



PUBLIC NOTICE

US Army Corps
of Engineers
New York District
Jacob K. Javits Federal Building
New York, N.Y. 10278-0090
ATTN: Regulatory Branch

In replying refer to:

Public Notice Number: **NAN-2020-01233-EBR**

Issue Date: September 14, 2021

Expiration Date: October 14, 2021

The New York District, of the U.S. Army Corps of Engineers has received an application for a Department of the Army permit 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 (33 U.S.C. 1344):

APPLICANT: GU Holdings, Inc.
25 Massachusetts Ave NW
Washington, D.C. 20001

ACTIVITY: Installation of one fiber-optic submarine telecommunications cable

WATERWAY: Atlantic Ocean

LOCATION: Town of Brookhaven, Suffolk County, New York to the United Kingdom and Spain

A detailed description and plans of the applicant's activity are enclosed to assist in your review.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

ALL COMMENTS REGARDING THE PERMIT APPLICATION MUST BE PREPARED IN WRITING AND EMAILED TO William.Bruno@usace.army.mil BEFORE THE EXPIRATION DATE OF THIS NOTICE; otherwise, it will be presumed that there are no objections to the activity.

Comments submitted in response to this notice will be fully considered during the public interest review for this permit application. Comments provided will become part of the public record for this permit application. All written comments, including contact information, will be made a part of the administrative record, available to the public under the Freedom of Information Act. The

Administrative Record, or portions thereof, may also be posted on a Corps of Engineers internet web site. Due to resource limitations, this office will normally not acknowledge the receipt of comments or respond to individual letters of comment.

Any person may request, in writing, before this public notice expires, that a public hearing be held to collect information necessary to consider this application. Requests for public hearings shall state, with particularity, the reasons why a public hearing should be held. It should be noted that information submitted by mail is considered just as carefully in the permit decision process and bears the same weight as that furnished at a public hearing.

Our preliminary determination is that the activity for which authorization is sought herein is not likely to adversely affect any Federally endangered or threatened species or their critical habitat. However, pursuant to Section 7 of the Endangered Species Act (16 U.S.C. 1531), the District Engineer is consulting with the appropriate Federal agency to determine the presence of and potential impacts to listed species in the project area or their critical habitat.

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act (Public Law 104-267), requires all Federal agencies to consult with the National Oceanic and Atmospheric Administration Fisheries Service (NOAA/FS) on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The proposed work, fully described in the attached work description, could cause the disruption of habitat for various lifestages of some EFH-designated species as a result of a temporary increase in turbidity during construction. However, the New York District has made the preliminary determination that the site-specific adverse effects are not likely to be substantial because it is expected that fish populations would avoid the small area of disturbance. Further consultation with NOAA/FS regarding EFH impacts and conservation recommendations being conducted and will be concluded prior to the final decision.

Based upon a review of the "Grace Hopper Subsea Cable System # NAN-2020-01233-EBR Request for Section 106 Consultation", prepared by AECOM, and dated January 13, 2021, there are no shipwrecks along the proposed route. Presently unknown archeological, scientific, prehistorical, or historical data may be lost by work accomplished under the required permit. In a letter dated, February 4, 2021, New York State Office of Parks, Recreation and Historic Preservation provided a letter stating that the project would have No Adverse Effect on historic or archeological resources.

Reviews of activities pursuant to Section 404 of the Clean Water Act will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 (b) of the Clean Water Act and the applicant will obtain a water quality certificate or waiver from the appropriate state agency in accordance with Section 401 of the Clean Water Act prior to a permit decision.

Pursuant to Section 307 (c) of the Coastal Zone Management Act of 1972 as amended [16 U.S.C. 1456 (c)], for activities under consideration that are located within the coastal zone of a state which has a federally approved coastal zone management program, the applicant has certified in the permit application that the activity complies with, and will be conducted in a manner that is consistent with, the approved state coastal zone management program. In a letter dated May 14, 2021, New York State Department of State issued a Coastal Zone Management Concurrence with Consistency Certification, F-2020-1035, for the proposed work.

*****PLEASE USE THE 18-CHARACTER FILE NUMBER ON ALL CORRESPONDENCE WITH
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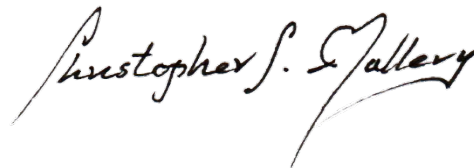
In addition to any required water quality certificate and coastal zone management program concurrence, the applicant has obtained or requested the following governmental authorization for the activity under consideration:

New York State Department of Environmental Conservation

It is requested that you communicate the foregoing information concerning the activity to any persons known by you to be interested and who did not receive a copy of this notice. If you have any questions concerning this application, you may contact this office at (917) 790-8516 and ask for William T. Bruno.

In order for us to better serve you, please complete our Customer Service Survey located at <http://www.nan.usace.army.mil/Missions/Regulatory/CustomerSurvey.aspx>.

For more information on New York District Corps of Engineers programs, visit our website at <http://www.nan.usace.army.mil>.



FOR AND IN BEHALF OF
Stephan A. Ryba
Chief, Regulatory Branch

Encl

DESCRIPTION OF PROPOSED WORK

The applicant, GU Holdings, Inc., has requested Department of the Army authorization for installation of a submarine fiber-optic cable (Grace Hopper cable) in the Atlantic Ocean, from the Town of Brookhaven, Suffolk County, New York to the United Kingdom and Spain.

The work would involve the installation of approximately 4,400 miles of 2.0-inch-diameter underwater fiber-optic telecommunication cable. The cable would originate in an existing metal conduit originating in an upland paved parking lot located at Smith Point County Park, Town of Brookhaven, Suffolk County, New York, and extending through the existing borepipe to approximately 0.3 miles offshore where the existing borepipe terminates. Prior to installation of the cable the applicant proposes to remove a total of approximately 100 cubic yards (CY) of sediments centered on the borepipe exit hole, to approximately 6-feet (ft) below the existing bottom from an approximately 576 square ft area, via a hydraulic dredge and placed in a barge. The dredged material will be stored in the barge for a maximum of two days. The bore exit pipe will be shortened by approximately 24 ft to allow for smoother cable installation and use. Immediately following the shortening of the borepipe, the cable will be run through it and the dredged material will be re-placed to fill in the excavated bore pipe exit pit.

Depending on timing, the cable can be landed into the existing bore pipe and laid seaward or installed from seaward towards the shore with the final segment of the cable landed into the bore pipe. For both options, a pre-lay grapnel run would be carried out in advance of the operations. The cable would be installed (via trench and burial) from the offshore end of the borepipe to a water depth of approximately 3,281-ft (1,000-meters). In New York State (NYS) waters, the cable is anticipated to be buried to minimum depths of 4.0 ft below the existing seabed, as measured from the top of the cable. Target burial depth is a minimum of 4.0 ft, with target of 6.0 ft below the existing seabed, as measured from the top of the cable.

Burial will be conducted using a combination of diver-operated jetting burial tools, a jetting sled tool, a mechanical trenching tool deployed from a barge and pulled with a crane, a sea plow (Sea Stallion 3), a Remotely Operated Vehicle with a saltwater jet (ROV), and a cable installation ship accompanied by escort and support vessels. During all burial operations, the cable will be installed at a speeds less than 1.0 nautical miles (NM) per hour.

Starting from the seaward end of the borepipe (N40 43.6937, W072 51.5761), to a water depth of approximately 50 ft, approximately 0.65 NM (3,950 ft) of the proposed cable would be buried via a jetting sled tool. Should very dense, cemented sands or other hard ground be encountered, in discreet locations, a mechanical trenching tool would be used to achieve deeper burials. Deployed from a barge, the mechanical trenching tool will be pulled by a crane at an approximate speed of 25 ft per minute.

To bury the cable seaward of this 0.65 NM cable portion, the installation vessels and equipment would relocate to the NYS Seaward Limit and conduct three passes via sea plow, supplemented with a jetting ROV, in order to install approximately ~3.6 NM (21,874 LF) of cable to a target burial depth of 4 ft to location (N40 43.3226, W072 50.9010) with of water depths of approximately 50 ft. The three passes are described as follows:

First Pass: Beginning at the NYS seaward limit, the cable installation vessel will tow the sea plow landward over the cable installation alignment with a 'dummy rope' in place of the telecommunications cable to create a trench along the alignment. Once reaching the approximate 50 ft water depth limit, the vessel will retrieve the sea plow.

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After retrieving the sea plow, the vessel will deploy the jetting ROV and travel seaward along the previously created plow trench beginning from approximately 50 ft water depth. The jetting ROV will run the length of the alignment with seawater jets to fluidize sediments beneath the installed dummy rope (while retrieving the rope). Upon reaching the NYS seaward limit, the ROV will be retrieved.

Second Pass: At the NYS seaward limit, the sea plow will again be deployed for the second round of plowing. This operation will follow the existing cable trench moving landward. This operation will cease at the approximate 50 ft. water depth contour and the sea plow will be recovered. Once the sea plow has been recovered, the jetting ROV will be deployed into the existing trench and proceed seaward jetting the cable trench. Upon arrival at the NYS seaward limit, the jetting ROV will be recovered to the cable installation vessel.

Third Pass: At the end of the second pass, the cable installation vessel will deploy the sea plow to install the cable into the cable trench. The cable installation vessel will install the cable in the trench, travelling from the NYS seaward limit to the approximate 50 ft water depth contour. During each pass, the sea plow and jetting ROV will be set to achieve maximum burial possible. The sea plow, ROV and other tools will be operated at low speeds (approximately 656 ft/hr).

In the area just seaward of the state boundary (at water depth approximately 75 ft) out to areas of water depths of about 3,280 ft (1000 meters), the cable will be buried using a single pass of the sea plow, supplemented with use of the ROV utilized when traversing in-service cables. Throughout burial in the U.S. 200 NM Exclusive Economic Zone (EEZ), maximum burial will be targeted, with an aim for 6 ft burial depth. In areas of cemented sands, reduced burial may occur, but a Burial Feasibility Study conducted for the project, considering measured sediment conditions and installation methods, predicts minimum burial to at least 2 ft with some areas being closer to 1 ft. Pages 8 and 9 show the profile of minimum predicted burial depth along the cable route to 3,280 feet of water depth. Actual depth of burial is expected to be greater than the depth of burial presented in these figures, but the cable installer is required to present the assessed minimum burial depth given the benthic conditions and machineries being employed to bury the cable.

Use of multiple passes and combinations of excavation methods, including the use of the mechanical trenching tool, will be employed only in New York State waters (within 3 NM of shore). These are areas where sediments were assessed to be particularly resilient, and single-pass methods of excavation were assessed to produce shallow burial, deemed insufficient to prevent risk of cable strike by other stakeholders. Waterward of NYS limits, conditions were assessed such that use of a single-pass method (of the machinery types shown on Page 9), has been modelled to excavate sufficient depth to reasonably prevent cable strikes by other stakeholders.

In the federal waters of New York Bight, the buried portion of the system crosses five (5) existing in-service cables. Use of the ROV and additional protective sleeve will prevent damage to these assets. The buried portion of the system, in federal waters of New York Bight, will also cross five (5) existing out of service cables. The out-of-service cables would be cut by the applicant prior to installation of the proposed cable. The cut section of the Out-of-Service cable will be recovered, to be disposed in the appropriate manner, in line with local legislation. The Grace Hopper cable will cross an additional eight (8) existing in-service and eighteen (18) out of service cables within the non burial, deep water, section of the cable route through the U.S. 200 NM EEZ. In non-burial, deep water, sections of cable routes, the new cable is simply laid across the incumbent asset. No remedial works are required.

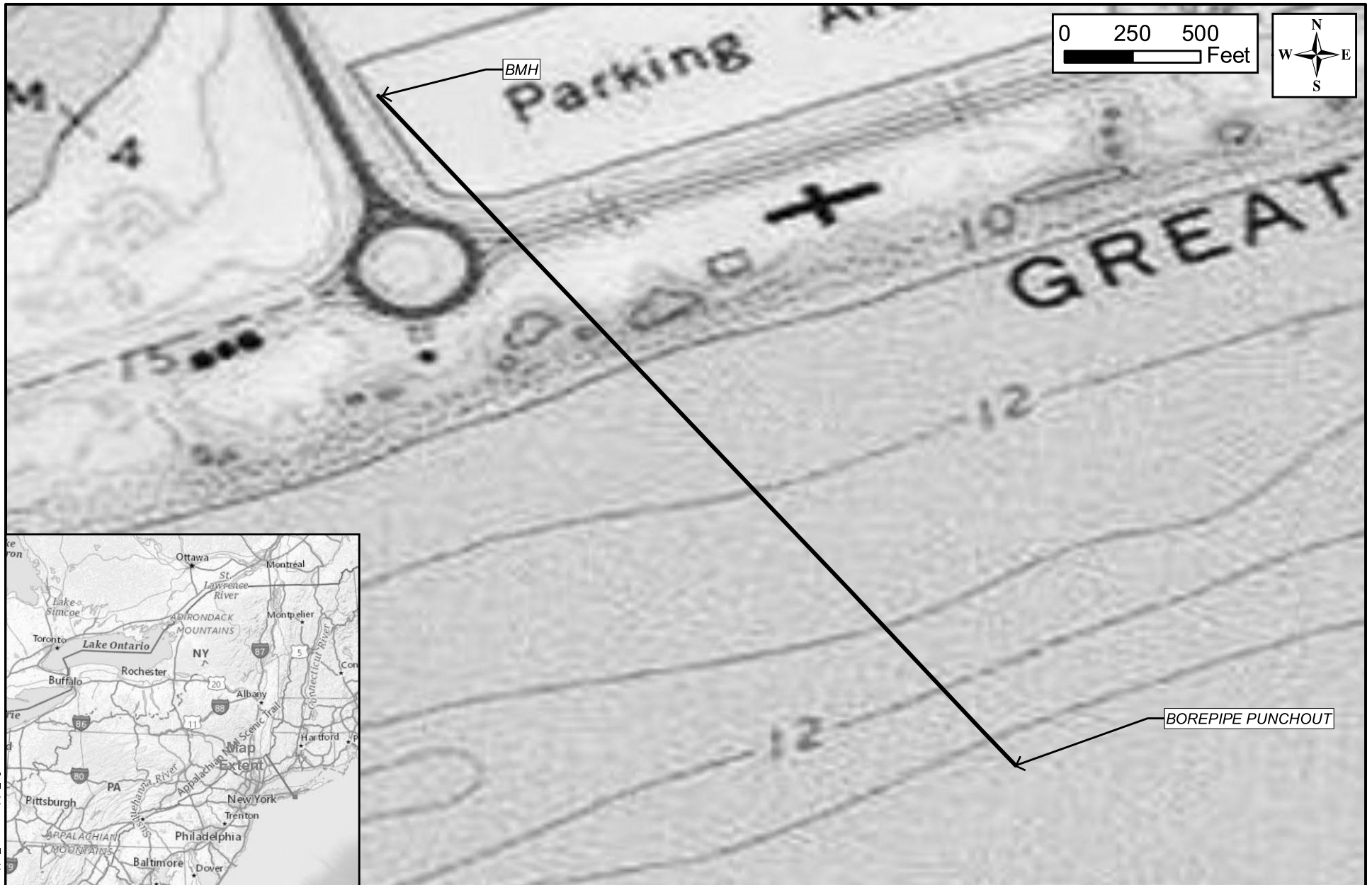
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The proposed work would temporarily disturb approximately 35 acres (311 linear nautical miles) of ocean bottom within the USA EEZ.

The applicant has stated they have avoided, minimized and mitigated for proposed impacts by minimizing construction to the smallest area practicable, avoiding the Northeast Canyons and Seamounts National Marine Monument, operating the cable installation vessel at slow and controlled speeds, and using dynamic positioning to ensure correct cable placement.

The stated purpose of this project is to provide telecommunications connectivity in the United States and Europe.

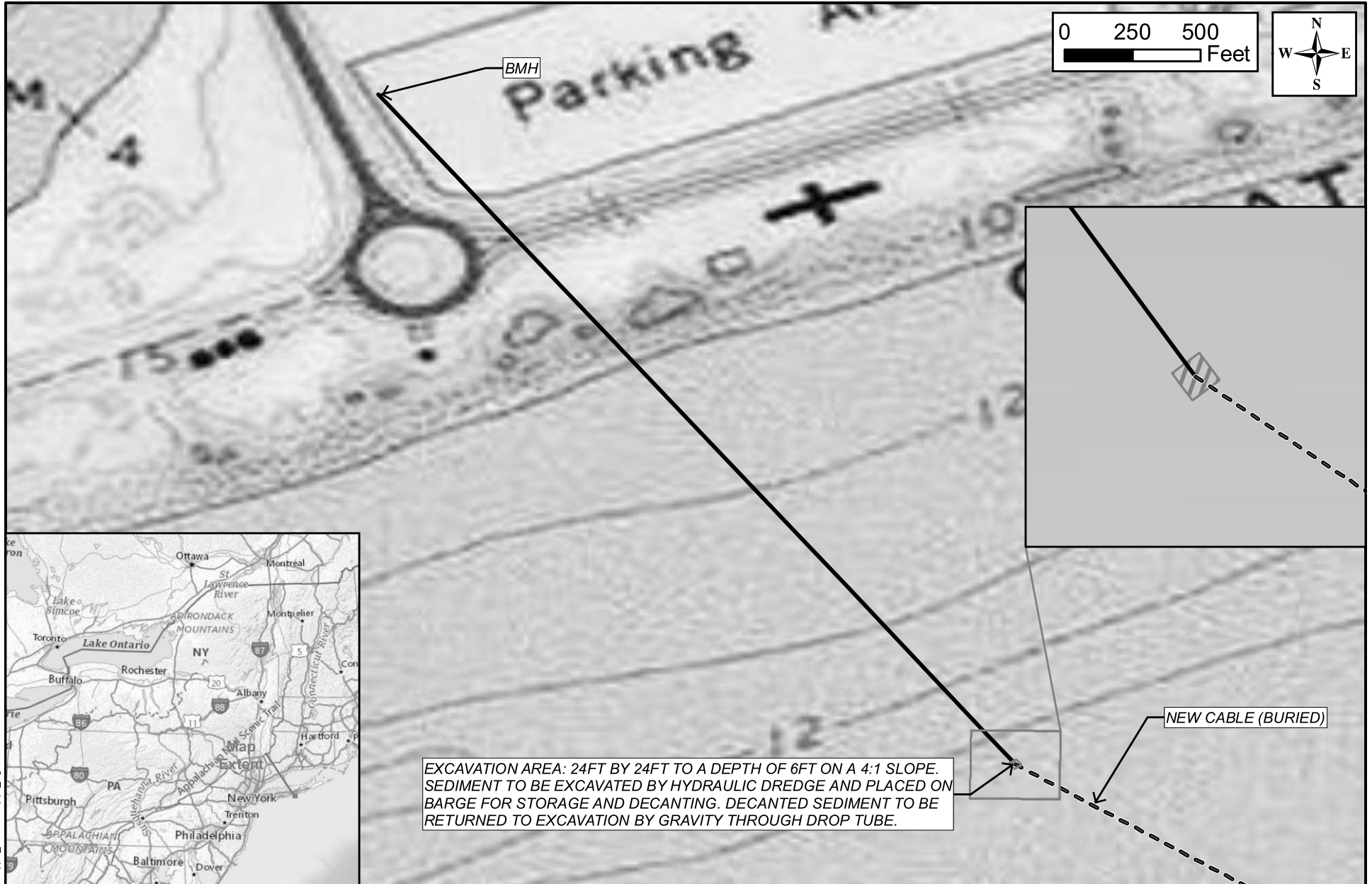
USACE FILE: NAN-2020-01233-EBR






Legend Existing Borepipe	Grace Hopper Cable Project Existing Nearshore Details Map		DATE: 8/2/2021
	At: Brookhaven In: Atlantic Ocean Suffolk County State of New York	Application By: SubCom, LLC. Project # NAN-2020-01233-EBR <small>Map Source: ESRI USA Topographic Maps Basemap</small>	FIGURE NUMBER: 1 of 11

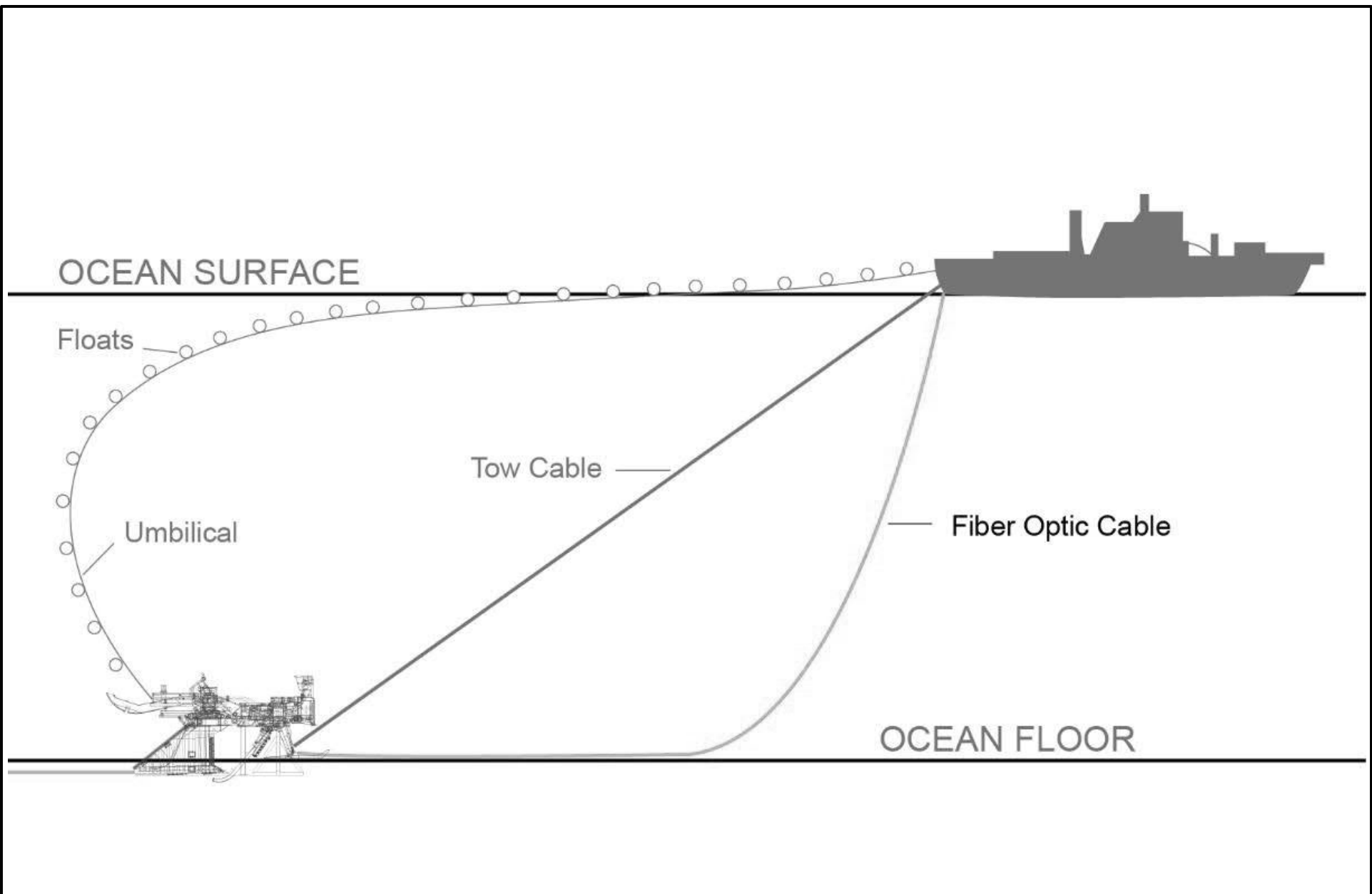
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Legend  Estimated Excavation Area  Proposed Buried Cable Alignment  Existing Borepipe	Grace Hopper Cable Project Nearshore Details Map		DATE: 8/2/2021
	At: Brookhaven In: Atlantic Ocean Suffolk County State of New York	Application By: SubCom, LLC. Project # NAN-2020-01233-EBR <small>Map Source: ESRI USA Topographic Maps Basemap</small>	FIGURE NUMBER: 2 of 11

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Notes:

1. Cable to be installed up to 6 feet below ocean floor surface.
2. Marine Mammal/Protected Species Observers on vessel.
3. Vessel Speeds: 0.5-1.0 knots (NM/hr) during cable burial, 1.0-5.0 knots during cable lay, 6.0-10.0 knots during transit.

**Grace Hopper Cable Project
Cable Installation and Burial via Sea Plow**

**At: Brookhaven
In: Atlantic Ocean
Suffolk County
State of New York**

**Application By:
SubCom, LLC.
Project # NAN-2020-01233-EBR**
Map Source:
ESRI USA Topographic Maps Basemap

DATE:

8/2/2021

FIGURE NUMBER:

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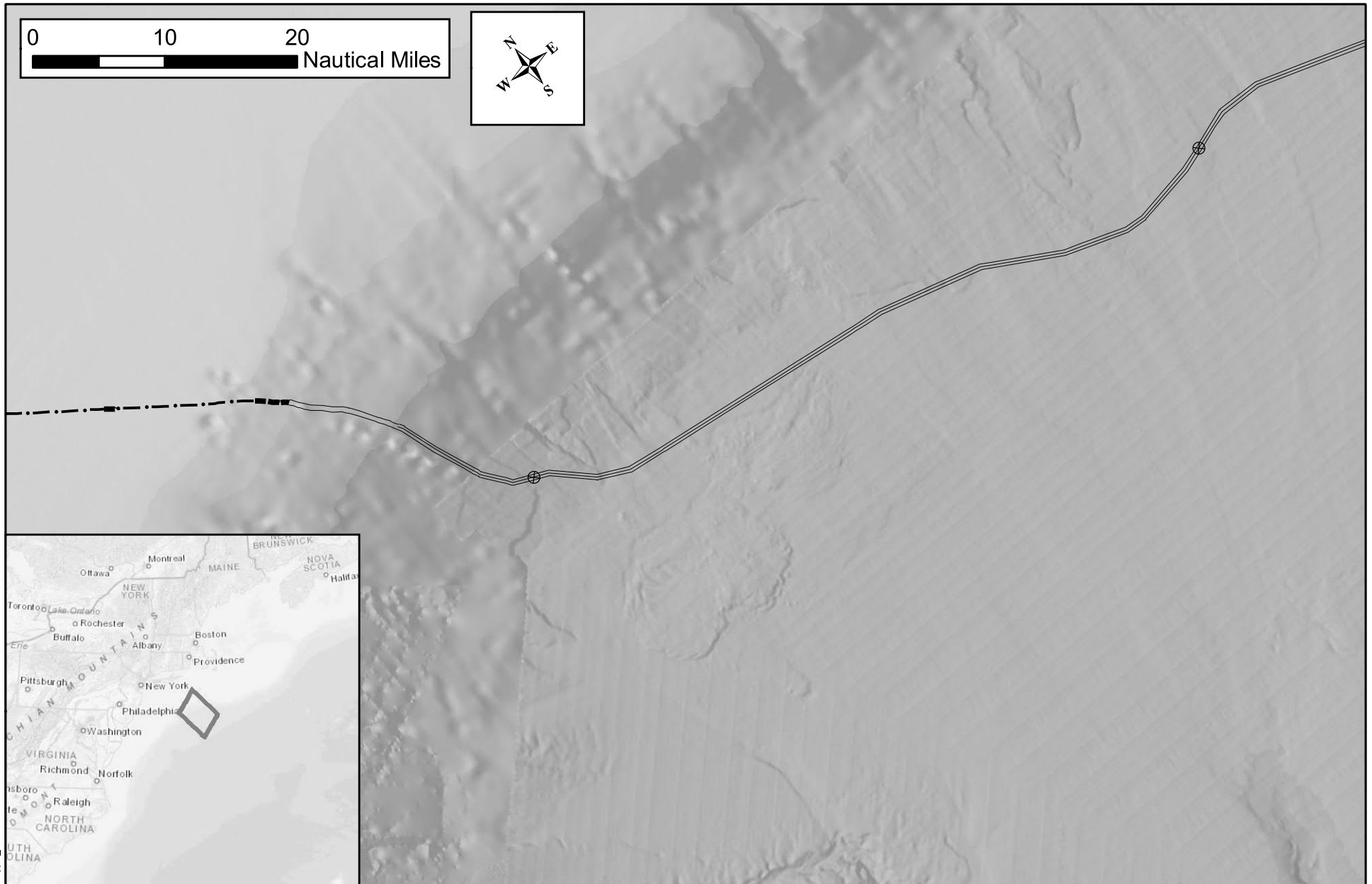
USACE FILE: NAN-2020-01233-EBR



<p>Legend</p> <ul style="list-style-type: none"> ⊗ In-Service Cable Crossing ▬ HDD Burial ▬▬▬ Surface Lay Position ▬▬▬ Category A: >4 Feet Burial ▬▬▬ Category B: >2 Feet Burial ▬▬▬ Category C: <2 Feet Burial ▬▬▬ Category D: Surface Lay with PLIB Burial Attempt ▬▬▬ Category E: >5 Feet Burial ▬▬▬ Maritime Boundaries and Limits 	<p align="center">Grace Hopper Cable Project Cable Installation and Burial via Sea Plow</p> <p>At: Brookhaven In: Atlantic Ocean Suffolk County State of New York</p> <p>Application By: SubCom, LLC. Project # NAN-2020-01233-EBR</p> <p><small>Map Source: ESRI USA Topographic Maps Basemap</small></p>	<p>DATE: 8/2/2021</p> <p>FIGURE NUMBER: 4 of 11</p>
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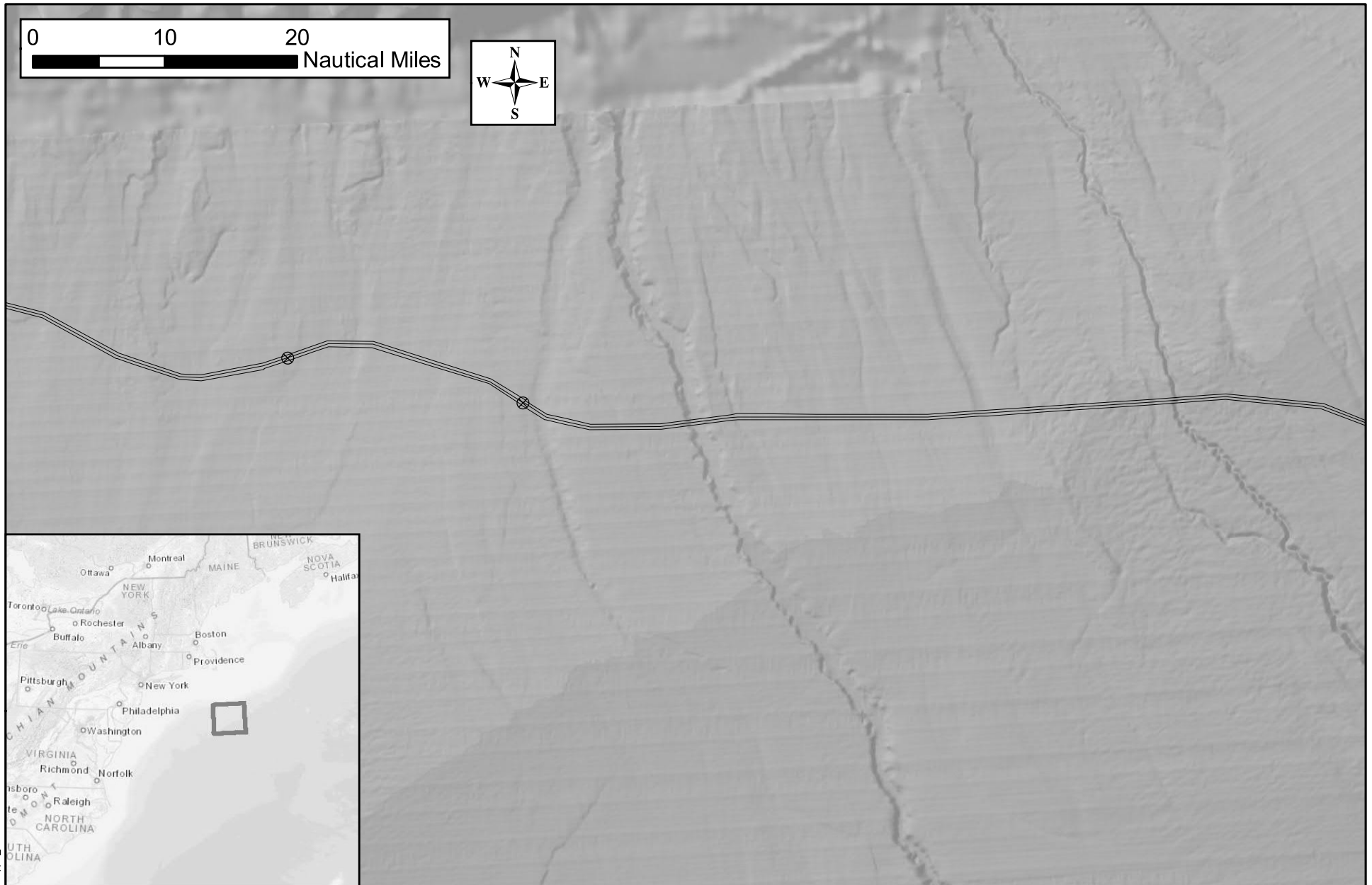
USACE FILE: NAN-2020-01233-EBR



<p>Legend</p> <ul style="list-style-type: none"> ⊗ In-Service Cable Crossing ▬ HDD Burial ▬ Category A: >4 Feet Burial ▬ Category B: >2 Feet Burial ▬ Category C: <2 Feet Burial ▬ Category D: Surface Lay with PLIB Burial Attempt ▬ Category E: >5 Feet Burial ▬ Surface Lay Position ▬ Maritime Boundaries and Limits 	<p align="center">Grace Hopper Cable Project Cable Installation and Burial via Sea Plow</p> <p>At: Brookhaven In: Atlantic Ocean Suffolk County State of New York</p> <p>Application By: SubCom, LLC. Project # NAN-2020-01233-EBR</p> <p><small>Map Source: ESRI USA Topographic Maps Basemap</small></p>	<p>DATE: 8/2/2021</p> <p>FIGURE NUMBER: 5 of 11</p>
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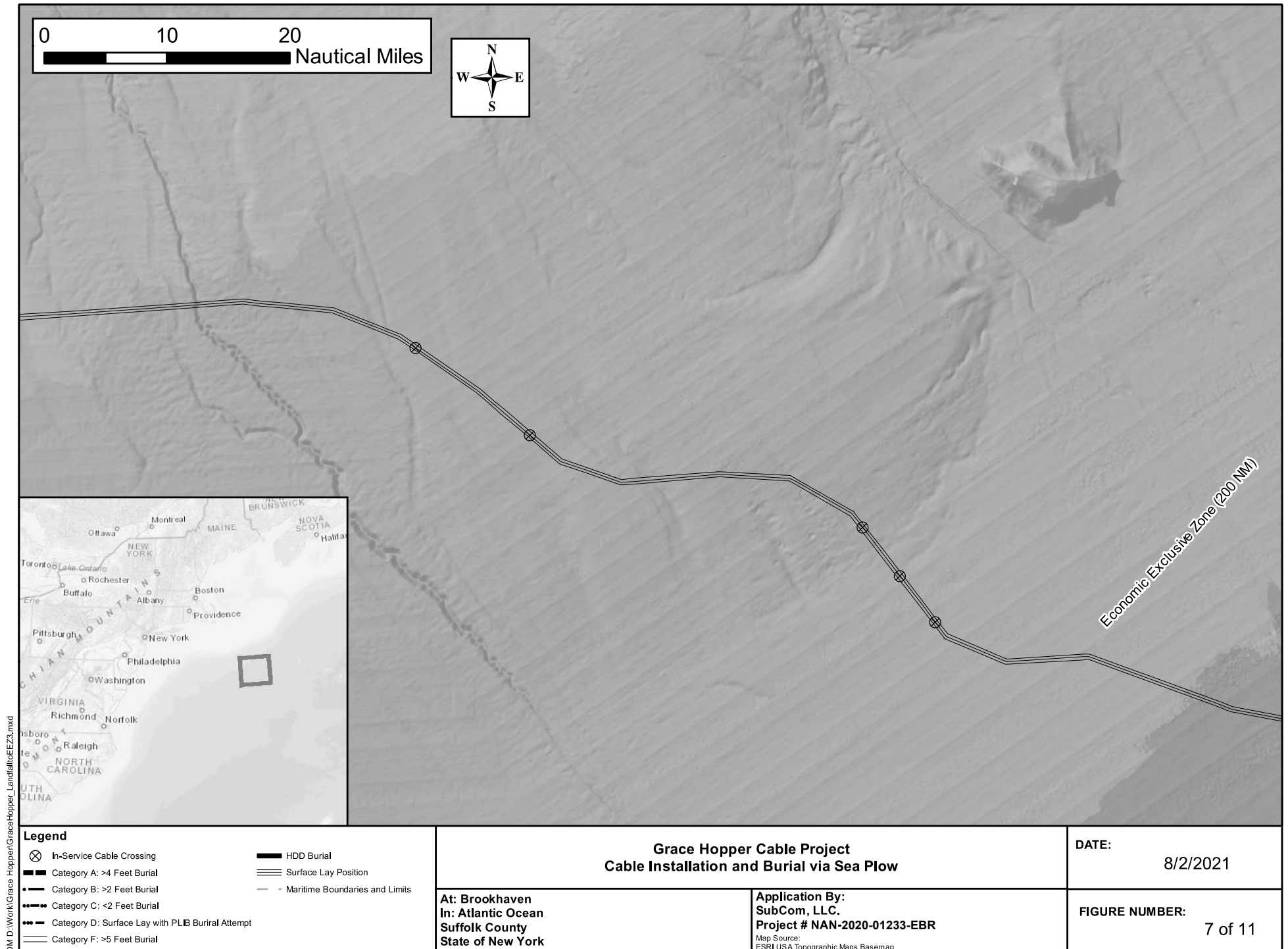
USACE FILE: NAN-2020-01233-EBR



<p>Legend</p> <ul style="list-style-type: none"> ⊗ In-Service Cable Crossing ▬ HDD Burial ▬▬▬ Surface Lay Position ▬▬▬ Category A: >4 Feet Burial ▬▬▬ Category B: >2 Feet Burial ▬▬▬ Category C: <2 Feet Burial ▬▬▬ Category D: Surface Lay with PLIB Burial Attempt ▬▬▬ Category E: >5 Feet Burial ▬▬▬ Maritime Boundaries and Limits 	<p align="center">Grace Hopper Cable Project Cable Installation and Burial via Sea Plow</p> <p>At: Brookhaven In: Atlantic Ocean Suffolk County State of New York</p> <p>Application By: SubCom, LLC. Project # NAN-2020-01233-EBR</p> <p><small>Map Source: ESRI USA Topographic Maps Basemap</small></p>	<p>DATE: 8/2/2021</p> <p>FIGURE NUMBER: 6 of 11</p>
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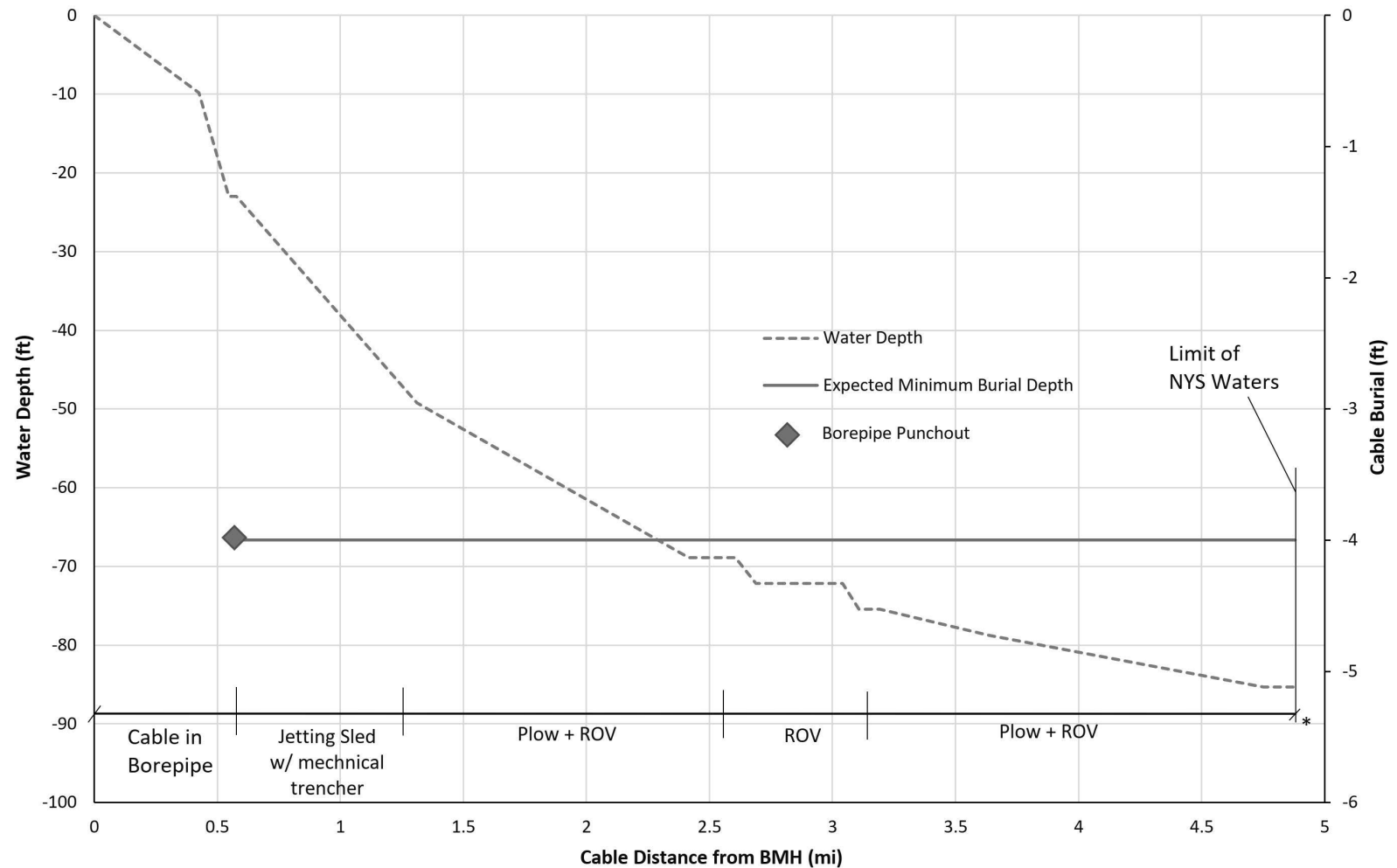
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* - Representation of burial machinery to be used. See Following Figure 9 - NYS and US Waters Seabed Profile & Expected Minimum Burial Depth for information on installation method beyond NYS Waters.

----- Water Depth
 ————— Expected Minimum Burial Depth

Grace Hopper Cable Project New York State Waters Seabed Profile & Expected Minimum Burial Depth

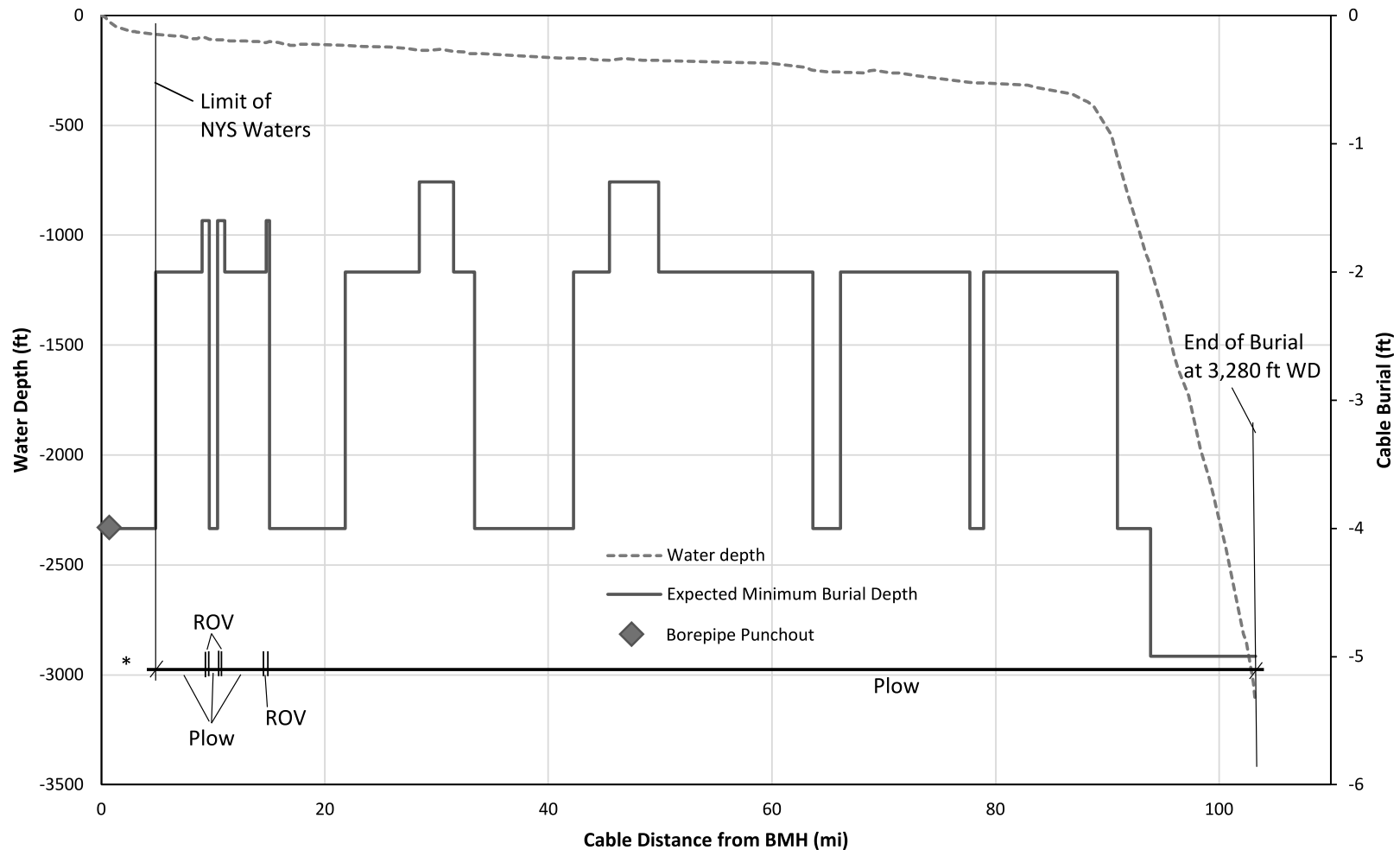
DATE: 8/2/2021

At: Brookhaven
 In: Atlantic Ocean
 Suffolk County
 State of New York

Application By:
 SubCom, LLC.
 Project # NAN-2020-01233-EBR

FIGURE NUMBER:
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Grace Hopper- NYS and US Waters Seabed Profile & Expected Minimum Burial Depth



* - Representation of burial machinery to be used. See Previous Figure 8 - New York State Waters Seabed Profile & Expected Minimum Burial Depth for information on installation method within NYS Waters.

----- Water Depth

———— Expected Minimum Burial Depth

* - See Figure 8 for detail on NYS Waters

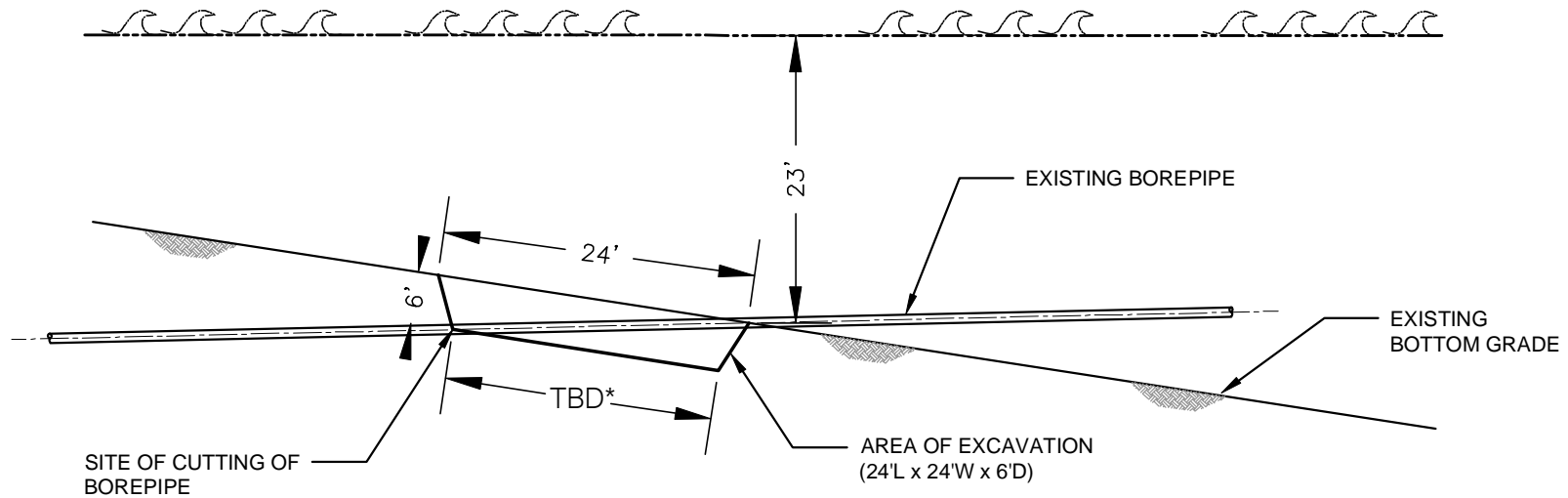
Grace Hopper Cable Project NYS and US Waters Seabed Profile & Expected Minimum Burial Depth

At: Brookhaven
In: Atlantic Ocean
Suffolk County
State of New York

Application By:
SubCom, LLC.
Project # NAN-2020-01233-EBR

DATE:
8/2/2021

FIGURE NUMBER:
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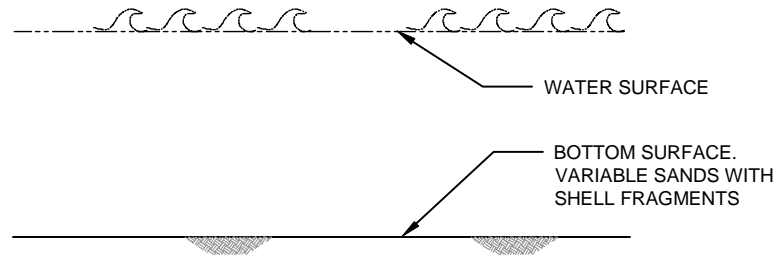
*-width & length of floor of excavation to be dependant on contractor's method of stabilization.

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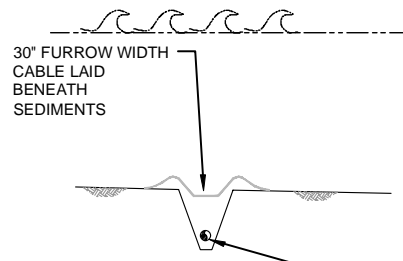
Grace Hopper Cable Project Borepipe Excavation Section		DATE: 8/2/2021
At: Brookhaven In: Atlantic Ocean Suffolk County State of New York	Application By: SubCom, LLC. Project # NAN2020-01233-EBR	FIGURE NUMBER: 10 of 11

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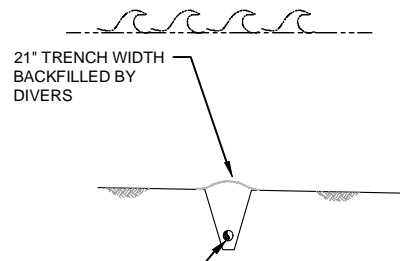
EXISTING CONDITIONS



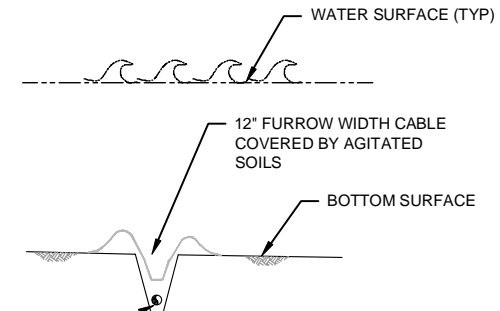
IMMEDIATELY POST-INSTALLATION SEA PLOUGH



JETTING SLED

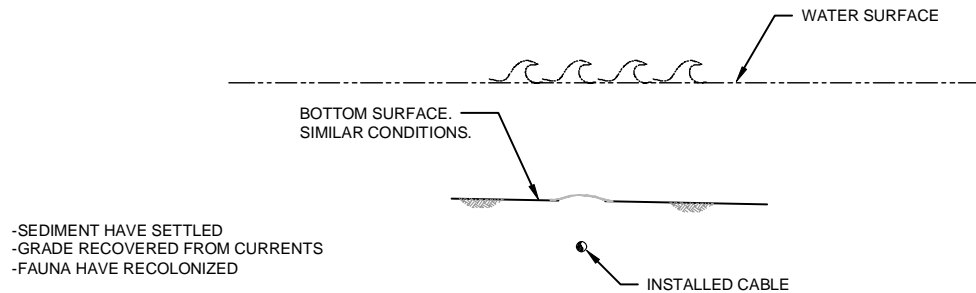


ROV



CABLE 2" DIAMETER, BURIAL
DEPTH VARIABLE UP TO 4
FEET IN DEPTH
TRENCH 2-2.5 FEET IN WIDTH

CROSS SECTION 6 MONTHS POST BURIAL



Grace Hopper Cable Project Cable Installation Cross Sections

DATE:
8/2/2021

At: Brookhaven
In: Atlantic Ocean
Suffolk County
State of New York

Application By:
SubCom, LLC.
Project # NAN-2020-01233-EBR

FIGURE NUMBER:
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