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MASS  
USA

# VINEYARD WIND

## Draft Construction and Operations Plan

### Volume III Appendices

## Vineyard Wind Project

June 3, 2020

**Submitted by**

**Vineyard Wind LLC**  
700 Pleasant Street, Suite 510  
New Bedford, Massachusetts 02740

**Submitted to**

**Bureau of Ocean Energy Management**  
45600 Woodland Road  
Sterling, Virginia 20166

**Prepared by**

**Epsilon Associates, Inc.**  
3 Mill & Main Place, Suite 250  
Maynard, Massachusetts 01754

# Draft Construction and Operations Plan

## Volume III Text

### Vineyard Wind Project

*Submitted to:*

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

*Submitted by:*

**VINEYARD WIND LLC**  
700 Pleasant Street, Suite 510  
New Bedford, MA 02740

*Prepared by:*

**EPSILON ASSOCIATES, INC.**  
3 Mill & Main Place, Suite 250  
Maynard, MA 01754

*In Association with:*

Baird & Associates  
Biodiversity Research Institute  
C2Wind  
Capitol Air Space Group  
Clarendon Hill Consulting  
Ecology and Environment  
Foley Hoag  
Geo SubSea LLC  
Gray & Pape

JASCO Applied Sciences  
Morgan, Lewis & Bockius LLP  
Public Archaeology Laboratory, Inc.  
RPS  
Saratoga Associates  
Swanson Environmental Associates  
Wood Thilsted Partners Ltd  
WSP

June 3, 2020

Appendix III-G

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Terrestrial Archaeology Resources Reports and Permits













































































































































































































































































































































































































November 14, 2017

Brona Simon  
State Archaeologist  
State Historic Preservation Officer  
Massachusetts Historical Commission  
220 Morrissey Boulevard  
Boston, Massachusetts 02125

Re: Vineyard Wind Upland Cabling Project  
Barnstable, Yarmouth and Nantucket, Massachusetts  
Archaeological Reconnaissance Survey  
PAL #3384

Dear Ms. Simon:

Enclosed please find a Project Notification Form and application for a permit to conduct an archaeological reconnaissance survey within the proposed Vineyard Wind Upland Cabling project area in Barnstable, Yarmouth and Nantucket, Massachusetts. The project area is located on the New Bedford and Nantucket, MA USGS quadrangles. Thank you in advance for your time and attention to this matter.

If you have any questions or concerns, please do not hesitate to contact Duncan Ritchie, Senior Archaeologist, or me, at your convenience.

Sincerely,

A handwritten signature in blue ink that reads 'Deborah C. Cox'.

Deborah C. Cox, RPA  
President

Enclosure

cc: Eric Peckar, Vineyard Power (w/encl.)  
Rachel Pachter, Vineyard Wind (w/encl.)  
Brian Lever, Epsilon Associates, Inc. (w/encl.)

(Note: no surveys on Nantucket are planned. The reference to an upland route on Nantucket is an error.)

APPENDIX A  
MASSACHUSETTS HISTORICAL COMMISSION  
220 MORRISSEY BOULEVARD  
BOSTON, MASS 02125  
617-727-8470, FAX: 617-727-5128

**PROJECT NOTIFICATION FORM**

Project Name: Vineyard Wind Upland Cabling

Location / Address: see Project Description below

City / Town: Barnstable, Yarmouth and Nantucket

Project Proponent

Name: Vineyard Wind

Address: 700 Pleasant Street

City/Town/Zip/Telephone: New Bedford, MA 02740

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name: \_\_\_\_\_ Type of License or funding (specify) \_\_\_\_\_

Bureau of Ocean Energy Management (BOEM)	
Federal Aviation Agency (FAA)	
Army Corps of Engineers (ACOE)	Clean Water Act (Section 404), Section 106 Consultation
Environmental Protection Agency (EPA)	NPDES Construction General Permit
Massachusetts Environmental Policy Act (MEPA)	Environmental Notification Form
Massachusetts Department of Environmental Protection (DEP)	

**Project Description (narrative):**

The routes within Barnstable and Yarmouth being considered include a Preferred and Notice Alternative Route as well as six variants and one substation parcel. The five Preferred variants include Seagull Beach, New Hampshire Avenue, Willow Street, Eversource ROW and Bike Path. The single Notice Alternative variant is at Attucks Lane. The preferred landing site is at New Hampshire Avenue in Yarmouth and the preferred grid interconnection point is the Barnstable Switching Station. (Note: The Preferred variant from Seagull Beach (Great Island) is no longer under consideration.)

The potential upland cabling route on Nantucket consists of two routes at the west end of the island that extend from the southern shoreline near Cisco Beach along the Madaket Road bicycle path and Barrett Farm Road. They converge at the northern end of Barrett Farm Road to form a single route that follows Eel Point Road to Dionis Beach on the north side of the island.  
(Note: no surveys on Nantucket are planned. The reference to an upland route on Nantucket is an error.)

**Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.**

No

**Does the project include rehabilitation of any existing building? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.**

No

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

Yes

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify.

Thirteen pre-contact and 2 post-contact archaeological sites may be located within and/or adjacent to the overland routes in Barnstable, Yarmouth and Nantucket.

What is the total acreage of the project area?

Woodland _____	acres	Productive Resources:	
Wetland _____	acres	Agriculture _____	acres
Floodplain _____	acres	Forestry _____	acres
Open Space _____	acres	Mining _____	acres
Developed _____	acres	Total Project Acreage _____	acres

What is the acreage of the proposed new construction? \_\_\_\_\_ acres

What is the present land use of the project area?

Mixed residential and commercial development and utility corridors (power line, sub-station), railroad right of way and existing roadways in the Barnstable and Yarmouth project area.

The Nantucket section of the project area land use is within existing roadways and bicycle paths (Madaket and Eel Point Roads) through open land and low density residential development in Madaket.

(Note: no surveys on Nantucket are planned. The reference to an upland route on Nantucket is an error.)

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submitting this form Duncan Petelie Date: 11/13/2017

Name: The Public Archaeology Laboratory, Inc.

Address: 26 Main Street

City / Town: Pawtucket, Rhode Island 02860

APPENDIX A (continued)

Telephone: 401-728-8780

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REGULATORY AUTHORITY

930CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St.1988, c.254.

APPENDIX A (continued)

**950 CMR: DEPARTMENT OF THE STATE SECRETARY**

**APPENDIX B  
COMMONWEALTH OF MASSACHUSETTS**

**SECRETARY OF STATE: MASSACHUSETTS HISTORICAL COMMISSION**

**PERMIT APPLICATION: ARCHAEOLOGICAL FIELD INVESTIGATION**

**A. General Information**

Pursuant to Section 27(c) of Chapter 9 of the General Laws and according to the regulations outlined in 950 CMR 70.00, a permit to conduct a field investigation is hereby requested.

1. Name(s): Duncan Ritchie
2. Institution: The Public Archaeology Laboratory, Inc.  
Address: 26 Main Street  
Pawtucket, Rhode Island 02860
3. Project Location: Vineyard Wind Upland Cabling Project  
*see attached proposal*
4. Town(s): Barnstable, Yarmouth and Nantucket
5. Attach a copy of a USGS quadrangle with the project area clearly marked.  
*see attached*
6. Property Owner(s): Towns of Barnstable, Yarmouth and Nantucket, MA;  
Eversource
7. The applicant affirms that the owner has been notified and has agreed that the applicant may perform the proposed field investigation.
8. The proposed field investigation is for a(n):
  - a. Reconnaissance Survey
  - b. Intensive Survey
  - c. Site Examination
  - d. Data Recovery



**B. Professional Qualifications**

1. Attach a personnel chart and project schedule as described in 950 CMR 70.11 (b).

**a. Personnel**

Principal Investigator(s): Duncan Ritchie  
Project Archaeologist(s): Colin Stephenson

Field Crew:

**b. Schedule**

Fieldwork: November, 2017  
Laboratory: December, 2017  
Report: January, 2018

2. Include copies of curriculum vitae of key personnel (unless already on file with the State Archaeologist).

**C. Research Design**

1. Attach a narrative description of the proposed Research Design according to the requirements of 950 CMR 70.11.
2. The Applicant agrees to perform the field investigations according to the standards outlined in 950 CMR 70.13.
3. The Applicant agrees to submit a Summary Report, prepared according to the standards outlined in 950 CMR 70.14 by:
4. The specimens recovered during performance of the proposed field investigation will be curated at:

The Public Archaeology Laboratory, Inc.  
26 Main Street  
Pawtucket, Rhode Island 02860

SIGNATURE

Duncan Ritchie

APPLICANT(S)

11/14/2017

DATE



December 19, 2017

Rachel Pachter

Vice President, Permitting Affairs

Vineyard Wind, LLC

700 Pleasant Street, Suite 510

New Bedford, MA 02740

**The Commonwealth of Massachusetts**

William Francis Galvin, Secretary of the Commonwealth

Massachusetts Historical Commission

RE: Vineyard Wind Offshore Wind Energy Project, Massachusetts, BOEM Lease Area OCS-A 0501. MHC # RC.62940

Dear Ms. Pachter:

Staff of the Massachusetts Historical Commission (MHC), office of the Massachusetts State Historic Preservation Officer, have reviewed the Project Notification Form (PNF), submitted by the PAL, Inc., for the Upland Cabling aspect of the project referenced above in Barnstable and Yarmouth.

The MHC will continue to review the project pursuant to the Programmatic Agreement with the Bureau of Ocean Energy Management (BOEM) for Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). The MHC looks forward to consultation with the involved federal and state agencies. A copy of the Environmental Notification Form (ENF) should be submitted to the MHC for review and comment when it is filed with the MEPA office.

The MHC looks forward to reviewing additional project information, including scaled existing and proposed conditions project plans, sized no larger than 11" by 17" for the preferred project alternative to assist BOEM in determining what effect, if any, the proposed project may have on significant historic and archaeological resources. Project information should also be submitted by project planners concurrently to the Massachusetts Board of Underwater Archaeological Resources (MBUAR). Project plans should show all proposed terrestrial and marine project impact areas, including materials staging and equipment storage areas, intertidal horizontal directional drilling entrance and/or exit pits, cable routes, turbine foundation and associated vessel anchorage locations within state and/or federal waters.

The State Archaeologist's permit (950 CMR 70) has been issued to the PAL to conduct the terrestrial archaeological reconnaissance survey for the Upland Cabling aspect of the project. The marine archaeological reconnaissance survey for the Export Cable aspect of the project is being conducted by Gray & Pape, Inc., in consultation with the MHC and MBUAR. The draft technical archaeological reports for the terrestrial upland cabling and marine export cable aspects of the project should be submitted to the MHC for review and comment.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), Massachusetts General Laws Chapter 9, Sections 26-27C (950 CMR 70-71) and MEPA (301 CMR 11). If you have any questions concerning this review, please contact Jonathan K. Patton, at this office.

Sincerely,

A handwritten signature in black ink that reads "Brona Simon".

Brona Simon

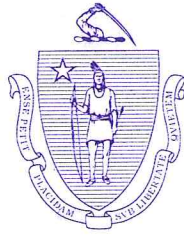
State Historic Preservation Officer

Executive Director

State Archaeologist

Massachusetts Historical Commission

xc: Richard Warner, BOEM  
Barbara Newman, USACOE-New England District  
Kate Atwood, USACOE-New England District  
Bettina Washington, Tribal Historic Preservation Officer, Wampanoag Tribe of Gay Head (Aquinnah)  
Ramona Peters, Mashpee Wampanoag Tribe  
Victor Mastone, MBUAR  
Deborah C. Cox, PAL, Attn: Duncan Ritchie  
Mike Tuttle, Gray & Pape, Inc.



**The Commonwealth of Massachusetts**  
William Francis Galvin, Secretary of the Commonwealth  
Massachusetts Historical Commission

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PERMIT TO CONDUCT ARCHAEOLOGICAL FIELD INVESTIGATION

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Permit Number 3795 Date of Issue December 18, 2017  
Expiration Date December 18, 2018

PAL is hereby  
authorized to conduct an archaeological field investigation pursuant to  
Section 27C of Chapter 9 of General Laws and according to the regulations  
outlined in 950 CMR 70.00.

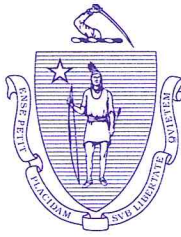
Vineyard Wind Upland Cabling Project, Barnstable & Yarmouth

Project Location

A handwritten signature in blue ink that reads "Brona Simon".

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Brona Simon, State Archaeologist  
Massachusetts Historical Commission



**The Commonwealth of Massachusetts**  
William Francis Galvin, Secretary of the Commonwealth  
Massachusetts Historical Commission

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PERMIT TO CONDUCT ARCHAEOLOGICAL FIELD INVESTIGATION

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Permit Number 3868 Date of Issue September 28, 2018  
Expiration Date September 28, 2019

PAL is hereby  
authorized to conduct an archaeological field investigation pursuant to  
Section 27C of Chapter 9 of General Laws and according to the regulations  
outlined in 950 CMR 70.00.

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Vineyard Wind Upland Cabling Project, Barnstable & Yarmouth

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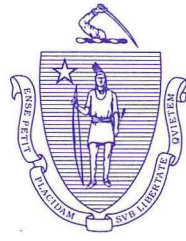
Project Location

*Brona Simon*

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Brona Simon, State Archaeologist  
Massachusetts Historical Commission





**The Commonwealth of Massachusetts**  
William Francis Galvin, Secretary of the Commonwealth  
Massachusetts Historical Commission

March 5, 2020

Deborah C. Cox  
President  
PAL  
26 Main Street  
Pawtucket, RI 02860

Attn: Duncan Ritchie

RE: Vineyard Wind Offshore Wind Energy Project, Massachusetts, BOEM Lease Area OCS-A 0501. MHC #RC.62490.  
**PAL #3384.**

Dear Deborah:

Staff of the Massachusetts Historical Commission (MHC), have reviewed your request to amend State Archaeologist's Permit #3868 to conduct supplemental intensive (locational) archaeological survey for the expanded upland cable substation aspect of the project in Barnstable. The results of the archaeological monitoring are proposed to be submitted as an addendum to the 2018 survey report.

State Archaeologist's Permit #3868 has been amended to expire March 5, 2021 to include the supplemental archaeological testing. I look forward to reviewing the results of the investigation.

These comments are provided to assist in compliance with the Secretary of the Interior's *Standards & Guidelines for Archeology and Historic Preservation* (48 Fed. Reg. 190)(1983)), Massachusetts General Laws, Chapter 9, Section 26-27C (950 CMR 70). If you have any questions, please contact Jonathan K. Patton at this office.

Sincerely,

A handwritten signature in blue ink that reads "Brona Simon".

Brona Simon  
State Historic Preservation Officer  
Executive Director  
State Archaeologist  
Massachusetts Historical Commission