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-2023-00480-EMI**
Issue Date: February 21, 2024
Expiration Date: March 22, 2024

To Whom It May Concern:

The New York District, 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: NYC Energy, LLC
322 West 57th Street, #46U
New York, New York 10019

ACTIVITY: Construction of a Floating Energy Storage System (FESS) and Maintenance Dredging

WATERWAY: Wallabout Channel

LOCATION: Pier K, Brooklyn Navy Yard, Kings County, City of New York, New York

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 REACH THIS OFFICE 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 email is considered just as carefully in the permit decision process and bears the same weight as that furnished at a public hearing.

The Project was determined eligible to apply for a loan guarantee from the U.S. Department of Energy (DOE) under Title XVII of the Energy Policy Act of 2005 (EPAct), which requires demonstration by the applicant that the project is innovative and uses new or improved technologies as compared to traditional methods currently in service. The DOE is the lead federal agency for this project and is responsible for coordinating review in accordance with the National Environmental Policy Act (NEPA).

DOE initiated consultation pursuant to Section 7 of the Endangered Species Act (16 U.S.C. 1531), with the National Marine Fisheries Service on February 10, 2023. The DOE's determination was that the activity for which authorization is sought herein may affect, but is not likely to adversely affect any Federally endangered or threatened species or their critical habitat. On May 25, 2023 NMFS concurred with DOE's determination that the proposed activities would not likely adversely affected any NMFS ESA-listed species.

DOE initiated consultation pursuant to Section 7 of the Endangered Species Act (16 U.S.C. 1531), with the United States Fish and Wildlife Service (USFWS) on October 13, 2023. The DOE made a no effect determination on USFWS ESA-listed species.

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 life stages of some EFH-designated species. DOE submitted an EFH assessment to NMFS initiating consultation on February 10, 2023, and made the preliminary determination that the site-specific adverse effects are not likely to be substantial.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, DOE initiated consultation with the New York State Historic Preservation Office (SHPO) on January 17, 2023 stating that the proposed activities would have no Adverse Effect to historic properties. In a letter dated March 16, 2023, the NYSHPO concurred with DOE's No Adverse Effect to historic properties determination.

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. By this public notice, we are requesting the state's concurrence with, objection to, or waiver of the applicant's certification. No permit decision will be made until one of these actions occur. For activities within the coastal zone of New York State, the applicant's certification and accompanying information is available from the Consistency Coordinator, New York State Department of State, Division of Coastal Resources and Waterfront Revitalization, Coastal Zone Management Program, One Commerce Plaza, 99 Washington Avenue, Albany, New York 12231, Telephone (518) 474-6000. Comments regarding the applicant's certification, and copies of any letters to this office commenting upon this proposal, should be so addressed.

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. Please send all comments and questions concerning this application to Christopher.W.Minck@usace.army.mil.

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.

Rosita Miranda

Digitally signed by Rosita Miranda
Date: 2024.02.16 13:23:21 -05'00'

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

Enclosures

WORK DESCRIPTION

The permit applicant, NYC Energy, LLC, has requested Department of the Army (DA) authorization to construct a utility-scale floating energy storage system (FESS) in Wallabout Channel at Berth 20 of Pier K in the Brooklyn Navy Yard, Kings County, City of New York, New York. The proposed work would involve the following:

Floating Energy Storage System (FESS):
Moor three (3) 146-foot-long by 130-foot-wide barges, totaling 56,940 square feet, equipped with battery energy storage containers and associated equipment. Each barge would have a 100 megawatt (MW) capacity for a total of 300 MW of energy storage capacity. The barges would accommodate three levels of battery storage units with each barge having a total height of approximately 65-67 feet above the main barge deck. The barges will be moored using twelve (12) 30-inch diameter steel pipe piles spaced approximately 25 feet apart and installed along the bulkhead at Berth 20 of Pier K outside of the Federal Navigation Channel. Each pile would be filled with concrete, of which approximately 33.5 cubic yards would be below Spring High Water (SHW). Atop each barge, 15 kilovolt (kV) and 35 kV aerial cables would connect from a control room to cable in addition to a utility tower constructed on Pier K. The project would interconnect into the New York Independent System Operator (NYISO) transmission system via two (2) 138 kV cables running in the upland to the existing Hudson Avenue East 138 kV substation in Brooklyn, New York.

Dredging:
Dredge, with ten-years maintenance, via mechanical dredge approximately 81,500 cubic yards (CY) of material from an approximately 5.2 acres area to a depth of 20 feet below Mean Low Water (MLW) with one-foot of allowable overdredge. Dredged material would be placed into a scow, dewatered with return flow to the waterway, and transported for disposal at an approved upland facility.

The applicant plans to conduct one (1) additional dredging events within the ten-year maintenance dredging period removing a maximum of approximately 81,500 CY per event from within the same dredging area with upland disposal.

The applicant has stated that they have avoided, minimized, and mitigated for potential impacts proposed to the maximum extent practicable by limiting the dredge area to the minimum necessary for safe transit of the barges. Best Management Practices and mitigation measures will be utilized including the use of a turbidity barrier around the construction area to minimize the spread of turbidity. Piles will be installed using a vibratory hammer and the applicant will incorporate a soft start to allow animals to leave the project area. The applicant has additionally proposed to facilitate the deployment of oyster reef structures with the Billion Oysters Project at Brooklyn Bridge Park. The applicant would monitor the reef structures to assess benefits to fish communities.

The purpose of the project is to store energy generated by offshore wind and distribute it via the ConEd substation at Hudson Avenue. The project is intended to integrate clean, renewable energy into New York City's electric grid and further New York State's climate goals of 6,000 MW of battery energy storage by 2030.

USGS Quad:	Brooklyn		USGS Quad Map NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM
Waterway:	Wallabout Channel				USGS
Latitude:	40° 42' 22" N				
Longitude:	73° 58' 12" W				
County: Kings		Datum: MLW	Scale: 1"=2000'	Oct. 18, 2023	Sht 1 of 18

USGS Quad:	Brooklyn	Tidal Wetlands Map NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM	
Waterway:	Wallabout Channel				
Latitude:	40° 42' 22" N			TW	
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: 1"=500'	Oct. 18, 2023	Sht 2 of 18	

PERMIT REQUIREMENTS & ENVIRONMENTAL CONTROLS

1. THE CONTRACTOR SHALL BE FURNISHED A COPY OF ENVIRONMENTAL PERMITS FROM THE US ARMY CORPS OF ENGINEERS AND THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION. THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL PERMIT CONDITIONS.
2. THE CONTRACTOR SHALL PREVENT TRASH OR CONSTRUCTION DEBRIS FROM ENTERING THE WATERCOURSE, AND SHALL RECOVER ANY ITEMS THAT ENTER THE WATERCOURSE IMMEDIATELY.

REFERENCE DATUM

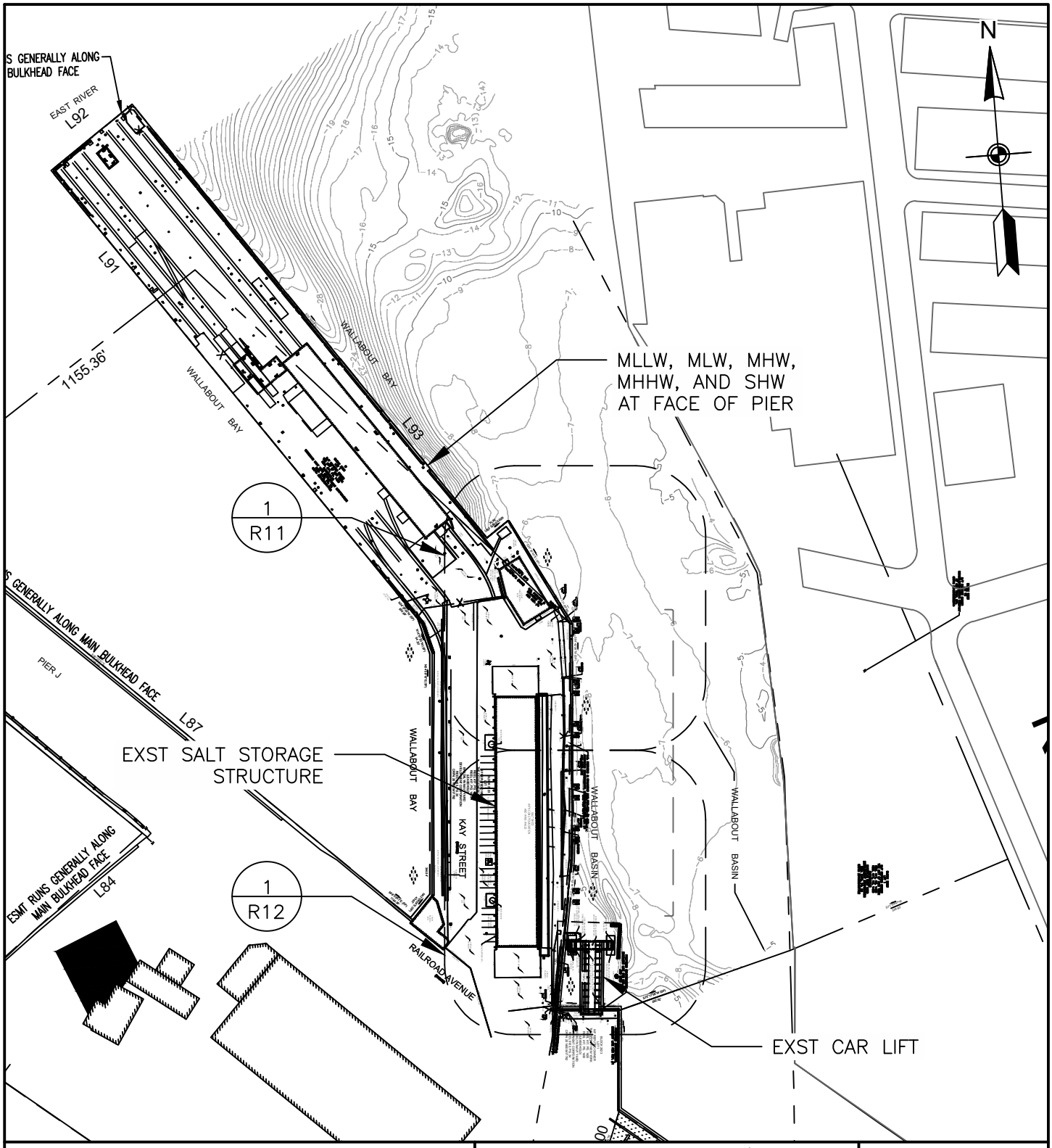
ELEVATIONS SHOWN ON DRAWINGS ARE RELATIVE TO MLW, UNLESS NOTED OTHERWISE. DATUM CONVERSIONS SHALL REFER TO THE TABLE ON THIS SHEET.

REFERENCE TOPOGRAPHIC SURVEYS PREPARED BY GALLAS SURVEYING GROUP, DATED DECEMBER 6, 2021, REVISED MARCH 9, 2023.

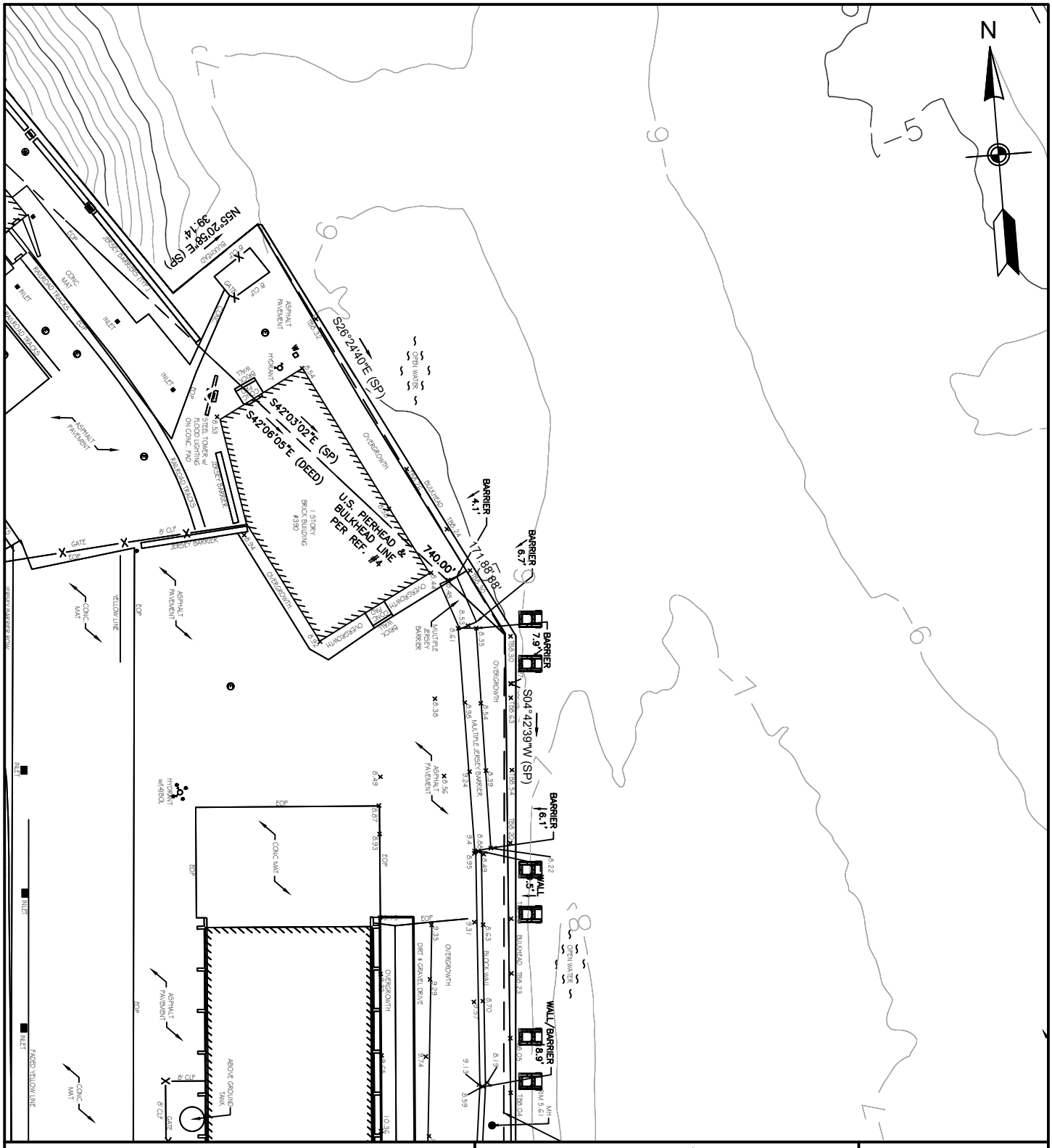
REFERENCE HYDROGRAPHIC SURVEYS PREPARED BY S.T. HUDSON ENGINEERS INC., DATED AUGUST 30, 2022.

DATUM CONVERSION (ELEVATIONS IN FEET)			
DATUM	NAVD88	MLW	MLLW
500–yr Return Period	+14.00	+16.40	+16.62
FEMA Preliminary VE Zone	+13.00	+15.40	+15.62
Hurricane Sandy Max Recorded Tide Elevation	+11.28	+13.68	+13.90
100–yr Return Period	+10.90	+13.30	+13.52
FEMA Effective AE Zone	+10.00	+12.40	+12.62
50–yr Return Period	+9.70	+12.10	+12.32
10–yr Return Period	+6.90	+9.30	+9.52
Spring High Water	+2.37	+4.77	+4.99
Mean Higher–High Water	+2.20	+4.60	+4.82
Mean High Water	+1.87	+4.27	+4.49
NAVD88	0.00	+2.40	+2.62
Mean Diurnal Tide Level	−0.21	+2.19	+2.41
Local Mean Sea Level	−0.24	+2.16	+2.38
Mean Low Water	−2.40	0.00	+0.22
Mean Lower–Low Water	−2.62	−0.22	0.00

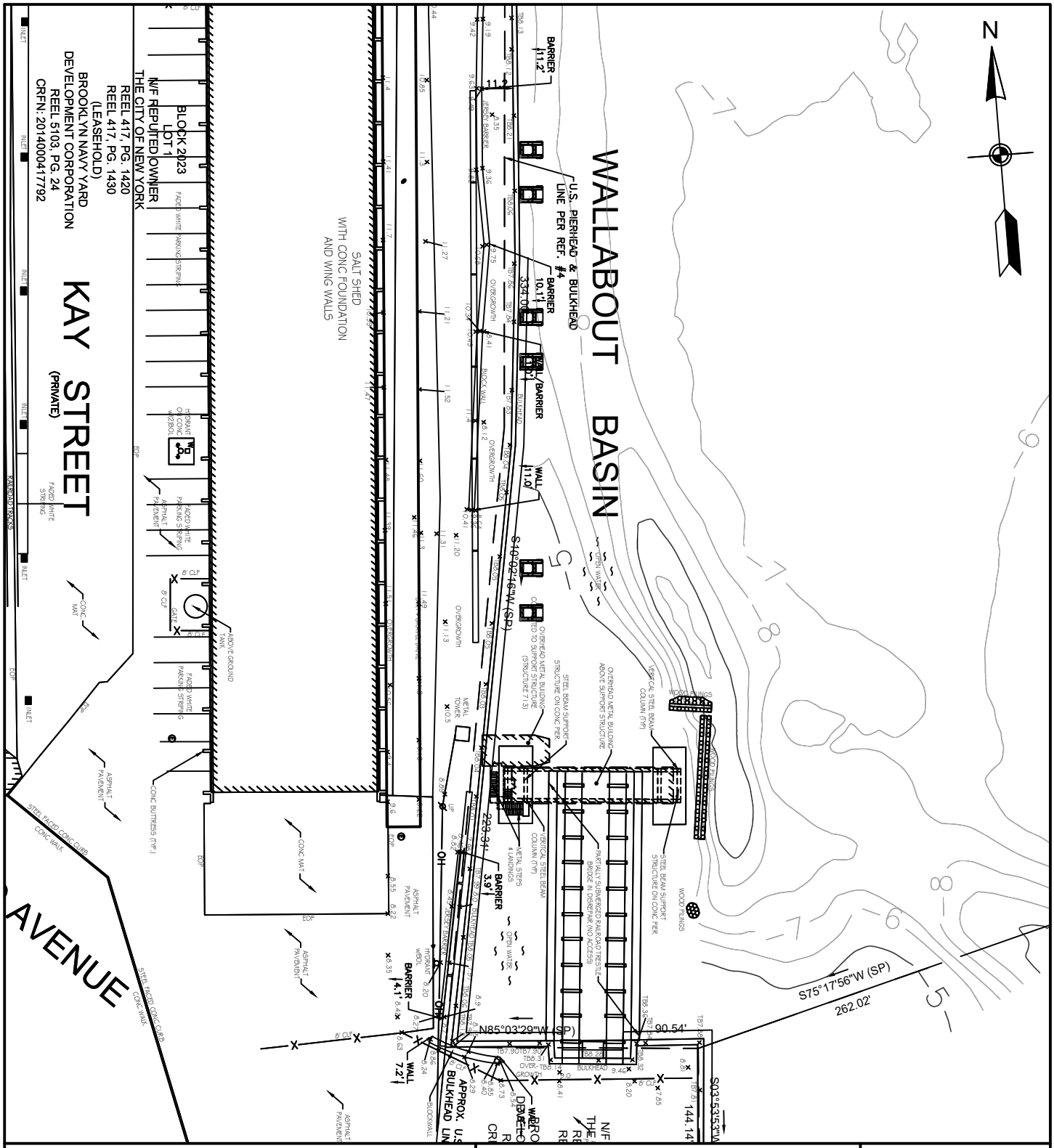
USGS Quad:	Brooklyn	General Notes			**BlueShore** ENGINEERING LLC
Waterway:	Wallabout Channel	NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019			TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM
Latitude:	40° 42' 22" N				R-1.0
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: N/A	Oct. 18, 2023		Sht 3 of 18



USGS Quad:	Brooklyn		Existing Site Plan NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM
Waterway:	Wallabout Channel				R-10.0
Latitude:	40° 42' 22" N				
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: 1"=200'	Oct. 18, 2023		Sht 4 of 18



USGS Quad:	Brooklyn	Existing Site Plan Zoom 1 NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM	
Waterway:	Wallabout Channel				
Latitude:	40° 42' 22" N			R-11.0	
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: 1"=50'	Oct. 18, 2023	Sht 5 of 18	



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Waterway:	Wallabout Channel				
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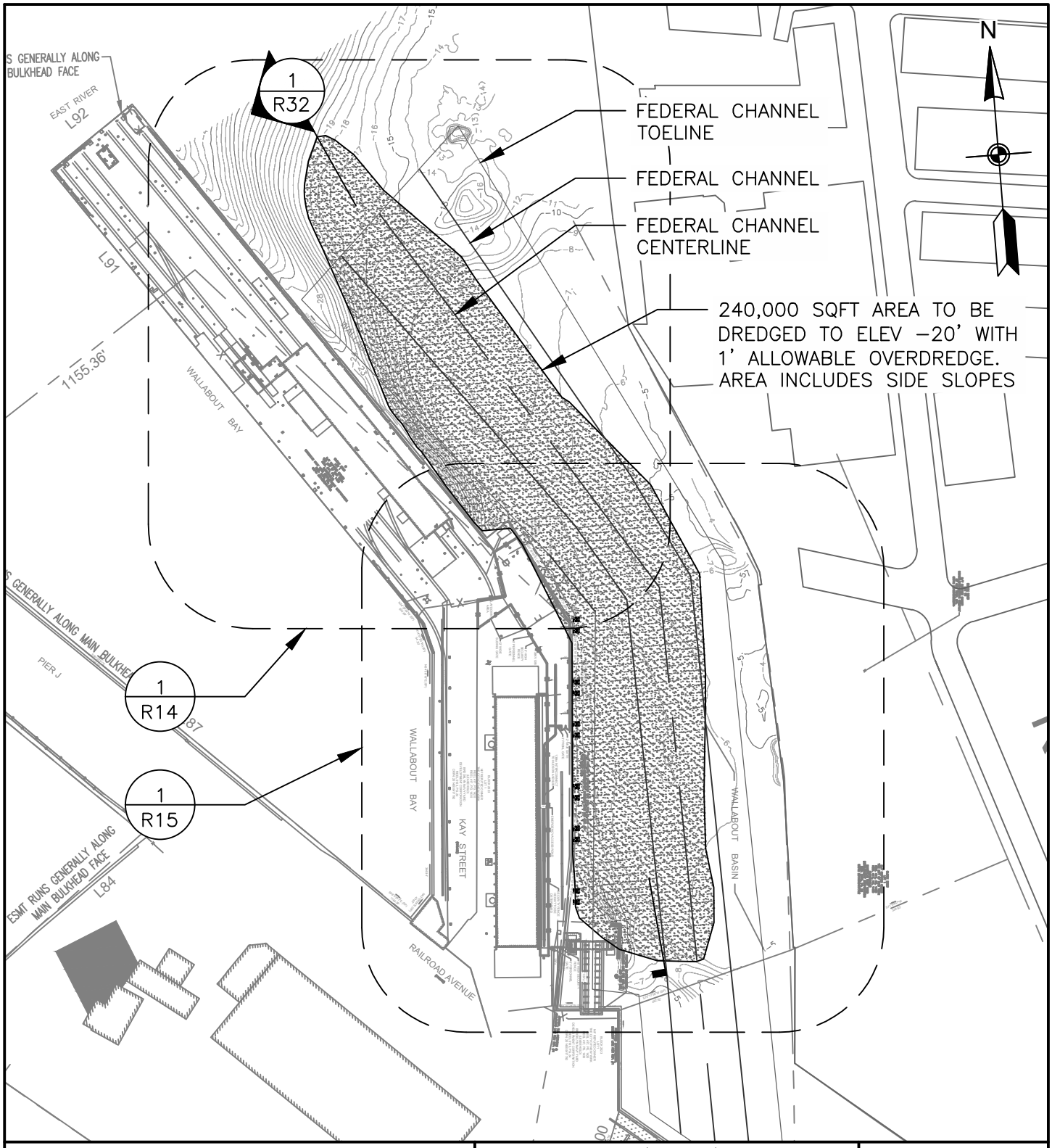

USGS Quad:	Brooklyn	Dredge Plan NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM	
Waterway:	Wallabout Channel				R-13.0
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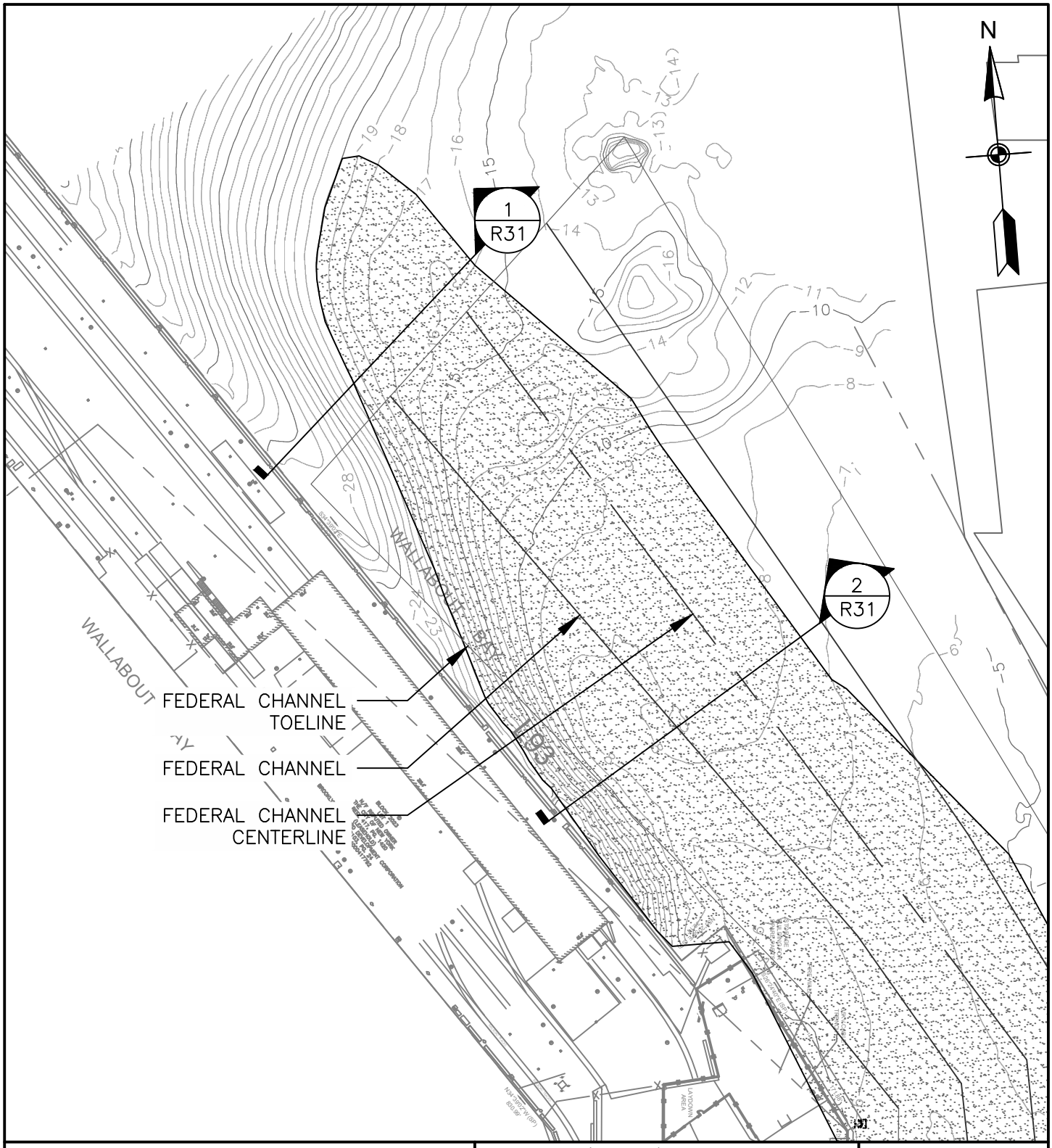
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: 1"=200'	Oct. 18, 2023	Sht 7 of 18	



USGS Quad:	Brooklyn	Dredge Plan Zoom 1 NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM	
Waterway:	Wallabout Channel				R-14.0
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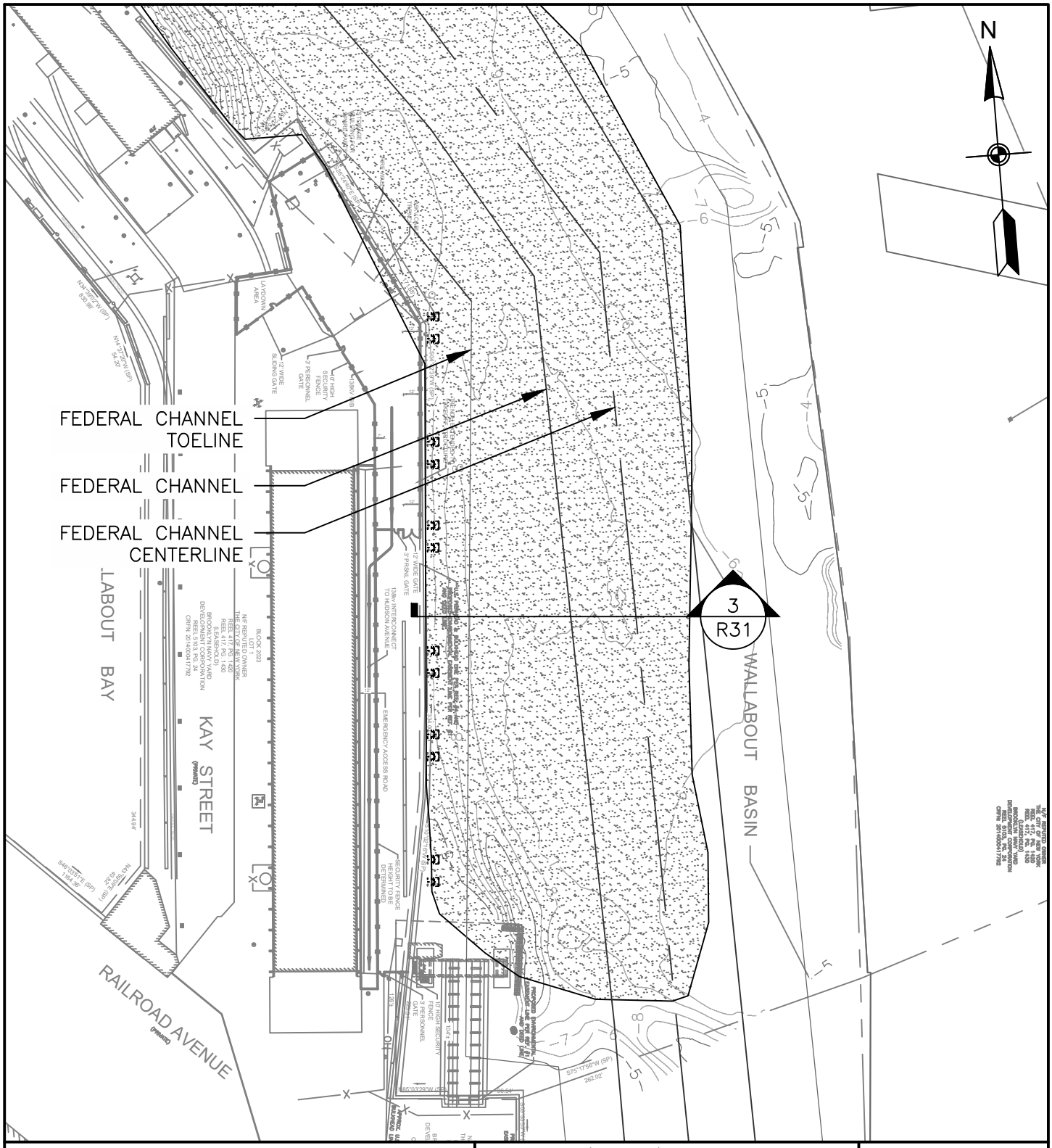
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: 1"=100'	Oct. 18, 2023	Sht 8 of 18	



USGS Quad:	Brooklyn	Dredge Plan Zoom 2 NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM	
Waterway:	Wallabout Channel				
Latitude:	40° 42' 22" N			R-15.0	
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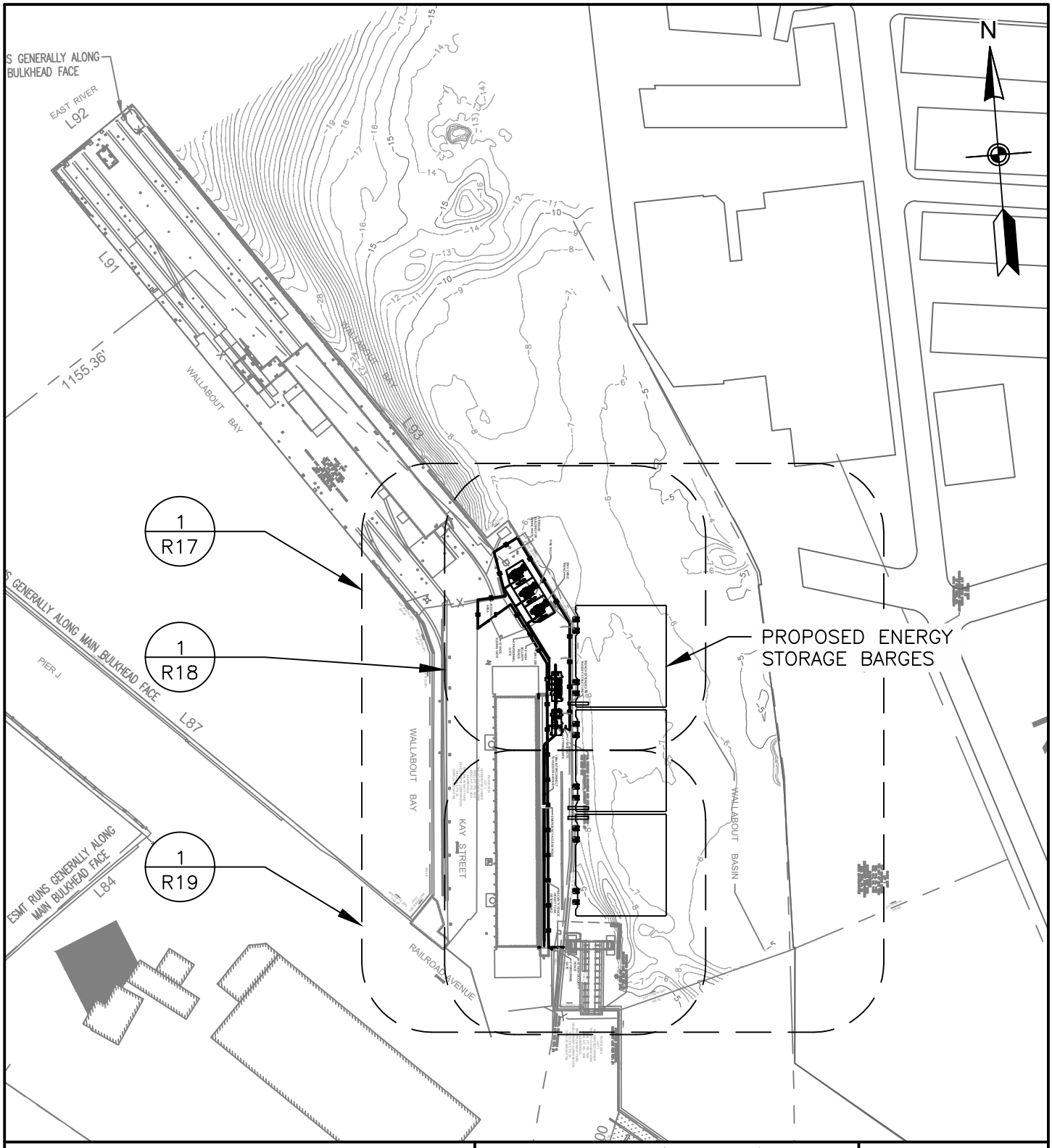
County: Kings	Datum: MLW	Scale: 1"=100'	Oct. 18, 2023	Sht 9 of 18	



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Waterway:	Wallabout Channel				R-16.0
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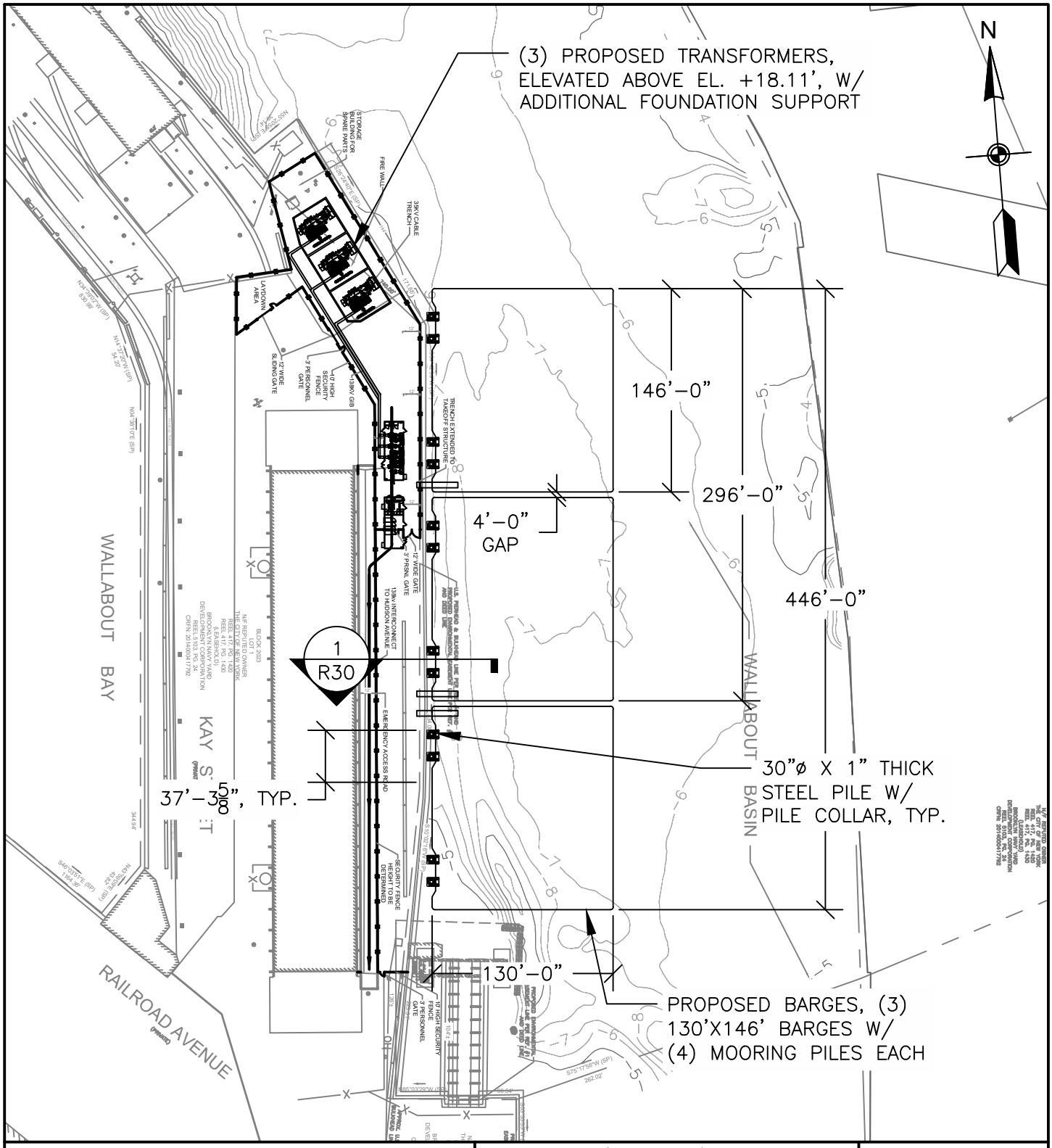
County: Kings	Datum: MLW	Scale: 1"=200'	Oct. 18, 2023		Sht 10 of 18



USGS Quad:	Brooklyn	Proposed Site Plan Zoom 1 NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019			**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM
Waterway:	Wallabout Channel				R-17.0
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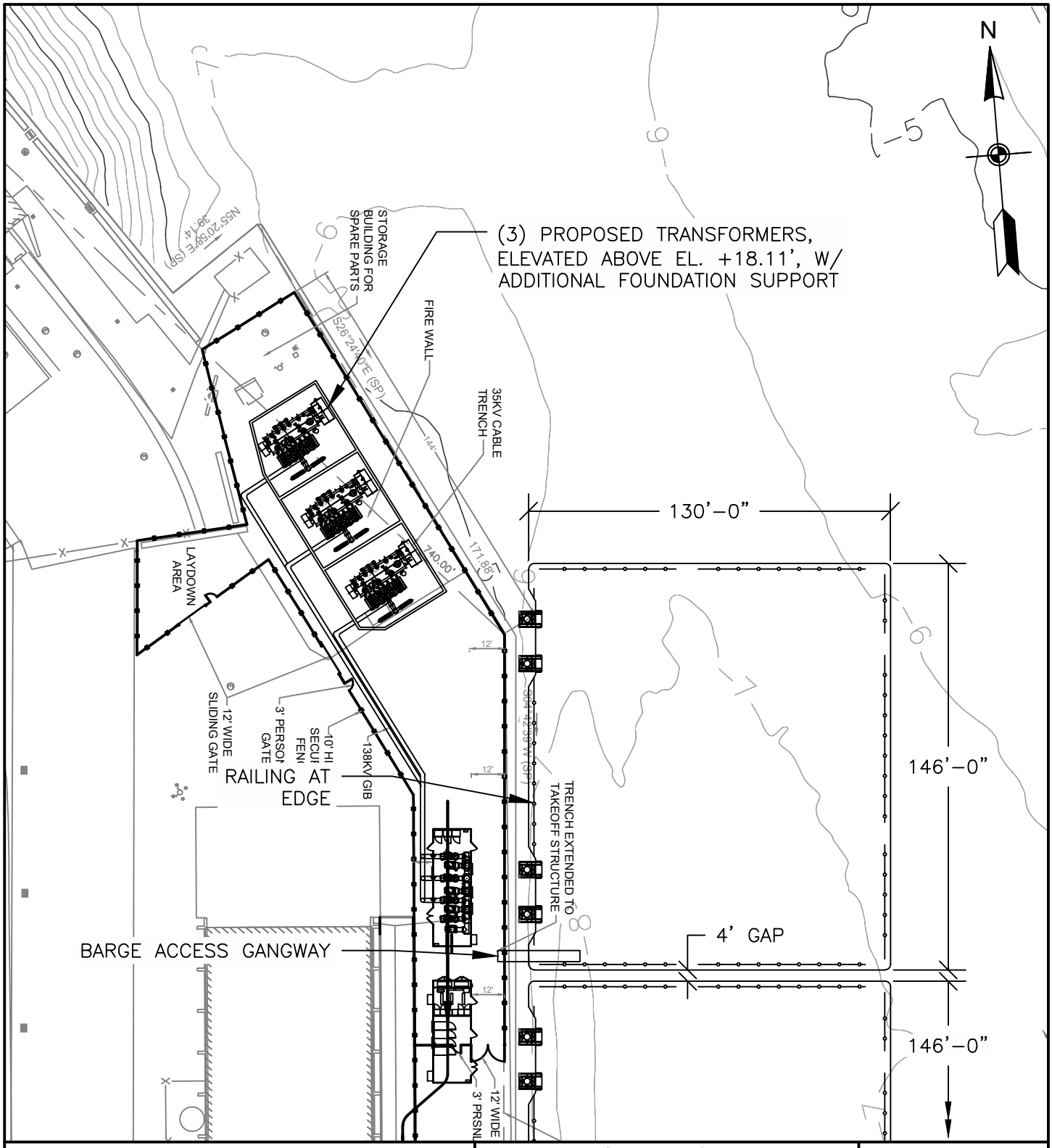
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: 1"=100'	Oct. 18, 2023		Sht 11 of 18



USGS Quad:	Brooklyn	Proposed Site Plan Zoom 2 NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM	
Waterway:	Wallabout Channel				R-18.0
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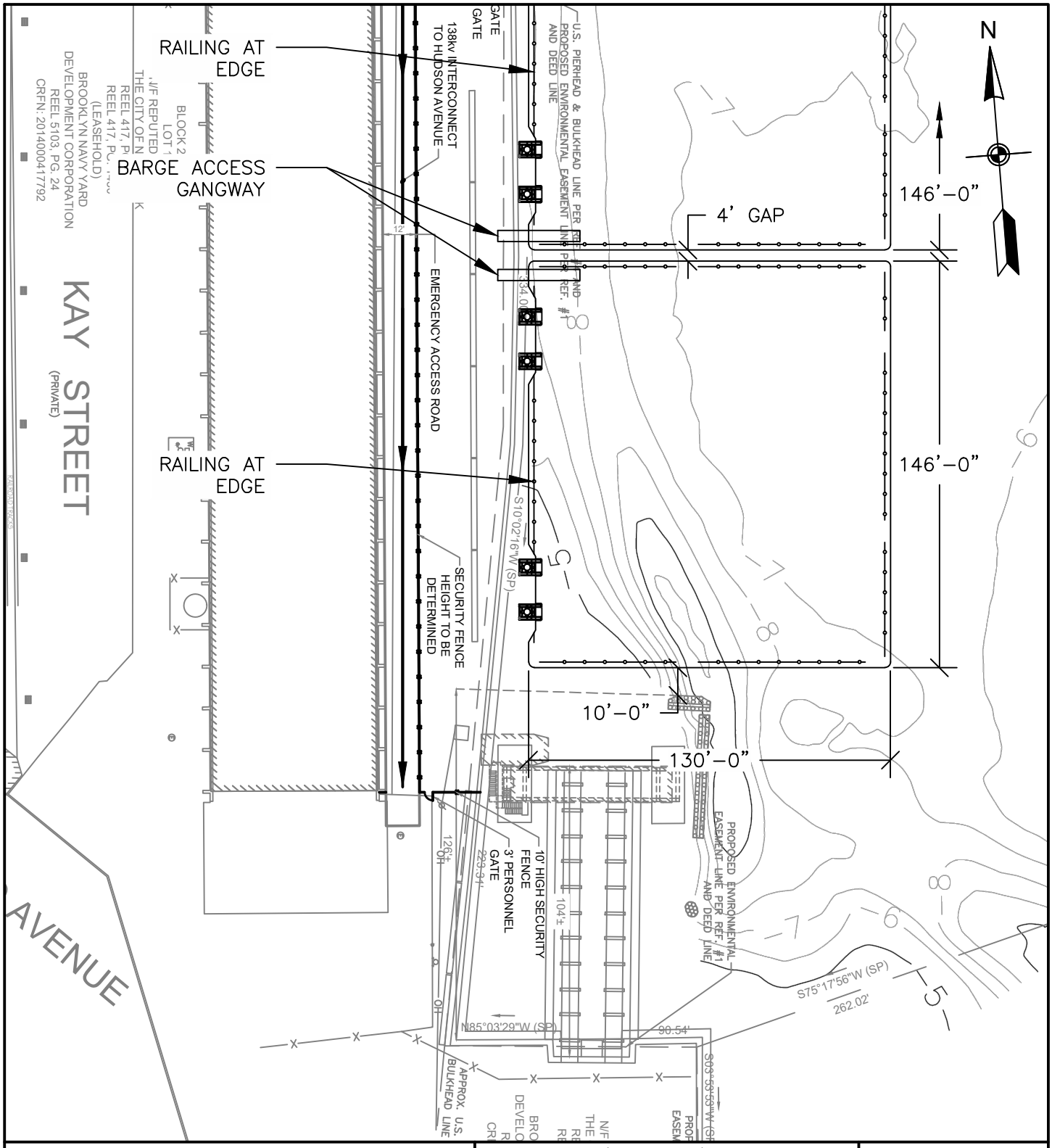
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: 1"=50'	Oct. 18, 2023	Sht 12 of 18	



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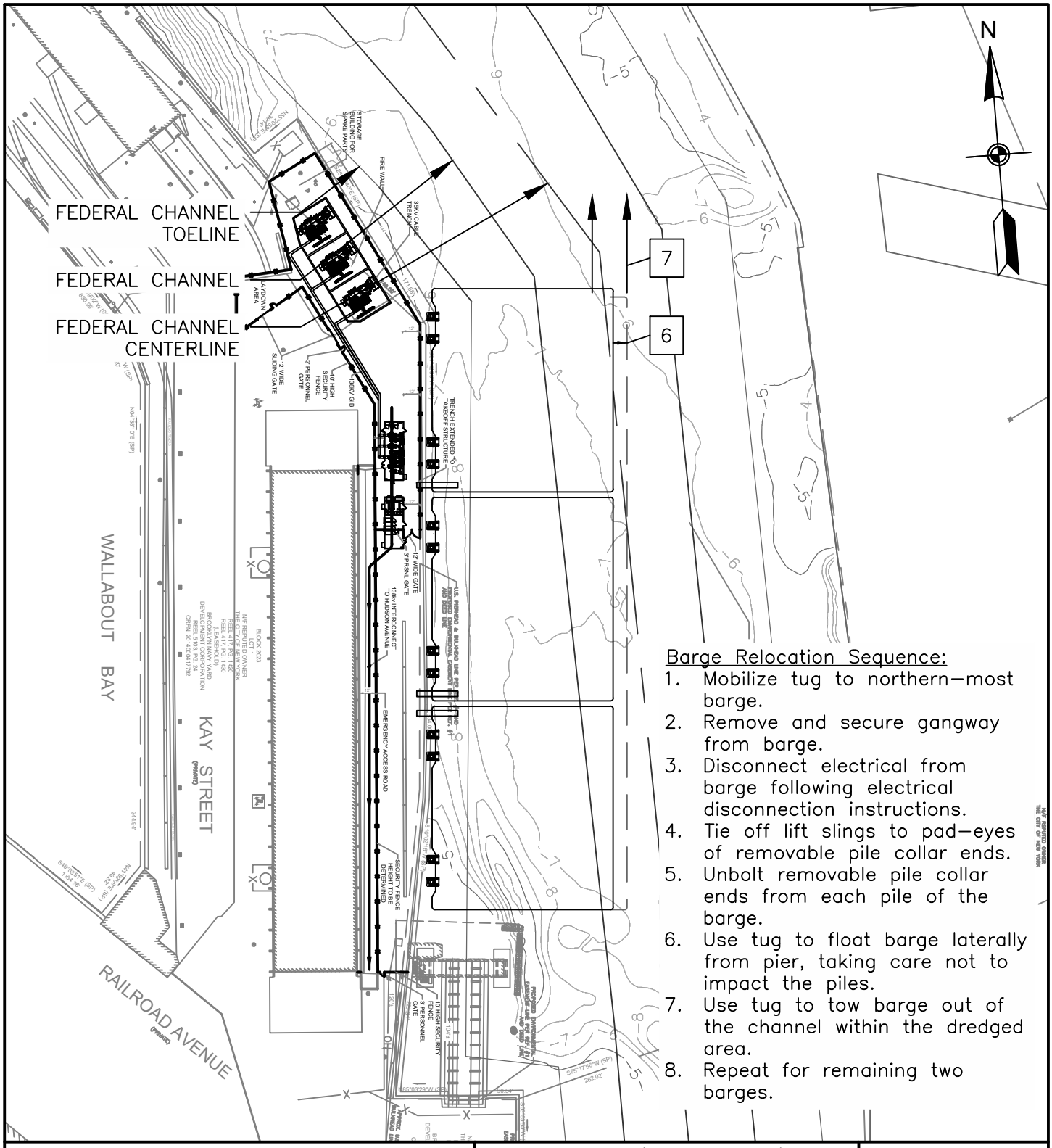
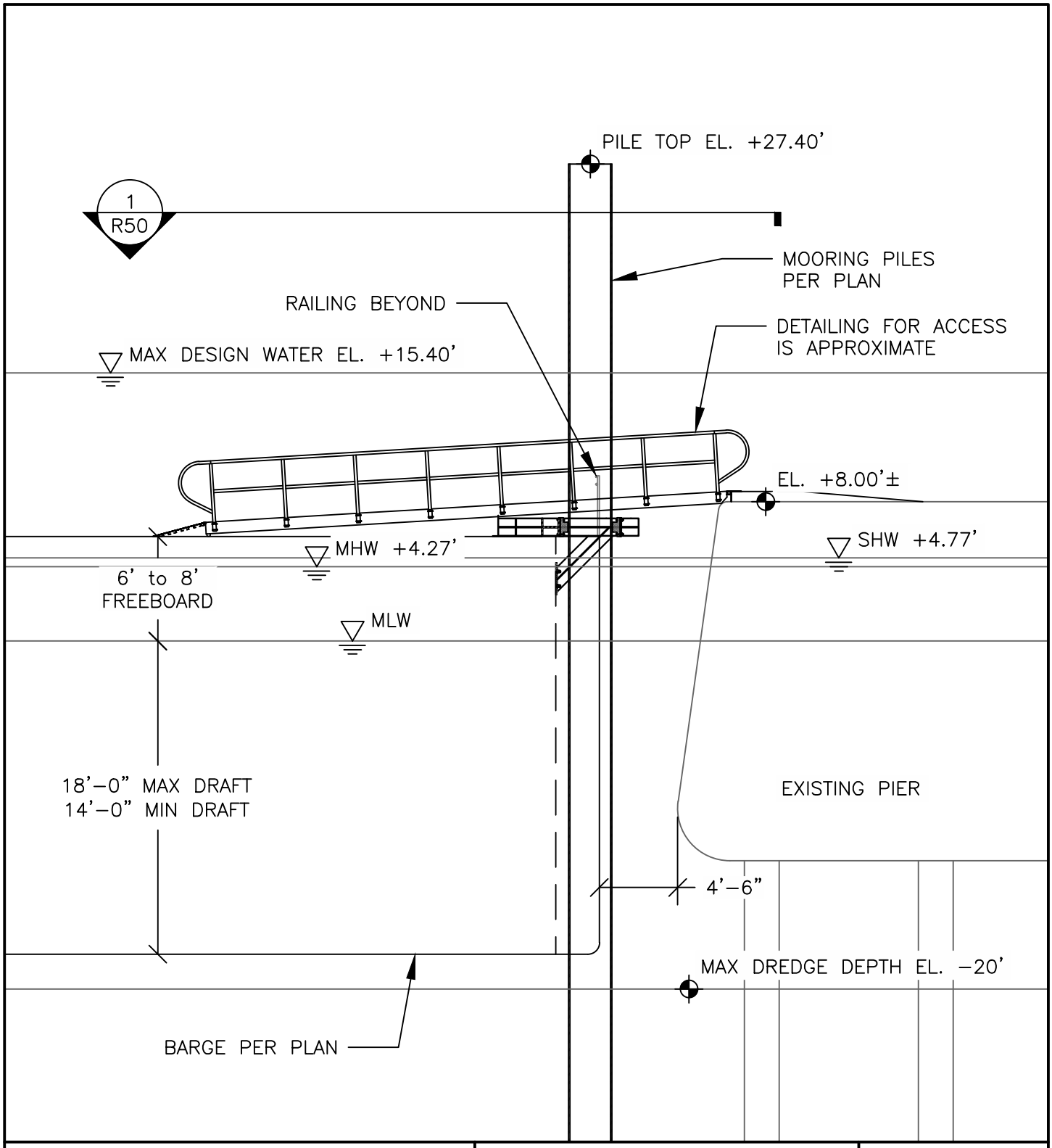
Waterway:	Wallabout Channel				
Latitude:	40° 42' 22" N			R-19.0	
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: 1"=50'	Oct. 18, 2023	Sht 13 of 18	



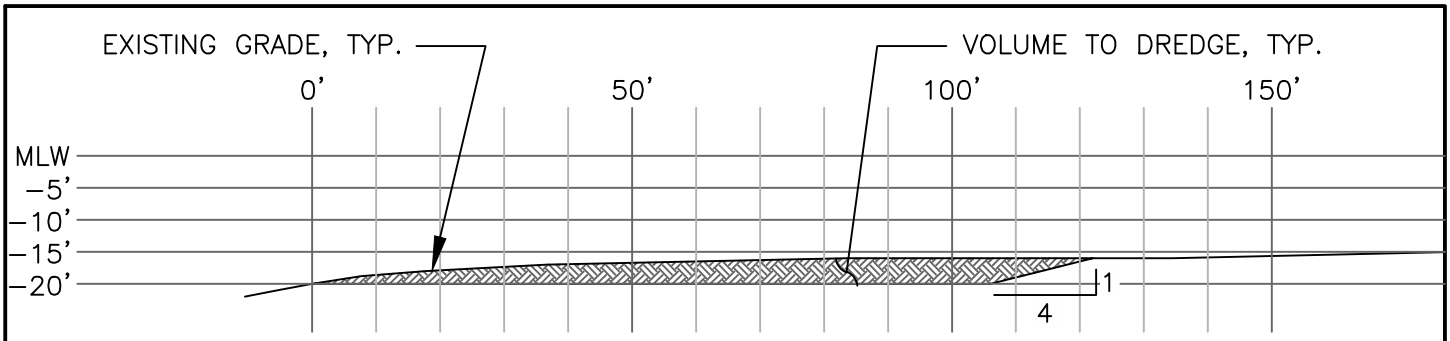
Barge Relocation Sequence:

1. Mobilize tug to northern–most barge.
2. Remove and secure gangway from barge.
3. Disconnect electrical from barge following electrical disconnection instructions.
4. Tie off lift slings to pad–eyes of removable pile collar ends.
5. Unbolt removable pile collar ends from each pile of the barge.
6. Use tug to float barge laterally from pier, taking care not to impact the piles.
7. Use tug to tow barge out of the channel within the dredged area.
8. Repeat for remaining two barges.

USGS Quad:	Brooklyn	Barge Relocation Plan NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM	
Waterway:	Wallabout Channel				R-20.0
Latitude:	40° 42' 22" N				
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: 1"=100'	Oct. 18, 2023	Sht 14 of 18	

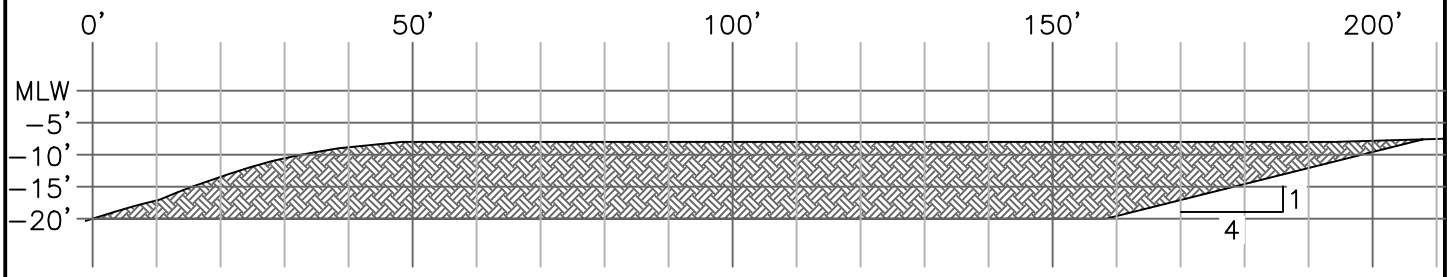


USGS Quad:	Brooklyn	Barge Section NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM	
Waterway:	Wallabout Channel				
Latitude:	40° 42' 22" N			R-30.0	
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: 1/8"=1'	Oct. 18, 2023	Sht 15 of 18	



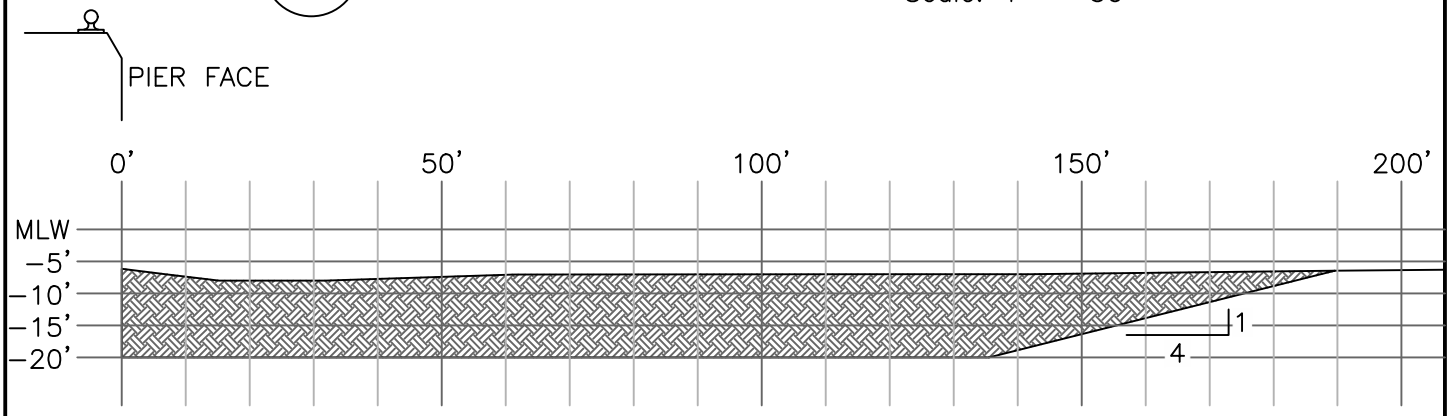
1 DREDGE SECTION NORTH

Scale: 1" = 30'



2 DREDGE SECTION MIDDLE

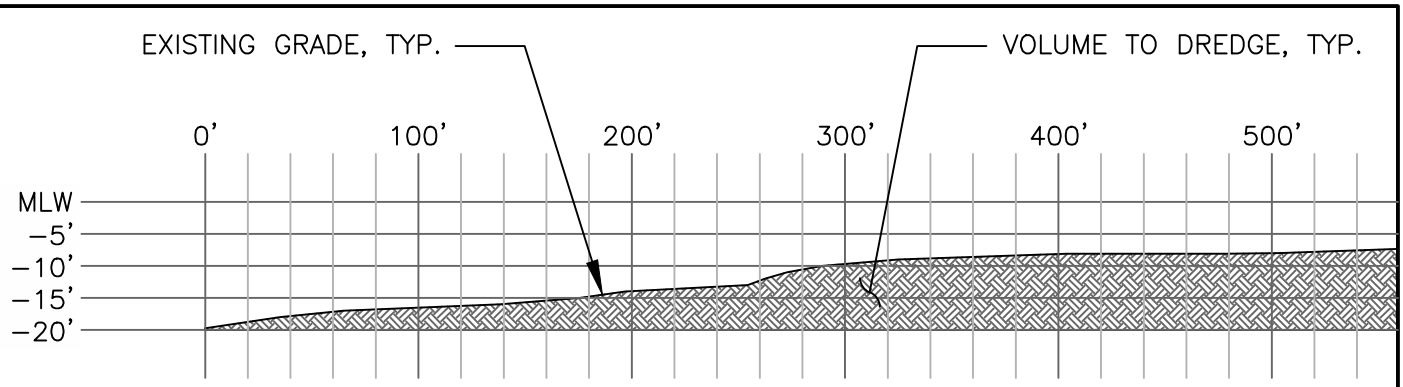
Scale: 1" = 30'



3 DREDGE SECTION SOUTH

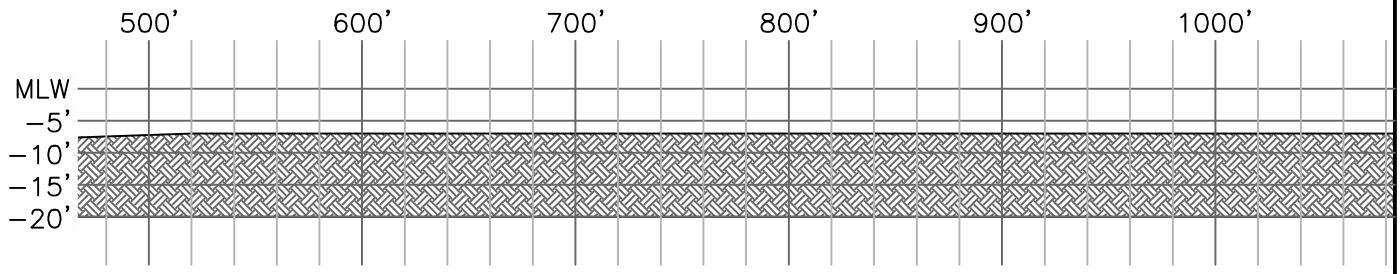
Scale: 1" = 30'

USGS Quad:	Brooklyn	Dredge Sections Crossing NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM	
Waterway:	Wallabout Channel				
Latitude:	40° 42' 22" N			R-31.0	
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: AS NOTED	Oct. 18, 2023	Sht 16 of 18	



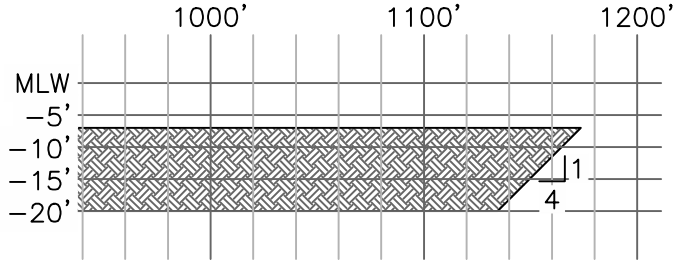
1 DREDGE CENTERLINE SECTION

Scale: 1" = 30' vertical, 1" = 90' horizontal



2 DREDGE CENTERLINE SECTION

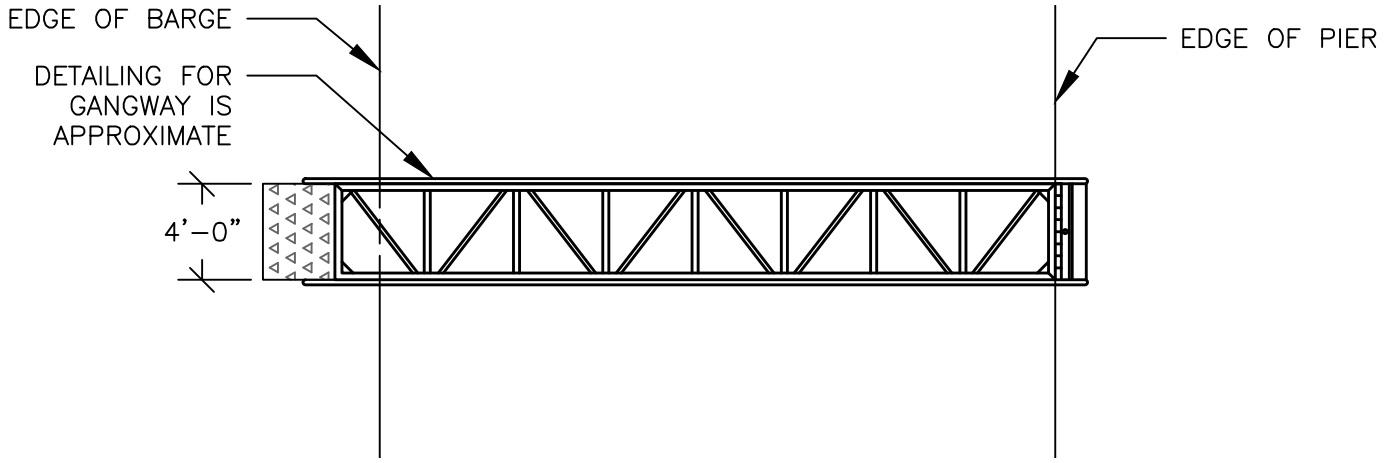
Scale: 1" = 30' vertical, 1" = 90' horizontal



3 DREDGE CENTERLINE SECTION

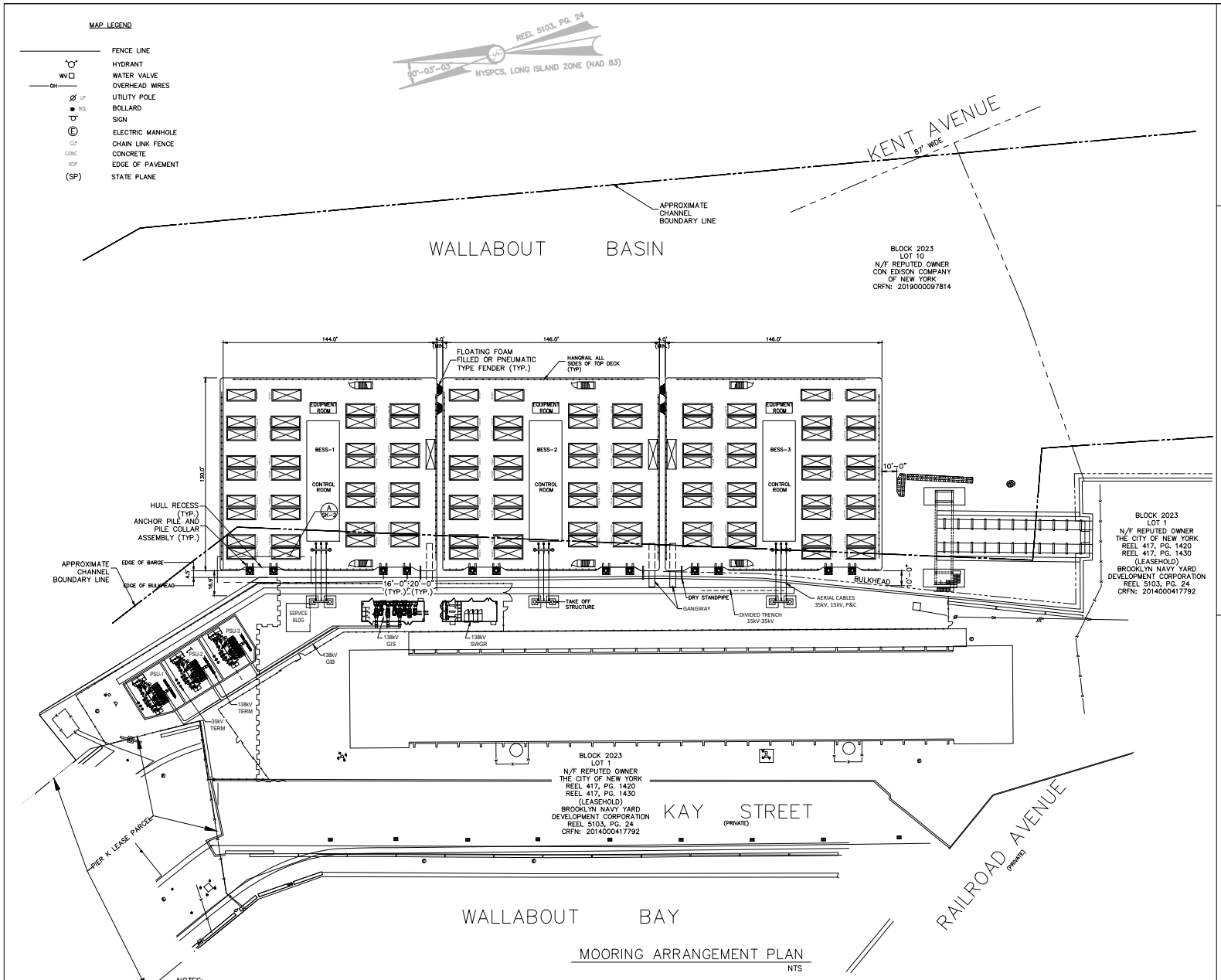
Scale: 1" = 30' vertical, 1" = 90' horizontal

USGS Quad:	Brooklyn	Dredge Sections Center NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM	
Waterway:	Wallabout Channel				
Latitude:	40° 42' 22" N			R-32.0	
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: AS NOTED	Oct. 18, 2023	Sht 17 of 18	



1 GANGWAY DETAIL
Scale: 1/8" = 1'–0"

USGS Quad:	Brooklyn		Barge Details NYC Energy Barge NYC Energy LLC 322 West 57th Street, #46U NY, NY 10019		**BlueShore** ENGINEERING LLC TEANECK, NJ (201)817-2001 RWG@BLUESHORELLC.COM
Waterway:	Wallabout Channel				R-50.0
Latitude:	40° 42' 22" N				
Longitude:	73° 58' 12" W				
County: Kings	Datum: MLW	Scale: AS NOTED	Oct. 18, 2023		Sht 18 of 18



NOTES:
1. THE ABOVE PLAN REPRESENTS A SCHEMATIC LAYOUT FOR A PILE BASED MOORING SYSTEM DESIGNED IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND DESIGN STANDARDS. THE MOORING SYSTEM COMPRISES ANCHOR PILES, PILE COLLARS, FENDERS, AND A CONFIGURATION THEREOF. ALL OTHER STRUCTURES, COMPONENTS, AND CONFIGURATIONS ARE SHOWN FOR REFERENCE ONLY AND ARE NOT PART OF THE MOORING SYSTEM DESIGN.
2. BACKGROUND SURVEY AND NON-MOORING RELATED ELEMENTS WERE TAKE FROM A PRELIMINARY DESIGN DRAWING SET PREPARED BY RST TECHNICAL SERVICES, LLC AND DATED 05/23/23. McLAREN TECHNICAL SERVICES, INC. ASSUMES NO RESPONSIBILITY FOR ANY ERRORS OR OMISSION THAT MAY HAVE BEEN INCORPORATED AS A RESULT OF INCORRECT INFORMATION PROVIDED TO McLAREN.
3. CHANNEL BOUNDARY LINES SHOWN ARE APPROXIMATE AND WERE PLOTTED BASED ON OVERLAY WITH USACE ARCGIS SURVEY MAPS.

McLaren ENGINEERING GROUP
M. G. McLaren Engineering and Land Surveying P.C.
100 Snake Hill Road, West Nyack, NY 10994
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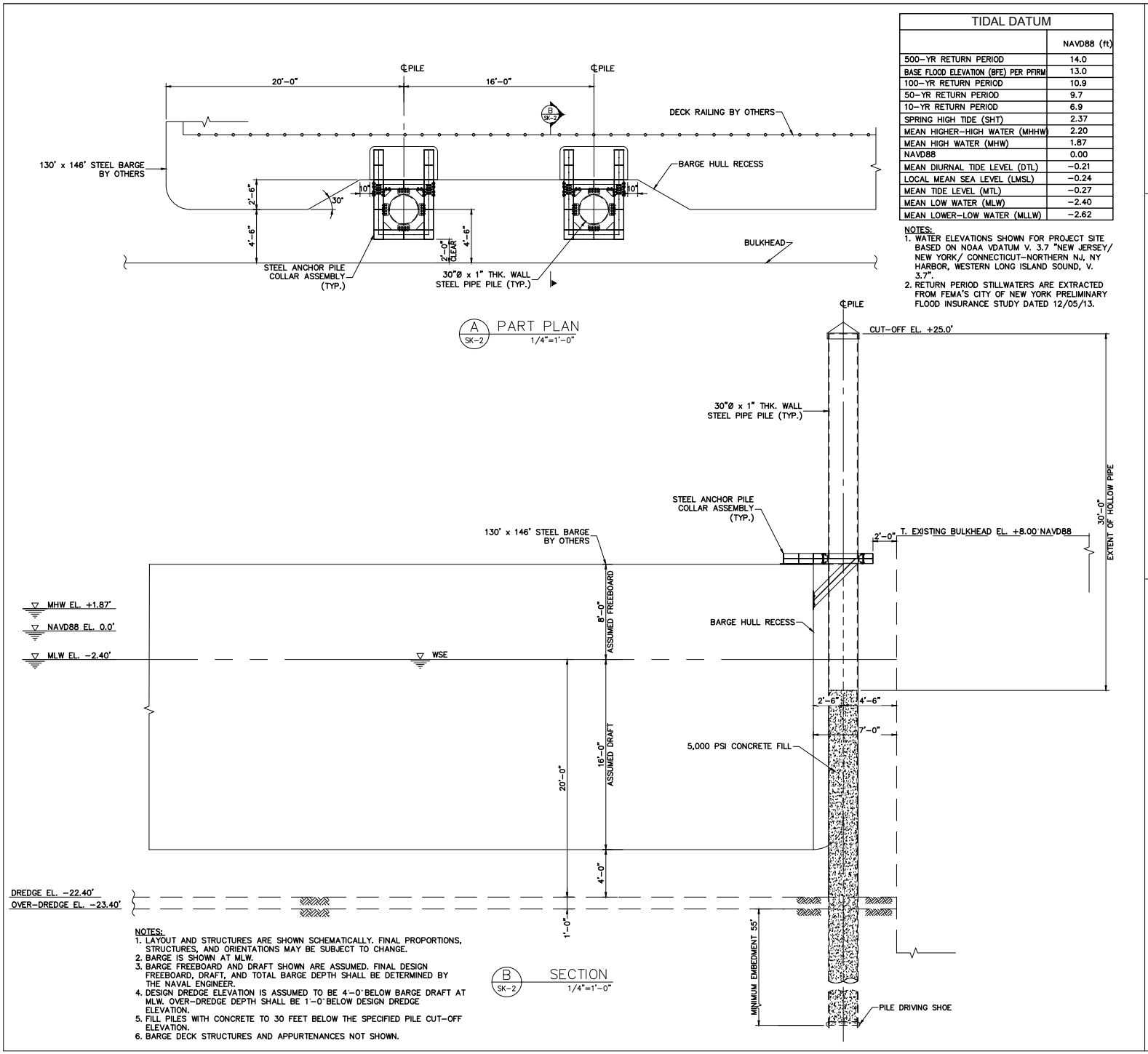
Mooring Arrangement Plan

NYC Energy Barge
NYC Energy LLC
322 West 57th Street, #46U
NY, NY 10019

SK-1

Sht 1 of 3

USGS Quad:	Brooklyn
Waterway:	Wallabout Channel
Latitude:	40° 42' 22" N
Longitude:	73° 58' 12" W
County:	Kings
Datum:	NAVD88
Scale:	NTS
	Oct. 6, 2023



TIDAL DATUM	
	NAVD88 (ft)
500-YR RETURN PERIOD	14.0
BASE FLOOD ELEVATION (BFE) PER FIRM	13.0
100-YR RETURN PERIOD	10.9
50-YR RETURN PERIOD	9.7
10-YR RETURN PERIOD	6.9
SPRING HIGH TIDE (SHT)	2.37
MEAN HIGHER-HIGH WATER (MHHW)	2.20
MEAN HIGH WATER (MHW)	1.87
NAVD88	0.00
MEAN DIURNAL TIDE LEVEL (DTL)	-0.21
LOCAL MEAN SEA LEVEL (LMSL)	-0.24
MEAN TIDE LEVEL (MTL)	-0.27
MEAN LOW WATER (MLW)	-2.40
MEAN LOWER-LOW WATER (MLLW)	-2.62

NOTES:
1. WATER ELEVATIONS SHOWN FOR PROJECT SITE BASED ON NOAA VDATUM V. 3.7 "NEW JERSEY/ NEW YORK/ CONNECTICUT-NORTHERN NJ, NY HARBOR, WESTERN LONG ISLAND SOUND, V. 3.7".
2. RETURN PERIOD STILLWATERS ARE EXTRACTED FROM FEMA'S CITY OF NEW YORK PRELIMINARY FLOOD INSURANCE STUDY DATED 12/05/13.

NOTES:
1. LAYOUT AND STRUCTURES ARE SHOWN SCHEMATICALLY. FINAL PROPORTIONS, STRUCTURES, AND ORIENTATIONS MAY BE SUBJECT TO CHANGE.
2. BARGE IS SHOWN AT MLW.
3. BARGE FREEBOARD AND DRAFT SHOWN ARE ASSUMED. FINAL DESIGN FREEBOARD, DRAFT, AND TOTAL BARGE DEPTH SHALL BE DETERMINED BY THE NAVAL ENGINEER.
4. DESIGN DREDGE ELEVATION IS ASSUMED TO BE 4'-0" BELOW BARGE DRAFT AT MLW. OVER-DREDGE DEPTH SHALL BE 1'-0" BELOW DESIGN DREDGE ELEVATION.
5. FILL PILES WITH CONCRETE TO 30 FEET BELOW THE SPECIFIED PILE CUT-OFF ELEVATION.
6. BARGE DECK STRUCTURES AND APPURTENANCES NOT SHOWN.

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Sht 2 of 3

Mooring Arrangement Section
NYC Energy Barge
NYC Energy LLC
322 West 57th Street, #46U
NY, NY 10019

Scale: NTS

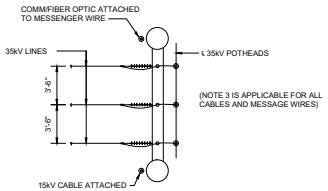
Oct. 6, 2023

USGS Quad: Brooklyn
Waterway: Wallabout Channel
Latitude: 40° 42' 22" N
Longitude: 73° 58' 12" W
County: Kings
Datum: NAVD88

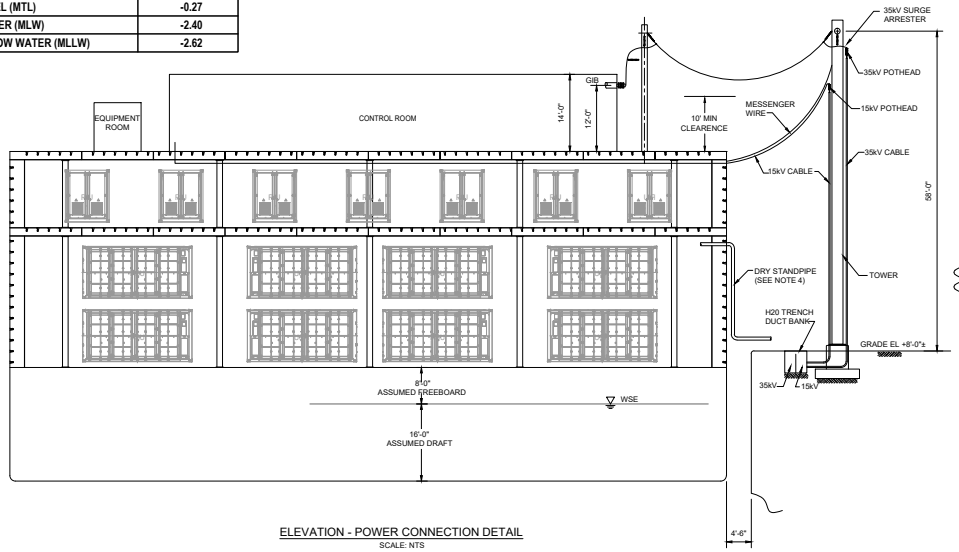
TIDAL DATUM CHART	
	NAVD88 (ft)
500-YR RETURN PERIOD	14.0
BASE FLOOD ELEVATION (BFE) PER PFIRM	13.0
100-YR RETURN PERIOD	10.9
50-YR RETURN PERIOD	9.7
10-YR RETURN PERIOD	6.9
SPRING HIGH TIDE (SHT)	2.37
MEAN HIGHER-HIGH WATER (MHHW)	2.20
MEAN HIGH WATER (MHW)	1.87
NAVD88	0.00
MEAN DIURNAL TIDE LEVEL (DTL)	-0.21
LOCAL MEAN SEA LEVEL (LMSL)	-0.24
MEAN TIDE LEVEL (MTL)	-0.27
MEAN LOW WATER (MLW)	-2.40
MEAN LOWER-LOW WATER (MLLW)	-2.62

NOTES:

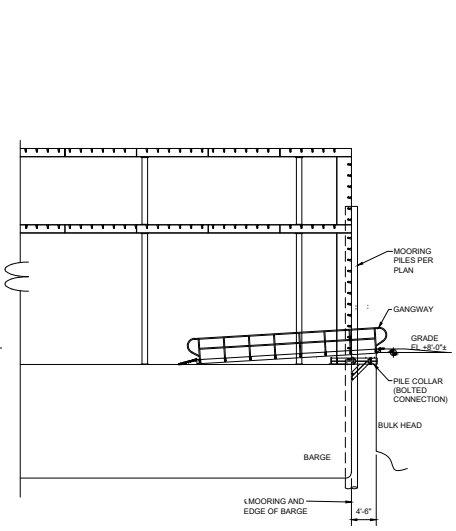
1. WATER ELEVATIONS SHOWN FOR PROJECT SITE BASE ON NOAA VDATUM V. 3.7 "NEW JERSEY / NEW YORK / CONNECTICUT-NORTHERN NJ, NY HARBOR, WESTERN LONG ISLAND SOUND, V. 3.7".
2. RETURN PERIOD STILLWATERS ARE EXTRACTED FROM FEMA'S CITY OF NEW YORK PRELIMINARY FLOOD INSURANCE STUDY DATE 12/05/13



TOWER PLAN VIEW
SCALE: 3/16" = 1'-0"



ELEVATION - POWER CONNECTION DETAIL
SCALE: NTS



ELEVATION - GANGWAY / MOORING PILES DETAIL
SCALE: 3/32" = 1'-0"

BARGE UNDOCKING SEQUENCE:

1. TURN OFF POWER FROM GRID AT BNY GIS BREAKER.
2. TURN OFF POWER FROM THE FACILITY IN THE CONTROL ROOM.
3. DISCONNECT ALL ELECTRICAL CABLES AND MESSENGER WIRES FROM THE BARGE TO THE LANDSIDE (UNLATCH QUICK DISCONNECTS).
4. SECURE AND DISCONNECT OTHER UTILITY CONNECTIONS SUCH AS THE FIRE STAND PIPE HOSE.
5. SECURE BARGES TOGETHER SO THAT THEY CAN BE SHIFTED AS A COMPOSITE UNIT (BINDERS, HAND WINCHES, BARGE TENSIONERS, BITTS, ETC.)
6. BARGE OPERATING PERSONNEL DEPART BARGE.
7. BARGE OPERATING PERSONNEL OR LINE CREW ON BEACH REMOVE THE GANGWAYS TO SHORE.
8. TUGS ARRIVE.
9. TUG PERSONNEL USE BARGE LADDER TO TRANSFER TO\FROM BARGE.
10. TUG PERSONNEL ABOARD BARGE.
11. TUGS MAKE UP TO THE BARGES. NOTE THAT THE BATHYMETRY MAY LIMIT THE CONFIGURATION OF TUGS WHILE IN THE SLIP.
12. PIN THE BARGE TO DOCK OR PILES USING THE TUGS WHILE THE MOORINGS TO SHORE ARE REMOVED. TEMPORARY MOORING LINES MAY BE USED AND THEN REMOVED ONCE ALL SHORE MOORINGS ARE FREE.
13. TUGS MANEUVER BARGES OUT OF THE SLIP.
14. TUGS MAY SHIFT POSITION ON THE BARGE ONCE CLEAR OF THE SLIP IN WALLABOUT CHANNEL TO ALLOW FOR ENHANCED EFFICIENCY AND BETTER CONTROL WHILE IN TRANSIT.
15. TUGS TRANSIT BARGE TO DESTINATION IN NY HARBOR. THE BARGE MUST REMAIN WITHIN PROTECTED WATERS INSIDE NY HARBOR AS THE BARGE WILL NOT HAVE A LOAD LINE CERTIFICATE.
16. PROCESS REVERSED TO DOCK. PARK, PIN, SECURE MOORING LINES, DISCONNECT TUGS.

RST Technical Services, LLC
UWCHLAND, PA (484)421-7279

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GENERAL ARRANGEMENT
NYC Energy Barge
NYC Energy LLC
322 West 57th Street, #46U
NY, NY 10019

Scale: NTS
Oct. 6, 2023

USGS Quad:	Brooklyn
Waterway:	Wallabout Channel
Latitude:	40° 42' 22" N
Longitude:	73° 58' 12" W
County:	Kings

Datum: NAVD88