parties in March 2021, including the NJHPO and ACHP. BOEM invited the following federally and state recognized Tribes with historic and cultural ties to the OCW1 project areas to participate in the Section 106 review as consulting parties:

- Absentee-Shawnee Tribe of Indians of Oklahoma
- Delaware Tribe of Indians
- Eastern Shawnee Tribe of Oklahoma
- Shawnee Tribe
- Stockbridge-Munsee Community Band of Mohican Indians

- The Delaware Nation
- The Narragansett Indian Tribe
- The Shinnecock Indian Nation
- Mashantucket (Western) Pequot Tribal Nation
- Wampanoag Tribe of Gay Head (Aquinnah)

In addition to the federally and state recognized Tribes, BOEM invited the following state recognized Tribes to participate as Section 106 consulting parties.

- Nanticoke Indian Association, Inc.
- Nanticoke Lenni-Lenape Tribal Nation
- Nanticoke Lenni-Lenape Tribe
- Powhatan Renape Nation
- Ramapough Lenape Indian Nation
- Ramapough Mountain Indians
- Lenape Indian Tribe of Delaware

Consulting parties participated in the finalization of this HPTP through BOEM's Section 106 consultation process.

After its initial invitation, BOEM hosted the following Section 106 consultation meetings with consulting parties on the following dates:

- April 13, 15, and 20, 2021: NEPA Public Scoping Meeting
- March 8, 2022: Section 106 Consulting Party Meeting 1
- May 4, 2022: Section 106 Consulting Party Meeting 2
- November 30, 2022: Section 106 Consulting Party Meeting 3
- February 22, 2023: Section 106 Consulting Party Meeting 4
- April 24, 2023: Section 106 Consulting Party Meeting 5

Consulting Parties referred to in this HPTP include the consulting parties, federally and state recognized Tribes, and state recognized Tribes detailed above. No additional Consulting Parties are expected to be involved in the implementation of this HPTP, not all parties identified may choose to provide input or participate in the HPTP mitigation process.

3.0 EXISTING CONDITIONS AND HISTORIC SIGNIFICANCE

Affected Ancient Submerged Landforms

This HPTP involves thirteen (13) historic properties, as identified below in **Table 3-1**. All 13 historic properties are ancient, submerged landform features (ASLFs) identified during geophysical and geotechnical investigations within the OCW1 Wind Farm Area (WFA) and within the BL England and Oyster Creek Export Cable Routes (ECRs) Corridors.

Table 3-1. Historic Properties included in the HPTP.

Name	Project Component Area
Target 21	Wind Farm Area
Target 22	Wind Farm Area
Target 23	Wind Farm Area
Target 24	Wind Farm Area
Target 25	Wind Farm Area
Target 26	Wind Farm Area
Target 28	Wind Farm Area
Target 29	Wind Farm Area
Target 30	Wind Farm Area
Target 31	Wind Farm Area
Target 33	BL England Export Cable Route Corridor
Target 34	Oyster Creek Export Cable Route Corridor
Target 35	Oyster Creek Export Cable Route Corridor

Adversely Affected Historic Properties

Physical Description and Existing Conditions

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

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

Target 23: Target 23 represents the western flank of a meandering paleochannel associated with U30/H30. Marine transgression removed portions of this margin, downcutting into the potential former subaerial

landscape. Nearby archaeological core AC-03_rev did not yield any evidence of a paleosol as it penetrated through the channel. Covering approximately 202.0 ha (499.2 ac), the acoustic imagery of Target 23 evidences a slightly eroded, yet preserved paleochannel flank. The reflector is buried 6.2 m (20.3 ft) bsb and is 2,468.7 m (8,099.4 ft) at its widest. Approximately 76% (154.5 ha [381.7 ac]) of Target 23 is present within the APE around a proposed turbine location and the inter-array cable corridor.

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

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

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

Target 28: Target 28 represents an interfluve between a bifurcation or convergence of a major paleochannel and a tributary associated with U30/H30. A significant portion of this geomorphic feature of archaeological interest remains intact, although marine transgression removed portions of this feature in the northeast, downcutting into the potential former subaerial landscape. Nearby archaeological cores AC-09a and AC-10 did not yield any evidence of a paleosol, as both penetrated the paleochannel. Covering approximately 210.8 ha (520.9 ac), the acoustic imagery of Target 28 indicates a well-preserved surface between two paleochannels. The reflector is buried 2.5 m (8.2 ft) bsb and is 1,7551.1 m (5,758.2 ft) at its widest. Approximately 24% (50.6 ha [125.1 ac]) of Target 28 is present within the APE around a proposed turbine location and the inter-array cable corridor.

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

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

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

Target 33: Target 33 is located along the BL England ECR Corridor and represents the flank and floodplain of a paleochannel associated with U30/H30. Marine transgression removed portions of this paleolandform, downcutting into the potential former subaerial landscape. Acoustic imagery of Target 33 is similar to other targets within the WFA (i.e., Target 29). Covering approximately 55.9 ha (138.2 ac), the acoustic imagery of Target 33 indicates a slightly eroded, yet preserved paleochannel flank. The reflector is buried 2.3 m (7.5 ft) bsb and is 1,198.8 m (3,933.1 ft) at its widest. Approximately 69% (38.4 ha [94.8 ac]) of Target 33 is present within the APE.

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

(13.1 ft) bsb and is 743.2 m (2,438.3 ft) at its widest. Approximately 80% (10.5 ha [25.8 ac]) of Target 34 is present within the APE.

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

Historic Context

The paleolandscape reconstruction for the APE based on the geophysical and geotechnical data indicated that unit 30 and its corresponding basal horizon (U30/H30) represented the last subaerial surface available for human occupation prior to the terminal Pleistocene sea level transgression. Radiocarbon data collected during the geoarchaeological campaign confirmed that U30/H30 dated to 9,351 cal BP to 13,646 cal BP. This timeframe correlates to the archaeologically defined Paleoindian Period (Lothrop et al. 2016) and Early Archaic Period (Kraft and Mournier 1982). Targets 21-26, 28-31, and 33-35 represent discontinuous portions of this surface and are the preserved margins adjacent to the paleo-fluvial network that once dominated this landscape. The interpretation of these ASLFs suggests that stable, former subaerial surfaces, such as these, are the most likely locations where evidence of human occupation could be preserved.

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

The ASLFs discussed above represent preserved elements of a former subaerial surface, one that was likely home to the indigenous peoples. These types of features are recognized as having traditional cultural significance to the consulting Tribes, many of whom are ancestors of the people that once traversed this landscape. Several of the Tribes maintain within their traditions that their people have always been present here. Their Tribal histories possess accounts of their ancestors existing and interacting with these former subaerial surfaces, a place that holds value and importance to their heritage and identity.

NRHP Criteria

Based on prior BOEM consultations for the South Fork Wind Farm and Vineyard Wind 1 Wind Farm undertakings and the Lessee's assessments, the identified ASLFs are potentially eligible for listing in the National Register of Historic Places, per 36 CFR 60.4, under Criterion D for their potential to yield important

information about the indigenous settlement of the northeastern United States and development of coastal subsistence adaptations. Each ASLF may also be eligible for listing under Criterion A for their association with and importance in maintaining the cultural identities of multiple Tribes.

4.0 MITIGATION MEASURES

This section details the proposed mitigation measures to resolve adverse effects to historic properties. The conceptual mitigation measures were developed on behalf of OCW1 by individuals who meet Secretary of the Interior (SOI) Qualifications Standards for Archeology and/or History (62 FR 33708) and are appropriate to fully address the nature, scope, size, and magnitude of adverse effects including cumulative effects caused by the Project to the NRHP-qualifying characteristics of each historic property that would be affected.

BOEM, OCW1, and federally recognized Tribes who have notified BOEM they want to consult on these mitigation measures, including the Shinnecock Indian Nation, the Mashantucket (Western) Pequot Tribal Nation, the Wampanoag Tribe of Gay Head (Aquinnah), the Delaware Tribe of Indians, the Delaware Nation, and the Stockbridge-Munsee Community Band of Mohican Indians hereafter referred to as Tribes, with demonstrated interest in the affected properties will identify steps to implement the following proposed measures. These final mitigation measures will be led by a Qualified Marine Archaeologist (QMA) pursuant to 30 CFR 585 and who meets SOI Qualifications Standards for Archeology and Historic Preservation (48 FR 44738-44739).

Preconstruction Geoarchaeology

Purpose and Intended Outcome

This mitigation measure consists of, prior to construction, the collection of vibracores within the affected portions of each ASLF that was not previously investigated during the 2020 Geotechnical Survey campaign. Target 22, 24, 25, and 30 have already been sampled during the 2020 geoarchaeological effort and will not be sampled during this effort. The focus will be on the effected landforms not previously investigated. The collected cores, the locations which will be selected in consultation with Tribes and BOEM) and will be analyzed in collaboration with the Tribes to provide a more detailed understanding of ancient, former terrestrial landscapes within the OCW1 WFA and ECR corridors and how such settings may have been used by Late Pleistocene-Early Holocene indigenous peoples. Data acquired from this effort is expected to refine the age estimates for each stable landform, the timing and character of ecological transitions evidenced in the MARA report and provide an additional opportunity to recover evidence of ancient indigenous use of each ASLF.

This measure will provide for a more detailed analysis of the stratigraphy, chronology, and evolving ecological conditions at each ancient landform. Two separate reports on the analyses and interpretations will be developed. The first will be focused on content of specific interest to the consulting Tribes, including a broad approach to integrating available data collected from other recent archaeological research and

surveys on the Atlantic OCS. The specific content and formatting of this report will be refined in consultation with the Tribes to align the work product with intended intra- and inter-tribal audiences. The second report will be geared primarily toward technical, Tribal/State Historic Preservation Officer and agency audiences.

Research Agendas

Research surrounding localized regression models and the potential for landscape preservation is growing as development along the Atlantic OCS continues. Results from additional geotechnical sampling may inform a detailed paleoshoreline regression model for this area. Integration of this data with adjacent regression models would serve to increase the understanding of the Pleistocene/Holocene transition and inundation. Additionally, sampling will reveal extant sediment profiles indicative of preserved landforms and living surfaces. The results of this study could inform numerous research agendas including, but not limited to, the following:

1) Inform scientific community of larger inundation trends;
2) Shift shoreline modeling based on localized dates;
3) Provide robust paleoenvironmental reconstruction data;
4) Indicate time frames associated with preserved landforms and cultural complexes;
5) Inform localized preservation potential based on environmental contexts;
6) Determine possible evidence of human presence in the environment.

Additional research agendas and specific research questions will be determined through consultation. The OCS represents the last preserved portion of a former subaerial landscape originally home to the Tribes now scattered along the eastern seaboard and across the United States. This mitigation effort (**Table 4.1**) is designed to be a dynamic interaction between scientific research and tribal knowledge. Combining these two factors will serve to produce an understanding of not only the former physical landscape of the OCS, but also the potential interactions of humans with and on this landscape.

Table 4-1. Proposed ASLF Mitigation

ASLF ID	Paleolandform Type	Geotechnical Testing/Results	Proposed Mitigation	Research Agenda
Target 21	Interfluve w/possible meandering and sinuous channels	No testing	2-3 geoarchaeological cores	1-6
Target 22	Possible interfluve or margin adjacent to a large paleochannel	AC-15/preservation	No additional testing recommended	N/A
Target 23	Flank of meandering paleochannel	AC-03/No preservation	2-3 geoarchaeological cores	1-6

ASLF ID	Paleolandform Type	Geotechnical Testing/Results	Proposed Mitigation	Research Agenda
Target 24	Flank of meandering paleochannel	AC-16/preservation	No additional testing recommended	N/A
Target 25	Flank and floodplain of major paleochannel	AC-13, AC-14/preservation	No additional testing recommended	N/A
Target 26	Flank and floodplain of meandering paleochannel	AC-01/No preservation	2-3 geoarchaeological cores	1-6
Target 28	Interfluve between bifurcation/convergence of major paleochannel and tributary	AC-09a, AC-10/No preservation	2-3 geoarchaeological cores	1-6
Target 29	Interfluve between meandering paleochannel and straight paleochannel	AC-05a/No preservation	2-3 geoarchaeological cores	1-6
Target 30	Flank of major paleochannel	AC-04/preservation	No additional testing recommended	N/A
Target 31	Extensive flank of major paleochannel	AC-08/No preservation	2-3 geoarchaeological cores	1-6
Target 33	Flank and floodplain of paleochannel	No testing	2-3 geoarchaeological cores	1-6
Target 34	Channel margins of minor tributary	No testing	2-3 geoarchaeological cores	1-6
Target 35	Flank of major paleochannel	No testing	2-3 geoarchaeological cores	1-6

Scope of Work

The scope of work consists of the following:

- Collaborative review of existing geophysical and geotechnical data with Tribes;

- Selection of coring locations in consultation with Tribes;
- Collection of two to three vibracores within each affected ASLF that has not been previously sampled, with a sampling focus on areas that will be disturbed by Project construction activities;
- Written verification to BOEM that the samples collected are sufficient for the planned analyses and consistent with the agreed scope of work;
- Collaborative laboratory analyses at a laboratory located in Rhode Island or New Jersey;
- Screening of recovered sediments for debitage or micro-debitage associated with indigenous land uses;
- Third-party laboratory analyses, including micro- and macro-faunal analyses, micro- and macro-botanical analyses, radiocarbon dating of organic subsamples, and chemical analyses for potential indirect evidence of indigenous occupations;
- Temporary curation of archival core sections;
- Draft reports for review by Tribes and BOEM;
- Final reporting;
- Public or professional presentations summarizing the results of the investigations, developed with the consent of the consulting Tribes.

Methodology

OCW1 will conduct the Preconstruction Geoarchaeology in consultation with the Tribes and BOEM. Although BOEM will be consulted, the research, analyses, and interpretations are intended to be a collaborative effort between OCW1 and the Tribes, who will be invited by OCW1 to a series of working sessions to:

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

Vibracores placed within the affected sections of each ASLF will extend a maximum depth of approximately 20 ft (6 m) below the seafloor. The cores will be cut on the survey vessel into approximately 1-meter-long sections and sealed to minimize the risk of environmental contamination. The core segments will be logged on the survey vessel and a chain of custody will be maintained to ensure all samples are accounted for and that all samples are transferred to the laboratory for geoarchaeological analyses. Once the core segments are transferred to the onshore laboratory, OCW1 will invite Tribal representatives to participate in the splitting, documentation, and subsampling of each core.

Each core segment will be split longitudinally into working and archival halves. Subsamples collected from working halves for specific third-party analyses will be packaged in a manner appropriate to the specific

analysis for which they are intended. Archival halves will be sealed and stored horizontally on shelves or racks in a climate-controlled facility for at least one year following completion of laboratory analyses. OCW1 will prioritize reasonable access to archival core segments by consulting parties and researchers when selecting the storage facility. All samples collected from the working halves will be submitted to third party laboratories within approximately 6 months of core transfer to the Qualified Marine Archaeologist facilities.

OCW1 will prepare a presentation of the preliminary results and interpretations for discussion with the Tribes (see work session schedule above). OCW1 will consider the Tribes' comments and suggestions when preparing the draft reports and will seek to resolve any disagreements among the parties through supplemental consultations prior to preparing the draft reports. OCW1 will submit the draft reports to the Tribes and BOEMfor review and comment. OCW1 will consider all comments received when developing the final reports. Final digital copies of the completed reports will be provided to Tribes and BOEM.

Following the one-year retention period, OCW1 will offer transfer of the archival core segments to the Tribesand related state agencies, and regional research institutions with an interest in and capacity to conduct further analyses. OCW1 currently anticipates research institutions with potential interests/capacities to include the Princeton University, Rutgers University, New Jersey Institute of Technology, and the University of Rhode Island. OCW1 will notify the Tribes of its intent to transfer archival core segments to any party at least 45 days prior to initiating such transfer and will consider any comments provided by Tribes before proceeding. If no external parties agree to accept the archival core segments, OCW1 will water-screen the retained segments to identify and collect potential physical evidence of ancient Native American activity at the ASLFs. In such circumstances, OCW1 will prepare a technical memorandum summarizing the results of the archival core segment processing and analyses and submit that memorandum to theTribes.

Standards

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

Documentation

The following documentation is to be provided for review by Tribes:

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

Funds and Accounting

OCW1 will be responsible for funding and implementation of this mitigation measure.

Open-Source GIS and Story Maps

Purpose and Intended Outcome

This mitigation measure will consist of the compilation and transfer of relevant geophysical, geotechnical, and geoarchaeological datasets pertaining to the ASLFs to a non-proprietary GIS system for use by Tribes. The datasets will include sub-bottom (seismic) data used to characterize the seabed and ASLF features, the location of all geotechnical/geoarchaeological samples collected, and the vertical and horizontal extents of the affected features or sub-features within each ASLF. The GIS will be, to the extent feasible and practicable, compatible with GIS datasets compiled for other OCS projects to assist in the Tribes on-going research and stewardship efforts. Story Maps or equivalent digital media presentations will be prepared to integrate and present the complex technical data compiled during the MARA and mitigation investigations in a manner best suited for inter- and intra-tribal audiences. Story Map content would be developed in close consultation and collaboration with the consulting Tribes.

Incorporation of OCW1 datasets into a broader GIS framework will allow the Tribes to better understand and protect preserved elements of the ASLF of traditional cultural significance. The intent of this measure is to enhance the Tribes understanding of existing conditions for a range of ASLFs located in the northeastern Atlantic OCS. This knowledge would allow for more effective Government to Government consultations regarding similar features that may be affected by future federal undertakings. The value of the GIS will increase as additional datasets are acquired and incorporated. Access to the GIS will support each Tribes capacity to pursue their own research or intra-tribal educational programs related to the OCS and traditional cultural uses of the now-submerged landscapes of their ancestors.

The combined MARA and Preconstruction Geoarchaeology investigations will provide an important perspective on the preservation of submerged ASLFs within formerly glaciated sections of the OCS and within the footprint of former glacial lakes. Integrated GIS that can accommodate datasets collected from other OCS development projects and surveys would allow for comparisons to areas south of the maximum glacial limits on the OCS to provide a more comprehensive view of the ancient landscapes within the region. OCW1 will provide reasonable compensation to tribal representatives working with OCW1 on implementation of this measure. Story Maps created within the GIS will provide a flexible approach to incorporating media from a variety of sources, including geospatial data, interviews with traditional knowledge-holders, photographs, audio recordings, and archival cartography for a compelling interpretive experience. Story Maps can be tailored for specific tribal audiences and uses and would be developed in consultation with the consulting Tribes.

Scope of Work

The scope of work will consist of the following:

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

Methodology

OCW1 will develop the GIS in consultation with the Tribes. At least one work session will be scheduled to refine specific functionality of interest to the Tribes. That session will be conducted after the preliminary data analyses for the Preconstruction Geoarchaeology effort has been completed. This will allow for a more focused walk-through of the data and options for organizing and integrating different datasets. OCW1 will request from the Tribes details on any existing open-source GIS systems currently in use by each Tribe/Tribal Nation to minimize any issues with data integration or interoperability.

Once the work session has been conducted OCW1 will proceed with development of the GIS, considering the Tribes' comments and suggestions. The draft GIS system will be shared with the Tribes in a training session that presents the functions of the GIS and familiarizes the Tribal representatives with the interfaces, data organization, and any custom features developed to enhance useability. OCW1 will consider any feedback from the Tribes on the draft GIS before proceeding with finalizing the system design and implementation. OCW1 will provide the GIS to the Tribes by physical storage media or as a secure digital file transfer, as appropriate to each Tribes IT infrastructure and preference. OCW1 does not intend to be responsible for the upkeep of the GIS database.

Story Maps content will be developed with the Tribes through one or more scheduled work sessions. Potential options for content intended for youth audiences, tribal governments, and/or general tribal membership will be discussed to refine the conceptual framework and develop draft Story Maps for review by the Tribes. OCW1 will consider all comments and feedback provided by the Tribes when preparing the final Story Maps. All comments and feedback will be collated and provided back to the Tribes as part of the process.

Standards

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

Documentation

OCW1 will provide draft descriptions and documentation of the GIS for review by the Consulting Parties and will provide a description of the draft Story Maps to the consulting Tribes following the initial working sessions.

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

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

Funds and Accounting

OCW1 will be responsible for funding and implementation of this mitigation measure.

Post-Construction Seafloor Impact Inspection

Purpose and Intended Outcome

OCW1 proposes a mitigation measure to use seafloor inspection to assess construction activity impacts to ASLFs. This effort will focus on areas of cable installation as this activity is more likely to disturb and redistribute shallow portions of a previously identified ASLF. OCW1 will construct a 3D model defining the spatial relationship of project components and installation methodology (e.g., cable installation via trenching or jetting) relative to the ASLFs. The 3D model will identify portions of the ASLFs within the vertical APE that will be impacted and possess a high preservation potential for evidence of human occupation. OCW1 will coordinate with BOEM and consulting parties on the results of this effort to select locations for post-construction visual inspection. Moreover, tribal members from the affected Tribes will be invited to actively participate during the visual inspection of the seafloor.

OCW1's QMA will design and direct the visual inspection of the seafloor at the selected locations identified through the above process to assess for the presence/absence of displaced cultural materials from the ASLF. BOEM and OCW1 will work together to determine the ROV inspection methodology. Post-construction inspection will focus on the areas of disturbance within the ASLFs. Various factors, including but not limited to environmental conditions, health and safety risks, the spatial extent of impacts, and the unique characteristics of each selected ASLFs will be considered before mobilization to conduct the visual inspection.

Scope of Work

The scope of work will consist of the following:

- Development of 3D model throughout ASLFs designated for review.
- Development of the ROV investigation methodology
- Review of candidate datasets and attributes ;
- Seafloor impact inspection of selected locations;
- Data Interpretative technical report draft; and
- Final technical report.

Methodology

Inspection of the impacted portions of the ASLFs will consist of the following:

- Development of 3D model throughout ASLFs designated for review.
- Consultation with BOEM to discuss the ROV investigation methodology.
- Consultation with BOEM and Tribes to facilitate tribal participation during inspection activities.
- QMA directed remotely operated vehicle (ROV) inspection of the seafloor along impacted portions of the selected ASLFs:
    - Multibeam Echosounder (MBES)
    - Scanning Sonar
    - Ultra-short baseline (USBL) positioning
    - HD photo & video camera with laser scale
    - High-resolutions camera system
    - Laser scales set at 10 centermeters
    - ROV lighting
    - Forward-looking sonar (FLS) multibeam
- Data interpretative technical draft and final reports with accompanying investigation data.

SEARCH in consultation with Tribes and BOEM will define the spatial relationship of project components and installation methodology relative to the ASLFs. The upper and lower ranges of each ASLF are not static and undulate unpredictably. Detailed review of the 2D seismic data will allow for selection of the best suited ASLFs for post-construction inspection. Based on the preliminary 2D seismic assessment, SEARCH will develop a 3D model of the affected ASLFs to finalize the areas for review. The 3D model will identify portions of the ASLFs within the vertical APE that will be impacted and possess a high preservation potential for evidence of human occupation. SEARCH will coordinate with BOEM, Tribes, and consulting parties on the results of this effort to select locations for post-construction visual inspection.

This effort will focus on areas of cable installation as this activity is more likely to disturb and redistribute shallow portions of a previously identified ASLF. Therefore, the inspection process is designed to focus on the ASLFs with the shallowest subsurface expression and highest likelihood of containing intact deposits. The final number of ASLFs will be selected for this post-construction inspection based on a detailed review of the proposed cable route and the aforementioned factors. Review will focus on the disturbed sediments around the as-laid cable route and attempt to delineate any materials indicative of human presence (i.e.,

lithics, pottery sherds, etc.). The goal of the investigation, therefore, is to determine the presence or absence of archaeological material in potential association with previously identified ASLFs andto determine the preservation potential. buried landforms...

SEARCH will design and direct the visual and multibeam echosounder inspection of the seafloor at the selected locations identified through the above process to assess for the presence/absence of displaced cultural materials from the ASLF. ROV investigation will occur over three separate mobilizations and be conducted in 12-hour/day operations. The investigation will utilize a vessel based USBL for subsea positioning of the ROV. The site investigation would include conducting numerous passes at different approaches and orientations to capture video and still imagery of the selected ASLFs, which may be built into composite images and models. The QMA will direct the ROV to other points of interest and data acquisition points for further inspection/investigations and viewing. SEARCH will maintain detailed logs of ROV diving missions and archaeological information, as well as record video with voice-over narration and positioning overlay. Video will be recorded continuously recorded throughout the duration of all dives for later analysis and archiving. Detailed photographs, including the use of a laser scale, will be captured at the discretion of the QMA and ROV operator.

Reporting will include processing of bathymetry and imagery. MBES data will be processed in QPS Qimera to produce final sounding grids and bathymetric results on the project datum. Positional and attitude data will be refined using Applanix POSPac and post-processed vertical positions to reference the project's vertical datum. Spurious data points will be removed from gridding subsets, and sound velocity corrections will be applied before final points, grids and images are produced. Multibeam backscatter processing will be completed in QPS FMGT for each sonar. Photo and camera imagery will be utilized to provide information on potential further understanding of the selected ASLFs. Additionally, the imagery data may be merged in post-processing to develop composite images and extract point clouds to develop models of the sites in combination with the bathymetry. The goal of data acquisition and processing is to determine presence or absence of potential cultural material on the seafloor, but no cultural material will be collected.

Standards

To be determined in consultation with BOEM, Tribes, and consulting parties

Documentation

OCW1 will provide BOEM and Tribes draft and final technical reports including the development of the 3D models and any resulting seafloor impact assessments.

Funds and Accounting

OCW1 will be responsible for funding and implementation of this mitigation measure.

Ethnographic Study with the Delaware Tribe of Indians, The Delaware Nation, and the Stockbridge-Munsee Community Band of Mohican Indians

Purpose and Intended Outcome

OCW1 proposes a mitigation measure to fund an ethnographic study focusing on one New Jersey coastal watershed, the Great Egg Harbor River, and its potential submerged extension onto the Outer Continental Shelf (OCS) to be coordinated by the Delaware Tribe of Indians (DTI) with collaboration by The Delaware Nation (DN) and the Stockbridge-Munsee Community Band of Mohican Indians (SM).

The study will focus on Native American resources, sites, places, Traditional Ecological Knowledge (TEK), and indigenous knowledge of the established Great Egg Harbor River Watershed and OCS. This study constitutes baseline research to compile and assess multiple levels of documentary evidence about the ancestral and contemporary connections to the landscape (both onshore and offshore) and will utilize new data on the offshore paleolandscape, including identified ancient, submerged landform features. The study will result in a written report that may follow the general format of an Ethnographic Overview and Assessment document utilized by the National Park Service. The scope of the study may include, but is not limited to, an overview of documentary evidence including historic maps, photographs, oral histories, research reports, archival data, TEK, and interviews. Relevant GIS data layers from sources available to the public and from the recent Ocean Wind high resolution geophysical surveys could also be used for predictive modeling purposes to help identify areas of potential archaeological or other resource sensitivity of importance to the Tribes.

This study could complement additional similar studies funded by other offshore wind projects along the Atlantic seaboard. Although not included in this scope, the goal is for the results of this study to be integrated into a potential larger report focusing on the New Jersey coast and offshore landscapes with the intent of increasing community knowledge of the landscape and for potential use in guiding consultations for future federal undertakings. This information will remain confidential and not shared with other people or organizations without the consent of the Tribes.

Scope of Work

The scope of work will consist of the following:

- Funding ethnographic researcher selected by DTI for 2-year period;
- Funding for researcher travel to New Jersey for research and site visits;
- Funding for DTI, DN, and SM technology upgrades associated with analysis of GIS data;
- Funding for DTI Historic Preservation office oversight and indirect costs;
- Funding for DTI, DN, and SM THPO Collaboration;
- OCW1 will provide relevant ASLF GIS data layers to DTI for use in this study as well as provide a tutorial on the data (see previous Open-Source GIS and Story Maps mitigation measure);

- OCW1 will hold quarterly progress update calls lasting approximately one-half hour with DTI until the final technical reports are issued.
- Final deliverables will consist of one confidential report that may contain sensitive resource information and one report that could be made available to the public. Both reports will be distributed by the Tribes, at their discretion.
- Funding for a presentation to highlight the results of the study to be coordinated and executed by DTI.

Methodology

In addition to consulting the Tribal Nation's archives, documents, and oral history interviews with DTI elders, this study will also require archival research at applicable repositories in New Jersey by the ethnographic researcher with the intent of acquiring available land transfer documents, historic maps, and other historic documents. Site visits and additional research at the NJHPO facilities may also be completed by the ethnographic researcher as part of the study. Relevant GIS data layers will also be analyzed for insight into the location of potential archaeological or other resource sensitivity of importance to the Tribe. No archaeological fieldwork or landowner permissions will be required as part of this study. No sensitive or other confidential information including archaeological site locations will be made available in the public document.

Standards

The ethnographic researcher and key team members shall be fully qualified personnel as experts in their areas of traditional knowledge and research as determined by the DTI.

Documentation

To be determined in consultation with BOEM and DTI.

Funds and Accounting

OCW1 will be responsible for funding and implementation of this mitigation measure. Funding levels will follow dollar amounts previously agreed to by OCW1 and DTI.

Ethnographic Study with the Shinnecock Indian Nation

Purpose and Intended Outcome

OCW1 proposes a mitigation measure to fund an ethnographic study focusing on the Atlantic seaboard in the vicinity of the lease area to be coordinated with the Shinnecock Indian Nation.

The study will focus on Native American resources, sites, places, Traditional Ecological Knowledge (TEK), and indigenous knowledge of the vicinity. This study constitutes baseline research to compile and assess multiple levels of documentary evidence about the ancestral and contemporary connections to the

landscape (both onshore and offshore) and will utilize new data on the offshore paleolandscape, including identified ancient, submerged landform features. The study will result in a written report that may follow the general format of an Ethnographic Overview and Assessment document utilized by the National Park Service. The scope of the study may include, but is not limited to, an overview of documentary evidence including historic maps, photographs, oral histories, research reports, archival data, TEK, and interviews. Relevant GIS data layers from sources available to the public and from the recent Ocean Wind high resolution geophysical surveys could also be used for predictive modeling purposes to help identify areas of potential archaeological or other resource sensitivity of importance to the Tribes.

This study could complement additional similar studies funded by other offshore wind projects along the Atlantic seaboard. Although not included in this scope, the goal is for the results of this study to be integrated into a potential larger report focusing on the Atlantic seaboard and offshore landscapes with the intent of increasing community knowledge of the landscape and for potential use in guiding consultations for future federal undertakings. This information will remain confidential and not shared with other people or organizations without the consent of the Shinnecock Indian Nation.

Scope of Work

The scope of work will consist of the following:

- Funding ethnographic researcher selected by Shinnecock Indian Nation for 2-year period;
- Funding for researcher travel for research and site visits;
- Funding for Shinnecock Indian Nation technology upgrades associated with analysis of GIS data;
- Funding for Shinnecock Indian Nation Historic Preservation office oversight and indirect costs;
- Funding for Shinnecock Indian Nation THPO Collaboration;
- OCW1 will provide relevant ASLF GIS data layers to Shinnecock Indian Nation for use in this study as well as provide a tutorial on the data (see previous Open-Source GIS and Story Maps mitigation measure);
- OCW1 will hold quarterly progress update calls lasting approximately one-half hour with Shinnecock Indian Nation until the final technical reports are issued.
- Final deliverables will consist of one confidential report that may contain sensitive resource information and one report that could be made available to the public. Both reports will be distributed by the Tribes, at their discretion.
- Funding for a presentation to highlight the results of the study to be coordinated and executed by DTI.

Methodology

In addition to consulting the Shinnecock Indian Nation's archives, documents, and oral history interviews with Shinnecock Indian Nation elders, this study will also require archival research at applicable repositories in New Jersey and/or New York by the ethnographic researcher with the intent of acquiring available land transfer documents, historic maps, and other historic documents. Site visits and additional research at the

NJHPO facilities may also be completed by the ethnographic researcher as part of the study. Relevant GIS data layers will also be analyzed for insight into the location of potential archaeological or other resource sensitivity of importance to the Shinnecock Indian Nation. No archaeological fieldwork or landowner permissions will be required as part of this study. No sensitive or other confidential information including archaeological site locations will be made available in the public document.

Standards

The ethnographic researcher and key team members shall be fully qualified personnel as experts in their areas of traditional knowledge and research as determined by the Shinnecock Indian Nation.

Documentation

To be determined in consultation with BOEM and Shinnecock Indian Nation.

Funds and Accounting

OCW1 will be responsible for funding and implementation of this mitigation measure. Funding levels will follow dollar amounts previously agreed to by OCW1 and Shinnecock Indian Nation.

5.0 IMPLEMENTATION

Timeline

Please refer to Stipulation III.A.1 for specific timeframes regarding implementation of each of the measures described in Section 4.0.

Organizational Responsibilities

BOEM

- Ensure implementation of the MOA in order to adequately resolve adverse effects and in consultation with the Participating Parties;
- Consult with OW1, NJHPO, ACHP, and other consulting parties; and
- Review and approve the annual summary report prepared and distributed to the Consulting Parties by OW1.

Ocean Wind LLC

- Fund and implement the mitigation measures Stipulated in III.B of the MOA and described in the Mitigation Measures section of this HPTP;
- Prepare Annual Reporting, submit reporting to BOEM for review and approval, and distribute to Consulting Parties per the Mitigation Measures section of this HPTP;
- Submit information for Participating Party review per the Mitigation Measures section of this HPTP;

- Creation and distribution of RFPs to solicit consultant support for mitigation measure fulfillment, as applicable;
- Proposal review and selection of a consultant who meets the qualifications specified in the SOI Qualifications Standards for History, Architectural History and/or Architecture (62 FR 33708), as applicable;
- Initial review of Documentation for compliance with the Scope of Work, Methodology and Standards;
- Distribution of Documentation to Participating Parties for their review; and
- Review and comment on deliverables.

New Jersey SHPO

- Consult, when necessary, on implementation of this HPTP.

Federally recognized Tribes with ancestral ties to the Project development area and participating in the consultation for this specific HPTP (the Shinnecock Indian Nation, the Delaware Tribe of Indians, Delaware Nation, and the Stockbridge-Munsee Community Band of Mohican Indians)

The Tribes including the Shinnecock Indian Nation, the Delaware Tribe of Indians, Delaware Nation, and the Stockbridge-Munsee Community Band of Mohican Indians:

- Work with BOEM, Ocean Wind LLC, the SHPO, and the ACHP using the previously agreed upon HPTP framework;
- Participate in all activities outlined in Section 4.0 and complete all associated reviews, comments, requests for feedback/input in agreed upon timeframes.

Advisory Council on Historic Preservation

- Consult, when necessary, on implementation of this HPTP.

Other Parties as Appropriate

OCW1 does not anticipate participation by any other NHPA Section 106 consulting parties. If BOEM determines additional consulting parties will participate in this plan, the plan will be updated to include those parties.

Participating Party Consultation

Consulting Parties were provided several opportunities to review and comment on this HPTP and provide meaningful input on the mitigation measures to resolve adverse effects to historic properties.

6.0 REFERENCES

Federal Regulations

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

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

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

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

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

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

State Regulations

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

Public documents related to Ocean Wind1

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

Ocean Wind 1 DEIS: https://www.boem.gov/renewable-energy/state-activities/ocean-wind-1-draft-environmental-impact-statement-deis-commercial

Ocean Wind 1 FEIS: https://www.boem.gov/renewable-energy/state-activities/ocean-wind-1-final-environmental-impact-statement-feis-commercial

General Information on Section 106

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

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

Kraft, Herbert, C. and Alan R. Mournier. 1982 The Archaic Period in New Jersey (ca. 8000 BC–1000 BC). In New Jersey's Archaeological Resources, A Review of Research Problems and Survey Priorities: The Paleo-Indian Period to Present. Electronic resource, http://www.nj.gov/dep/hpo, accessed December 2018.

Lothrop Jonathan, Darrin Lowery, Arthur Spiess, and Christopher Ellis 2016. Early Human settlement of Northeastern North America. PaleoAmerica 2: 192-251

National Park Service (NPS). 1997. How to Apply the National Register Criteria for Evaluation. Rev. ed. National Register Bulletin 15. Available at: https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf. Accessed April 21, 2022.

ATTACHMENT 4 – HISTORIC PROPERTIES TREATMENT PLAN FOR THE OCEAN WIND 1 OFFSHORE WIND FARM PROJECT, HISTORIC PROPERTIES SUBJECT TO ADVERSE VISUAL EFFECT, CAPE MAY AND ATLANTIC COUNTIES, NEW JERSEY

This page intentionally left blank.

Historic Properties Treatment Plan

for the

Ocean Wind 1 Offshore Wind Farm Project

Historic Properties Subject to Adverse Visual Effect

Cape May, Atlantic, and Ocean Counties, New Jersey

Submitted to:

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

Prepared for:

Ocean Wind 1
https://oceanwind.com/

Prepared by:

HDR Engineering, Inc.
www.hdrinc.com

May 2023

ABSTRACT

Federal Undertaking:	Ocean Wind 1 Offshore Wind Farm Project, OCS-A 0498
Location:	Outer Continental Shelf, New Jersey
Federal and State Agencies:	Bureau of Ocean Energy Management Bureau of Safety and Environmental Enforcement Environmental Protection Agency National Marine Fisheries Service U.S. Army Corps of Engineers New Jersey Department of Environmental Protection/State Historic Preservation Office Advisory Council on Historic Preservation
ACHP Project No.:	016649
HPO Project No.:	18-1184-30
Potential Adverse Visual Effect Finding for:	Properties in Cape May, Atlantic, and Ocean Counties
Date:	May 2023

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADLS	Aircraft Detection Lighting System
APE	Area of Potential Effects
BOEM	Bureau of Ocean Energy Management
BSEE	Bureau of Safety and Environmental Enforcement
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
EPA	Environmental Protection Agency
FEIS	Final Environmental Impact Statement
FR	Federal Regulation
HDR	HDR, Inc.
HPTP	Historic Preservation Treatment Plan
HRVEA	Historic Resources Visual Effects Analysis
N/A	Not Applicable
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
NJ DEP	New Jersey Department of Environmental Protection
NJHPO	New Jersey State Historic Preservation Office(r)
NMFS	National Marine Fisheries Service
NPS	National Park Service
NRHP	National Register of Historic Places
OCS	Outer Continental Shelf
OW1	Ocean Wind 1 Offshore Wind Farm Project
RFP	Request for Proposal
ROD	Record of Decision
SOI	Secretary of the Interior
TCP	Traditional Cultural Property
USCG	United States Coast Guard
WFA	Wind Farm Area
WTG	Wind Turbine Generator

INTRODUCTION

This Historic Properties Treatment Plan (HPTP) was prepared to support fulfillment of Stipulation III.B of the *Memorandum of Agreement (MOA) Among the Bureau of Ocean and Energy Management, The New Jersey State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Ocean Wind 1 Offshore Wind Farm Project*. This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation actions to resolve adverse visual effects to 10 historic properties identified by the Bureau of Ocean Energy Management (BOEM) through Section 106 consultation for the Ocean Wind 1 Offshore Wind Farm (OW1), as identified in the *Ocean Wind Visual Effects on Historic Properties* (VEHP), also commonly referred to as the HRVEA (Historic Resources Visual Effects Analysis), dated January 2023 (HDR and SEARCH 2023), as well as eight additional historic properties BOEM has determined will be visually adversely affected as a result of consultation. The mitigation measures and the process for implementation described herein were developed in consultation with the federally recognized Tribes, New Jersey Historic Preservation Officer (NJHPO), the Advisory Council on Historic Preservation (ACHP), and other consulting parties. This HPTP outlines mitigation measures, implementation steps, and timeline for actions.

Introduction: Outlines the content of this HPTP.

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

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

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

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

References: A list of works cited in this HPTP.

BACKGROUND INFORMATION

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

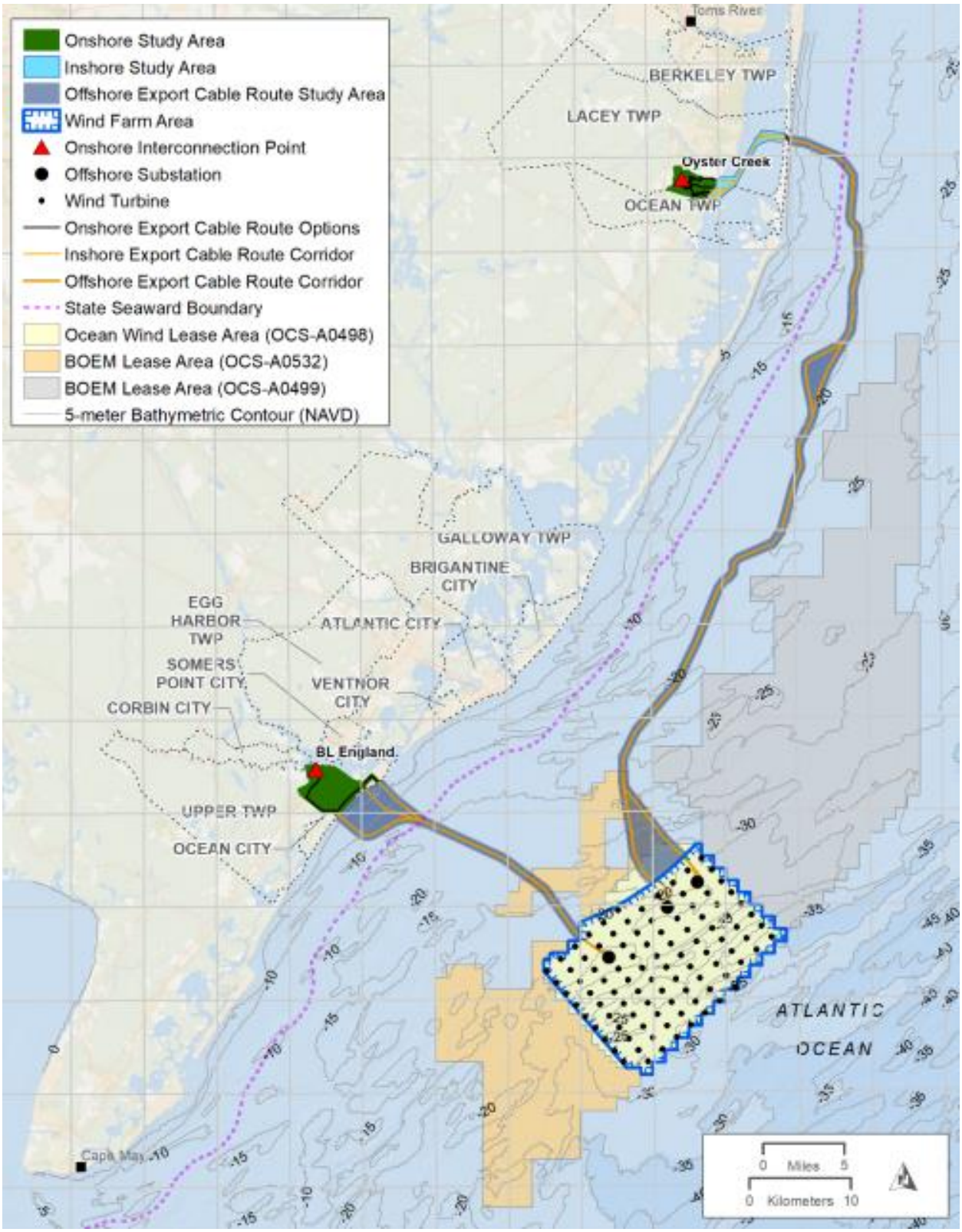
The WTGs, foundations, offshore substations, and inter-array cables will all be in federal waters on the Outer Continental Shelf (OCS), approximately 15 statute miles (mi) (13 nautical miles [nm]) southeast of Atlantic City, New Jersey. Cables will be buried below the seabed. Export cables from the offshore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

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

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

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

Figure 1: Project Location



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

In the FoAE, BOEM determined that the OW1 undertaking will have an adverse visual effect on 18 historic properties. BOEM has consulted with the Advisory Council on Historic Preservation (ACHP), New Jersey Historic Preservation Office (NJHPO), federally recognized Native American Tribes, and other NHPA Section 106 consulting parties to seek ways to avoid, minimize, or mitigate adverse effects to historic properties. BOEM has decided to codify the resolution of adverse effects through an NHPA Section 106 MOA pursuant to 36 CFR § 800.8(c)(4)(i)(B). As defined in 36 CFR § 800.6 (c), a project-specific MOA records the terms and conditions agreed upon to resolve adverse effects of the undertaking. This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation measures. The resolution measures to resolve adverse effects to historic properties are recorded in the *Memorandum of Agreement Among the Bureau of Ocean and Energy Management, The New Jersey State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Ocean Wind 1 Offshore Wind Farm Project*.

Pursuant to the terms and conditions of the MOA, OW1 will implement applicant-proposed environmental protection measures to avoid potential visual impacts to historic properties (see MOA Stipulations I.B and II.A). This HPTP was developed by the applicant to fulfill Stipulation III.B of the MOA to resolve adverse visual effects to 18 historic properties. Mitigation measures implemented under this HPTP will be conducted in accordance with all agreed upon terms and conditions in the MOA and with applicable local, state, and federal regulations and permitting requirements. Responsibilities for specific compliance actions are described in further detail in Section 5.2, Organizational Responsibilities.

Municipal Regulations

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

Table 1. Municipal Departments Requiring On-Site Mitigation Coordination

Historic Property	Municipality	Departments
Ocean City Boardwalk	Ocean City	Construction Code Division, Planning Board, Historic Preservation Commission
Ocean City Music Pier	Ocean City	Construction Code Division, Planning Board, Historic Preservation Commission
Flanders Hotel	Ocean City	Construction Code Division, Planning Board, Historic Preservation Commission
U.S. Lifesaving Station #35	Stone Harbor	Planning Board, Zoning Board
North Wildwood Lifesaving Station	North Wildwood	Construction Office, Planning Board, Historic Preservation Commission
Hereford Inlet Lighthouse	North Wildwood	Construction Office, Planning Board, Historic Preservation Commission
Brigantine Hotel	Brigantine	Planning Board
Absecon Lighthouse	Atlantic City	Construction Division, Planning and Development, Historic Preservation Commission
Atlantic City Boardwalk	Atlantic City	Construction Division, Planning and Development, Historic Preservation Commission
Atlantic City Convention Hall	Atlantic City	Construction Division, Planning and Development, Historic Preservation Commission
Haddon Hall/Resorts Casino Hotel	Atlantic City	Construction Division, Planning and Development, Historic Preservation Commission
Ritz-Carlton Hotel	Atlantic City	Construction Division, Planning and Development, Historic Preservation Commission
Riviera Apartments	Atlantic City	Construction Division, Planning and Development, Historic Preservation Commission
Vassar Square Condominiums	Ventnor City	Division of Construction Code Enforcement, Planning Board
114 S Harvard Avenue	Ventnor City	Division of Construction Code Enforcement, Planning Board
Lucy the Margate Elephant	Margate City	Planning Board and Zoning, Historical Society
Great Egg Coast Guard Station	Longport	Zoning/Planning Board
Little Egg Harbor U.S. Lifesaving Station #23 (U.S. Coast Guard Station #119)	Little Egg Harbor	Construction Department, Zoning and Code Enforcement

Preservation Easements and Restrictions

Preservation easements and restrictions protect significant historic, archaeological, or cultural resources. Any mitigation work associated with a historic property will comply with the conditions of all extant historic preservation legislation (see Table 2. Additional information regarding compliance with extant preservation legislation appears below in Section 5.0, Implementation.

Table 2. Applicable State/Local Legislation for Historic Properties

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

Participating NHPA Section 106 Participating Parties

For the purposes of this HPTP, Participating Parties are defined as a subset of the NHPA Section 106 consulting parties that have a functional role in the process of fulfilling Stipulation III.B of the MOA and the mitigation measure implementation processes described herein. The roles of Participating Parties are identified for each mitigation measure in Section 4.0 of this document, including meeting participation and document reviews. Participating Parties with a demonstrated interested in the adversely affected historic properties are summarized in Table 3.

The full list of invited and participating consulting parties is available as Attachment 3 of the MOA.

Table 3. Participating Parties involved with the Historic Property/s

Name	Relationship to Historic Property	Address
Absecon Lighthouse	Interested Party	31 S Rhode Island Ave, Atlantic City, New Jersey 08401
American Legion Stephen C. Ludlam Post 331	Property Owner	P.O. Box 232 Stone Harbor, New Jersey 08247
Atlantic City	Local Govt/Property Owner	1301 Bacharach Boulevard, Atlantic City, New Jersey 08401
Donald and June Feith	Property Owner	204 Marvin Road, Elkins Park, Pennsylvania 19027
Flanders Condominium Association	Property Owner	Flanders Condominium Association, 719 East 11th Street, Ocean City, New Jersey 08226
Legacy Vacation Resorts	Property Owner	PO Box 690999, Orlando, Florida 32869

Name	Relationship to Historic Property	Address
Margate City	Local Govt/Property Owner	Rutala Associates, LLC, 717 River Drive, Linwood, New Jersey, 08221-1226
Max Gurwicz Enterprises	Property Owner	331 Tilton Road, Northfield, New Jersey, 08225
New Jersey Casino Redevelopment Authority	State Agency/Property Owner	15 S. Pennsylvania Avenue, Atlantic City, New Jersey 08401
New Jersey Department of Environmental Protection – Historic Preservation Office	State Agency	Mail Code 501-048, NJDEP Historic Preservation Office, PO Box 420, Trenton, New Jersey 08625-0420
New Jersey Department of Environmental Protection – Office of Historic Sites & Parks	State Agency/Property Owner	NJDEP Office of Historic Sites & Parks, PO Box 420, Trenton, New Jersey 08625-0420
New Jersey Department of Law & Public Safety, Marine Service Bureau	State Agency/Property Owner	New Jersey Marine Service Bureau, 25 Market Street, Trenton, New Jersey, 08611
Ocean City	Local Govt/Property Owner	861 Asbury Ave, Ocean City, New Jersey 08226
Ritz Condominium Association	Property Owner	Ritz Condominium Association, 2715 Boardwalk, Atlantic City, New Jersey 08401
Rutgers University, Department of Marine and Coastal Sciences, School of Environmental and Biological Sciences	Property Owner	88 Lipman Drive, New Brunswick, New Jersey 08901
US Coast Guard	Federal Agency/Property Owner	Sector Delaware Bay, 1 Washington Ave, Philadelphia PA 19147
US Coast Guard	Federal Agency/Property Owner	National Offshore Safety Advisory Committee, 2703 Martin Luther King Jr. Ave SE, Stop 7509, Washington DC 20593-7509
Vassar Square Condominiums	Property Owner	Vassar Square Condominiums, 4800 Boardwalk, Ventnor City, New Jersey 08406

EXISTING CONDITIONS AND HISTORIC SIGNIFICANCE

Historic Properties

This HPTP involves 18 resources, as identified below in Table 4. All 18 historic properties are located along the New Jersey shoreline within 15–24 miles of the Wind Farm Area (WFA), and ocean views are a character-defining feature of each property's significance.

Table 4. Historic Properties included in the Visual Effect HPTP

Name	Property Address	BOEM Effect Finding
Cape May County		
Ocean City Boardwalk	East 6th Street to East 14th Street, Ocean City	Adverse effect
Ocean City Music Pier	811 Boardwalk, Ocean City	Adverse effect
Flanders Hotel	719 East 11th Street, Ocean City	Adverse effect
U.S. Lifesaving Station #35	11617 2nd Avenue, Stone Harbor	Adverse effect
North Wildwood Lifesaving Station	113 North Central Avenue, North Wildwood	Adverse effect
Hereford Inlet Lighthouse	111 North Central Avenue, North Wildwood	Adverse effect
Atlantic County		
Brigantine Hotel	1400 Ocean Avenue, Brigantine City	Adverse effect
Absecon Lighthouse	Pacific and Rhode Island Avenues, Atlantic City	Adverse effect
Atlantic City Boardwalk	South New Jersey Avenue to South Georgia Avenue	Adverse effect
Atlantic City Convention Hall	Boardwalk at Pacific Avenue	Adverse effect
Haddon Hall/Resorts Casino Hotel	1121 Boardwalk, Atlantic City	Adverse effect
Ritz-Carlton Hotel	2715 Boardwalk, Atlantic City	Adverse effect
Riviera Apartments	116 South Raleigh Avenue, Atlantic City	Adverse effect
Vassar Square Condominiums	4800 Boardwalk, Ventnor City	Adverse effect
114 South Harvard Avenue	114 South Harvard Avenue, Ventnor City	Adverse effect
Lucy the Margate Elephant	Decatur and Margate Avenues, Margate City	Adverse effect
Great Egg Coast Guard Station	2301 Atlantic Avenue, Longport	Adverse effect
Ocean County		
Little Egg Harbor U.S. Lifesaving Station #23 (U.S. Coast Guard Station #119)	800 Great Bay Boulevard, Little Egg Harbor	Adverse effect

Adversely Affected Historic Properties

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

Physical Description and Existing Conditions

Ocean City Boardwalk

Origins of the Ocean City Boardwalk date to 1880, when the first seasonal structure was constructed from 2nd Street to 4th Street and West Avenue. The Boardwalk was expanded in 1885 to extend the length of the beach, accommodating a new amusement pavilion at 11th Street (The Shore Blog 2021). In keeping with Ocean City's history as a Methodist camp, the Boardwalk offered not only live music, restaurants, and shopping, but free educational seminars and church services (*Daily Intelligencer Journal* 1950:10). The Boardwalk burned in 1927 and was reconstructed the following year. The 1928 Boardwalk was built on a concrete foundation in response to the fire, but portions reconstructed in the 2000s removed the concrete and replaced it with more cost-effective wood (*The Morning Call* 2017). Two important outcomes of the Boardwalk fire were the relocation of a large section of the Boardwalk one block closer to the beachfront and the establishment of a city ordinance that banned building on the ocean side of the Boardwalk (Kelly 2018). The Boardwalk was again reconstructed after the Ash Wednesday Storm of 1962. The Ocean City Boardwalk currently extends approximately 2.5 mi. Like the boardwalks in neighboring Atlantic City and Wildwood, the Ocean City Boardwalk is home to hotels, motels, amusement parks and other entertainments, restaurants, and shopping, housed in buildings constructed throughout the twentieth century. The local ordinance prohibiting construction on the east side of the Ocean City Boardwalk has preserved open and unobstructed views of the ocean along its length. Only the Ocean City Music Pier stands on the ocean side of the Boardwalk, as it was built in 1928, immediately after the fire. The Ocean City Boardwalk was treated as eligible for the NRHP as a result of the survey undertaken for OW1, with a boundary extending from East 6th Street to East 14th Street, reflecting the concentration of commercial development along its length. The property's significance is associated with the commercial and recreation-related growth of Ocean City (Criterion A). The WFA is approximately 15 mi southeast of this historic property.

The Ocean City Boardwalk is integral to the history of commercial development and recreation on the Jersey Shore. While the physical infrastructure of the Boardwalk has changed through the years, due to expansion, general improvements, and storm-related replacement and repairs, its role as a conduit along the shoreline has remained constant. The Ocean City Boardwalk is home to resources from the early twentieth century through the twenty-first century, offering visitors accommodations, entertainment, and food. Upgrades and improvements made to the buildings that line the Boardwalk have impacted the overall setting and feeling of the Boardwalk, as have modern infill buildings and structures. The Boardwalk has offered commercial and recreational opportunities along the seashore since its inception, and it has been subject to ongoing investment and economic development along its route, which in fact attests to its ongoing vitality and viability. However, visitors walking along the Boardwalk in 2022 are offered similar unobstructed sea views as those who walked the Boardwalk 50 years ago and 100 years ago, due the ordinance restricting development on the ocean side of the Boardwalk. The WFA would be visible along the horizon approximately 15 mi from the Boardwalk. Views of the WFA from the entire length of Boardwalk will alter its setting, which has been preserved through the local ordinance passed in the 1920s. As a result, the project will have an adverse effect on the Ocean City Boardwalk.

Ocean City Music Pier

The Ocean City Music Pier was constructed as a concert hall in 1928, after a fire destroyed much of the Ocean City boardwalk. The Ocean City Music Pier was determined eligible for the NRHP in 1990. NJHPO online records do not include information on the building's NRHP significance; however, it appears to be significant under Criterion A for Entertainment and Recreation due to its long history as an entertainment venue on the Ocean City Boardwalk, and under Criterion C for Architecture. The Ocean City Music Pier continues to function as a music venue. The building includes an enclosed concert hall and attached open-air loggia. The enclosed portion of the building features large arched windows, while the loggia has open arches. There are sea views from both inside the concert hall and inside the loggia, although the views have changed somewhat over the years. Originally, the pier was built over the water and views were exclusively of the ocean. In 1993, a major beach restoration project imported 6.4 million cubic ft of sand to widen Peck Beach in Ocean City (USACE 2011). Since 1993, the pier has been over sand rather than water and the views to the north and south primarily include the beach, with water views visible at an angle. The building's primary entrance faces west and is accessed via the Ocean City Boardwalk, and the rear of the building sits on piers driven into the sand. The WFA is due east of the Ocean City Music Pier, approximately 15.2 mi away.

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

Flanders Hotel, Ocean City

The Flanders Hotel is an NRHP-listed property located one-half block from the boardwalk in Ocean City. The building is listed under Criterion A for Entertainment and Recreation, and Community Planning and Development, and under Criterion C for Architecture. The property currently includes a 1923 nine-story U-Shaped Spanish-Colonial style hotel, a two-story commercial and solarium annex, a pool, and a parking lot (Bethke 2009). The hotel is the tallest building in the area. Its upper floors (approximately floors 5–9) have unobstructed views of the ocean, while its lower levels (approximately floors 1–4) have views blocked or obscured by Playland's Castaway Cove and other nearby development.

The two-story solarium annex is located on the building's east side, and from 1927 to 1978, the solarium overlooked three saltwater pools located between the hotel and the Ocean City Boardwalk. When it was built, the two-story solarium annex featured large windows and an open central section, all with direct views to the water. The pools were removed in 1978 and the land was later redeveloped (Bethke 2009). The building originally featured an 8th-story terrace overlooking the ocean. The terrace was a significant part of the original design meant to capture expansive sea views. According to the hotel's 2009 NRHP nomination, the terrace was enclosed in 1960. The building also originally featured a tower on the building's south wing with open sides that had unobstructed sea views. A 1990s remodeling project included the addition of two stories to the south wing. According to the NRHP nomination, much of the building's significance is associated with it being the first high-end hotel in Ocean City. The project is due east of the hotel, approximately 15.2 mi distant. BOEM has determined that the project will have an adverse effect on the Flanders Hotel.

U.S. Lifesaving Station #35, Stone Harbor

The U.S. Lifesaving Station #35 (now the Steven C. Ludlum American Legion Post 331) is a former US Life-Saving Service and US Coast Guard Station constructed in 1895. The building is located at 11617 2nd Avenue at the northwest corner of 2nd Avenue and 117th Street in Stone Harbor. The American Legion currently owns and operates the building after purchasing it in 1948 when its function as a lifesaving station became obsolete. The building is listed in the NRHP under Criterion A for Transportation and Maritime History and under Criterion C for Architecture. The station is a representative example of the 1893 Duluth Design by George R. Tolman (Koski-Karell et al. 2013). The main structure features three parts and includes the primary lifesaving station building along the south, a four-story tower in the center, and a boat room along the north façade. The NRHP nomination for U.S. Lifesaving Station #35 states that the structure was originally located on ocean front property but is now positioned two blocks to the west due to dense residential infill and sand deposits to the east along the shoreline. The building is approximately 21.9 mi from the project. BOEM has determined that the project will have an adverse effect on U.S. Lifesaving Station #35.

North Wildwood Lifesaving Station, North Wildwood

The North Wildwood Lifesaving Station is a former U.S. Coast Guard Station constructed in 1938. The building is located at 113 North Central Avenue and sits on the northeast corner of the intersection of North Central Avenue and East First Avenue, directly to the northeast of the Hereford Inlet Lighthouse. The building was determined eligible by the New Jersey HPO in 2001. It was constructed later than the Hereford Lighthouse, thus, the North Wildwood Lifesaving Station is not mentioned as a contributing resource to the Hereford Lighthouse in its the lighthouse's NRHP nomination. NJHPO's online records do not include information on the building's significance; however, it is likely significant under Criterion A for Maritime History and under Criterion C as an example of the 1934 Roosevelt Design for Coast Guard stations during that era (Koski-Karell et al. 2013). The station is positioned near the Hereford inlet between North Wildwood and Stone Harbor. The inlet was heavily trafficked by ships and an important entry location for the Intracoastal Waterway pivotal to local commerce. The building was constructed in 1938 as a U.S. Coast Guard station, then later converted to the NJ Marine Police Headquarters.

The station replaced an 1888 lifesaving station at this same site (Koski-Karell et al. 2013). The 1934 Roosevelt Design was transitional, incorporating design cues from previous lifesaving station designs with evolving missions and administrative duties after consolidation of predecessor services under the U.S. Coast Guard. Key to the station's significance is its intact representation of the 1934 standardized Roosevelt Design. The station is approximately 23.4 mi from the project. BOEM has determined that the project will have an adverse effect on the North Wildwood Lifesaving Station.

Hereford Inlet Lighthouse, North Wildwood

The Hereford Inlet Lighthouse, constructed in 1874 and listed in the NRHP in 1977, is located at 113 North Central Avenue on the north end of North Wildwood. The lighthouse sits on the northeast corner of the intersection of North Central Avenue and East First Avenue. The lighthouse originally marked the Hereford Inlet between North Wildwood and Stone Harbor, an important waterway for local commerce. The lighthouse consists of one- and two-story sections surrounding a central four-story tower. The lighthouse's original setting was approximately 150 ft west of its present-day location. It was relocated in the early twentieth century due to erosion, weathering, and damage to the foundation (Elias 2018). Its NRHP nomination indicates that the lighthouse is no longer adjacent to the shoreline due to infill, which includes the construction of a contemporary police station to its north. The U.S. Coast Guard automated the lighthouse in 1964 and eventually converted it into a museum. The lighthouse is significant under Criterion A for Commerce and Criterion C for Architecture. The project is approximately 23.4 mi from the Hereford Inlet Lighthouse. BOEM has determined that the project will have an adverse effect on the Hereford Inlet Lighthouse.

Brigantine Hotel, Brigantine City

The Brigantine Hotel, at 1400 Ocean Avenue, is an 11-story rectangular plan, Art Deco-inspired hotel built in 1926–1927. The Brigantine Hotel was surveyed for OW1 in January 2021 and was recommended eligible for NRHP listing under Criterion A for Ethnic Heritage: Black, due to its associations with prominent African American figures and its role in integrating the Jersey Shore. The hotel is on Brigantine Beach at a distance of approximately 16 mi from the project.

The Brigantine Hotel is sited directly on the beach and has unobstructed sea views from most of the building. The hotel is recommended significant under Criterion A for Ethnic Heritage due to its association with black history on the Jersey Shore. As a hotel, the building represents a recreational property type associated with tourist activity in New Jersey, which heightens the importance of its setting, in particular those of sea views within the setting. As possibly the first hotel to welcome black guests and integrate New Jersey's beaches, the Brigantine Hotel reflects the challenges black Americans faced to gain equal access to recreational opportunities. Because the focus of recreational activity in this location is the beach and access to the sea, this aspect of the setting supports the hotel's significance under Criterion A. Conspicuous views of the WFA from the both the beach and guest rooms in the hotel will alter the character-defining setting of the building. As a result, the project will have an adverse effect on the Brigantine Hotel.

Absecon Lighthouse, Atlantic City

The Absecon Lighthouse, constructed in 1856, is an NRHP-listed property on the north end of Atlantic City. The lighthouse originally marked the inlet between Absecon and Brigantine Islands, although that channel has shifted northward since the lighthouse's construction. The 171-ft-tall light tower is constructed of iron and brick, and has a diameter of 27 ft at its base and 13 ft-7.5 in at the lens chamber. Lightkeepers had a view of the Absecon Inlet from "A catwalk at a storage level just below the lens" (Wilson 1970). The Absecon Lighthouse was decommissioned in 1933. Its original setting was the undeveloped north end of Absecon Island, and the light station site included a keeper's house, assistant keeper's house, and oil house (all nonextant, although the keeper's house has been reconstructed). The 1970 NRHP nomination states the lighthouse is significant for navigational history (Criterion A) and architecture (Criterion C). The project is approximately 15.3 mi southeast of the Absecon Lighthouse. BOEM has determined that the project will have an adverse effect on the Absecon Lighthouse.

Atlantic City Boardwalk, Atlantic City

Origins of the Atlantic City Boardwalk date to 1870, when the first seasonal structure was constructed between South Massachusetts Avenue and what is now Columbia Place (between South Mississippi and Missouri Avenues). Four boardwalks soon followed in succession prior to 1900: widened for increased usage, but still seasonal (1880); permanent with electric lighting (1884); replacement due to hurricane (1890); and steel-braced (1898). Several piers were added in the 1890s, including Playground Pier, Central Pier, and Steel Pier. Large-scale hotels attracting tourists and businesspeople lined the west side of the Boardwalk beginning in the late 1890s and into the first decades of the twentieth century. Only a few of the hotels remain, largely due to the 1976 state legislation that required hotels to have at least 400 rooms, 325 square ft each, in order to operate a casino on the premises. This precluded many of the existing hotels from taking advantage of the new gambling legislation without extensive renovations. Many of the grand hotels on the Boardwalk were razed in the 1970s and 1980s to make room for new construction (*The Daily News* 1978:13). The Atlantic City Boardwalk was identified as a potential historic property in 1978, with NJHPO data indicating a boundary extending from the Atlantic City Convention Hall (South Georgia Avenue) to just northeast of South New Jersey Avenue. NJHPO data indicates the property's potential significance is associated with the commercial and recreation-related growth of Atlantic City (Criterion A). The WFA is approximately 15.3 mi southeast of Atlantic City Boardwalk. The Boardwalk is being treated as eligible for NRHP listing for the purposes of Section 106 compliance for the Project.

The Atlantic City Boardwalk is integral to the history of commercial development and recreation on the Jersey Shore. While the physical infrastructure of the Boardwalk has changed through the years, due to expansion, general improvements, and storm-related replacement and repairs, its role as a conduit along the shoreline has remained constant. The Atlantic City Boardwalk is home to resources from the early twentieth century through the twenty-first century, offering visitors accommodations, entertainment, and food, and, since the late 1970s, gambling opportunities. While large-scale towers built since the 1970s, including Caesar's Atlantic City (1979), Atlantic Palace (1986), Showboat Atlantic City (1987), Bally's Tower (1989), Hard Rock Hotel and Casino (1990), Ocean Casino (2012), have impacted the overall setting and feeling of the Boardwalk, as have the upgrades and improvements made to many of the one- and two-story buildings that line the Boardwalk, visitors walking along the Boardwalk in 2022 are still offered unobstructed

sea views in some locations. Dunes and vegetation obstruct views of the horizon in other locations. Yet the Boardwalk has offered commercial and recreational opportunities along the seashore since its inception, and it has been subject to ongoing investment and economic development along its route, which in fact attests to its ongoing vitality and viability. To the extent that the WFA would be visible along the horizon approximately 15.3 mi from the Boardwalk, BOEM has determined that the impact to setting rises to the level of adverse effect.

Atlantic City Convention Hall, Atlantic City

The Atlantic City Convention Hall, constructed 1929, is a National Historic Landmark-designated property on the Boardwalk in Atlantic City. The Convention Hall's 1985 NRHP nomination notes its eligibility under Criterion A for Recreation and Criterion C for Engineering. The Convention Hall's relationship to the Boardwalk, and by extension to the ocean, is defined by a curved limestone exedra (arcade) across the Boardwalk and in front of the hall's oceanside entrance. The exedra is "appropriately ocean-oriented, with decoration, like that of contemporary Atlantic City hotels, using forms of ocean flora and fauna" (Charleton 1985:2). The Convention Hall's views to the ocean from the building's interior are limited to ground floor entrances, where direct views of the ocean are screened partially by the exedra, and a ballroom on the second floor. The WFA is approximately 15.5 mi from the Atlantic City Convention Hall.

The Atlantic City Boardwalk was the center of social activity on the Jersey Shore in the early twentieth century, and the Convention Hall epitomized the Boardwalk's social and entertainment appeal. The Convention Hall's significance as a recreational venue (Criterion A) is tied to its large auditorium that hosted concerts, pageants, and sporting and political events. While the auditorium has no views to the exterior, an event space on the second story above the main Boardwalk entrance features a loggia of arched windows designed to provide sea views. This space was historically utilized as a ballroom but currently serves as a multi-function space for gatherings and smaller events (a reversible change).

The Project will have a visual effect on the Atlantic City Convention Hall, largely borne by the exedra walkway, a contributing structure of the site, located across the Boardwalk from the Convention Hall. While the Project would not alter any characteristics or physical features within the Convention Hall that contribute to its historic significance, BOEM determined that the Project would diminish its integrity of setting, an aspect of its historic integrity that relates to its significance. The Atlantic City Convention Hall is significant under Criterion A for Recreation and Criterion C for Engineering. The building's location on Atlantic City's Boardwalk is paramount to its history and associated significance. To the extent that the WFA would be visible along the horizon approximately 15.5 mi from the historic property, BOEM has determined that the impact to setting rises to the level of adverse effect.

Haddon Hall/Resorts Casino Hotel, Atlantic City

Haddon Hall, 1121 Boardwalk, Atlantic City Haddon Hall at 1121 Boardwalk in Atlantic City, New Jersey, is located in this Project's visual APE. It is an E-plan hotel completed in phases from 1920 to1929 and executed in the Beaux Arts style. The main tower block is 15 stories with a central 3-story penthouse level; it was completed in 1929. Two flanking projecting blocks, 12 stories tall, were built in 1921–1922 as additions to an earlier iteration of the hotel, a frame building constructed in 1896. While some of the building's exterior

is covered in a smooth stucco in 2023, contemporary photography and newspaper descriptions indicate the concrete and steel building originally had a red brick, Indiana limestone, and granite exterior with terra cotta details. Some of these original exterior materials are still visible, albeit painted. Typical of Philadelphia-based architecture firm of Rankin and Kellogg, who designed the 1920s building components, Haddon Hall's Beaux Arts design includes exterior walls featuring inset decorative detailing, quoins, pilasters, string courses, dentil molding at cornice levels, and roof-line balustrades (Ocean Wind 2023).

Ritz-Carlton Hotel, Atlantic City

The Ritz-Carlton Hotel (constructed 1921, now The Ritz Condominiums) is an NRHP-eligible property at 2715 Boardwalk in Atlantic City. It was designed by Philadelphia's Horace Trumbauer in association with New York-based Warren and Wetmore. The hotel has a five-story block fronting the Atlantic City Boardwalk and a 15-story block that extends north creating an L footprint. The hotel was determined eligible for the NRHP in 2011. NJHPO data indicates the property's significance is associated with its construction at the height of Atlantic City's "urban hotel by the sea" period. The Boardwalk wing capitalizes on the Boardwalk's commercial activity while the orientation of the main block of hotel rooms maximized rooms with northeast and southwest sea views. It was determined to be significant under Criterion A for Commerce and Criterion C for Architecture. The WFA is approximately 15.3 mi southeast of this property.

The Ritz-Carlton Hotel is on the Atlantic City Boardwalk with the main hotel block extending north-northwest from the shoreline. The hotel block rising behind the commercial Boardwalk block is oriented to maximize the number of rooms on its narrow, deep lot. The ocean-facing elevation of this block is three bays wide, with a central-bay Juliet balcony on each floor. In addition to southeast elevation windows on both the main hotel block and the five-story Boardwalk block, most windows on the southwest elevation will have a view of the WFA. The building's siting and orientation are important to its Criterion A significance for Commerce. While architectural elements oriented toward the WFA have been subject to modification, most notably at the mezzanine level on the exterior, where a redesign with replacement materials creates a solid screen in front of double-height arched windows, conspicuous views of the WFA from guest rooms in the hotel will alter the character-defining setting of the building. As a result, the project will have an Adverse Effect to the Ritz-Carlton Hotel.

Riviera Apartments, Atlantic City

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

The Riviera Apartments building sits directly on the Atlantic City Boardwalk. This area was developed by the time the Riviera Apartments were constructed; however, aerial imagery shows that the surrounding buildings were primarily modest single-family detached homes in the 1930s, likely two to three stories tall. The apartment building was the tallest building in the area and would have had clear ocean views. The building's design focused on both the northeast and southeast elevations, with the southwest elevation having the appearance of a wall that would typically be found facing an alley. The two elevations with design emphasis have numerous windows, including bay windows, that maximize light and views in the apartments. Under the apartment building's significance for Criterion C, the property's historic integrity of location, design, materials and workmanship are critical, and those will not be altered by the proposed Project. Integrity of setting, feeling, and association have the potential to be affected by the project. Both ground-level views and views from inside the nine-story building may be affected by the introduction of the WFA on the horizon. The seascape was an important consideration in the selection of the location for this building, reflected in its design and siting. The project will be conspicuously visible in the viewshed, and it will affect views to the sea, a character-defining feature of the property. Therefore, the project will have an adverse effect on the Riviera Apartments.

Vassar Square Condominiums, Ventnor City

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

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

Boardwalk and views from inside the building may be affected by the introduction of the WFA on the horizon. Because the seascape was an important consideration in the selection of the location for this building and the building's design maximized expansive sea views, the project will impact a characteristic of the property that supports its eligibility for listing in the NRHP. Therefore, the project will have an adverse effect on the Vassar Square Condominiums building.

114 South Harvard Avenue, Ventnor City

The house at 114 South Harvard Avenue in Ventnor City is a two-and-a-half-story French Eclectic style building dating to 1925. The building was surveyed for OW1 in January 2021 and was recommended NRHP-eligible under Criterion C for Architecture as a good example of early twentieth-century beachfront housing in Ventnor City. The building appears to retain its original form and massing, and includes French Eclectic features such as textured stucco walls, a steeply pitched roof, flared eaves and multiple eave heights, and an asymmetrical plan with a tower. The house is immediately adjacent to the beach and Boardwalk, and has open views toward the Atlantic Ocean. The building faces northeast toward South Harvard Avenue, with its southeast elevation facing the Boardwalk. The southeast elevation includes an enclosed ground-level sun room with arched windows facing the ocean. Above the sun room is a second-story porch with unobstructed sea views. The WFA is approximately 15.7 miles southeast of the property.

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

Lucy the Margate Elephant, Margate City

Lucy the Margate Elephant, originally known as Elephant Bazaar, was NRHP-listed in 1971 and designated as a National Historic Landmark in 1976. The building is listed under Criterion C for Invention, Sculpture, and Other: "architectural folly" (Pitts 1971). Lucy the Margate Elephant is a six-story, elephant-shaped architectural folly located in Margate City. Lucy was built in 1881 by inventor James V. Lafferty, who had received a U.S. patent with exclusive rights to construct buildings in the shape of animals beginning in 1881. Lafferty was a land speculator who owned undeveloped land in the area that is now Margate City. Lucy was originally constructed in this barren location by Lafferty as a means of attracting potential buyers and visitors to the area (Lucy the Elephant 2011a). Lafferty sold Lucy to Anton Gertzen in 1887, and members of the Gertzen family continued to own the building until 1970 (Lucy the Elephant 2011a, 2011d). During the Gertzen family ownership, the building was used temporarily as both a house and tavern, but primarily as a piece of novelty architecture. The family capitalized on it by offering tours for an admission fee (Lucy the Elephant 2011b, 2011c).

Modifications to Lucy include the partitioning of the domed interior space in 1902 and replacement of the original howdah (canopied seat) after it was destroyed in a storm in 1928. The building went without a howdah (or with a very deteriorated howdah) for several years. When the building was nominated as an NHL in 1976, the nomination stated, "she will have a new howdah when funds permit." The howdah was eventually replaced with a less ornate version with a different roof type (Pitts 1971). In 1968, the Gertzen family sold the parcel on which Lucy was located and donated the building to the City. It was moved to its current parcel in 1970. Lucy's original location was near the intersection of present-day Atlantic Avenue and South Cedar Grove Avenue, two blocks north-northeast of its present location (NETR 1963, 1970). The building is currently located approximately one half-block farther inland than its original location. It continues to operate as a tourist attraction, with guided tours offered for a fee. The immediate surroundings include a single-story beachfront grill, several two- and three-story condominium buildings, a restaurant, and a 19-story condominium building (located on Lucy's original site). The building is approximately 15.3 mi west-northwest of the WFA. From its upper levels, views to the Atlantic Ocean are unobstructed.

Lucy the Margate Elephant is integral to the history of commercial development and recreation on the Jersey Shore. Originating as an architectural folly, it stands as one of the most recognizable symbols of the Jersey Shore experience. Part commercial, part recreational, part functional, part folly, Lucy is a tourist attraction that represents the vision a late nineteenth-century entrepreneur had for seaside development that continued through the twentieth century, a vision reflected in Margate's growth all around the building. While some original materials have changed through the years, and its setting has been subject to infill, impacting ground-level views of the sea, Lucy provides similar unobstructed sea views from its upper level as it did when it was first built. The uniqueness of the resource and its property type merited additional consideration during effects assessment.

The building's seaside location, while not original, generally replicates the sea views and setting of its original location a few blocks away. The building has windows on all sides, albeit small. The 18-in windows facing the ocean are inserted as the elephant's porthole eyes. The howdah (canopied seat) at the top of the building also has unobstructed ocean sea views; it was reportedly used by Lafferty as a viewing platform for potential investors to see advantageous views of the surrounding real estate (NJ South 2019).

At a distance of 15.3 mi, characterized in the VIA as apparent, the WFA will be visible on the horizon, altering the property's setting and potentially, the experience of visitors to the site. Lucy's significance as an architectural folly and sculpture, while not specified in its NRHP nomination, likely falls under Criteria A and C. Sea views are a key component of the building's property type and contribute to its significance. Therefore, a finding of Adverse Effect is recommended for Lucy the Margate Elephant.

Great Egg Coast Guard Station, Longport

The Great Egg Coast Guard Station is located at 2301 Atlantic Avenue in Longport. It was listed in the NRHP in October 2005 under Criterion C for Architecture as an example of the 1934 Roosevelt Design for Coast Guard stations (Berkey 2005; Koski-Karell et al. 2013). The station is located in an area of Longport that is approximately two blocks deep between Great Egg Harbor and the Atlantic Ocean. The station was

constructed in 1938 as a U.S. Coast Guard station, and was abandoned in 1947 by the U.S. Treasury Department, which oversaw the Coast Guard until 1967. The City of Longport purchased the building and used it as a municipal hall (Berkey 2005). In 1994, it was leased to the Longport Historical Society and Museum. The primary building is two-and-a-half stories with a central three-story tower set within the roof ridgeline. The station replaced an 1888 lifesaving station at this same site (Berkey 2005). The 1934 Roosevelt Design was transitional, incorporating design cues from previous lifesaving station designs with evolving missions and administrative duties after consolidation of predecessor services under the U.S. Coast Guard. Located approximately 0.14 mi (740 ft) from the shore, the building is one-and-a-half blocks removed from the ocean front. It is approximately 15.2 mi from the project. BOEM has determined that the project will have an adverse effect on the Great Egg Coast Guard Station.

Little Egg Harbor U.S. Lifesaving Station #23 (U.S. Coast Guard Station #119, Little Egg Harbor)

The original Little Egg Harbor U.S. Lifesaving Station #23 was built in 1869 on Tucker Island and moved several times due to beach erosion. It succumbed to the ocean in the early 1930s, while Tucker Island itself disappeared by the early 1950s. In 1937, the U.S. Coast Guard constructed the current station, a two-and-one-half-story building, just west of Tucker Island on the southern point of Little Egg Harbor's salt marsh peninsula on Great Bay. The station used the federal government's 1934 Roosevelt Design that incorporated Colonial Revival elements into a two-story, rectangular plan with a central cupola. The station and associated boathouses are on elevated piers to accommodate the tides (Koski-Karell et al. 2013). The station is accessed from Great Bay Road by a long pedestrian boardwalk. The Coast Guard operated the station into the 1960s. It was then left vacant until purchased in 1972 by Rutgers University for use as a marine field station, and it continues to operate as Rutgers Tuckerton Marine Field Station.

The station was determined individually eligible for NRHP listing by NJHPO in 2014. NJHPO's online records do not include information on the building's NRHP significance; however, it appears to be significant under Criterion A for Maritime History and under Criterion C for Architecture as an example of the 1934 Roosevelt Design, based on application of the eligibility requirements in the U.S. Government Lifesaving Stations, Houses of Refuge, and pre-1950 U.S. Coast Guard Lifeboat Stations Multiple Property Documentation Form (MPDF) (Koski-Karell et al. 2013). The 1934 Roosevelt Design was transitional, incorporating design cues from previous lifesaving station designs with evolving missions and administrative duties after consolidation of predecessor services under the U.S. Coast Guard. Key to the station's significance is its intact representation of the 1934 standardized Roosevelt Design. Its period of significance, 1937–1960s, reflects its use as a Coast Guard station. The project is approximately 21.25 mi south of the station. BOEM has determined that the project will have an adverse effect on U.S. Coast Guard Station #119.

Historic Context

North Wildwood, Cape May County

The city of North Wildwood is on Five Mile Island, where the Lenni-Lenape tribe often visited to fish and collect shells they used as currency. Farmers used the Wildwood area to graze their livestock, and fishermen and whalers established temporary camps on Five Mile Island between the early seventeenth and the mid-nineteenth centuries. Fishermen established the first settlement on Five Mile Beach—Anglesea—ca. 1859.

Development increased following construction of a railroad and bridge in 1884. Anglesea incorporated as the North Wildwood Borough in 1885. The borough became the City of North Wildwood City in 1917. The city experienced a post-World War II boom following the growing popularity of personal automobiles and resultant tourism (VisitNJShore.com 2021a). New hotels featured futuristic forms and neon signage, a distinctive style later called Wildwood's "Doo Wop." North Wildwood was heavily damaged by the Ash Wednesday Storm of 1962, which flooded and destroyed beachfront properties and roads and caused major coastline loss (NPS 2019). Tourism declined in the 1970s and 1980s, but rebounded in the late 1990s with the establishment of the Doo Wop Preservation League, charged with restoring and promoting appreciation of the Wildwood area hotels and their history (VisitNJShore.com 2021a).

Ocean City, Cape May County

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

Brigantine City, Atlantic County

The Lenni-Lenape tribe first traveled to Brigantine Island from the mainland to fish and collect shells they used as currency. Brigantine Improvement Company purchased the island by the late nineteenth century. Railroad and light rail transportation facilitated early development during the period, but growth was limited by bad weather and difficult financial times. Brigantine invested in infrastructure development in the 1920s, including the construction of roads and sewage lines, only to have its growth stymied again by numerous storms and the Great Depression (SouthJersey.com 2015). Development continued post-World War II. Brigantine was heavily damaged by the Ash Wednesday Storm of 1962, which flooded and destroyed beachfront properties and roads, causing major coastline loss (NPS 2019). Due to its proximity and access to Atlantic City, development was consistent in the second half of the twentieth century, with older neighborhoods and commercial development interspersed with newer single-family and multi-family housing (Gatza 1991).

Atlantic City, Atlantic County

Atlantic City is located on Absecon Island, where the Lenni-Lenape tribe often visited to fish and collect shells they used as currency. Jeremiah Leeds built the first structure on the island in 1785, and his descendant had built seven permanent dwellings by 1850 (Town Square Publications 2010). The city incorporated in 1854 and rail development soon followed. The city grew quickly in the late nineteenth century as a resort town located near New York and Philadelphia. Unlike primarily residential communities on the New Jersey Shore, Atlantic City development included businesses, recreational spaces, and tourist attractions like theaters and the Boardwalk. Half of the Boardwalk was destroyed in the Great Atlantic Hurricane of 1944. The city's popularity continued through the mid-twentieth century. but diminished in the 1950s when air travel allowed vacationers more options (ACFPL 2021). Atlantic City was heavily damaged by the Ash Wednesday Storm of 1962, which flooded and destroyed beachfront properties and roads and caused major coastline loss (NPS 2019). Another wave of large-scale development followed the city's gambling legalization in 1976 (ACFPL 2021).

Ventnor City, Atlantic County

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

Margate City, Atlantic County

Margate City is located five miles south of Atlantic City on Absecon Island, where the Lenni-Lenape tribe often visited to fish and collect shells they used as currency. Early settlers moved to modern Margate City in the early nineteenth century, and by the mid-nineteenth century, fishing, trade, and salt industries attracted increasing numbers of workers (VisitNJShore.com 2021c). Completion of a rail line from Philadelphia also opened Margate to seasonal residents, and Margate City neighborhoods like Marven Gardens attracted affluent vacationers interested in buying second homes (Ralph 1989). In 1882, James V. Lafferty built Lucy the Elephant, an elephant-shaped hotel and restaurant, to attract land buyers and commercial development. The city incorporated as South Atlantic City in 1897, and changed its name to Margate City in 1909. Development continued in the late nineteenth and early twentieth centuries following the arrival of railroad service (VisitNJShore.com 2021c). The Ash Wednesday Storm of 1962 heavily damaged Margate City, including washing away what remained of the city's boardwalk that had initially been washed out in the Great Atlantic Hurricane of 1944 (Galloway 2019).

Longport, Atlantic County

Longport is located on Absecon Island, where the Lenni-Lenape tribe often visited to fish and collect shells they used as currency. The borough is named for James Long, who owned the area including modern Longport from 1857 to 1882. Long sold the parcel to M. Simpson McCollough, who planned to develop a resort community. Development in the late nineteenth and early twentieth centuries was largely commercial, while development in the mid-twentieth century was primarily residential. Longport was heavily damaged by the Ash Wednesday Storm of 1962 (NPS 2019). Two early twentieth-century buildings—the Longport Cabin Inn and the Gospel Hall Home for the Aged—were demolished in the early twenty-first century in favor of residential development. Several historic buildings have been remodeled and repurposed, however, including the Betty Bacharach Home for Afflicted Children, which has served as Borough Hall since 1987 (Borough of Longport 2021).

MITIGATION MEASURES

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

Historic Context Mitigation Measures

Purpose and Intended Outcome

Based on input from Participating Parties during consultation, historic contexts consistent with agreed upon themes will be developed to disseminate significance of specific property types to Jersey Shore history. Consistent with MOA stipulations III.B.1.i.a-c, historic context themes will include:

- Historic Context addressing early 20th century New Jersey Shore Hotels
- Historic Context addressing Mid-century High-rise residential buildings at the New Jersey shore
- Historic Context addressing Boardwalks of the New Jersey Shore, and Survey and Evaluation of Atlantic City Boardwalk, Ocean City Boardwalk, and Wildwood Boardwalk.

Historic context content will draw largely on additional research to expand on existing documentation. Each context will also provide registration requirements to assist in future NRHP eligibility evaluations. Survey and evaluation will only be conducted for Atlantic City Boardwalk, Ocean City Boardwalk, and Wildwood Boardwalk.

Scope of Work

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

- Historic Context addressing New Jersey Shore early 20th century Hotels (MOA Stipulation III.B.1.i.a)
    - Compile research for historic context;
    - Deliver Draft historic context for review by OW1, BOEM, and Participating Parties; and
    - Deliver Final historic context NJHPO.
- Historic Context addressing Mid-century High-rise residential buildings at the New Jersey shore (MOA Stipulation III.B.1.i.b)
    - Compile research for historic context;
    - Deliver Draft historic context for review by OW1, BOEM, and Participating Parties; and
    - Deliver Final historic context NJHPO.
- Historic Context addressing Boardwalks of the New Jersey Shore, and Survey and Evaluation of Atlantic City Boardwalk, Ocean City Boardwalk, and Wildwood Boardwalk (MOA Stipulation III.B.1.i.c)
    - Compile research for historic context;

- Deliver Draft historic context for review by OW1, BOEM, and Participating Parties; and
- Deliver Final historic context to NJHPO.
- Conduct field survey of Atlantic City Boardwalk, Ocean City Boardwalk, and Wildwood Boardwalk.
- Deliver draft Survey and Evaluation Report for review by OW1, BOEM, and Participating Parties, and
- Deliver Final Survey and Evaluation Report to NJHPO.

Methodology

OW1 will release an RFP for consultant services and select a consultant to perform the Scope of Work listed for Historic Context Mitigation Measures, for each context, or as part of a larger consultancy RFP for additional or all mitigation measures listed herein. The chosen consultant should have staff that meet SOI Professional Qualifications for Architecture, Architectural History, or History. A draft of the documents will be provided to the applicable Participating Parties for review and comment. The final documents will be developed incorporating comments from the Participating Parties and will be submitted to NJHPO by OW1 in an NJHPO-approved format.

Standards

The project will comply with following standards and guidelines:

- NPS White Paper: The Components of a Historic Context, Barbara Wyatt (2009);
- NPS Bulletin 15: How to Apply the National Register Criteria for Evaluation (revised 1995);
- New Jersey Historic Preservation Office Guidelines for Architectural Survey; and
- New Jersey Historic Comprehensive Statewide Historic Preservation Plan 2023–2028 (2022).

Deliverables

The following documentation is to be provided for review by the Participating Parties and ultimately, submitted to the NJHPO:

- Historic Context addressing New Jersey Shore Hotels
  - Draft Historic Context
  - Final Historic Context
- Historic Context addressing Mid-century High-rise residential buildings at the New Jersey shore
  - Draft Historic Context
  - Final Historic Context
- Historic Context addressing Boardwalks of the New Jersey Shore, and Survey and Evaluation of Atlantic City Boardwalk, Ocean City Boardwalk, and Wildwood Boardwalk.
  - Draft Historic Context
  - Final Historic Context
  - Draft Survey and Evaluation Report
  - Final Survey and Evaluation Report

Schedule

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

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

Funds and Accounting

The Lessee will be responsible for funding and implementation of this mitigation measure in accordance with the funding amounts identified in Attachment 8 of the MOA.

Funding for Visitor Experience and Public Access

Purpose and Intended Outcome

Based on input from Participating Parties during consultation, a funding contribution will be provided to either fully or partially fund projects that facilitate access and support the visitor experience at historic properties with public visitation applicable to but not limited to Lucy the Margate Elephant, Absecon Lighthouse (Atlantic City), and the Atlantic City Boardwalk (Atlantic City). Examples for use of these funds may include: directional signage, parking, improvements to site circulation (including ADA accessibility), public access, safety and security, and funding for maintenance and improvement to areas heavily used or damaged due to public visitation. When applicable, Lessee-funded physical improvements to the properties should adhere to applicable preservation standards, including but not limited to the Secretary of the Interior Standards for the Treatment of Historic Properties. The intent of this funding is to support and improve public access at these historic properties to foster an appreciation of the sites and their contribution to the historic character of the Jersey Shore. This funding should ensure that improvements are made with careful consideration of the historic character of the property and sympathetic to the existing physical structure.

Scope of Work

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

- The Lessee will determine priority projects in collaboration with property owners
- The Lessee will fund the agreed upon priority projects or specified activities associated with the priority projects in accordance with the funding amounts listed in Attachment 8 of the MOA.

- The Lessee will demonstrate the draft plans associated with the funded activities meet the Secretary of the Interior Standards for the Treatment of Historic Properties. This demonstration may be made by the cooperation of the lessee and the property owner to share planning documents that meet this requirement.
- The Lessee will ensure the draft plans associated with the funded activities are submitted to the NJ HPO for their review and comment prior to construction.
- The Lessee with the cooperation of the property owner will make good faith efforts to ensure the funded activities are implemented by professionals who meet the Secretary of Interior Professional Qualifications Standards, as applicable.
- The Lessee will provide notification of compliance with this scope of work in the annual report pursuant to Stipulation XV of the MOA.

Standards

The project will comply with following standards:

- Secretary of the Interior Standards for the Treatment of Historic Properties (for applicable projects).
- State and local laws including the NJ Register of Historic Places Act (for applicable projects)

Deliverables

The Lessee will provide following documentation for review by BOEM, NJHPO, and the private property owner:

- Project plans
- Notification that the funding was provided for the priority project(s).

Schedule

The following is a preliminary schedule for execution of visitor experience and public access improvements measure.

Fall 2023	Determination of priority projects at each historic property.
Winter 2023-2024	Submit project plans to BOEM, NJHPO, and applicable property owners.
Spring 2024	Notification that the funding was provided for the priority project(s).

Funds and Accounting

The Lessee will be responsible for funding and implementation of these mitigation measures in accordance with the funding amounts identified in Attachment 8 of the MOA.

IMPLEMENTATION

Timeline

Within one year of the MOA being executed, these mitigation measures must be initiated. Tasks associated with all measures can occur during and/or after construction. Mitigation measures within this HPTP are to be completed within four years of its initiation, unless a different timeline is agreed upon by Participating Parties and accepted by BOEM and may be completed simultaneously, as applicable.

Reporting

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

Organizational Responsibilities

BOEM

- Ensure implementation of the MOA in order to adequately resolve adverse effects and in consultation with the Participating Parties;
- Consult with OW1, NJHPO, ACHP, and other consulting parties ; and
- Review and approve the annual summary report prepared and distributed to the Consulting Parties by OW1.

Ocean Wind LLC

- Fund and implement the mitigation measures Stipulated in III.B of the MOA and described in the Mitigation Measures section of this HPTP;
- Prepare Annual Reporting, submit reporting to BOEM for review and approval, and distribute to Consulting Parties per the Mitigation Measures section of this HPTP;
- Submit information for Participating Party review per the Mitigation Measures section of this HPTP;
- Creation and distribution of RFPs to solicit consultant support for mitigation measure fulfillment, as applicable;
- Proposal review and selection of a consultant who meets the qualifications specified in the SOI Qualifications Standards for History, Architectural History and/or Architecture (62 FR 33708), as applicable;
- Initial review of Documentation for compliance with the Scope of Work, Methodology and Standards;
- Distribution of Documentation to Participating Parties for their review; and
- Review and comment on deliverables.

New Jersey SHPO

- Consult, when necessary, on implementation of this HPTP.

Advisory Council on Historic Preservation

- Consult, when necessary, on implementation of this HPTP.

REFERENCES

Works Cited

Atlantic City Free Public Library (ACFPL). 2021. "Atlantic City History." Electronic document, http://acfpl.org/ac-history-menu/atlantic-city-faq-s/15-heston-archives/147-atlantic-city-history-22.html. Accessed March 30, 2021.

Berkey, Joan E. 2017. *A Survey of 80 Historic Buildings and Sites in Upper Township Cape May County, New Jersey*. Historical Preservation Society of Upper Township. Report on file, New Jersey Department of Environmental Protection, Historic Preservation Office.

Bethke, Alex. 2009. *National Register of Historic Places Registration Form: Flanders Hotel*. On file New Jersey Historic Preservation Office, Trenton, New Jersey.

Borough of Longport. 2021 "History of Longport." Electronic document, https://longportnj.gov/history.html, accessed March 31, 2021.

Bzdak, Meredith. 2001. Ocean City Residential Historic District, National Register of Historic Places Registration Form. Produced by Ford, Farewell, Mills and Gatsch, Architects, Princeton, New Jersey, for the National Park Service, Department of the Interior, Washington, D.C. Available at https://npgallery.nps.gov/GetAsset/f74e7baa-c2a9-4042-acbb-455c663fdff7/.

Charleton, James H. 1985. *National Register of Historic Places Inventory – Nomination Form: Atlantic City Convention Hall*. On file New Jersey Historic Preservation Office. Trenton, New Jersey.

Council on Tall Buildings and Urban Habitat (CTUBH). 2021. Vassar Square Condominiums: Ventnor City, United States. Online [URL]: https://skyscraper-staging.ctbuh.org/building/vassar-square-condominiums/12723. Accessed February 25, 2021.

The Daily Intelligencer (Lancaster, Pennsylvania). 1950. Many Features at Ocean City, N.J. June 29, 1950:10.

The Daily News (Huntingdon, Pennsylvania). 1978. Atlantic City Demolition to Begin Soon. January 25, 1978:13.

Elias, Donna. 2018. *Hereford Inlet Lighthouse*. Online [URL]: http://www.herefordlighthouse.org/history.html. Accessed February 19, 2021.

Esposito, Frank J. and Robert J. Esposito. 1996. *Ocean City, New Jersey*. Volume 1. Arcadia Publishing, Charleston, S.C.

Kelly, Tim. 2018. "Great Boardwalk Fire" of 1927 Re-shaped Ocean City. Online [URL]: https://ocnjdaily.com/great-boardwalk-fire-of-1927-re-shaped-ocean-city/. Accessed September 2022.

Koski-Karell, Daniel and Melissa Wiedenfeld, Chad Blackwell, Marjorie Nowick, Kathryn Plimpton, and Lori Vermass (Koski-Karell et al.). 2013. *National Register of Historic Places Multiple Property Documentation Form: U.S. Government Lifesaving Stations, Houses of Refuge, and pre-1950 U.S. Coast Guard Lifeboat Stations*.

On file US Department of the Interior, National Park Service, Washington, DC. Online [URL]: https://www.nps.gov/nr/feature/places/pdfs/64501177.pdf. Accessed July 29, 2019.

Lucy the Elephant. 2011a. *Chapter 1 – Elephant to Starboard*. Online [URL]: https://www.lucytheelephant.org/history/chapter-1-elephant-to-starboard/. Accessed July 30, 2019.

Lucy the Elephant. 2011b. *Chapter 2 – The Gertzens*. Online [URL]: https://www.lucytheelephant.org/history/chapter-2-the-gertzens/. Accessed July 30, 2019.

Lucy the Elephant. 2011c. *Chapter 4 – The Turkish Pavilion*. Online [URL]: https://www.lucytheelephant.org/history/chapter-4-the-turkish-pavilion/. Accessed July 30, 2019.

Lucy the Elephant. 2011d. *Chapter 5 – Tourist Camp*. Online [URL]: https://www.lucytheelephant.org/history/chapter-5-tourist-camp/. Accessed July 30, 2019.

Miller, Fred. 2003. *Ocean City: America's Greatest Family Resort*. Arcadia Publishing, Charleston, S.C.

The Morning Call (Allentown, Pennsylvania). Historic Boardwalk Being Replaced in Ocean City, N.J. Online [URL]: https://www.mcall.com/news/local/mc-nws-ocean-city-boardwalk-20171211-story.html. Accessed July 30, 2019.

National Park Service (NPS). 2019. "Ash Wednesday Storm of 1962." Electronic document, https://www.nps.gov/articles/ash-wednesday-storm-of-1962.htm. Accessed March 29, 2021.

National Environmental Title Research (NETR). 1963. Historic Aerial Photograph. Online [URL]: https://www.historicaerials.com/viewer. Accessed August 2019.

National Environmental Title Research (NETR). 1970. Historic Aerial Photograph. Online [URL]: https://www.historicaerials.com/viewer. Accessed August 2019.

NJ South. 2019. *Lucy the Elephant*. Online [URL]: http://www.njsouth.com/index-lucy.htm. Accessed July 30, 2019.

Ocean City, New Jersey. 2021. "The History of Ocean City, New Jersey." Electronic document, https://oceancityvacation.com/history/history-of-ocean-city-nj.html. Accessed March 31, 2021.

Ocean Wind LLC (Ocean Wind). 2023. Ocean Wind Intensive-Level Architectural Survey of Haddon Hall, 1121 Boardwalk, Atlantic City, New Jersey. May. Prepared for Bureau of Ocean Energy Management, Washington, D.C.

Pitts, Carolyn. 1971. *National Register of Historic Places Registration Form: Lucy the Margate Elephant*. On file US Department of the Interior, National Park Service, Washington DC. Online [URL]: https://npgallery.nps.gov/GetAsset/1abd9673-d3a5-456b-a91d-cbf6a507488d. Accessed July 29, 2019.

Smith, Sarah T. 1963. *The History of Ventnor, New Jersey*. Self-published. Available at http://downbeachbuzz.com/wp-content/uploads/2015/11/History-Of-Ventnor.pdf. Accessed April 14, 2021.

TheShoreBlog.com. 2019. "History of Stone Harbor." Electronic document, https://theshoreblog.com/history-of-stone-harbor/. Accessed April 15, 2021.

The Shore Blog. 2021. History of Ocean City, New Jersey. Online [URL]: https://theshoreblog.com/history-of-ocean-city/. Accessed September 2022.

Thomas, George E. 1986. John Stafford Historic District, National Register of Historic Places Nomination Form. Produced by Clio Group, Inc., Philadelphia, for the National Park Service, Department of the Interior, Washington, D.C. Available at https://npgallery.nps.gov/GetAsset/addd3b51-8881-45bf-bb78-c00faa13a9d9.

Town Square Publications. 2010. "Atlantic City, New Jersey History." Electronic document, https://local.townsquarepublications.com/newjersey/atlantic-city/01/topic.html. Accessed April 15, 2021.

United States Army Corps of Engineers (USACE). 2012. *New Jersey Shore Protection: Great Egg Harbor Bay and Peck Beach, (Ocean City), NJ*. Online [URL]: https://www.nap.usace.army.mil/Missions/Factsheets/Fact-Sheet-Article-View/Article/490782/new-jersey-shore-protection-great-egg-harbor-and-peck-beach-ocean-city-nj/. Accessed July 18, 2019.

VisitNJShore.com. 2021a. "History of North Wildwood, NJ." Electronic document, https://www.visitnjshore.com/north-wildwood/history/. Accessed March 1, 2021.

VisitNJShore.com. 2021b. "History of Ocean City, NJ." Electronic document, https://www.visitnjshore.com/ocean-city/history/. Accessed March 1, 2021.

VisitNJShore.com. 2021c. "History of Margate City, NJ." Electronic document, https://www.visitnjshore.com/margate-city/history/. Accessed March 1, 2021.

Wilson, Charles, Jr. 1970. *National Register of Historic Places Registration Form: Absecon Lighthouse*. On file US National Archives, Washington DC. Online [URL]: https://catalog.archives.gov/id/135813729. Accessed February 17, 2021.

Federal Regulations

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

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

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

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

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

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

State Regulations

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

Public documents related to Ocean Wind1

https://www.boem.gov/ocean-wind
https://www.boem.gov/ocean-wind-1-construction-and-operations-plan
[Ocean Wind1 FEIS]
[Ocean Wind1 ROD]

General Information on Section 106

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

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

ATTACHMENT 5 – TERRESTRIAL ARCHAEOLOGICAL MONITORING PLAN

This page intentionally left blank.

Monitoring Plan

Monitoring Plan for the Treatment of Cultural Resources Encountered During Construction of Onshore Facilities associated with the Ocean Wind Offshore Wind Farm (Lease Area OCS-A 0498)

Cape May and Ocean Counties, New Jersey

1 Introduction

Ocean Wind LLC (Ocean Wind) has proposed construction of the Ocean Wind 1 Offshore Wind Project (Project), consisting of the Wind Farm located in federal water on the Atlantic Outer Continental Shelf (OCS) within the Bureau of Ocean Energy Management (BOEM) Renewable Energy Lease Area OCS-A 0498 (Lease Area) as well as the export cable routes from offshore to onshore, nearshore and onshore horizontal directional drilling (HDD) locations and open-trench cuts, and substation interconnections (Figure 1).

This plan describes the protocols to be followed in the event that cultural resources and/or human remains are inadvertently exposed during onshore construction activities performed in the Area of Potential Effects (APE) and as documented in the Terrestrial Archaeological Resources Assessment (TARA) and nearshore/onshore portions documented in the Marine Archaeological Resources Assessment (MARA).

1.1 Regulatory Framework

The Outer Continental Shelf Lands Act, 1953 (as amended) (43 U.S.C 1337), grants the lead enforcement of laws and regulations governing offshore leasing on Federal offshore lands to BOEM (CFR Title 30, Chapter V, Subpart B-Offshore). The issuance of Lease Area OCS-A 0498 to Ocean Wind under the “Commercial Lease of Submerged Lands for Renewable Energy Development of the Outer Continental Shelf, Number OCS-A 0498”) constitutes a federal undertaking subject to Section 106 of the National Historic Preservation Act (NHPA) (54 U.S.C. § 300101 et seq.). The Section 106 implementing regulations (36 CFR Part 800) define an undertaking as a:

> project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; and those requiring a federal permit, license or approval (36 CFR 800.16[y]).

The Section 106 process “requires Federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings” (36 CFR 800.1[a]). In December 2020, BOEM made the decision to substitute the National Environmental Policy Act (NEPA) review process to comply with Section 106 procedures, under 36 CFR 800.8(c). Procedures and documents required for the preparation of the Project’s environmental impact statement (EIS) and record of decision (ROD) replaced the standard Section 106 review process.

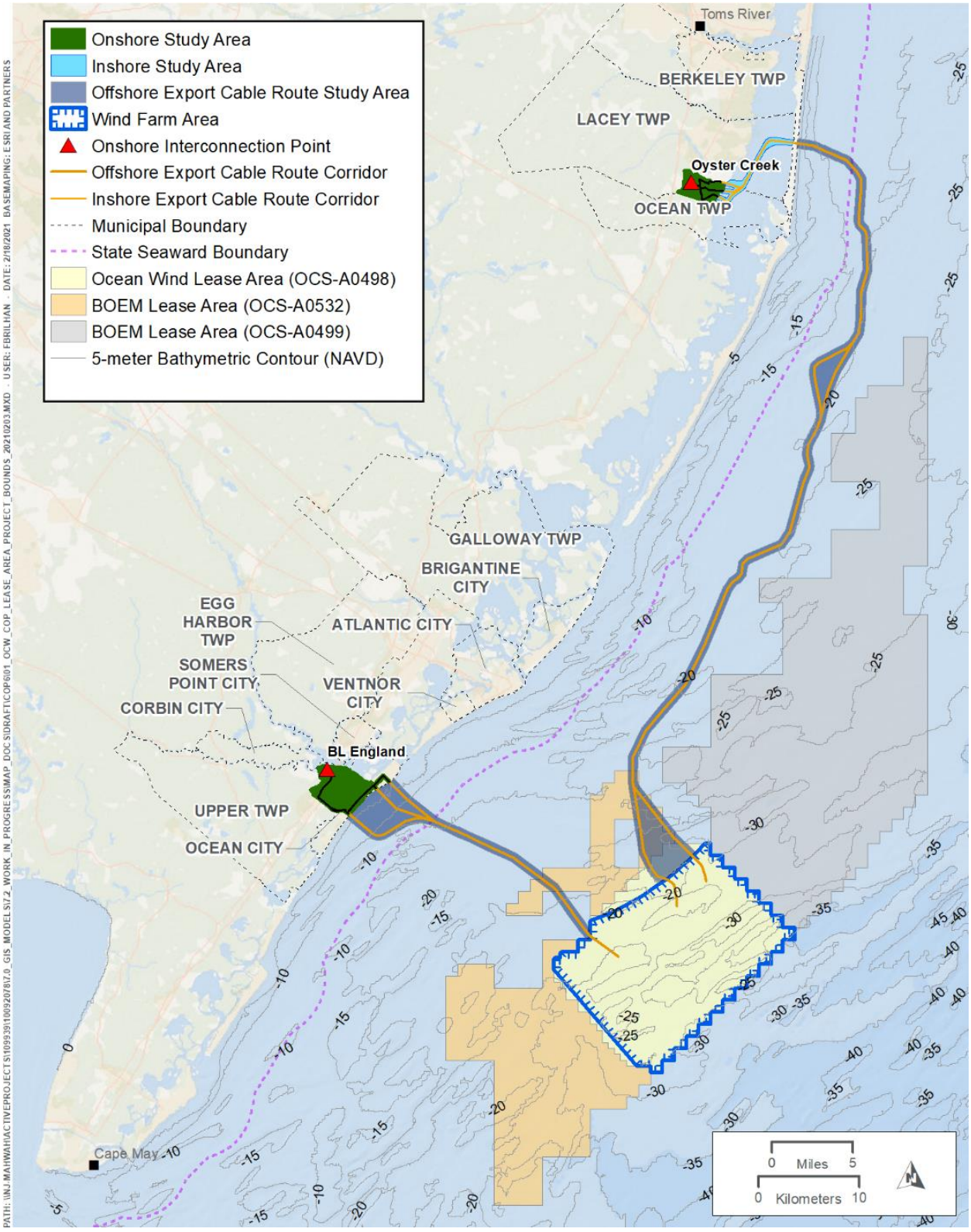


Figure 1. General Location of the Project.

1.2 Purpose

Between 2018 and 2022, Ocean Wind conducted Phase I archaeological investigations of the onshore portions of the Project, including the export cable routes from offshore to onshore, nearshore and onshore HDD locations and open-trench cuts, and substation interconnections. These surveys were completed in accordance with NJ HPO's *Guidelines for Phase I Archaeological Investigations: Identification of Archaeological Resources*, and its *Guidelines for Preparing Cultural Resources Management Archaeological Reports Submitted to the Historic Preservation Office*. The surveys identified six archaeological sites; two are expansions of previously reported sites, three are newly reported, and one is a previously reported site adjacent to the APE. Avoidance, protective measures, and monitoring were recommended during construction for this Project.

The purpose of this monitoring plan is to prevent or address unintended adverse effects to historic properties that may occur during the construction of the Project. This plan was prepared in accordance with the TARA recommendations found in Section 8.5.3 and conveyed within subsequent Section 106 consultation meetings.

Prior to beginning any construction activities related to the onshore cable routes at both Oyster Creek and BL England, Ocean Wind will share this construction monitoring plan that addresses the following:

- Training procedures to familiarize construction personnel with the identification and appropriate treatment of historic properties;
- Monitoring of construction activities by a qualified archaeologist meeting, at a minimum, the *Secretary of the Interior's (SOI) Professional Qualifications Standards for Archaeologists* (48 Federal Register 44738-44739);
- Provisions for monitoring and coordination with qualified Tribal Monitors and Tribal Representatives;
- Provisions for temporary avoidance measures;
- Process for determining the relevance of monitoring a construction activity; and
- Reporting including regular updates to the Section 106 consulting parties (e.g. BOEM, New Jersey Historic Preservation Office [NJ HPO] serving as the State Historic Preservation Office [SHPO]), and Tribal representatives and/or Tribal Historic Preservation Officers (THPOs) during construction and the completion of a monitoring report following the completion of construction activities.

The ensuing archaeological monitoring will be conducted in compliance with the above referenced provisions.

1.3 Definition of Ground-Disturbing Activities Requiring Archaeological Monitoring

Archaeological monitoring is generally defined as the observation of ground-disturbing construction activities by a qualified archaeologist in order to identify, document, protect, and/or recover information on the cultural resources to avoid adverse effects.

Ground disturbance is defined as activities that compacts or disturbs the ground. Ground-disturbing activities that will require monitoring for this Project include mechanical tree removal and grubbing, scraping, grading, excavating, drilling, trenching, augering and coring.

2 Project Personnel Roles

Archaeologist – A professional archaeologist meeting, at a minimum, the *Secretary of the Interior's (SOI) Professional Qualifications Standards for Archaeologists* (48 Federal Register 44738-44739);

Cultural Resource Compliance Manager – Ocean Wind's defined point-of-contact for construction activities;

Cultural Resources Manager – Archaeological monitor manager, meeting, at a minimum, the *Secretary of the Interior's (SOI) Professional Qualifications Standards for Archaeologists* (48 Federal Register 44738-44739). This person may not be in the field but will manage archaeological monitoring aspects;

Construction Contractor – Construction team manager or supervisor. There may be more than one Construction Contractor, dependent on the construction activity.

Qualified Monitor(s) – Field archaeologists and Tribal members herein referred to as Qualified Monitors with education and training in archaeology, who meet SOI standards for arcaheological monitoring, and who are supervised by an SOI qualified archaeologist.

Qualified (Tribal) Monitor(s) – See Qualified Monitor(s) above; and

Tribal Representative(s) – a Native American with affiliation with affected Tribes who are onsite to observe construction activities.

3 Training Procedures

An archaeologist will provide on-site archaeological orientation and training in advance of the start of construction to applicable construction workers, including managers and supervisors, qualified Monitors and Tribal Representatives. Training will be provided as needed for new workers as construction continues. The training, which will last no longer than 30 minutes, will outline the steps to be taken in the event of an unanticipated discovery. During the training the archaeologist will:

- Give information and examples of the types of cultural resources that may be encountered in the area, including how to identify stone tools, bone, ceramics, glass, and various wood and metal objects;
- Outline the laws that protect cultural resources;
- Outline applicable penalties for damaging sites; and
- Provide contact information for the qualified Monitors, the Archaeological Principal Investigator (PI), and any backup.

Individuals attending a training session will sign a sheet indicating the date and time of their attendance, which will be maintained by the qualified archaeologist.

Qualified Monitors and Tribal Representatives must participate in safety training prior to entering construction areas. That training will be provided at regular intervals before and during construction

and updated in daily safety meetings. The Construction Contractor will provide a list of personal protective equipment that will be required for archaeological monitors.

4 Monitoring Procedures

The following procedures will be adhered to during archaeological monitoring of the ground-disturbing activities taking place during construction.

Work under the terms of the monitoring plan is to be carried out under the direct supervision of a qualified archaeologist meeting, at a minimum, the *Secretary of the Interior's Professional Qualifications Standards for Archaeologists* (48 Federal Register 44738-44739).

4.1 Coordination with Consulting Tribes

Tribal representatives and/or Tribal Historic Preservation Offices (THPOs) will be notified of construction activities up to 30 days and minimally of two-weeks in advance to participate in monitoring activities, if desired. The Cultural Resources Manager will notify Tribal representatives and/or THPOs who have expressed an intent to have either a qualified Tribal Monitor and/or Tribal Representative present each day prior of the starting location for the next day. Additionally, the Cultural Resources Manager will coordinate with the Tribal representatives and/or THPOs who expressed interest in participating in training for construction crews (Section 3), installation of temporary avoidance measures (Section 4.3), and to assist Consulting Tribes with the logistics for pre-construction reconnaissance when they request to assess a portion of the project area prior to the start of construction activities in that area.

The Tribal representative and/or THPO will provide SOI certification to the Cultural Resources Manager for each Qualified Tribal Monitor prior to their start date.

4.2 Locations Requiring Monitoring

Six archaeological sites and nine archaeologically sensitive areas were identified during the TARA, completed between 2018 and 2022 (Tables 1 through 3). Additional areas of monitoring may be identified during construction, and is at the discretion of the qualified Monitors, Tribal Representatives, and contacts.

Table 1: List of Archaeological Sites Identified during the Terrestrial Archaeological Resources Assessment.

Site Name	Number	Date	Size	Project Impacts
B.L. England (Locus 1) (Expansion)	28-Cm-032	Precontact: Late Archaic to Transitional, Middle to Late Woodland	2,695 m² (29,012 ft²)	Site previously determined eligible for the National Register. Site to be avoided and protected, area to be monitored.
GEHB Site 1 (Expansion)	28-Cm-064	Precontact and Historic: Woodland, Late 17th to early 20th century	53 m² (173 ft²)	Site to be avoided and protected, area to be monitored.
Cedar Hollow Historic Site	28-Cm-091	Historic: 18th to 19th century	104 m² (1125 ft²)	Site to be avoided and protected, area to be monitored.
Oyster Creek Paleoindian Spot Find	28-Oc-249	Precontact: Paleoindian	17 m² (55 ft²)	Site considered eligible for the National Register. Site to be avoided and protected, area to be monitored.

Site Name	Number	Date	Size	Project Impacts
Chamberlain Historic Midden	28-Oc-250	Historic: 18th to 20th century	550 m² (1,800 ft²)	Site to be avoided and protected, area to be monitored.
Unnamed Site	28-Oc-055	Possible precontact shell midden (appears to be mislocated in site forms).	Unknown	Adjacent to PAPE, area to be monitored.

Table 2. Summary of Pre-Contact and Historical Archaeological Sensitivity of the Oyster Creek Area of Potential Effects.

Landfall/Route	Pre-Contact Sensitivity	Historical Sensitivity	NJ CRGIS LUCY – Archaeology Grid Designation
Oyster Creek Substation	Moderate	Low	Not Evaluated
Farm Property	Moderate	Moderate	Identified
US Route 9	Low	Moderate	Identified
Bay Parkway	Moderate	Moderate	Identified
Old Main Street	Moderate	High	Identified
Lighthouse Drive	Low	Low	Identified
Nautilus Road	Low	Low	Identified
Holiday Harbor Marina	Low	Moderate	Identified

Table 3. Summary of Pre-Contact and Historical Archaeological Sensitivity of the B.L. England Area of Potential Effects.

Landfall/Route	Precontact Sensitivity	Historic Sensitivity	NJ CRGIS LUCY – Archaeology Grid Designation
B.L. England Substation	High	Low	Eligible
US Route 9 (North Shore Road)	Moderate	High	Identified
Roosevelt Boulevard	Low	Low	Not Evaluated
West Ave – Ocean City	Moderate	Moderate	Not Evaluated and Eligible

The Project proposes to avoid impacts to known sites; however, archaeological monitoring was determined necessary during construction near known archaeological sites, as well as along the proposed cable routes and within roadways deemed to be highly sensitive, based on the sensitivity maps presented in the TARA.

4.3 Temporary Avoidance Measures

This section outlines the proposed avoidance measures to undertake at each of the archaeological sites, where applicable.

4.3.1 Site 28-Cm-032 (B.L. England)- Expanded Boundaries

Site number	28-Cm-032 (B.L. England)
Date	Late Archaic to Transitional and Middle to Late Woodland Periods
Type	Toolmaking/shellfish and mammal processing site; Late Archaic to Transitional and Middle to Late Woodland Periods
Size	2,695 m² (29,012 ft²)
Depth	.5 m (1.5 ft)
Within/Adjacent PAPE	The site, although expanded, is no longer included as part of the PAPE, but is immediately adjacent to the north and west of the PAPE.
Proposed Impacts	Adjacent to the APE. No direct effects.

Site number	28-Cm-032 (B.L. England)
Protection/Avoidance Measures	Site protection measures and monitoring will occur.

The qualified Monitor will install snow fencing and signage around the external limits of the site boundary within a 10-foot buffer of the APE and as mapped in the TARA no more than one week prior to construction. The signage will be demarcated with “Restricted Area” printed on corrugated plastic materials. The sign will be double- sided to ensure visibility. The signage will not denote the area as archaeological in nature. The signage and snow fencing will remain in place during construction activities, with the qualified Monitor removing it within one week of completion of all construction activities within a 1-mile radius for the Project. The Construction Contractor will be responsible for ensuring the fencing remains in place, and should it fall or be removed, the Construction Contractor will notify the qualified archaeologist within 24-hours. Please note, placement of snow fencing and signage is dependent upon approval from the landowner.

The qualified Monitor will monitor ground-disturbing construction activities within the immediate vicinity, defined necessary by the qualified Monitor, of the archaeological site.

4.3.2 Site 28-Cm-064 (GEHB Site 1), Expanded Boundaries

Site number	28-Cm-064 (expansion)
Date	Woodland Period and Late 17th – Early 20th century
Type	Precontact camp, tool production, and food processing site; historic house midden.
Size	53 m^2 (173 ft^2)
Depth	.5 m (1.5 ft)
Within/Adjacent PAPE	Within the defined PAPE, but between edge of pavement and edge of ROW
Proposed Impacts	The cable may be placed in the road near the site area if this alternate is selected. No direct effects.
Protection/Avoidance Measures	Site protection measures and monitoring will occur.

The qualified Monitor will install snow fencing and signage around the external limits of the site boundary within a 10-foot buffer of the APE and as mapped in the TARA no more than one week prior to construction. The signage will be demarcated with “Restricted Area” printed on corrugated plastic materials. The sign will be double- sided to ensure visibility. The signage will not denote the area as archaeological in nature. The signage and snow fencing will remain in place during construction activities, with the qualified Monitor removing it within one week of completion of all construction activities within a 1-mile radius for the Project. The Construction Contractor will be responsible for ensuring the fencing remains in place, and should it fall or be removed, the Construction Contractor will notify the qualified archaeologist within 24-hours. Please note, placement of snow fencing and signage is dependent upon approval from the landowner.

The qualified Monitor will monitor ground-disturbing construction activities within the immediate vicinity, defined necessary by the qualified Monitor, of the archaeological site.

4.3.3 Site 28-Cm-091 (Cedar Hollow Historic Site), Newly Identified Site

Site number	28-Cm-091
Date	18th – 19th century
Type	House midden

Site number	28-Cm-091
Size	105 m^2 (1125 ft^2)
Depth	0.35-0.55 m (1-1.5 ft)
Within/Adjacent PAPE	Within the defined PAPE, but between edge of pavement and edge of ROW.
Proposed Impacts	The cable may be placed in the road near the site area if this alternate is selected. No direct effects.
Protection/Avoidance Measures	Site protection measures and monitoring will occur.

The qualified Monitor will install snow fencing and signage around the external limits of the site boundary within a 10-foot buffer of the APE and as mapped in the TARA no more than one week prior to construction. The signage will be demarcated with “Restricted Area” printed on corrugated plastic materials. The sign will be double- sided to ensure visibility. The signage will not denote the area as archaeological in nature. The signage and snow fencing will remain in place during construction activities, with the qualified Monitor removing it within one week of completion of all construction activities within a 1-mile radius for the Project. The Construction Contractor will be responsible for ensuring the fencing remains in place, and should it fall or be removed, the Construction Contractor will notify the qualified archaeologist within 24-hours. Please note, placement of snow fencing and signage is dependent upon approval from the landowner.

The qualified Monitor will monitor ground-disturbing construction activities within the immediate vicinity, defined necessary by the qualified Monitor, of the archaeological site.

4.3.4 Site 28-Oc-055, Unnamed Site

Site number	28-Oc-055
Date	Possible Pre-Contact
Type	Shell midden
Size	Approximately 40 m^2 (430 ft^2)
Depth	Unknown
Within/Adjacent PAPE	Possibly mapped the defined PAPE. Site was not relocated during survey
Proposed Impacts	The cable may be placed in the road and near the site area if this alternate is selected. No direct effects.
Protection/Avoidance Measures	Monitoring will occur.

The qualified Monitor will monitor ground-disturbing construction activities within the immediate vicinity, defined necessary by the qualified Monitor, of the archaeological site.

4.3.5 Site 28-Oc-249, Oyster Creek Paleoindian Spot Find

Site number	Site 28-Oc-249,
Date	Paleoindian, c. 12,500 B.P.
Type	Spot find
Size	706 m^2 (7,854 ft^2)
Depth	0-40 cm (1.3 ft)
Within/Adjacent PAPE	Within the PAPE, just outside of the proposed limits of disturbance (LOD), as the cable will be buried in this location via HDD. Entry/exit pit approximately 50 feet east of find.
Proposed Impacts	The site will be avoided. No direct effects.
Protection/Avoidance Measures	Site protection measures and monitoring will occur.

The qualified Monitor will install snow fencing and signage around the external limits of the site boundary as mapped in the TARA no more than one week prior to construction. The signage will be demarcated with "Restricted Area" printed on corrugated plastic materials. The sign will be double-sided to ensure visibility. The signage will not denote the area as archaeological in nature. The signage and snow fencing will remain in place during construction activities, with the Monitor removing it within one week of completion of all construction activities within a 1-mile radius for the Project. The Construction Contractor will be responsible for ensuring the fencing remains in place, and should it fall or be removed, the Construction Contractor will notify the qualified archaeologist within 24-hours.

The qualified Monitor will monitor ground-disturbing construction activities within the immediate vicinity, defined necessary by the qualified Monitor, of the archaeological site.

4.3.6 Site 28-Oc-250, Chamberlain Historic Midden Site

Site number	Site 28-Oc-250,
Date	Historic, c. late 18th-20th centuries
Type	House midden
Size	550 m² (1,800 ft²)
Depth	15-40 cm (0.5-1.3 ft)
Within/Adjacent PAPE	Within the defined PAPE, but between edge of pavement and edge of ROW.
Proposed Impacts	The cable may be placed in the road if this alternate is selected.
Protection/Avoidance Measures	Site protection measures and monitoring will occur.

The qualified Monitor will install snow fencing and signage around the external limits of the site boundary within a 10-foot buffer of the APE and as mapped in the TARA no more than one week prior to construction. The signage will be demarcated with "Restricted Area" printed on corrugated plastic materials. The sign will be double- sided to ensure visibility. The signage will not denote the area as archaeological in nature. The signage and snow fencing will remain in place during construction activities, with the qualified Monitor removing it within one week of completion of all construction activities within a 1-mile radius for the Project. The Construction Contractor will be responsible for ensuring the fencing remains in place, and should it fall or be removed, the Construction Contractor will notify the qualified archaeologist within 24-hours.

The qualified Monitor will monitor ground-disturbing construction activities within the immediate vicinity, defined necessary by the qualified Monitor, of the archaeological site.

4.3.7 Archaeological Monitoring Along the Export Cable Routes, Including Open Cut Trench Landings and HDD Locations

The qualified Monitor will monitor ground-disturbing construction activities within archaeologically sensitive areas along the export cable routes. This includes all areas of the export cable routes except areas along Lighthouse Drive, Nautilus Road, and Roosevelt Boulevard.

4.4 Process for Determining if Monitoring a Construction Activity is Necessary

Ground-disturbing construction activities should assume to be monitored; however, consultation with the qualified Monitor should occur should there be a question whether monitoring is necessary. Questions regarding whether monitoring is necessary must go through the request for information process before proceeding.

4.5 Responsibilities During Construction

The qualified Monitor will be responsible for confirming that the proper steps are followed to assess and protect cultural resources. The qualified Monitors have the authority and responsibility to stop work if any previously unidentified cultural resources are encountered. The Cultural Resource Manager will be responsible for coordinating logistics for the Archaeological and Tribal monitors (qualified monitors) and Tribal Representatives.

The qualified archaeologist will be present where monitoring is required and will be responsible for the recordation of unanticipated discoveries. The qualified archaeologist will be equipped with:

- A digital camera;
- Global Positioning System (GPS) unit capable of submeter accuracy;
- Monitor's daily logs;
- Relevant Project contact information;
- Safety evacuation information.

Other equipment will be determined by the Project design and needs.

To minimize the hazards associated with the archaeological monitoring of construction, there will be close coordination between the qualified monitors and construction personnel. The qualified monitors will be responsible for the following tasks:

- Be present during mechanical tree removal, scraping, grading, excavating, trenching, and other ground-disturbing activities in all required monitoring areas in the Project APE.
- Inspect the newly exposed surface as sediment is moved by heavy equipment.
- Identify cultural materials and ascertain whether the material is archaeological.
- Determine the significance of unanticipated discoveries.
- Consult and coordinate with the BOEM, NJ HPO, and Tribal representatives and/or THPOs in order to mitigate unanticipated discoveries.
- Coordinate with relevant construction personnel when unanticipated discoveries are made.

If cultural remains, or possible human remains are noted, construction activities will be halted within the immediate vicinity of the discovery, in an area defined sufficient by the qualified archaeologist. Construction may proceed in other areas of the Project APE.

Archaeological monitoring will not be required once all surface and subsurface ground-disturbing activity in a construction area is completed. Equipment or vehicles traveling over previously disturbed surfaces will not require monitoring. Routine travel on existing or disturbed areas will not be monitored for cultural resources.

Blading, scraping, grading, trenching, or excavating at a depth beyond the previously disturbed area will be monitored for cultural resources, even within previously graded or bladed areas, where the potential exists for impacting intact subsurface deposits.

4.6 Responsibilities for Reporting

The qualified Monitors will maintain monitoring records, photographs, and digital data, and will maintain daily logs of Project-related monitoring activities comprising the following:

- Date, time of work, and amount of time spent at a construction monitoring location;
- Area of work;
- Type of work, equipment present, and name of construction crew being monitored;
- Documentation of successful resource avoidance, including a map showing locations of excavations, surface structures, topography, and identified archaeological deposits within the APE;
- Activities for which there are circumstances that limit or prevent visual examination of Project excavations (including delimiting those areas on a Project area map), cultural resource problems, non-compliances, or other concerns;
- Identification of an unanticipated discovery, steps taken to protect the discovery, and documentation of notifications (name, agency, time, and notes); and
- Color digital photographs taken (as appropriate) to document construction and monitoring activities and submitted as attachments to the daily log.

The qualified Monitors will prepare and provide their monitoring logs daily to the Cultural Resources Manager, who will prepare and provide bi-weekly summary reports on the progress or status of cultural resources-related activities during active construction.

- The bi-weekly reports will summarize construction progress, monitoring (including monitor name, dates worked, finds, issues, etc.), and status of cultural resources-related issues.
- Bi-weekly reports will include photographs of the activities as well as a look-ahead schedule of upcoming activities.
- These reports will also include the appropriate state archaeological isolate or site forms for finds identified under the monitoring program.
- Site forms for any newly discovered properties will include recommendations for National Register of Historic Places (NRHP) eligibility and Project effect.

The Cultural Resources Manager will submit bi-weekly reports to Ocean Wind, BOEM, NJ HPO, and Tribal representatives and/or THPOs via email. BOEM will be notified of all unanticipated finds within 24-hours of discovery via email.

4.7 Detailed Procedures

This section includes detailed information regarding the construction and post-construction tasks to be performed by the qualified Monitors and other parties, as well as the procedure for documenting and reporting unanticipated discoveries made during construction.

4.7.1 Construction Tasks

While construction activities are ongoing, the qualified Monitors will observe ground-disturbing activities. If an unanticipated discovery is made and that find is determined significant by the qualified Monitor, construction work within the site boundary will halt temporarily.

In the event of an unanticipated discovery, the Terrestrial Archaeology Post-Review Discovery Plan will be followed. If the discovery is recommended eligible for the NRHP, the qualified Monitor will consult with the appropriate agency archaeologist. No construction work will occur at the discovery location until agency concurrence is made and the relevant data recovery is completed.

4.7.2 Post-Construction Tasks

Once the qualified Monitor has reviewed the condition of the site and documented damage (if any), site-defining, snow fencing and signage will be removed.

5 Artifact Collection and Curation

If artifacts are collected, they will be prepared for curation at the state designated curatorial facility, or as otherwise directed by the NJ HPO and in consultation with BOEM and the Tribal representatives and/or THPOs.

6 Reporting

6.1 Daily Monitoring Logs

All qualified Monitors will keep daily logs. These logs will capture the Project name and number, which GPS system unit was used, the camera used and associated photograph numbers, the monitor's and any visiting personnel's names, the company whose work is being monitored, the location of the area(s) monitored, the actions monitored (excavation, drilling, etc.), the number of sites (if any) that were monitored and their Smithsonian trinomial, any sites or cultural material discovered while monitoring that day, any safety incidents, and a narrative for the daily activities. In-field recordation will be made digitally for reporting purposes.

6.2 Bi-Weekly Progress Reports

The Cultural Resources Manager will complete a bi-weekly progress report, sent via email, BOEM, NJ HPO, and Tribal representatives and/or THPOs. This progress report will summarize the past two weeks' daily logs and will give a brief outlook for the following two weeks' archaeological monitoring activities. Unexpected discoveries should be noted in the progress report but should not be the primary

form of communication for an unexpected discovery (see the Terrestrial Archaeology Post Review Discovery Plan for additional notification procedures).

6.3 Technical Reports

When construction activities have ceased and there is no longer a need for archaeological monitoring, a technical report will be prepared. This report will synthesize all monitoring activities, including photographs of sites before, during, and after construction. For any unanticipated discoveries, the report will cover the treatment activity completed (including excavation summaries if applicable) and any necessary site updates or new site forms created due to ground-disturbing activities.

Technical reports will abide by relevant agency guidelines, and a draft will be submitted within 30 days of archaeological monitoring completion.

7 Federal, State, Tribal, and Project Contacts

7.1 Federal Contacts

Bureau of Ocean Energy Management
Sarah Stokely
Lead Historian and Section 106 Team Lead
Bureau of Ocean Energy Management
Office of Renewable Energy Programs
45600 Woodland Road, VAM-OREP
Sterling, Virginia 20166
571-460-9954
Sarah.Stokely@boem.gov

Bureau of Safety and Environmental Enforcement
Shawn Arnold, FPO, Senior Marine Archaeologist
Bureau of Safety and Environmental Enforcement (BSEE)
Office of Environmental Compliance
1201 Elmwood Park Blvd.
New Orleans, LA 70123
Office (504) 736-2416
William.arnold@bsee.gov

Barry Bleichner, Marine Archaeologist
Bureau of Safety and Environmental Enforcement (BSEE)
Office of Environmental Compliance
1201 Elmwood Park Blvd.
New Orleans, LA 70123
504 736-2947
barry.bleichner@bsee.gov

7.2 New Jersey State Historic Preservation Office

Katherine J. Marcopul
Deputy State Historic Preservation Officer
501 East State Street
P.O. Box 420, Mail Code 501-04B
Trenton, New Jersey 08609
609-940-4312

7.3 New Jersey State Police and County Medical Examiner Offices

New Jersey State Police
Office of Forensic Sciences
Forensic Anthropology Unit
NJ Forensic Technology Center
1200 Negron Drive - Horizon Center
Hamilton, New Jersey 08691
Phone: (609) 584-5054 x5656

Cape May County Medical Examiner Office
Dr. Eric Duval and Dr. Charles Siebert Jr.
County Medical Examiner
1175 DeHirsch Avenue
Woodbine, New Jersey 08270
Phone: (609) 861-3355

Ocean County Medical Examiner Office
County Medical Examiner
P.O. Box 2191, Sunset Avenue
Toms River, New Jersey 08754-2191
Phone: (732) 341-3424

7.4 Tribal Contacts

Absentee-Shawnee Tribe of Indians of Oklahoma
Mr. Devon Frazier
Tribal Historic Preservation Officer
2025 South Gordon Cooper Drive
Shawnee, Oklahoma 74801
405.275.4030 x6243
dfrazier@astribe.com

The Delaware Nation
Ms. Carissa Speck
Historic Preservation Director
P.O. Box 825
Anadarko, Oklahoma 73005
Phone: (405).247-2448 Ext. 1403
cspeck@delawarenation-nsn.gov

Delaware Tribe of Indians
Ms. Susan Bachor
Historic Preservation Representative
Delaware Tribe Historic Preservation Office
126 University Circle
Stroud Hall, Rm. 437
East Stroudsburg Pennsylvania 18301
610.761.7452
sbachor@delawaretribe.org

Eastern Shawnee Tribe of Oklahoma
Mr. Brett Barnes
Cultural Preservation Director
70500 East 128 Road,
Wyandotte, Oklahoma 74370
Phone: (918) 238-5151

Lenape Tribe of Delaware
4164 N. Dupont Hwy., Suite 6
Dover, Delaware 19901-1573
302-730-4601

Nanticoke Indian Association, Inc.
Natasha Carmine
27073 John J Williams Highway
Millsboro, Delaware 19966
info@nanticokeindians.org
302.945.3400

Nanticoke Lenni-Lenape Tribal Nation
Mark Gould
Principal Chief/Chairman
18 E Commerce Street
Bridgeton, New Jersey 08302
tribalcouncil@nlltribe.com
856.455.6910

The Narragansett Indian Tribe
Mr. John Brown
Tribal Historic Preservation Officer
P.O. Box 268
Charlestown, Rhode Island 02813
Phone: (401).364-1100
tashtesook@aol.com

Ramapough Lenape Indian Nation
Steven Burton89
New Jersey Commission on American Indian Affairs, Commission Member, Representing Ramapough Lenape Indian Nation
NJ Commission on Indian Affairs, PO Box 300
Trenton, New Jersey 08625
609.633.9627

Shawnee Tribe
Ms. Tonya Tipton
Tribal Historic Preservation Officer
P.O. Box 189 29 S Hwy 69A
Miami, Oklahoma 74355
Phone: (918).542-4030 x124
tonya@shawnee-tribe.com

The Shinnecock Indian Nation
Ms. Shavonne Smith
Director, Shinnecock Environmental Department
PO Box 5006
Southampton New York 11969
Phone: (631) 283-6143
ShavonneSmith@shinnecock.org

Jeremy Dennis, Junior THPO
P.O. Box 2338
Southampton New York 11968
jeremynative@gmail.com
(631) 566-0486

Stockbridge-Munsee Community Band of Mohican Indians
Mr. Jeffrey Bendremer
Tribal Historic Preservation Officer
Stockbridge-Munsee Mohican Tribal Historic Preservation Extension Office
86 Spring Street
Williamstown, Massachusetts 01267
Phone: (413)884-6029
thpo@mohican-nsn.gov

7.5 Project Contacts

Ocean Wind
Katharine Perry
Ocean Wind 1 Permit Manager
437 Madison Avenue, 19th floor
New York, New York
KAPER@orsted.com
917-524-4633

Ocean Wind
TBD
Cultural Resources Compliance Manager

HDR
Kimberly Smith
Cultural Resources Lead
235 Promenade Street, Suite 104
Providence, Rhode Island 02908
Kimberly.smith@hdrinc.com
717-515-8994

ATTACHMENT 6 – POST-REVIEW DISCOVERY PLAN FOR SUBMERGED CULTURAL RESOURCES FOR THE OCEAN WIND 1 OFFSHORE WIND FARM FOR LEASE OCS-A 0498 CONSTRUCTION AND OPERATIONS PLAN

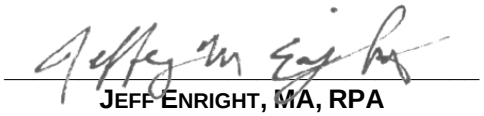
This page intentionally left blank.

Post-Review Discovery Plan for Submerged Cultural Resources for the Ocean Wind 1 Offshore Wind Farm for Lease Area OCS A-0498 Construction and Operations Plan

Ocean Wind 1 Offshore Wind Farm

AUTHORED BY

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



JEFF ENRIGHT, MA, RPA
QUALIFIED MARINE ARCHAEOLOGIST

SEARCH

WWW.SEARCHINC.COM

NOVEMBER 2022

1. Introduction

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

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

2. Roles and Responsibilities

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

2.1 Ocean Wind

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

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

2.2 Qualified Marine Archaeologist

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

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

3. Training and Orientation

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

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

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

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

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

4. Procedures for when Cultural Material are Observed

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

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

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

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

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

Tribes/Tribal Nations for their review and comment. The NJ HPO and Tribes/Tribal Nations will review the plan and provide comments and recommendations within a one week, with final comments to follow as quickly as possible.

8. Per Lease Stipulation 4.2.6, Ocean Wind may not impact a known archaeological resource in federal waters without prior approval from BOEM. No development activities in the vicinity of the cultural resource will resume until either a mitigation plan is executed or, if BOEM determines a mitigation plan is not warranted, BOEM provides written approval to Ocean Wind to resume bottom disturbing activities. For discoveries in state waters, Ocean Wind will not impact a known archaeological resource with prior approval from BOEM, and the NJ HPO. If suspected human remains are encountered, the below procedures, which comply with the Advisory Council on Historic Preservation's (ACHP) *Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects*, should be followed.

1. All work in the near vicinity of the human remains shall cease and reasonable efforts should be made to avoid and protect the remains from additional impact. Encountered potential material shall be protected, which may include keeping the remains submerged in an onboard tank of sea water or other appropriate material.
2. The Onboard Representative shall immediately notify the County Medical Examiner, State Archaeologist, the Forensic Anthropology Unit of the New Jersey State Police, and Ocean Wind as to the findings.
3. Ocean Wind will notify the QMA and provide them with sufficient information/documentation on the potential find to allow the QMA to evaluate the discovery and determine if the find is a cultural resource. If necessary, the QMA may request to visit the vessel to inspect the potential human remains. If the find is a cultural resource, the QMA will provide a preliminary assessment. The QMA will document and inventory the remains and any associated artifacts, and assist in coordinating with federal, state, and local officials.
4. A plan for the avoidance of any further impact to the human remains and/or mitigative excavation, reinternment, or a combination of these treatments will be developed in consultation with the State Archaeologist, the NJ HPOBOEM, and appropriate Indian tribes or closest lineal descendants. All parties will be expected to respond with advice and guidance in an efficient time frame. Once the plan is agreed to by all parties, the plan will be implemented.

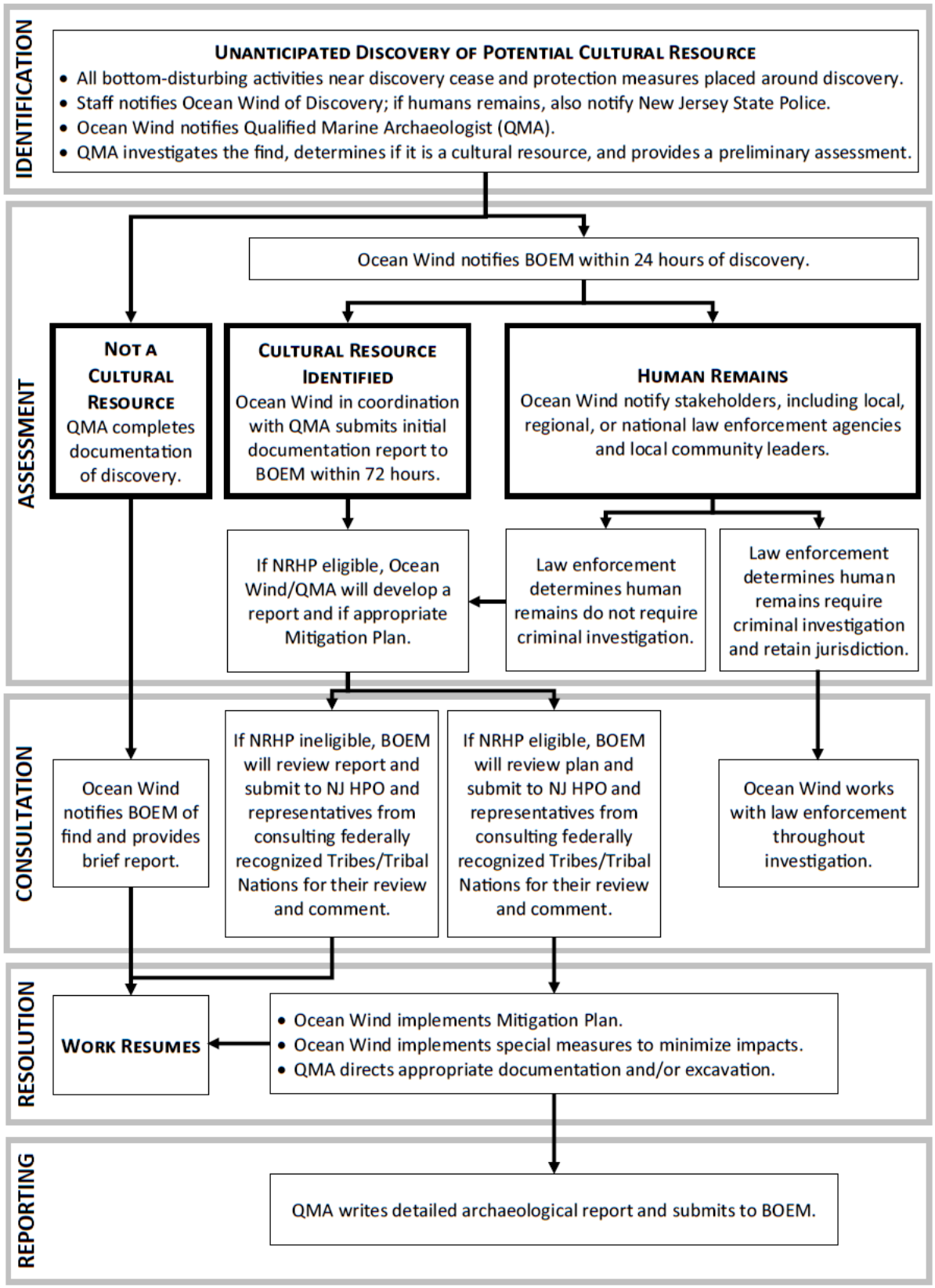


Figure 1. Communications and notification plan for unanticipated discoveries.

5. Archaeological Investigation of a Submerged Unanticipated Discovery

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

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

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

6. Notification List

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

Ocean Wind Katharine Perry Environmental Manager 917-524-4633	Bureau of Ocean Energy Management Sarah Stokely Lead Historian and Section 106 Team Lead Office of Renewable Energy Programs 45600 Woodland Road, VAM-OREP Sterling, Virginia 20166	New Jersey State Historic Preservation Office 501 E. State Street Trenton, NJ 08609 609-984-0176

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

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

7. References Cited

Advisory Council on Historic Preservation's (ACHP)

2007 *Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects*. https://www.achp.gov/sites/default/files/policies/2018-06/ACHPPolicyStatementRegardingTreatmentofBurialSitesHumanRemainsandFuneraryObjects0207.pdf, Digital article accessed December 9, 2021.

Bureau of Ocean Energy Management (BOEM)

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

ATTACHMENT 7 – POST-REVIEW DISCOVERY PLAN FOR TERRESTRIAL RESOURCES FOR THE OCEAN WIND 1 OFFSHORE WIND FARM FOR LEASE AREA OCS-A 0498 CONSTRUCTION AND OPERATIONS PLAN

This page intentionally left blank.

Post-Review Discovery Plan for Terrestrial Resources for the Ocean Wind 1 Offshore Wind Farm for Lease Area OCS A-0498 Construction and Operations Plan

Ocean Wind 1 Offshore Wind Farm

AUTHORED BY

HDR

WWW.HDRINC.COM

NOVEMBER 2022

1. Introduction

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

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

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

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

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

This Terrestrial Post-Review Discovery Plan (PRDP) outlines the protocol/steps for dealing with potential unanticipated discoveries of cultural resources, including human remains, during the construction of the proposed Project.

The Protocol:

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

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

The following terms are used throughout the Protocol:

- The Facility: The Facility collectively refers to all components of the onshore portions of the Project.

- Unanticipated Discovery/Unanticipated Cultural Resource Discovery: Any indications of the presence of archaeological materials including historic-period or pre-contact Native American artifacts, stone features, animal bone, and/or human remains. Common historic-period artifacts encountered may include bottles/glass, pottery/ceramics, stone foundations, hand-dug wells, brick, nails, miscellaneous metal fragments, or charcoal or ash-stained soils. Common pre-contact Native American artifacts encountered may include arrowheads/spearheads, stone (chert or "flint") chips or flakes, charcoal or ash-stained soils, rough gray, black, or brown pottery, and other stone tools/artifacts of obvious human origin.

- Potential Human Remains: Any indications of potential human remains, such as bones or bone fragments, that cannot definitely be determined to be non-human.

- Preliminary Area of Potential Effect (PAPE): All areas of potential soil disturbance associated with the construction and operation of the proposed Facility.

- Cultural Resources Compliance Manager (CRCM): The Lessee's designated on-site staff person responsible for monitoring compliance with permitting conditions and commitments during construction.

- Archaeologist: The Lessee's Secretary of the Interior (SOI) qualified cultural resources consultant. Review of any potential unanticipated discoveries will be conducted under the supervision of a Registered Professional Archaeologist (RPA).

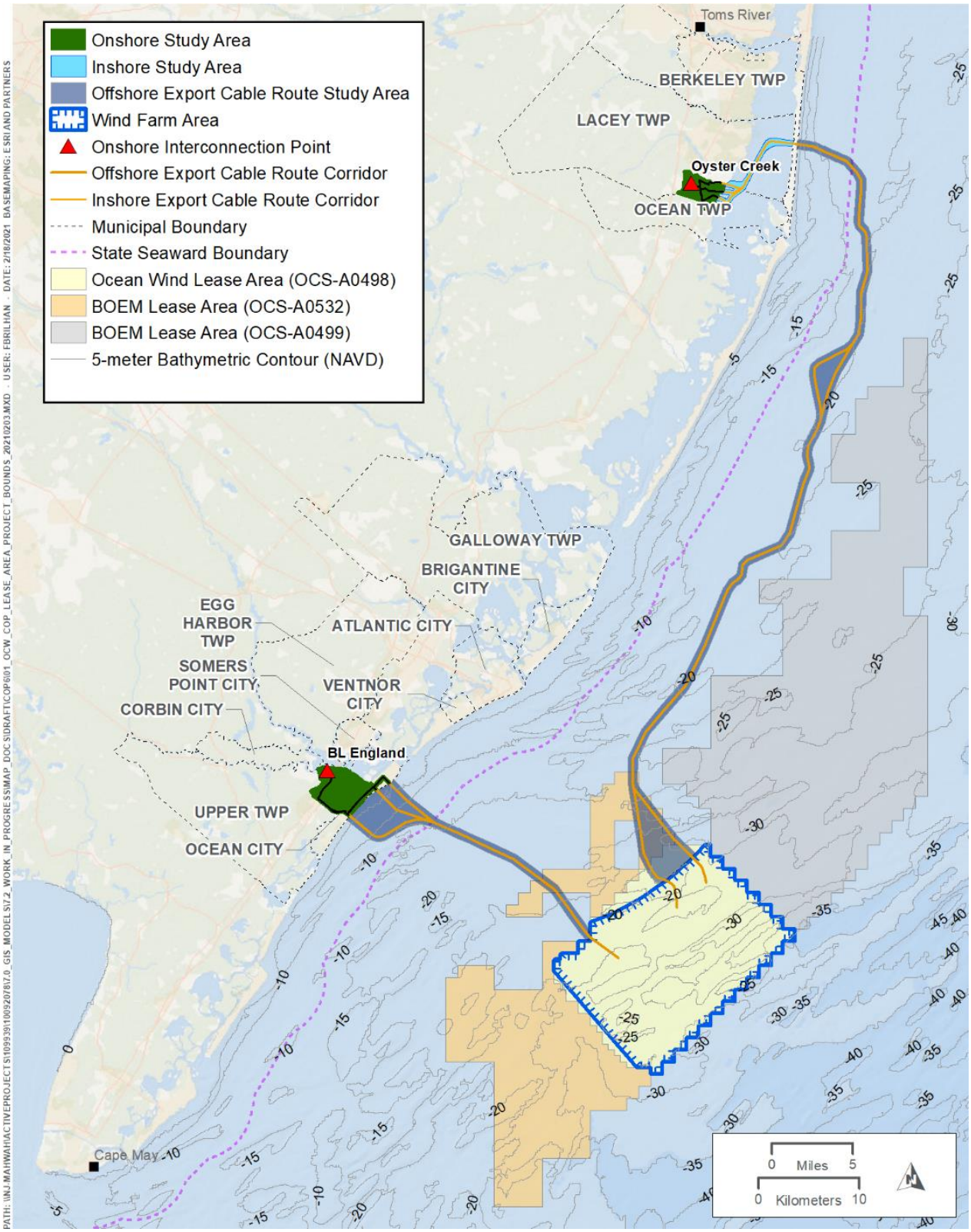


Figure 1-1. Lease Area and Project boundaries

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

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

3. Training and Orientation

The identification of archaeological resources, human remains, and burial sites is facilitated by training and orientation. All Project inspectors, resident engineers, and construction supervisors working on the Project's onshore excavation activities will be given basic training to facilitate their identification of archaeological sites, artifacts, features, and human remains prior to the start of Project-related excavation or construction activities. The training will be given by a SOI qualified archaeologist[2]. Additional training will be conducted on an as-needed basis (e.g., for new construction supervisors) during Project construction.

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

4. Cultural Resources Compliance Manager

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

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

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

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

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

5. Unanticipated Discovery Procedures

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

5.1 Procedures for Unanticipated Archaeological Discoveries

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

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

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

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

5.2 Procedures for the Unanticipated Discovery of Human Remains

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

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

6. Notification List

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

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

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

ATTACHMENT 8 – MITIGATION FUNDING AMOUNTS

The mitigation measures proposed in Stipulation III have been developed by individuals who meet the qualifications specified in the SOI's Qualifications Standards for Archaeology, History, Architectural History, and/or Architecture (36 CFR 61) and are based on input from consulting parties. The proposed mitigation measures consider the nature, scope, and magnitude of adverse effects caused by the Project, the qualifying characteristics of each historic property that would be affected. The following funding amounts were considered by signatories, invited signatories, and consulting parties for historic properties mitigation measures based on budgets proposed by Lessee for each mitigation effort. These budgets are good faith estimates, based on the experience of these 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. Therefore, the funding amounts indicated here for activities required by the MOA represent the maximum amounts the Lessee is required to spend to fund these activities.

- Marine APE
  - $ 3,948,718 for mitigation to resolve adverse effects at the 13 ASLFs (Targets 21–26, 28–31, and 33–35), including Pre-construction Geoarchaeology ($1,875,758), Open Source GIS and Story Maps ($150,000), ASLF Post-Construction Seafloor Inspection ($1,540,000), Ethnographic Study for the Delaware Tribe of Indians, the Delaware Nation, and the Stockbridge-Munsee Community Band of Mohican Indians ($191,480), and Ethnographic Study for Shinnecock Indian Nation ($191,480).

The mitigation measures outlined in the MOA for Absecon Lighthouse, Atlantic City Boardwalk (Atlantic City), and Lucy the Margate Elephant (NHL) as well as for multi-property mitigation 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) in consultation with the consulting parties.

- $55,000 for mitigation of adverse effects at the Absecon Lighthouse through:
  - Contribution to support planned, preservation-related rehabilitation activities at the lighthouse.
- $140,000 for mitigation of adverse effects at the Atlantic City Boardwalk through:
  - Contribution to support planned, preservation-related improvements to the boardwalk.
- $170,000 for mitigation of adverse effects at Lucy the Margate Elephant (NHL) through:
  - Contribution to support planned, preservation-related visitor center upgrades and site improvements.
- $175,000 to draft the following multi-property and multi-county mitigation measures:
  - Historic context addressing early 20th century New Jersey Shore Hotels to resolve adverse effects to Brigantine Hotel, Atlantic County, Haddon Hall/Resorts Casino Hotel, Atlantic County, Ritz-Carlton Hotel, Atlantic County, and Flanders Hotel, Cape May County.
  - Historic context addressing mid-20th century New Jersey High-Rises to resolve adverse effects to Riviera Apartments, Atlantic City and Vassar Square Condominiums, Atlantic County.
  - Historic context addressing Boardwalks of the New Jersey Shore, with Surveys and Evaluations of Atlantic City Boardwalk, Ocean City Boardwalk, and Wildwood Boardwalk to resolve adverse effects to the Atlantic City Boardwalk and Ocean City Boardwalk.

The mitigation measures for the Atlantic City Convention Hall (NHL), Ocean City Boardwalk, Ocean City Music Pier, Flanders Hotel, U.S. Lifesaving Station #35, North Wildwood Lifesaving Station, Hereford Inlet Lighthouse, Brigantine Hotel, Ritz-Carlton Hotel, Riviera Apartments, Vassar Square Condominiums, 114 S Harvard Avenue, Great Egg Coast Guard Station, and U.S. Coast Guard Station #119, were 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), proposed by Lessee, and circulated by BOEM in HPTPs to consulting parties. The proposed mitigation measures included projects such as NJ/NRHP nominations, HABS Level II documentation, historic structure reports, interpretive/educational materials, and funding for visitor experience or public access.

Based on comments from consulting parties requesting a mitigation fund, BOEM decided to consult on a mitigation fund rather than the previously considered mitigation measures (see June 24, 2022 Draft Environmental Impact Statement Appendix N Finding of Effect). Using the previously proposed mitigation measures as a financial basis for the mitigation fund described in Stipulation III.C, and to achieve parity across the adversely affected historic properties, the following values are set by property type: $55,000 for single-family residences; $55,000 for lifesaving stations or lighthouses; $65,000 for hotels, and $70,000 for apartment or condominium buildings. The number and type of adversely affected historic properties are a basis for determining the value of the fund.

Single-Family Houses (1)

- 114 S Harvard Avenue.

Hotels (4)

- Flanders Hotel.
- Brigantine Hotel.
- Ritz-Carlton Hotel.
- Haddon Hall/Resorts Casino Hotel.

Life-saving Stations or Lighthouses (5)

- U.S. Lifesaving Station #35.
- North Wildwood Lifesaving Station.
- Hereford Inlet Lighthouse.
- Great Egg Coast Guard Station.
- U.S. Coast Guard Station #119.

Apartment or Condominium Buildings (2)

- Riviera Apartments.
- Vassar Square Condominiums.

Certain adversely affected historic properties did not fall into the property type categories described above and are of a scale or NHL status that warrant a higher contribution to the mitigation fund, resulting in a contribution to the fund in the amounts of $170,000 for the NHL Atlantic City Convention Hall, $145,000 for the Ocean City Music Pier, and $140,000 for the Ocean City Boardwalk.

The total contribution to the mitigation fund will be $1,185,000.