



# 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-2024-00653-MMI**  
Issue Date:  
Expiration Date:

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: New York City Economic Development Corporation  
One Liberty Plaza, 14<sup>th</sup> Floor  
New York, New York 10006

ACTIVITY: Construction of a Ferry Terminal and Shoreline Stabilization

WATERWAY: Buttermilk Channel

LOCATION: Clinton Wharf, Borough of Brooklyn, 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 [CHRISTOPHER.W.MINCK@USACE.ARMY.MIL](mailto:CHRISTOPHER.W.MINCK@USACE.ARMY.MIL) TO REACH THIS OFFICE

**CENAN-OP-RM**  
**PUBLIC NOTICE NO. NAN-2024-00653-MMI**

BEFORE THE EXPIRATION DATE OF THIS NOTICE, otherwise, it will be presumed that there are no objections to the activity. Comments can also be submitted through the USACE Regulatory Request System (RRS) at <https://rrs.usace.army.mil/rrs/public-notices>.

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 U.S. Federal Transit Administration (FTA) is providing grant funding to New York City Economic Development Corporation (NYCEDC) for the proposed project and is serving as lead federal agency for coordinating review in accordance with the National Environmental Policy Act (NEPA).

As the lead federal agency, FTA is reviewing the project for potential impacts on Federally-listed threatened or endangered species and their designated critical habitat pursuant to Section 7 of the Endangered Species Act as amended. FTA is coordinating with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) on listed species under their jurisdiction and the ESA consultation will be concluded prior to the final decision.

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). Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted by FTA as the lead federal agency and will be concluded prior to the final decision.

Based upon a review of the latest published version of the National Register of Historic Places, there are no known sites eligible for, or included in, the Register within the permit area. Presently unknown archeological, scientific, prehistorical, or historical data may be lost by work accomplished under the required permit. Additional review and consultation to fulfil requirements under Section 106 of the National Historic Preservation Act of 1966, as amended, will be completed by FTA.

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

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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](mailto: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>.

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

Enclosures

## **WORK DESCRIPTION**

The permit applicant, New York City Economic Development Corporation (NYCEDC) has requested Department of the Army (DA) authorization to construct a new ferry terminal and stabilize the shoreline to create the Brooklyn Cruise Terminal (BCT) Resiliency Wharf in the Borough of Brooklyn, Kings County, City of New York, New York. The proposed work would involve the following:

### **Shoreline Stabilization:**

Remove approximately 1,976 cubic yards of existing riprap, debris and concrete over an approximately 10,437 square foot area and the installation of approximately 240 linear feet of steel sheet pile bulkhead and a new approximately 360-foot-long riprap revetment along the shoreline. Approximately 1,783 cubic yards of new stone riprap fill would be discharged below the plane of Spring High Water (SHW) over approximately 12,822 square feet.

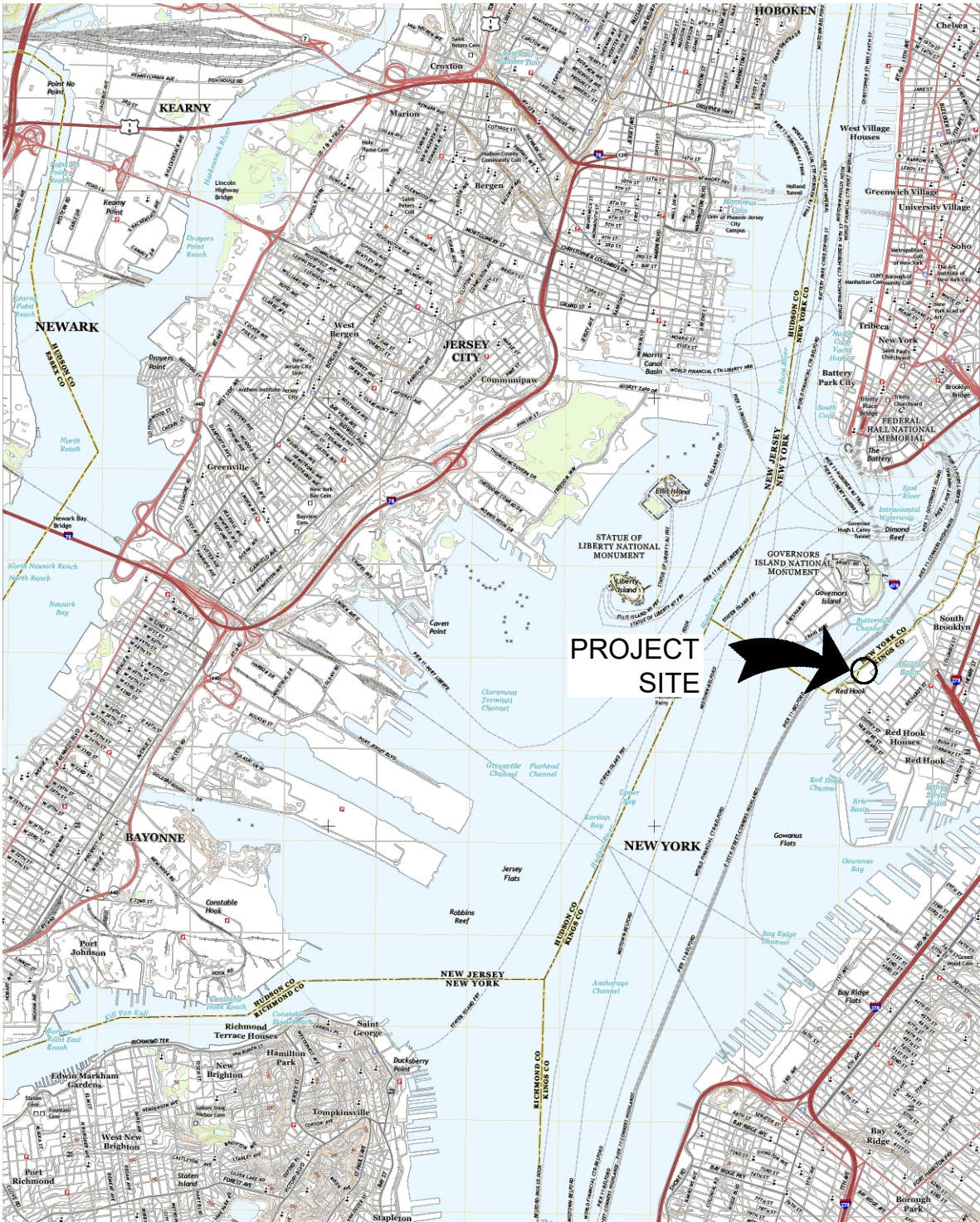
### **Wharf Structures:**

Seaward of the new bulkhead and above the riprap revetment, construct an approximately 50-foot-wide by 202-foot-long concrete platform supported by forty (40) 30-inch diameter steel pipe piles. Nine (9) 36-inch diameter steel pipe piles with cone fenders and laminate pile fenders and twenty-four (24) 12-inch diameter timber fender piles will be installed along the west face of the new wharf platform. Extending to the north, parallel with the new revetment, an approximately eight-foot-wide by 60-foot-long gangway ramp would be installed leading to an approximately 12-foot-wide by 12-foot-long mooring platform supported by four (4) 30-inch diameter steel pipe piles filled with concrete will be installed. Two (2) 48-inch diameter steel pipe mooring piles with donut fendering will be installed west of the gangway and mooring dolphin platform.

The applicant has stated that they have avoided, minimized, and mitigated for potential impacts proposed to the maximum extent practicable by limiting construction to the minimum area necessary and avoiding constructing structures into the navigation channel. Additionally the applicant proposed to utilize a turbidity curtain around the construction area mitigate the spread of turbidity in the waterway. A soft-start will be utilized during pile driving and work will be completed using a vibratory hammer, as practicable.

The purpose of the project is to upgrade the existing wharf infrastructure to create a resilient landing for an Ollis Class Ferry in the event of an emergency.





PURPOSE: RESILIENCY WHARF

DATUM: NAVD88  
ADJACENT OWNERS:  
1. SEE ATTACHED

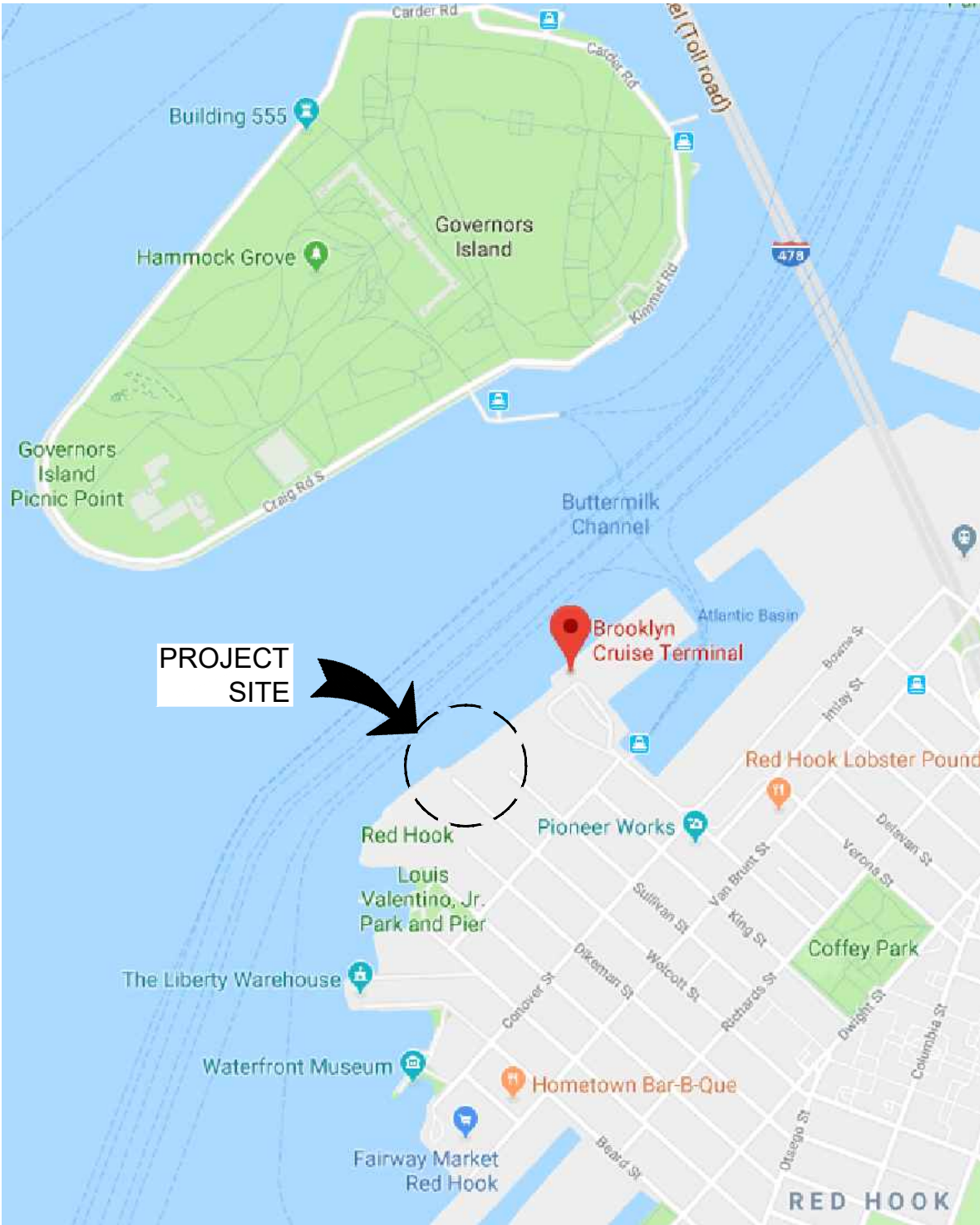
**BROOKLYN CRUISE TERMINAL  
RESILIENCY WHARF**

APPLICANT: NEW YORK CITY ECONOMIC  
DEVELOPMENT CORPORATION  
ONE LIBERTY PLAZA  
NEW YORK, N.Y. 10006  
AGENT: M.G. McLaren Engineering & Land Surveying, P.C.  
530 Chestnut Ridge Road  
Woodcliff Lake, N.J. 07677

1.0 USGS MAP

IN: BROOKLYN  
AT: BUTTERMILK CHANNEL  
COUNTY OF: KINGS STATE: NY

SHT 1 OF 18 10/25/2024



PROJECT  
SITE



PURPOSE: RESILIENCY WHARF

DATUM: NAVD88  
ADJACENT OWNERS:  
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**BROOKLYN CRUISE TERMINAL  
RESILIENCY WHARF**

APPLICANT: NEW YORK CITY ECONOMIC  
DEVELOPMENT CORPORATION  
ONE LIBERTY PLAZA  
NEW YORK, N.Y. 10006  
AGENT: M.G. McLaren Engineering & Land Surveying, P.C.  
530 Chestnut Ridge Road  
Woodcliff Lake, N.J. 07677

**2.0 LOCATION MAP**

IN: BROOKLYN  
AT: BUTTERMILK CHANNEL  
COUNTY OF: KINGS STATE: NY

SHT 2 OF 18 10/25/2024

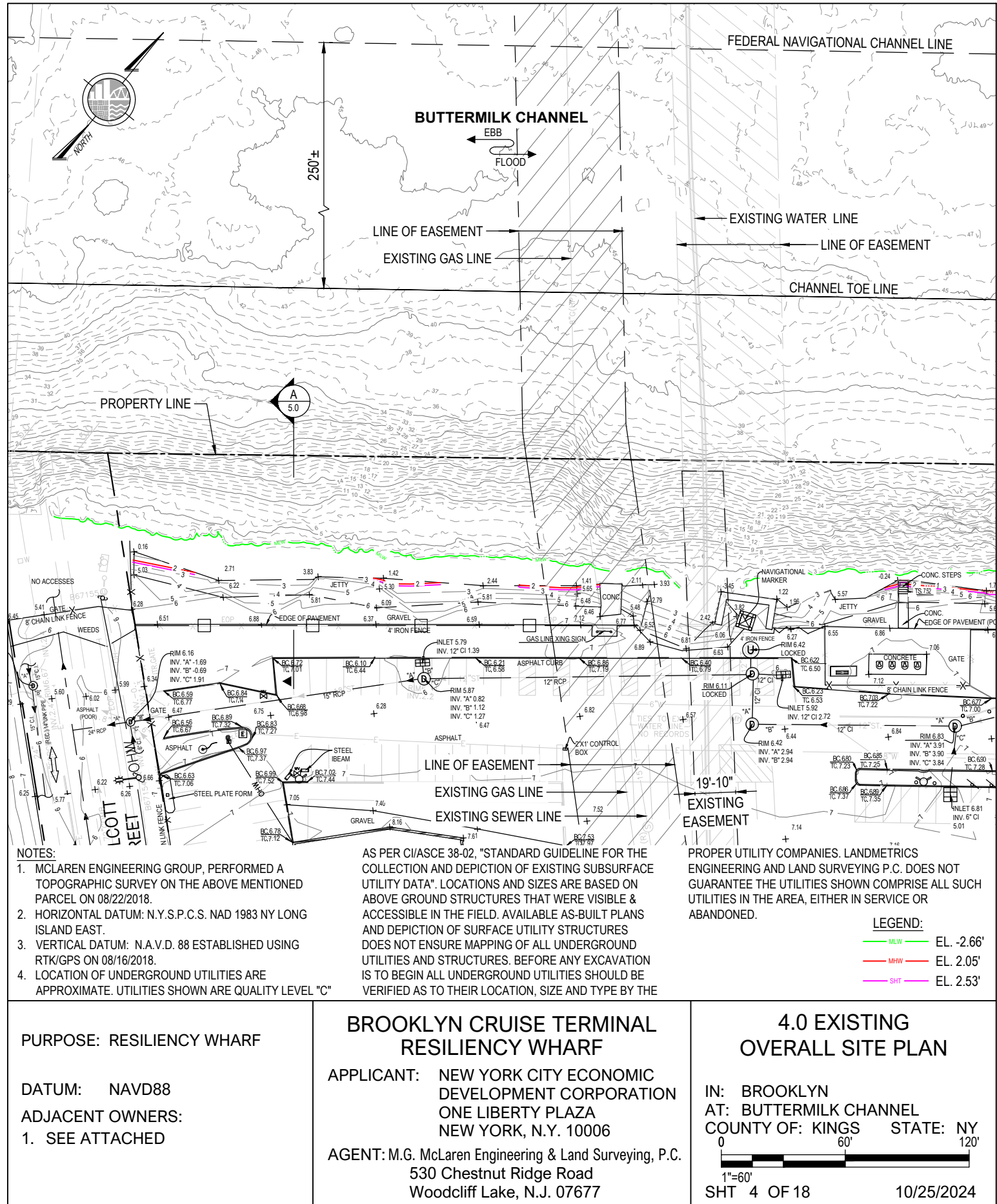


TIDAL DATUM		
CONTROL ELEVATION		ELEV. (ft)
		NAVD88
FEMA PRELIMINARY BASE FLOOD ELEVATION (VE 15)	BFE	15.0
HIGHEST OBSERVED WATER LEVEL* (10/30/2012)	HOWL	11.27
FEMA BASE FLOOD ELEVATION (AE 11)	BFE	9.89
SPRING HIGH TIDE	SHT	2.53
MEAN HIGHER-HIGH WATER	MHHW	2.37
MEAN HIGH WATER	MHW	2.05
NORTH AMERICA VERTICAL DATUM OF 1988	NAVD88	0.0
NATIONAL GEODETIC VERTICAL DATUM OF 1929	NGVD29	-1.11
MEAN LOW WATER	MLW	-2.66
MEAN LOWER-LOW WATER	MLLW	-2.86
LOWEST OBSERVED WATER LEVEL* (2/2/1976)	LOWL	-6.91

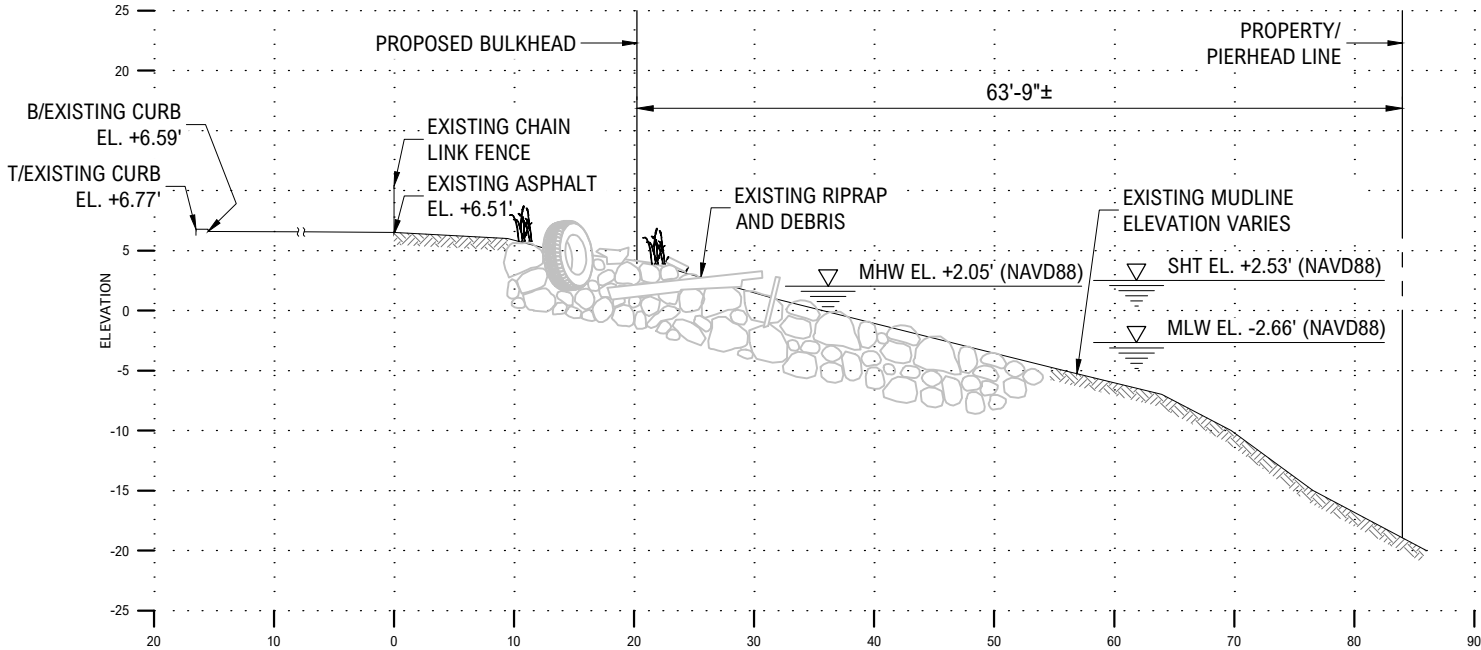
- NOTES:
- 1. PROJECT HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83), NEW JERSEY STATE PLANE.
  - 2. PROJECT VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
  - 3. ELEVATIONS SHOWN IN FEET.
  - 4. TIDAL INFORMATION WAS OBTAINED FROM NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) VDATUM V4.6 "NEW JERSEY/ NEW YORK/ CONNECTICUT - NORTHERN NJ, NY HARBOR, WESTERN LONG ISLAND SOUND V.3.4.
  - 5. \* INDICATES TIDAL DATA TAKEN FROM NOAA TIDAL LEVEL BENCHMARKS AT THE BATTERY, NY - STATION 8518750 (PRESENT EPOCH 1983-2001).

LATITUDE: 40.6814° N  
LONGITUDE: 74.0163° W

<p>PURPOSE: RESILIENCY WHARF</p> <p>DATUM: NAVD88</p> <p>ADJACENT OWNERS:</p> <p>1. SEE ATTACHED</p>	<p>BROOKLYN CRUISE TERMINAL RESILIENCY WHARF</p> <p>APPLICANT: NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION ONE LIBERTY PLAZA NEW YORK, N.Y. 10006</p> <p>AGENT: M.G. McLaren Engineering &amp; Land Surveying, P.C. 530 Chestnut Ridge Road Woodcliff Lake, N.J. 07677</p>	<p>3.0 TIDAL DATUM CHART</p> <p>IN: BROOKLYN AT: BUTTERMILK CHANNEL COUNTY OF: KINGS STATE: NY</p> <p>SHT 3 OF 18 10/25/2024</p>
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5.0

EXISTING SECTION

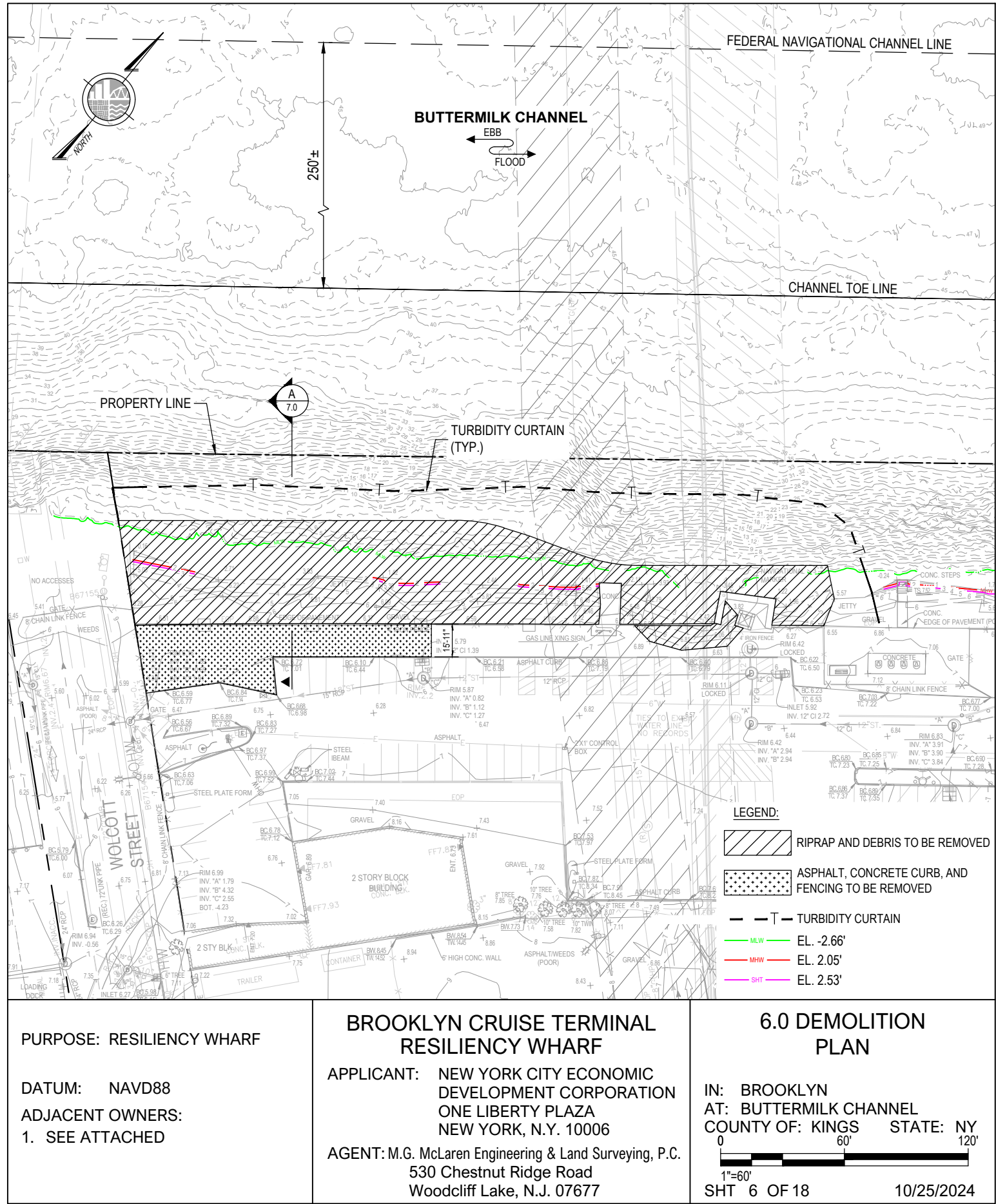
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1. SEE DWG. 4.0 FOR SECTION LOCATION.

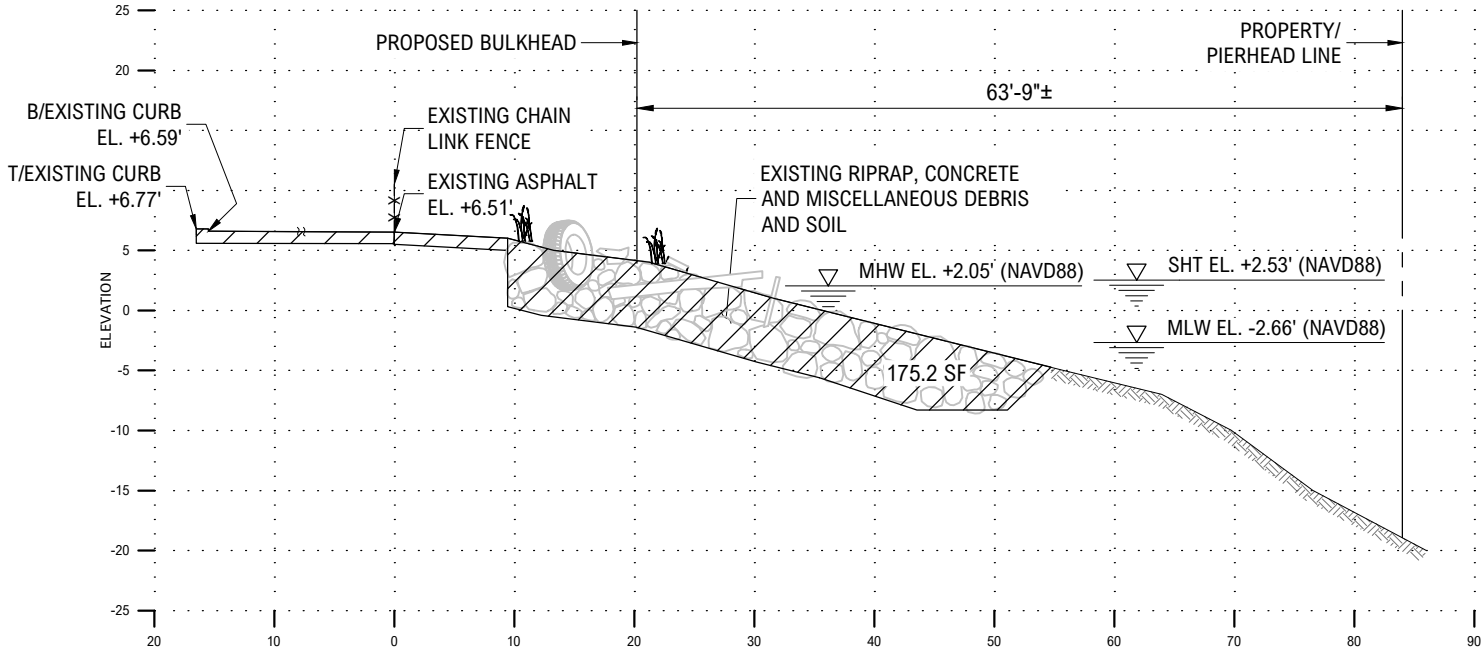
PURPOSE: RESILIENCY WHARF

DATUM: NAVD88  
ADJACENT OWNERS:  
1. SEE ATTACHED

BROOKLYN CRUISE TERMINAL  
RESILIENCY WHARF  
APPLICANT: NEW YORK CITY ECONOMIC  
DEVELOPMENT CORPORATION  
ONE LIBERTY PLAZA  
NEW YORK, N.Y. 10006  
AGENT: M.G. McLaren Engineering & Land Surveying, P.C.  
530 Chestnut Ridge Road  
Woodcliff Lake, N.J. 07677


5.0 EXISTING SECTION  
IN: BROOKLYN  
AT: BUTTERMILK CHANNEL  
COUNTY OF: KINGS STATE: NY  
0 16' 32'  
1/16"=1'-0"  
SHT 5 OF 18 10/25/2024





**A** **DEMOLITION SECTION**

NOTE:  
1. SEE DWG. 6.0 FOR SECTION LOCATION.

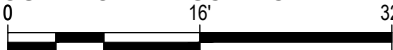
LEGEND:  
 AREAS TO BE REMOVED

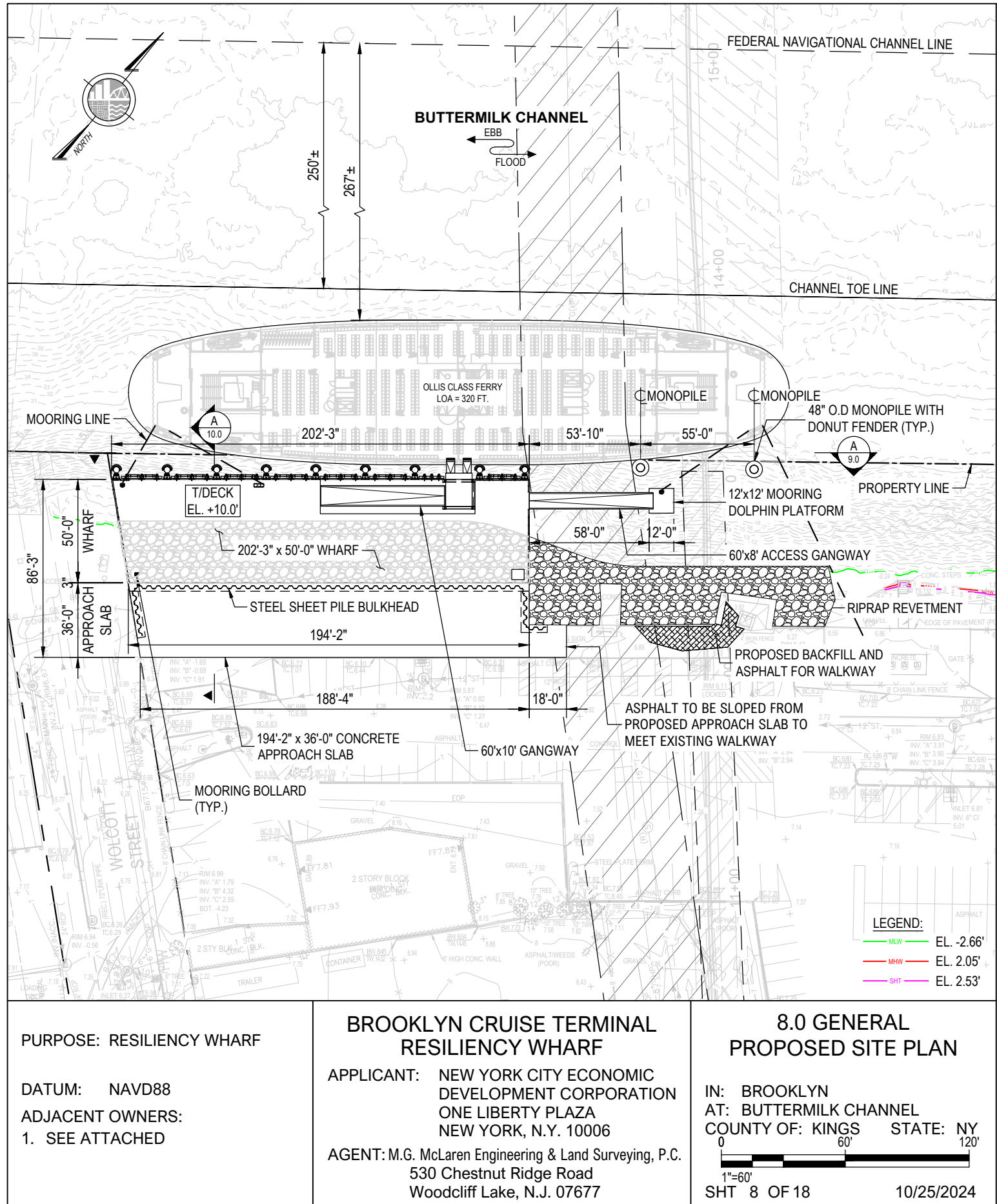
PURPOSE: RESILIENCY WHARF

DATUM: NAVD88  
ADJACENT OWNERS:  
1. SEE ATTACHED

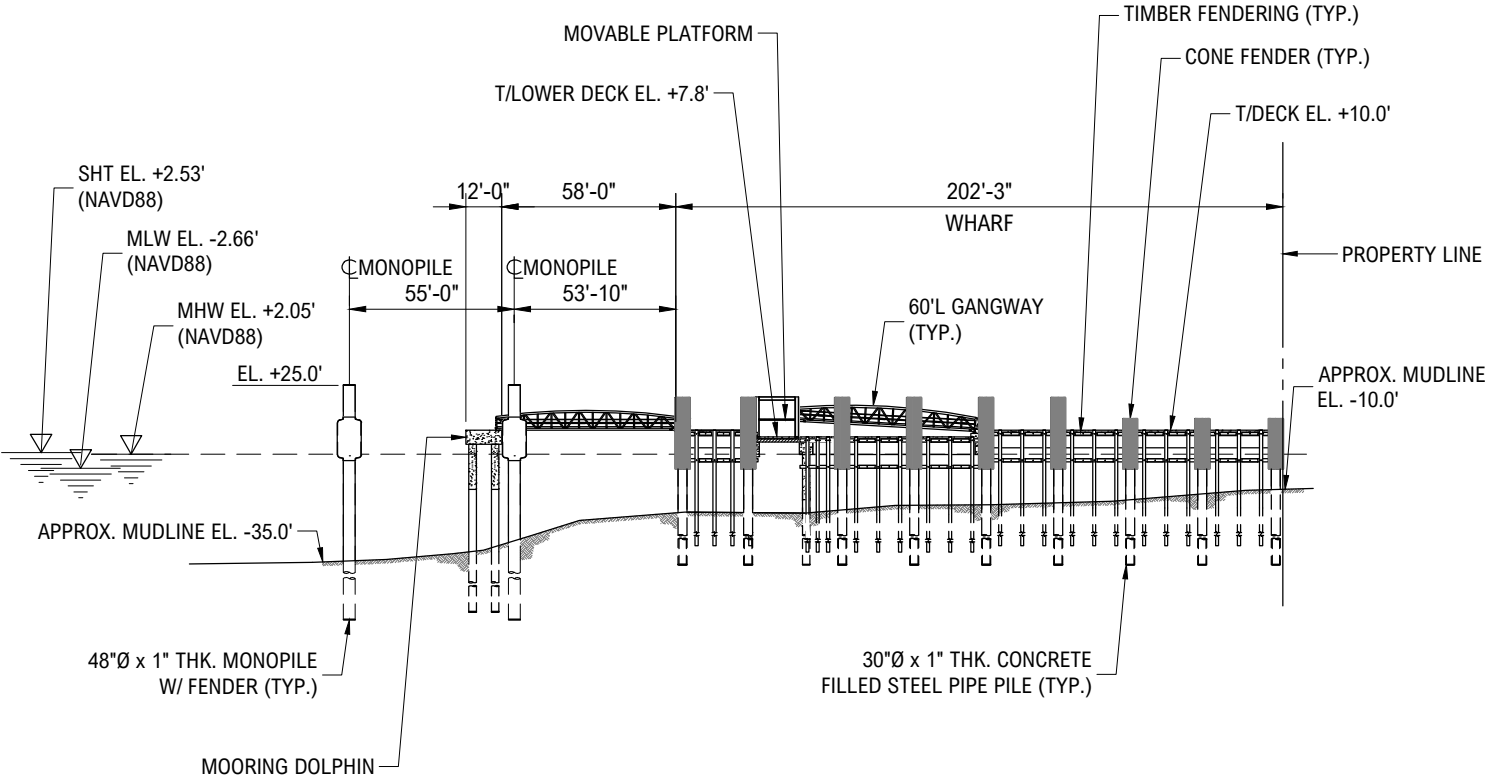
**BROOKLYN CRUISE TERMINAL  
RESILIENCY WHARF**  
APPLICANT: NEW YORK CITY ECONOMIC  
DEVELOPMENT CORPORATION  
ONE LIBERTY PLAZA  
NEW YORK, N.Y. 10006  
AGENT: M.G. McLaren Engineering & Land Surveying, P.C.  
530 Chestnut Ridge Road  
Woodcliff Lake, N.J. 07677

**7.0 DEMOLITION SECTION**

IN: BROOKLYN  
AT: BUTTERMILK CHANNEL  
COUNTY OF: KINGS STATE: NY  
  
1/16"=1'-0"  
SHT 7 OF 18 10/25/2024







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9.0

PROPOSED ELEVATION

NOTE:  
1. SEE DWG. 8.0 FOR ELEVATION LOCATION.

PURPOSE: RESILIENCY WHARF

DATUM: NAVD88  
ADJACENT OWNERS:  
1. SEE ATTACHED

BROOKLYN CRUISE TERMINAL  
RESILIENCY WHARF

APPLICANT: NEW YORK CITY ECONOMIC  
DEVELOPMENT CORPORATION  
ONE LIBERTY PLAZA  
NEW YORK, N.Y. 10006

AGENT: M.G. McLaren Engineering & Land Surveying, P.C.  
530 Chestnut Ridge Road  
Woodcliff Lake, N.J. 07677

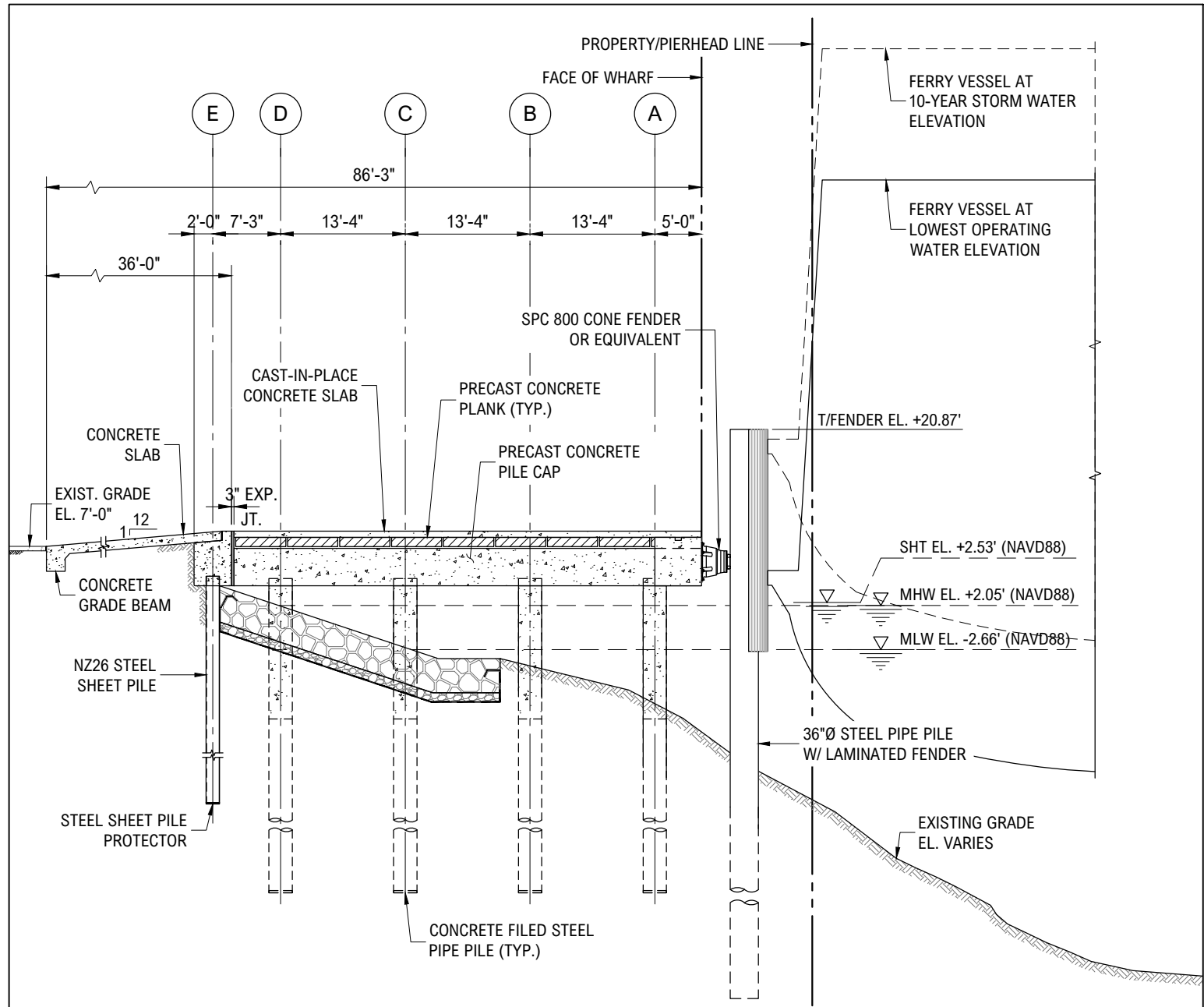
9.0 PROPOSED ELEVATION

IN: BROOKLYN  
AT: BUTTERMILK CHANNEL  
COUNTY OF: KINGS STATE: NY

0 64' 128'

1/64"=1'-0"

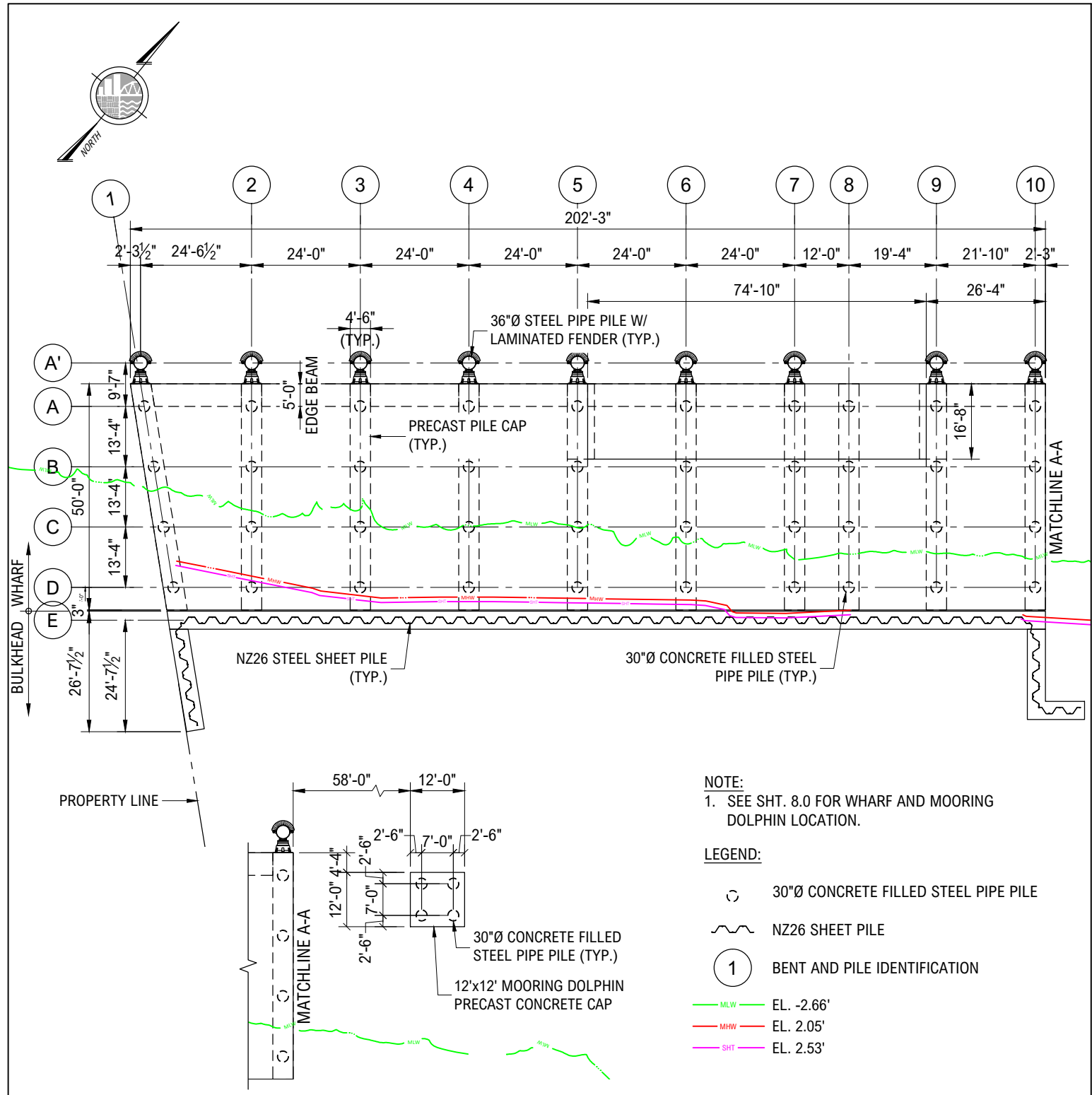
SHT 9 OF 18 10/25/2024



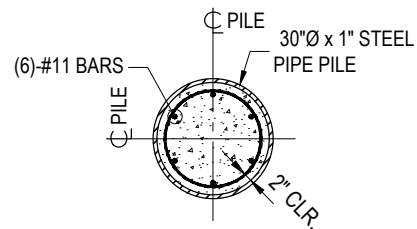
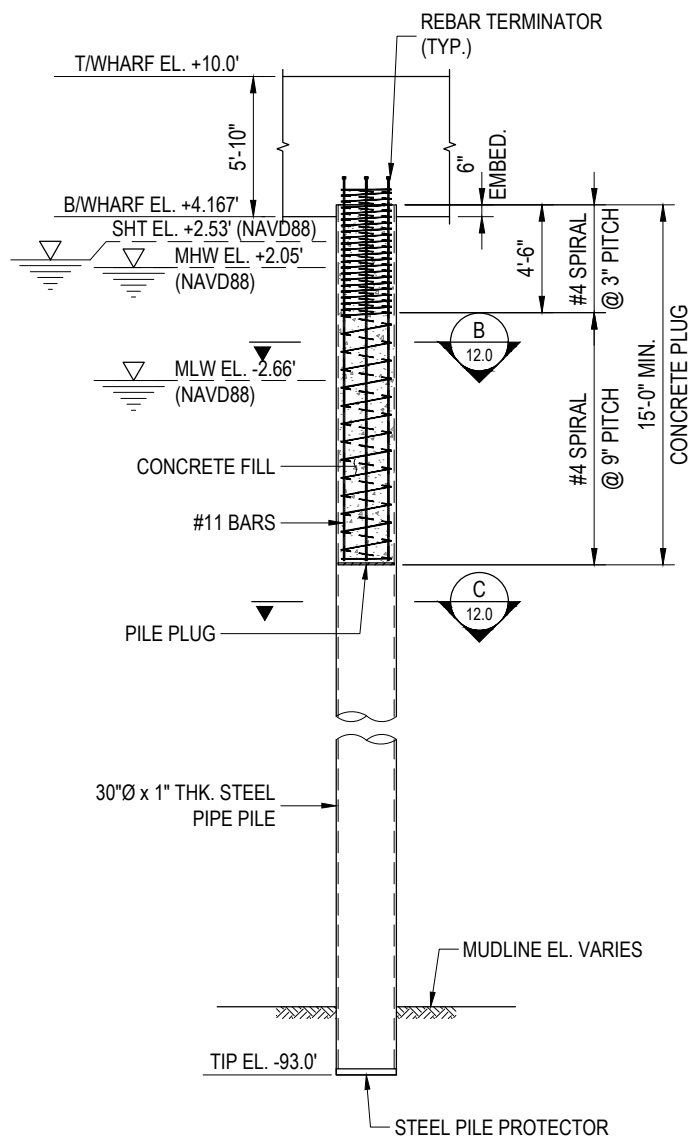
**A** **PROPOSED WHARF SECTION**

NOTE:  
1. SEE DWG. 8.0 FOR SECTION LOCATION.

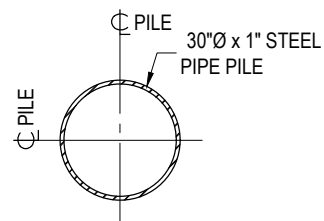
<p>PURPOSE: RESILIENCY WHARF</p> <p>DATUM: NAVD88</p> <p>ADJACENT OWNERS: 1. SEE ATTACHED</p>	<p><b>BROOKLYN CRUISE TERMINAL RESILIENCY WHARF</b></p> <p>APPLICANT: NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION ONE LIBERTY PLAZA NEW YORK, N.Y. 10006</p> <p>AGENT: M.G. McLaren Engineering &amp; Land Surveying, P.C. 530 Chestnut Ridge Road Woodcliff Lake, N.J. 07677</p>	<p><b>10.0 PROPOSED WHARF SECTION</b></p> <p>IN: BROOKLYN AT: BUTTERMILK CHANNEL COUNTY OF: KINGS STATE: NY</p> <p>0 16' 32'</p> <p>1/16"=1'-0"</p> <p>SHT 10 OF 18 10/25/2024</p>
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<p>PURPOSE: RESILIENCY WHARF</p> <p>DATUM: NAVD88</p> <p>ADJACENT OWNERS: 1. SEE ATTACHED</p>	<p><b>BROOKLYN CRUISE TERMINAL RESILIENCY WHARF</b></p> <p>APPLICANT: NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION ONE LIBERTY PLAZA NEW YORK, N.Y. 10006</p> <p>AGENT: M.G. McLaren Engineering &amp; Land Surveying, P.C. 530 Chestnut Ridge Road Woodcliff Lake, N.J. 07677</p>	<p><b>11.0 PILE AND PILE CAP PLAN</b></p> <p>IN: BROOKLYN AT: BUTTERMILK CHANNEL COUNTY OF: KINGS STATE: NY</p> <p>0 30' 60' 1"=30' SHT 11 OF 18 10/25/2024</p>
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**B SECTION**  
12.0 Scale: 1/4" = 1'-0"



**C SECTION**  
12.0 Scale: 1/4" = 1'-0"

**A 30" DIA. WHARF AND MOORING DOLPHIN PILE DETAIL**  
12.0 Scale: 1/8" = 1'-0"

PURPOSE: RESILIENCY WHARF

DATUM: NAVD88

ADJACENT OWNERS:

1. SEE ATTACHED

**BROOKLYN CRUISE TERMINAL  
RESILIENCY WHARF**

APPLICANT: NEW YORK CITY ECONOMIC  
DEVELOPMENT CORPORATION  
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AGENT: M.G. McLaren Engineering & Land Surveying, P.C.  
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**12.0 PILE DETAILS - 1**

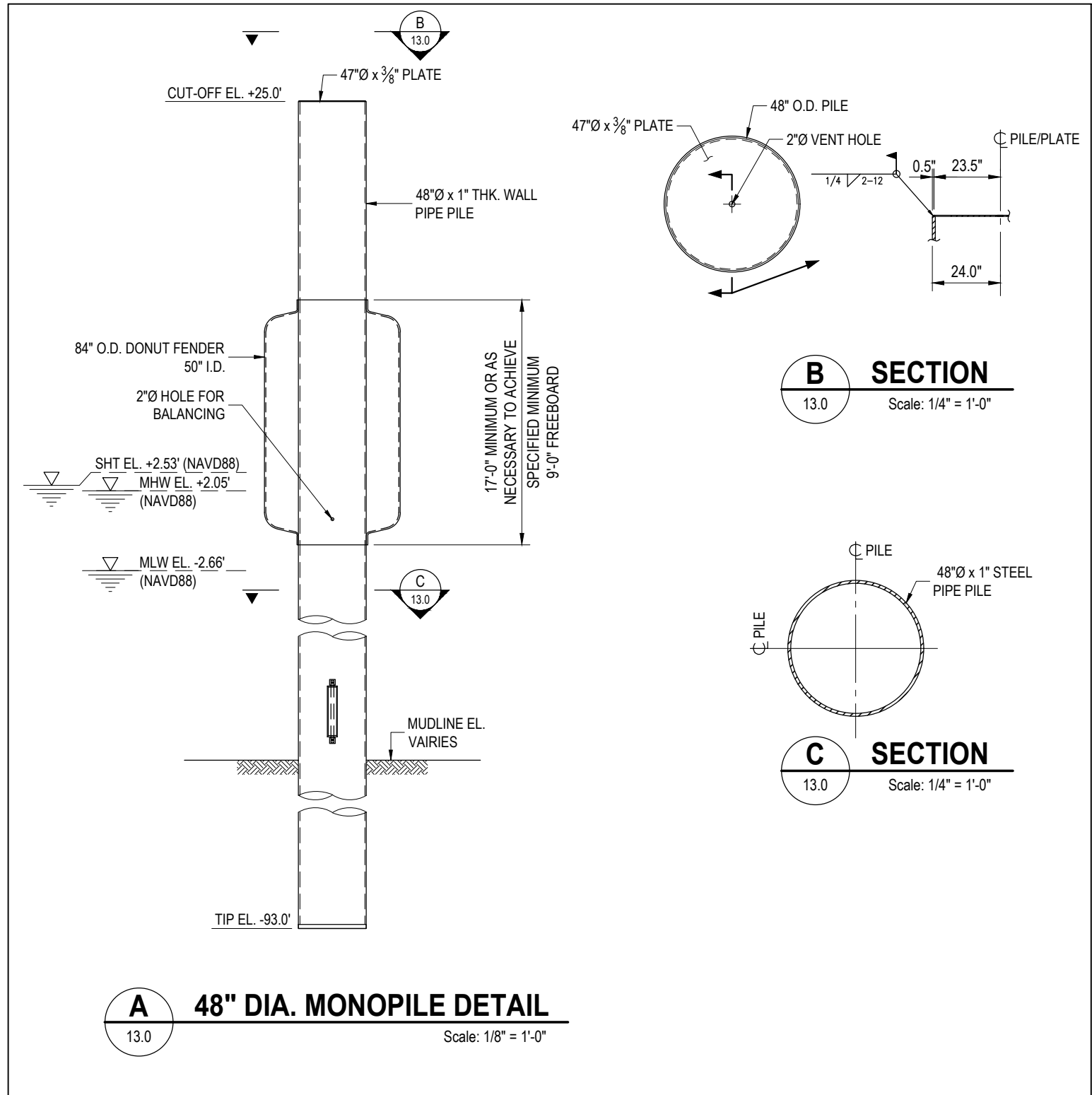
IN: BROOKLYN  
AT: BUTTERMILK CHANNEL  
COUNTY OF: KINGS STATE: NY



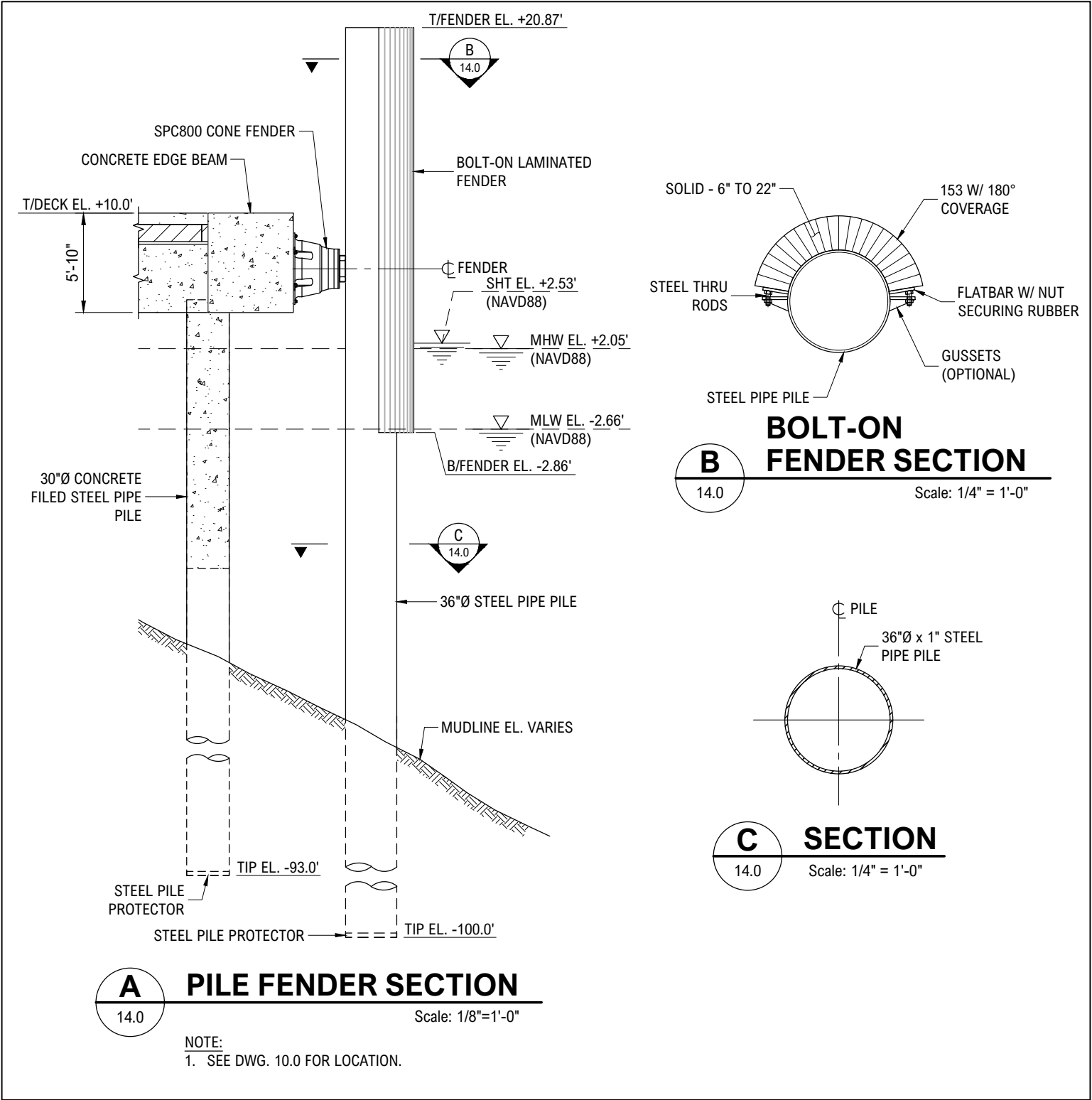
SHT 12 OF 18

10/25/2024

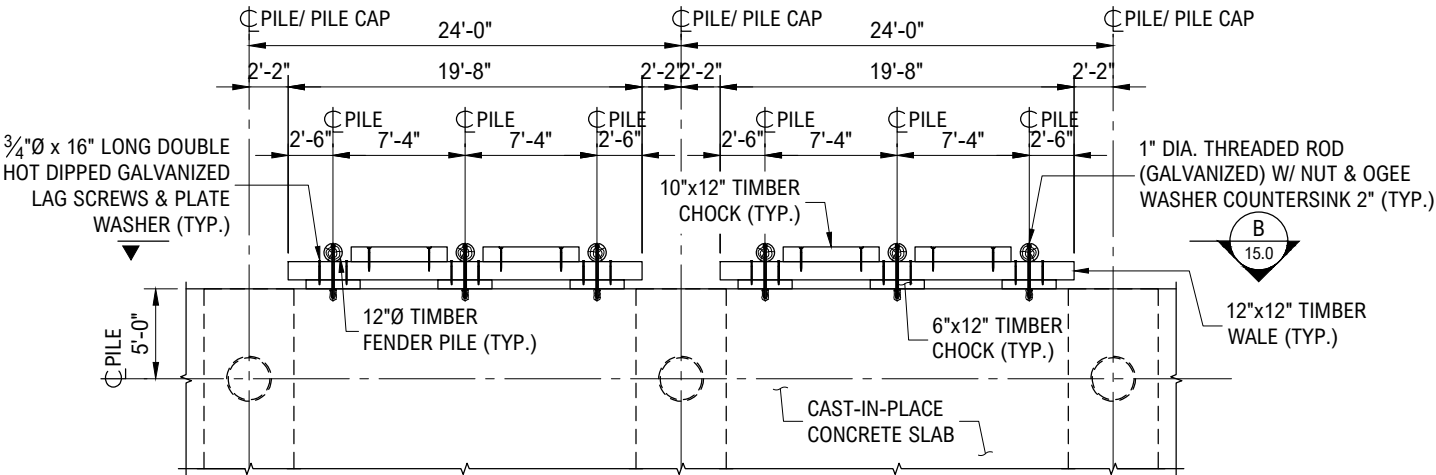




<p>PURPOSE: RESILIENCY WHARF</p> <p>DATUM: NAVD88</p> <p>ADJACENT OWNERS:</p> <p>1. SEE ATTACHED</p>	<p>BROOKLYN CRUISE TERMINAL RESILIENCY WHARF</p> <p>APPLICANT: NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION ONE LIBERTY PLAZA NEW YORK, N.Y. 10006</p> <p>AGENT: M.G. McLaren Engineering &amp; Land Surveying, P.C. 530 Chestnut Ridge Road Woodcliff Lake, N.J. 07677</p>	<p>13.0 PILE DETAILS - 2</p> <p>IN: BROOKLYN AT: BUTTERMILK CHANNEL COUNTY OF: KINGS STATE: NY</p> <p>0 8' 16'</p> <p>1/8"=1'-0"</p> <p>SHT 13 OF 18 10/25/2024</p>
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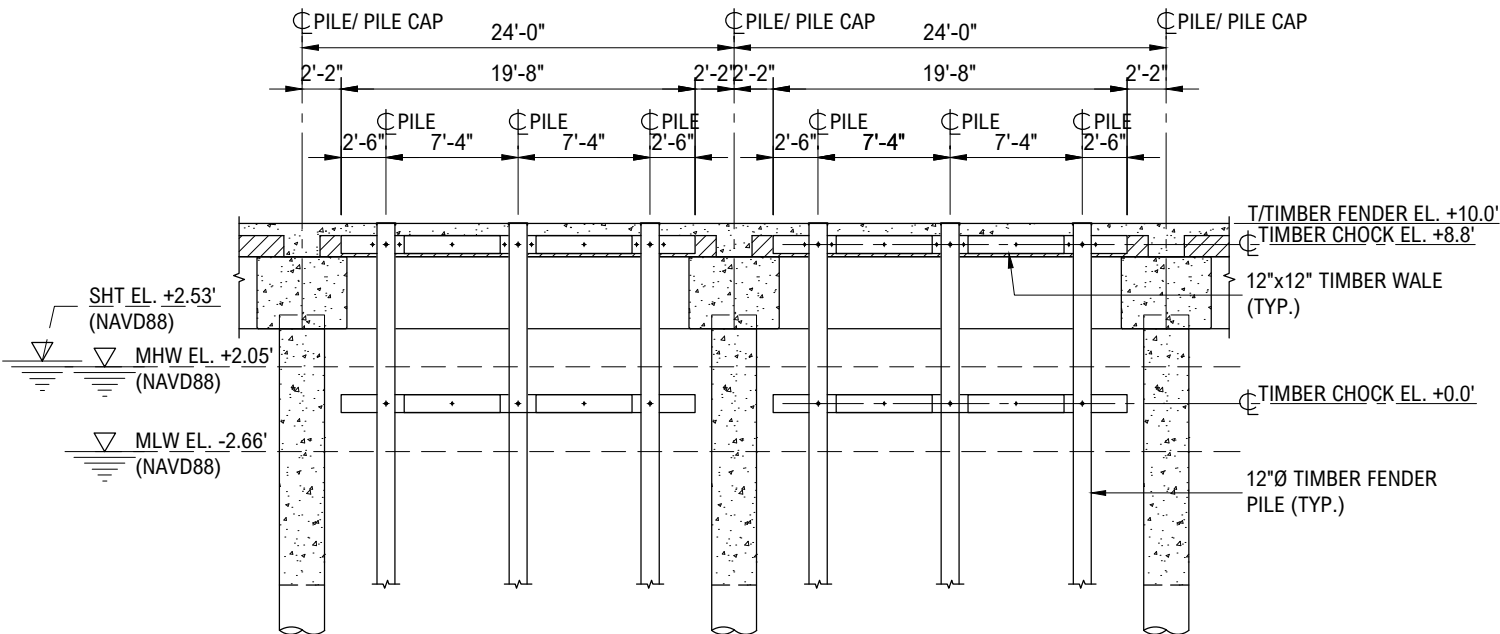


<p>PURPOSE: RESILIENCY WHARF</p> <p>DATUM: NAVD88</p> <p>ADJACENT OWNERS: 1. SEE ATTACHED</p>	<p>BROOKLYN CRUISE TERMINAL RESILIENCY WHARF</p> <p>APPLICANT: NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION ONE LIBERTY PLAZA NEW YORK, N.Y. 10006</p> <p>AGENT: M.G. McLaren Engineering &amp; Land Surveying, P.C. 530 Chestnut Ridge Road Woodcliff Lake, N.J. 07677</p>	<p>14.0 FENDER DETAILS - 1</p> <p>IN: BROOKLYN AT: BUTTERMILK CHANNEL COUNTY OF: KINGS STATE: NY</p> <p>0 8' 16'</p> <p>1/8"=1'-0"</p> <p>SHT 14 OF 18 10/25/2024</p>
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**A** **TIMBER PILE FENDER PLAN**  
15.0 Scale: 3/32"=1'-0"

- NOTES:  
1. SEE DWG. 8.0 FOR TIMBER PILE FENDER LOCATION.  
2. CONE AND LAMINATED PILE FENDERS NOT SHOWN FOR CLARITY.



**B** **TIMBER PILE FENDER ELEVATION**  
15.0 Scale: 3/32"=1'-0"

- NOTE:  
1. CONE AND LAMINATED PILE FENDERS NOT SHOWN FOR CLARITY.

PURPOSE: RESILIENCY WHARF

DATUM: NAVD88  
ADJACENT OWNERS:  
1. SEE ATTACHED

**BROOKLYN CRUISE TERMINAL  
RESILIENCY WHARF**

APPLICANT: NEW YORK CITY ECONOMIC  
DEVELOPMENT CORPORATION  
ONE LIBERTY PLAZA  
NEW YORK, N.Y. 10006

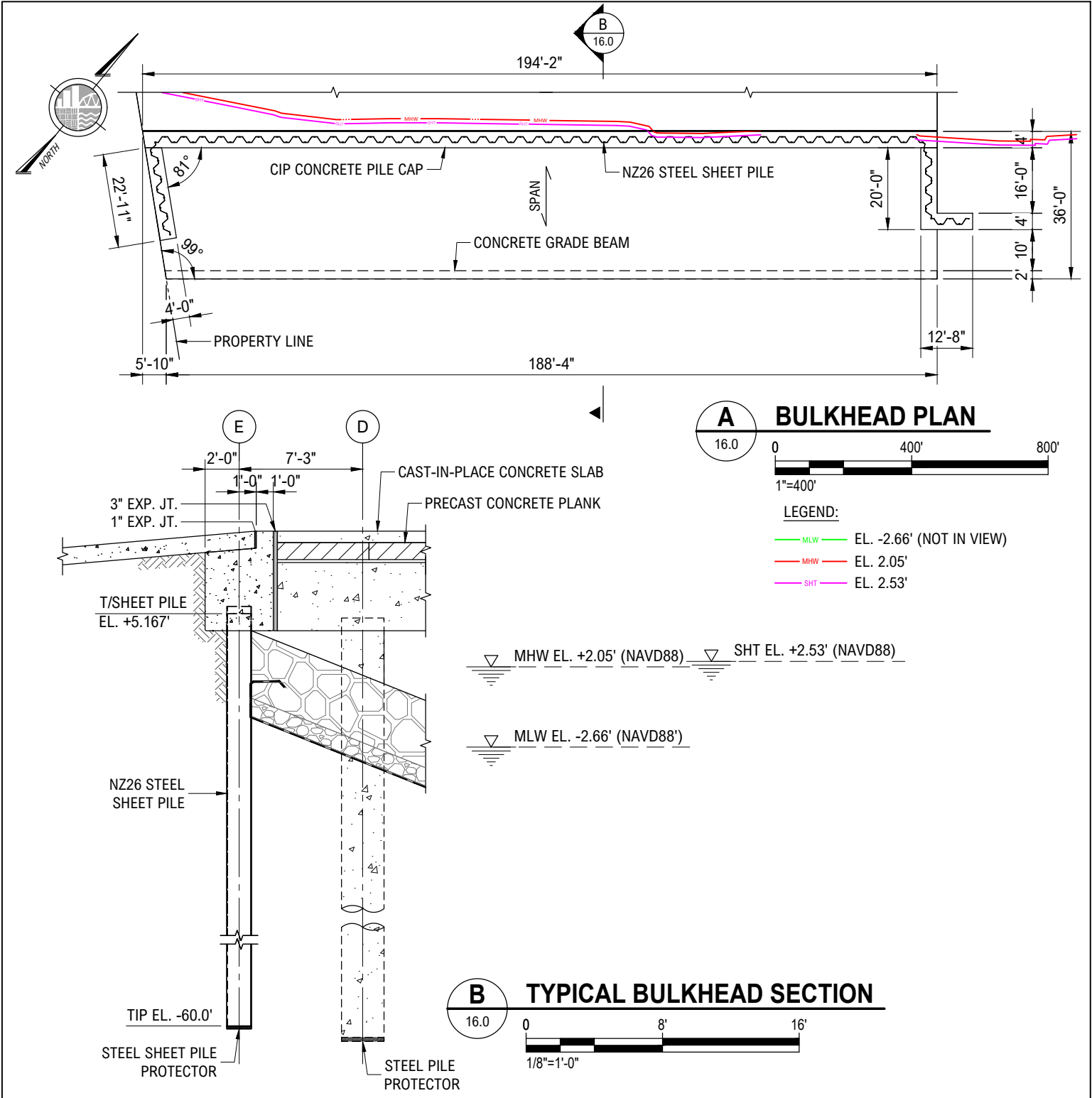
AGENT: M.G. McLaren Engineering & Land Surveying, P.C.  
530 Chestnut Ridge Road  
Woodcliff Lake, N.J. 07677

**15.0 FENDER DETAILS - 2**

IN: BROOKLYN  
AT: BUTTERMILK CHANNEL  
COUNTY OF: KINGS STATE: NY

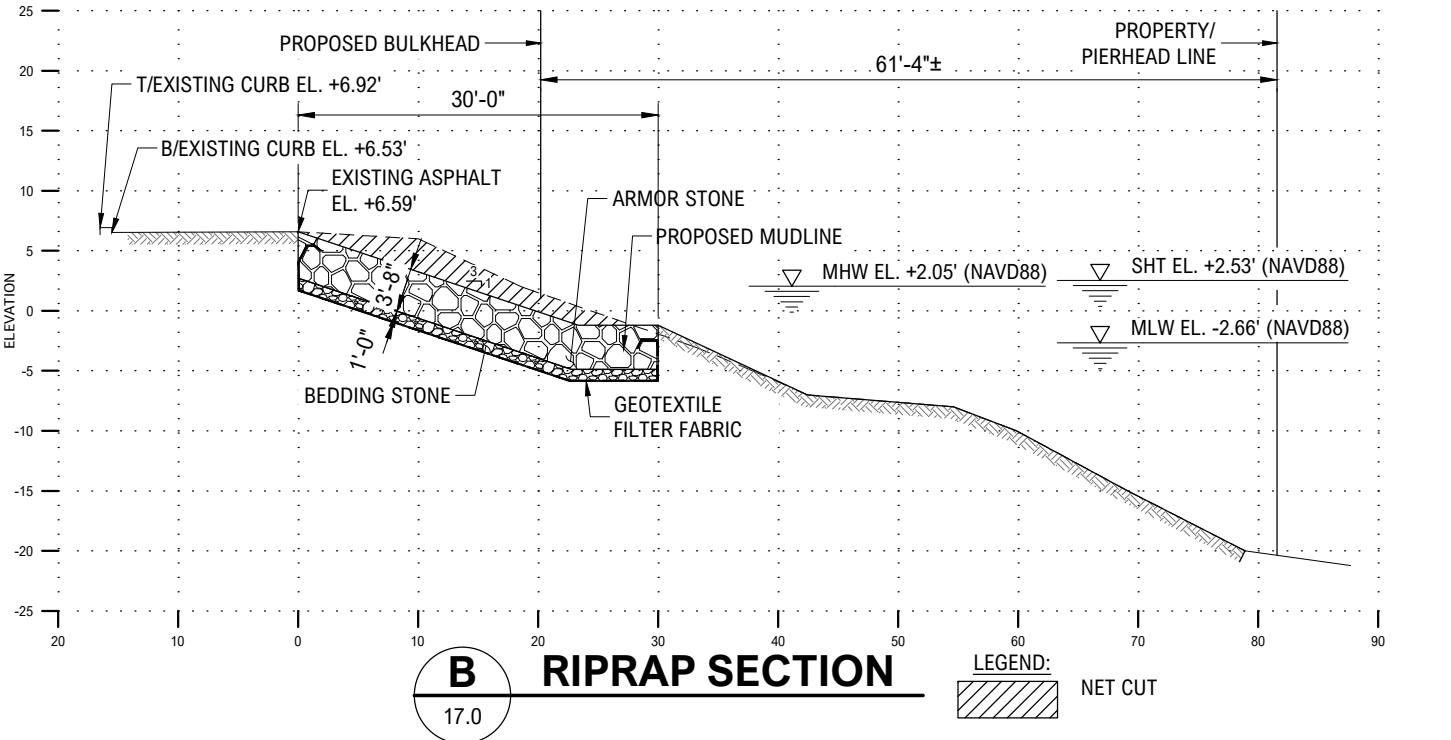
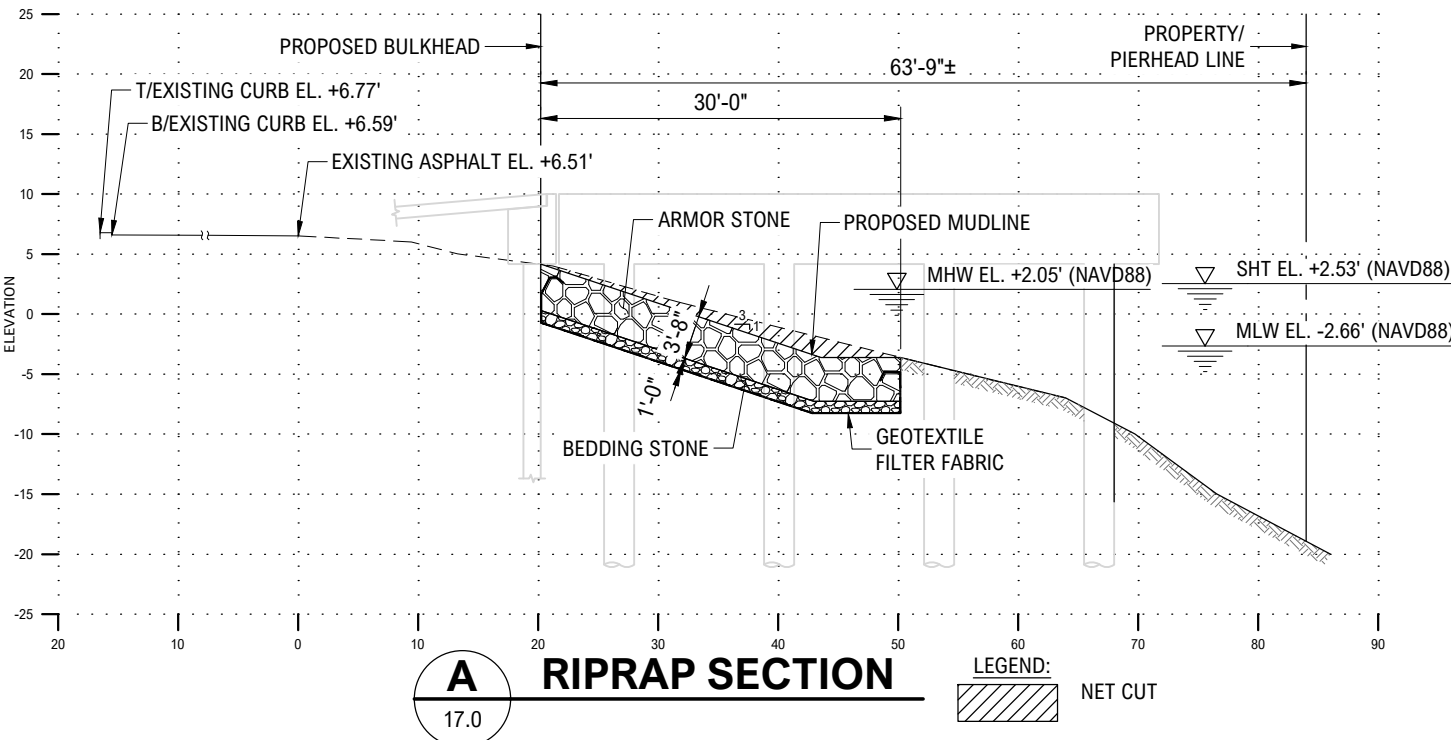


3/32"=1'-0"  
SHT 15 OF 18 10/25/2024



<p>PURPOSE: RESILIENCY WHARF</p> <p>DATUM: NAVD88</p> <p>ADJACENT OWNERS:</p> <p>1. SEE ATTACHED</p>	<p>BROOKLYN CRUISE TERMINAL RESILIENCY WHARF</p> <p>APPLICANT: NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION ONE LIBERTY PLAZA NEW YORK, N.Y. 10006</p> <p>AGENT: M.G. McLaren Engineering &amp; Land Surveying, P.C. 530 Chestnut Ridge Road Woodcliff Lake, N.J. 07677</p>	<p>16.0 BULKHEAD PLAN AND SECTION</p> <p>IN: BROOKLYN AT: BUTTERMILK CHANNEL COUNTY OF: KINGS STATE: NY</p> <p>SHT 16 OF 18 10/25/2024</p>
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PURPOSE: RESILIENCY WHARF

DATUM: NAVD88

ADJACENT OWNERS:

1. SEE ATTACHED

**BROOKLYN CRUISE TERMINAL  
RESILIENCY WHARF**

APPLICANT: NEW YORK CITY ECONOMIC  
DEVELOPMENT CORPORATION  
ONE LIBERTY PLAZA  
NEW YORK, N.Y. 10006

AGENT: M.G. McLaren Engineering & Land Surveying, P.C.  
530 Chestnut Ridge Road  
Woodcliff Lake, N.J. 07677

**17.0 RIPRAP DETAILS**

IN: BROOKLYN  
AT: BUTTERMILK CHANNEL  
COUNTY OF: KINGS STATE: NY



SHT 17 OF 18

10/25/2024

CUT AND FILL QUANTITIES (CY)							
STRUCTURE	PILE FILL TYPE	CUT BELOW MHW	FILL BELOW MHW	NET FILL BELOW MHW	CUT BELOW SHT	FILL BELOW SHT	NET FILL BELOW SHT
WHARF	12"Ø TIMBER FENDER PILE	0	0	0	0	0	0
	30"Ø CONCRETE FILLED STEEL PIPE PILE	0	0	0	0	82	82
	36"Ø STEEL FENDER PILE	0	0	0	0	0	0
	48"Ø STEEL MONOPILE	0	0	0	0	0	0
MOORING DOLPHIN	30"Ø CONCRETE FILLED STEEL PIPE PILE	0	0	0	0	9	9
SHORELINE REVETMENT	RIPRAP STONE	1817	1681	-136	1976	1783	-193
TOTAL		1817	1681	-136	1976	1874	-102

CUT AND FILL QUANTITIES (SF)							
STRUCTURE	PILE FILL TYPE	CUT AREA BELOW MHW	FILL AREA BELOW MHW	NET FILL BELOW MHW	CUT AREA BELOW SHT	FILL AREA BELOW SHT	NET FILL BELOW SHT
WHARF	12"Ø TIMBER FENDER PILE	0	0	0	0	0	0
	30"Ø CONCRETE FILLED STEEL PIPE PILE	0	0	0	0	171	171
	36"Ø STEEL FENDER PILE	0	0	0	0	0	0
	48"Ø STEEL MONOPILE	0	0	0	0	0	0
MOORING DOLPHIN	30"Ø CONCRETE FILLED STEEL PIPE PILE	0	0	0	0	17	17
SHORELINE REVETMENT	RIPRAP STONE	10437	12729	2292	10437	12822	2385
TOTAL		10437	12729	2292	10437	13010	2573

<p>PURPOSE: RESILIENCY WHARF</p> <p>DATUM: NAVD88</p> <p>ADJACENT OWNERS:</p> <p>1. SEE ATTACHED</p>		<p>BROOKLYN CRUISE TERMINAL RESILIENCY WHARF</p> <p>APPLICANT: NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION ONE LIBERTY PLAZA NEW YORK, N.Y. 10006</p> <p>AGENT: M.G. McLaren Engineering &amp; Land Surveying, P.C. 530 Chestnut Ridge Road Woodcliff Lake, N.J. 07677</p>	<p>18.0 CUT AND FILL QUANTITIES</p> <p>IN: BROOKLYN AT: BUTTERMILK CHANNEL COUNTY OF: KINGS STATE: NY</p> <p>SHT 18 OF 18</p> <p>10/25/2024</p>
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