

FINDING OF NO SIGNIFICANT IMPACT

Block Island Wind Farm and Block Island Transmission System

INTRODUCTION

The United States Army Corps of Engineers (USACE), New England District, prepared an environmental assessment (EA) to determine whether issuance of a regulatory permit (Corps Permit File No. NAE-2009-789) authorizing a wind project offshore Block Island, Rhode Island, would have a significant effect on the environment and whether an environmental impact statement (EIS) must be prepared pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). The EA evaluated the reasonably foreseeable impacts of construction, operation, maintenance, and decommissioning of five wind turbine generators (WTGs) and a transmission cable system that consists of two cables: one connecting the WTGs to Block Island and one connecting Block Island to the mainland. In addition, the Project would include construction of one new substation on Block Island, Rhode Island.

The U.S. Department of the Interior (USDOI), Bureau of Ocean Energy Management (BOEM) participated in the preparation of the EA as a cooperating agency with jurisdiction under Section 8(p)(1)(C) of the Outer Continental Shelf (OCS) Lands Act (43 U.S.C. § 1337(p)(1)(C)). BOEM has jurisdiction for activities on the OCS which includes the 9 mile portion of the cable in Federal waters that connects Block Island to the Rhode Island mainland.

On September 4, 2014, the USACE issued the EA, a Finding of No Significant Impact (FONSI), and issued Permit Number 2012-2724 with conditions (Attachment A). BOEM is adopting the EA to comply with its distinct requirements under the National Environmental Policy Act (NEPA) to support issuance of a right-of-way (ROW) Grant and approval of the General Activities Plan (GAP), with conditions. BOEM conducted an independent review of the EA prepared by USACE and has determined that it complies with the Council on Environmental Quality (CEQ) regulations at 40 Code of Federal Regulations (CFR) 1500-1508, USDOJ regulations implementing NEPA at 43 CFR 46.320, and USDOJ Manual (DM) Chapter 15 (516 DM 15).

PURPOSE AND NEED

The EA provided two purpose and need statements: one for the USACE and one for BOEM. The USACE's purpose and need is broader than BOEM's purpose and need since BOEM's authority is limited to the portion of the cable within Federal waters.

BOEM's purpose and need is to support the future production and transmission of renewable energy (30 CFR 585.300). BOEM received an application from Deepwater Wind Block Island Transmission, LLC (DWBIT) requesting a ROW grant for an approximately nine mile-long (8 Nautical Miles (NM)), 200-foot wide corridor in Federal waters on the OCS to connect their proposed offshore wind farm, located in Rhode Island State waters approximately 3 miles (mi)

southeast of Block Island, to the Rhode Island mainland. This is a portion of the total 25.1 mi cable that connects Block Island to the Rhode Island mainland.

DESCRIPTION OF THE PROPOSED ACTION

The following is the proposed action considered in the USACE's EA.

Deepwater Wind (DWW) proposes to develop a 30-megawatt (MW) offshore wind farm located approximately 3 mi southeast of Block Island, Rhode Island and 16 mi south of the Rhode Island mainland which is referenced herein as Block Island Wind Farm (BIWF). The BIWF will consist of five 6-MW WTGs, an Inter-Array Cable, and a 34.5-kV transmission cable approximately 7.2 mi (6.2 NM) long from the northernmost WTG to an interconnection point on Block Island. DWW also proposes to develop a transmission system. The Block Island Transmission System (BITS) is a 34.5-kV AC bi-directional submarine transmission cable that will run approximately 25.1 mi (21.8 NM) from its interconnection on Block Island to the interconnection on the Rhode Island mainland. An 8.98 mi (7.805 NM) portion of the BITS is located in Federal waters.

The Project would also include construction of one new substation at the site of an existing power generation facility on Block Island Power Company (BIPCO) property (Block Island Substation). The Block Island Substation will provide a point of interconnection for the power from the BIWF and will be the point of interconnection for BITS on Block Island. The Block Island Substation will consist of two adjoining switchyards: one dedicated to the BIWF (BIWF Generation Switchyard) and the other dedicated to the BITS (BITS Island Switchyard). The BITS will also include upgrades to the existing substation on the BIPCO property. The BITS will connect to the existing distribution system on the Rhode Island mainland that is operated by The Narragansett Electric Company (TNEC) at the existing Wakefield Substation in South Kingstown, Rhode Island, via a new switchyard located on Rhode Island Department of Transportation (RIDOT) property in the Town of Narragansett, Rhode Island ("Dillon's Corner Switchyard").

BOEM's proposed action, issuance of a ROW Grant and approval of the GAP with conditions for the 9 mi portion of the cable within Federal waters, is contained within the proposed action stated in the EA.

ALTERNATIVES

BOEM has reviewed the proposed action and alternatives and determined that a reasonable range of alternatives were considered in the USACE's EA, and that range is consistent with BOEM's proposed action. In addition, as an alternative to the proposed action, BOEM considered taking no action. This would mean not issuing the Grant or approving the GAP. If BOEM did not approve the Grant or GAP, the BITS could not be built connecting Block Island to the Rhode Island mainland. This no action alternative is inconsistent with the purpose and need of supplying power to the Rhode Island mainland.

Specific information about each alternative can be found in Chapter 5 of the attached EA. The overall categories of alternatives proposed by the applicant are:

- Offsite Alternatives:
 - WTG Array Alternative Locations
 - BIWF Collection System Alternatives
- Onsite configuration alternatives:
 - WTG Array Alternatives
 - Block Island Substation Alternatives
 - Alternative WTG Technology
 - Alternative Foundation Technology
- BITS:
 - BITS Mainland Interconnection Alternatives
 - BITS Submarine Cable Route Alternatives
 - BITS Mainland Landfall Alternatives
 - BITS Island Switchyard Alternatives
- No action alternative
- Least environmentally damaging practical alternative (LEDPA)-The USACE is required under Section 404 of the CWA to determine LEDPA as outlined in 404(b)(1).

ENVIRONMENTAL IMPACTS

BOEM has reviewed the effects of alternatives considered, public comments, USACE response to BOEM comments and other relevant information. BOEM also reviewed the Environmental Report prepared by DWW and submitted to BOEM on September 12, 2012. This report, *Environmental Report for the Block Island Transmission System General Activities Plan* (DWBITS 2012), provides detailed information concerning the preliminary design plans, terrestrial cable routes, marine cable routes, typical construction drawings, geotechnical and geophysical reports, sediment transport analysis report, air emissions analysis, acoustic assessment, and other site-specific information. In addition, the report provides DWW's analyses of the alternatives, physical, biological and socioeconomic resources, and cumulative impacts. BOEM found the information in the Engineering Report to be consistent with and in support of the scenario presented in the EA.

BOEM considered the context and intensity of potential effects that could result from the proposed action. Environmental resources considered include: physical resources such as air quality and water quality; biological resources such as avian and bats resources, marine mammals, sea turtles, benthic habitat, essential fish habitat, and fisheries; and socioeconomic resources such as aesthetics. Based on the analysis presented in the EA, BOEM found the proposed action will not result in a significant impact to the human environment because impacts would be temporary and short term.

Standard Operating Conditions and Reporting Requirements

Based on BOEM's independent review of the EA, required consultations, review of information provided in the GAP, requirements outlined by the USACE as terms and conditions

of the Section 404, and 10 permits issued for the BIWF and BITS project, BOEM has developed standard operating conditions (SOCs) as part of the GAP approval and conditions for Grant issuance. These SOCs are considered to be part of the proposed action. Most of BOEM's SOCs are consistent with the USACE Special Conditions of Permit Number NAE-2012-2724 but were modified to be specific to the BITS. All of the SOCs are in Attachment B. The additional SOCs that were developed by BOEM that were not included in the USACE permit are outlined below:

- BOEM has included a condition explaining how to dispose of materials that become snagged during pre-lay cable route clearance activities when using a grapnel (Attachment B, Section 1.b). BOEM developed this condition to address concerns expressed by the fishing community that debris snagged should not be returned to the bottom if it is safe to bring onshore for disposal.
- A condition was added (Attachment B, Section 1(c)) to specify what information will be needed to provide BOEM the cable route location after installation.
- BOEM is requiring an environmental compliance monitoring plan be submitted which is to describe how the Grantee will comply with the SOCs of GAP approval. These conditions can be found in Attachment B, Sections 1.a, 2.b, and 2.c.
- A condition was added to ensure that protected species observers have direct communication with the Deepwater Wind Construction Compliance Manager or other authorized individual to assure proper separation is maintained between vessels using dynamic position thrusters and protected species. This condition can be found in Attachment B, Section 4(k).
- In Section 5 of the SOCs (Attachment B), BOEM requires field verification of high resolution geophysical survey sound sources to ensure that the default 300 meter exclusion zone accurately encompasses the NMFS-defined 160 dB re 1microPa (RMS) behavioral harassment threshold for marine mammals.
- In Attachment B, Sections 4 and 5, BOEM clarifies that the exclusion zone applies to all protected species and included power-down provisions if a delphinoids cetacean or pinniped is sighted at or within the exclusion zone. Conditions were added to Attachment B, Section 5 to clarify the procedures for onboard protected species monitoring.
- In Section 6 of the SOCs (Attachment B), BOEM further clarifies requirements for vessel strike avoidance measures with respect to various species and their behaviors, in order to provide efficient mitigation to avoid vessel strikes, as provided for in BOEM's Joint Notice to Lessees and Operators No. 2012-G01, which in turn refers to National Oceanic and Atmospheric Administration (NOAA) Vessel Strike Avoidance Measures and Reporting for Mariners NOAA Fisheries Service, Southeast Region and 50 CFR 2224.103.
- BOEM has added Grant stipulations (Attachment E, Addendum C of the Grant) for the purposes of meeting its obligations under Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470f).

PUBLIC INVOLVEMENT

The USACE has had extensive public outreach for this proposed project. USACE issued a public notice on October 2, 2012 to initiate a 45-day public comment period on the BIWF and

BITS applications (available at: http://www.nae.usace.army.mil/Portals/74/docs/regulatory/publicnotices/NAE-2009-00789_2oct12REV.pdf). The public comment period was later extended to December 31, 2012. The public notice was further extended to February 10, 2013, when the public comment period was officially closed. Subsequently, the Corps received permit application modifications from the Applicants, dated September 26, 2013, for an alternative cable landfall on the mainland and withdrawal of the long-distance horizontal directional drill landing option off of Block Island. The Corps issued a new public notice on November 26, 2013, to initiate a 30-day public comment period for the revised cable landfall location.

Additionally, public hearings were held by Rhode Island Department of Environmental Management on April 24, 2013, and May 8, 2013, and by Rhode Island Coastal Resources Management Council on February 4, 24, and 27, 2014. BOEM reviewed the comments from public hearings conducted by Rhode Island Department of Environmental Management and by Rhode Island Coastal Resources Management Council.

BOEM has determined that public involvement requirements have been met through the USACE's public notices and the state's public meetings. BOEM will make this FONSI available to the public on its website at <http://www.boem.gov/Renewable-Energy-Program/State-Activities/RI/Block-Island-Transmission-System.aspx>. In addition, BOEM will notify interested stakeholders through email of the FONSI's availability pursuant to 40 CFR 1506.6(b)(3).

SUPPORTING DOCUMENTS

Deepwater Wind Block Island Transmission (DWBITS), LLC. 2012. Environmental Report for the Block Island Transmission System General Activities Plan (prepared by Tetra Tech EC, Inc.). September 14, 2012.

U.S. Army Corps of Engineers (USACE). 2014a. Environmental Assessment and Statement of Findings. Application Numbers: NAE-2009-789 and NAE-2012-2724. September 4, 2014.

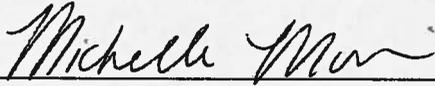
U.S. Army Corps of Engineers (USACE). 2014b. Memorandum Of Agreement Between U.S. Army Corps of Engineers, New England District, U.S. Department of the Interior, Bureau of Ocean Energy Management, and the Rhode Island State Historic Preservation Office, for Managing Historic Properties that may be Affected by Authorizing Deepwater Wind Block Island Transmission, LLC's Block Island Transmission System Project in the Towns of New Shoreham and Narragansett, Rhode Island and in Rhode Island Coastal Waters and Federal Waters on the Outer Continental Shelf in Rhode Island Sound. June 27, 2014.

CONCLUSION

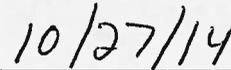
I have thoroughly considered the prominent issues and concerns identified in the USACE EA and by the public and in their comments, as well as conducted an independent evaluation of the potential effects of the proposed action and alternatives in the USACE EA. It is my determination that there are no substantial questions regarding the reasonably foreseeable impacts of the proposed action or alternatives, and that no reasonably foreseeable significant impacts are expected to occur as the result of the preferred alternative or any of the alternatives contemplated in the USACE EA. I have determined the USACE EA and its supporting documentation, as incorporated, adequately assesses and discloses the environmental impacts of

the proposed action for the purposes of BOEM's Federal action. It is therefore my determination that the proposed action or any of the alternatives would not constitute a major Federal action significantly affecting the quality of the human environment under Section 102(2)(C) of the

National Environmental Policy Act of 1969 and BOEM is adopting the USACE EA to comply with its distinct requirements under the NEPA. As a result, an EIS is not required, and I am issuing this finding of no significant impact.



Michelle Morin
Chief, Environment Branch for Renewable Energy
Office of Renewable Energy Programs



Date



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

September 4, 2014

Regulatory Division
CENAE-R
Permit Number: NAE-2012-2724

Aileen Kenney, Director of Permitting
Deepwater Wind Block Island Transmission System, LLC
Deepwater Wind, LLC Office
56 Exchange Terrace Street
Providence, Rhode Island 02903-1772

Dear Ms. Kenney:

Attached are two copies of a Department of the Army permit authorizing your **Block Island Transmission System** project. **Please sign both copies of the permit and return one signed copy to this office at the address above.** A fee of \$100.00 is required. Please enclose a check made payable to "FAO New England District", and return it with the signed permit copy. Please ensure your address and social security number, or tax identification number for businesses, are on the check. The authorized work cannot start until we receive a complete, signed copy of the permit.

You are required to complete and return the attached forms to this office:

1. Work Start Notification Form at least two weeks before the anticipated work start date.
2. Compliance Certification Form within one month following the completion of the authorized work.

This permit is a limited authorization containing a specific set of conditions. Please read the permit thoroughly to familiarize yourself with those conditions, **including any conditions contained on the attached state water quality certification.** If a contractor does the work for you, both you and the contractor are responsible for ensuring that the work is done in compliance with the permit's terms and conditions, as any violations could result in civil or criminal penalties.

The Corps of Engineers has consulted with the National Marine Fisheries Service (NMFS) regarding the effects of your project on Essential Fish Habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act. **To minimize impacts to the aquatic environment, conservation recommendations from several agencies are included as special conditions attached to this permit**

This letter contains an approved jurisdictional determination for your subject site and a proffered permit for your proposed project. If you object to either this determination or decision, you may request an administrative appeal under Corps regulations at 33 CFR 331. A combined Notification of Administrative Appeal Options and Process (NAP) and Request for Appeal (RFA) form, and flow chart explaining the appeals process and your options, are attached to this

letter. If you desire to appeal this determination, you must submit a completed RFA form along with any supporting or clarifying information to Michael G. Vissichelli; Administrative Appeals Review Officer; North Atlantic Division, Corps of Engineers; North Atlantic Fort Hamilton Military Community, Bldg. 301; General Lee Avenue; Brooklyn, NY 11252-6700. Contact info: (347) 370-4663 or michael.g.vissichelli@usace.army.mil.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP.

You may not appeal conditions contained in the State water quality certification or the CZM consistency determination under this program as they are automatically included in the Federal permit. Also note that the Department of the Army permit process does not supersede any other agency's jurisdiction.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/?p=regulatory_survey.

If you have any questions regarding this correspondence, please contact Michael Elliott at (978) 318-8131, (800) 343-4789, or use (800) 363-4367 within Massachusetts.

Sincerely,



Robert J. DeSista
Acting Chief, Regulatory Division

Enclosures

Copy Furnished:

✓ Jennifer Daniels
Director of Offshore Energy
Tetra Tech
160 Federal Street, 3rd Floor
Boston, MA 02110

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Deepwater Wind Block Island Transmission System, LLC	File Number: CENAE-2012-1274	Date: 4 Sept 2014
Attached is:		See Section below
<input checked="" type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
<input type="checkbox"/>	PERMIT DENIAL	C
<input checked="" type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D
<input type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/function_cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the New England District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations (JD) associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the New England District Engineer. Your objections must be received by the New England District Engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the New England District Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the New England District Engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the New England District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the New England District Engineer.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the New England District Engineer.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the New England District Engineer.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II: REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION

If you have questions regarding this decision and/or the appeal process you may contact:

Ruth M. Ladd
CENAE-R
U.S. Army Corps of Engineers, New England District
696 Virginia Road
Concord, MA 01742-2751
Telephone: (978) 318-8818
Email: ruth.m.ladd@usace.army.mil

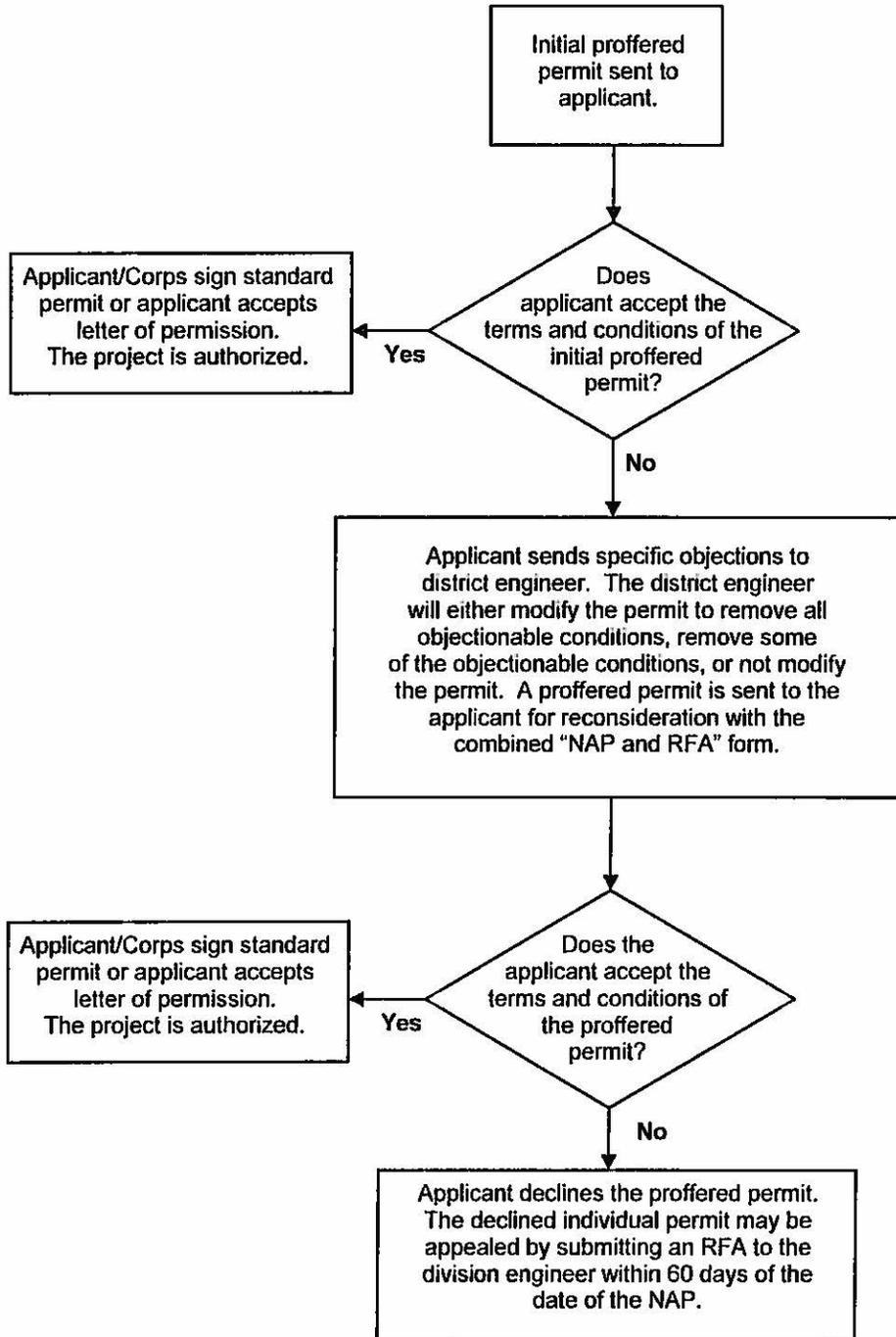
If you only have questions regarding the appeal process you may also contact:

Mr. Michael G. Vissichelli
Administrative Appeals Review Officer
North Atlantic Division, Corps of Engineers Fort Hamilton
Military Community Bldg. 301, General Lee Avenue Brooklyn,
NY 11252-6700
Telephone: (347) 370-4663
Email: michael.g.vissichelli@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

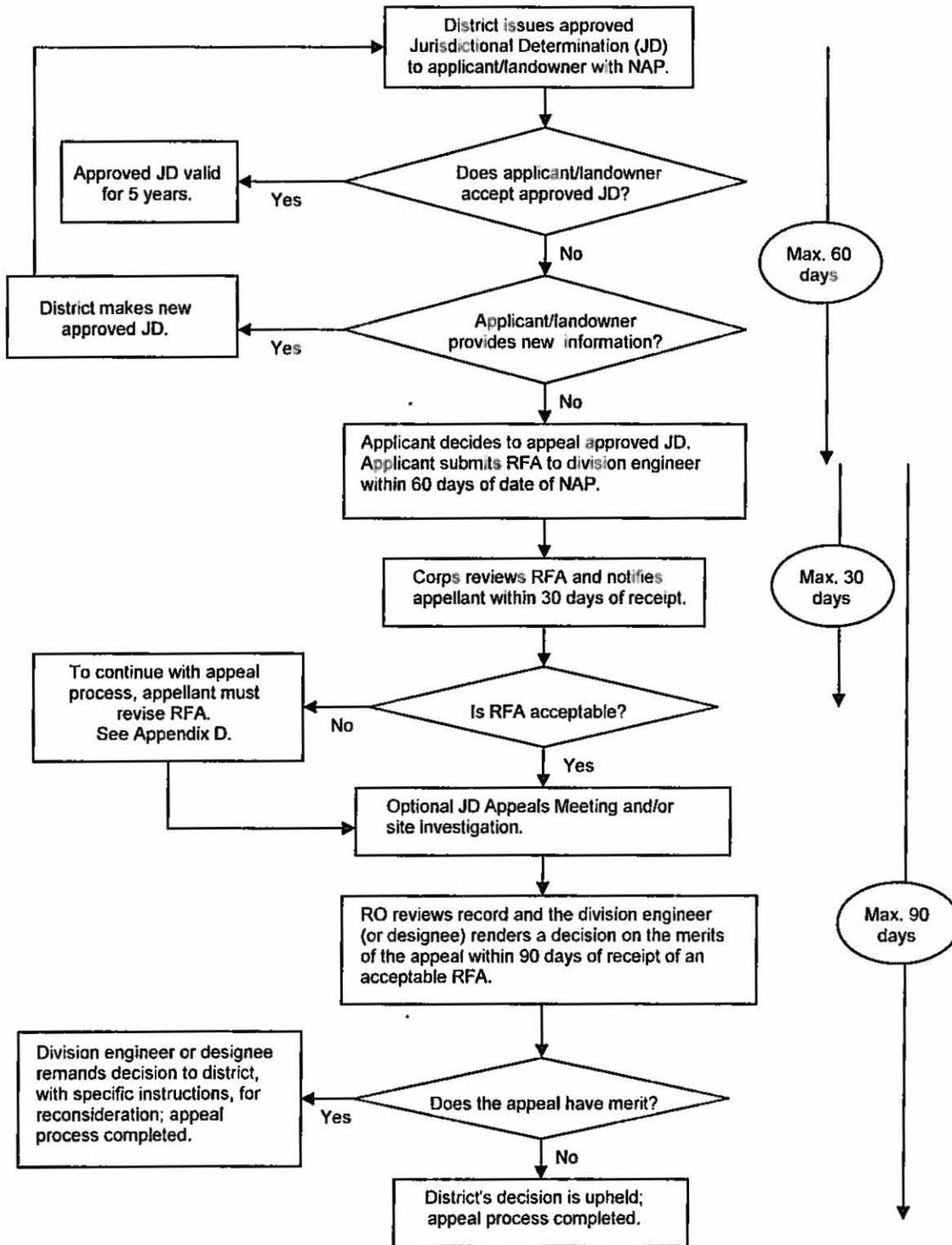
Signature of appellant or agent.	Date:	Telephone number:
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Applicant Options with Initial/Proffered Permit



Appendix B

Administrative Appeal Process for Approved Jurisdictional Determination



Appendix C

DEPARTMENT OF THE ARMY PERMIT

Permittee Deepwater Wind Block Island Transmission, LLC

Permit No. NAE-2012-2724 (see also associated Permit No. NAE-2009-789)

Issuing Office New England District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: To construct and maintain the Block Island Transmission System (BITS). In connection with the BITS, Deepwater Wind Block Island, LLC will develop the Block Island Wind Farm (BIWF), a 30-MW offshore wind farm located approximately 3 miles southeast of Block Island, Rhode Island. The BIWF and BITS were subject to joint review under the National Environmental Policy Act (NEPA). The BIWF has been authorized under a separate permit (see Permit No. NAE-2009-789). The authorized work includes:

- 1.) Install 20 linear miles of submerged transmission cable including the placement of up to 1.7 acres of fill for cable armoring.

(Project Description continued on Page 4)

Project Location:

BITS cable located in Rhode Island Sound (Atlantic Ocean) between Crescent Beach on Block Island and Scarborough State Beach in Narragansett, Rhode Island.

Permit Conditions:

General Conditions:

DECEMBER 31, 2019

1. The time limit for completing the work authorized ends on _____ . If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

(Special Conditions start on Page 5)

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

Section 404 of the Clean Water Act (33 U.S.C. 1344).

Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1415).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

Aileen Kenney, Aileen Kenney _____ 9/4/2014
(PERMITTEE) (DATE)
V.P. of Permitting and Enviro. Affairs

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Robert J. DeSista _____ 9/4/2014
(DATE)
Robert J. DeSista
Acting Chief, Regulatory Division

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE) (DATE)

Project Description (continued from Page 1)

- 2.) BITS cable aerial crossing of approximately 45 linear feet over Trims Pond in the Town of New Shoreham (Block Island).
- 3.) Excavate a temporary trench between mean high and mean low water for the BITS cable landfall at Crescent Beach on Block Island. Temporary impact is approximately 0.01 acre.
- 4.) 0.02 acres temporary impact from sediment excavation and refill and sheet piles for a temporary offshore cofferdam associated with the BITS landfall on the Rhode Island mainland.

The work is described on the enclosed plans:

- 1) Plan set entitled "34.5kV BITS Underground Route" originally submitted on May 23, 2012 and as updated in submittals dated September 26, 2013, and January 31, 2014.
- 2) Plan set entitled "The Scarborough Beach Alternative" dated November 4, 2013.

Special Conditions

1. The special condition requirements contained in the Section 401 State Water Quality Certification issued by RIDEM for the BITS project are made a part of the Corps permit.
2. All BITS work is to be completed in accordance with the Permittee's September 2012 applications and subsequent modifications, and their Environmental Report and subsequent modifications.
3. The Permittee shall ensure that a copy of this permit is at the work site whenever work is being performed and that all personnel performing work at the site of the work authorized by this permit are fully aware of the terms and conditions of the permit. This permit, including its drawings and any appendices and other attachments, shall be made a part of any and all contracts and subcontracts for work which affects areas of Corps of Engineers jurisdiction at the site of the work authorized by this permit. This shall be done by including the entire permit in the specifications for work. If the permit is issued after the construction specifications, but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. If the permit is issued after receipt of bids or quotes, the entire permit shall be included in the contract or sub-contract as a change order. The term "entire permit" includes permit amendments. Although the Permittee may assign various aspects of the work to different contractors or subcontractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions of the entire permit, and no contract or subcontract shall require or allow unauthorized work in areas of Corps jurisdiction.
4. The Permittee shall complete and return the enclosed Compliance Certification Form to the Corps within one month after the completion of the authorized work.
5. Adequate sedimentation and erosion control devices, such as geotextile silt fences or other devices capable of filtering sediments, shall be installed and properly maintained to minimize impacts on wetlands and/or waters during construction. These devices must be removed after soils disturbed by construction activities are stabilized by revegetation or other means. The sediment collected by these devices must be periodically removed and placed in uplands, in a manner that will prevent its erosion and transport to wetlands and/or waters.
6. All areas of wetlands and/or waters, which are disturbed during construction, except those authorized herein for permanent impact, shall be restored to their approximate original elevation (but not higher) and condition by careful protection, and/or removal and replacement, of existing soil and vegetation. In addition, if upland clearing, grubbing, or other construction activity results in, or may result in, soil erosion with transport and deposition into a wetland or waterway, devices such as geotextile silt fences, sediment trenches, etc., shall be installed and properly maintained to minimize such impacts during construction. These devices must be removed upon completion of work and stabilization of disturbed areas. The sediment collected by these devices must also be removed and placed upland, in a manner that will prevent its later erosion and transport to a waterway or wetland.
7. Except where stated otherwise, reports, drawings, correspondence and any other submittals required by this permit shall be marked with the words "Permit No. 2012-2724" and shall be submitted to: PATS Branch - Regulatory Division, Corps of Engineers, New

England District, 696 Virginia Road, Concord, MA 01742-2751. Documents which are not marked and addressed in this manner may not reach their intended destination and do not comply with the requirements of this permit. Requirements for immediate notification to the Corps shall be done by telephone to (978) 318-8338.

Essential Fish Habitat:

8. The Permittee shall provide their vessel operators with maps of sensitive hard bottom habitat in the Project Area, as well as a proposed anchoring plan that minimizes impacts on the hard bottom habitat to the greatest extent practicable. These plans shall be provided for all anchoring activity, including construction, maintenance, and decommissioning.
9. Prior to the start of construction, a monitoring plan shall be prepared to assess any hard bottom habitat impacts that cannot be avoided. The monitoring plan shall provide an assessment of impacts on the hard bottom habitat, as well as a plan for assessing recovery time for this sensitive habitat. The plan shall also include a means of recording observations of any increased coverage of invasive species in the impacted hard bottom area. The monitoring plan and subsequent reports shall be provided to the Corps, NMFS, and BOEM for review and comment.
10. Reports on the post-construction monitoring of cable installation shall be provided to the Corps, NMFS, and BOEM for review. Mitigation may be required if areas along the cable route do not recover or fill in naturally, as stated in the BIWF/BITS ER.
11. Noise mitigating measures shall be used during construction, such as soft-start procedures, to ensure fish species have the opportunity to evacuate the area prior to pile driving activity. A plan outlining noise mitigation procedures shall be provided to the Corps, NMFS and BOEM prior to construction. Resource agencies shall be notified within 24 hours if any evidence of a fish kill during construction activity is observed.
12. Monitoring for noise levels during construction and operation shall be conducted to verify the acoustic models and provide more accurate information on the area of impact. Noise monitoring reports shall be provided to the Corps, NMFS, and BOEM.
13. The Permittee shall provide vessel operators maps of sensitive hard bottom habitat in the project area of the BITS Scarborough Beach Alternative. Anchoring in complex and hard bottom habitats, classified as Type 3 (complex mixture of alternating bottom types including fine to coarse grained sediments and boulders) and Type 4 (hard, compact seabed including primarily gravel, cobbles, and boulders in a sand matrix habitat in the geophysical surveys, shall be avoided for all construction, maintenance, and decommissioning activities associated with the installation of the cable.
14. Side casting of material excavated from the offshore cofferdam shall be disposed of north and/or northeast of the cofferdam in sandy habitat, classified as Type 1 (fine grained sediments (mostly silt and fine sand) with possible isolated boulders). Material shall not be disposed of directly or adjacent to any hard bottom or complex habitat, classified as Type 3 or Type 4 in the geophysical surveys.

Avian and Bat:

15. DWBIT shall develop a plan for constructing a new nest platform and relocating an osprey nest in close proximity to the proposed Block Island Substation when the nest is inactive.

Cultural Resources:

16. DWBIT shall comply with the Memorandum of Agreement (MOA) executed in June, 2014 that was signed by the Army Corps of Engineers (Corps), Rhode Island State Historic Preservation Office (SHPO), The Bureau of Ocean Energy Management (BOEM), DWBIT, and the Narragansett Indian Tribal Historic Preservation Office (NITHPO).

Marine Navigation:

17. DWBIT shall ensure that cable routes are depicted on appropriate government produced and commercially available nautical charts.

18. DWBIT shall submit a detailed submarine cable system burial plan shall be submitted that depicts precise location and burial depths of the entire cable system. This plan shall be reviewed by the USCG and approved by the Corps of Engineers before construction of any component of the offshore renewable energy installation (OREI) begins.

That portion of the BITS submarine cable that is proposed within the southbound (outbound) lane of the traffic separation scheme may require USCG regulatory rulemaking such as a temporary safety zone or regulated navigation area. DWBIT will not be permitted to begin any cable-laying operations within this area until any USCG regulatory efforts are complete.

Marine Mammals and Sea Turtles:

19. **Exclusion and Monitoring Zones:** Exclusion and monitoring zones will be established around acoustically active project components (i.e., pile driving (vibratory) and dynamic position (DP) thruster use for cable-lay operations). These zones will be established to monitor for ESA-listed species of sea turtles and whales that may enter the project area and to adjust project operations accordingly to prevent exposure of these animals to potentially injurious levels of underwater noise. Exclusion and monitoring zones are not being established for Atlantic sturgeon because this species occurs only under the water surface and visual observers will not be able to detect the presence of Atlantic sturgeon in the project area and no remote sensing technology that could detect Atlantic sturgeon is feasible for deployment in the area.

- a. **Vibratory Pile Driving of Cofferdam** – Cofferdam installation and removal will produce sound levels of 180 dB_{RMS} within 10 m from the source and thus, an exclusion zone will not be established. A 200-m radius monitoring zone, based on the modeled distance to the 160 dB_{RMS} isopleth, will be monitored during all vibratory pile driving activities. All marine mammal sightings, including those beyond the 160 dB_{RMS} isopleth, will be recorded.
- b. **DP Vessel during Cable Installation** – DP vessel use during cable installation will not produce sound levels at 180 dB_{RMS} beyond 1 m from the source and thus, an exclusion zone will not be established. A monitoring zone, based on the extent to the 160 dB_{RMS} isopleth, will be established around the DP vessel. The monitoring zone will extend an estimated 21 m from the source (i.e., DP vessel).

All marine mammal sightings, including those beyond the 160 dB_{RMS} isopleth will be recorded.

20. Field Verification of Monitoring and Exclusion Zones:

- a. **Impact Pile Driving of WTG Foundations** – Field verification of the initial 200-m radius exclusion zone and the 3.6-km radius monitoring zone for the 200-kJ impact pile driving hammer, as well as the 600-m radius exclusion zone and 7-km radius monitoring zone for 600-kJ impact pile driving hammer, will be conducted. Acoustic measurements will include the driving of the last half (deepest pile segment) for any given open-water pile and will include measurements from two reference locations at two water depths (a depth at mid-water and a depth at approximately 1 m above the seafloor). If the field measurements determine that the actual 180 dB_{RMS} and 160 dB_{RMS} zones of influence are less than or extend beyond the proposed exclusion zone and monitoring zone radii, a new zone(s) will be established accordingly. The Corps and NMFS will be notified within 24 hours whenever any new exclusion and/or monitoring zone are established by DWBI that extends beyond the initially proposed radii. Implementation of the revised zone(s) smaller than the proposed radii will be contingent upon Corps and NMFS review and approval. In the event that a smaller zone(s) is determined to be appropriate, DWBI will continue to use the originally proposed zone(s) until agency approval is given.
- b. **Vibratory Pile Driving of Cofferdams** – Field verification of the initial 200-m radius exclusion zone (i.e. confirmation that 200 m = 160 dB_{RMS}) will be conducted. Acoustic measurements will include measurements from two reference locations at two water depths (a depth at mid-water and a depth at approximately 1 m above the seafloor). If the field measurements determine that the actual 160 dB_{RMS} zones of influence is less than or extend beyond the proposed exclusion zone and monitoring zone radii, a new zone(s) will be established accordingly. The Corps and NMFS will be notified within 24 hours whenever any new exclusion and/or monitoring zone are established by DWBI that extends beyond the initially proposed radii. Implementation of the revised zone(s) smaller than the proposed radii will be contingent upon Corps and NMFS review and approval. In the event that a smaller zone(s) is determined to be appropriate, DWBI will continue to use the originally proposed zone(s) until agency approval is given.
- c. **DP Vessel during Cable Installation** – Field verification of the preliminary 21-m radius monitoring zone (i.e., that the 160 dB_{RMS} isopleth does not extend beyond 21-m) associated with DP vessel thruster use during cable installation will be performed using acoustic measurements from two reference locations at two water depths (a depth at mid-water and a depth at approximately 1-m above the seafloor). As necessary, the monitoring zone will be modified and implemented as described for vibratory pile driving).

21. Protected Species Observers:

- a. All observations for whales and sea turtles in the exclusion and monitoring zones will be performed by NMFS-approved protected species observers (PSO). Observer qualifications will include direct field experience on a marine mammal/sea turtle observation vessel and/or aerial surveys in the Atlantic Ocean/Gulf of Mexico. It is anticipated a minimum of two PSOs will be stationed aboard each noise producing construction support vessel (e.g., derrick barge and cable-lay vessel). Each PSO will monitor 360 degrees of the field of vision. Each PSO will follow the specified monitoring period for each of the following construction activities:
 - i. **DP Vessel during Cable Installation** – PSOs stationed on the DP vessel will begin observation of the monitoring zone as the vessel initially leaves the dock. Observations of the monitoring zone will continue throughout the construction activity and will end after the DP vessel has returned to dock.
 - ii. **Vibratory Pile Driving of Cofferdam** – The PSOs will begin observation of the monitoring zone at least 30 minutes prior to vibratory pile driving. Use of noise producing equipment will not begin until the associated monitoring zone is clear of all marine mammals and sea turtles for at least 30 minutes. In addition, soft-start of construction equipment, as described below, will not be initiated if the monitoring zone cannot be adequately monitored (i.e., obscured by fog, inclement weather, poor lighting conditions) for a 30-minute period. If a soft-start has been initiated before the onset of inclement weather, activities may continue through these periods if deemed necessary to ensure the safety and integrity of the Project. Observation of both the exclusion and monitoring zones will continue throughout the construction activity and will end approximately 30 minutes after use of noise-producing equipment is completed.
- b. For each of the two construction activities (vibratory pile driving and DP thruster use during cable installation), PSOs, using binoculars, will estimate distances to whales and sea turtles either visually, using laser range finders, or by using reticle binoculars during daylight hours. It is important to note that all pile driving activity will occur only during daylight hours. As cable-laying activities will operate 24 hours a day, during night operations, night vision binoculars will be used. If higher vantage points (greater than 25 ft) are available, distances can be measured using inclinometers. Position data will be recorded using hand-held or vessel global positioning system (GPS) units for each sighting, vessel position change, and any environmental change.
- c. For monitoring established exclusion and monitoring zones, each PSO stationed on or in proximity to the noise-producing vessel or location will scan the surrounding area for visual indication of whale and sea turtle presence that may enter the zones. Observations will take place from the highest available vantage

point on the associated operational platform (e.g., support vessel, barge or tug; estimated to be over 20 or more feet above the waterline). General 360-degree scanning will occur during the monitoring periods, and target scanning by the PSO will occur when alerted of the presence of a whale or sea turtle.

- d. Data on all observations will be recorded based on standard PSO collection requirements. This will include dates and locations of construction operations; time of observation, location and weather; details of whale and sea turtle sightings (e.g., species, age classification [if known], numbers, behavior); and details of any observed behavioral disturbances or injury/mortality. In addition, prior to initiation of construction work, all crew members on barges, tugs and support vessels, will undergo environmental training, a component of which will focus on the procedures for sighting and protection of whales and sea turtles. A briefing will also be conducted between the construction supervisors and crews, the PSOs, and DWBIT. The purpose of the briefing will be to establish responsibilities of each party, define the chains of command, discuss communication procedures, provide an overview of monitoring purposes, and review operational procedures. The DWBIT Construction Compliance Managers (or other authorized individual) will have the authority to stop or delay impact pile driving activities, if deemed necessary. New personnel will be briefed as they join the work in progress.

22. Ramp-up/Soft-Start Procedures: A ramp-up (also known as a soft-start) will be used for noise-producing construction equipment capable of adjusting energy levels (i.e., pile driving operations). The DP vessel thrusters will be engaged from the time the vessel leaves the dock.

The ramp-up procedure will not be initiated if the monitoring zone cannot be adequately monitored (i.e., obscured by fog, inclement weather, poor lighting conditions) for a 30-minute period. A ramp-up or soft-start will be used at the beginning of each pile segment during vibratory pile driving in order to provide additional protection to marine mammals and sea turtles near the project area by allowing them to vacate the area prior to the commencement of vibratory pile-driving activities. The ramp-up requires an initial set of three strikes from the vibratory hammer at 40 percent energy with a one-minute waiting period between subsequent three-strike sets. The procedure will be repeated two additional times. If marine mammals or sea turtles are sighted within the vibratory pile driving monitoring zone prior to or during the soft-start, activities will be delayed until the animal(s) has moved outside the monitoring zone and no marine mammals or sea turtles are sighted for a period of 30 minutes.

23. Shutdown Procedures: The monitoring zone around the noise-producing activities (vibratory pile driving and DP thruster use during cable installation) will be monitored, as previously described, by PSOs for the presence of whales and sea turtles before, during and after any noise-producing activity. PSOs will work in coordination with DWBIT's Construction Compliance Managers (or other authorized individual) to stop or delay any construction activity, if deemed necessary. The following outlines the shutdown procedures:

- a. **DP Vessel during Cable Installation** -- During cable installation, a constant tension must be maintained to ensure the integrity of the cable. Any significant

stoppage in vessel maneuverability during jet plow activities has the potential to result in significant damage to the cable. Therefore, during DP vessel operations if whales or sea turtles enter or approach the established exclusion zone, DWBIT will reduce DP thruster to the maximum extent possible, except under circumstances when ceasing DP thruster use would compromise safety (both human health and environmental) and/or the integrity of the Project. As with reduced hammer force for pile driving operations, reducing thruster energy will effectively reduce the potential for exposure of whales and sea turtles to sound energy. Normal use may resume when PSOs report that the monitoring zone has remained clear of whales and/or sea turtles for a minimum of 30 minutes since last the sighting.

- b. **Vibratory Pile Driving of Cofferdams** – Cofferdam construction will produce sound levels of 180 dB_{RMS} extending no further than 10 m from the source; therefore, no exclusion zone for this activity has been established. However, if ESA-listed species are observed entering or approaching the 200-m radius monitoring zone for vibratory pile driving, DWBIT shall halt vibratory pile driving as a precautionary measure to minimize noise impact on the animal(s). Ramp-up procedures for vibratory pile driving may be initiated when PSOs report that the monitoring zone has remained clear of marine mammals and/or sea turtles for a minimum of 30 minutes since the last sighting.

24. Pile Driving - Time of Day Restrictions: Vibratory pile driving cofferdams will occur during daylight hours starting approximately 30 minutes after dawn and ending 30 minutes prior to dusk unless a situation arises where ceasing the pile driving activity would compromise safety (both human health and environmental) and/or the integrity of the project. If a soft-start has been initiated prior to the onset of inclement weather (e.g., fog, severe rain events), the pile driving of that segment may be completed. No new pile driving activities will be initiated until 30 minutes after dawn or after the inclement weather has passed.

25. Reporting: DWBIT will provide the following reports during construction activities:

- a. DWBIT will contact the Corps and NMFS at least 24 hours prior to the commencement of construction activities and again within 24 hours of the completion of the activity.
- b. DWBIT will contact the Corps and NMFS within 24 hours of establishing any exclusion and/or monitoring zone. Within seven days of establishing exclusion and/or monitoring zones, DWBIT will provide a report to the Corps and NMFS detailing the field-verification measurements. This report will include the following information: a detailed account of the levels, durations, and spectral characteristics of the vibratory pile driving sounds, DP thruster use, and the peak, RMS, and energy levels of the sound pulses and their durations as a function of distance, water depth, and tidal cycle.
- c. DWBIT must notify Corps and NMFS within 24 hours of receiving any field monitoring results which indicate that any exclusion or monitoring zones should

be modified (i.e., due to in-field sound monitoring suggesting that model results were too big or too small). No changes will be made to the exclusion or monitoring zones without written (e-mail) approval from the Corps and NMFS.

- d. Any observed behavioral reactions (e.g., animals departing the area) or injury or mortality to any marine mammals, Atlantic sturgeon, or sea turtles must be reported to the Corps and NMFS within 24 hours of observation. If any sturgeon are observed, these instances will also be reported to the Corps and NMFS (incidental.take@noaa.gov) within 24 hours.
- e. A final technical report will be provided to the Corps and NMFS within 120 days after completion of the construction activities. This report must provide full documentation of methods and monitoring protocols (including verification of the sound levels actually produced within the exclusion and monitoring zones), summarizes the data recorded during monitoring, and comparing these values to the estimates of listed marine mammals and sea turtles that were expected to be exposed to disturbing levels of noise during construction activities, and provides an interpretation of the results and effectiveness of all monitoring tasks.

26. Strike Avoidance: All vessels associated with the construction, operation, maintenance and repair, and decommissioning of the BITS will adhere to NMFS guidelines for marine mammal ship strike avoidance (see http://www.nmfs.noaa.gov/pr/pdfs/education/viewing_northeast.pdf), including maintaining a distance of at least 500 yards from right whales, at least 100 ft from all other whales, and having dedicated lookouts and/or protected species observers posted on all vessels who will communicate with the captain to ensure that all measures to avoid whales are taken.

PSOs will be placed on vessels with noise-producing equipment (e.g., vessels with the pile driver and the DP vessels) and vessels assigned to actively observe the Project's established exclusion and monitoring zones through construction. Other vessels will have a dedicated lookout to watch for whales and sea turtles and to communicate with the captain.

27. Geophysical Surveys Mitigation and Monitoring: DWBIT will use the following measures during all geophysical surveys (i.e., multi-beam sonar and sub-bottom profiler [chirp]):

- a. **Implementation of Ramp-Up:** At the start of each survey day, instruments that have the capability of running at variable power levels and operate at a frequency detectable by ESA-listed species will initially be operated at low-levels, then gradually increased to minimum necessary power requirements for quality data collection. This allows any listed species capable of detecting this noise to depart the area before full-power surveying commences. Surveys will not commence (i.e., ramp-up) when the exclusion zone cannot be effectively monitored.
- b. **Establishment of Exclusion Zone:** Whenever multi-beam sonar or the chirp is in use, a 300-m radius exclusion zone (from the source) will be established around the operating vessel or the towed survey device. The sounds produced by this equipment cannot be perceived by sea turtles or Atlantic sturgeon because the

frequency is too high. Therefore, the exclusion zone will be maintained for listed whales. For example, if a sound source is towed 30 m behind the survey vessel, the monitored area from the vessel will be out to 330 m (or 300 m from the source). The 300-m exclusion zone encompasses the 160 dB_{RMS} isopleth, which for either geophysical survey device, is expected to occur within 150 m or less from the operating device.

- c. **Visual Monitoring of the Exclusion Zones:** The exclusion zone will be monitored by a trained Environmental Compliance Monitor who will keep vigilant watch for the presence of marine mammals within the exclusion zone. The exclusion zone will be monitored for 30 minutes prior to the ramp-up of sound sources. If the exclusion zone is obscured by fog or poor lighting conditions, surveying utilizing noise-producing equipment will not be initiated until the entire exclusion zone is visible for the 30-minute period. If marine mammals are observed within the 300-m safety exclusion zones during 30-minute period and before the ramp-up begins, surveying utilizing noise-producing equipment will be delayed until they move out of the area.

The Environmental Compliance Monitor assigned to the survey vessel, as well as all individuals onboard the survey vessel responsible for navigation duties, will receive training on marine mammal and sea turtle sighting and reporting and vessel strike avoidance measures. The training course will be modeled after a NMFS-approved marine mammal and sea turtle training program. The training will include details on the federal laws and regulations for protected species (ship strike information, migratory routes, and seasonal abundance), as well as training on species identification.

All sightings of NMFS-listed species will be recorded on an established NMFS-approved log sheet by the Environmental Compliance Monitor. The following data will be recorded:

- i. Dates and location of operations;
- ii. Weather and sea-state conditions;
- iii. Time of observation;
- iv. Approximate location (latitude and longitude) at the time of the sighting;
- v. Details of sighting (species, numbers, behavior);
- vi. General direction and distance of sighting from the vessel;
- vii. Activity of the vessels at the time of sighting; and
- viii. Action taken by the Environmental Compliance Monitor.

All observation data will be provided to NMFS within 60 days of the completion of surveys. In addition, during all survey operations DWBIT will report all sightings of ESA-listed species, regardless of condition, to NMFS (incidental.take@noaa.gov) within 24 hours of the observation and record as much information as possible (e.g., species, size, decomposition state, obvious injuries etc.).

- d. **ShutDown:** If a listed whale is spotted within or transiting towards the exclusion zone when equipment is operating that can be heard by that individual (i.e., the chirp), an immediate shutdown of the equipment will occur. Subsequent restart or ramp-up of equipment will occur only after the whale has cleared the safety exclusion zone.

Sea Turtles and Atlantic Sturgeon:

28. All endangered species observers contracted by DWBIT must be approved by the Corps and NMFS. DWBIT shall provide the Corps, and the Corps shall transmit to NMFS, the names and resumes of all endangered species monitors to be employed at the project site at least 30 days prior to the start of WTG construction. No observer shall work at the project site without written approval of NMFS. If during project construction or DP vessel operations, additional endangered species monitors are necessary, DWBIT shall provide those names and resumes, and the Corps shall transmit those names and resumes to NMFS for approval at least 10 days prior to the date that they are expected to start work at the site.

29. Designated exclusion zones for all noise-producing activities must be monitored by NMFS-approved observers. The exclusion zone is considered that area ensounded by injurious levels (i.e., underwater noise levels greater than or equal to 180 dB_{RMS}).

Monitoring shall be as follows:

- a. **Vibratory Pile Driving Operations:** Observers must begin monitoring the exclusion zone at least 60 minutes prior to the initiation of soft-start pile driving. Full energy pile driving must not begin until the zone is clear of all sea turtles for at least 60 minutes. Monitoring will continue through the pile driving period and end approximately 60 minutes after pile driving is completed. Observers must notify operators if any sea turtles appear to be moving toward the exclusion zone, so that operations can be adjusted (i.e., pile driving energy reduced) to minimize the size of the exclusion zone. If the latter occurs, the observer must monitor the area within and near the exclusion zone for 60 minutes, and if clear after 60 minutes after the last sighting, notify the operator that full energy pile driving may resume.
- b. **DP vessel operations:** Observers will begin monitoring the exclusion zone as soon as the vessel leaves the dock and continue throughout the construction activity. Observers must notify the vessel operator if any sea turtles appear to be moving toward the exclusion zone, so that operations can be adjusted (i.e., reduced DP thruster energy) to minimize the size of the exclusion zone. If the latter occurs, the observer must monitor the area within and near the exclusion zone for 60 minutes, and if clear after 60 minutes of the last sighting, notify the vessel operator that full energy thruster use may resume. As DP vessels will be operational for 24 hours, at least two observers shall be onboard the vessel, working a 12-hour on, 12-hour off schedule. That observer working the night shift needs to be provided night-vision binoculars.

30. Field verification of modeled noise levels for injury or mortality must be undertaken and must be conducted throughout the work period to confirm modeled sound levels. This needs

to be conducted for: (1) installation and removal of cofferdams with vibratory pile driving; and (2) DP thruster use. Acoustic verification and monitoring must be conducted during DP thruster use, and vibratory pile driving (for cofferdam installation and removal) to ensure the exclusion zone is appropriately defined and thus, monitored by the observer required in Condition 29. Acoustic monitoring must be sufficient to determine source levels (i.e., within 1 m of the source), as well as the following:

- c. Atlantic sturgeon acoustic injury thresholds: Distance to the 206 peak sound level (dB_{Peak}) and 187 cumulative sound exposure level (dB_{cSEL}) isopleths.
- d. Sea turtle acoustic injury threshold: Distance to the 207 dB_{RMS} isopleth.

Results of this monitoring must be reported, via email, (danielle.palmer@noaa.gov) to NMFS. For pile driving operations, results must be provided to NMFS prior to the installation of the next pile or within 24 hours of installation, whichever is sooner. For DP vessel operation, results must be provided every 24 hours. If there is any indication that injury thresholds have been attained in a manner not considered in the NMFS Biological Opinion dated January 30, 2014 (i.e., extent of 206 dB_{Peak} or 187 dB_{cSEL} [Atlantic sturgeon]; 207 dB_{RMS} [sea turtles]), NMFS must be contacted immediately.

31. Any ESA listed species, including Atlantic sturgeon, observed during activities authorized under this Permit must be recorded, with information submitted to NMFS within 30 days. Any dead or injured individuals must be reported to NMFS within 24 hours. In the event of any observations of dead sea turtles or Atlantic sturgeon, dead specimens should be collected with a net and preserved (refrigerate or freeze) until disposal procedures are discussed with NMFS.

32. Reasonable attempts should be made to collect any dead sea turtles or sturgeon. These individuals shall be held in cold storage until disposition can be discussed with NMFS. The Corps or DWBIT must contact NMFS within 24 hours of any observations of dead or injured ESA listed species. NMFS will provide contact information when alerted of the start of project activity. Until alerted otherwise, the USACE should contact the Section 7 Coordinator by phone (978)281-9328 or fax 978-281-9394). Take information should also be reported by e-mail to: incidental.take@noaa.gov.

Other Stipulations:

33. **Nearshore Transmission Cable Burial Depth:** The minimum transmission cable burial depth between Mean High Water (MHW) and Mean Low Water (MLW) shall be Elevation minus 10 feet MLW. Transmission Cable installation depth below beaches and dunes at cable landing locations shall also achieve a minimum burial depth of 10' below the beach sediment surface. Burial depth below dunes shall be based on the elevation of the beach at the base of the dunes and shall not include the dune height in the burial depth measurement. Long Distance Horizontal Directional Drilling (Long Distance HDD) is required to assure this minimal burial depth requirement is met at the mainland Scarborough Beach landing. A post installation survey, stamped by a RI registered Land Surveyor or Engineer, that provides the elevation of the top of the cable on the mean low water datum and horizontally on the RI State Plane coordinate system shall be submitted to the Corps to confirm this requirement has

been met. This survey shall be submitted within 15 days of transmission cable installation at the beach landing locations.

34. Environmental Compliance Monitor: DWBIT shall employ an Environmental Compliance Monitor (ECM) to monitor environmental compliance during all construction activities associated with the BITS. The ECM shall be a third-party entity hired by DWBIT.

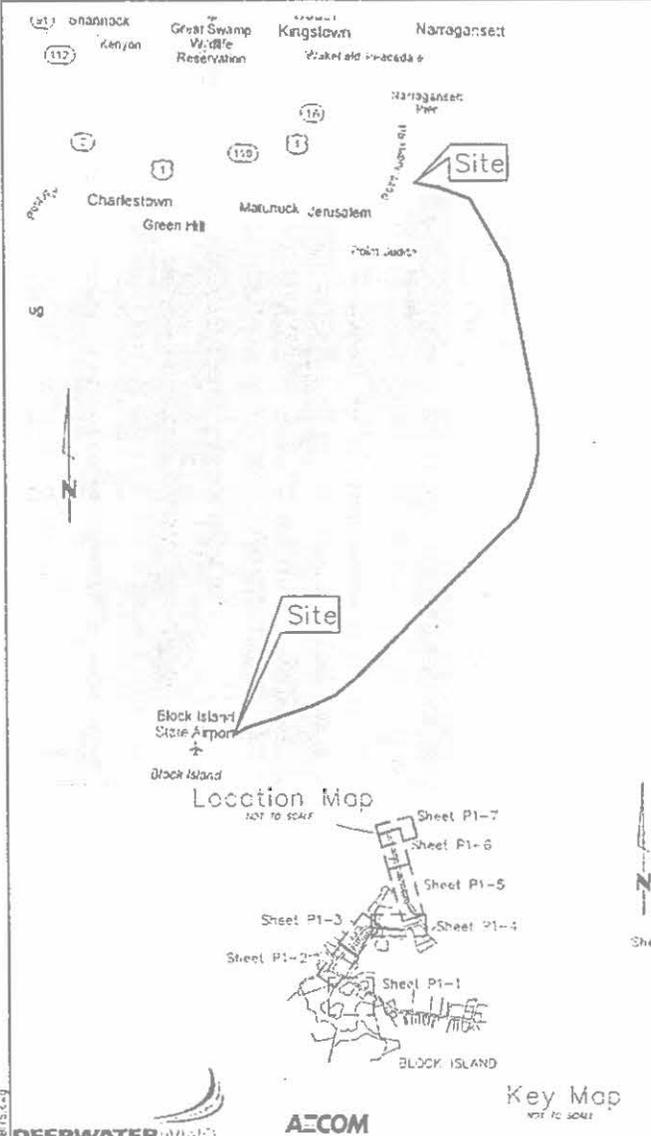
35. Cable Location and Scour Protection: Within 15 days of completing the installation of the submarine transmission cable, DWBIT shall submit a post-construction survey, stamped by a Rhode Island-registered Professional Land Surveyor or Engineer, of the actual cable location and the proposed cable easement with State Plane and LA T /LON coordinates for the cable angle points, easement comers / angle points of all scour protection matting (concrete filled bags, concrete mats, stone, etc.) installed on the ocean floor to protect the transmission cable. If the area of the ocean bottom impacted by protective armoring exceeds the 2.1 acres of total ocean bottom coverage estimated within the Environmental Report/COP, the Corps may require marine habitat compensation to be determined after submission of the post-installation survey.

36. Prior to commencing construction, DWBIT shall obtain a Right-of-Way Grant from the Bureau of Ocean Energy Management for the portions of the BITS cable in federal waters on the Outer Continental Shelf.

BLOCK ISLAND TRANSMISSION, LLC. 34.5 KV BITS UNDERGROUND ROUTE

DRAWING MANIFEST			
SHEET #	REV	DATE	DESCRIPTION
P1-1	V	04/05/2011	ROUTE ALI SHEET
P1-1	C	06/22/2011	BLOCK ISLAND PLAN VIEW
P1-2	C	04/28/2011	BLOCK ISLAND PLAN VIEW
P1-3	C	04/28/2011	BLOCK ISLAND PLAN VIEW
P1-4	D	04/28/2011	BLOCK ISLAND PLAN VIEW
P1-5	D	04/28/2011	BLOCK ISLAND PLAN VIEW
P1-6	B	04/28/2011	BLOCK ISLAND PLAN VIEW
P1-7	F	04/28/2011	OCEAN PLAN AND PROFILES
P1-8	L	04/28/2011	OCEAN PLAN AND PROFILES
P1-9	C	04/28/2011	OCEAN PLAN AND PROFILES
P1-10	C	04/28/2011	OCEAN PLAN AND PROFILES
P1-11	G	04/28/2011	OCEAN PLAN AND PROFILES
P1-12	D	04/28/2011	OCEAN PLAN AND PROFILES
P1-13	T	04/28/2011	OCEAN PLAN AND PROFILES
P1-14	E	04/28/2011	OCEAN PLAN AND PROFILES
P1-1	L	04/28/2011	BLOCK ISLAND DETAILED SHEET
P1-2	L	04/28/2011	BLOCK ISLAND BRIDGE DETAILS

Legend:		See Sheet #
DITCHHEAD MARKS	--- DWH --- DWH ---	SEE SHEET #
EXISTING OVERHEAD WIRES	--- OWH --- OWH ---	City of Nome
UNDERGROUND ELECTRIC	--- EUG --- EUG ---	City of Nome
EXISTING UNDERGROUND ELECTRIC	--- EUG --- EUG ---	City of Nome
ASSESSOR'S LINE	---	City of Nome
GAS LINE	---	City of Nome
WATER LINE	---	City of Nome
SEWER LINE	---	City of Nome
DRAIN LINE	---	City of Nome
SEWER FORCE MAIN	---	City of Nome
CORROSION LINE	---	City of Nome
EASEMENT LINE	---	City of Nome
SEWER VALVE	---	City of Nome
WATER VALVE	---	City of Nome
OLE VALVE	---	City of Nome
HYDRANT	---	City of Nome
WATER SHUT OFF	---	City of Nome
ELECTRIC MANHOLE	---	City of Nome
TELEPHONE MANHOLE	---	City of Nome
SEWER MANHOLE	---	City of Nome
DRAINAGE MANHOLE	---	City of Nome
CATCH BASIN	---	City of Nome
LIGHT POLE	---	City of Nome
UTILITY POLE	---	City of Nome
SUN YARD	---	City of Nome
SPIN	---	City of Nome
WELL	---	City of Nome
PLACING LOCATION WITH VEGETATION	---	City of Nome
DRAINAGE MATCH LINE	---	City of Nome
LIMITS OF PAVING	---	City of Nome
EXISTING FENCE LINE	---	City of Nome
PROPOSED UNDERGROUND HOIST	---	City of Nome
PROPOSED MANHOLE	---	City of Nome
LIMIT OF ROCK	---	City of Nome
UNDERGROUND LINE AND FLAG	---	City of Nome
STREAM LINE AND FLAG	---	City of Nome
50' PERIMETER RETIARD LINE	---	City of Nome
100' OVERHEAD RETIARD LINE	---	City of Nome
200' LANDSIDE OF A COASTAL FEATURING LINE	---	City of Nome
EROSION CONTROL LINE	---	City of Nome
EXISTING FENCE LINE	---	City of Nome
EXISTING PERIMETER LINE	---	City of Nome
PROPOSED OVERHEAD POWER LINES	---	City of Nome
200' CORRIDOR BOUNDARY	---	City of Nome
500 METER CORRIDOR 50% DARY	---	City of Nome

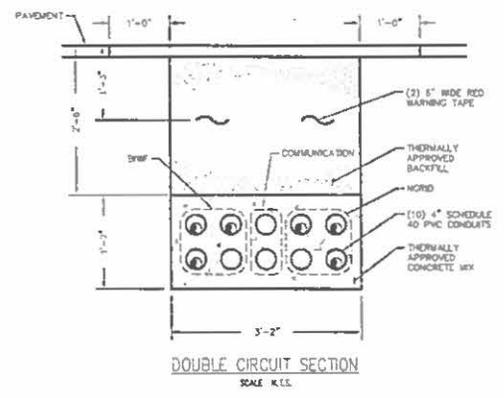
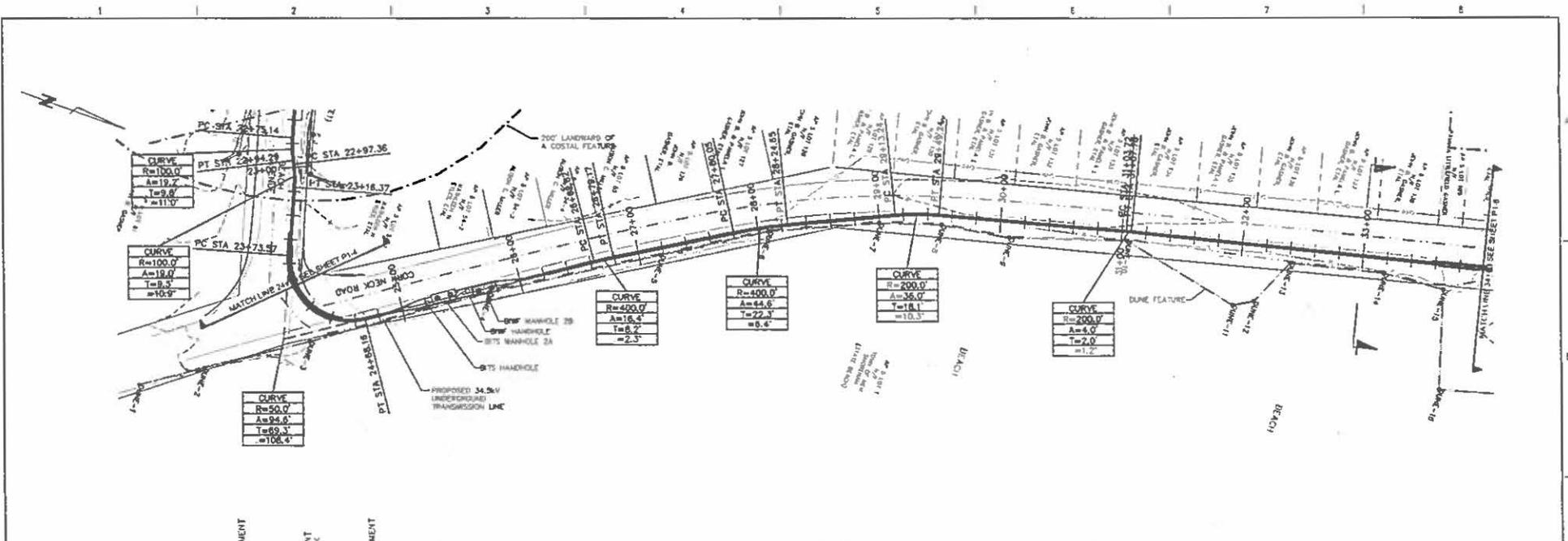


General Notes

- THE UTILITIES SHOWN HEREIN ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORDED DOCUMENTS. OTHER UTILITIES MAY EXIST NOT DISCLOSED THROUGH THE RECORD. CHECK THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES, WELL BEFORE THE DIG.



DEEPWATER WIND 11000 W. ALASKA STREET, SUITE 100, ANCHORAGE, ALASKA 99515 TEL: 907.561.1100 FAX: 907.561.1101 WWW.DEEPWATERWIND.COM		AZCOM 1100 W. ALASKA STREET, SUITE 100, ANCHORAGE, ALASKA 99515 TEL: 907.561.1100 FAX: 907.561.1101 WWW.AZCOM.COM		POWER ENGINEERS 1100 W. ALASKA STREET, SUITE 100, ANCHORAGE, ALASKA 99515 TEL: 907.561.1100 FAX: 907.561.1101 WWW.POWERENGINEERS.COM		REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>CHKD</th> <th>APP'D</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>04/28/2011</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> </tr> </tbody> </table>		NO.	DATE	BY	CHKD	APP'D	DESCRIPTION	1	04/28/2011	SCALE: 1" = 100'		PROJECT: 34.5 KV BITS UNDERGROUND ROUTE		DATE: 04/28/2011		PROJECT NO.: 11000		JOB NUMBER: 11000		REV: 1	
NO.	DATE	BY	CHKD	APP'D	DESCRIPTION																										
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General Notes

1. THE UTILITIES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION WITH HORIZONTAL AND VERTICAL OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG.
2. ALL WORK WITHIN STATE'S ROW WILL CONFORM TO BROT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 204 EDITION AND STANDARD DETAILS, JUNE 15, 1998, AS AMENDED BY REVISION.
3. SEE BROT STANDARD 34.1.0 FOR TYPICAL QUADRANT INSTALLATION.
4. SEE BROT STANDARD 102 FOR SEEDING OF OFF ROAD RESTORATION AREAS.
5. SEE BROT STANDARD 720 FOR PAVEMENT MARKINGS.



Know what's below.
Call before you dig.



REV	REVISIONS	DATE	DRN	DSGN	CXD	APPR	REV	REVISIONS	DATE	DRN	DSGN	CXD	APPR	REV	REFERENCE DRAWINGS
							C	ISSUED FOR PERMIT	06/06/2013	JAS	JAS	DEJ			
							D	ISSUED FOR PERMIT	06/11/2013	JAS	JAS	DEJ			
							C	ISSUED FOR PERMIT	05/23/2012	BNW	JAS	DEJ			
							B	ISSUED FOR REVIEW	05/01/2012	BNW	JAS	DEJ			
							A	ISSUED FOR REVIEW	04/12/2012	JAS	JAS	DEJ			

SCALE: PLAN: 1" = 40'
SECTION: 1" = 10'
JOB 22-34 DWG 065

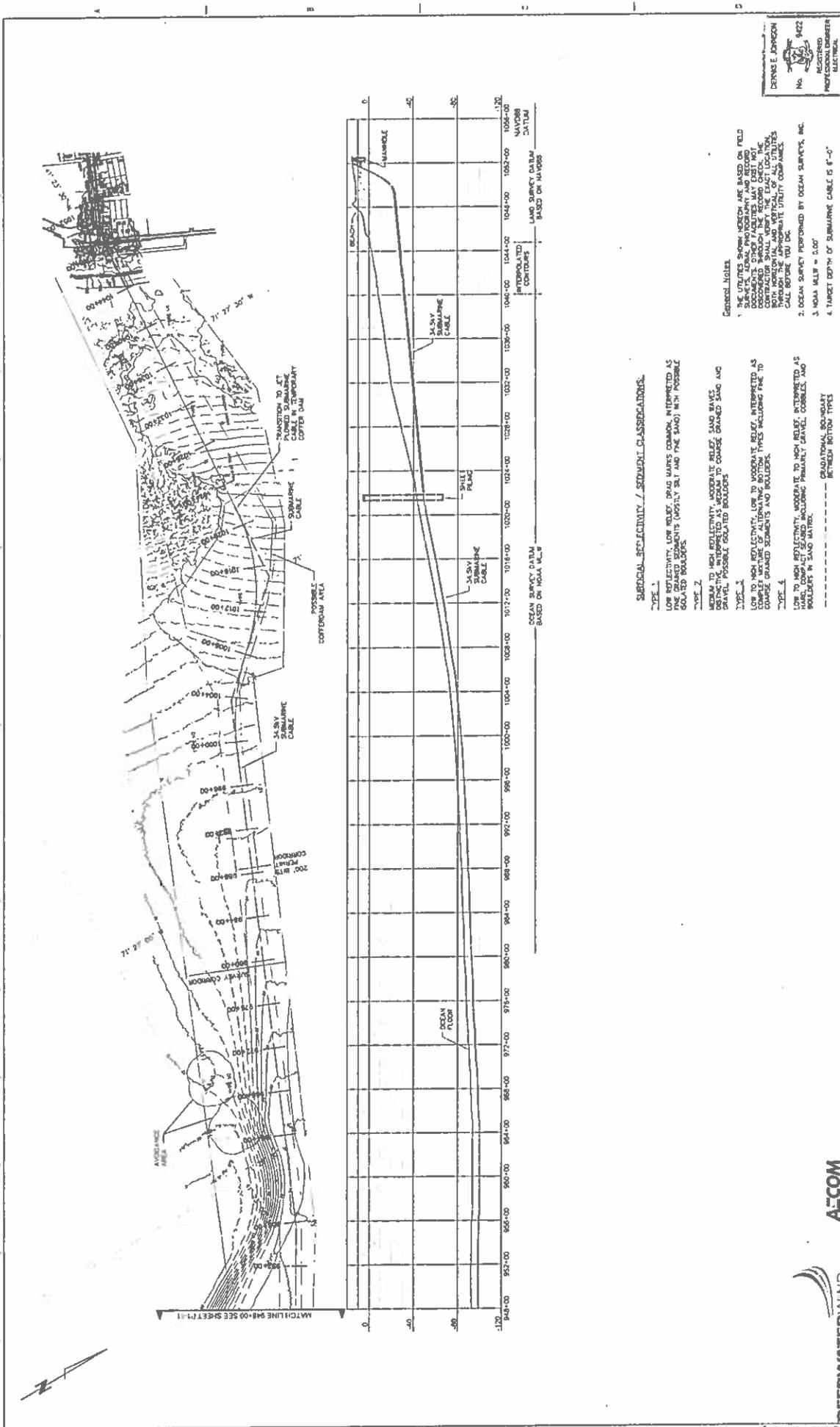


DEEPWATER WIND
BLOCK ISLAND TRANSMISSION, LLC
BLOCK ISLAND PLAN VIEW
34.5kV BITS UNDERGROUND ROUTE

JOB NUMBER 119631
DRAWING NUMBER P1-5

DEWIS E. JOHNSON
No. 9422
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL

BLOCK ISLAND ROUTE.dwg



REV	REVISIONS	DATE	BY	CHK	APPD	REV	DATE	BY	CHK	APPD	REFERENCE DRAWINGS
E	ISSUED FOR PERMIT	01/20/2014	JUS	JUS	DEJ						
D	ISSUED FOR PERMIT	06/09/2013	JUS	JUS	DEJ						
C	ISSUED FOR PERMIT	05/23/2012	BRF	JUS	DEJ						
B	ISSUED FOR REVIEW	05/07/2012	BRF	JUS	DEJ						
A	ISSUED FOR REVIEW	05/17/2012	BRF	JUS	DEJ						

DEEPWATER WIND
 A-COM

01 OCEAN ROUTE BRTS - 01-1.dwg

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REVISIONS

DATE

BY

CHK

APPD

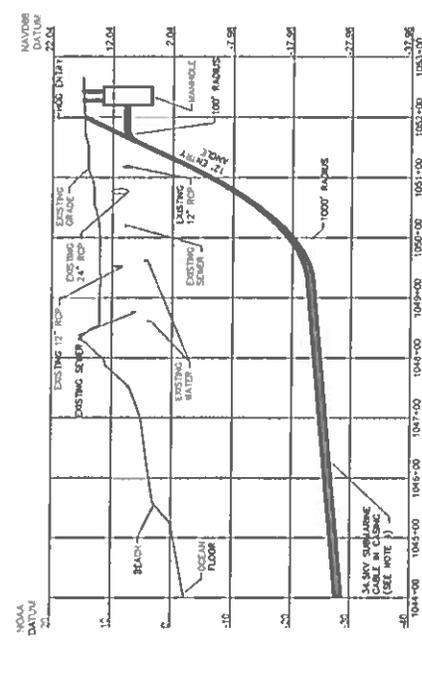
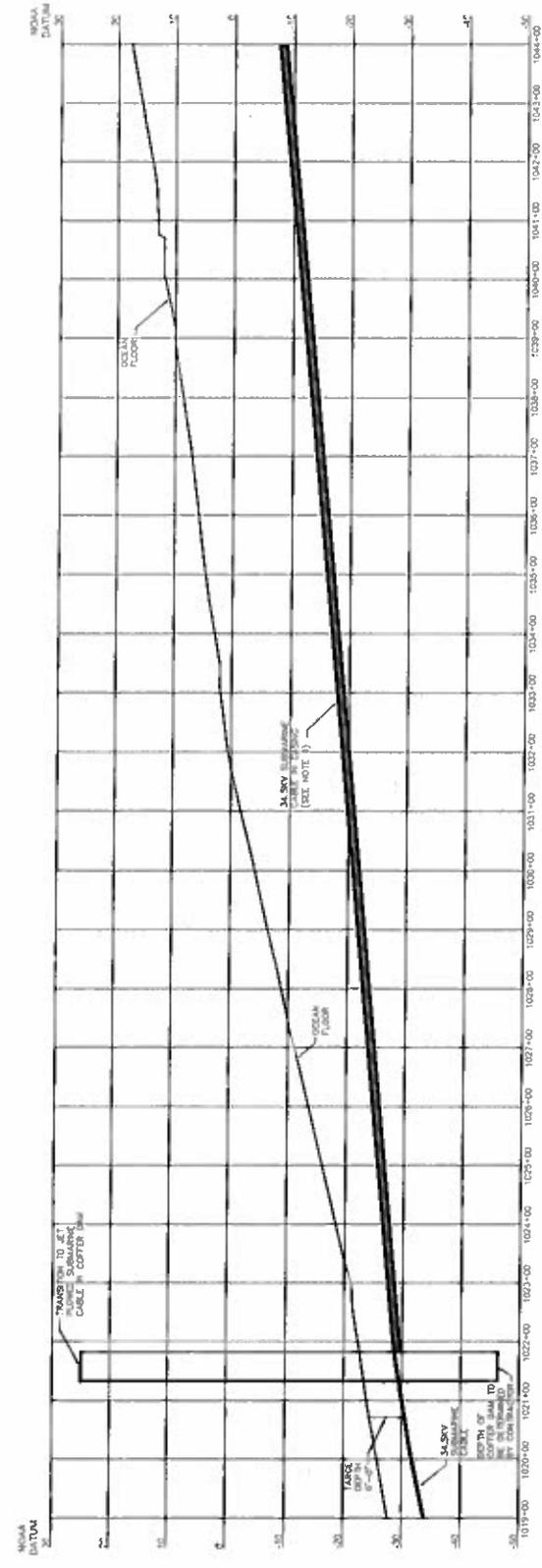
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BY

CHK

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General Notes

- THE UTILITIES SHOWN HEREON ARE BASED ON FIELD SURVEYS. FACILITIES MAY EXIST AND NOT INDICATED THROUGH THE RECORD SURVEY. VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES CALL BEFORE YOU DIG.
- ALL PROPERTY LINE INFORMATION IS SHOWN APPROXIMATE AND BASED ON TOWN ASSESSOR'S PLATS ONLY.
- WALLS SHALL BE BUILT 10' OR MORE BELOW SEALED VA HOOD.
- CABLE TO BE BURIED 10' OR MORE BELOW SEALED VA HOOD.



DEREK E. JOHNSON
No. 118031
PROFESSIONAL ENGINEER
ELECTRICAL

JOB NUMBER: 118031
DRAWING NUMBER: P1-13A

DEEPWATER WIND
BLOCK SOUND TRANSMISSION, LLC
OCEAN PLUM AND PROFILES
34.5KV BITS UNDERGROUND ROUTE

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DATE: 03/27/2012
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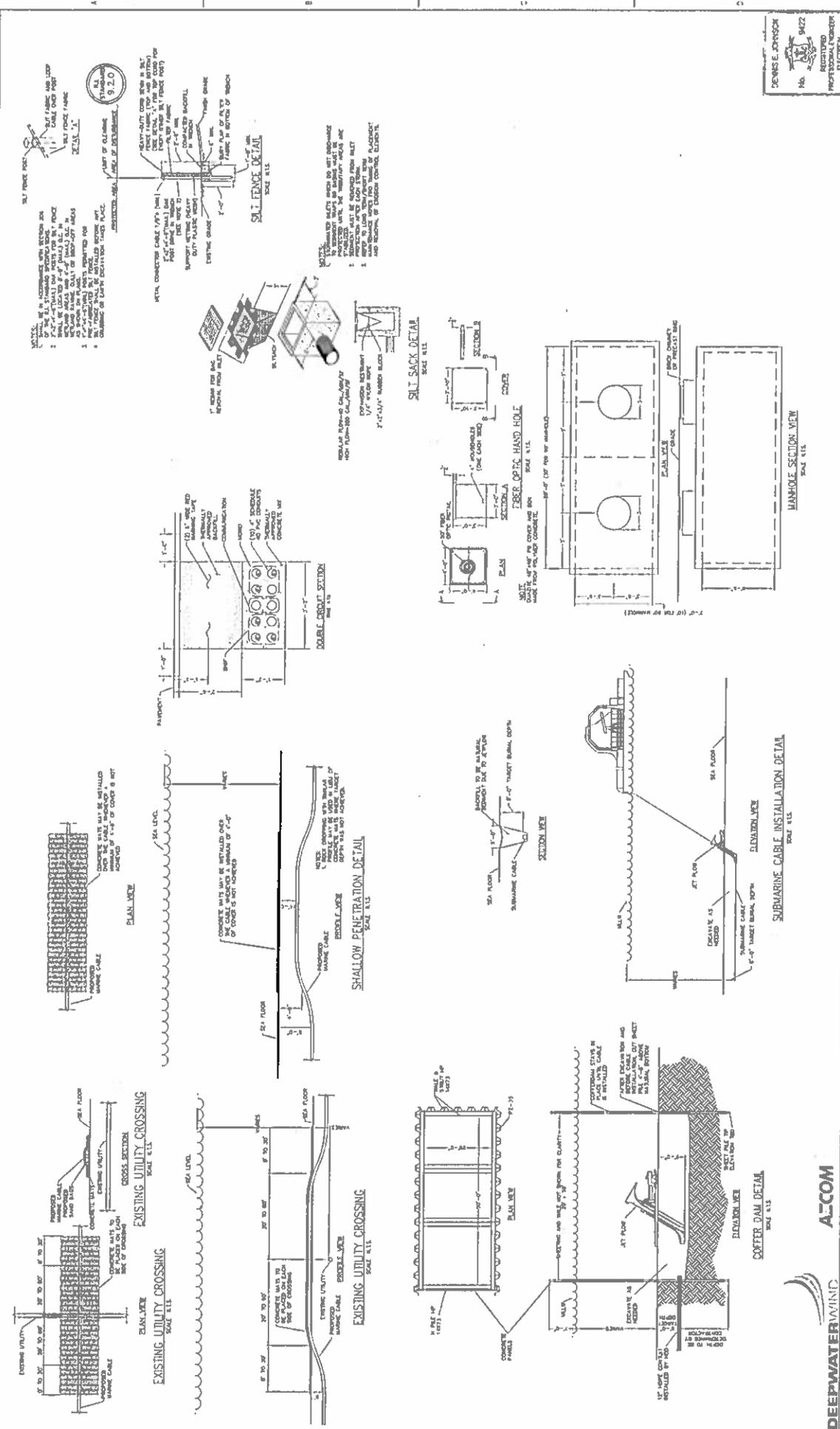
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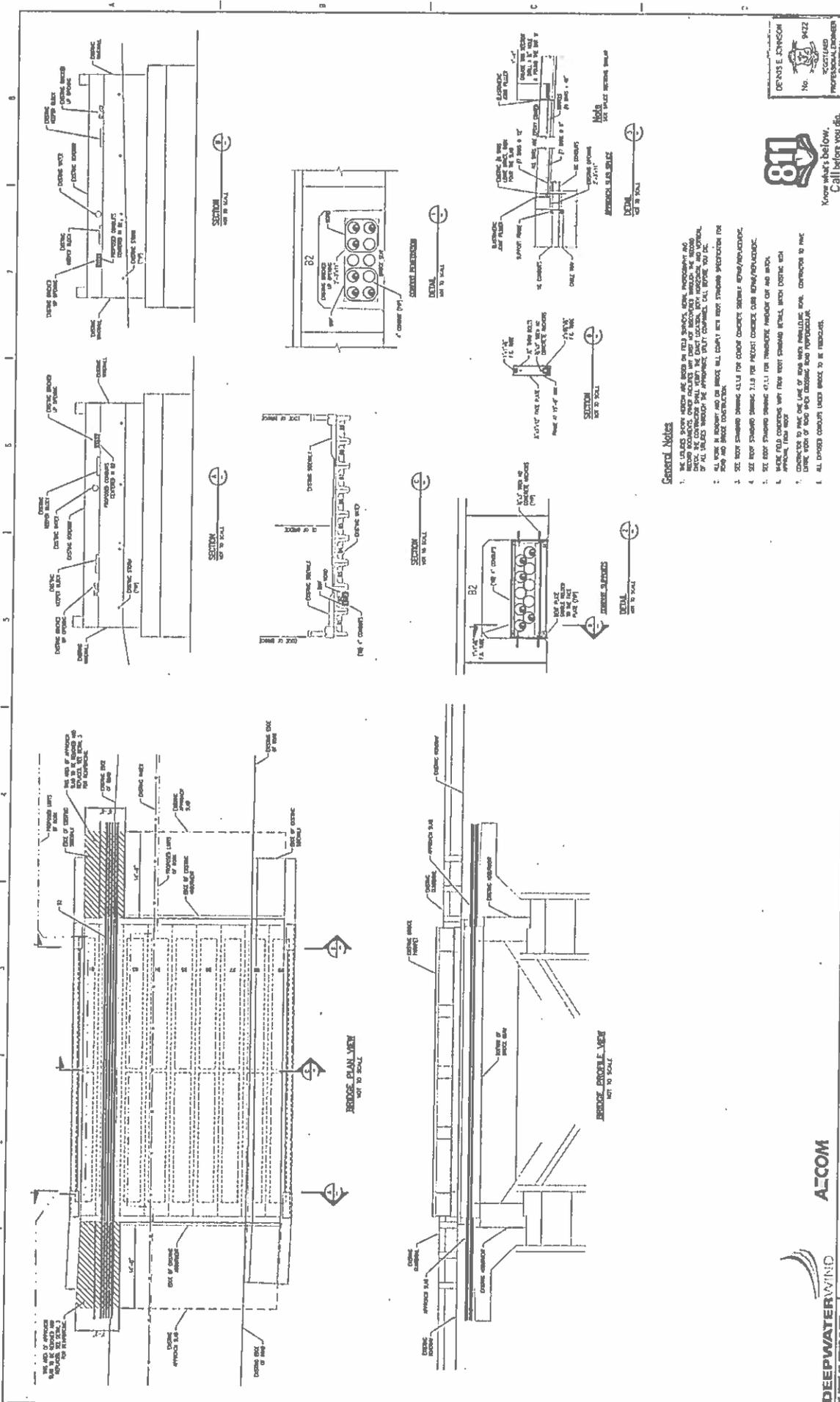
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DEEPWATER WIND 34-54V BAYS UNDERGROUND ROUTE		KEEPWATER WIND BLOCK ISLAND PROGRESSION, LLC		JOB NUMBER: 118811 REV: 4	
POWER ENGINEERS ENGINEERS 1000 BAYVIEW BLVD SUITE 1000 OAKLAND, CA 94612		DESIGN: JAS 10/22/2013 DRN: JAS 10/22/2013 C&C: DEJ 10/22/2013 SCALE: N.T.S.		DRAWING NUMBER: U3-1	
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B	ISSUED FOR PERMIT	10/22/2013	JAS	DEJ	DEJ
A	ISSUED FOR PERMIT	10/22/2013	JAS	DEJ	DEJ



- General Notes**
1. THE DETAILS SHOWN HEREON ARE BASED ON FIELD SPACING, UNLESS INDICATED OTHERWISE AND SHALL BE CONSIDERED TO BE THE MINIMUM REQUIRED. THE DESIGNER SHALL VERIFY THE FIELD SPACING IS APPROPRIATE FOR THE STRUCTURE AND SHALL BE RESPONSIBLE FOR THE PROVISION OF ALL REINFORCEMENT THROUGH THE APPROPRIATE BRIDGE CHANNELS. CALL ENGINEER FOR CLARIFICATION.
 2. ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE STANDARD SPECIFICATIONS FOR BRIDGE CONSTRUCTION.
 3. SEE NOTES REGARDING BRIDGE 43.11 FOR CONCRETE QUALITY REQUIREMENTS.
 4. SEE NOTES REGARDING BRIDGE 71.9 FOR PRECAST CONCRETE CURB REQUIREMENTS.
 5. SEE NOTES REGARDING BRIDGE 41.11 FOR PRECAST CONCRETE CURB REQUIREMENTS.
 6. MAKE FIELD CONNECTIONS WITH FIELD REINFORCEMENT BARS, WHICH SHOULD BE APPLIED, FROM BELOW.
 7. CONNECTIONS TO MAKE THE LINE OF WORK WITH PRECAST CONCRETE CURB, CONNECTIONS TO MAKE LINEAR WITH OF EACH WHICH EXISTING AND PROPOSED.
 8. ALL DIMENSIONS SHOWN UNLESS SPECIFIED TO BE OTHERWISE.

DEEPAWATER WIND
 No. 1922
 SCOTTISH REGISTERED
 PROFESSIONAL ENGINEER
 ELECTRICAL



Know what's below.
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JOB NUMBER	REV
11800	1

DEEPAWATER WIND
 BLOCK ISLAND, LLC
 BLOCK ISLAND BRIDGE DETAILS
 34.5 FT BRIDGE UNDERGROUND ROUTE



DESIGN	DATE	BY	CHK
AS	05/07/2013	AS	AS
AS	05/07/2013	AS	AS
AS	05/07/2013	AS	AS

SCALE: NONE
 FILE: 23-11.DWG, OUT

REV	REVISIONS	DATE	DRN	DSGN	CHK	APPD	REFERENCE DRAWINGS
A	ISSUED FOR PERMIT	05/07/2013	AS	AS	AS	AS	
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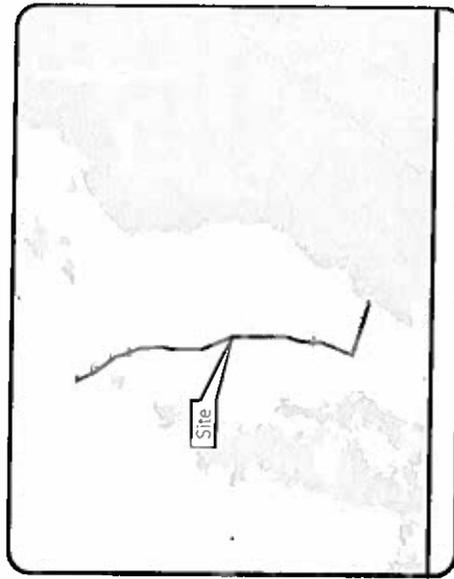
DEEPAWATER WIND
 ACOM

U2-2 Bridge Details

The Scarborough Beach Alternative

Deepwater Wind Block Island Transmission, LLC

Burnside Ave., Point Judith Rd., Kingstown Rd., Old Tower Hill Rd.
Narragansett and South Kingstown, RI



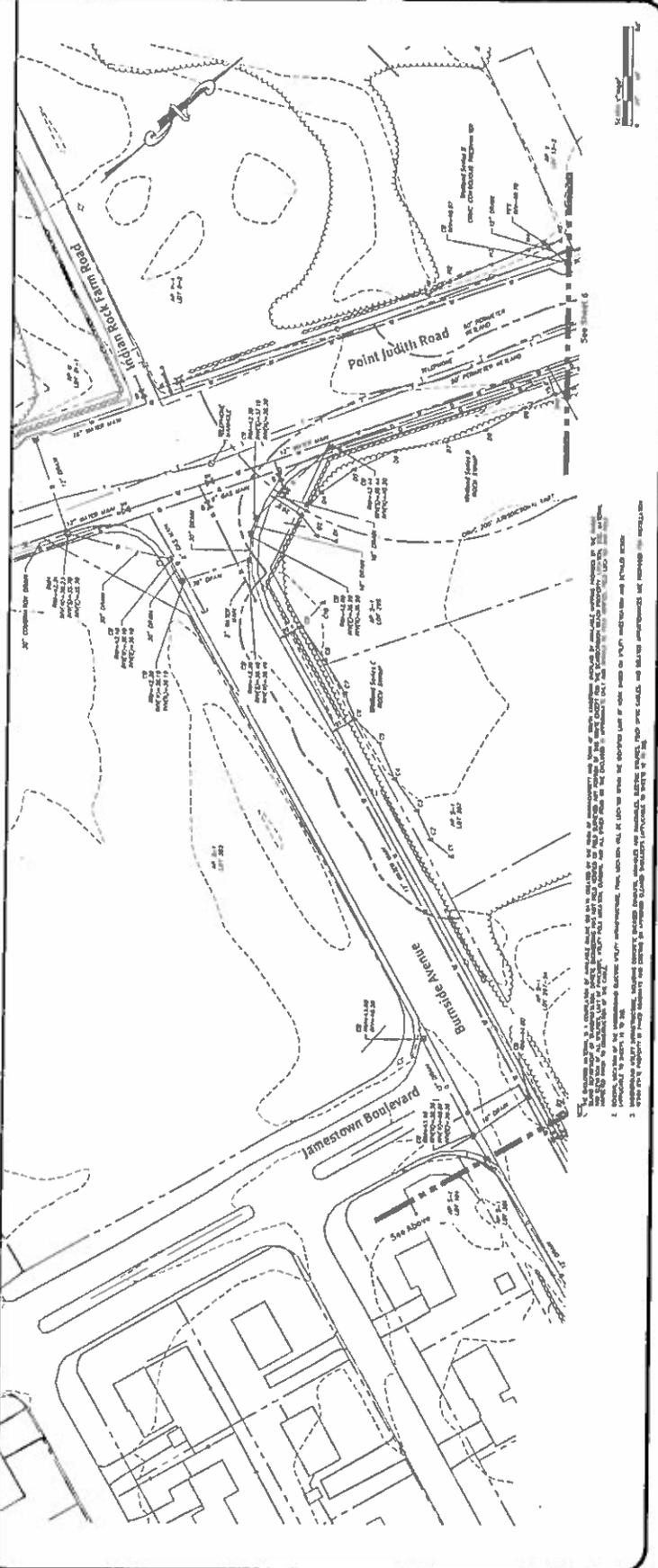
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- 3. Notes & Legend
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- 6. Existing Conditions - 3
- 7. Existing Conditions - 4
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- 31. Detail Sheet - 1
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Sheet No. 1A-4	Sheet No. 1A-1
Sheet No. 1A-5	Sheet No. 1A-6
Sheet No. 1A-7	Sheet No. 1A-8
Sheet No. 1A-9	Sheet No. 1A-10

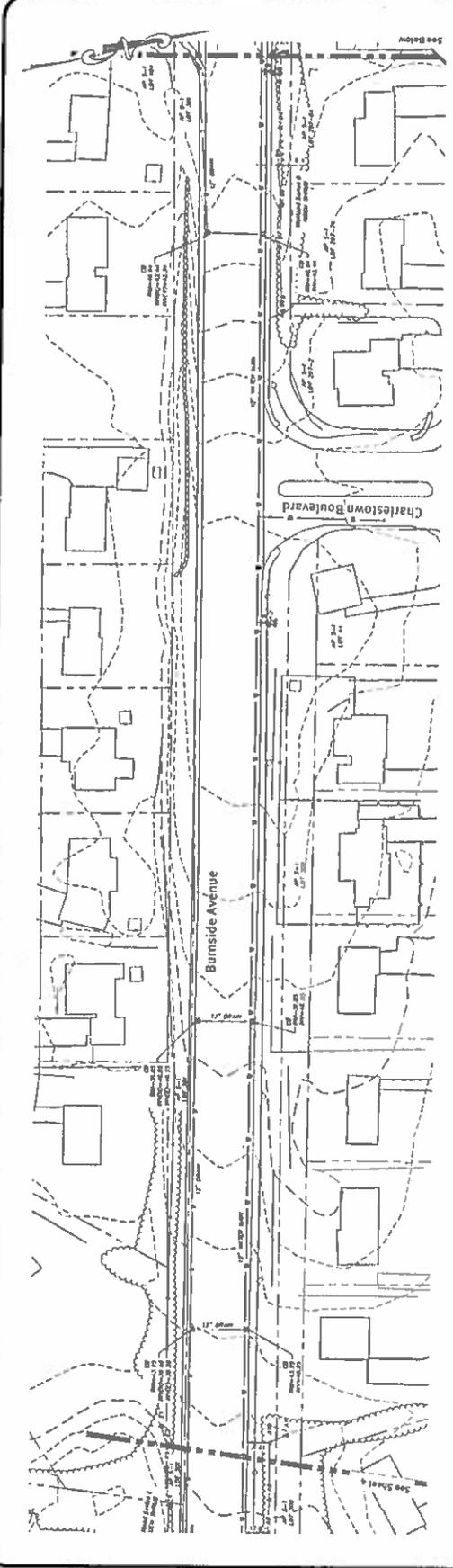


1. This drawing is a plan view of the proposed transmission line route. It is not a cross-section and does not show the vertical alignment of the line. The vertical alignment shall be determined by the engineer in charge of the project.

2. The proposed transmission line route is shown as a solid line. The existing transmission line route is shown as a dashed line. The proposed route is shown with a 100-foot right-of-way boundary.

3. The proposed transmission line route is shown with a 100-foot right-of-way boundary. The existing transmission line route is shown with a 100-foot right-of-way boundary.

4. The proposed transmission line route is shown with a 100-foot right-of-way boundary. The existing transmission line route is shown with a 100-foot right-of-way boundary.



1. This drawing is a preliminary drawing and is not to be used for construction. It is intended for informational purposes only. All dimensions and elevations are approximate and subject to change. The contractor shall verify all dimensions and elevations in the field.

2. The contractor shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities. The contractor shall also be responsible for obtaining all necessary easements and rights-of-way.

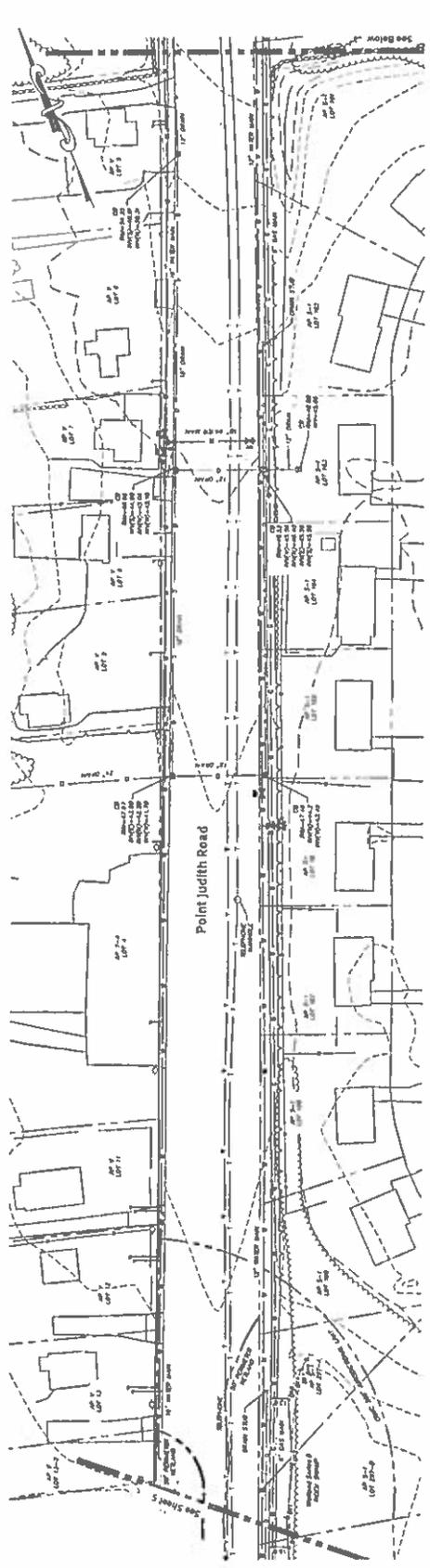
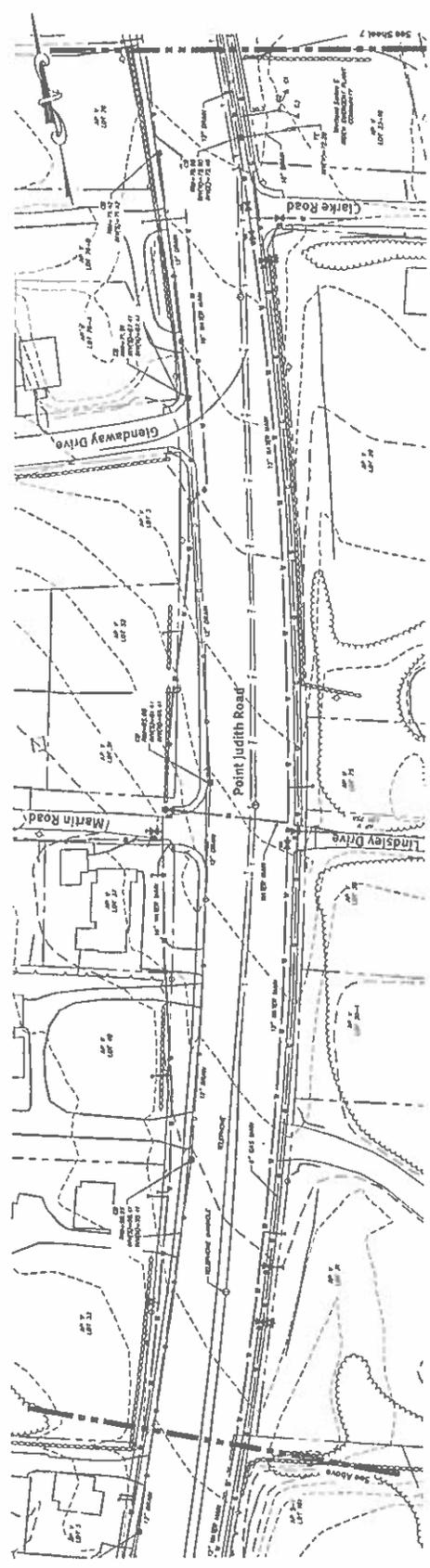
3. The contractor shall be responsible for protecting all existing utilities and structures. The contractor shall also be responsible for restoring all existing utilities and structures to their original condition.

4. The contractor shall be responsible for maintaining access to all existing roads and structures. The contractor shall also be responsible for maintaining all existing easements and rights-of-way.

5. The contractor shall be responsible for maintaining all existing survey monuments and markers. The contractor shall also be responsible for setting all new survey monuments and markers.

6. The contractor shall be responsible for maintaining all existing survey data and records. The contractor shall also be responsible for updating all survey data and records.

7. The contractor shall be responsible for maintaining all existing survey data and records. The contractor shall also be responsible for updating all survey data and records.



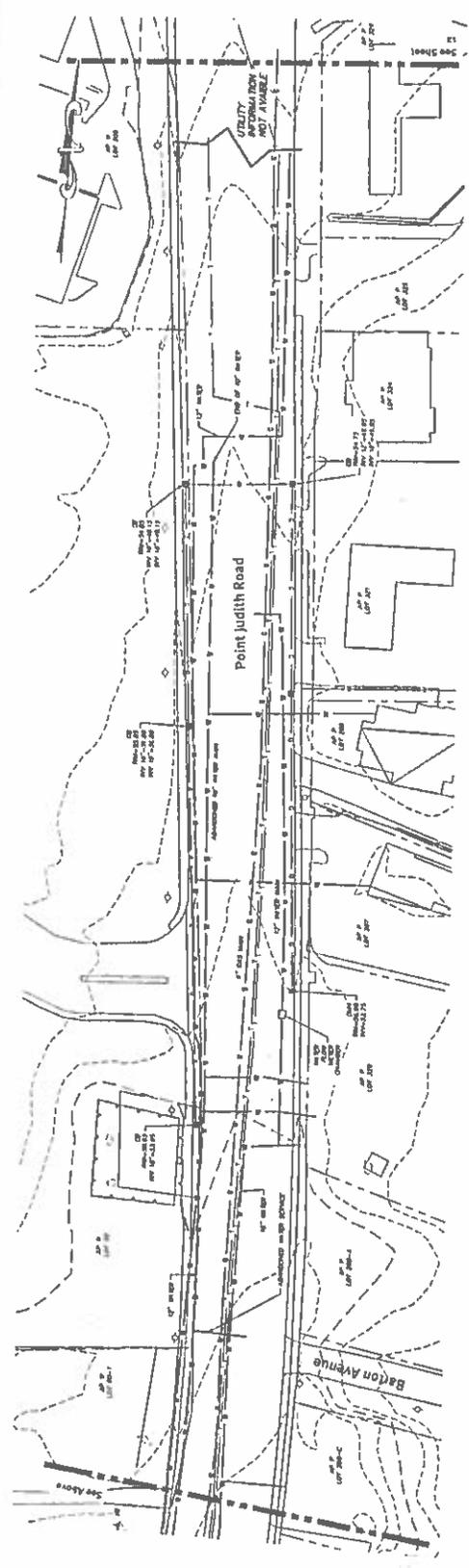
Existing Conditions - 3
 Deepwater Wind Block Island
 Transmission, LLC
 Deepwater Wind
 6000 West 10th Street, Suite 100
 Anchorage, Alaska 99503
 Phone: 907.561.1234
 Fax: 907.561.1235
 Email: info@deepwaterwind.com

NO.	DESCRIPTION	DATE
1	Issue for Public Review	10/15/10
2	Issue for Public Review	10/15/10
3	Issue for Public Review	10/15/10
4	Issue for Public Review	10/15/10
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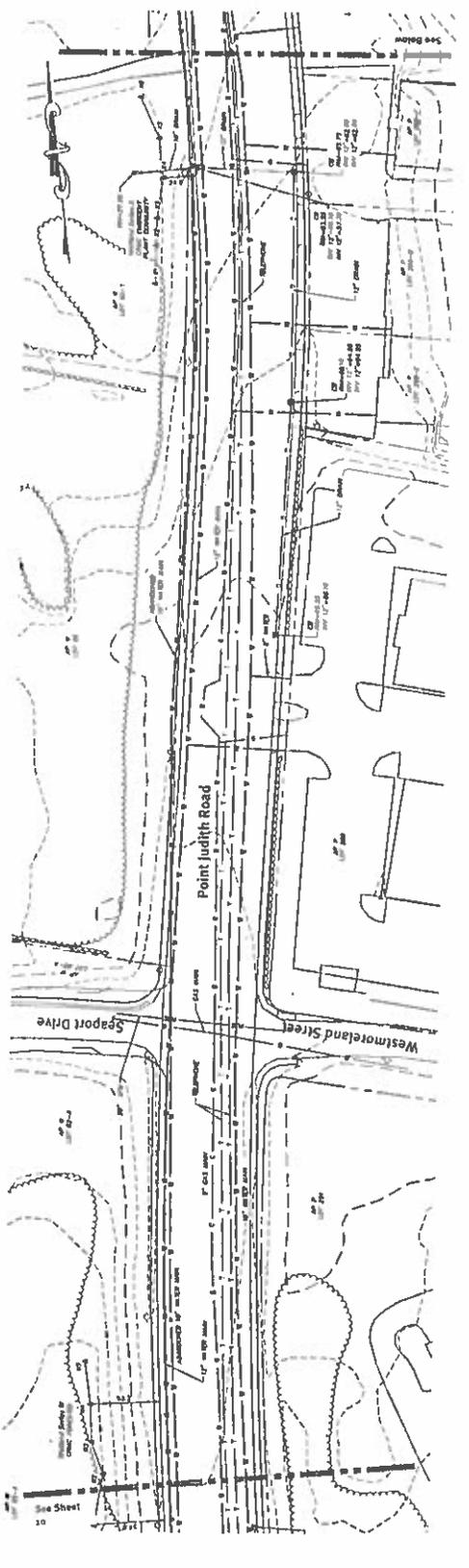


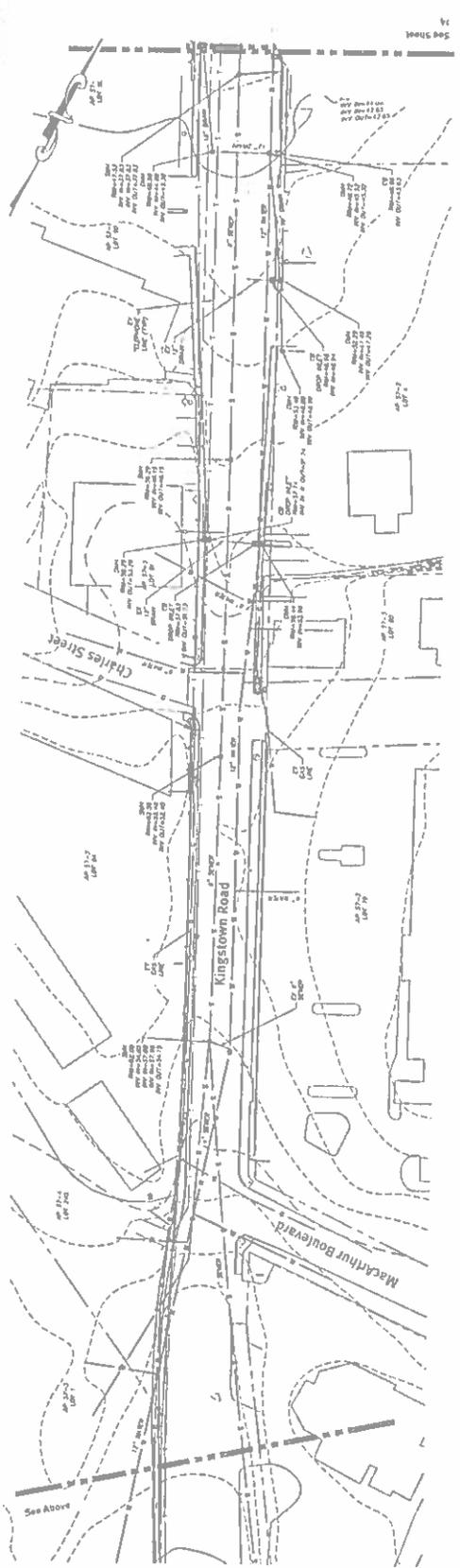
D|Prete Engineering
 600 West 10th Street, Suite 100
 Anchorage, Alaska 99503
 Phone: 907.561.1234
 Fax: 907.561.1235
 Email: info@prete.com

Sheet No.	8
Scale	AS SHOWN
Project No.	11.15.13
Revision	
Checked by	D.C.S.
Drawn by	

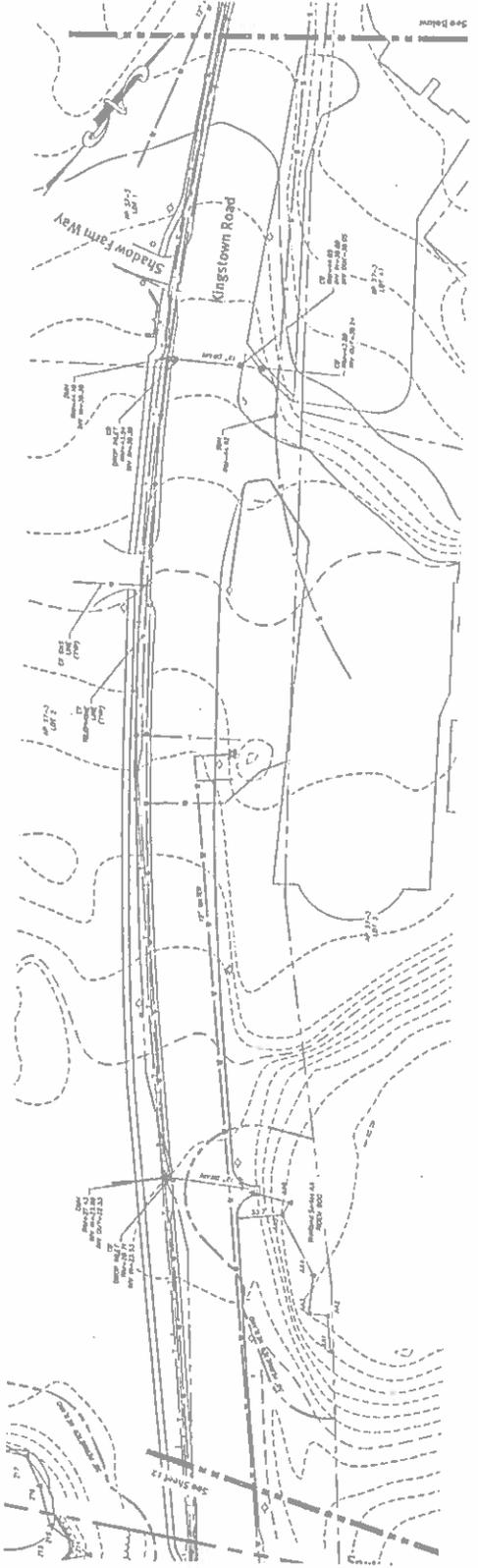


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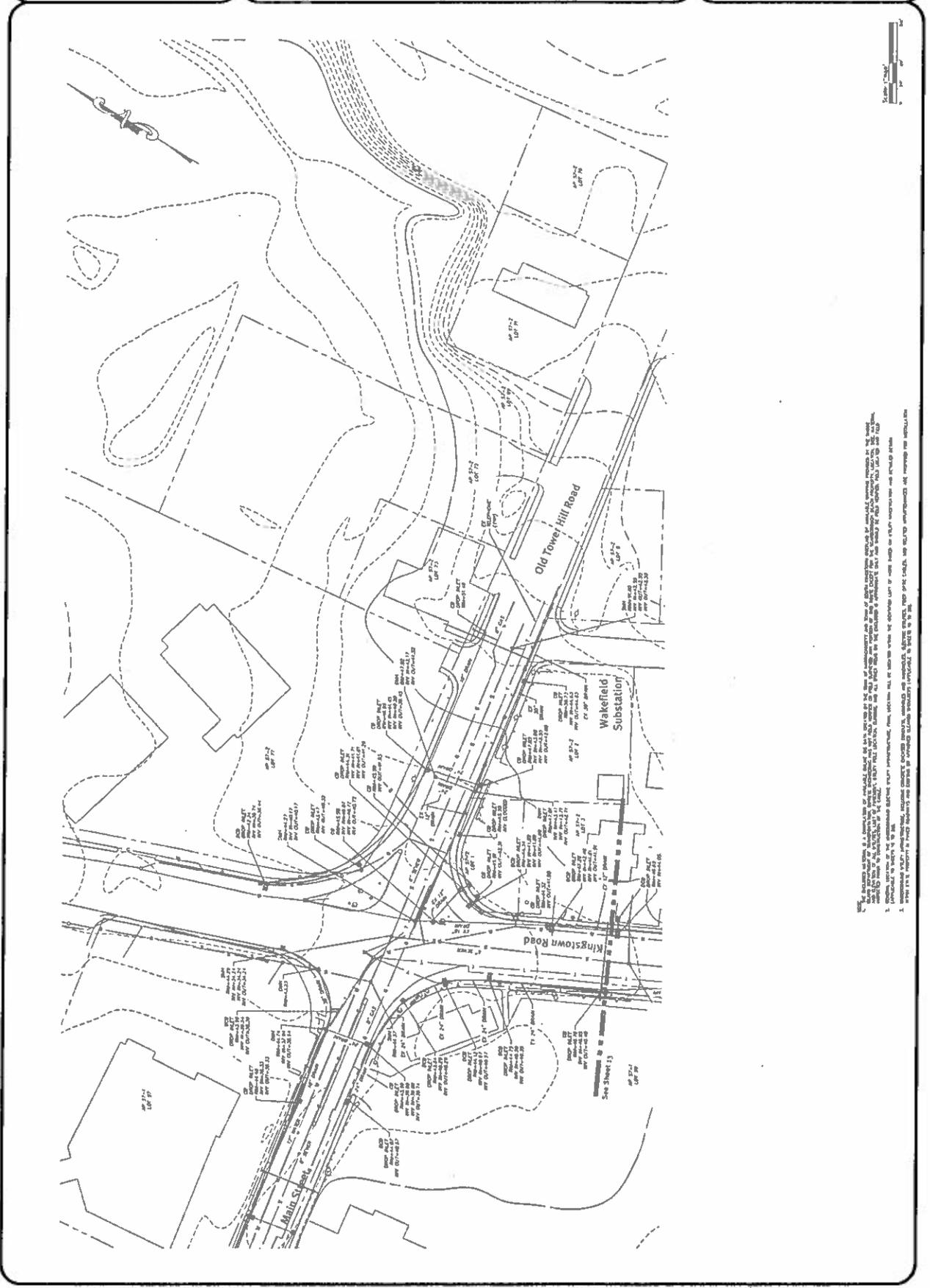


DIPREte Engineering
 1000 West 10th Street, Suite 100
 Anchorage, Alaska 99501
 Phone: (907) 562-1234
 Fax: (907) 562-1235
 Email: info@DIPREte.com

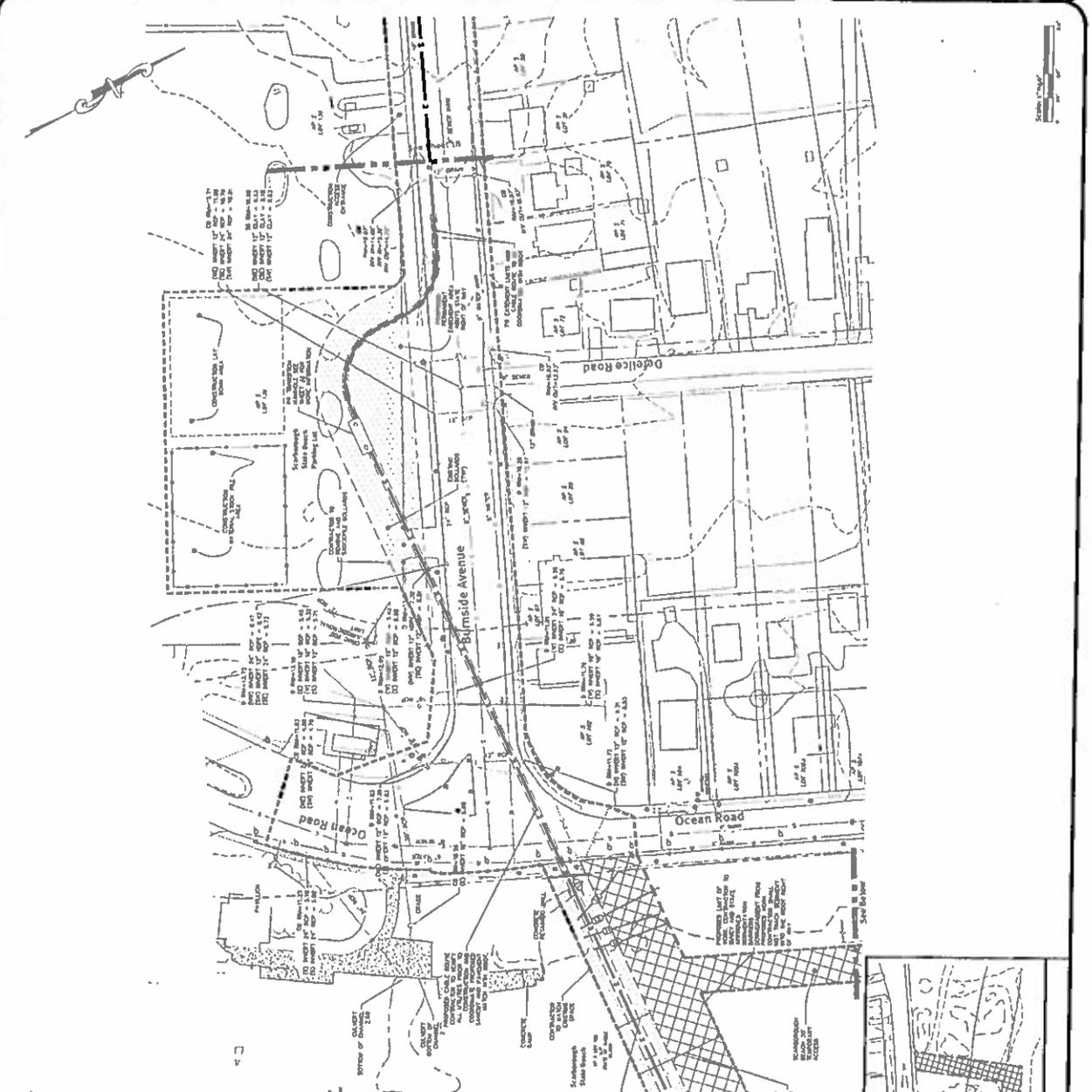


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2	01/15/2025	Revised
3	02/01/2025	Revised
4	03/10/2025	Revised
5	04/20/2025	Revised

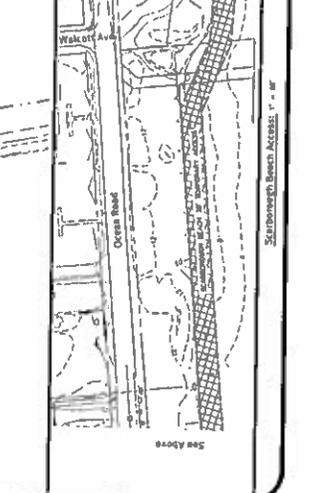
Deepwater Wind
 Transmission, LLC
 Deepwater Wind Block Island
 Existing Conditions - 11



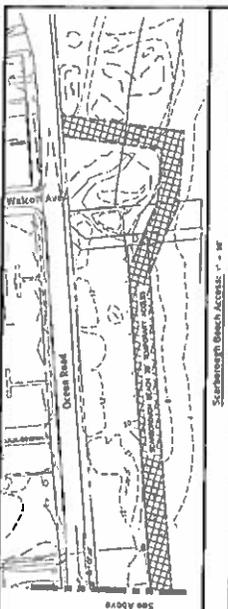
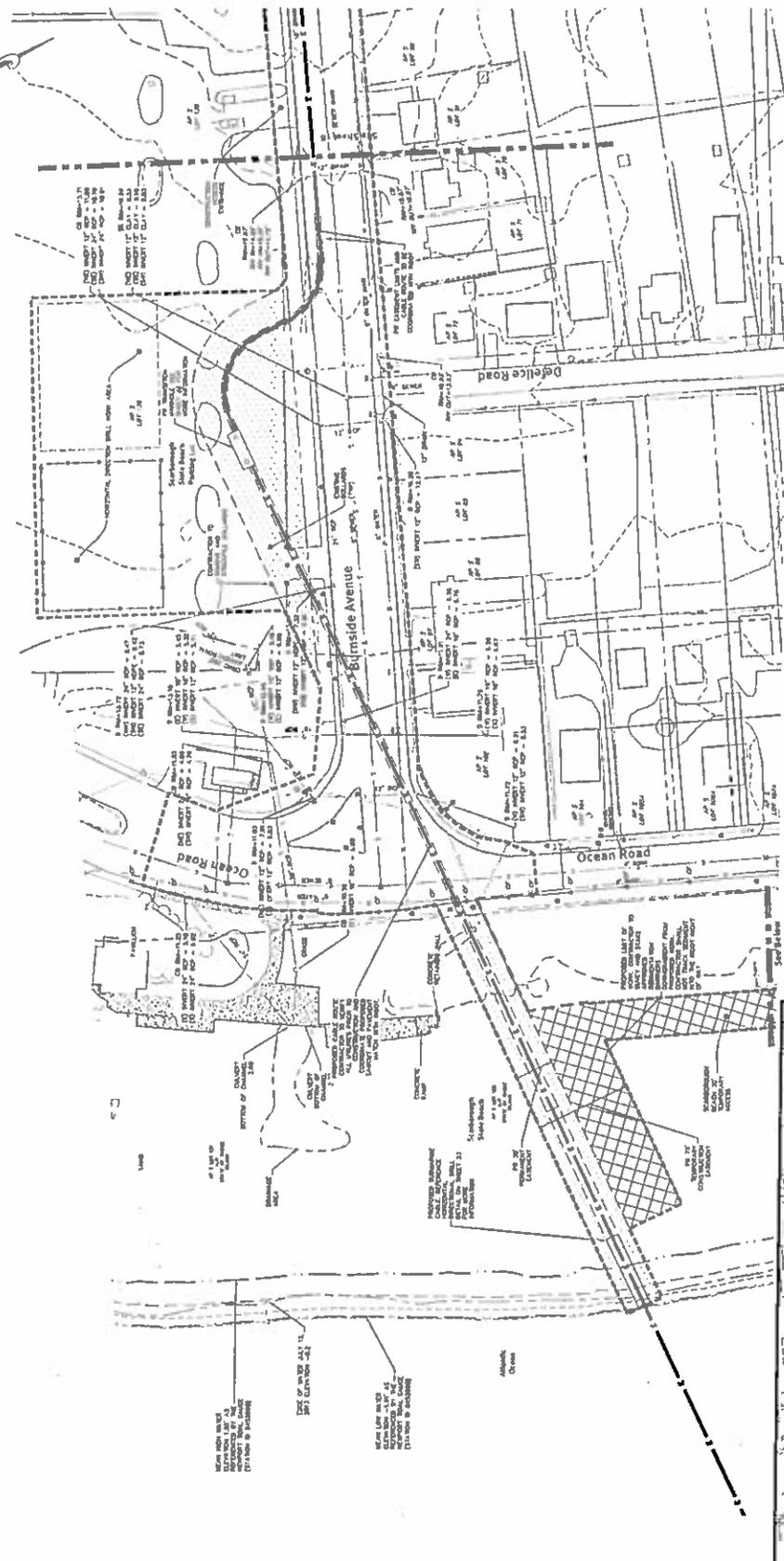
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- Shows Landing Option 1: Direct Coastal Installation**
- Construction Sequence for Scarborough Beach Phase 1 Installation of Coastal Bridge Deck:**
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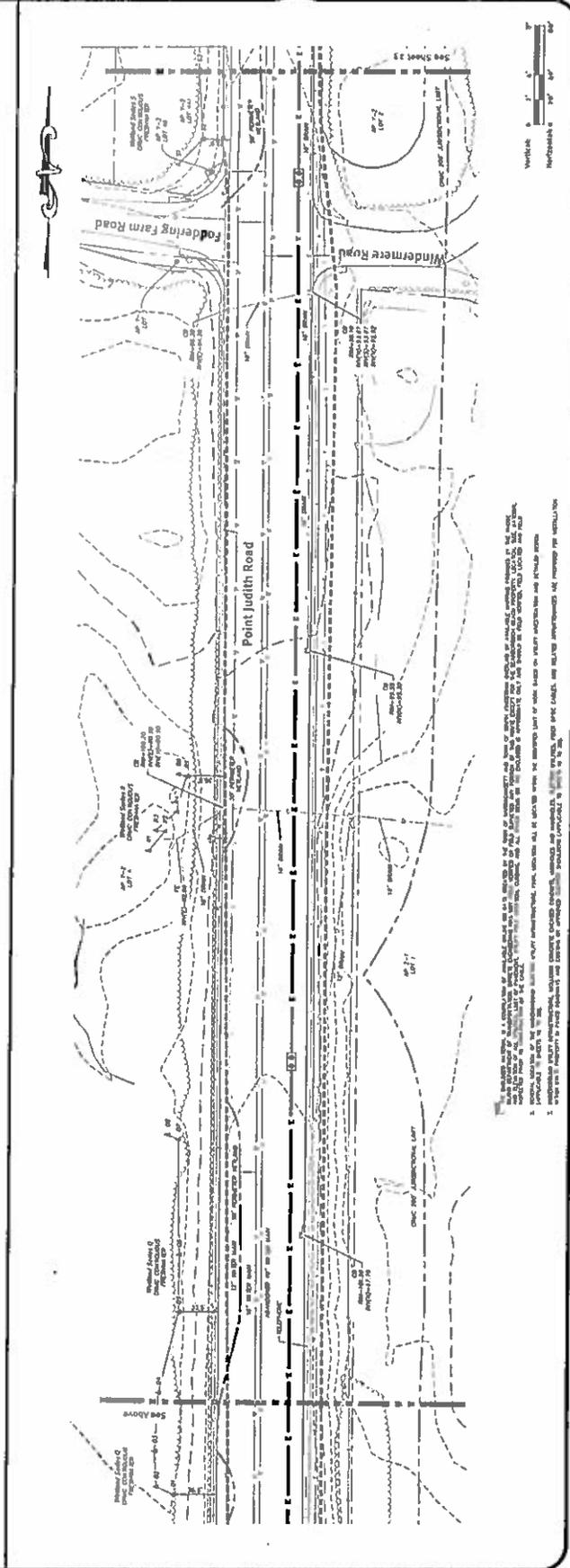
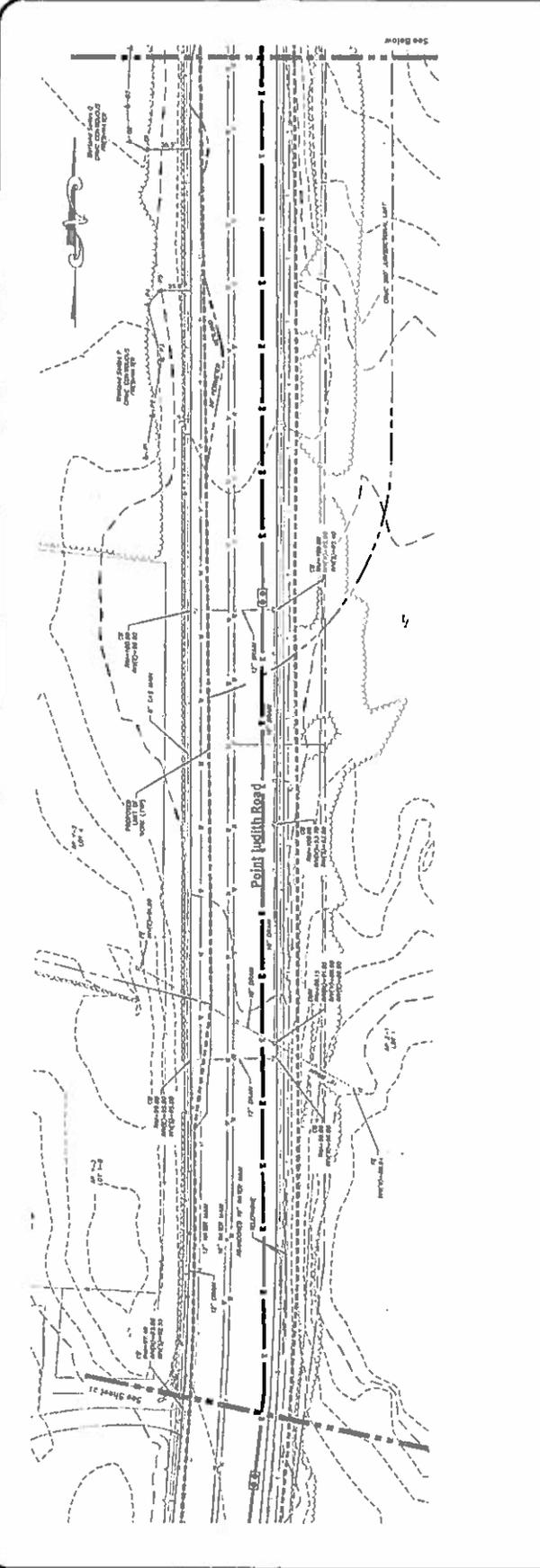
Shore Landing Option 2: Horizontal Directional Drill to Offshore Cofferdam



Scarborough Beach Access - 1" = 50'

See Above

Scale: 1" = 100'



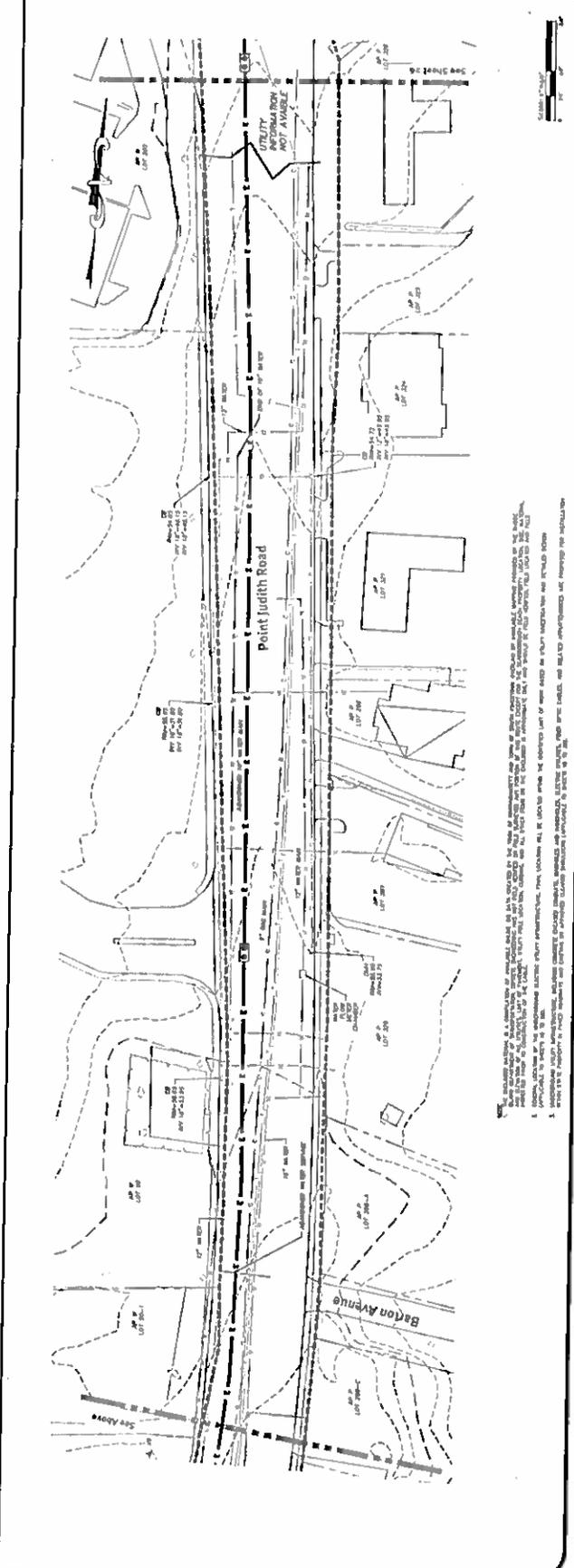
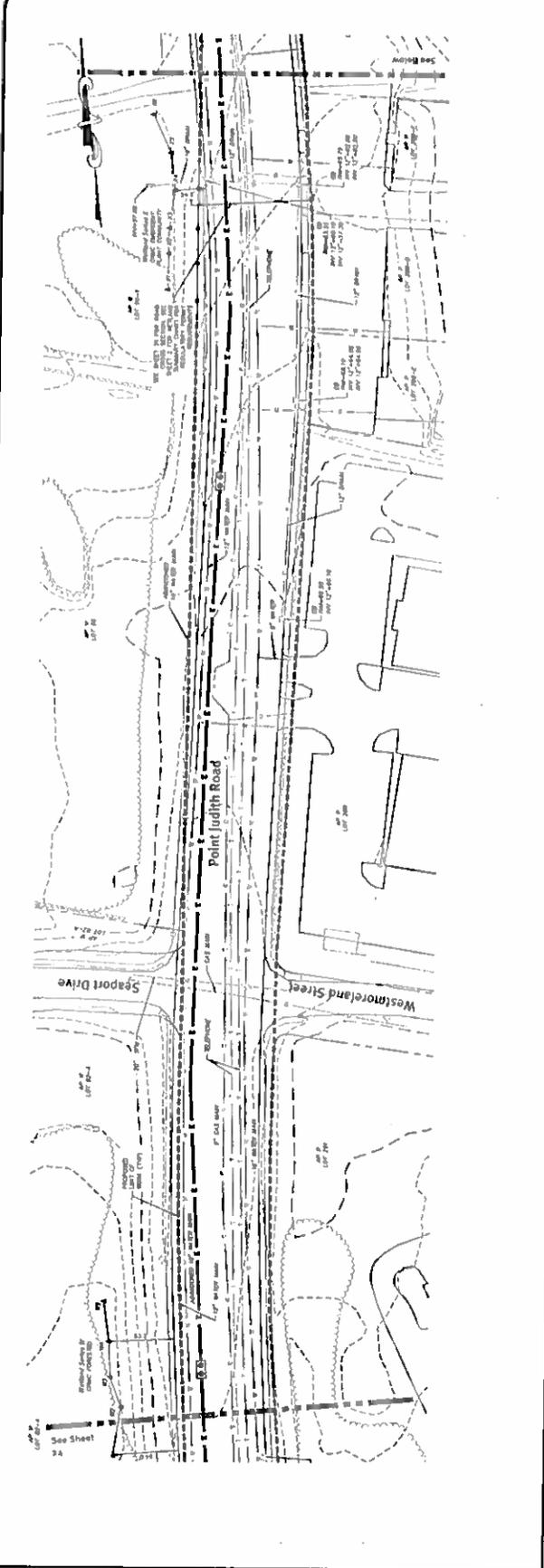
Vertical Scale: 1" = 20'
 Horizontal Scale: 1" = 100'

1. This plan shows the proposed location of the transmission line and the location of the towers. The location of the towers is shown by the circles with the number of towers in the center. The location of the transmission line is shown by the dashed line. The location of the towers and the transmission line is shown by the solid line. The location of the towers and the transmission line is shown by the solid line. The location of the towers and the transmission line is shown by the solid line.

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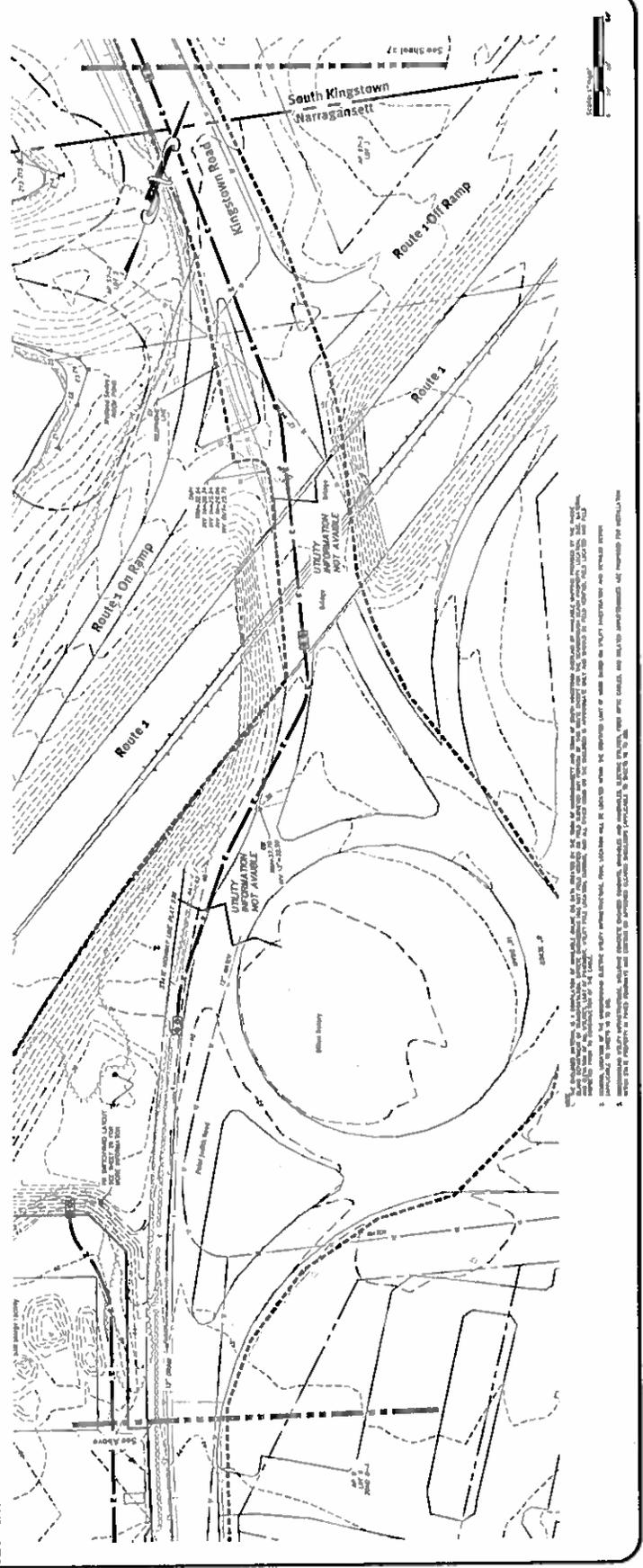
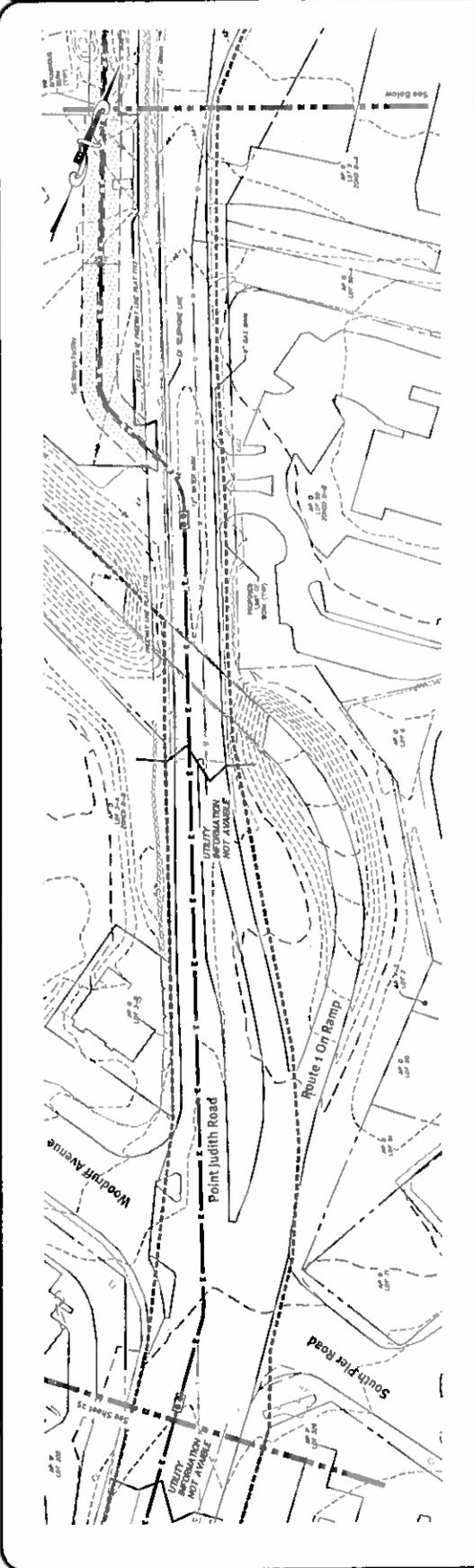
NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR PERMITTING	08/11/11	...
2
3
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10



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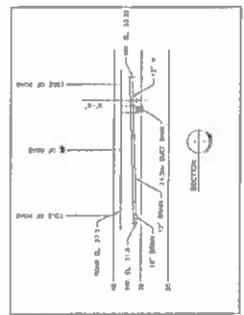


Project No.	10000
Client	South Kingstown
Location	Kingston
Date	10/1/00
Scale	1" = 100'
Sheet No.	26

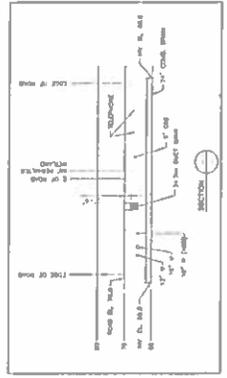


1. This map was prepared from aerial photography and ground surveys. It is not intended to be used for any purpose other than that for which it was prepared. The user assumes all liability for any use of this map for any purpose other than that for which it was prepared.
 2. The user assumes all liability for any use of this map for any purpose other than that for which it was prepared.
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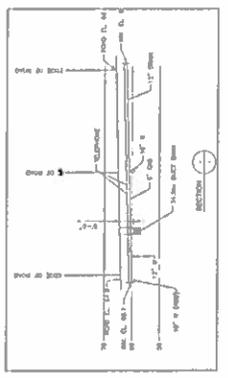
TYPICAL ROADWAY CROSS SECTIONS ALONG PROPOSED CABLE ROUTE
PROVIDED BY PROJECT CONSULTANTS



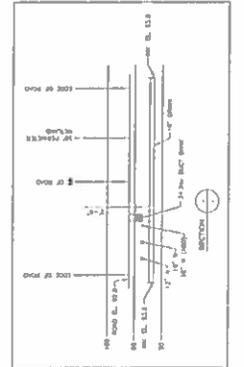
BURNSIDE AVE AT BURNSIDE ROAD
 CROSS SECTION (SHEET 19)



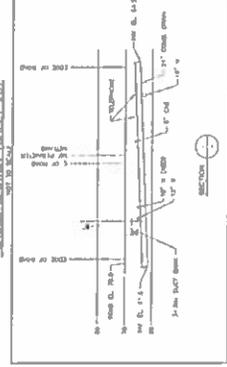
POINT NORTH ROAD SOUTH OF WAGONWHEEL STREET
 CROSS SECTION (SHEET 24)



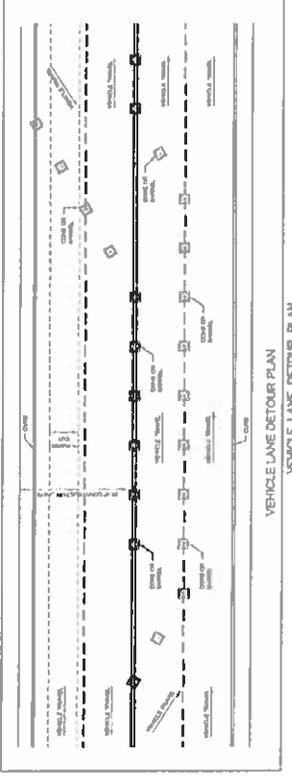
POINT NORTH ROAD WAGONWHEEL STREET
 CROSS SECTION (SHEET 25)



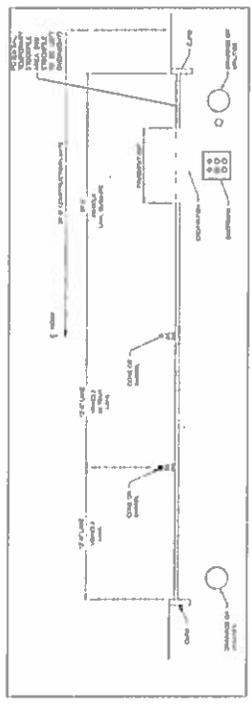
POINT NORTH ROAD SOUTH OF KNOBBY ROAD
 CROSS SECTION (SHEET 23)



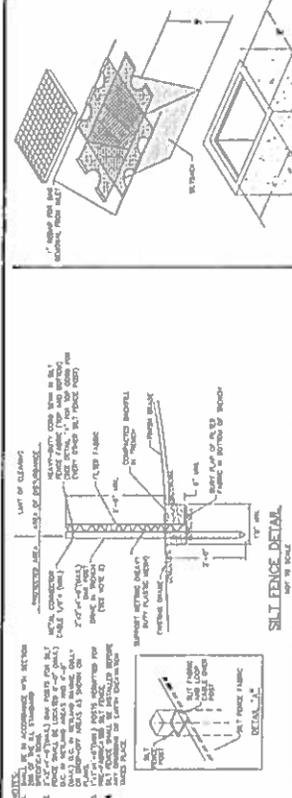
POINT NORTH ROAD WAGONWHEEL STREET
 CROSS SECTION (SHEET 24)



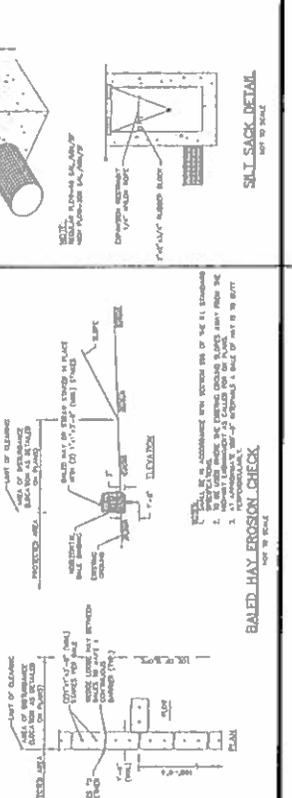
VEHICLE LANE DETOUR PLAN



TYPICAL ROAD CONSTRUCTION SECTION



SILT FENCE DETAIL

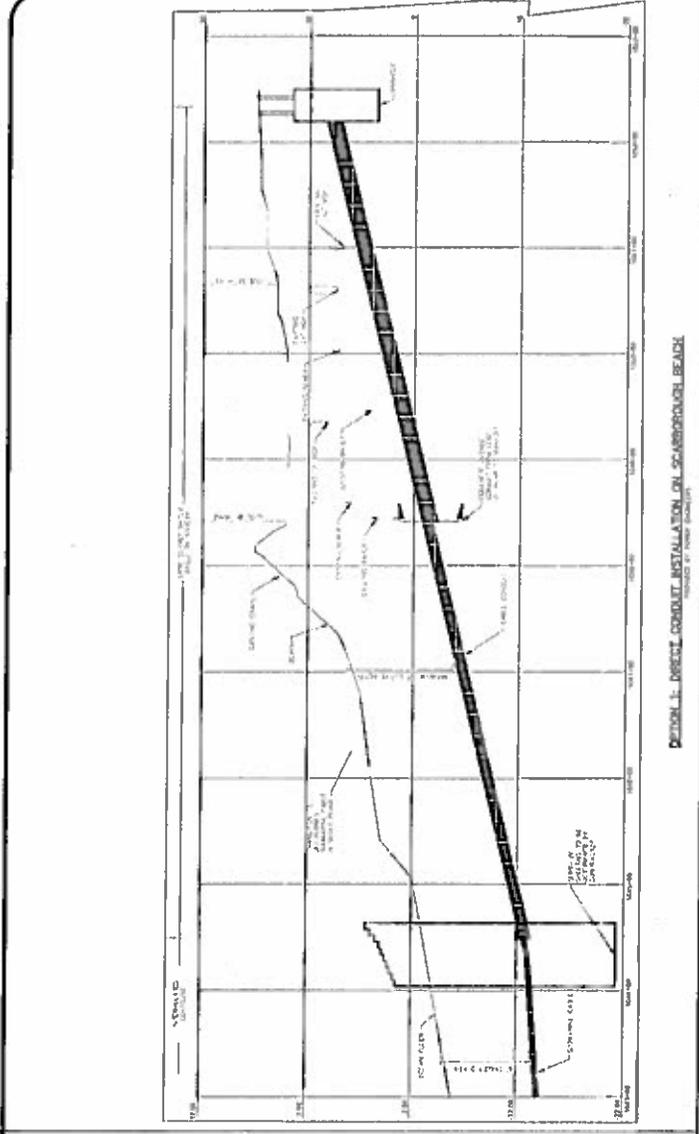


BALED HAY EROSION CHECK

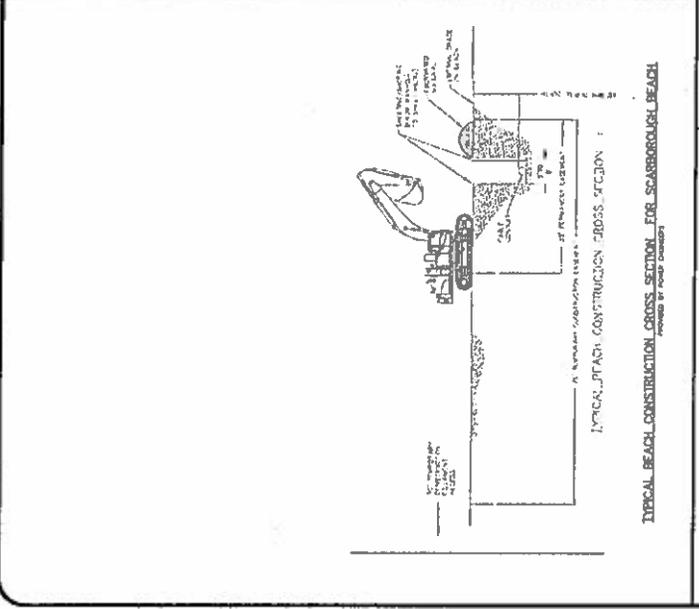




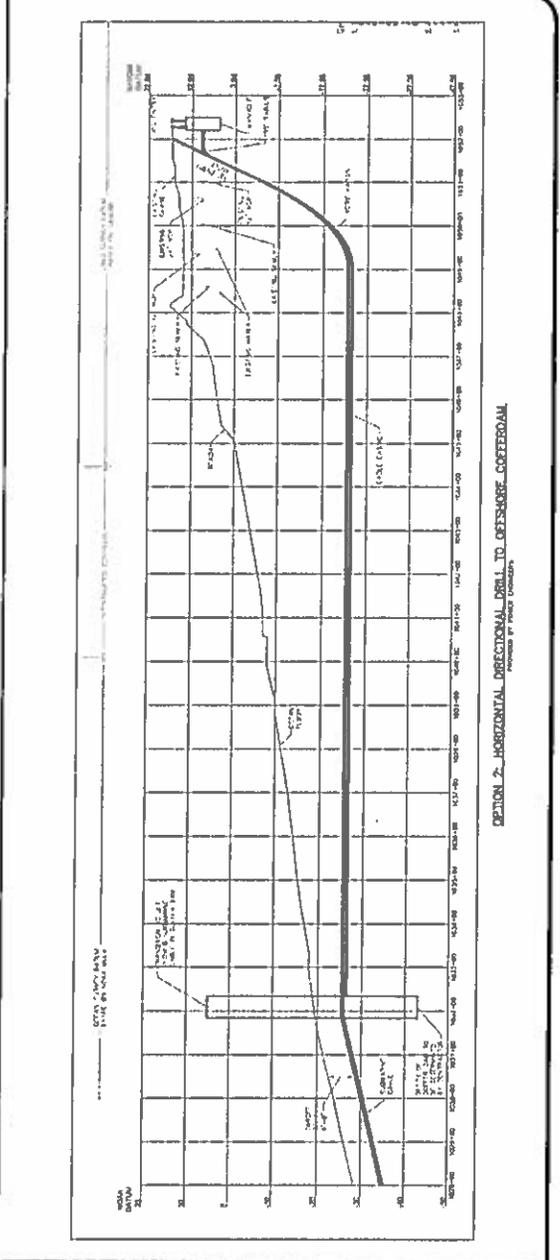
NO.	DATE	DESCRIPTION
1	10/15/11	ISSUED FOR PERMIT
2	11/01/11	REVISIONS
3	11/15/11	REVISIONS
4	12/01/11	REVISIONS
5	12/15/11	REVISIONS



SECTION 1: DIRECT CURRENT INSTALLATION ON SCARBOROUGH BEACH



TYPICAL BEACH CONSTRUCTION CROSS SECTION FOR SCARBOROUGH BEACH



SECTION 2: HORIZONTAL DIRECTIONAL DRILL TO OFFSHORE COFFERDAM



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

May 7, 2014

Ms. Aileen Kenney
Deepwater Wind Block Island Transmission, LLC
56 Exchange Terrace, Suite 101
Providence, Rhode Island 02903

**Subject: Application for New Dredging and Transmission Line Installation
New Shoreham, Rhode Island
Water Quality Certificate File Number 12-039
Dredge Permit Application Number DP-12-120**

Dear Ms. Kenney:

The Department of Environmental Management ("DEM") has reviewed the above referenced project for compliance with the *Rules and Regulations for Dredging and the Management of Dredged Materials, February 2003, amended September 2010* (the "Dredging Regulations") and the *State Water Quality Regulations, July 2006, amended December 2010*.

Deepwater Wind Block Island Transmission, LLC ("Applicant") has submitted an Environmental Report dated September 24, 2012, amended May 31, 2013 and is entitled "*Water Quality Certification, Marine Dredging Applications, and Environmental Report, Volumes I to IV.*" Deepwater Wind has also submitted a "*Water Quality Certification and Marine Dredging Application Modification Request*" dated October 17, 2013 to revise the Rhode Island mainland location of the submarine transmission cable.

Project Description

The Applicant proposes to construct the Block Island Transmission System ("BITS" or "Project"), a proposed 34.5-kV AC bi-directional submerged transmission cable that will run approximately 24.1 miles from the substation on Block Island to the proposed Dillon's Corner Switchyard in Narragansett, Rhode Island and to its interconnection point with the Narragansett Electric Company d/b/a National Grid ("TNEC") distribution system at the Wakefield Substation in South Kingstown, Rhode Island. The BITS would be located within the State of Rhode Island, its territorial waters, and federal waters (approximately 9 miles on the OCS). The BITS would make landfall on Block Island at Crescent Beach adjacent to the Block Island Wind Farm ("BIWF") Export Cable and would be collocated with the BIWF Export Cable within existing road rights-of-way to the Block Island Power Company ("BIPCO") property. The BITS cable route would make landfall on the Rhode Island mainland at the Scarborough State Beach parking lot and would follow an onshore route to a new switchyard located on State owned land in the Town of Narragansett.

The BITS would be installed offshore using a jet plow to minimize sediment resuspension and seafloor disturbance. Installation activities would result in a maximum of 39.64 acres of seafloor disturbance. During operation, bags of sand and/or cement for cable armoring associated with two existing telecommunications cable crossings and areas where the target burial depth may not be achieved would result in up to 1.33 acres of seafloor disturbance. At Scarborough Beach, the BITS cable would be brought ashore using a long-distance Horizontal Directional Drill ("HDD") that would temporarily disturb up to 2.3 acres of parking areas onshore. The long-distance HDD would require the installation of one temporary cofferdam that would result in dredging and fill of approximately 333 cubic yards of sediment. The onshore BITS facilities will not result in fill or discharge into wetlands and waters of the United States. The BITS would be collocated with the BIWF Export Cable attached to the existing bridge that spans Trims Pond and Harbor Pond on Beach Avenue.

The Project would also include construction of one new substation at the site of an existing power generation facility on BIPCO property (Block Island Substation). The Block Island Substation will provide a point of interconnection for the power from the BIWF and will be the point of interconnection for BITS on Block Island. The Block Island Substation would consist of two adjoining switchyards: one dedicated to the BIWF (BIWF Generation Switchyard) and the other dedicated to the BITS (BITS Island Switchyard). The Project would also include upgrades to the existing substation on the BIPCO property. The BITS would connect to the existing TNEC distribution system on the Rhode Island mainland via a new switchyard located in the Town of Narragansett, Rhode Island.

The modification proposes a BITS cable landfall at Scarborough State Beach and associated terrestrial facilities, referred to as the Scarborough Beach Alternative. The Scarborough Beach Alternative does not change the BITS terrestrial cable route on Block Island or the proposed submarine cable route corridor through state and federal waters up to a point approximately 17.4 miles from the manhole on Block Island. At this point, the proposed Scarborough Beach alternative cable corridor diverges to the west from the route as originally proposed for a distance of approximately 2.4 miles traversing state submerged lands to make landfall at Scarborough State Beach at a manhole in the DEM parking lot. From the manhole in the parking lot, the cable transitions to a buried terrestrial cable that follows Burnside Avenue and Point Judith Road/Route 108 for approximately 3.4 miles to a new switchyard on Rhode Island Department of Transportation property between Point Judith Road/Route 108 and the on-ramp to Route 1 North. The route then continues as a buried cable following Kingstown Road/Route 1 and Tower Hill Road for another 0.9 miles to an interconnection point at the existing Wakefield Substation, in South Kingstown, RI. In total, the Scarborough Beach Alternative will consist of approximately 4.3 miles of terrestrial cable buried entirely within State rights-of-way and/or within maintained portions of the road shoulders.

The Project and associated activities will take place in State waters identified as Rhode Island Sound, Class SA.

Public Comment and Hearings

A 60 Day Public Notice was issued on December 3, 2012. Two Public Hearings were also conducted on April 24, 2013 at the Narragansett Town Hall and on May 8, 2013 at the New Shoreham Town Hall. A third Public Hearing was held on December 11, 2013 at the Narragansett Town Hall for the Scarborough

WQC # 12-039
 DP -12-120

Beach alternative. All written and oral comments have been documented and reviewed and taken into consideration in this Dredging Permit and Water Quality Certificate.

Conditions

It is the opinion of the DEM that said project is in compliance with the Dredging Regulations and Water Quality Regulations provided that the Applicant complies with the Environmental Report and the following conditions.

1. All work shall conform to the Environmental Report and plans submitted with the “Water Quality Certification Program Application” and the “Application for Marine Dredging and Associated Activities” prepared by Tetra Tech, Inc., dated September 24, 2012. See Table 1 below:

Table 1. Contents

TITLE	DESCRIPTION
Water Quality Certification, Marine Dredging Applications, and Environmental Report	Volume 1 – Environmental Report and Applications
Water Quality Certification, Marine Dredging Applications, and Environmental Report	Volume 2 – Appendix A, Agency Correspondence; Appendix B, Preliminary Project Design Plans; Appendix C, Typical Construction Drawings; Appendix D, Sediment Profile and Plan View Report
Water Quality Certification, Marine Dredging Applications, and Environmental Report	Volume 3 – Appendix E, Geotechnical and Geophysical Reports; Appendix F, Benthic Resources Survey Report; Appendix G, Sediment Survey and Analysis Report
Water Quality Certification, Marine Dredging Applications, and Environmental Report	Volume 4 - Appendix H, Sediment Transport Analysis Report; Appendix I, Draft Storm Water Pollution Prevention Plan; Appendix J, Resource Area Delineation Reports; Appendix K, Air Emissions Analysis; Appendix L, Eelgrass Survey Report; Appendix M, EMF Analysis; Acoustic Assessment; Appendix O, Pre-Construction Avian and Bat survey Report
November 2, 2012 Submittal of Revised Materials to the Water Quality Certification and Marine Dredging Applications for the Block Island Wind Farm and Block Island Transmission System	Attachment 1 – Application Check List; Project Options Agreements
October 17, 2013 Submittal of a Water Quality Certification and Marine Dredging application Modification Request	BITS Scarborough Beach Alternative Modification to Environmental Report/Construction and Operations Plan

TITLE	DRAWING NUMBER	SCALE
Route Key Sheet	G1-1	Not to Scale
Block Island Plan View	P1-1	1 inch = 40 feet
Block Island Plan View	P1-2	Plan 1"= 40' Section 1"=10'
Block Island Plan View	P1-3	Plan 1"= 40' Section 1"=10'
Block Island Plan View	P1-4	Plan 1"= 40' Section 1"=10'
Block Island Plan View	P1-5	Plan 1"= 40' Section 1"=10'
Block Island Plan View	P1-6	Plan 1"= 40' Section 1"=10'
Ocean Plan and Profiles	P1-7	Horz 1"= 40' Vert 1"= 4'
Ocean Plan and Profiles	P1-8	Horz 1"= 400' Vert 1"= 40'
Ocean Plan and Profiles	P1-9	Horz 1"= 400' Vert 1"= 40'
Ocean Plan and Profiles	P1-10	Horz 1"= 400' Vert 1"= 40'
Ocean Plan and Profiles	P1-11	Horz 1"= 400' Vert 1"= 40'
Ocean Plan and Profiles	P1-12	Horz 1"= 400' Vert 1"= 40'
Ocean Plan and Profiles	P1-13	Horz 1"= 400' Vert 1"= 40'
Ocean Plan and Profiles	P1-14	Horz 1"= 400' Vert 1"= 40'
Block Island Detail Sheet	U3-1	Not to Scale
Block Island Bridge Details	U3-2	Not to Scale

Site Plans titled: *The Scarborough Beach Alternative, Deepwater Wind Block Island Transmission, LLC, Burnside Ave., Point Judith Rd., Kingstown Rd., Old Tower Hill Rd., Narragansett and South Kingstown*, prepared by DiPrete Engineering, Sheets 1 to 33 of 33, dated August 23, 2013, September 23, 2013, October 31, 2013, November 4, 2013.

2. Any change to the plans identified in Condition 1 resulting in changes in construction methodologies approved in this Dredging Permit/Water Quality Certificate (the "Permit") shall require the Applicant to notify DEM of the proposed change and receive written approval prior to undertaking any work not authorized by this Permit. A new or amended Permit may be required if the route of the transmission cable changes due to requirements of any state, local, or federal permit or authorization.
3. The Applicant must notify DEM forty-eight (48) hours in advance of commencing dredging and/or construction activities so that DEM is available to inspect work. No submarine construction authorized by this Permit shall begin prior to January 1, 2015.
4. The Applicant shall designate a third party Environmental Compliance Monitor for this project whose responsibilities shall include ensuring the project complies with the requirements of this Permit and that all necessary reports are made on a timely basis. Prior to the start of construction, the Applicant shall provide to DEM the name, phone number and qualifications of the Environmental Compliance Monitor assigned to the project.
5. A copy of this Permit and referenced plans and documents shall be provided to

the contractor prior to the start of construction.

6. A copy of this Permit and referenced plans and documents shall be kept on the major construction vessels during all phases of construction.
7. Staff of the DEM shall have the right to enter and inspect the area and activities subject to this Permit at reasonable hours to evaluate compliance with the conditions stated in this Permit, and may require the submittal of any available data deemed necessary by DEM for that evaluation.
8. All vessels used in the Project shall be maintained in sea-worthy condition. Construction and construction-support vessels shall, at a minimum, implement best management practices to control discharge of drainage and trash. Discharges of sanitary waste and other discharges are prohibited in State waters.
9. Dredge Window: The proposed dredging activities as described in the permit application must adhere to the following time of year restrictions and conditions.
 - A. Cofferdam installation – The proposed cofferdam installation as described in the permit application shall be installed via a vibratory hammer and shall not be limited to a time of year restriction.
 - B. Cofferdam construction - The proposed cofferdam construction as described in the permit application shall not be limited to a time of year restriction should the conditions as stated below be satisfied. To avoid impacts to hard bottom habitats, a silt curtain shall not be used during any phases of cofferdam construction including cofferdam installation, excavation, sidecasting of materials, and cofferdam removal. Excavated material shall not be placed in or adjacent to any hard bottom or complex habitat (type 3 and type 4 sediments as described in the DWW Marine Geophysical results). Additionally, sidecasting of excavated material shall occur to the north and/or northeast of the cofferdam to avoid hard bottom and complex habitat.
 - C. Jet plowing – The proposed cable installation as described in the permit application that requires the use of a jet plow may occur anytime between April 1 and January 31. This time frame is an extension of the current window of October 15 to January 31. No further modifications to this extended dredge window shall be granted and thus, no jet plowing shall occur during the time period of February 1 to March 31. This time of year restriction is required for the protection of winter flounder.
10. No later than December 31, 2015, the BITS owner shall submit a long-term monitoring and operations and maintenance plan for the transmission cables for DEM review and approval. This plan shall include a post-construction inspection using a multi-beam survey and shallow sub-bottom profiler (chirp) to ensure cable

burial depth was achieved and to verify reconstitution of the trench. The cable burial depth along the route will be inspected using a sub-bottom profiler at least once every five (5) years. No later than December 31, 2015, the BITS owner shall submit a study plan to DEM for review and approval to assess electromagnetic field (EMF) levels and burial depth along the entirety of the transmission cable routes to address the potential effects of EMF on the composition, life cycle functions, uses, process and activities of fish and wildlife. The EMF assessment shall be conducted during the first year of BITS operations. Within ninety (90) days of the assessment (even if required by another agency), the results will be provided to the Wind Farm Cable Interagency Review Panel ("WFCIRP") and DEM. If it is determined that, pursuant to Rule 8.D of the *State Water Quality Regulations, July 2006, amended December 2010*, there is an adverse impact to the composition, life cycle functions, uses, process and activities of fish and wildlife, the WFCIRP and the applicant's EMF expert shall submit a recommendation to address such impact to DEM for review, comment, and approval based on the best available science. All approved recommendations shall be implemented within a reasonable time period. The WFCIRP shall consist of one member from each of the following agencies and organizations: DEM, CRMC, ACOE, NMFS, and USCG.

11. Mitigation Requirements - DEM has the authority and shall determine if the construction, operation and maintenance of the BITS violates the water quality criteria as defined in Rule 8.D of the *State Water Quality Regulations, July 2006, amended December 2010*. DEM shall notify the applicant regarding any such determination and the Applicant shall submit a mitigation plan to DEM within three months of said notification. Mitigation shall be implemented by the applicant after final review and approval of the mitigation plan by DEM.
12. Prior to initiating construction, all final submarine plans and specifications in conformance with this Permit shall be provided to the DEM.
13. DEM shall be notified immediately of any site or operational condition that results in the violation of the requirements noted herein. If conditions are discovered that violates this Permit, dredging operations shall cease until the problem is rectified. Should any stipulation or condition identified within any other applicable permit be in conflict with the conditions set forth in this Permit, the Applicant shall notify the DEM immediately.
14. The Applicant must obtain all other applicable local, state, and federal permits prior to commencing dredging operations.
15. All cables buried greater than thirty-six (36) inches may be abandoned in place at the time of decommissioning. Following abandonment in place, all exposed underwater cables that pose a risk or threat to marine life, commercial fishing practices, or navigation must be either removed or reburied to a minimum depth of thirty-six (36) inches.

WQC # 12-039
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16. Material used for fill and construction shall be clean and free of matter that could cause pollution of the waters of the State. The use of creosote treated structures may result in the introduction of pollutants to waters of the State.
17. No sewage, refuse, or waste of any kind shall be discharged into waters of the State from activities associated with the development of these parcels. Any release of materials from the site associated with the project during the construction period will require immediate notification to the DEM.
18. DEM hereby reserves the right to provide a written response to any of the plans and reports required under this Permit. Said response may also include additional conditions and requirements that are deemed necessary upon review of relevant data. Failure of the Applicant to adequately address a written response in a timely manner may be grounds for suspension of the within Permit. Failure of the Applicant to adhere to submitted plans required under this Permit may also be grounds for a suspension of the Permit.
19. This Permit shall expire ten (10) years from the date of issuance.

This is the DEM Dredging Permit. This Permit also constitutes the Rhode Island Water Quality Certification under Section 401 of the Federal Clean Water Act (33 U.S.C. Sec. 1341). Violation of the terms and conditions of this Permit may result in appropriate enforcement action. If you have any questions regarding this Permit, please contact Ronald Gagnon in the Office of Technical and Customer Assistance at 401 222-6822, extension 7500.

Sincerely,



Alicia M. Good, P.E.
Assistant Director for Water Resources

cc: Danni Goulet, RI CRMC
Michael Elliot, ACOE



**US Army Corps
of Engineers** ®
New England District

**INDIVIDUAL PERMIT
WORK-START NOTIFICATION FORM**
(Minimum Notice: Two weeks before work begins)

* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Permits and Enforcement Branch *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *

Corps of Engineers Permit No. 2012-2724 was issued to Deepwater Wind Block Island Transmission System, LLC. They are authorized to install approximately 20 linear miles of submerged transmission cable from New Shoreham (Block Island) to the mainland at Narragansett, Rhode Island.

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

Telephone Numbers: () _____ () _____

Proposed Work Dates: Start: _____ Finish: _____

Permittee/Agent Signature: _____ **Date:** _____

Printed Name: _____ **Title:** _____

Date Permit Issued: _____ **Date Permit Expires:** _____

FOR USE BY THE CORPS OF ENGINEERS

PM: M. Elliott **Submittals Required:** _____

Inspection Recommendation: Yes



**US Army Corps
of Engineers** ®
New England District

(Minimum Notice: Permittee must sign and return notification
within one month of the completion of work.)

COMPLIANCE CERTIFICATION FORM

Permit Number: 2012-2724

Project Manager: M. Elliott

Name of Permittee: Deepwater Wind Block Island Transmission System, LLC

Permit Issuance Date: September 4, 2014

Please sign this certification and return it to the following address upon completion of the activity and any mitigation required by the permit. You must submit this after the mitigation is complete, but not the mitigation monitoring, which requires separate submittals.

 * MAIL TO: U.S. Army Corps of Engineers, New England District *
 * Permits and Enforcement Branch B *
 * Regulatory Division *
 * 696 Virginia Road *
 * Concord, Massachusetts 01742-2751 *

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

Printed Name

Date of Work Completion

(_____) _____
Telephone Number

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): July 15, 2014

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District; Deepwater Wind Block Island Transmission, LLC; NAE-2012-2724

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: RI County/parish/borough: City: New Shoreham (Block Island); Narragansett
Center coordinates of site (lat/long in degree decimal format): Lat. 41.21° Pick List, Long. 71.53° Pick List.
Universal Transverse Mercator: NAD83/UTM zone 19

Name of nearest waterbody: Rhode Island Sound

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Rhode Island Sound

Name of watershed or Hydrologic Unit Code (HUC):

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: October 28, 2009

Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Pick List "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There Pick List "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 105,600 linear feet: 10 width (ft) and/or 24.2 acres.

Wetlands: 0.0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Attachment B. Standard Operating Conditions

These standard operating conditions were developed by BOEM during review of the Grant application, General Activities Plan (GAP), consultations, and independent review of the USACE EA. These measures are considered part of the proposed action. As BOEM develops the Grant issuance documents these standard operating conditions may be further refined:

1. GENERAL STANDARD OPERATING CONDITIONS

- a. Thirty calendar days prior to installation of the BITS, the Grantee must provide to the Grantor an environmental compliance monitoring plan describing the protocols the Grantee will use to comply with the terms and conditions of GAP approval. The Grantor may require that the Grantee modify the environmental compliance monitoring plan to address any comments the Grantor submits to the Grantee on the contents of the environmental compliance monitoring plan in a manner deemed satisfactory to the Grantor prior to installation of the BITS.
- b. The Grantee must ensure compliance with the following measures during the cable route clearance in the grant area: 1) if, during export cable route clearance and pre-lay grapnel activities, debris is snagged on the seabed by the grapnels, the attached item must be recovered to the surface and the item examined and identified; 2) if it is safe to bring the item (e.g., wires, chains, rope and other small items) onboard, the item must be detached from the grapnels and stored on the vessel for later disposal ashore; 3) if the item is too large or it would be otherwise unsafe to bring the item onboard, then it must be lowered back to the seabed, detached and its position logged, and this information must be provided to the Grantor as soon as practicable.
- c. The Grantee will provide a Route Position List (RPL) of the final as-laid position of the BITS in excel-compatible tabular format and in accordance with International Cable Protection Committee (ICPC) Recommendation 11. The header will include the following, when applicable; system name, segment names, cable owners, RPL owner, RPL status, version number, issue date, datum, ellipsoid, depth units, vertical datum, and burial depth units.
 - i. The body of the RPL will include the following items:
 1. Event number
 2. Event label
 3. As laid date
 4. Latitude degrees
 5. Latitude minutes
 6. Latitude direction
 7. Longitude degrees

8. Longitude minutes
9. Longitude direction
10. Water depth
11. Route distance
12. Cumulative route distance
13. Slack
14. Cable distance
15. Cumulative cable distance
16. Cable type
17. Burial depth

ii. Events include, but are not limited to, the following:

1. Alter course positions (A/C)
2. Any changes in cable protection or engineering design
3. All cable and pipeline crossings and crossing angles
4. Entry and exit positions for United Nations Law of the Sea and United States of America federally recognized waters including State Waters and Territorial Waters
5. Entry and exit positions for hazard areas including, but not limited to; military exercise area, dumping zones, explosive zones, fishing zones, anchorages, shipping lanes, cable areas and lease blocks.

2. STANDARD OPERATING CONDITIONS FOR ESSENTIAL FISH HABITAT

- a. The Grantee must provide vessel operators with maps of sensitive hard bottom habitat in the BITS cable installation area, as well as an anchoring plan that minimizes impacts to the hard bottom habitat to the greatest extent practicable. The Grantee must provide this plan to vessel operators for all anchoring activity including installation, maintenance, and decommissioning as described in the GAP.
- b. Thirty calendar days prior to installation of the BITS, the Grantee must submit to the Grantor a benthic habitat monitoring plan to assess any unavoidable hard bottom habitat impacts that are anticipated to occur as a result of the BITS cable installation. The benthic habitat monitoring plan must provide an assessment of anticipated impacts on hard bottom habitat, as well as a plan for assessing recovery time for this sensitive habitat. The plan must include a means of recording observations of any

detectable change in hard bottom habitats including changes in invasive species coverage. The Grantor may require that the Grantee modify the benthic habitat monitoring plan to address any comments the Grantor submits to the Grantee on the contents of the benthic habitat monitoring plan in a manner deemed satisfactory to the Grantor prior to the commencement of installation activities for the BITS in the grant area.

- c. The Grantee must conduct monitoring of the grant area to assess impacts to benthic habitat in compliance with the final benthic habitat monitoring plan, and submit reports to the Grantor detailing the results of the Grantee's post-installation monitoring activities. The Grantor may require that the Grantee mitigate impacts if areas along the cable route in the grant area do not recover or fill in naturally. The Grantee must include the schedule for submission of these reports in the benthic habitat monitoring plan.

3. STANDARD OPERATING CONDITIONS FOR CULTURAL RESOURCES

- a. The Grantee must comply with the Memorandum of Agreement (MOA) executed in June 2014 by the United States Army Corps of Engineers (USACE), Rhode Island State Historic Preservation Office, the Bureau of Ocean Energy Management (BOEM), DWBIT, and the Narragansett Indian Tribal Historic Preservation Office.

4. STANDARD DYNAMIC POSITIONING (DP) THRUSTER OPERATING CONDITIONS FOR PROTECTED SPECIES

- a. DP Thruster Exclusion Zone – The Grantee must establish a default exclusion zone, with a 160 dB (RMS) isopleth radius, around the DP vessel when DP thrusters are in use in the grant area. The default exclusion zone must extend 21 m from the sound source (i.e., DP thrusters).
- b. Field Verification of DP thruster sound source levels - The Grantee must perform field verification of the default 21 m radius exclusion zone (i.e., verify that the 160 dB (RMS) isopleth does not extend beyond 21 m) associated with DP vessel thruster use during cable installation in the grant area. Field verification will be done by taking acoustic measurements from two reference locations at two water depths (a depth at mid-water and a depth at approximately 1 meter above the seafloor). The Grantee must document the two reference locations with respect to their distance from the sound source. The acoustic monitoring must be sufficient to determine source levels (within 1 m of the source) for the following:
 - i. Marine mammal acoustic injury and harassment thresholds: Distance to the 180 dB (RMS) and 160 dB (RMS) isopleths.
 - ii. Atlantic sturgeon acoustic injury thresholds: Distance to the 206 dB (Peak) and 187dB cSEL isopleths.
 - iii. Sea Turtle acoustic injury threshold: Distance to the 207 dB (RMS) isopleth.

- c. The Grantee must report the results of the field verification to NMFS and the Grantor, pursuant to 4(n) below. Additionally, prior to the Grantee establishing a modified exclusion zone, the Grantor must review the results of the field verification and approve any such modification, and communicate this decision to the Grantee in writing (e.g., email). The Grantor will coordinate with NMFS and the USACE when deciding whether to approve a modification of the exclusion zone.
 - i. If the field measurements demonstrate that the actual 160 dB (RMS) isopleth is less than the default exclusion zone, the Grantee may request that the Grantor approve the establishment of a modified exclusion zone.
 - ii. If the field measurements demonstrate that the actual 180dB or 160dB (RMS) isopleths extend beyond the 21m radius, the Grantee must notify the Grantor, USACE and NMFS within 24 hours, and the Grantor will require modification of the exclusion zone.
- d. The Grantee must ensure that all observations for protected species in the exclusion zone are performed by NMFS-approved PSOs. Observer qualifications must include direct field experience on a marine mammal/sea turtle observation vessel and/or aerial surveys in the Atlantic Ocean/Gulf of Mexico.
- e. The Grantee must ensure that the exclusion zone for all DP vessel operations within the grant area is monitored by a minimum of two PSOs around the sound source. The Grantee must ensure that the names and résumés of all PSOs are provided to the USACE at least thirty (30) calendar days prior to the scheduled start of DP vessel operations. No observer may work at the project site without written approval from NMFS. If, during DP vessel operations, additional PSOs are necessary, the Grantee must provide those names and résumés to the USACE at least ten (10) calendar days prior to the date the observers are expected to start work at the site.
- f. The Grantee must ensure data on all observations are recorded based on standard PSO data collection requirements. The Grantee will ensure that all sightings of, and incidental interactions with, protected species are recorded using the data elements and data sheet provided by the Grantor (Attachments C and D).
- g. The Grantee must ensure that when monitoring the exclusion zone, PSOs, using binoculars, will estimate distances to protected species either visually, using laser range finders, or by using reticle binoculars during daylight hours. For nighttime DP thruster use during cable installation, the PSOs must employ night-vision binoculars to monitor the exclusion zone. If higher vantage points (greater than 25 feet) are available, distances can be measured using inclinometers. Position data will be recorded using hand-held or vessel global positioning system (GPS) units for each sighting, vessel position change, and any environmental change.
- h. The Grantee must ensure that when monitoring the exclusion zone, each PSO stationed on or in proximity to the noise-producing vessel will scan the surrounding area for visual indications of protected species that may enter the zone. Observations will take place from the highest available vantage point on the associated operational

platform (e.g., support vessel, barge or tug; estimated to be over 20 or more feet above the waterline). General 360-degree scanning will occur during the monitoring periods, and target scanning by the PSO will occur when the PSO is alerted of the presence of protected species.

- i. The Grantee must ensure that prior to initiation of installation work, all crew members on barges, tugs and support vessels will undergo environmental training, a component of which will focus on the procedures for sighting and protection of protected species. The Grantee will ensure that a briefing that: (1) establishes the responsibilities of each party, (2) defines the chains of command, (3) explains communication procedures, (4) provides an overview of monitoring purposes, and (5) reviews operational procedures is conducted between the construction supervisors and crews, the dedicated lookouts (pursuant to 6(c)), PSOs, and the Grantee. The Grantee must brief new personnel as they join the work in progress.
- j. If protected species are seen at or within the exclusion zone during DP thruster operations, the Grantee will reduce DP thrusters to the maximum extent possible, except under circumstances when reducing DP thrusters to the maximum extent possible would compromise safety (both human health and environmental) and/or the integrity of the Project. Normal DP thruster use may resume when PSOs report that the exclusion zone has remained clear of protected species for a minimum of 60 minutes since the last sighting.
- k. The Grantee must ensure that the PSO has direct communication with the Deepwater Wind Construction Compliance Manager or other authorized individual who has the authority to reduce DP thrusters to the maximum extent possible or delay DP thruster activities. The authorized individual must comply immediately with a call by the PSO to reduce DP thrusters to the maximum extent possible or delay DP thruster activities. Any disagreement or discussion should occur only after delay or DP thruster reduction, except under circumstances when delays or DP thruster reduction would compromise safety (both human health and environmental) and/or the integrity of the Project.
- l. The Grantee must ensure that PSOs co-ordinate their watch schedules to ensure constant monitoring of the exclusion zone, with sufficient breaks to ensure effective monitoring. An observer's combined watch schedule will not exceed 12 hours during a 24 hour period.
- m. The Grantee will ensure that the USACE, NMFS and the Grantor are contacted at least 24 hours prior to the commencement of installation activities in the grant area and again within 24 hours of the completion of the activity in the grant area.
- n. The Grantee will ensure that, within 7 days of establishing the default exclusion zone, the USACE, NMFS and the Grantor receive a report detailing the field verification measurements. This report will include the following information: a detailed account of the levels, durations, and spectral characteristics of the DP thruster use, and Peak, RMS, and energy levels of the sound pulses and their durations as a function of distance, water depth, and tidal cycle.

- o. The Grantee must report any observed behavioral reactions (e.g., animals departing the area) or injury or mortality to any marine mammals, Atlantic sturgeon, or sea turtles associated with project-related activities to USACE, NMFS and the Grantor within 24 hours of observation.
- p. The Grantee must contact NMFS and the Grantor within 24 hours of any observations of dead or injured ESA-listed species. The Grantee must make reasonable attempts to collect any dead sea turtles or sturgeon. The Grantee must hold these individuals in cold storage until the Grantee discusses disposition with NMFS.
- q. If any sturgeon are observed, the Grantee must report these instances to USACE, the Grantor and NMFS (incidental.take@noaa.gov) within 24 hours.
- r. The Grantee must provide a final technical report to USACE, NMFS and the Grantor within 120 calendar days after completion of the installation activities. This report must provide full documentation of methods and monitoring protocols (including verification of the sound levels actually produced within the exclusion zone), summarize the data recorded during monitoring comparing these values to the estimates of protected species that were expected to be exposed to disturbing levels of noise during installation activities, and provide an interpretation of the results and effectiveness of all monitoring tasks.

Reports must be sent to:

Bureau of Ocean Energy Management
Environment Branch for Renewable Energy
Phone: 703-787-1340
Email: renewable_reporting@boem.gov

National Marine Fisheries Service
Northeast Regional Office, Protected Resources Division
Section 7 Coordinator
Phone: 978-281-9328
Email: incidental.take@noaa.gov

5. STANDARD OPERATING CONDITIONS FOR HIGH RESOLUTION GEOPHYSICAL SURVEYS MITIGATION AND MONITORING

- a. The Grantee must ensure that prior to initiation of HRG work, all crew members on barges, tugs and support vessels will undergo environmental training, a component of which will focus on the procedures for sighting and protection of protected species. The Grantee will ensure that a briefing that (1) establishes the responsibilities of each party, (2) defines the chains of command, (3) explains communication procedures, (4) provides an overview of monitoring purposes, and (5) reviews operational procedures is conducted between the construction supervisors and crews, the dedicated lookouts (pursuant to Section 6(c)), PSOs, and the Grantee. The Grantee must brief new personnel as they join the work in progress.

- b. The Grantee must ensure that all observations for protected species in the exclusion zone are performed by NMFS-approved PSOs. Observer qualifications must include direct field experience on a marine mammal/sea turtle observation vessel and/or aerial surveys in the Atlantic Ocean/Gulf of Mexico. The Grantee must ensure that the names and résumés of all PSOs are provided to the USACE at least thirty (30) calendar days prior to the scheduled start of HRG surveys. No observer may work at the project site without written approval from NMFS. If, during HRG surveys, additional PSOs are necessary, the Grantee must provide those names and résumés to the USACE at least ten (10) calendar days prior to the date the observers are expected to start work at the site.
- c. The Grantee must ensure the following measures are followed during all high resolution geophysical surveys operating at frequencies below 200 kHz that are conducted in the grant area:
 - i. Electromechanical Survey Equipment Ramp-Up: The Grantee must ensure that, when technically feasible, a “ramp-up” of the electromechanical survey equipment occurs at the start or re-start of HRG survey activities. A ramp-up would begin with the power of the smallest acoustic equipment for the HRG survey at its lowest power output. The power output would be gradually turned up and other acoustic sources added in a way such that the source level would increase in steps not exceeding 6 dB per 5-minute period.
 - ii. Establishment of Exclusion Zone: The Grantee must establish a 300-meter radius exclusion zone around the sound source. The 300-meter exclusion zone must encompass the 160 dB (RMS) isopleth.
 - iii. Field Verification of HRG sound source levels: The Grantee must perform field verification of the default 300 m radius exclusion zone (i.e., verify that the 160 dB (RMS) isopleth does not extend beyond 300 m) associated with HRG operations. Field verification will be done by taking acoustic measurements from two reference locations at two water depths (a depth at mid-water and a depth at approximately 1 meter above the seafloor). The Grantee must document the two reference locations with respect to their distance from the sound source. The acoustic monitoring must be sufficient to determine source levels (within 1 m of the source) for marine mammal acoustic injury and harassment thresholds (i.e. distances to the 180 dB (RMS) and 160 dB (RMS) isopleths).
 - iv. The Grantee must report the results of the field verification to NMFS and the Grantor, pursuant to 4(n) above. Additionally, prior to the Grantee establishing a modified exclusion zone, the Grantor must review the results of the field verification and approve any such modification, and communicate this decision to the Grantee in writing (e.g., email). The Grantor will coordinate with NMFS and the USACE when deciding whether to approve a modification of the exclusion zone.

1. If the field measurements demonstrate that the actual 160 dB (RMS) isopleth is less than the default exclusion zone, the Grantee may request that the Grantor approve the establishment of a modified exclusion zone.
 2. If the field measurements demonstrate that the actual 180dB or 160dB (RMS) isopleths extend beyond the 300 m radius, the Grantee must notify the Grantor, USACE and NMFS within 24 hours, and the Grantor will require modification of the exclusion zone
- v. Visual Monitoring of the Exclusion Zone: The Grantee must ensure that the exclusion zone for all HRG surveys is monitored by at least one NMFS-approved PSO, around the sound source. The PSO must keep vigilant watch for the presence of marine mammals within the exclusion zone. The PSO will monitor the exclusion zone for 30 minutes prior to the ramp up of sound sources. If marine mammals are observed at or within the exclusion zone, ramp-up will be delayed until the exclusion zone is clear of marine mammals for 30 minutes. If the exclusion zone is obscured by fog or poor lighting conditions, the Grantee will not initiate HRG survey activities until the entire exclusion zone is visible for the 30 minute period.
 - vi. The Grantee must ensure that PSOs coordinate their watch schedules to ensure constant monitoring of the exclusion zone, with sufficient breaks to ensure effective monitoring. An observer's combined watch schedule will not exceed 12 hours during a 24 hour period.
 - vii. The Grantee must ensure that the PSO has direct communication with the Deepwater Wind Construction Compliance Manager or other authorized individual who has the authority to shut-down or power down noise-producing equipment. The authorized individual must comply immediately with a call by the PSO to shut-down or power down noise-producing equipment. Any disagreement or discussion should occur only after shut-down or power down noise-producing, except under circumstances when shut-down or power down noise-producing equipment would compromise safety (both human health and environmental) and/or the integrity of the Project.
 - viii. When monitoring the exclusion zone, each PSO stationed on the HRG vessel will scan the surrounding area for visual indications of protected species that may enter the zone. Observations will take place from the highest available vantage point (estimated to be over 20 or more feet above the waterline). General 360-degree scanning will occur during the monitoring periods, and target scanning by the PSO will occur when the PSO is alerted of the presence of protected species.

- ix. When monitoring the exclusion zone, PSOs, using binoculars, will estimate distances to protected species either visually, using laser range finders, or by using reticle binoculars during daylight hours. If higher vantage points (greater than 25 feet) are available, distances can be measured using inclinometers. Position data will be recorded using hand-held or vessel global positioning system (GPS) units for each sighting, vessel position change, and any environmental change.
- x. Power Down for Delphinoid Cetaceans and Pinnipeds: If a delphinoid cetacean or pinniped is sighted at or within the exclusion zone, the electromechanical survey equipment must be powered down to the lowest power output that is technically feasible. Subsequent power up of the electromechanical survey equipment must use the ramp up provisions described above and may occur after (1) the exclusion zone is clear of delphinoid cetaceans and pinnipeds or (2) a determination by the PSO after a minimum of 10 minutes of observation that the delphinoid cetacean or pinniped is approaching the vessel at a speed and vector that indicates voluntary approach. An incursion into the exclusion zone by a non-delphinoid cetacean during power-down requires implementation of shutdown procedures described below.
- xi. Shut-Down: If a non-delphinoid cetacean is sighted at or within the exclusion zone, an immediate shutdown of the electromechanical survey equipment is required. Subsequent restart of the electromechanical survey equipment may only occur following clearance of the exclusion zone for the 30 minute period and implementation of ramp-up procedures.
- xii. The Grantee will ensure that all sightings of, and incidental interactions with, protected species are recorded using the data elements and data sheet provided by the Grantor (Attachments C and D). The Grantee must provide this information to NMFS within 60 calendar days of the completion of HRG survey operations.
- xiii. The Grantee will ensure that, within 7 days of establishing the exclusion zone, the USACE, NMFS and the Grantor receive a report detailing the field-verification measurements. This report will include the following information: a detailed account of the levels, durations, and spectral characteristics of the HRG sound sources, and Peak, RMS, and energy levels of the sound pulses and their durations as a function of distance, water depth, and tidal cycle.
- xiv. The Grantee must report any observed behavioral reactions (e.g., animals departing the area) or injury or mortality to any marine mammals, Atlantic sturgeon, or sea turtles associated with project-related activities to USACE, NMFS and the Grantor within 24 hours of observation.
- xv. The Grantee must contact NMFS and the Grantor within 24 hours of any observations of dead or injured ESA-listed species. The Grantee must

make reasonable attempts to collect any dead sea turtles or sturgeon. The Grantee must hold these individuals in cold storage until the Grantee discusses disposition with NMFS.

- xvi. If any sturgeon are observed, the Grantee must report these instances to USACE, the Grantor and NMFS (incidental.take@noaa.gov) within 24 hours.
- xvii. The Grantee must provide a final technical report to USACE, NMFS and the Grantor within 120 calendar days after completion of the installation activities. This report must provide full documentation of methods and monitoring protocols (including verification of the sound levels actually produced within the exclusion zone), summarize the data recorded during monitoring comparing these values to the estimates of listed marine mammals and sea turtles that were expected to be exposed to disturbing levels of noise during installation activities, and provide an interpretation of the results and effectiveness of all monitoring tasks.

Reports must be sent to:

Bureau of Ocean Energy Management
Environment Branch for Renewable Energy
Phone: 703-787-1340
Email: renewable_reporting@boem.gov

National Marine Fisheries Service
Northeast Regional Office, Protected Resources Division
Section 7 Coordinator
Phone: 978-281-9328
Email: incidental.take@noaa.gov

6. STANDARD OPERATING CONDITIONS FOR VESSEL STRIKE AVOIDANCE

- a. The Grantee must ensure that all vessels comply with the vessel strike avoidance measures specified below, except under extraordinary circumstances when complying with these requirements would put the safety of the vessel or crew at risk.
- b. The Grantee must ensure that vessel operators, crews, dedicated lookouts (Section 6(c) below) and PSOs maintain a vigilant watch for cetaceans, pinnipeds, and sea turtles and slow down or stop their vessel to avoid striking these protected species.
- c. The Grantee will ensure that PSOs will be placed on DP vessels and that other vessels associated with activities within the grant area will have a dedicated lookout to watch for whales and sea turtles.
- d. The Grantee must ensure that all vessels operating from November 1 through July 31, operate at speeds of 10 knots (18.5 km/hr) or less. In addition, the Grantee must ensure that all vessel operators comply with 10 knot (18.5 km/hr) speed restrictions in any Dynamic Management Area (DMA).

e. North Atlantic right whales

- i. The Grantee must ensure all vessels maintain a separation distance of 500 m (1,640 ft) or greater from any sighted North Atlantic right whale.
- ii. The Grantee must ensure that the following avoidance measures are taken if a vessel comes within 500 m (1,640 ft) of any North Atlantic right whale:
- iii. If underway, vessels must steer a course away from any sighted North Atlantic right whale at 10 knots (18.5 km/h) or less until the 500 m (1,640 ft) minimum separation distance has been established (except as provided in Section 6(a)).
- iv. If a North Atlantic right whale is sighted in a vessel's path, or within 100 m (328 ft) to an underway vessel, the underway vessel must reduce speed and shift the engine to neutral. The Grantee must not engage the engines until the North Atlantic right whale has moved outside the vessel's path and beyond 100 m (328 ft).
- v. If a vessel is stationary, the vessel must not engage engines until the North Atlantic right whale has moved beyond 100 m (328 ft), at which point the Grantee must re-establish the minimum separation distance as described above.

f. Non-delphinoid cetaceans other than the North Atlantic right whales

- i. The Grantee must ensure all vessels maintain a separation distance of 100 m (328 ft) or greater from any sighted non-delphinoid cetacean.
- ii. The Grantee must ensure that the following avoidance measures are taken if a vessel comes within 100 m (328 ft) of any non-delphinoid cetacean:
- iii. If any non-delphinoid cetacean is sighted, the vessel underway must reduce speed and shift the engine to neutral, and must not engage the engines until the non-delphinoid cetacean has moved outside of the vessel's path and beyond 100 m (328 ft).
- iv. If a vessel is stationary, the vessel must not engage engines until the non-delphinoid cetacean has moved out of the vessel's path and beyond 100 m (328 ft).

g. Delphinoid cetaceans

- i. The Grantee must ensure that all vessels maintain a separation distance of 50 m (164 ft) or greater from any sighted delphinoid cetacean.
- ii. The Grantee must ensure the following avoidance measures are taken if the vessel comes within 50 m (164 ft) of a sighted delphinoid cetacean:

1. The Grantee must ensure that any vessel underway remain parallel to a sighted delphinoid cetacean's course whenever possible, and avoid excessive speed or abrupt changes in direction. The Grantee may not adjust course and speed until the delphinoid cetacean has moved beyond 50 m (164 ft) and/or the delphinoid cetacean has moved abeam of the underway vessel.
2. The Grantee must ensure that any vessel underway reduces vessel speed to 10 knots (18.5 km/h) or less when pods (including mother/calf pairs) or large assemblages of delphinoid cetaceans are observed. The Grantee may not adjust course and speed until the delphinoid cetaceans have moved beyond 50 m (164 ft) and/or abeam of the underway vessel.

h. Sea Turtles and Pinnipeds

The Grantee must ensure all vessels maintain a separation distance of 50 m (164 ft) or greater from any sighted sea turtle or pinniped.

- i. Vessel Operator Briefing. The Grantee must ensure that all vessel operators are briefed to ensure they are familiar with the requirements specified above.

Attachment C. Incident Report: Protected Species Injury or Mortality

Photographs/Video should be taken of all injured or dead animals.

Observer's full name: _____

Reporter's full name: _____

Species Identification: _____

Name and type of platform: _____

Date animal observed: _____ Time animal observed: _____

Date animal collected: _____ Time animal collected: _____

Environmental conditions at time of observation (i.e. tidal stage, Beaufort Sea State, weather):

Water temperature (°C) and depth (m/ft) at site: _____

Describe location of animal and events 24 hours leading up to, including and after, the incident (incl. vessel speeds, vessel activity and status of all sound source use):

Photograph/Video taken: YES / NO If Yes, was the data provided to NMFS? YES / NO
(Please label *species, date, geographic site* and *vessel name* when transmitting photo and/or video)

Date and Time reported to NMFS Stranding Hotline: _____

Sturgeon Information: *(please designate cm/m or inches and kg or lbs)*

Species: _____

Fork length (or total length): _____ Weight: _____

Condition of specimen/description of animal: _____

Fish Decomposed: NO SLIGHTLY MODERATELY SEVERELY

Fish tagged: YES / NO If Yes, please record all tag numbers.

Tag #(s): _____

Genetic samples collected: YES / NO

Genetics samples transmitted to: _____ on _____ / _____ /201....

Marine Mammal information: *(please designate cm/m or ft/inches)*

Length of marine mammal (note direct or estimated): _____

Weight (if possible, kg or lbs): _____

Sex of marine mammal (if possible): _____

How was sex determined?: _____

Confidence of Species Identification: SURE UNSURE BEST GUESS

Description of Identification characteristics of marine mammal: _____

Genetic samples collected: YES / NO

Genetic samples transmitted to: _____ on ____/____/201....

Fate of marine mammal: _____

Description of Injuries Observed: _____

Other Remarks/Drawings: _____

Attachment D. Required Data Elements for Protected Species Observer Reports

The Grantee must ensure that the protected-species observer record all observations of protected species using standard marine mammal observer data collection protocols. The list of required data elements for these reports is provided below:

1. Vessel name;
2. Observers' names and affiliations;
3. Date;
4. Time and latitude/longitude when daily visual survey began;
5. Time and latitude/longitude when daily visual survey ended; and
6. Average environmental conditions during visual surveys including:
 - a. Wind speed and direction;
 - b. Sea state (glassy, slight, choppy, rough, or Beaufort scale);
 - c. Swell (low, medium, high, or swell height in meters); and
 - d. Overall visibility (poor, moderate, good).
7. Species (or identification to lowest possible taxonomic level);
8. Certainty of identification (sure, most likely, best guess);
9. Total number of animals;
10. Number of juveniles;
11. Description (as many distinguishing features as possible of each individual seen, including length, shape, color and pattern, scars or marks, shape and size of dorsal fin, shape of head, and blow characteristics);
12. Direction of animal's travel – related to the vessel (drawing preferably);
13. Behavior (as explicit and detailed as possible; note any observed changes in behavior);
14. Activity of vessel when sighting occurred.

Attachment E. Grant-Specific Terms, Conditions, and Stipulations

The Grantee's rights to conduct activities on the granted area are subject to the following terms, conditions, and stipulations. The Grantor reserves the right to impose additional terms and conditions incident to the future approval or approval with modifications of a GAP.

1. **No Impact Without Prior Approval.** In no case may the Grantee knowingly impact a potential archaeological resource without the Grantor's prior approval. The term "archaeological resource" has the same meaning as "archaeological resource" in BOEM regulations provided in 30 CFR 585.112.
2. **Post-Review Discovery Clauses.** If the Grantee discovers a potential archaeological resource, such as the presence of a shipwreck (e.g., a sonar image or visual confirmation of an iron, steel, or wooden hull, wooden timbers, anchors, concentrations of historic objects, piles of ballast rock), prehistoric artifacts, or relict landforms, etc. within the project area, the Grantee must: Immediately halt seafloor/bottom-disturbing activities within the area of discovery; notify the Grantor within 24 hours of discovery; notify the Grantor in writing via report to the Grantor within 72 hours of its discovery; keep the location of the discovery confidential and take no action that may adversely affect the archaeological resource until the Grantor has made an evaluation and instructs the applicant on how to proceed; and conduct any additional investigations as directed by the Grantor to determine if the resource is eligible for listing in the National Register of Historic Places (30 CFR 585.802(b)). The Grantor will do this if: (1) the site has been impacted by the Grantee's project activities; or (2) impacts to the site or to the area of potential effect cannot be avoided. If investigations indicate that the resource is potentially eligible for listing in the National Register of Historic Places, the Grantor will tell the Grantee how to protect the resource or how to mitigate adverse effects to the site. If the Grantor incurs costs in protecting the resource, under Section 110(g) of the National Historic Preservation Act, the Grantor may charge the Grantee reasonable costs for carrying out preservation responsibilities under the OCS Lands Act (30 CFR 585.802(c-d)). The term "archaeological resource" has the same meaning as "archaeological resource" in BOEM regulations provided in 30 CFR 585.112.

Attachment F. List of Reviewers

Jennifer Kilanski	NEPA Coordinator, Environmental Protection Specialist
David Bigger	Avian Biologist
Brandi Carrier	Archaeologist
Callie Hall	Oceanographer
William Hoffman	Archaeologist
Brian Hooker	Marine Biologist
Jessica Stromberg	Project Coordinator, Renewable Energy Program Specialist
Angel McCoy	Meteorologist
Desray Reeb	Marine Biologist
Amy Stillings	Industry Economist
Josh Wadlington	Geographer