



January 9, 2023

Mr. Rich Saltzberg, DRI Coordinator
Martha's Vineyard Commission
33 New York Avenue
Oak Bluffs, MA 02557

**Subject: Development of Regional Impact Application
New England Wind 2 Connector Cables (CR 12-2023) – Edgartown, MA
Responses to Questions of December 19, 2023**

Dear Mr. Saltzberg:

Thank you for your prompt review of the New England Wind 2 Connector Development of Regional Impact (DRI) application and for the thoughtful questions provided via email on December 19, 2023. Please find below a set of responses to your questions along with attached documents, as requested. MVC questions have been numbered and are provided below for context.

1. Could you please provide an end of use plan or narrative for these cables. That is to say, can you please describe how the cables will be salvaged or abandoned when they reach the end of their useful lives. Also, could you please state when the end of the cables' useful lives is expected? Lastly on this subject, should the cables be abandoned as opposed to salvaged, who will be the responsible party, if any, should the cables be involved in a future navigational or environmental incident? For example, should the cables be abandoned 35 years from now and 40 years from now 2,000 feet of cable rips free in a hurricane and washes ashore on Chappaquiddick, who would be responsible for cleaning it up and where would the funds come from to execute such a cleanup?

The decommissioning plan is described in detail in Section 2.8 of the DEIR submitted for the NE Wind 2 Connector. In brief, as is typical of utility-grade generation and transmission infrastructure, the Project's equipment is expected to have a physical life expectancy of 30 or more years. The offshore cables could be retired in place or removed, subject to discussions with the appropriate regulatory agencies on the preferred approach to minimize environmental impacts. Current Bureau of Energy Management (BOEM) regulations require the removal of decommissioned submarine cables, unless otherwise requested by the cable owner, and subsequently approved by BOEM. Regardless of the specific approach, the Proponent will comply with then-applicable regulations and then-relevant decommissioning procedures. The Proponent will provide financial assurance for the project, including coverage for decommissioning, in accordance with the terms and conditions required by BOEM regulation or otherwise with approval from BOEM. If decommissioning in place is

approved, it is anticipated that the approval will contain conditions relating to ongoing maintenance or inspection obligations and address other contingencies and future liability.

2. Could you please provide cut sheets for the Gabion rock bag, the concrete mattress, the half shell pipe, the cable circuit breakers, and the cables themselves?

Engineering plans for concrete mattresses, rock protection, and gabion rock bags are attached to this document as Attachment 1. These plans are the same as those previously provided in the Chapter 91 License Plans for NE Wind 1 Connector (a very similar project). As described in Section 4.2.3 of the DRI Application, half-shell pipes will not be used for remedial cable protection, but rather would only be used for cable crossings (none of which are currently anticipated) or where cable is temporarily laid on the seafloor. A typical cross-section of the offshore export cable was provided as Figure 1-5 of the DEIR for the NE Wind 2 Connector and is attached to this document as Attachment 2.

Circuit breakers are components of the offshore substation (located within Lease Area 0534) and onshore substation (located in Barnstable). There are no circuit breakers along the offshore export cables within Edgartown waters.

3. Could you please describe the backup relay system and if it is not instantaneous, what delay would occur before it would activate?

As discussed in the Executive Summary of the DRI Application, the offshore export cables will be encased in a grounded metal armor jacket, and each of the three individual conductors will also be grounded through its metallic shielding. The export cables will have multiple levels of fault protection. Should any of the cables ever be compromised or damaged resulting in a fault, the cable relay protection scheme would immediately open circuit breakers on both ends, isolating the cable. Isolating the cable in this fashion immediately cuts off electricity flowing through the cable. The cables are continuously monitored and have both a primary and backup relay protection scheme, which both ensures protection of the equipment and maintains safety. Because the relay system is redundant, in the event the main relay system did not operate, the backup system would instantaneously activate.

4. With the understanding Epsilon Associates prepared the Vineyard Wind 1 export cable Application and the NE Wind 1 export cable Application, could you share how many Gabion rock bags (or similar bags) and concrete mattresses were deployed for each project? Also, do you have a map of these deployments? If so, could you please share that?

Within Edgartown waters, no cable protection has been installed for the Vineyard Wind Connector, although Vineyard Wind is still assessing whether any cable protection will be installed at the cable joint location within Edgartown waters (an assessment that should be completed by the Spring). NE Wind 1 Connector is not yet under construction.

5. Do you have an estimate of how many Gabion rock bags and concrete mattresses you will employ in this project?

As described in Section 4.2.3 of the DRI Application, Project engineers have conservatively estimated that for all three offshore export cable alignments combined, the length of cable protection that may be required within Edgartown waters is approximately 4.5 miles (Scenario 1), 6.5 miles (Scenario 2), or 8.6 miles (Scenario 3).

6. Can you please share copies of your archaeological permit application and permit from MHC?

The archaeological permit application and permit from MHC referenced in Table 1-1 of the DRI application were for onshore intensive archaeological survey activities performed in the Town of Barnstable, and do not pertain to any work in Edgartown.

7. Can you please share copies of your underwater archaeological permit application and permit from MBUAR?

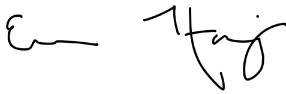
The MBUAR underwater archaeological permit application and permit renewal are attached to this document as Attachment 3.

8. Your Shellfish Suitability Areas map shows blue mussels in the vicinity of Hawes Shoal. Do you know what it is those mollusks fasten themselves to in that area?

Several areas along the Massachusetts coast have been designated by the Division of Marine Fisheries (DMF) for shellfish suitability based on their expertise and that of local shellfish constables. The area of shellfish suitability that has been identified in the vicinity of Hawes Shoal for blue mussels (*Mytilus edulis*) is further defined as suitable spawning and settlement habitat. There is no further information provided by DMF regarding the suitability of substrate for attachment by mature mussels in this area but given the water depths it appears extremely unlikely that any such attachment by blue mussels is taking place within this part of the OECC.

Thank you again for your review and questions. Please do not hesitate to contact us with any additional questions or concerns.

Sincerely,



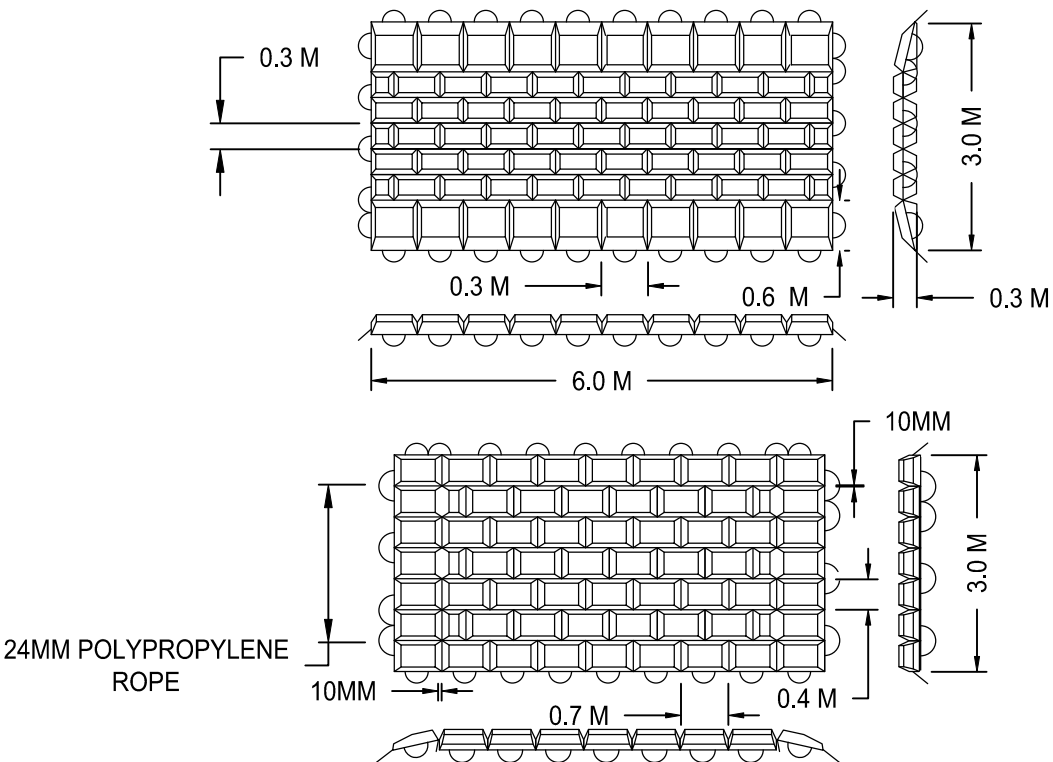
Erin Harizi, Permitting Manager
Commonwealth Wind LLC

Enclosures

Attachment 1. Typical Offshore Export Cable Cross-section
Attachment 2. Cable Protection Plans
Attachment 3. Marine Archaeological Permit Information

Attachment 1

Cable Protection Plans



CONCRETE MATTRESS DETAIL
(NOT TO SCALE)

NOTES:

1. TYPICAL CONCRETE MATTRESSES WILL HAVE A MAXIMUM WIDTH OF 3 METERS (10 FEET).
2. TYPICAL CONCRETE MATTRESSES ARE TO BE DESIGNED SO THAT THE BLOCKS TO THE EDGES OF THE MATTRESS CAN BE CAST WITH A FLAT EDGE AND A GRADED SLOPE TO ENABLE MAN-MADE ITEMS SUCH AS ANCHORS OR FISHING GEAR TO RUN SMOOTHLY OVER THE CONCRETE MATTRESSES.
3. THEIR DEPLOYMENT SUBSEA IS TYPICALLY BY CRANE CONNECTED TO A FRAME WHICH CONNECTS TO THE ARRAY OF POLYPROP RIGGING ROPES, SOMETIMES WITH DIVERS TO CONFIRM THEIR CORRECT POSITIONING.
4. POST INSTALLATION SURVEYING WITH MULTI-BEAM SONAR (OR SIMILAR) CAN ALSO CONFIRM THEIR CORRECT INSTALLATION AND POSITION ABOVE THE SUBSEA CABLES.

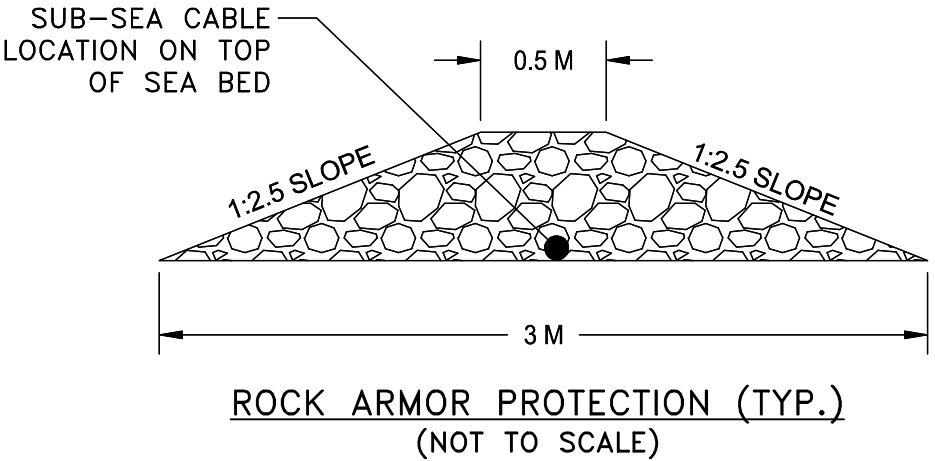
DRAFT

NEW ENGLAND WIND 1
CONNECTOR
CABLE PROTECTION – CONCRETE
MATTRESSES

SCALE: N.T.S.
DATE: JULY 17, 2023
SHEET: 21 OF 31

CERTIFICATION:

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMITY WITH THE RULES AND REGULATIONS OF THE REGISTRY OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.



NOTES:

1. ROCK DUMPING VESSELS ARE LARGE CONVERTED BULK CARRIERS OR PURPOSE BUILT VESSELS WITH LARGE LOADING CAPACITIES AND EQUIPPED WITH FLEXIBLE FALL PIPE SYSTEMS FOR PLACING ROCK SUBSEA WITH A HIGH PRECISION IN WATER DEPTHS RANGING FROM 15 TO 1200 METERS.
2. THE VESSEL IS ANTICIPATED TO BE OPERATED WITH A DYNAMIC POSITIONING SYSTEM (DP) TO ENSURE THE ROCK IS PLACED CORRECTLY OVER THE SUBSEA CABLE.
3. THE ROCK IS TRANSPORTED FROM THE HOLD OF THE VESSEL TO THE START OF THE FALL PIPE ON A CONVEYER BELT SYSTEM WITH THE USE OF ONBOARD EXCAVATORS.
4. AT THE END OF THE FALL PIPE THERE IS A REMOTE OPERATED VEHICLE (FPROV) WHICH CONTROLS THE DIRECTION OF THE ROCK FLOW.
5. ROCK BERMS HAVE A GRADUAL SLOPE ON EITHER SIDE OF THE SUBSEA CABLE TO PREVENT SNAGGING OF ITEMS SUCH AS ANCHORS OR FISHING GEAR. THE SLOPE OF THE BERM MAY VARY. MAXIMUM WIDTH OF BERM SHALL BE 3 METERS (10 FEET).
6. THE MEDIAN SIZE OF MATERIAL USED IN ROCK PROTECTION WILL BE DETERMINED BASED ON LOCAL CONDITIONS (E.G., CURRENTS, WAVE VELOCITIES) WHERE CABLE PROTECTION IS REQUIRED.

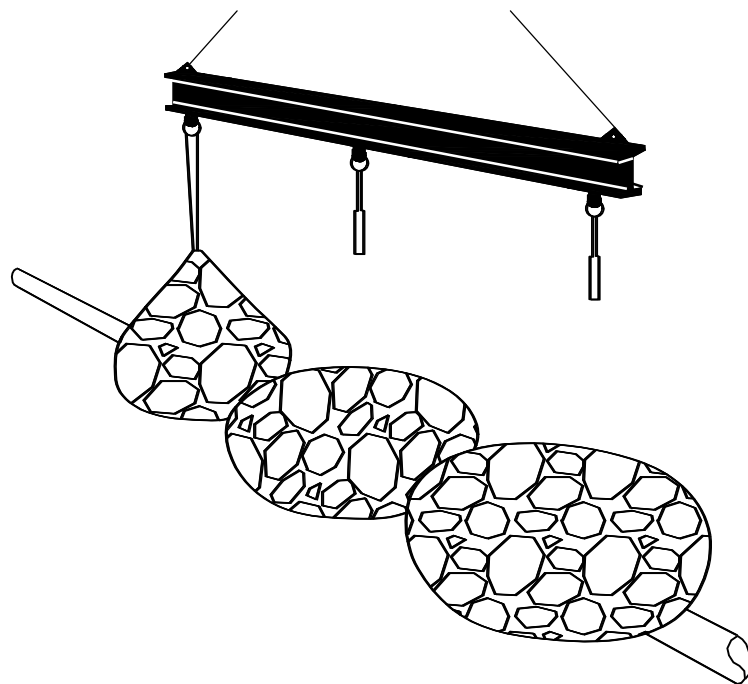
CERTIFICATION:

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMITY WITH THE RULES AND REGULATIONS OF THE REGISTRY OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

DRAFT

NEW ENGLAND WIND 1
CONNECTOR
CABLE PROTECTION – ROCK
PROTECTION

SCALE: N.T.S.
DATE: JULY 17, 2023
SHEET: 22 OF 31



GABION ROCK BAG CABLE PROTECTION (TYP.)
(NOT TO SCALE)

NOTES:

1. THIS METHOD INVOLVES ROCKS ENCASED IN A NET MATERIAL (E.G., A POLYESTER NET) THAT CAN BE ACCURATELY DEPLOYED ON TOP OF THE CABLE AND SUBSEQUENTLY RECOVERED, IF NECESSARY, FOR TEMPORARY OR PERMANENT CABLE PROTECTION. THESE ROCK BAGS HAVE BEEN DEPLOYED IN OTHER HIGH-ENERGY MARINE ENVIRONMENT SUCH AS THE NORTH SEA, AND THE NET MATERIAL USED FOR THE ROCK BAGS IS DESIGNED TO HAVE AN APPROXIMATELY 50-YEAR LIFESPAN.
2. EACH BAG IS EQUIPPED WITH A SINGLE LIFTING POINT TO ENABLE ITS ACCURATE AND EFFICIENT DEPLOYMENT AND RECOVERY.
3. GABION ROCK BAGS TYPICALLY CONTAIN GRAVEL APPROXIMATELY 0.8 INCHES (20MM) IN DIAMETER, SINCE THIS ALLOWS THE BAG TO SOMEWHAT CONFORM TO THE SHAPE OF THE EXPOSED CABLE.
4. IF GABION BAGS ARE UTILIZED, ANY WIDTH CAN BE INSTALLED BY USING MULTI-COMPARTMENT BAGS. HOWEVER, AT THIS TIME THE PROPONENT’S ENGINEERS DO NOT ANTICIPATE NEEDING A WIDTH GREATER THAN 10 FEET (I.E. THE SAME AS THE CONCRETE MATTRESSES).

DRAFT

NEW ENGLAND WIND 1
CONNECTOR
CABLE PROTECTION – GABION
ROCK BAGS

SCALE: N.T.S.
DATE: JULY 17, 2023
SHEET: 23 OF 31

CERTIFICATION:

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMITY WITH THE RULES AND REGULATIONS OF THE REGISTRY OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

Attachment 2

Typical Offshore Cable Cross-section



Design:

- | | | |
|-------------------------------|---------------------|----------------------|
| 1 Conductor (Al or Cu) | 5 Swellable tape | 9 Filler profiles |
| 2 Inner semi-conducting layer | 6 Lead sheath | 10 Bedding (PP) |
| 3 XLPE insulation | 7 PE oversheath | 11 Armouring |
| 4 Outer semi-conducting layer | 8 Fibre optic cable | 12 Outer sheath (PP) |

Attachment 3

Marine Archaeological Permit Information



GRAY & PAPE
HERITAGE MANAGEMENT

Since 1987

60 Valley Street
Suite 103
Providence, RI 02909
401.273.9900

31 October 2023

David S. Robinson
Director and Chief Archaeologist
Massachusetts Board of Underwater Archaeological Resources
100 Cambridge St., Suite 900
Boston, Massachusetts 02114

RE: Special Use Permit 21-006 Renewal Request for the New England Wind Offshore Export Cable Corridor

Dear Mr. Robinson:

Gray & Pape, Inc., (Gray & Pape) has been contracted by Park City Wind, LLC (Park City Wind) to conduct marine archaeological services in support of the New England Wind Offshore Export Cable Corridor (OECC). In order to support this project, Gray & Pape is requesting renewal of Special Use Permit (SUP) 21-006; the permit was formally awarded on December 22, 2021 and granted an extension on December 1, 2022 with formal renewal approved in March 2023. Based on the extension date, the updated permit expiration is December 1, 2023.

The enclosed renewal package includes an updated SUP application form, current project area map (Attachment I), annual report and scope of work (Attachment II), personnel flow chart (Attachment III), and updated CVs of the project team (Attachment VI). The Annual Report and Scope of Work (Attachment II), includes a summary of project survey activities over the most recent permit renewal period, and a forecast of activities anticipated in the next twelve months.

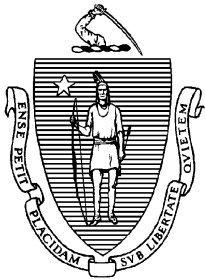
Please do not hesitate to contact me at your convenience with any questions or comments about this permit renewal application package.

Sincerely,

Amanda M. Evans, PhD., RPA
Qualified Marine Archaeologist
GRAY & PAPE

Encl:

Christina Hoffman, Avangrid Renewables (via email w/encl.)
Jeff Gardner, Geo SubSea, LLC., (via email w/encl.)
Maria Hartnett, Epsilon Associates, Inc., (via email w/encl.)



THE COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
251 Causeway Street, Suite 800, Boston, MA 02114

SPECIAL USE PERMIT APPLICATION

In accordance with 312 CMR 2, rules and regulations established by the Board of Underwater Archaeological Resources under MGL C. 91, s. 63, as amended, the undersigned herewith makes application for a permit to conduct archaeological research activities to identify and/or examine underwater archaeological resources located within the inland and coastal waters of the Commonwealth.

PLEASE TYPE OR PRINT LEGIBLY

NAME(S): _____

ORGANIZATION: _____

(Applicant must be a qualified archaeologist or archaeological organization meeting the minimum qualifications under 312 CMR 2.09(4)(d); if multiple applicants, provide information for all parties and each must sign. If a corporation, include a copy of the certificate of incorporation with this application, and write both corporate name and contact information.)

ADDRESS: _____

TELEPHONE NUMBER: _____ **FAX NUMBER:** _____

EMAIL ADDRESS: _____

PROJECT NAME: _____

LOCATION OF PROPOSED ACTIVITY

Nearest City or Town: _____ Longitude and Latitude of Proposed Project Area

Name of Water Body: _____ (Project area of potential effect):

Depth of Water: _____ NE _____ NW _____

Total Acreage of the Project Area: _____ SE _____ SW _____

Description of Proposed Permit Area (narrative): _____

Please attach a copy of the section of the NOAA nautical chart(s) or USGS topographic map(s).

(Clearly indicate the exact location of and the extent of the requested permit area on attached NOAA nautical chart or USGS topographic Map, specifying marker buoys, longitude and latitude, loran bearings and/or any other identifying features which define the requested Permit area. Use the space provided or attach additional sheets if necessary to complete this section.)

PROJECT PROPONENT (if not applicant)

CONTACT NAME/ORGANIZATION: _____

ADDRESS: _____

TELEPHONE NUMBER: _____ **FAX NUMBER:** _____

EMAIL ADDRESS: _____

PROJECT DESCRIPTION WHICH INCLUDES THE PURPOSE AND GOALS (attach additional sheets as needed):

14a, 14b, 15, 16, 17, 21, and 22. The purpose of this study is to answer four research questions as outlined in the attached information. The locations of these cores, their reason for selection, and their proposed subsampling is attached.

DESCRIPTION OF ANY KNOWN UNDERWATER ARCHAEOLOGICAL RESOURCE IN THE PROJECT AREA

PLEASE INDICATE THE TYPE OF INVESTIGATION BEING UNDERTAKEN FOR THIS PROJECT (check one):☒ Reconnaissance Survey☒ Site Examination☒ Intensive Survey☐ Data Recovery

PLEASE ATTACH A COPY OF YOUR RESEARCH DESIGN AND DESCRIBE IN AS MUCH DETAIL AS POSSIBLE WHAT YOU PLAN TO DO, INCLUDING DOCUMENTARY RESEARCH, REMOTE SENSING, ON-SITE ACTIVITIES, INCLUDING TESTING, EXCAVATION, RESOURCES RECOVERY, CONSERVATION AND CURATION, ETC. (attach additional sheets as needed): _____

(This work plan should include, but not limited to, a description of: 1.) the plans to document activities and finds; 2. the inventory and catalogue which shall be maintained for all recovered artifacts; 3.) the artifact conservation program; and 4. the artifact repository)

WHAT IS YOUR PROPOSED WORK SCHEDULE (attach additional sheets as needed)?

PROFESSIONAL QUALIFICATIONS OF APPLICANT: (1) ON A SEPARATE SHEET, PROVIDE A PERSONNEL OR ORGANIZATION CHART INDICATING THE NAMES, DUTIES AND RESPONSIBILITIES OF KEY PERSONNEL; (2) INCLUDE COPIES OF THE CURRICULA VITAE FOR THE PROJECT DIRECTOR/PRINCIPAL INVESTIGATOR, PROJECT ARCHAEOLOGIST, AND OTHER KEY STAFF AS NECESSARY.

WHAT ARE YOUR PUBLIC BENEFIT PLANS, SUCH AS PUBLIC DISPLAYS, PUBLIC PRESENTATIONS, AND/OR PUBLICATION OF THE RESULTS OF YOUR WORK (Attach additional sheets as needed)? _____

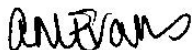
YOU MAY INCLUDE ANY OTHER INFORMATION YOU BELIEVE MAY ASSIST THE BOARD IN ASSESSING YOUR APPLICATION (Attach additional sheets as needed) _____

The undersigned understands and acknowledges that all underwater archaeological resources recovered under a special use permit remain the property of the Commonwealth of Massachusetts.

The undersigned understands and acknowledges that this permit does not authorize the excavation of human remains.

The undersigned understands and acknowledges that the Board may deny this permit application or revoke a permit granted whenever the Board determines that there is substantial fraud, deceit, corruption, or misrepresentation in the information or filing of this permit application.

I have read and agree to carry out the underwater archaeological investigations to the standards outlined in 312 CMR 2.



(Signature of Principal Investigator/Project Director)



(Signature of Project Archaeologist)

(Date)

(Type or Print Name)

(Type or Print Name)

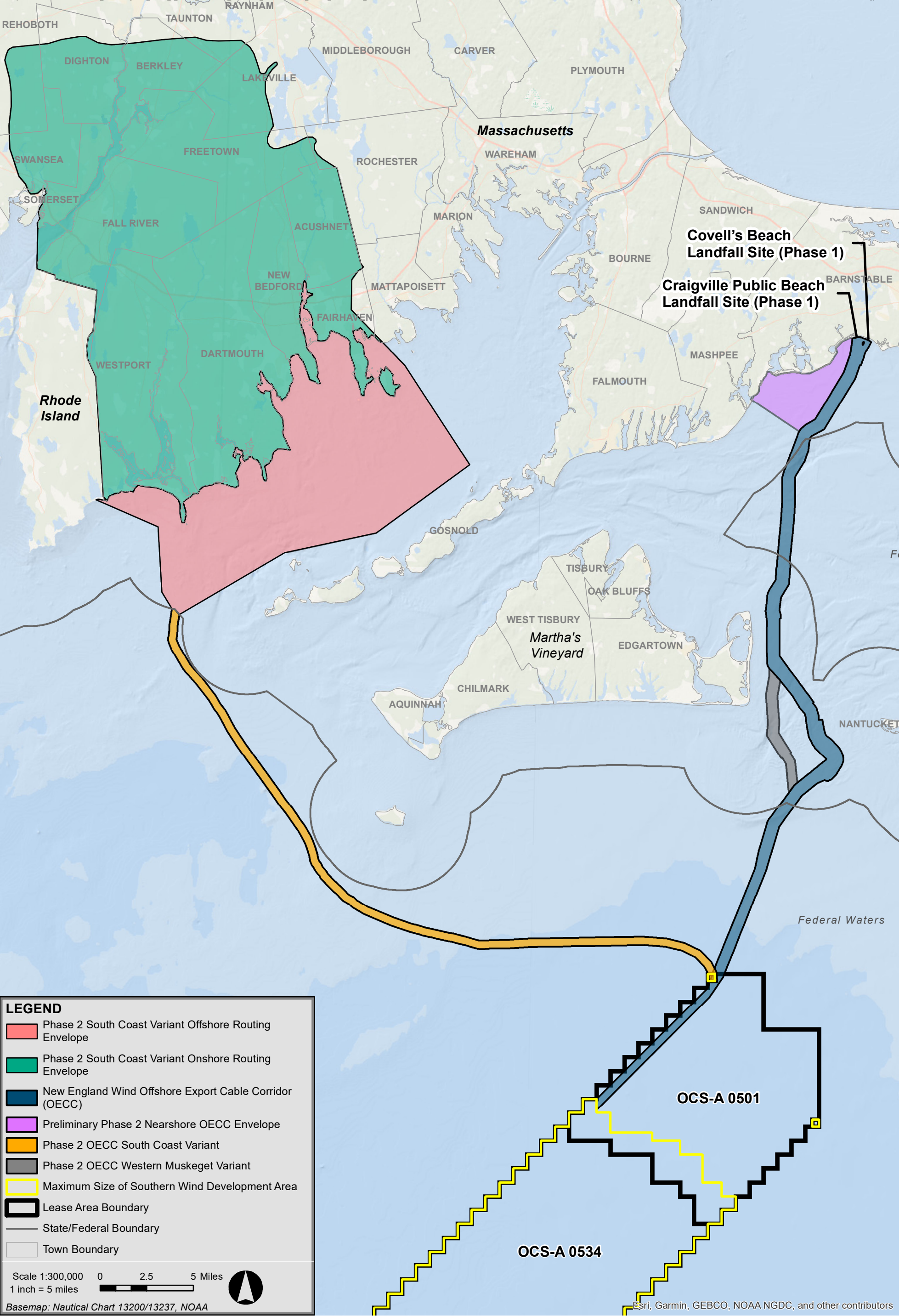
(Date)

FOR OFFICIAL USE ONLY (DO NOT COMPLETE THIS SECTION)

Date and Time Received:

By:

Attachment 1



Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

This product is for informational purposes and may not be suitable for legal, engineering, or surveying purposes.



The image shows a map of two lease areas, OCS-A 0501 and OCS-A 0534, overlaid on a light blue background representing the ocean. The lease areas are filled with a grid of small black dots, representing wind turbine footprints. The yellow area (OCS-A 0534) is larger and more irregularly shaped, while the blue area (OCS-A 0501) is smaller and more rectangular. A dashed yellow line separates the two areas. Text labels for each area are centered within their respective grids. To the right of the areas, text labels for wind projects are written diagonally.

Lease Area
OCS-A 0501

Lease Area
OCS-A 0534

New England Wind
(Phase 1—Park City Wind & Phase
2—Commonwealth Wind)

Vineyard Wind 1
(already permitted)

WDA

	Long	Lat
SW Corner	70°51'4.734"W	40°50'33.88"N
SE Corner	70°43'11.816"W	40°44'47.859"N
NE Corner	70°22'8.564"W	41°1'20.477"N
NW corner	70°29'13.434"W	41°8'18.885"N

OECC

From offshore to onshore. Points mark bends in corridor

	Long	Lat
End point, WDA	70°36'58.75"W	41°1'36.236"N
	70°36'23.999"W	41°1'12.637"N
	70°29'20.562"W	41°7'34.242"N
	70°28'47.089"W	41°7'10.616"N
	70°25'40.151"W	41°15'29.733"N
	70°24'57.922"W	41°15'13.456"N
	70°24'5.691"W	41°17'10.877"N
	70°22'41.42"W	41°17'15.881"N
	70°22'44.144"W	41°17'56.728"N
	70°21'58.745"W	41°17'24.526"N
	70°22'5.387"W	41°18'26.472"N
	70°21'3.505"W	41°18'27.144"N
	70°22'57.572"W	41°19'4.571"N
	70°22'8.956"W	41°19'32.274"N
	70°23'30.448"W	41°20'31.719"N
	70°22'56.744"W	41°21'6.377"N
	70°25'50.974"W	41°22'43.632"N
	70°25'7.053"W	41°23'12.048"N
	70°25'56.275"W	41°26'2.277"N
	70°25'3.862"W	41°25'55.948"N
	70°25'26.284"W	41°26'45.082"N
	70°24'34.799"W	41°26'34.223"N
	70°25'7.214"W	41°31'33.562"N
	70°23'45.38"W	41°32'19.103"N
	70°24'4.138"W	41°33'47.082"N
	70°23'25.255"W	41°33'25.645"N
	70°23'9.277"W	41°34'16.353"N
	70°22'34.827"W	41°33'48.152"N
	70°21'24.188"W	41°36'31.38"N
	70°20'39.694"W	41°36'9.223"N
Landing	70°20'55.32"W	41°38'4.395"N
	70°19'43.794"W	41°37'55.564"N

OECC Southern Variant

From offshore to onshore. Points mark bends in corridor

	Long	Lat
End point, WDA	70°29'12.933"W	41°7'59.952"N
	70°28'46.507"W	41°8'18.249"N
	70°31'55.451"W	41°9'37.644"N
	70°33'18.163"W	41°9'54.767"N

	70°43'24.739"W	41°9'23.074"N
	70°42'38.251"W	41°9'36.101"N
	70°51'39.05"W	41°11'21.392"N
	70°51'26.009"W	41°11'37.153"N
	70°53'32.512"W	41°12'56.062"N
	70°53'6.404"W	41°13'1.852"N
	71°2'59.96"W	41°23'11.018"N
	71°2'8.927"W	41°23'18.359"N
	71°2'53.941"W	41°24'54.074"N
	71°2'50.533"W	41°24'58.156"N
re end in Federal	71°1'55.832"W	41°24'58.268"N

Attachment 2

AVANGRID RENEWABLES 534 PROJECT- NEW ENGLAND WIND OFFSHORE EXPORT CABLE CORRIDOR

EXISTING MBUAR PERMIT - SUP 21-006**ANNUAL REPORT SUMMARY OF PREVIOUS YEAR'S EFFORT**

DECEMBER 2022 to NOVEMBER 2023

Activities during the current year were limited to revision and resubmission of the draft Marine Archaeological Resources Assessment reports that were based on survey work for the OCS-A 0534 (534) lease New England Wind Nantucket Sound Offshore Export Cable Corridor (OECC) completed under MBUAR permit SUP 17-003 Lease OCS-A 0501. The legal subdivision of the lease area and renumbering required by the federal government required separate MBUAR permits as the leases are under different ownership. Lease 534 contains the Park City Wind and Commonwealth Wind Projects, and the lease is now referred to as New England Wind. Survey activities took place over five seasons from 2016 to 2020, with the 2020 survey season extending into February of 2021.

No new data were collected during the previous permit year, and no new analyses were conducted. All survey results have been reported in previous year's renewal applications.

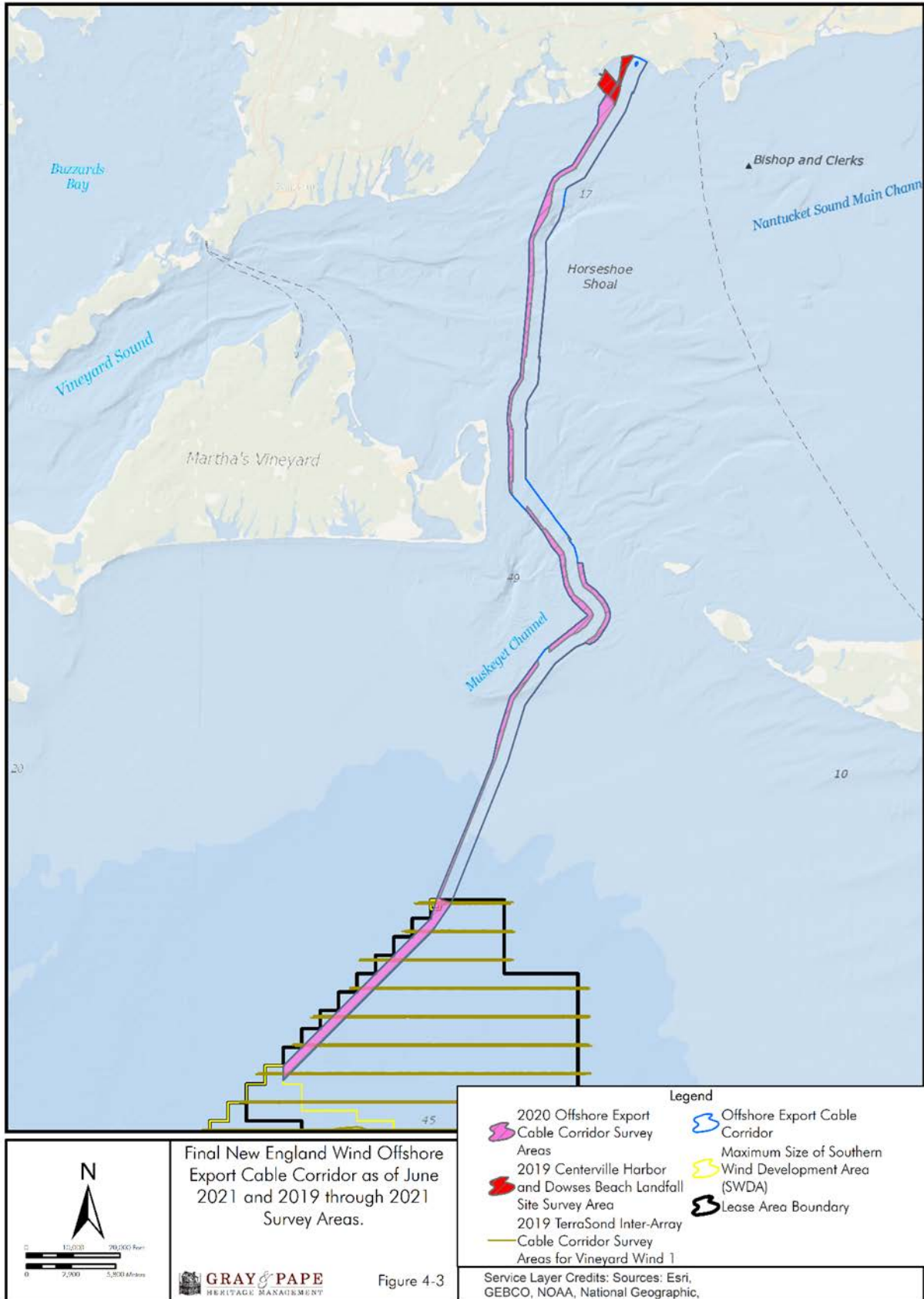
FORECAST OF FIELD PROGRAMS FOR NEXT YEAR'S EFFORT

DECEMBER 2023 TO NOVEMBER 2024

Pre-construction planning is expected to continue for the New England Wind Project in late 2023 and in 2024.

Tasks continuing through 2024:

- No new archaeological survey is anticipated in 2024.
 - Activities in 2024 may include data review and additional technical reporting in support of unanticipated discoveries, if encountered.
- A state waters MARA has been drafted and is pending agency comment.
 - Any revisions will be addressed in 2024 and submitted as a final draft.
- A Historic Properties Treatment Plan is in development and will be submitted to consulting parties and related agencies for review and comment.



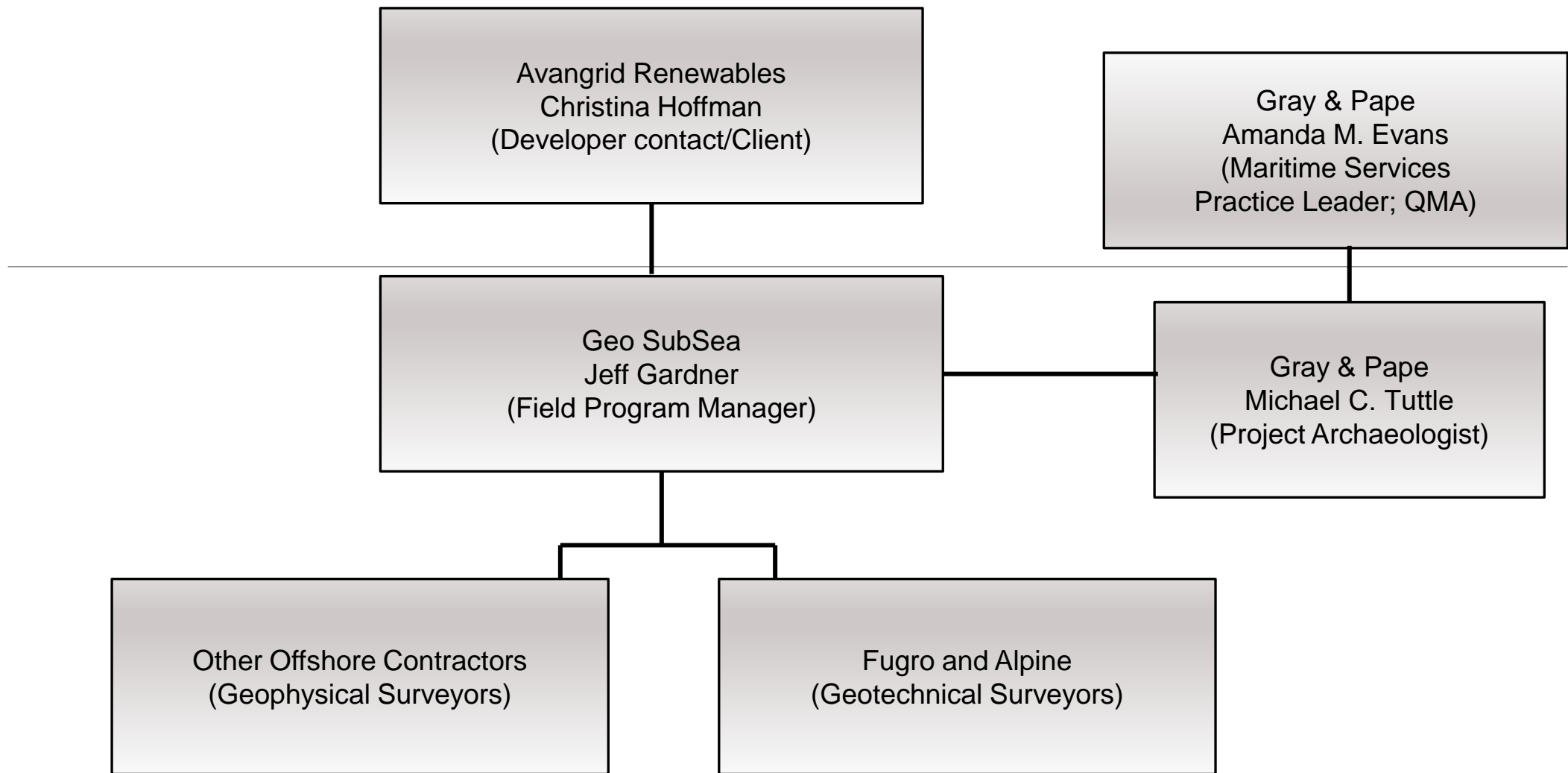
Final New England Wind Offshore Export Cable Corridor as of June 2021 and 2019 through 2021 Survey Areas.

GRAY & PAPE
HERITAGE MANAGEMENT

Figure 4-3

Service Layer Credits: Sources: Esri, GEBCO, NOAA, National Geographic,

Attachment 3



Attachment 4



Amanda M. Evans, Ph.D., RPA

Maritime Services Practice Leader

EDUCATION

2013, Ph.D., Geography with Anthropology concentration and Geology minor, Louisiana State University

2005, M.A., Anthropology with History minor, Florida State University

1998, B.A., Anthropology with History minor, Indiana University

SUMMARY OF EXPERIENCE

Dr. Evans has more than 20 years of experience in submerged cultural resources management, including fifteen years in supervisory positions. This experience includes successful completion and documentation of all phases of archaeological projects in the Southeast, Midwest, Great Lakes, and Gulf coast regions of the United States, as well as the Bahamas, Belize, Dominican Republic, Cayman Islands, and Mediterranean. Dr. Evans has extensive experience with Section 106 of the National Historic Preservation Act (NHPA) (36 CFR § 800) and the National Environmental Policy Act (NEPA) and has conducted archaeological work in support of Section 110 (NHPA). She has completed projects submitted to the Bureau of Ocean Energy Management (BOEM), the United States Army Corps of Engineers (USACE), and various state agencies.

Dr. Evans has significant experience designing best practice survey plans in compliance with regulations and policies, executing complex and interconnected operations and investigations, coordinating archaeological investigations with shallow hazards and unexploded ordnance (UXO), coordinating with internal and external project team members, managing multiple projects with overlapping deadlines, and identifying and evaluating submerged cultural resources according to NHPA and National Register eligibility criteria. Dr. Evans' specialties include underwater archaeology, with a concentration in submerged paleolandscapes and marine geophysics; shipwreck archaeology; physical site formation processes; and historic preservation and best practices regarding underwater cultural heritage. Dr. Evans' maritime experience includes geophysical remote sensing data acquisition, processing, and interpretation, working with remotely operated vehicles (ROV) and autonomous underwater vehicles (AUV), and conducting diver investigations. She has conducted and directed paleolandscape research in the Gulf of Mexico and has investigated shipwrecks such as an eighteenth-century British naval sloop, nineteenth-century schooners, USS *Hatteras*, WWII casualties, and twentieth-century dredge barges, tugboats, and fishing vessels.

CERTIFICATIONS AND TRAINING

- Register of Professional Archaeologists, No. 15922
- American Academy of Underwater Sciences (AAUS) Scientific Diver (60ft rating; valid through 08/2020)
- Transportation Worker Identification Credential (TWIC; valid through 02/2025)



- Offshore Water Survival (OWS)
- METS Helicopter Underwater Egress Training (HUET)
- SafeGulf Certification
- RigPass Certification
- NAUI Master Diver Certification
- YMCA Nitrox Certification
- PADI Rescue Diver Certification
- PADI Advanced Certification
- PADI Open Water Diver Certification
- Building Partnerships with Tribal Governments (IS-00650.a); FEMA (Jan. 20, 2017; 1 CEU)
- Introduction to Environmental and Historic Preservation Compliance (LO253); FEMA (Nov. 14-16, 2016; Baton Rouge, LA)
- Edgetech Operational and Maintenance Training Course for Side Scan Sonar and Sub-Bottom Systems, 3 days, 2014
- Society for Underwater Technology, Introduction to Integrated Marine Site Characterization, 3 days, 2013
- QPS QINSy and Qloud Multibeam Bathymetry Processing Training, 2010
- Prospection in Depth Geophysical Training Course, National Center for Preservation Technology and Training, National Park Service, 5 days, 2009
- CODA GeoKit and GeoKit on Mosaic Certification, 3 days, 2007
- Archaeological Resources Protection Training Program (Federal Law Enforcement Training Center, Dept. of Homeland Security), 5 days, 2004

SELECT PROJECT EXPERIENCE

- **Lake Pontchartrain Marine Archaeological Survey - Data Analysis:** St. Tammany Parish, LA; for Morris P. Hebert, Inc./Coastal Protection and Restoration Authority. Conducted geophysical data interpretation and prepared report as required for compliance with Section 106 (NHPA). Remote Sensing Specialist, Marine Archaeologist (2020).
- **I-35 Red River Marine Archaeological Survey, Cooke County, TX and Love County, OK;** for Texas Department of Transportation. Directed project planning, equipment mobilization, and conducted geophysical data interpretation and analysis from bridge construction APE crossing the Red River. Authored chapters and directed completion of additional report elements for submission of draft report. Remote Sensing Specialist, Marine Archaeologist, Principal Investigator (2019-2020).
- **Alabama Connecting Coastal Waters - Desktop Assessments, Baldwin County, Alabama;** for Moffatt & Nichol. Prepared desktop assessments and coordinated with AL SHPO to determine cultural resources survey needs for proposed restoration projects in Baldwin County. Marine Archaeologist/Principal Investigator (2019-2020).
- **Proposed Pipeline Corridor Survey - Data Analysis:** Plaquemines Parish, LA; for Fugro USA. Conducted geophysical data interpretation of a proposed pipeline corridor extending from the



shoreline to the state/federal boundary and prepared report as required for compliance with Section 106 (NHPA). Remote Sensing Specialist, Marine Archaeologist (2019).

- **Alliance Hydrogen Pipeline - Data Analysis, St. Charles Parish, LA;** for Morris P. Hebert, Inc. Conducted geophysical data interpretation from a proposed pipeline corridor and prepared report of findings. Remote Sensing Specialist, Marine Archaeologist (2019).
- **Living Shorelines and Reefs in Mississippi Estuaries Project, Deer Island, Bangs Bayou, Graveline, and Big Island Components - Submerged Cultural Resources Survey, Harrison and Jackson Counties, MS;** for Covington Civil and Environmental, L.L.C./Department of the Interior. Conducted remote-sensing data interpretation from four separate subtidal reef, intertidal reef, and living shoreline project areas and prepared four separate reports of findings. Principal Investigator, Remote-Sensing Specialist, Marine Archaeologist (2019).
- **Living Shorelines and Reefs in Mississippi Estuaries Project, Wolf River Component - Submerged Cultural Resources Survey, Harrison County, MS;** for Covington Civil and Environmental, L.L.C./Department of the Interior. Conducted marine geophysical remote-sensing data acquisition and interpretation of data from offshore restoration project area and prepared report of findings. Principal Investigator, Remote Sensing Specialist, Marine Archaeologist (2019).
- **East Leeville Marsh Creation - Data Analysis, Lafourche Parish, LA;** for Morris P. Hebert, Inc./Coastal Protection and Restoration Authority. Conducted geophysical data interpretation of data from offshore borrow areas to be used to provide fill for marsh creation and restoration project and prepared report of findings. The project was amended to include analysis of additional acreage. Remote Sensing Specialist, Marine Archaeologist (2018).
- **Portland Bight Jamaica Background, Portland Bight, Jamaica;** for Echo Offshore, LLC. Prepared geologic background report for Portland Bight area as part of proposed offshore pipeline route survey. Marine Geoarchaeologist (2018).
- **Geophysical Interpretation:** various locations; for Echo Offshore, LLC. Conduct geophysical data interpretation and prepare written assessments of AUV and towed survey data for Phase I BOEM-compliant reports that are required for Section 106 compliance and NEPA permitting. Remote Sensing Specialist, Marine Archaeologist (2018-2020).
- **Lake Salvador Magnetometer Survey, St. Charles Parish, LA;** for MREC Environmental. Provided field support for bathymetry and magnetometer survey over proposed oil drilling rig route to assess potential for underwater cultural resources. Processed and interpreted the magnetometer data. Remote Sensing Specialist (2018).
- **Lake Erie, Ashtabula Co. Cultural Resources Survey:** Ashtabula Co., Ohio; for Ohio State Historic Preservation Office. Phase I and II cultural resources survey and diver investigation within county waters to assess shipwrecks and paleolandscapes, assess anomalies via diving, coring, probing, and write report of findings. Marine Archaeologist/Principal Investigator (2017- 2020).
- **TNC Lightning Point Cultural Resources Survey, Mobile Co., AL;** for Moffatt and Nichol / The Nature Conservancy of Alabama. Conduct background research and consult with Alabama SHPO regarding required survey areas. Conduct cultural resources surveys of shoreline, marsh channel to be cut and offshore access channel and marsh creation cells at Lightning Point, Bayou La Batre,



AL and prepare report of findings. Principal Investigator, Remote Sensing Specialist, Marine Archaeologist (2017-2018).

- **AUV Archaeological Survey for DOF Subsea.** Phase I cultural resources survey of a development field, offshore Mediterranean. Processed and interpreted remote sensing data; wrote final report. Remote Sensing Specialist, Marine Archaeologist (2016).
- **AUV Archaeological Survey for Houston Energy, L.P.** Phase I cultural resources survey of a federal lease block, offshore Louisiana. Processed and interpreted remote sensing data; wrote final report and individual site assessments. Remote Sensing Specialist, Marine Archaeologist (2015-2016).
- **Archaeological Assessment, Geophysical Survey, and Anomaly Investigation for McMoRan Oil & Gas, LLC.** Planned Phase II survey design, coordinated with regulatory authority, processed and interpreted remote sensing data, assessed targets for possible NRHP eligibility, and wrote final report. Remote Sensing Specialist, Sr. Marine Archaeologist (2015).
- **Archaeological and Shallow Hazard Geophysical Survey, Main Pass Area.** Phase I cultural resources survey of a federal lease block, offshore Louisiana. Processed and interpreted remote sensing data, and wrote final report and individual site assessments. Remote Sensing Specialist, Sr. Marine Archaeologist (2015).
- **Archaeological and Shallow Hazard Pipeline Route Survey, Main Pass Area.** Phase I cultural resources survey of a proposed pipeline corridor, offshore Louisiana. Processed and interpreted remote sensing data, and wrote final report and individual site assessments. Remote Sensing Specialist, Sr. Marine Archaeologist (2015).
- **Archaeological and Shallow Hazard Geophysical Survey, West Delta Area.** Phase I cultural resources survey of a federal lease block, offshore Louisiana. Processed and interpreted remote sensing data, and wrote final report and individual site assessments. Remote Sensing Specialist, Sr. Marine Archaeologist (2015).
- **AUV Archaeological Survey for LLOG Exploration Offshore, LLC.** Phase I cultural resources survey of an offshore federal lease block. Processed and interpreted remote sensing data, and wrote final report and individual site assessments. Remote Sensing Specialist, Sr. Marine Archaeologist (2015).
- **Examining and Testing Potential Prehistoric Archaeological Features on the Gulf of Mexico, Outer Continental Shelf, Bureau of Ocean Energy Management:** Designed and conducted remote sensing, coring, lab analyses, and paleolandscape reconstruction offshore Louisiana and Texas. The project supported BOEM's Section 110 (NHPA) responsibilities. Remote Sensing Specialist, Sr. Marine Archaeologist (2007-2014).
- **Archaeological and Shallow Hazard Geophysical Survey, Main Pass Area.** Phase I cultural resources survey of a federal lease block, offshore Louisiana. Processed and interpreted remote sensing data, and wrote final report and individual site assessments. Remote Sensing Specialist, Sr. Marine Archaeologist (2014).
- **Archaeological Analysis of Submerged Sites on the Gulf of Mexico Outer Continental Shelf, Bureau of Ocean Energy Management:** Designed and directed geophysical survey and diver investigation of sites offshore Louisiana and Texas, recommended NRHP eligibility, and lead author for final technical report and NRHP nominations. The project was awarded to support



BOEM's Section 110 (NHPA) responsibilities. Principal Investigator, Remote Sensing Specialist, Marine Archaeologist (2009-2013).

- **Archaeological and Shallow Hazard Geophysical Survey, Main Pass Area.** Phase I cultural resources survey of a federal lease block, offshore Louisiana. Processed and interpreted remote sensing data, and wrote final report and individual site assessments. Remote Sensing Specialist, Sr. Marine Archaeologist (2012).
- **ROV Archaeological Survey for ENI Petroleum Exploration Offshore, Co, Inc.** Phase II cultural resources investigation of reported sonar targets in an offshore federal lease block. Designed and directed field operations, interpreted remote sensing data, developed NRHP eligibility recommendation, and wrote final report. Remote Sensing Specialist, Sr. Marine Archaeologist (2012).
- **Subbottom Survey, Lake Borgne, Louisiana,** subcontract to Coastal Environments, Inc. Designed and conducted remote sensing survey, processed and interpreted data, and prepared a written assessment, maps, and data samples. Remote Sensing Specialist, Sr. Marine Archaeologist (2011).
- **ROV Archaeological Survey for ENI US Operating Company, Inc.** Phase II cultural resources investigation of reported sonar targets in an offshore federal lease block. Designed and directed field operations, interpreted remote sensing data, developed NRHP eligibility recommendation, and wrote final report. Sr. Marine Archaeologist (2011).
- **ROV Archaeological Survey for ENI US Operating Company, Inc.** Mitigation 3.20 Compliant Phase I cultural resources investigation of a site-specific grid in an offshore federal lease block. Designed and directed field operations, interpreted remote sensing data, and wrote final report. Sr. Marine Archaeologist (2011).
- **ROV Archaeological Survey for ENI US Operating Company, Inc.** Mitigation 3.20 Compliant Phase I cultural resources investigation of a site-specific grid in an offshore federal lease block. Designed and directed field operations, interpreted remote sensing data, and wrote final report. Sr. Marine Archaeologist (2011).

SELECT PUBLICATIONS

- Evans, A.M. and S. Smith. 2016. Vernacular Watercraft: In Concept and In Practice. In: *The Archaeology of Vernacular Watercraft*, A.M. Evans (ed.), pp. 1-8. Springer Publishing, New York, NY.
- Evans, A.M. 2016. Improvise, Adapt, Overcome: Vernacular Boats as Environmental Adaptations. In: *The Archaeology of Vernacular Watercraft*, A.M. Evans (ed.), pp. 9-18. Springer Publishing, New York, NY.
- Evans, A.M and A.J. Firth. 2016. Anthropogenic Impacts of Development-led Archaeology in an Offshore Context. In: *Site Formation Processes of Submerged Shipwrecks*, M.E. Keith (ed.), pp. 133-156. University Press of Florida, Gainesville, FL.
- Keith, M.E. and A.M. Evans. 2016. Sediment and Site Formation in the Marine Environment. In: *Site Formation Processes of Submerged Shipwrecks*, M.E. Keith (ed.), pp. 44-69. University Press of Florida, Gainesville, FL.



- Flatman, J.C. and A.M. Evans. 2014. Prehistoric Archaeology on the Continental Shelf: The State of the Science in 2013. In: *Prehistoric Archaeology on the Continental Shelf: A Global Review*, A.M. Evans, J.C. Flatman, and N.C. Flemming, (eds.), pp. 1-12, Springer Publishing, New York, NY.
- Evans, A.M. 2014. No Visibility, No Artifacts, No Problem? Challenges Associated with Presenting Buried Sites and Inaccessible Shipwrecks to the Public. In: *Between the Devil and the Deep: Meeting Challenges in the Public Interpretation of Maritime Cultural Heritage*, D. Scott-Ireton (ed.), pp. 131-140, Springer Publishing, New York, NY.
- Keith, M.E. and A.M. Evans. 2014. Marine Archaeology and Environmental Studies in the Offshore Oil and Gas Industry: "Technological Issues Related to the Identification of Submerged Prehistoric Sites". Proceedings of the Offshore Technology Conference, 25281-MS, Houston, TX.
- Evans, A.M. 2013. Submerged Indigenous Sites. In: *Encyclopedia of Global Archaeology*, C. Smith (ed.), Springer Publishing, New York, NY, (substantive entry).
- Warny, S., D.M. Jarzen, A. Evans, P. Hesp, and P. Bart. 2012. Environmental Significance of Abundant and Diverse Hornwort Spores in a Potential Submerged Paleoindian Site in the Gulf of Mexico. *Palynology* 36(2):234-253
- Evans, A.M. and M.E. Keith. 2011. Benefit Analysis of a Maritime Cultural Landscape Approach to Submerged Prehistoric Resources, Northwestern Gulf of Mexico. In: *The Archaeology of Maritime Landscapes*, B. Ford (ed.), pp. 169-178, Springer Publishing, New York, NY.
- Keith, M.E. and A.M. Evans. 2011. Modeling Maritime Culture; Galveston, Texas in the Historic Period. In: *The Archaeology of Maritime Landscapes*, B. Ford (ed.), pp. 179-194, Springer Publishing, New York, NY.
- Evans, A.M. and E.E. Voisin. 2011. Geophysics, Industry, and Shipwrecks on the Gulf of Mexico OCS. Proceedings of the Offshore Technology Conference, 21697, Houston, TX.
- Evans, A.M., M.A., Russell, and M.E. Leshikar-Denton. 2010. Local Resources, Global Heritage: An Introduction to the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage. *Journal of Maritime Archaeology* 5(2):79-83
- Evans, A.M., A. Firth, and M. Staniforth. 2009. Old and New Threats to Submerged Cultural Landscapes: Fishing, Farming, and Energy Development. *Conservation and Management of Archaeological Sites*, 11(1):43-53
- Keith, M.E. and A.M. Evans. 2009. Shipwreck Subsidence; Applying Geotechnical Concepts in Archaeology. In: *ACUA 2009 Underwater Archaeology Proceedings*, E. Laanela and J. Moore (eds.), pp. 59-70
- Evans, A.M. 2007. Defining Jamaica Sloops: A Preliminary Model for Identifying an Abstract Concept. *Journal of Maritime Archaeology* 2(2):83-92

AWARDS AND COMPETITIVE FUNDING

- 2018 Paleolandscapes and the Shoreline at ca. 8,000 BP, Gulf of Mexico, Outer Continental Shelf; National Oceanic and Atmospheric Administration, Ocean Exploration Research FY2018; PI: Amanda Evans; Award: \$596,424
- 2015 Presidential Service Award, Register of Professional Archaeologists
- 2011 Partners in Conservation Award, United States Department of the Interior



- 2009 Archaeological Analysis of Submerged Sites on the Gulf of Mexico Outer Continental Shelf; Bureau of Ocean Energy Management, Award No. M09PC00048
PI: Amanda Evans; Award: \$313,473.57
- 2008 Cecelia Connelly Memorial Scholarship in Underwater Archaeology, Women Divers Hall of Fame
- 2007 From Geophysical Targets to Verified Resources: Examining and Testing Potential Prehistoric Archaeological Features on the Gulf of Mexico, OCS; Minerals Management Service Cooperative Agreement Award MO7AC13373.
PI: Dr. Patrick Hesp
Co-PIs: Amanda Evans, Dr. Graziela Miot da Silva, and Dr. Barry Keim
Award (including match): \$367,095 (\$718,833)
- 2007 Ed and Judy Jelks Student Travel Grant, Society for Historical Archaeology

ELECTED AND APPOINTED OFFICES

- 2020 – Present; Emeritus Member, Advisory Council on Underwater Archaeology (ACUA)
- 2019 – Present; Vice President, Louisiana Archaeological Society (LAS)
- 2013 – Present; Chair, UNESCO Presidential Committee, Society for Historical Archaeology
- 2016 – 2019; Individual Associate Member, Advisory Council on Underwater Archaeology (ACUA)
- 2015 – 2019; Full Member, Society for Underwater Technology - Houston Branch Offshore Site Investigation and Geotechnics Committee (SUT-OSIG)
- 2014 – 2017; Board of Directors, Society for Historical Archaeology (SHA)
- 2012 – 2015; Board of Directors, Advisory Council on Underwater Archaeology (ACUA); elected Secretary 2012 - 2013
- 2012 – 2015; Board of Directors, Register of Professional Archaeologists (RPA)
- 2010 – Present; SHA Government Affairs Committee Member
- 2009 – 2011; Board of Directors, Register of Professional Archaeologists (RPA)
- 2008 – 2011; Board of Directors, Advisory Council on Underwater Archaeology (ACUA); elected Secretary 2008-2011
- 2005 – 2007; Graduate Student Associate Member, Advisory Council on Underwater Archaeology (ACUA; served two consecutive terms)
- 2004 – 2012; Secretary, UNESCO Presidential Committee, Society for Historical Archaeology
- 2003 – 2004; Faculty-Student Liaison, Department of Anthropology, Florida State University



MICHAEL C. TUTTLE, PHD, RPA

Principal Investigator

EDUCATION

2014, PhD, American History, The Pennsylvania State University

1995, M. Litt, Maritime Studies, University of St. Andrews, Scotland

1994, MA, American History, University of Maine, Orono

1990, BA, History, State University of New York at Buffalo

SUMMARY OF EXPERIENCE

Dr. Tuttle has over thirty years of experience working in maritime archaeology conducting Phase I, II, and III archaeological survey, testing, and mitigation projects. He has completed documentary research in numerous state archives associated with maritime issues and histories. Consultation with multiple State Historic Preservation Offices as well as numerous Federal agencies such as the Army Corps of Engineers, BOEM, & FERC has resulted in a solid understanding of both state and federal regulations and requirements.

Having participated in well over one hundred and sixty archaeological projects Dr. Tuttle's experience ranges from remote sensing survey to full shipwreck site recordation. In particular he has completed numerous remote sensing and diving projects in locations throughout the United States. Environments encountered during these investigations varied from rivers such as the Piscataqua, Savannah, Niagara, Red, Tennessee, and White, to lakes such as Champlain, Erie, Michigan, and Tahoe as well as the open waters of the Atlantic, Gulf of Mexico, and Pacific. Temporally he has investigated shipwreck sites ranging from late fifteenth century through to modern twentieth century vessels. The project examples listed below outline Dr. Tuttle's experience participating in remote sensing and diver investigations in focusing on his east coast research. This research requires a thorough understanding of the particular needs, administratively and in the field, associated with conducting maritime cultural resources investigations in such environments. Overall, Dr. Tuttle has participated in over 170 cultural resources projects in various stages of the archaeological process and served as the lead author on most reports

SELECT PROJECT EXPERIENCE

- **Marine Archaeological Support Services, Rhode Island:** Project Manager to provide cultural resources services to Deepwater Wind through a Master Services Agreement with CH2M Hill. This work, largely completed in support Deepwater's South Fork Wind Farm Construction and Operations Plan (COP) for the Bureau of Ocean Energy Management (BOEM), the lead federal agency, includes agency administrative activities, geophysical and geotechnical analysis, preparation of a standalone archaeology report, tribal consultation, and other project support.
- **Marine Archaeological Support Services, Massachusetts:** Project Manager to provide cultural resources services to Vineyard Wind. This work, largely completed in support Vineyard Wind's Construction and Operations Plan (COP) for the Bureau of Ocean Energy Management (BOEM), the lead federal agency, includes agency administrative activities, geophysical and geotechnical analysis, preparation of a standalone archaeology report, tribal consultation, and other project support.



- **Marine Archaeological Resource Assessment, Massachusetts:** Project Manager to provide cultural resources services to Vineyard Wind. This work was completed in support Vineyard Wind's Site Assessment Plan (SAP) for the Bureau of Ocean Energy Management (BOEM), the lead federal agency, includes agency administrative activities, geophysical analysis, preparation of a standalone archaeology report, tribal consultation, and other project support.
- **Marine Archaeological Resource Assessment, Rhode Island:** Project Manager to provide cultural resources services to Deepwater Wind through a Master Services Agreement with Tetra Tech. This work, largely completed in support Deepwater's Met Buoy Site Assessment Plan (SAP) for the Bureau of Ocean Energy Management (BOEM), the lead federal agency, includes preparation of the SAP, and has entailed literature reviews, tribal consultation, Phase I marine archaeological surveys and reporting.
- **Proposed Natural Gas Pipeline Lateral, Massachusetts:** Principal investigator for Intensive geophysical and geotechnical investigations at the Spectra Energy Salem Pipeline Lateral Site in Beverly and Salem, Massachusetts. Conducted historic, remote sensing and coring investigations, no materials of significance located. Lead federal agency was the Federal Energy Regulatory Commission (FERC). The project was permitted by the Massachusetts Board of Underwater Archaeological Resources (MBUAR) the project involved review of files held at the MBUAR and the Massachusetts Historical Commission and production of a written report of findings.
- **Long Island Bridge and Utility Corridor Replacement Project, Boston Harbor, Massachusetts:** Principle Investigator for the bathymetric, side scan, sub-bottom and magnetometer survey of an 800-ft wide work corridor along the condemned Long Island Bridge in Boston Harbor. The project was permitted by the Massachusetts Board of Underwater Archaeological Resources (MBUAR). Video of harbor bed and Geotechnical cores were taken along a utility corridor for more exact environmental characterization. Project focused upon identification and evaluation of potential paleo landscapes within the project area. No potentially significant materials located. Work included assessment of historic wrecks, field investigations, detailed analysis of the remote sensing data and report of findings.
- **Archaeological Monitoring for Yard Expansion Activities along the Kennebec River, Bath Iron Works, Bath, Maine:** Principle Investigator for the observation of all ground clearing and disturbing activities in conjunction with construction of three new structures, some of which were constructed over known historic wharves. No potentially significant materials located and a report of findings presented to BIW and the Maine SHPO.
- **Geophysical Investigations, Montauk, New York:** Field Director responsible for the geophysical investigations for two proposed anti-erosional piers. Magnetometer, side scan and bathymetric data were collected during the investigation for historic materials. A report of findings was submitted to the U.S. Army Corps of Engineers, New York District.
- **Geophysical Investigations, Belmar, New Jersey:** Maritime Archaeologist for the remote sensing investigation of 3 potential borrow areas off Belmar, New Jersey. Conducted geophysical investigation for potentially significant materials. Numerous anomalies located. A report of findings was submitted to the U.S. Army Corps of Engineers, New York District.



- **Geophysical Investigations, Jersey Flats, New York Harbor:** Principal Investigator for the remote sensing survey of Jersey Flats, New York Harbor. Conducted geophysical investigation of area and analyzed collected data to determine if there were indications of potentially significant materials. Several anomalies encountered. A report of findings was submitted to the U.S. Army Corps of Engineers, New York District.
- **Archaeological Diver Investigations Boston Hubline Project, Boston Harbor:** Principal Investigator. Examined over 60 remote sensing targets for significance, several sunken vessels located. For Public Archaeological Laboratory Inc., Pawtucket, Rhode Island. By Panamerican Consultants.

SELECTED PUBLICATIONS

- 2017 Geophysical Data Analysis for Marine Archaeological Assessment of the Poseidon Project Raritan Bay, Revised Keyport Landfall Route Monmouth County, New Jersey. For ESS Group, Inc. East Providence, Rhode Island by Gray & Pape, Inc. Providence, Rhode Island.
- Synopsis of Marine Archaeological Services in Support of the Vineyard Wind Offshore Wind Energy Project Off Martha's Vineyard, Massachusetts. For Vineyard Wind, LLC., New Bedford, Massachusetts by Gray & Pape, Inc. Providence, Rhode Island.
- 2016 Poseidon Transmission Project, Supplemental Marine Cultural Outreach, Letter Report. For ESS Group, Inc. East Providence, Rhode Island by Gray & Pape, Inc. Providence, Rhode Island.
- Geophysical Data Analysis for Marine Archaeological Assessment of Reconnaissance Survey of Geotechnical Core Areas GP-1 Through GP-30 in the OffshoreMW, LLC., Massachusetts Offshore Wind Energy Area, BOEM Lease OCS-0501. For OffshoreMW, LLC., Princeton, NJ by Gray & Pape, Inc. Providence, Rhode Island.
- 2015 East Boston Intertidal Survey Located at 122-148 Border Street, Boston, Suffolk County, Massachusetts (with contributions by Christopher Donta and Kim Smith). For The Public Archaeology Laboratory, Inc., Pawtucket, Rhode Island, By HRA Gray & Pape LLC, Providence, Rhode Island.
- Marine Archaeological Services for the Long Island Bridge and Utility Replacement Project, Boston Harbor, Norfolk and Suffolk Counties Massachusetts (with contributions by Christopher Donta and Kim Smith). For The Public Archaeology Laboratory, Inc., Pawtucket, Rhode Island, By HRA Gray & Pape LLC, Providence, Rhode Island.
- 2011 "Search And Documentation Of Underwater Archaeological Sites" In *The Oxford Handbook of Maritime Archaeology* Alexis Catsambis, Ben Ford and Donny L. Hamilton Eds. Oxford University Press: New York, Ny.

SELECT SERVICE

Session Chair, "Shipboard Environments", 45th North American Society for Oceanic History Conference, New Bedford, Massachusetts, 2019.

Session Chair, "Ports and the Perils of Public Health", 45th North American Society for Oceanic History Conference, New Bedford, Massachusetts, 2019.

Judge, Subject Matter Expert (underwater archaeology), 6th Annual Student Ethics Bowl, 52th Society for Historic Archaeology Conference, St. Charles, Missouri, 2019.



State of the State. A current affairs television program on PEG RI TV, public access television. Volunteer production crew. Providence, Rhode Island (2016-2019).

Session Chair, "Promise and Peril: Steamboats on Eastern and Western Rivers", 44th North American Society for Oceanic History Conference, St. Charles, Missouri, 2018.

Guest Lecturer 'Maritime Material Culture: The Anchor', for Dr. Amy Barlow Rhode Island College, First Year Seminar # 11111, Raid the collections!: Making Discoveries in Rhode Island College Collections. Discussed the anchor, symbol of the college, 2018.

Conference on New England Archaeology (CNEA), Brattleboro, Vermont Steering Committee (2014-2016).

Session Chair, "Missing Voices in Maritime History", 43rd Annual North American Society for Oceanic History, Portland, Maine, 2016

Member, Providence Community Boating Center, support boating education, 2015-2016.

Boy Scouts of America, Narragansett Council Merit Badge College, Archaeology Badge councilor, 2014.



The COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
100 Cambridge Street, Suite 900, Boston, MA 02114

Tel. (617) 626-1014

www.mass.gov/orgs/board-of-underwater-archaeological-resources

December 6, 2023

Amanda M. Evans, PhD, RPA (via email attachment)
Maritime Services Practice Leader/Principal Investigator
Gray & Pape, Inc.
60 Valley Street, Suite 103
Providence, RI 02909

RE: Notice of Renewal – BUAR Special Use Permit 21-006, Park City Wind, LLC's New England Wind (1) Offshore Export Cable Corridor Project, State Waters Portions of Nantucket Sound and the Atlantic Ocean, Barnstable to Edgartown

Dear Dr. Evans,

This letter confirms a vote taken by the Massachusetts Board of Underwater Archaeological Resources at its regularly scheduled public meeting of November 30, 2023 granting the renewal of Special Use Permit (21-006) held by Gray & Pape, Inc. for conducting marine archaeological survey to identify underwater archaeological resources within the State waters portion of the Park City Wind, LLC's New England Wind (1) Offshore Export Cable Corridor in Nantucket Sound and the Atlantic Ocean, between Barnstable and Edgartown. The duration of this permit shall be one year from the date of issuance, with its new expiration date now set as November 30, 2024.

This permit renewal is herein granted dependent upon Gray & Pape, Inc.'s compliance with the Board's Regulations (312 CMR 2.00). All archaeological work performed under this permit must be conducted in accordance with Board directives, standard conditions, and policy guidance documents, as well as with Gray & Pape, Inc.'s research design and survey plan. Activities allowed under this permit include marine archaeological remote sensing, geoarchaeological sediment sampling and analyses, and archaeological site examination and recovery to determine the presence or absence of underwater archaeological and undertake necessary recovery and documentation of these resources in the permit area.

For projects subject to review under Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), permittees are directed to consult with, provide their proposed research design and methodology to, and obtain the approval of, the State Historic Preservation Office/Massachusetts Historical Commission and the lead federal agency, in accordance with 36 CFR 800.4, prior to conducting the field investigation. This permit does not relieve the permittee or any other person of the necessity of complying with all other federal, state and local statutes, regulations, by-laws and ordinances.

If you should have any questions or need further assistance, please do not hesitate to contact the Board at our address above or by email (david.s.robinson@mass.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "David S. Robinson".

David S. Robinson
Director

/dsr

Cc: Brona Simon, MHC
Todd Callaghan, Sean Duffey, Lisa Engler, Rebecca Haney, and Stephen McKenna, MCZM (via email attachment)
Bettina Washington, WTGH/A (via email attachment)
David Weeden, MWT (via email attachment)