

# Summary Report Revolution Wind Farm Rhode Island

Terrestrial (Onshore) Archaeological Resource Assessment and Survey June 2023

Revolution Wind, LLC (Revolution Wind), a 50/50 joint venture between Orsted North America Inc. (Orsted NA or Orsted) and Eversource Investment LLC (Eversource), proposes to construct and operate the Revolution Wind Farm Project (REV01 or the Project). The wind farm portion of the Project will be located in federal waters on the Outer Continental Shelf in the designated Bureau of Ocean Energy Management (BOEM) Renewable Energy Lease Area OCS-A 0486. The Project also includes up to two submarine export cables, generally co-located within a single corridor through both federal waters and state waters of Rhode Island. The export cable will make landfall at Quonset Point in North Kingstown, Rhode Island and will interconnect to the existing electric transmission system via the Davisville Substation also in North Kingstown, which is owned and operated by The Narragansett Electric Company (TNEC).

Revolution Wind contracted with The Public Archaeology Laboratory, Inc. (PAL) to conduct an archaeological reconnaissance and Phase I site identification archaeological survey for the onshore components of the Project that include cable routes, onshore substation (OnSS), and interconnection facility (ICF) in North Kingstown (Figure 1). The results of PAL's archaeological investigations were presented in a detailed technical report entitled *Technical Report: Terrestrial Archaeological Resources Assessment and Site Identification Survey – Revolution Wind Farm Project Onshore Facilities* (Forrest and Waller 2021), which was included as Appendix N to the Construction and Operations Plan (COP) submitted to the BOEM for the Revolution Wind Farm Project. The methods and results detailed in PAL's *Terrestrial Archaeological Resources Assessment and Site Identification Revolution Wind Farm Project*. The methods and results detailed in PAL's *Terrestrial Archaeological Resources Assessment and Site Identification Revolution Wind Farm Project*. The methods and results detailed in PAL's *Terrestrial Archaeological Resources Assessment and Site Identification Survey* archaeological Resources Assessment and Site Identification Revolution Wind Farm Project. The methods and results detailed in PAL's *Terrestrial Archaeological Resources Assessment and Site Identification Survey* archaeological report for the Project are summarized below.

# Purpose, Methods, and Consultation

The purpose of the archaeological reconnaissance and Phase I site identification surveys was to determine if areas of anticipated ground disturbance contain recorded archaeological sites, evaluate the potential for undiscovered archaeological sites to be present in areas of proposed ground disturbance, and to conduct archaeological testing in archaeologically sensitive areas to determine the presence or absence of archaeological deposits. The archaeological investigations included archival research, the development of project-specific environmental and cultural contexts, examination of previous land uses that may have affected archaeological resources that may once have been present, archaeological monitoring of geotechnical test pit sampling, and Phase I site identification through archaeological hand testing. PAL consulted with the Rhode Island Historical Preservation and Heritage Commission (RIHPHC) and the Tribal Historic Preservation Offices (THPOs) for the Narragansett Indian, Wampanoag Tribe of Gay Head/Aquinnah, Mashpee Wampanoag, Mashantucket Pequot, and Mohegan Indian tribes throughout the Project.





Figure 1. Onshore components of the Revolution Wind Farm Project.

# **Reconnaissance Survey and Sensitivity Assessment: Onshore Cable Routes**

Construction, operation, and decommissioning of the Project have the potential to affect archaeological properties and other cultural resources within the Project's Area of Potential Effects (APE). The archaeological reconnaissance identified previously reported archaeological sites within the Project study area and evaluated the potential for undiscovered sites. Information collected during the archival research combined with a site walkover with the Mashpee Indian Tribe provided the information necessary to assess the archaeological sensitivity, defined as the likelihood for belowground cultural resources to be present, along the Onshore Cable Routes.

Because of the rapid and intense development of the point during and after World War II, little archaeological data is available for the Quonset Point landform, itself. Previous archaeological studies and archaeological site records on file at the RIHPHC in Providence indicate the Quonset Point and Mill Creek areas were visited by Native Americans as early as 10,000 years before present. Potential post-contact archaeological sites include twentieth century residential properties, initially constructed as summer cottages, and then moved, modified, repurposed to support naval operations, and/or dismantled. The "J. Spink" house, as seen on the Walling 1855 and Beers 1870 maps of North Kingstown, was once near the proposed onshore transmission cable but appears to have been razed before or during intensive development of the Quonset Point area.



The potential for intact pre- and post-contact archaeological sites within much of the Project study area is generally low. Historical maps, twentieth and twenty-first century aerial photographs, soil surveys, topographic maps, and archaeological site investigations indicate ground disturbance from the 1940's to the present have been pervasive on Quonset Point. Despite extensive modifications to the landscape, small pockets within the APE may nevertheless have been spared substantial disturbance.

Truncated cultural features have the potential to be present where previous ground disturbances were limited to only 2 to 3 vertical feet (0.6 to 1 m) of the pre-development land surface. Identifying such resources is difficult or impossible through standard Phase I shovel test pit testing, and remote sensing (e.g. Ground Penetrating Radar), would have limited utility in identifying sites and archaeological features this setting due to the complexity of cut/fill episodes throughout the area. PAL recommended consulting with RIHPHC and Native American tribes to discuss the need for archaeological/tribal monitoring during construction to address the potential for isolated cultural features within the preliminary APE.

### Geotechnical Monitoring and Sensitivity Assessment: OnSS and ICF

PAL with Narragansett Indian THPO staff monitored the excavation of 23 geotechnical pits at select locations. Archaeological monitoring was conducted to assess the archaeological integrity of the parcels and to address potential impacts to any archaeological deposits that might be affected by geotechnical data collection.

Tested areas include woodlands, wetlands, areas of secondary vegetation growth, and open sand banks. The properties were historically wooded and persisted as woodlands or were used as agricultural land through the nineteenth century and were impacted by cutting, filling, and sand and gravel mining during and after the Navy's development and use of Quonset and Davisville.

Archaeological monitoring of geotechnical data collection confirmed that twentieth century filling and dumping and sand and gravel mining disturbed much of the construction footprint and surrounding areas. Selected areas were considered sensitive for Native American artifact scatters, processing or hunting camps, and domestic sites, seventeenth- through nineteenth-century domestic and agricultural sites, and early to mid-twentieth century industrial and military sites. Soil disturbance is pervasive in some areas, however intact soils were documented in some areas. PAL documented intact wetland mucks on the east side of the TNEC parcel. near the Davisville. These poorly drained soils are not archaeologically sensitive.

# Phase I Site Identification Archaeological Testing

Revolution Wind is committed to avoiding or minimizing impacts to significant archaeological sites and resources of cultural importance to the Native American tribes. They requested that PAL conduct a Phase I site identification archaeological survey within areas of identified archaeological sensitivity where Project impacts would occur and the access road to identify archaeological resources potentially eligible for listing in the State/National Registers and to provide recommendations about the need for additional archaeological survey, as necessary. PAL consulted with the RIHPHC and the Native American THPOs and conducted the Phase I archaeological survey in the summer of 2021 under RIHPHC archaeological permit No. 21-17. Narragansett THPO representatives accompanied PAL field crews daily throughout the fieldwork.



PAL excavated 60, 50-x-50-centimeter (cm) (1.6-x-1.6-ft) shovel test pits within archaeologically sensitive areas. Test pits were excavated along linear transects every 10 m (33 ft). Eight test pits organized in two sampling arrays were excavated around one test pit that contained archaeological materials. The first and second sampling arrays involved the excavation of a 50-x-50-cm test pit 2.5 m (8.2 ft) at each of the cardinal directions (magnetic) and 5 m (16.4 ft) at the inter-cardinal directions around the center source test pit, respectively. PAL archaeologists excavated test pits by hand using shovels in 10-cm (3.9 in) increments to 25–94 cm (9–37 in) below surface. Excavated soils were sieved through ¼-inch hardware cloth with cultural materials remaining in the screen bagged and tagged by level. The locations of all excavated test pits were recorded by a submeter Trimble GeoXH 6000 series Global Positioning System (GPS) handheld receiver. Soil profiles, including depths of soil horizons, colors, and textures, and the counts and types of recovered cultural materials were noted on standardized test pit profile forms.

# Phase I Site Identification Survey Results and Recommendations

Phase I archaeological testing identified three, previously unrecorded archaeological sites and one isolated artifact find spot. Two of the identified sites are significant and important additions to the inventory of known archaeological sites in North Kingstown. PAL recommended that Revolution Wind avoid impacts to the significant sites through Project redesign. If final construction design plans are to result in any impact to either of the sites, then PAL recommended that consultation among state and federal agencies and Native American THPOs to develop and implement an archaeological mitigation/treatment plan to mitigate adverse effects that Project construction will have on the sites.

One archaeological site and the isolated artifact find are not eligible for listing in the State/National Registers of Historic Places. No additional archaeological investigations are therefore necessary.

The *Terrestrial Archaeological Resources Assessment and Site Identification Survey* archaeological report also noted potential alternative routing options for the Onshore Transmission Cable. Based on a review of historical maps, photographs, and documentation of prior land disturbances, information collected during PAL's archaeological monitoring of geotechnical sampling, and Phase I site identification archaeological testing, PAL found that route options within the Onshore Transmission Cable Envelope area lack stratigraphic integrity and were determined not to be archaeologically sensitive. Thus, no further archaeological testing was recommended for the alternative routing options identified in November 2021.

# References

Forrest, Daniel and Joseph N. Waller, Jr.

2021 Technical Report: Terrestrial Archaeological Resources Assessment and Site Identification Survey – Revolution Wind Farm Project Onshore Facilities. PAL Report No. 3500.01. Submitted to Revolution Wind, Providence, RI.