



**US Army Corps
of Engineers®**

PUBLIC NOTICE

Applicant:

Roberta Zwier

Ravenswood Operations, LLC

Published:

Expires:

New York District

Permit Application No. NAN-2025-00367-MMI

TO WHOM IT MAY CONCERN: The New York District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403). The purpose of this public notice is to solicit comments from the public regarding the work described below:

APPLICANT: Roberta Zwier

Ravenswood Operations, LLC

38-54 Vernon Boulevard

Long Island City, New York 11101

AGENT: Shea Thorvaldsen

TMS Waterfront

PO Box 731

Nyack, New York 10960

WATERWAY AND LOCATION: East River – 38-54 Vernon Boulevard, Long Island City, Queens County, City of New York, New York

EXISTING CONDITIONS: The Ravenswood Facility is primarily composed of four (4) areas consisting of the following areas:

1. Plant Discharge and Southern Wharf
2. Coal Unloading Towers, Transfer Tower and Conveyor Support Piers
3. North Refueling Station
4. Lemon Creek Manifold Area

The existing waterfront structures are deteriorated with scouring and undermining of pile-supported platforms, steel corrosion and perforations in existing sheet piles. The project area consists of the waterfront along the East Channel of the East River across from Roosevelt Island.

PROJECT PURPOSE: The purpose of the project is to rehabilitate the marine infrastructure at the Ravenswood Generating Station.

PROPOSED WORK: The applicant requests authorization for general maintenance including cleaning, recoating, and sealing of deficiencies along the existing shoreline

comprised of sheet pile bulkheads and areas of pile supported platform. For the areas with steel sheet pile bulkhead, 58 square feet of the existing bulkhead surface will have holes repaired, 175 square feet of banding repairs, 2 square feet of concrete closure along the bulkhead, approximately 601 linear feet of cleaning and recoating, and approximately 1,400 linear feet of pile caps will be repaired. Approximately 720 linear feet of fender framing will be replaced along the shoreline with approximately 210 linear feet of steel bracing and 450 linear feet of additional steel bracing. Approximately 383 steel pipe piles will be encased with FRP jackets, 373 of these as structural encasements and 5 as non-structural encapsulations. Approximately 310 H-Piles will be encased in FRP jackets, 112 as structural encasements and 198 as non-structural encapsulations. Additionally, approximately 20,473.2 square feet (0.47) acres of scour protection will be installed to stabilize the area including approximately 435 square feet of scour protection at a combined sewer outfall (CSO) comprising of rock scour, grout bags and flowable fill, as well as underneath the platform areas as restoration for existing scoured areas. Repairs will be made to the existing block wall, and various pieces of marine hardware and timber wales will be replaced.

AVOIDANCE AND MINIMIZATION: The applicant has provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment: Best Management Practices (BMPs) including the use of a turbidity curtain around the work area and working at low tide as practicable will be implemented during construction.

COMPENSATORY MITIGATION: The applicant has provided the following explanation why compensatory mitigation should not be required: The permanent loss of waters associated with the project is primarily associated with encapsulating and jacketing existing piles resulting in less than 0.10 acres of loss.

CULTURAL RESOURCES:

The Corps evaluated the undertaking pursuant to Section 106 of the National Historic Preservation Act (NHPA) utilizing its existing program-specific regulations and procedures along with 36 CFR Part 800. The Corps' program-specific procedures include 33 CFR 325, Appendix C, and revised interim guidance issued in 2005 and 2007, respectively. The District Engineer consulted district files and records and the latest published version of the National Register of Historic Places and initially determines that: Cultural resources that have been determined not eligible for inclusion in the National Register of Historic Places are present within the Corps' permit area; therefore, there will be no historic properties affected by the proposed work. The Corps subsequently requests concurrence from the SHPO and/or THPO.

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO and/or THPO, as appropriate and required, and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps-identified permit area.

ENDANGERED SPECIES: The Corps has performed an initial review of the application, the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), National Marine Fisheries Service (NMFS) Greater Atlantic Region Section 7 Mapper, and the NMFS Critical Habitat Mapper to determine if any threatened, endangered, proposed, or candidate species, as well as the proposed and final designated critical habitat may occur within the boundary of the proposed project. Based on this initial review, the Corps has made a preliminary determination that the proposed project may affect species and critical habitat listed in Table 1. No other ESA-listed species or critical habitat will be affected by the proposed action.

Table 1: ESA-listed species and/or critical habitat potentially present in the action area.

Common Name	Scientific Name	Status	Agency
Monarch Butterfly	<i>Danaus plexippus</i>	Proposed Threatened	USFWS
Green Sea Turtle	<i>Chelonia mydas</i>	Threatened	USFWS and NMFS
Kemp's Ridley Sea Turtle	<i>Lepidochelys kempii</i>	Endangered	USFWS and NMFS
Leatherback Sea Turtle	<i>Dermochelys coriacea</i>	Endangered	USFWS and NMFS
Loggerhead Sea Turtle	<i>Caretta caretta</i>	Threatened	USFWS and NMFS
Atlantic Sturgeon	<i>Acipenser oxyrinchus oxyrinchus</i>	Endangered	NMFS
Shortnose Sturgeon	<i>Acipenser brevirostrum</i>	Endangered	NMFS

This notice serves as request to the U.S. Fish and Wildlife Service and National Marine Fisheries Service for any additional information on whether any listed or proposed to be listed endangered or threatened species or critical habitat may be present in the area which would be affected by the proposed activity.

ESSENTIAL FISH HABITAT: Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act 1996, the Corps reviewed the project area, examined information provided by the applicant, and consulted available species information.

The Corps intends to initiate Essential Fish Habitat (EFH) consultation separately from this public notice. A separate EFH consultation package will be sent to the National Marine Fisheries Service (NMFS). The Corps will not make a permit decision until the consultation process is complete.

Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

NAVIGATION: The proposed structure or activity is not located in the vicinity of a federal navigation channel.

SECTION 408: The applicant will not require permission under Section 14 of the Rivers and Harbors Act (33 USC 408) because the activity, in whole or in part, would not alter, occupy, or use a Corps Civil Works project.

WATER QUALITY CERTIFICATION: 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.

COASTAL ZONE MANAGEMENT ACT: 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.

OTHER AUTHORIZATIONS: 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:

NOTE: This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program. The geographic extent of aquatic resources within the proposed project area that either are, or are presumed to be, within the Corps jurisdiction has not been verified by Corps personnel.

EVALUATION: 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 benefits, 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 cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical 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. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act or the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

COMMENTS: The Corps 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 to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The New York District will receive written comments on the proposed work, as outlined above, until the expiration date of this public notice. Comments should be submitted electronically via the Regulatory Request System (RRS) at <https://rrs.usace.army.mil/rrs> or to Christopher Minck at Christopher.W.Minck@usace.army.mil. Please refer to the permit application number in your comments.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing will be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

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.

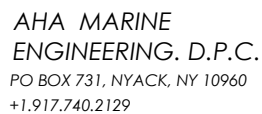
In order for us to better serve you, please complete our Customer Service Survey located at <https://www.nan.usace.army.mil/Missions/Regulatory/Customer-Survey/>.

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





PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM

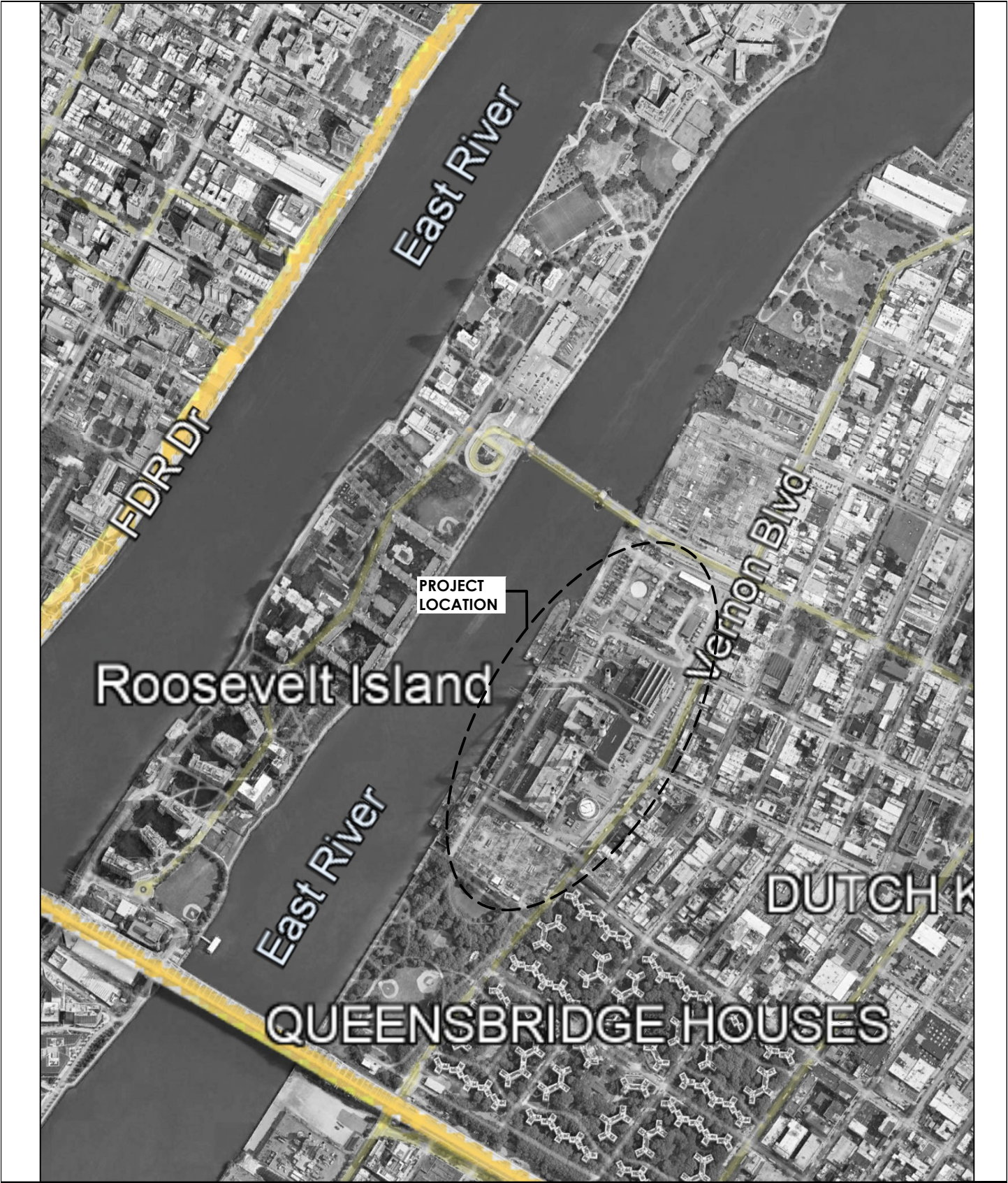
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101

PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

LOCATION MAP

CHK'D BY: AH/AA

02 OF 37



AHA MARINE
ENGINEERING, D.P.C.
PO BOX 731, NYACK, NY 10960
+1.917.740.2129

PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
NEIGHBORHOOD MAP
PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA
SCALE: AS NOTED
DRAWING NO:
03 OF 37

DATUM CHART	
	NAVD88
HOWL (10/30/2012)	11.27
SHT	2.47
MHHW	2.30
MHW	1.96
NAVD88	0.00
MTL	-0.29
MLW	-2.57
MLLW	-2.78
LOWL (2/2/1976)	-7.06

- 1. MHW AND MLW IS BASED ON RAVENSWOOD GENERATING STATION BASELINE INSPECTION DATED AUGUST 2021 AS PROVIDED BY JACOBS.
- 2. HOWL AND LOWL BASED ON NOAA STATION 8518750, THE BATTERY, NY.
- 3. MHHW,MTL, AND MLLW ARE BASED ON TRANSFORMATIONS AS PROVIDED FROM VDATUM ONLINE 4.6.1 DATED SEPTEMBER 2023.
- 4. SHT APPROXIMTED BASED ON MHHW AND MHW.



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PROJECT TITLE:
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38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE: TIDAL DATUM CHART	
PROJ. NO: 23090	SCALE: AS NOTED
DATE: 04.09.25	DRAWING NO:
DRAWN BY: DDP/AL	04 OF 37
CHK'D BY: AH/AA	

1. PER EAST RIVER CONDITION SURVEY SHEET VH-106 AS PROVIDED BY THE OPERATIONS DIVISION OF THE DEPARTMENT OF ARMY U.S. ARMY CORPS OF ENGINEERS NEW YORK, DISTRICT, NO NAVIGABLE CHANNEL IS ON THIS SIDE OF THE EAST RIVER.

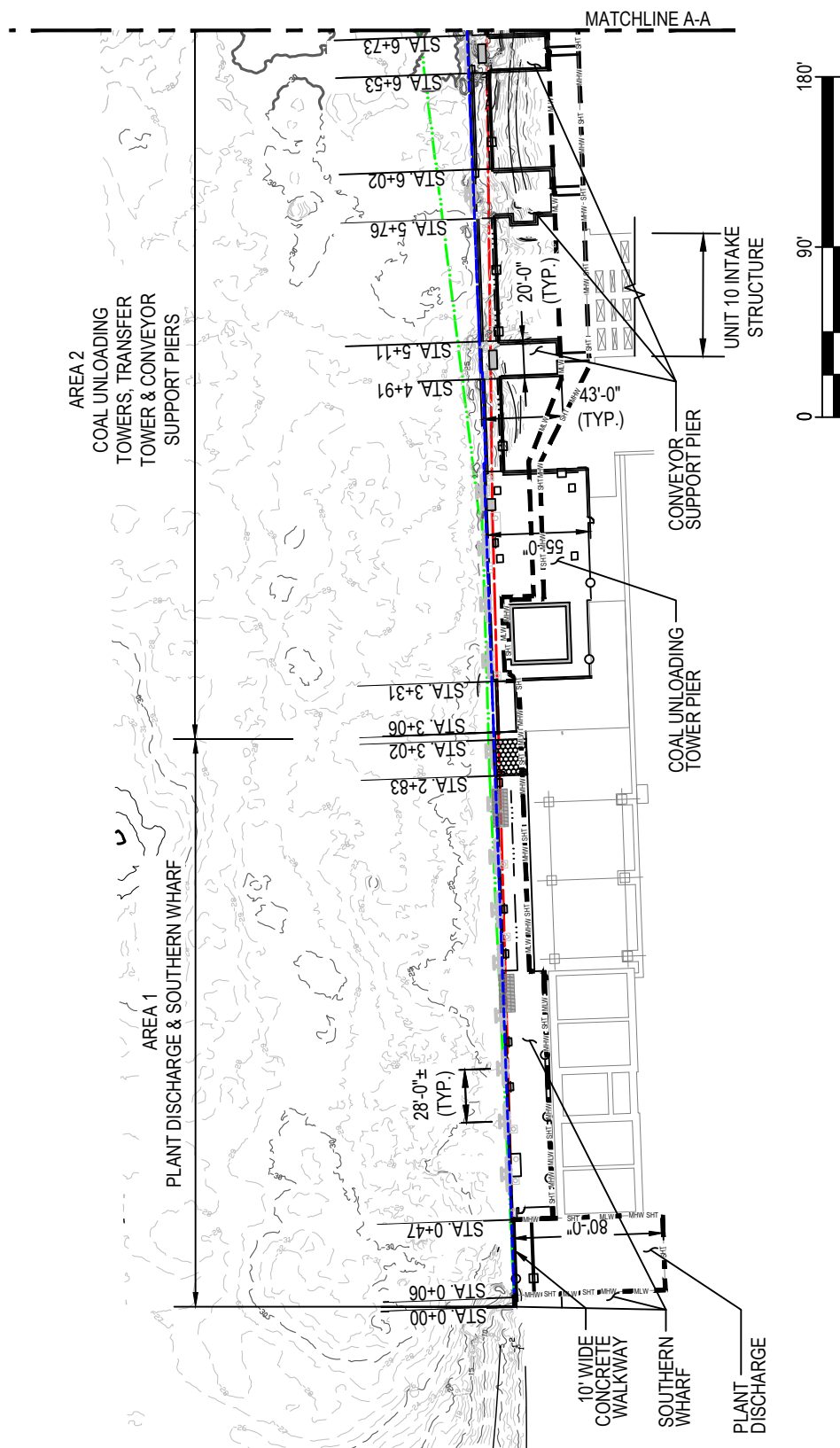
2. WETLANDS LINE BASED ON "MAP 588.512" AS PROVIDED BY NYSDEC

3. MHW, MLW AND SHT ARE APPROXIMATED BASED ON SITE OBSERVED SITE CONDITIONS. LIMITED ACCESS WAS AVAILABLE FOR CERTAIN STRUCTURES DUE TO MOORED VESSELS, STRONG CURRENT AND LIMITED DIMENSIONAL CLEARANCE.

— US PIERHEAD LINE AND BULKHEAD LINE
— WATER GRANT LINE OF 1850
— WETLANDS LINE OF 1974



EAST RIVER



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38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:

EXISTING SITE PLAN I

PROJ. NO: 23090

DATE: 04.09.25

DRAWN BY: DDP/AL

CHK'D BY: AH/AA

SCALE:AS NOTED

DRAWING NO:

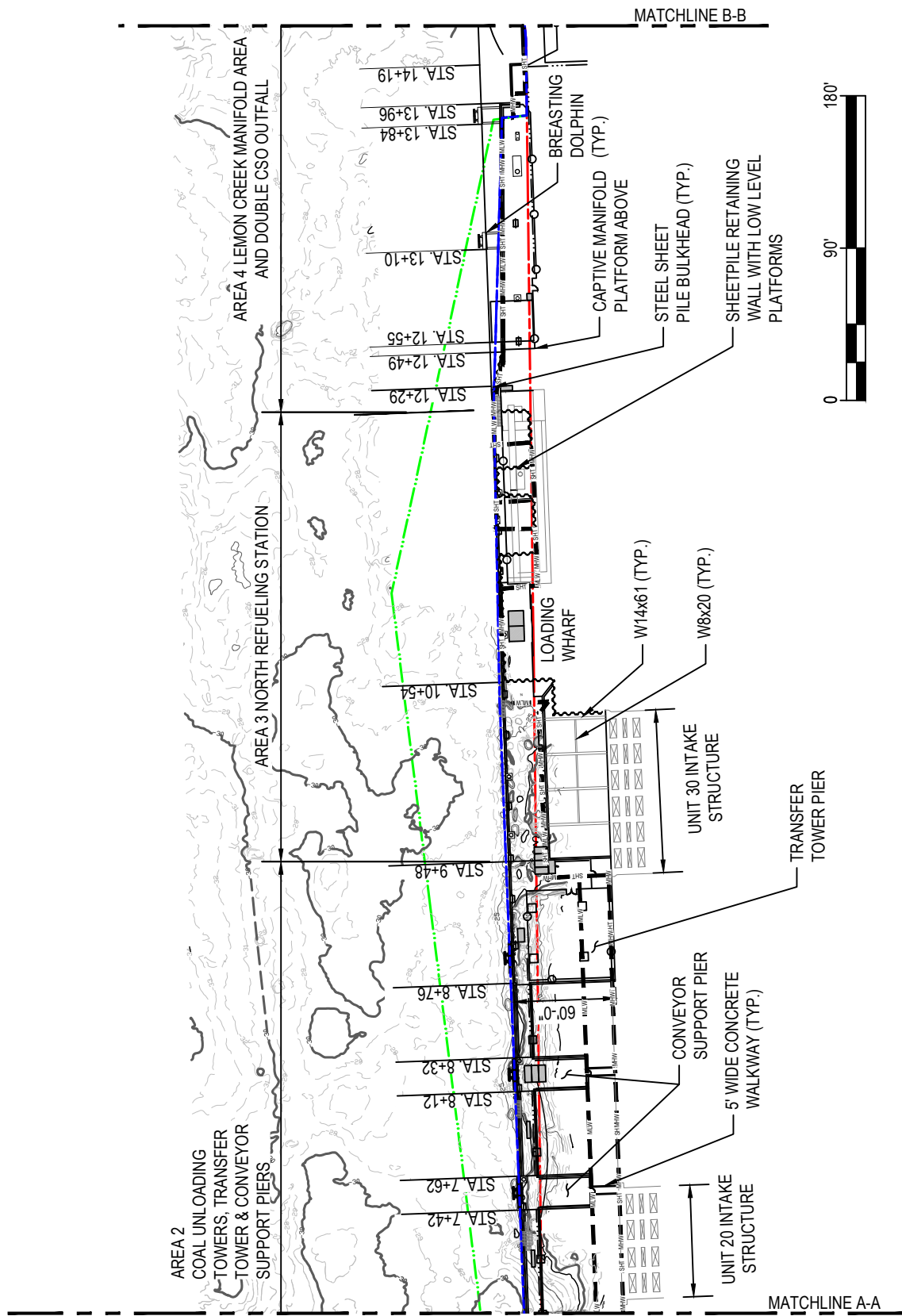
05 OF 37

Apr 10, 2025 - 10:18am C:\Users\ahd\OneDrive\group\23090_ravenswood\waterfront\asset management - documents\4. drawings, graphics, maps, diagrams, and 2D/3D\23090_ravenswood\usace\set\121213_14_EXIST SITE PLAN.dwg

- NOTES:
1. PER EAST RIVER CONDITION SURVEY SHEET VH-106 AS PROVIDED BY THE OPERATIONS DIVISION OF THE DEPARTMENT OF ARMY U.S. ARMY CORPS OF ENGINEERS NEW YORK DISTRICT, NO NAVIGABLE CHANNEL IS ON THIS SIDE OF THE EAST RIVER.
 2. WETLANDS LINE BASED ON "MAP 588.512" AS PROVIDED BY NYSDEC
 3. MHW, MLW AND SHT ARE APPROXIMATED BASED ON SITE OBSERVED SITE CONDITIONS. LIMITED ACCESS WAS AVAILABLE FOR CERTAIN STRUCTURES DUE TO MOORED VESSELS, STRONG CURRENT AND LIMITED DIMENSIONAL CLEARANCE.

- LEGEND:
- US PIERHEAD LINE AND BULKHEAD LINE
 - WATER GRANT LINE OF 1850
 - WETLANDS LINE OF 1974

EAST RIVER



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PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:	
EXISTING SITE PLAN II	
PROJ. NO: 23090	SCALE: AS NOTED
DATE: 04.09.25	DRAWING NO:
DRAWN BY: DDP/AL	06 OF 37
CHK'D BY: AH/AA	

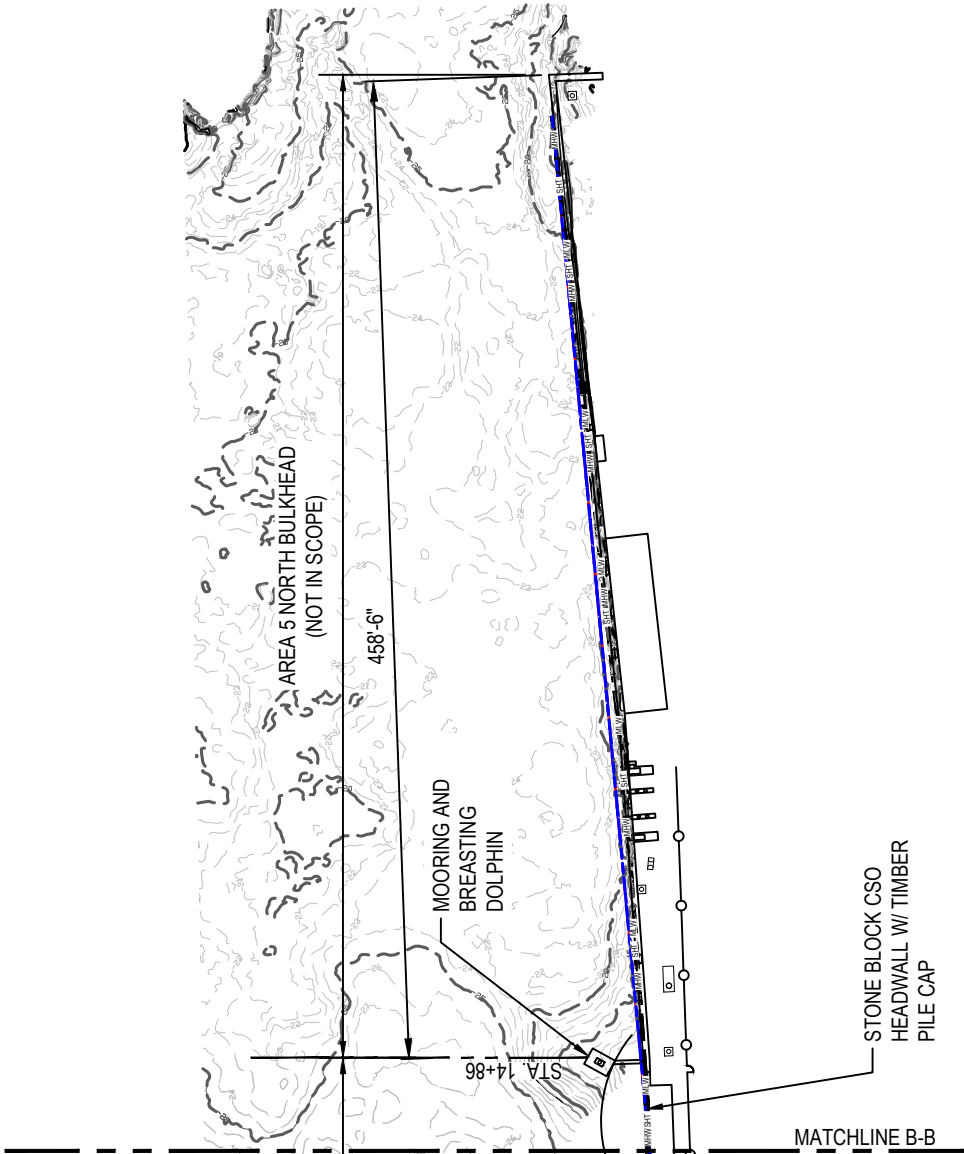
NOTES:

- 1. PER EAST RIVER CONDITION SURVEY SHEET VH-106 AS PROVIDED BY THE OPERATIONS DIVISION OF THE DEPARTMENT OF ARMY U.S. ARMY CORPS OF ENGINEERS NEW YORK DISTRICT, NO NAVIGABLE CHANNEL IS ON THIS SIDE OF THE EAST RIVER.
- 2. WETLANDS LINE BASED ON "MAP 588_512" AS PROVIDED BY NYSDEC
- 3. MHW, MLW AND SHT ARE APPROXIMATED BASED ON SITE OBSERVED SITE CONDITIONS. LIMITED ACCESS WAS AVAILABLE FOR CERTAIN STRUCTURES DUE TO MOORED VESSELS, STRONG CURRENT AND LIMITED DIMENSIONAL CLEARANCE.

LEGEND:

- US PIERHEAD LINE AND BULKHEAD LINE
- WATER GRANT LINE OF 1850
- WETLANDS LINE OF 1974

EAST RIVER



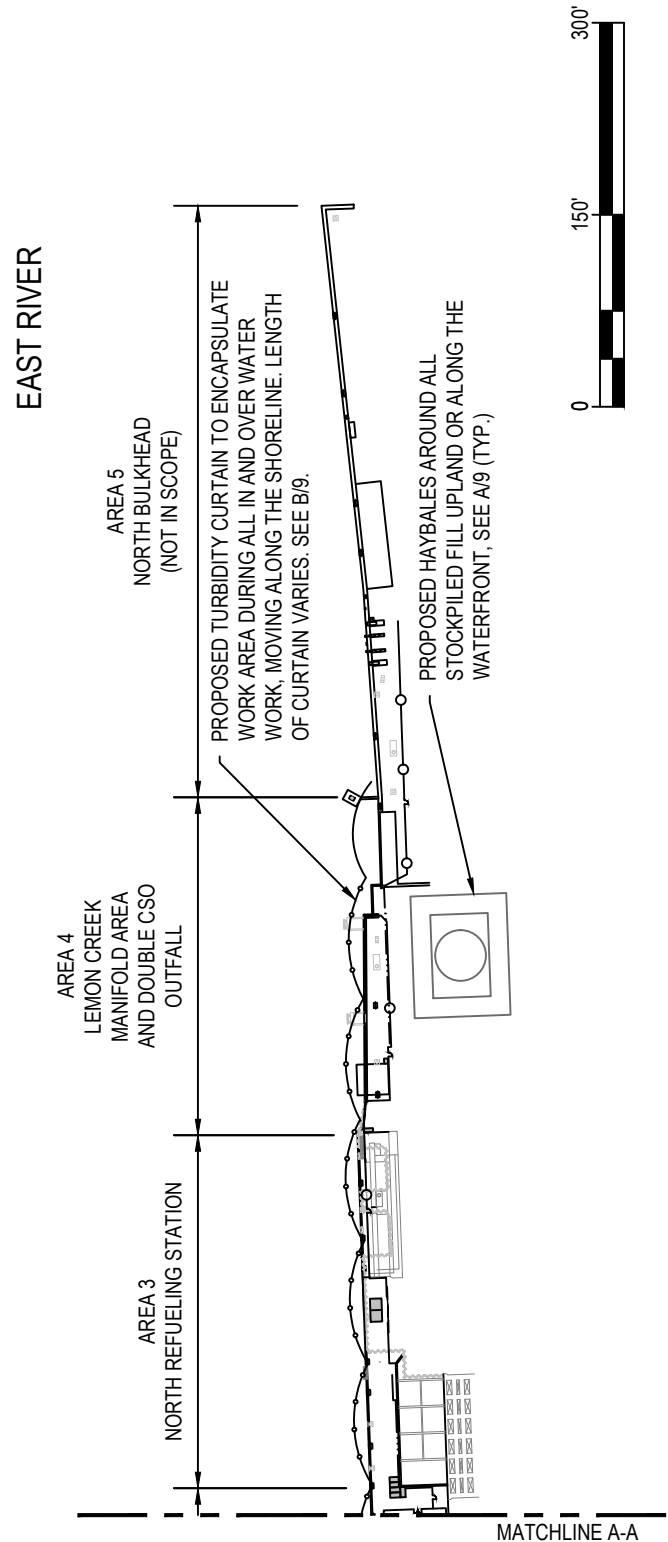
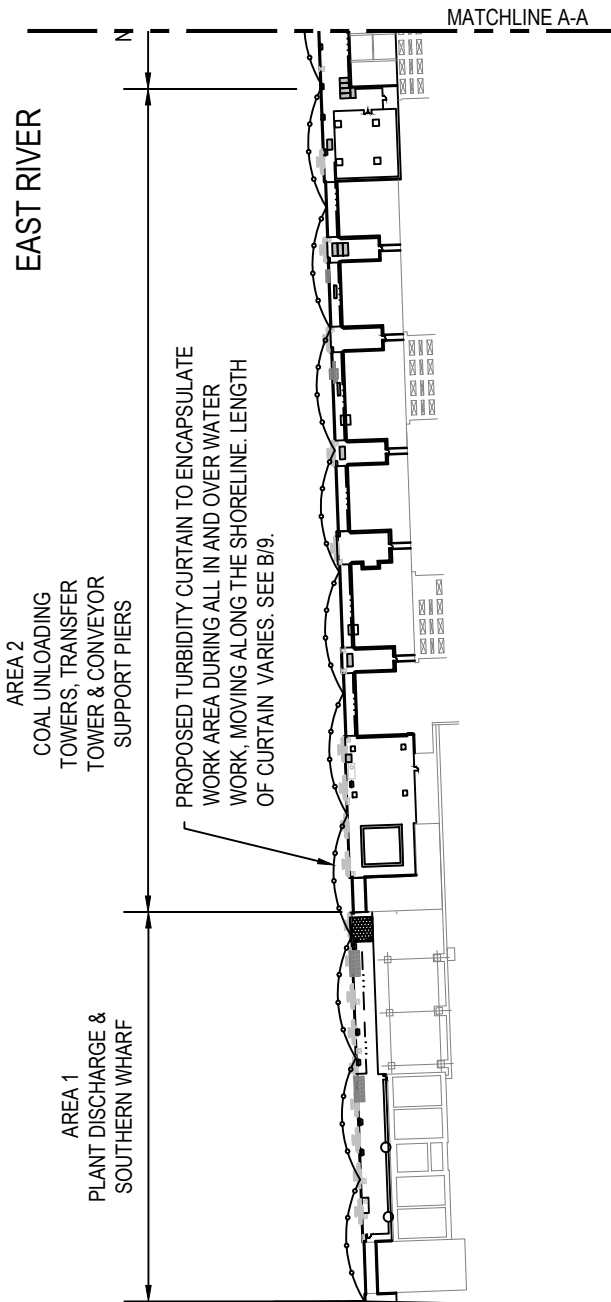
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PROJECT TITLE:
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SHEET TITLE:
EXISTING SITE PLAN III

PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA

SCALE: AS NOTED
DRAWING NO:
07 OF 37

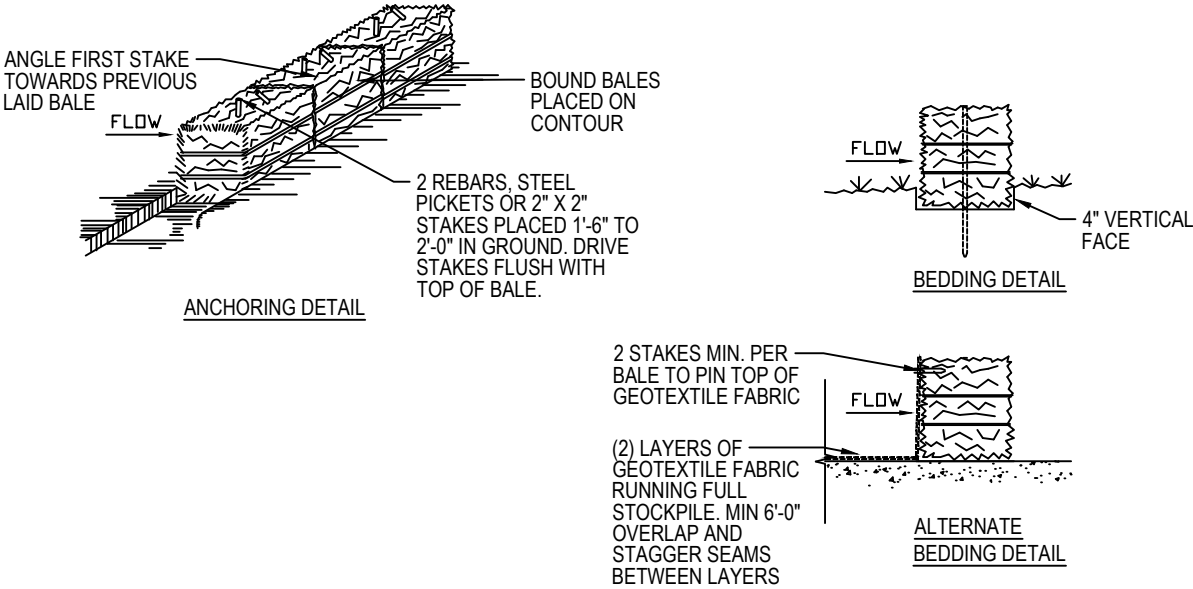


PROJECT TITLE:
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BMP PLAN

CHK'D BY: AH/AA

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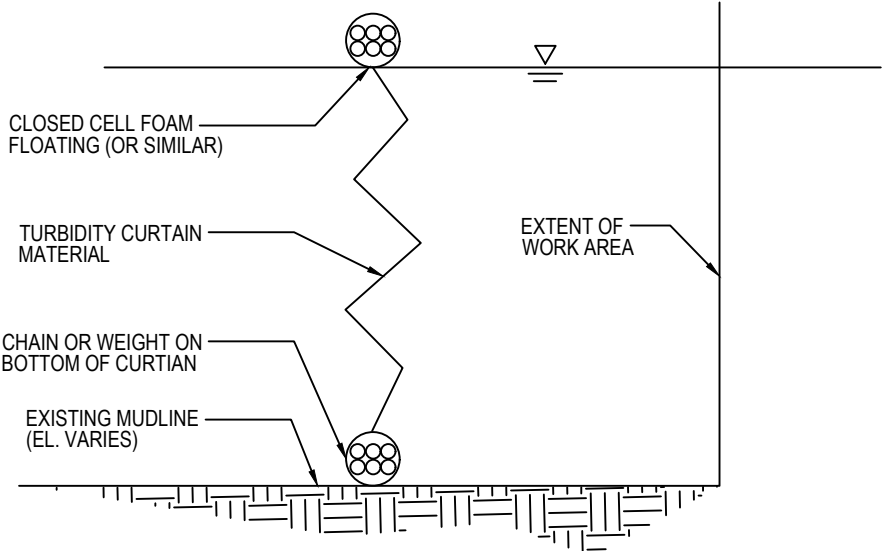


A
9

TYPICAL HAYBALE DETAIL

NTS

- NOTES:
1. DRAINAGE AREA NO MORE THAN $\frac{1}{2}$ ACRE PER 100 FEET OF STRAW BALE DIKE FOR SLOPES LESS THAN 25%



B
9

TYPICAL TURBIDITY CURTAIN DETAIL

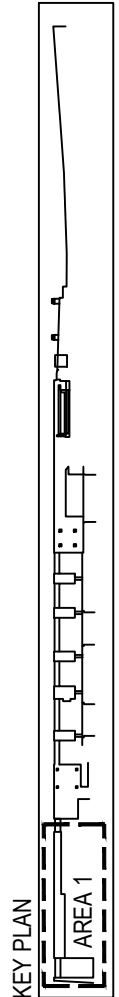
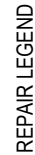
NTS



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SHEET TITLE: BMP DETAILS	
PROJ. NO: 23090	SCALE: AS NOTED
DATE: 04.09.25	DRAWING NO:
DRAWN BY: DDP/AL	09 OF 37
CHK'D BY: AH/AA	

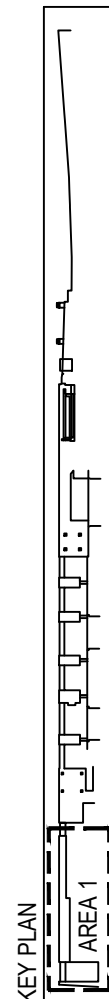


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WATERFRONT MAINTENANCE PROGRAM

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38-54 VERNON BLVD, LIC, NY 11101

PREPARED FOR
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SHEET TITLE: SOUTHERN WHARF AND DISCHARGE SUPERSTRUCTURE REPAIR PLAN	
PROJ. NO: 23090	SCALE: AS NOTED
DATE: 04.09.25	DRAWING NO:
DRAWN BY: DDP/AL	10 OF 37
CHK'D BY: AH/AA	

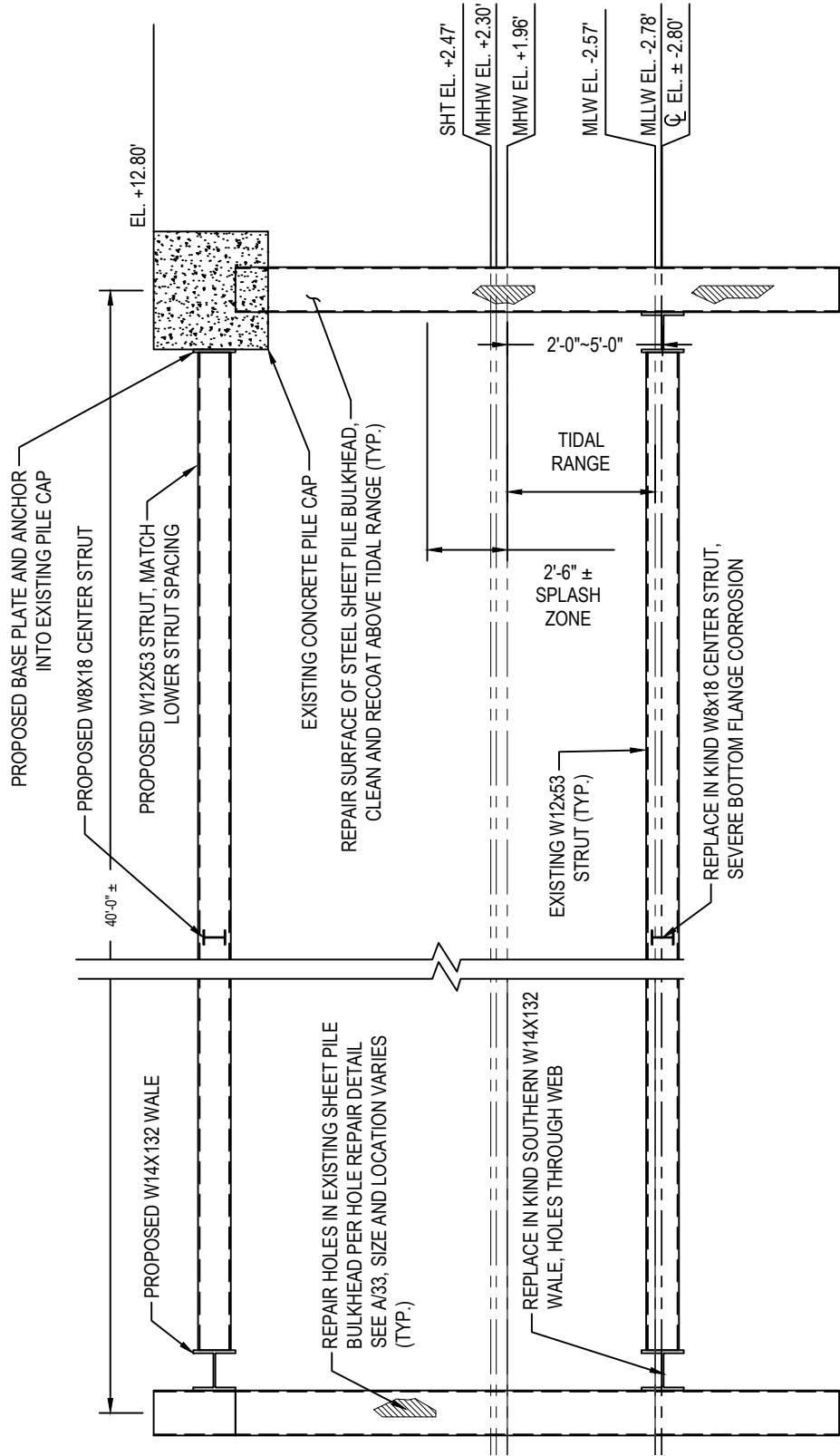


ALLA

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PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD. LIC. NY 11101

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PLANT DISCHARGE SECTION
SCALE: 3/16"=1'-0"
NOTES:
1. CLEAN AND RECOAT ALL PLANT DISCHARGE WALES, STRUTS AND FRAMING

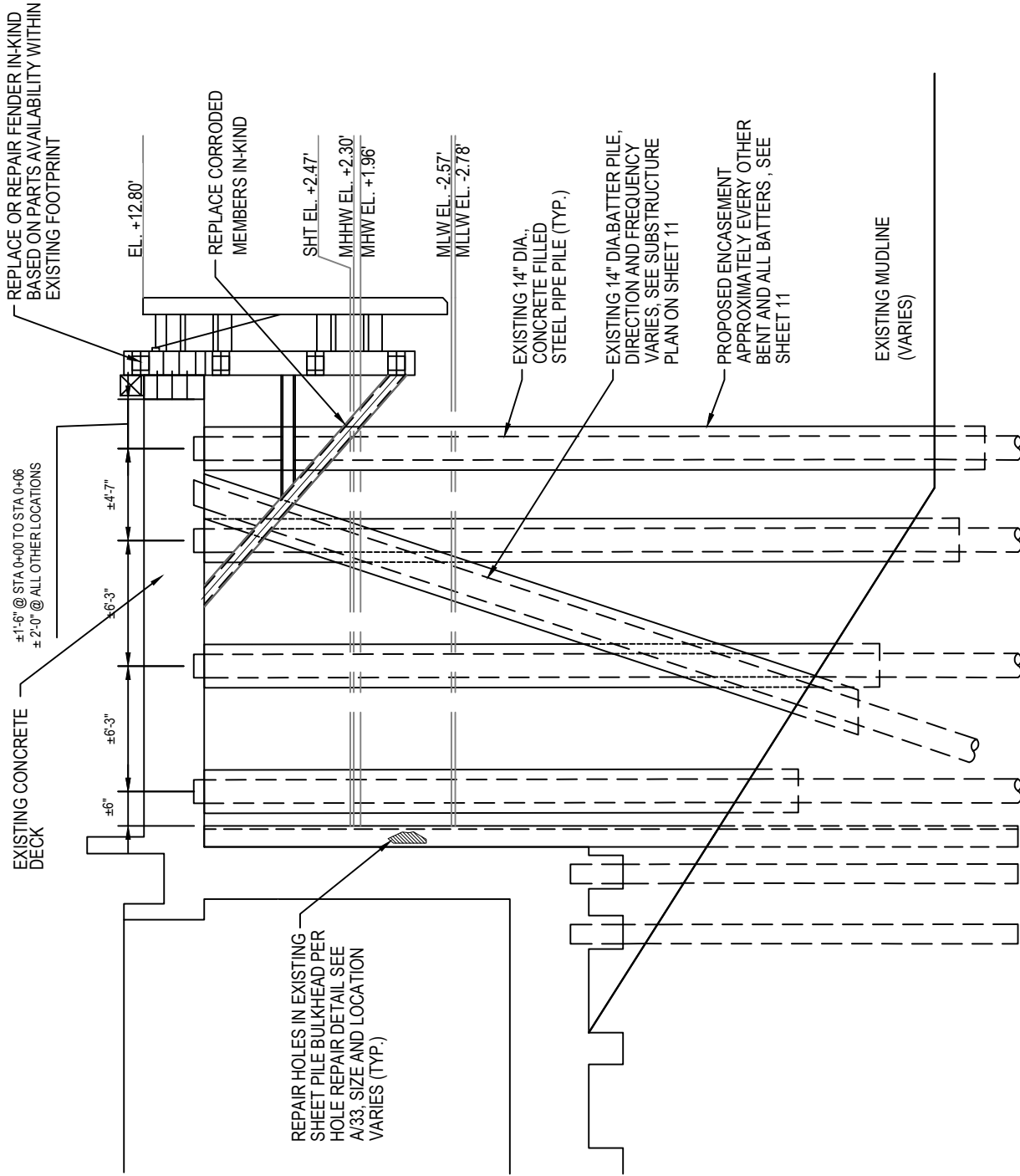


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SHEET TITLE:	
PLANT DISCHARGE SECTION	
PROJ. NO: 23090	SCALE: AS NOTED
DATE: 04.09.25	DRAWING NO:
DRAWN BY: DDP/AL	12 OF 37
CHK'D BY: AH/AA	

Apr 10, 2025 - 10:18am C:\Users\ahd\OneDrive\group\20250909_ravenswood\waterfront\asset management - documents\14 drawings, graphics, maps, diagrams, and 20250210 usace set\121215_9-4-SOUTH WHARF & P-LANT REPAIR PLAN.dwg



NOTES:

1. SEE B/35 FOR PIPE PILE ENCASMENT DETAIL.



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38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:	
TYPICAL 4-PILE WHARF SECTION	
PROJ. NO: 23090	SCALE: AS NOTED
DATE: 04.09.25	DRAWING NO:
DRAWN BY: DDP/AL	13 OF 37
CHK'D BY: AH/AA	



SCALE: 1/8"=1'-0"

NOTES:

1. SEE B/35 FOR PIPE PILE
ENCASEMENT DETAIL.



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WATERFRONT MAINTENANCE PROGRAM
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SHEET TITLE:

TYPICAL 3-PILE WHARF SECTION

PROJ. NO: 23090

DATE: 04.09.25

DRAWN BY: DDP/AL

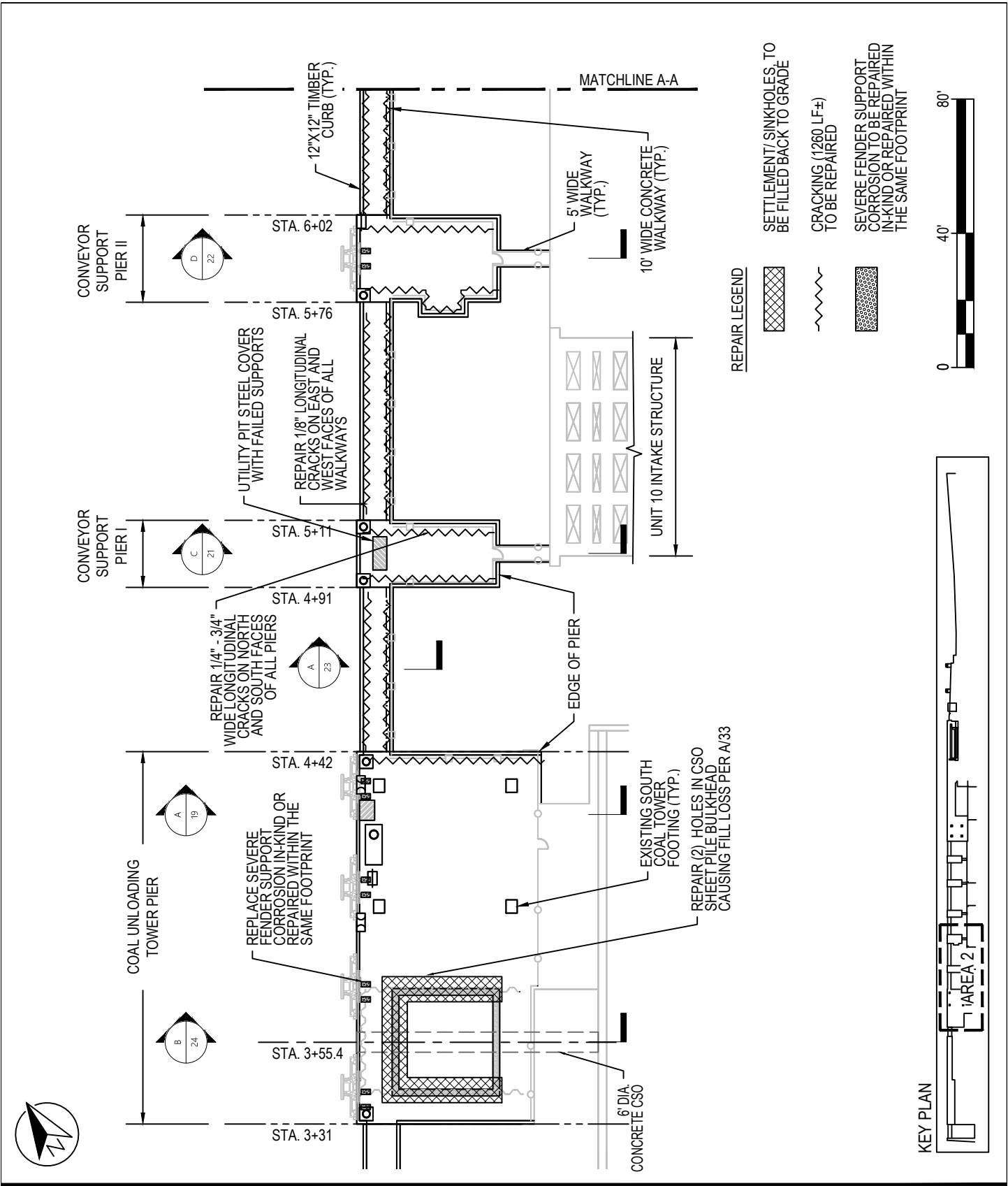
CHK'D BY: AH/AA

SCALE:AS NOTED

DRAWING NO:

14 OF 37

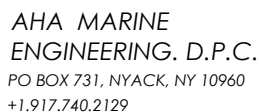
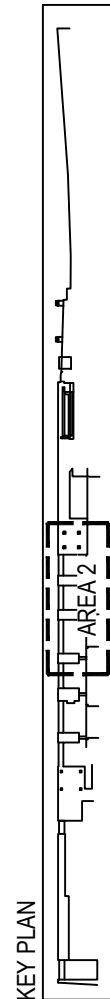
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AHA MARINE
ENGINEERING, D.P.C.
PO BOX 731, NYACK, NY 10960
+1.917.740.2129

PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
COAL TOWER, TRANSFER TOWER AND CONVEYOR
SUPPORT SUPERSTRUCTURE PLAN I
PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA
SCALE: AS NOTED
DRAWING NO:
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PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
COAL TOWER, TRANSFER TOWER AND CONVEYOR
SUPPORT SUPERSTRUCTURE PLAN II

SCALE:AS NOTED

DRAWING NO:

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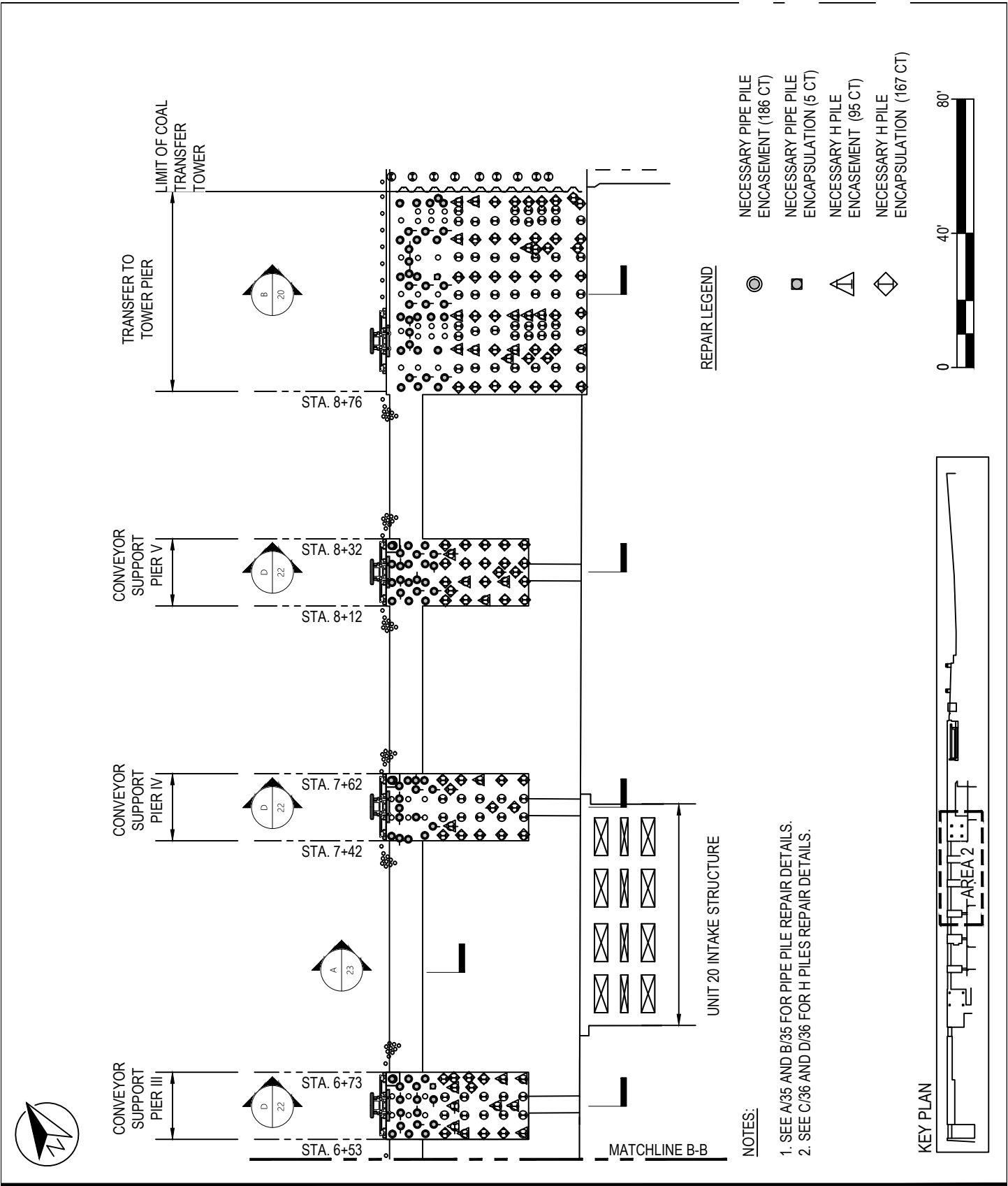
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PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

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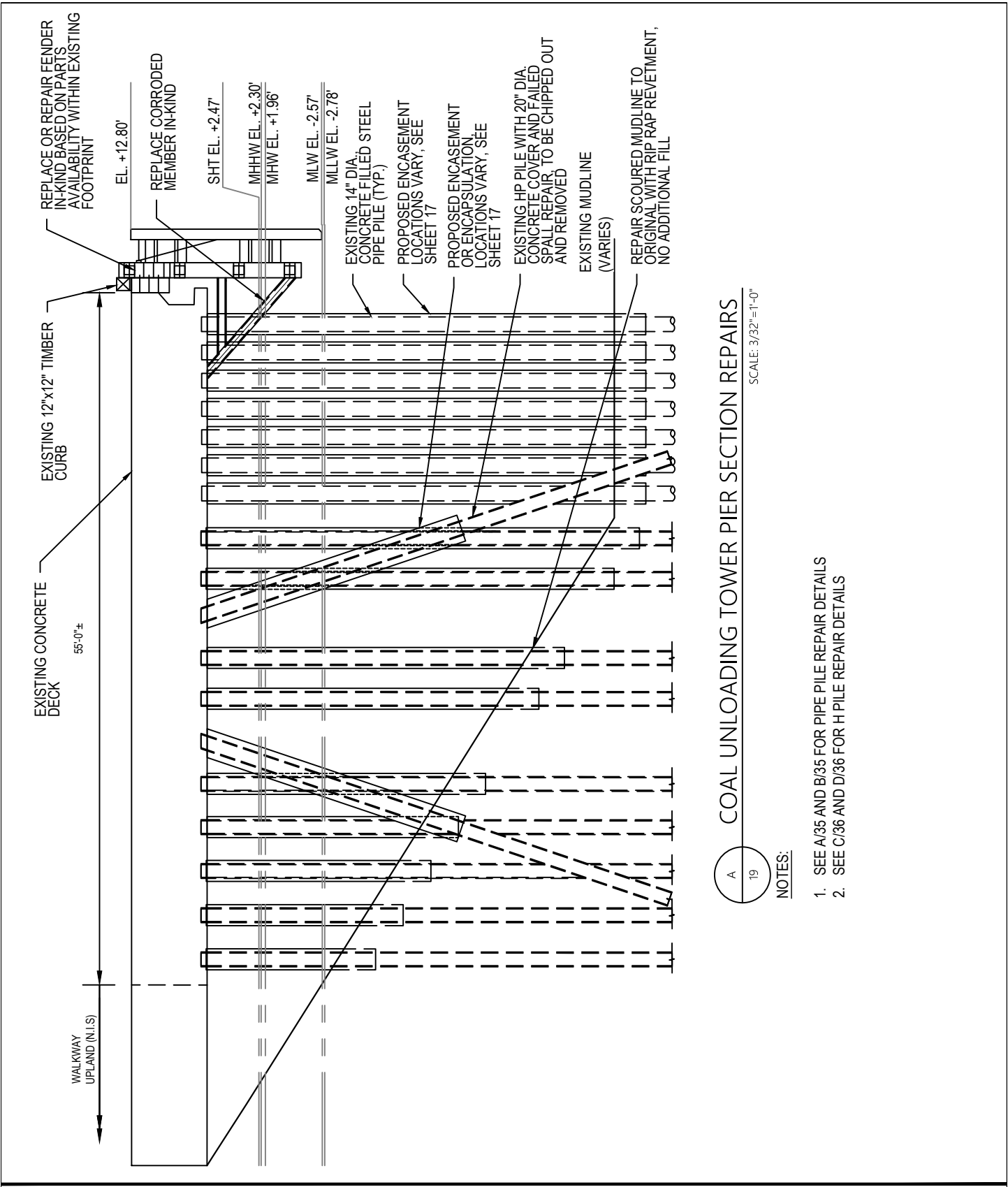


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PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
COAL TOWER, TRANSFER TOWER AND CONVEYOR
SUPPORT SUBSTRUCTURE PLAN II
PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA
SCALE: AS NOTED
DRAWING NO:
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PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

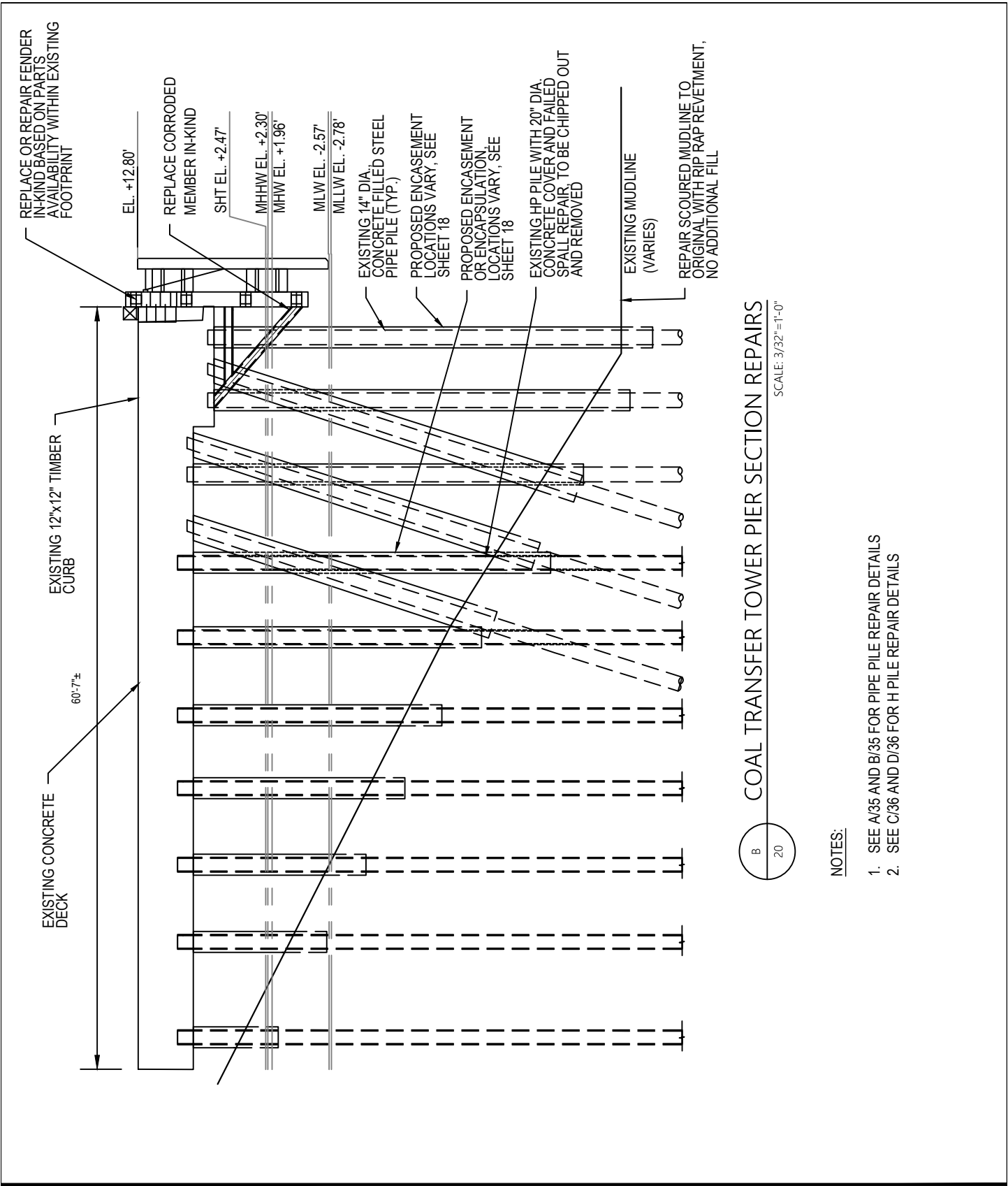
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PROJ. NO: 23090
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CHK'D BY: AH/AA

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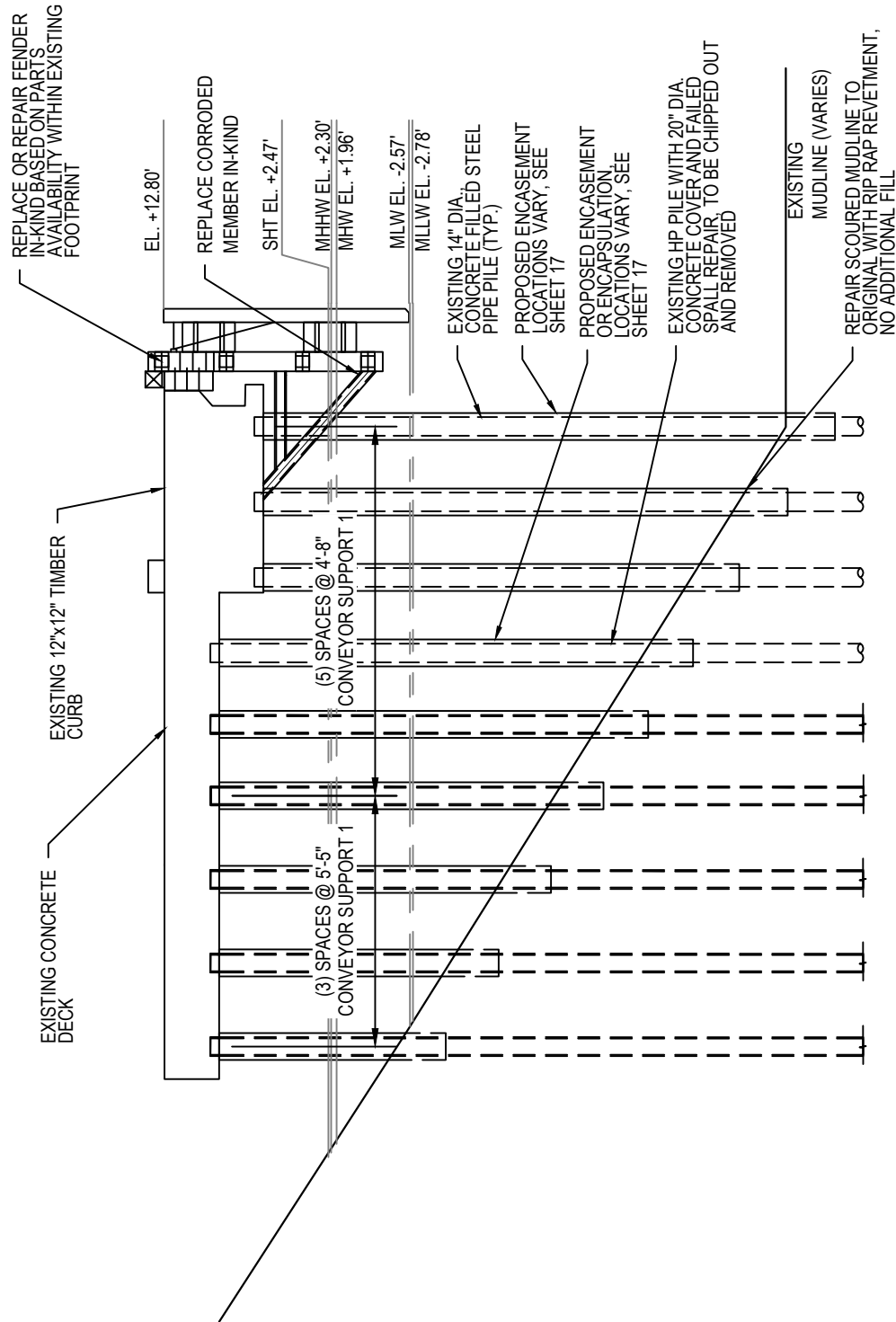
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 AHA MARINE ENGINEERING, D.P.C. PO BOX 731, NYACK, NY 10960 +1.917.740.2129	PROJECT TITLE: WATERFRONT MAINTENANCE PROGRAM LOCATED AT RAVENSWOOD GENERATING STATION 38-54 VERNON BLVD, LIC, NY 11101 PREPARED FOR RAVENSWOOD OPERATIONS, LLC 38-54 VERNON BLVD, LIC, NY 11101		SHEET TITLE: TRANSFER TOWER SECTION	
	PROJ. NO: 23090		SCALE: AS NOTED	
	DATE: 04.09.25		DRAWING NO:	
	DRAWN BY: DDP/AL		20 OF 37	
CHK'D BY: AH/AA				

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C 21

CONVEYOR SUPPORT PIER I SECTION REPAIRS

SCALE: 3/32" = 1'-0"

NOTES:

- 1. SEE A/35 AND B/35 FOR PIPE PILE REPAIR DETAILS
- 2. SEE C/36 AND D/36 FOR H PILE REPAIR DETAILS



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PROJECT TITLE:
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LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
COAL TOWER SUPPORT SECTION

PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA

SCALE: AS NOTED
DRAWING NO:

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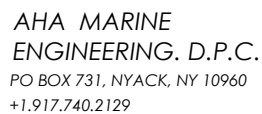


SCALE: 3/32"=1'-0"

CONVEYOR SUPPORT PIER II, III, IV, V SECTION REPAIRS

NOTES:

1. SEE A/35 AND B/35 FOR PIPE PILE REPAIR DETAILS
2. SEE C/36 AND D/36 FOR H PILE REPAIR DETAILS



PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

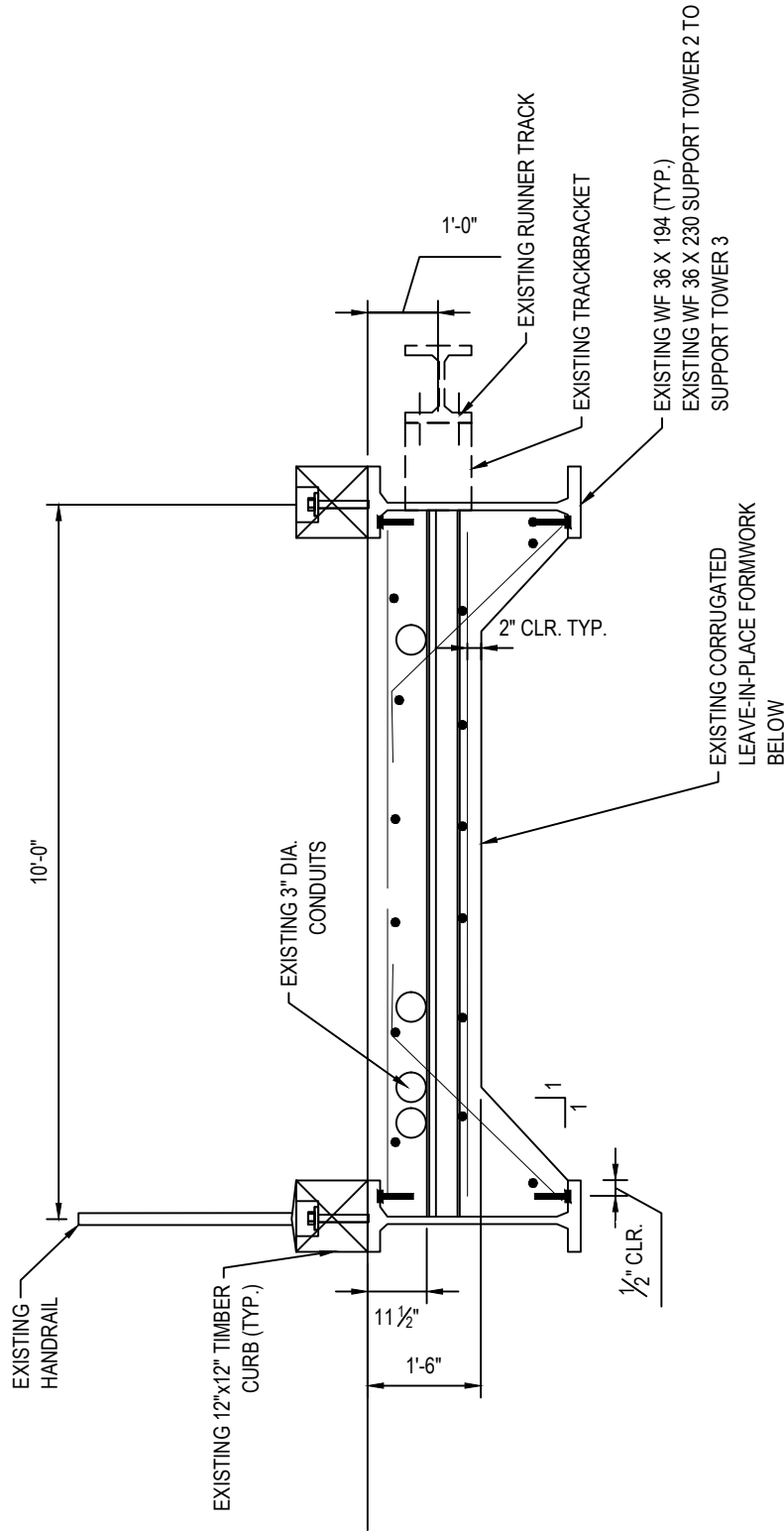
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TYPICAL COAL TOWER SUPPORT SECTION

PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA

SCALE:AS NOTED

DRAWING NO:

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A
23
WALKWAY BETWEEN TOWER SECTIONS
SCALE: 3/8"=1'-0"

NOTES:

- 1. WALKWAYS ARE LOCATED BETWEEN THE FOLLOWING:
 - 1.1. COAL TOWER AND SUPPORT TOWER I
 - 1.2. SUPPORT TOWER I TO II, II TO III, III TO IV, IV TO V
 - 1.3. SUPPORT TOWER IV TO TRANSFER TOWER



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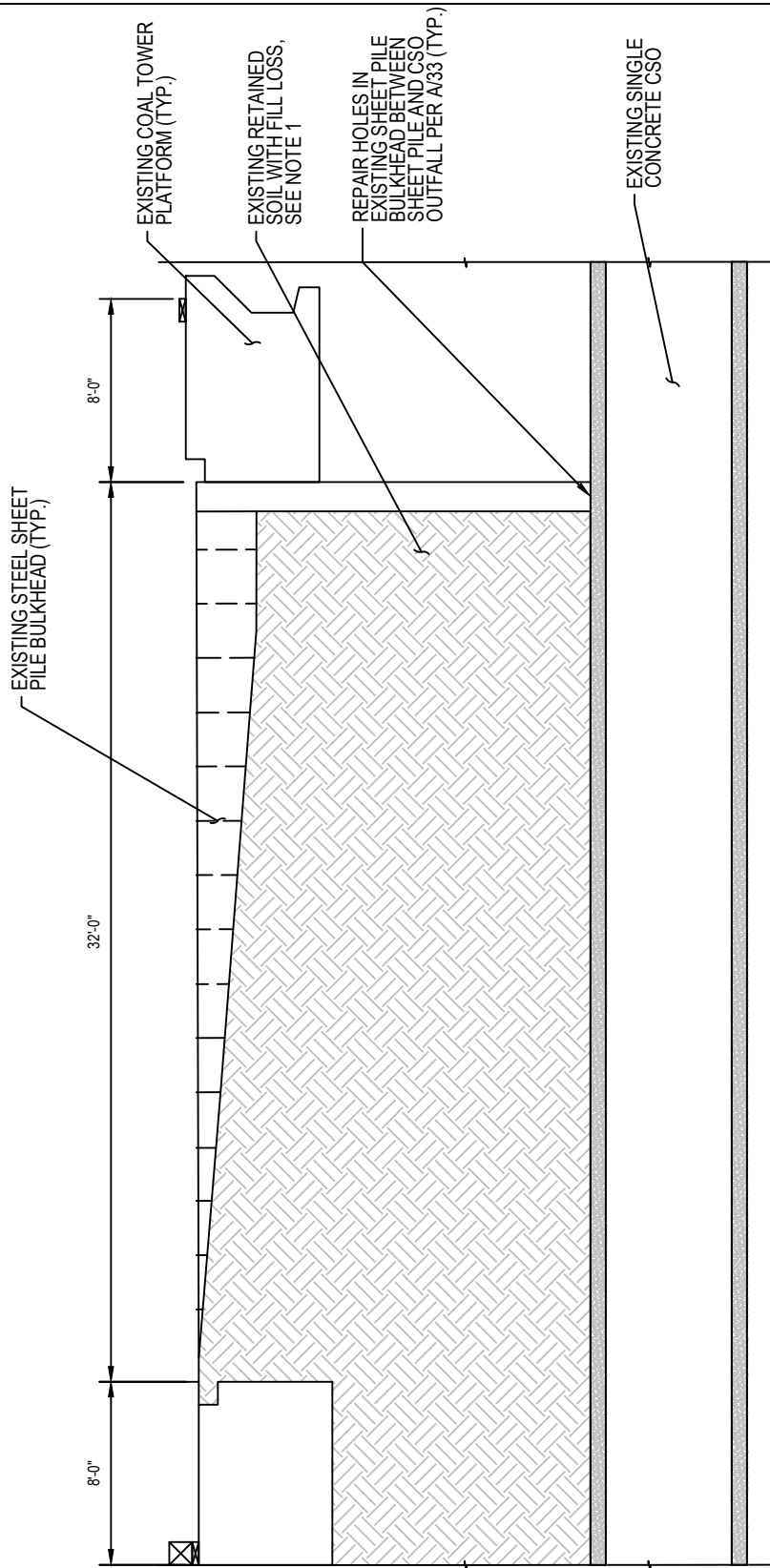
PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
TYPICAL WALKWAY SECTION

PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA

SCALE: AS NOTED
DRAWING NO:
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SINGLE CSO OUTFALL BELOW COAL TOWER SECTION REPAIRS

SCALE: 1/8"=1'-0"

NOTES:

1. BACKFILL AS NEEDED AFTER SHEETPILE BULKHEAD HAS BEEN REPAIRED.

B 24



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PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
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38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
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SHEET TITLE:

SINGLE CSO OUTFALL

PROJ. NO: 23090

DATE: 04.09.25

DRAWN BY: DDP/AL

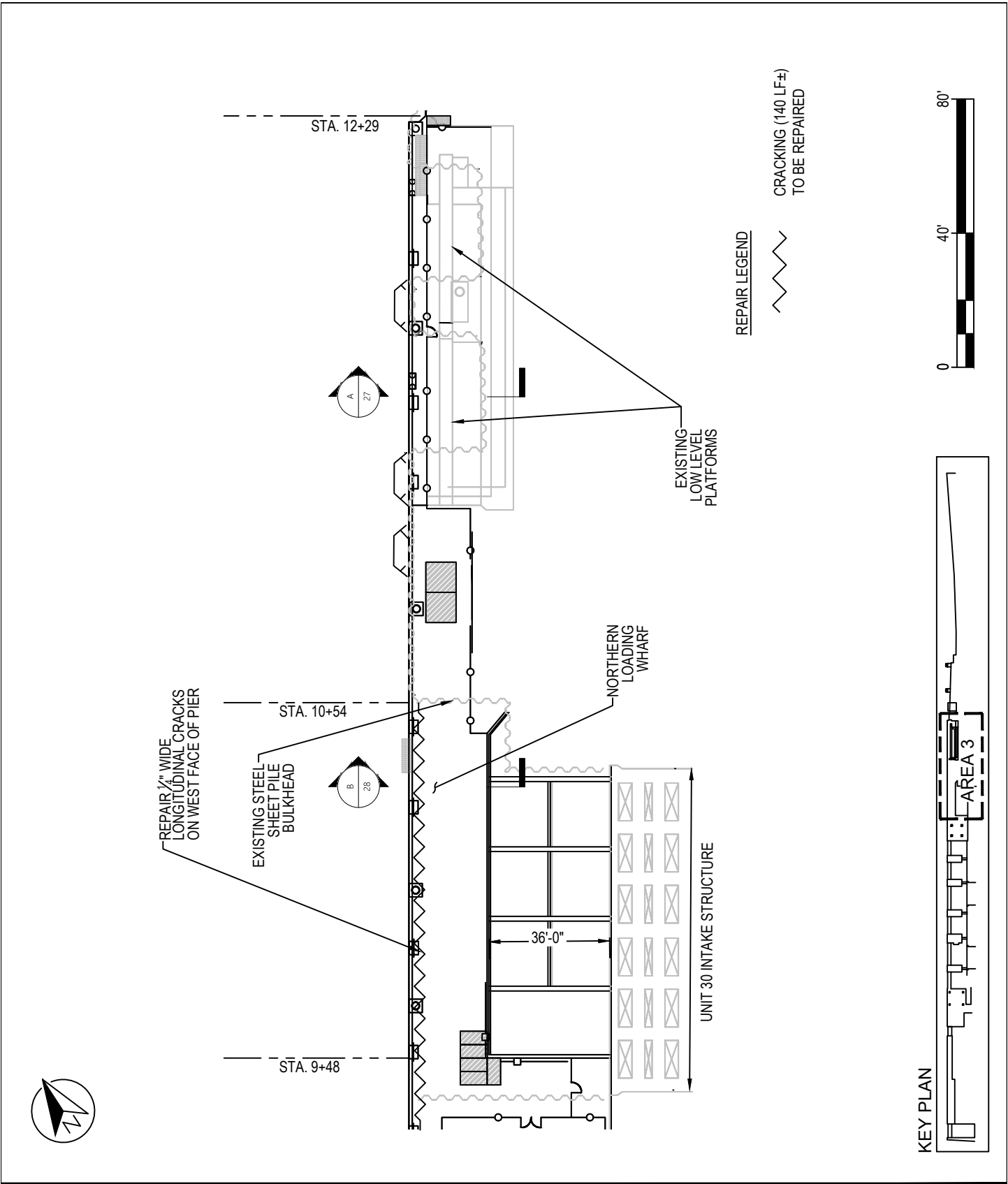
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SCALE: AS NOTED

DRAWING NO:

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KEY PLAN



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PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
NORTH REFUELING STATION
SUPERSTRUCTURE PLAN I

PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA

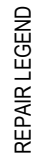
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DRAWING NO:

25 OF 37



PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD. LIC. NY 11101

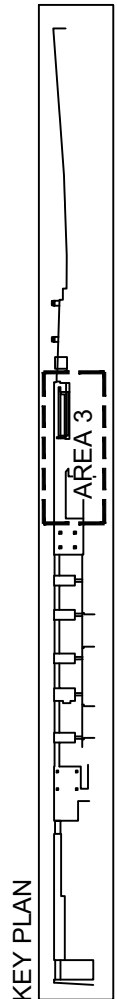
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- | | |
|---|---|
|  | NECESSARY PIPE PILE
ENCASEMENT (86 CT) |
|  | NECESSARY H PILE
ENCASEMENT (17 CT) |
|  | NECESSARY H PILE
ENCAPSULATION (31 CT) |

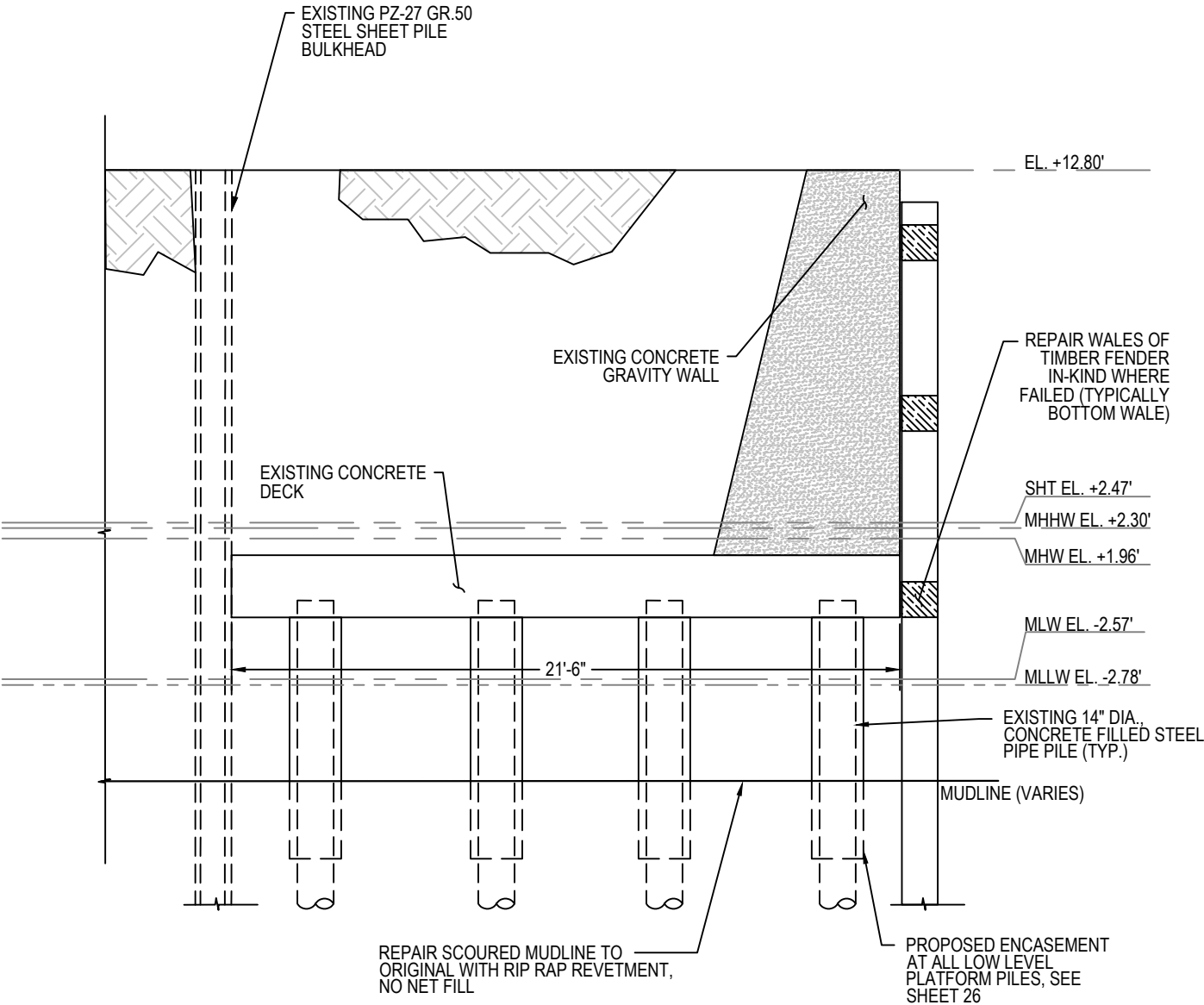
NOTES:

1. SEE A/35 AND B/35 FOR PIPE PILE REPAIR DETAILS.
2. SEE C/36 AND D/36 FOR H PILE REPAIR DETAILS.



KEY PLAN





A
27

PILE SUPPORTED LOW LEVEL PLATFORM SECTION REPAIRS

SCALE: 3/16"=1'-0"

NOTES:

1. SEE A/35 AND B/35 FOR PIPE PILE REPAIR DETAILS.
2. TOP & BOTTOM OF LOW LEVEL PLATFORM IS APPROXIMATED BASED ON FIELD OBSERVATIONS.



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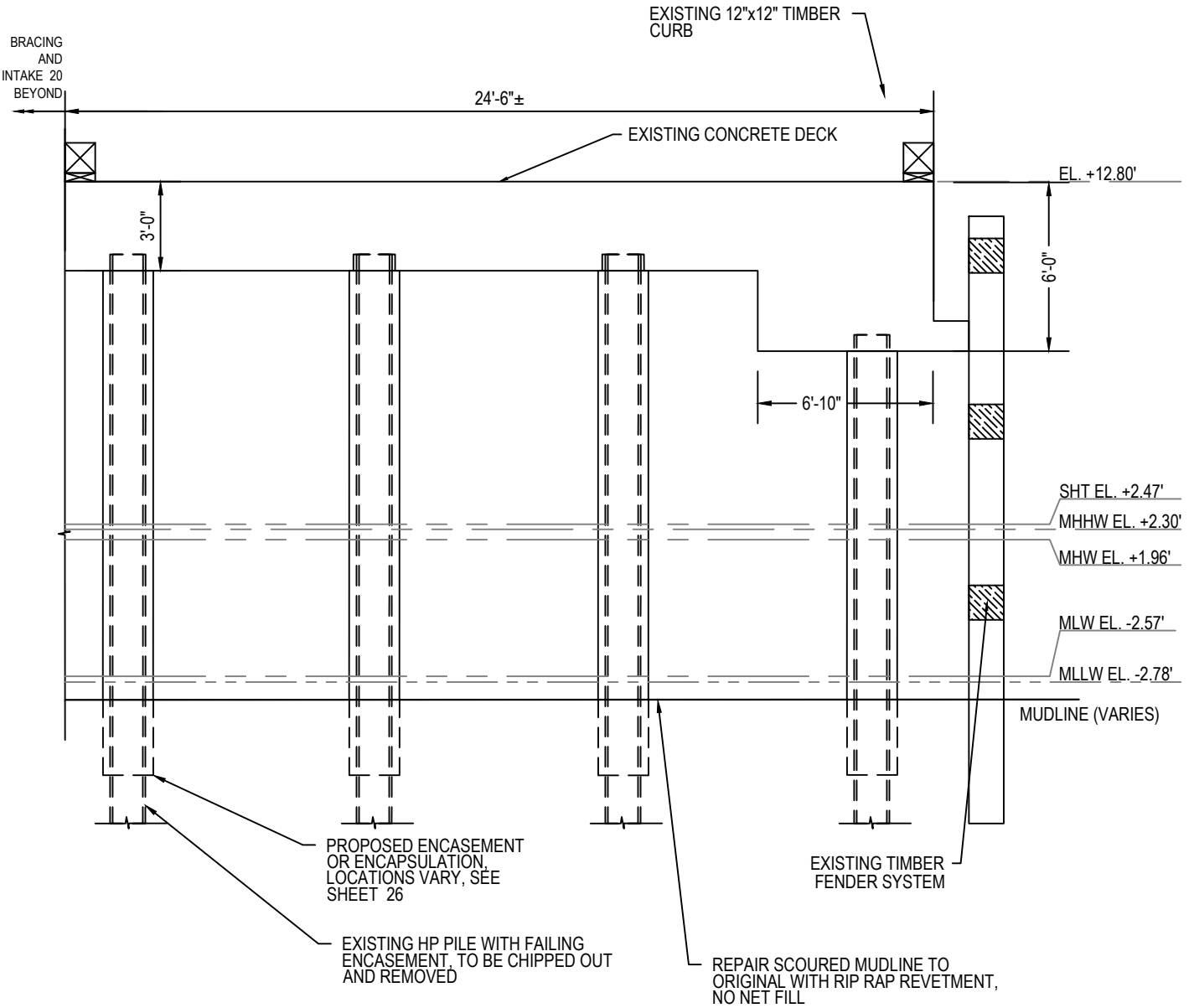
PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
TYPICAL SECTION AND PILE SUPPORTED LOW
LEVEL PLATFORM

PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA

SCALE: AS NOTED
DRAWING NO:

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B
28

PILE SUPPORTED WHARF AT REFUELING STATION SECTION REPAIRS

SCALE: 3/16"=1'-0"

NOTES:

1. SEE C/36 AND D/36 FOR H-PILE REPAIR DETAILS.



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WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
TYPICAL SECTION OF PILE SUPPORTED WHARF AT
NORTHERN REFUELING SECTION
PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA
SCALE: AS NOTED
DRAWING NO:
28 OF 37

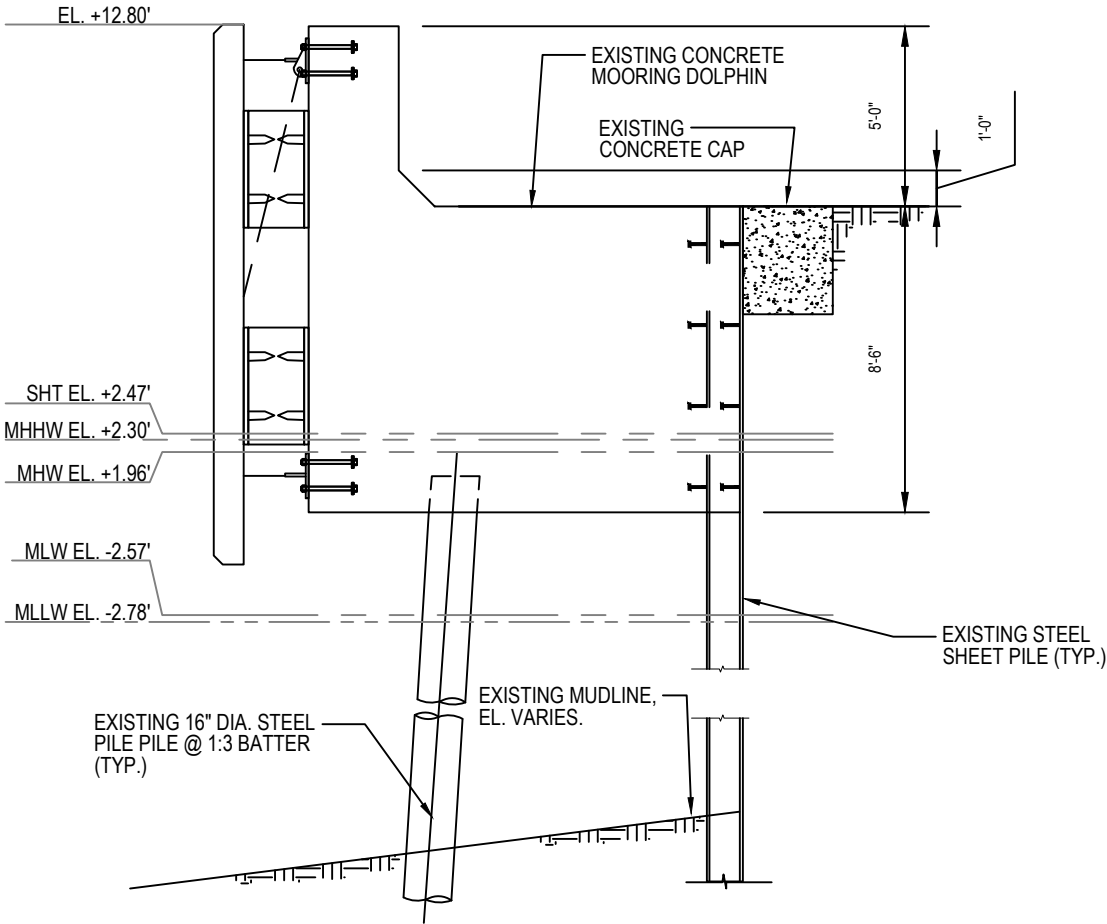


SHEET TITLE:
LEMON CREEK MANIFOLD AREA PLAN

PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA

SCALE:AS NOTED
DRAWING NO:

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A

30

MOORING DOLPHIN SECTION REPAIRS

SCALE: 3/16"=1'-0"

NOTES:

1.
- ALL MOORING PILES SHALL BE INSTALLED WITH CATHODIC PROTECTION. WHERE CATHODIC PROTECTION EXISTS, REPLACE IN KIND.
2.
- PILES SHALL BE RECOATED ABOVE MLW WHERE EXISTING COATING HAS BEEN CORRODED.



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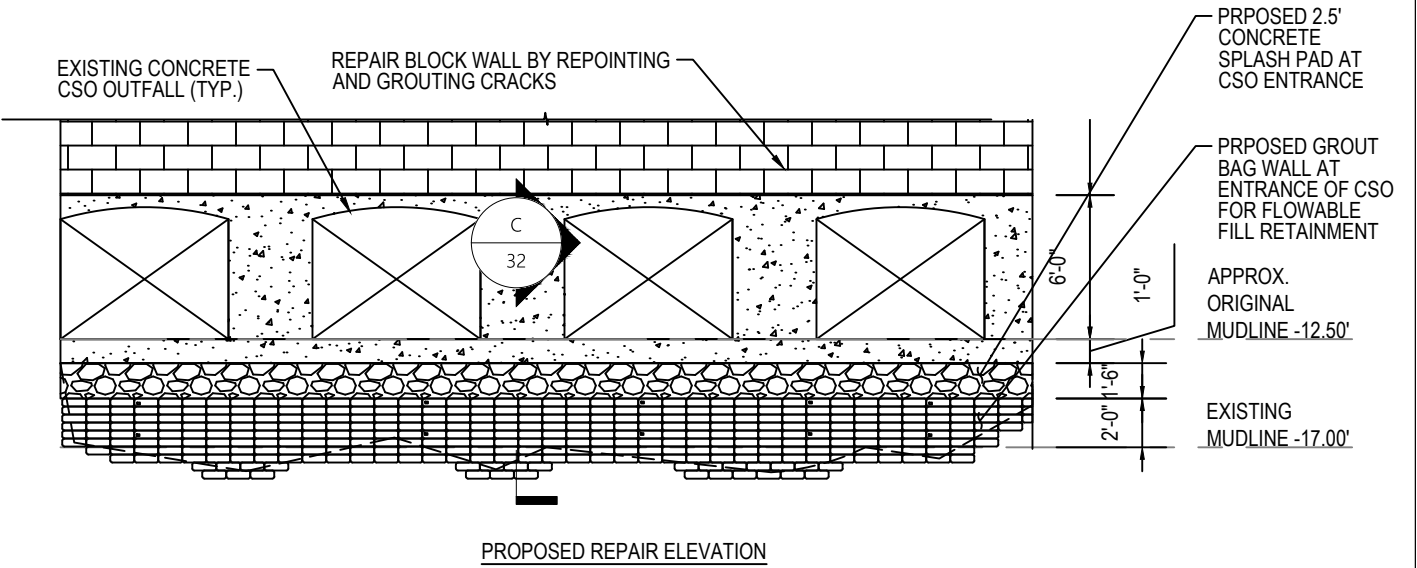
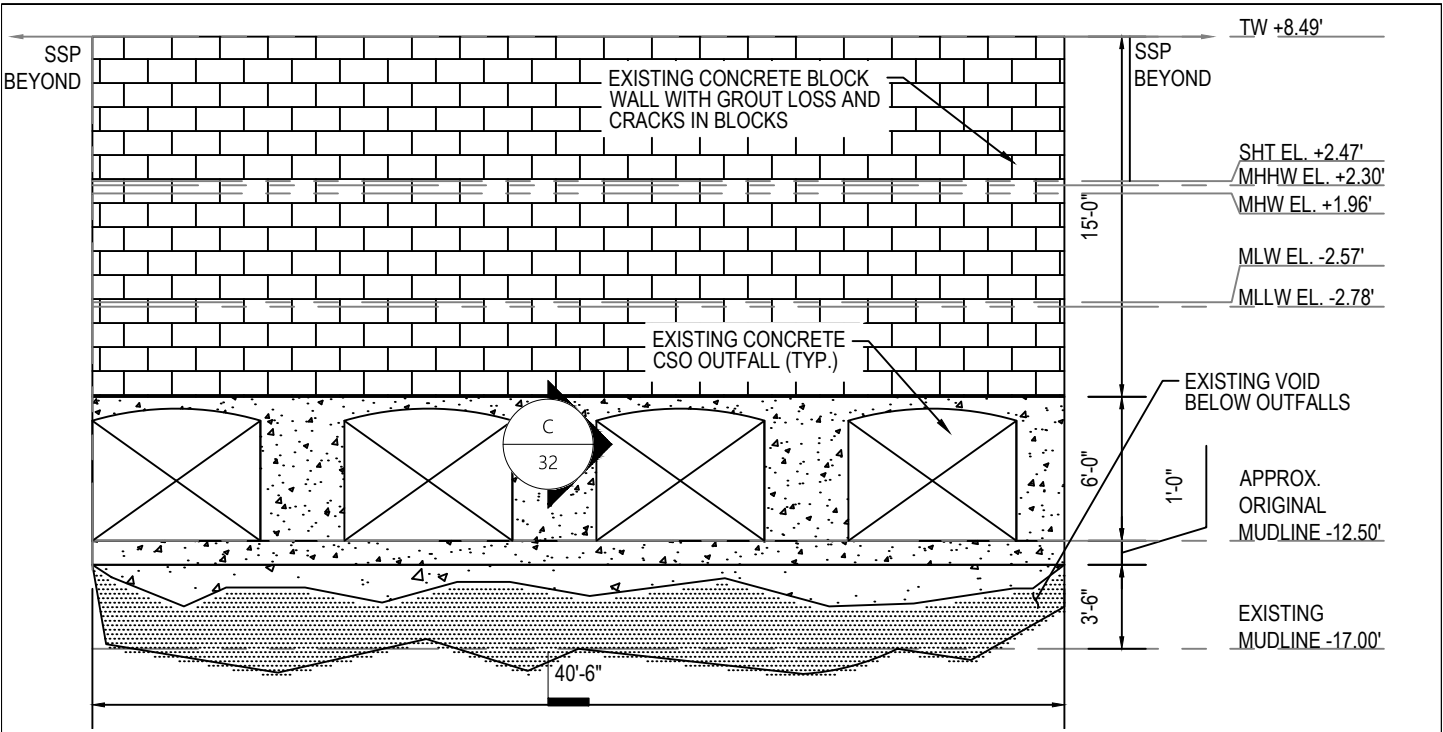
PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
TYPICAL MOORING DOLPHIN SECTION

PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA

SCALE: AS NOTED
DRAWING NO:

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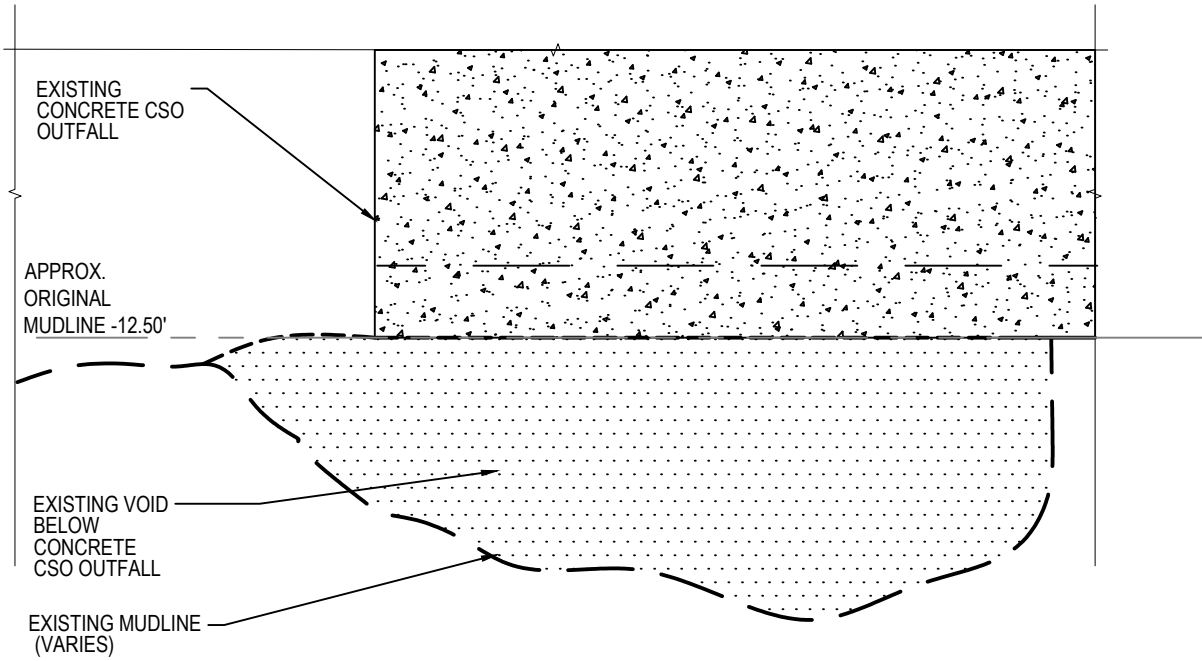


B 31 GRANITE BLOCKWALL ELEVATIONS N.T.S.

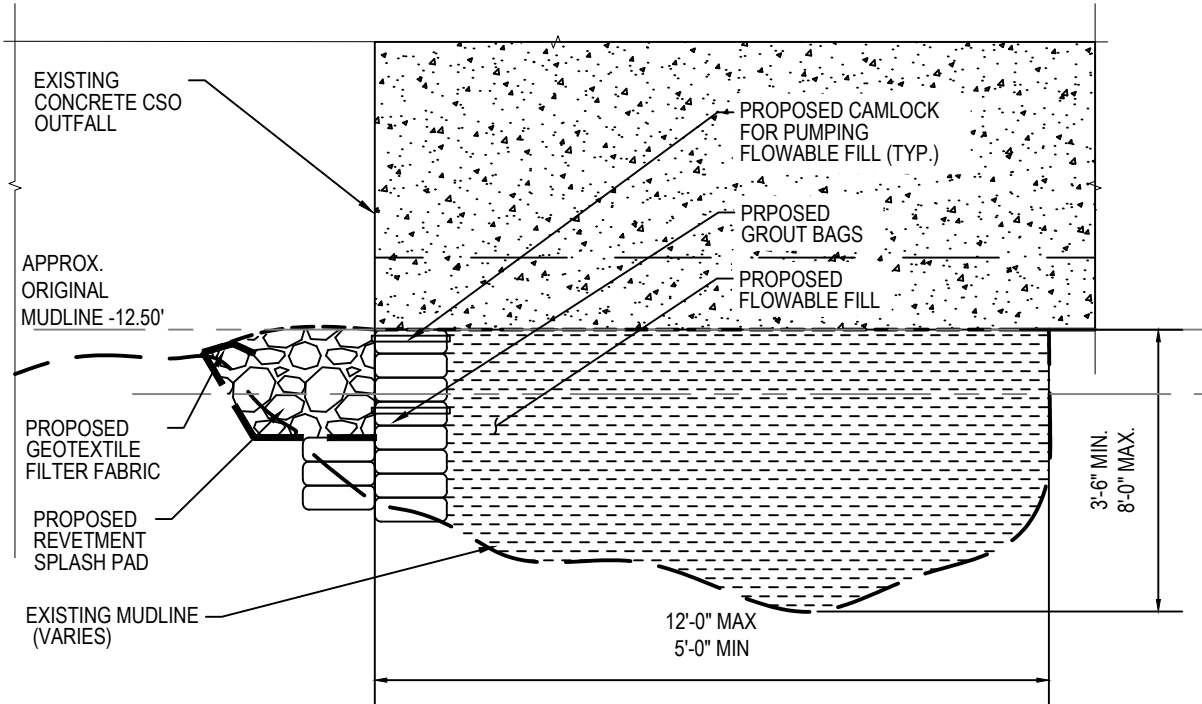
NOTES:

1. PROPOSED SECTION HAS BEEN TRUNCATED FOR SIMPLICITY. SEE EXISTING SECTION FOR FULL ELEVATION BREAKDOWN.

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		PROJ. NO: 23090	SCALE: AS NOTED
		DATE: 04.09.25	DRAWING NO:
		DRAWN BY: DDP/AL	31 OF 37
CHK'D BY: AH/AA			



EXISTING SECTION



PROPOSED REPAIR SECTION



GRANITE BLOCKWALL SECTIONS

N.T.S.



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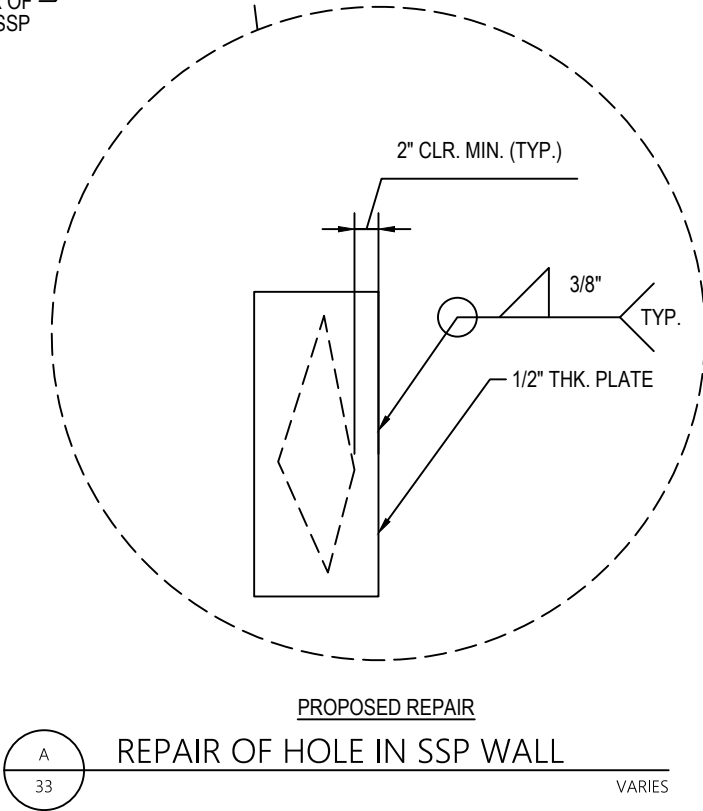
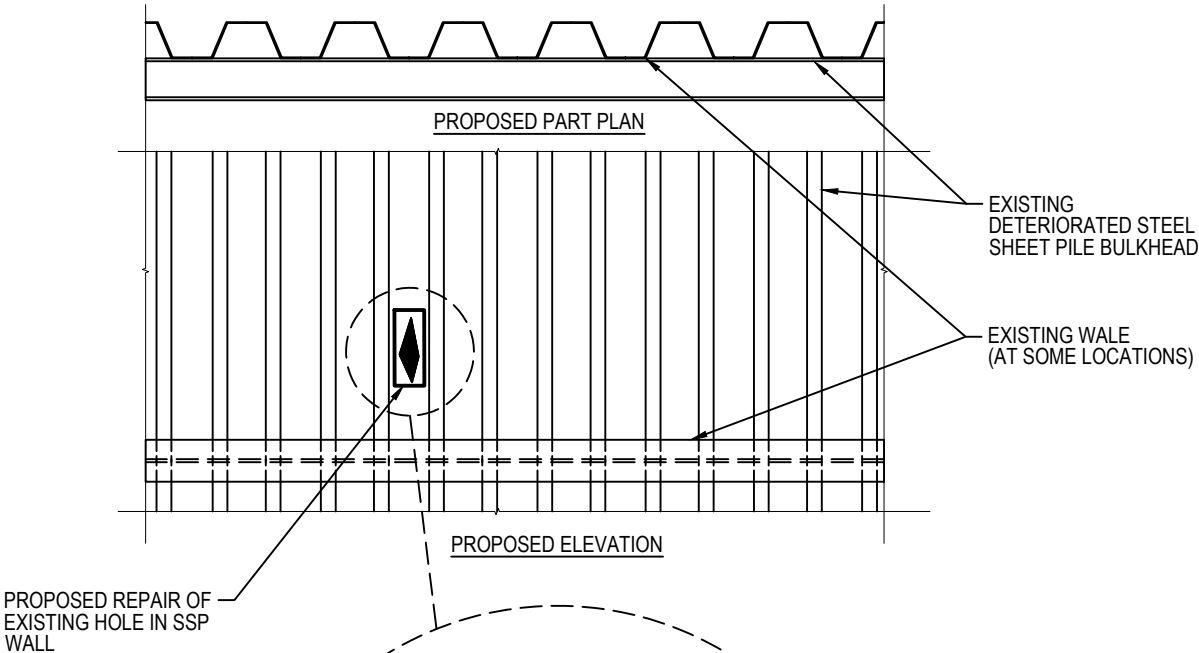
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WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
GRANITE BLOCKWALL REPAIR- SECTION

PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA

SCALE: AS NOTED
DRAWING NO:

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- NOTES:
1. PRIOR TO WELDING PROPOSED PLATE TO FACE OF EXISTING STEEL SHEET PILE, CONTRACTOR TO CLEAN WELD SURFACE TO SSPC-SP2 OR SSPC-SP3.
 2. WHERE WELDING IS CONDUCTED UNDERWATER OR WITHIN THE TIDAL ZONE, A DIVER SHALL PERFORM THE REPAIR WITH THE APPROPRIATE UNDERWATER WELDING EQUIPMENT.



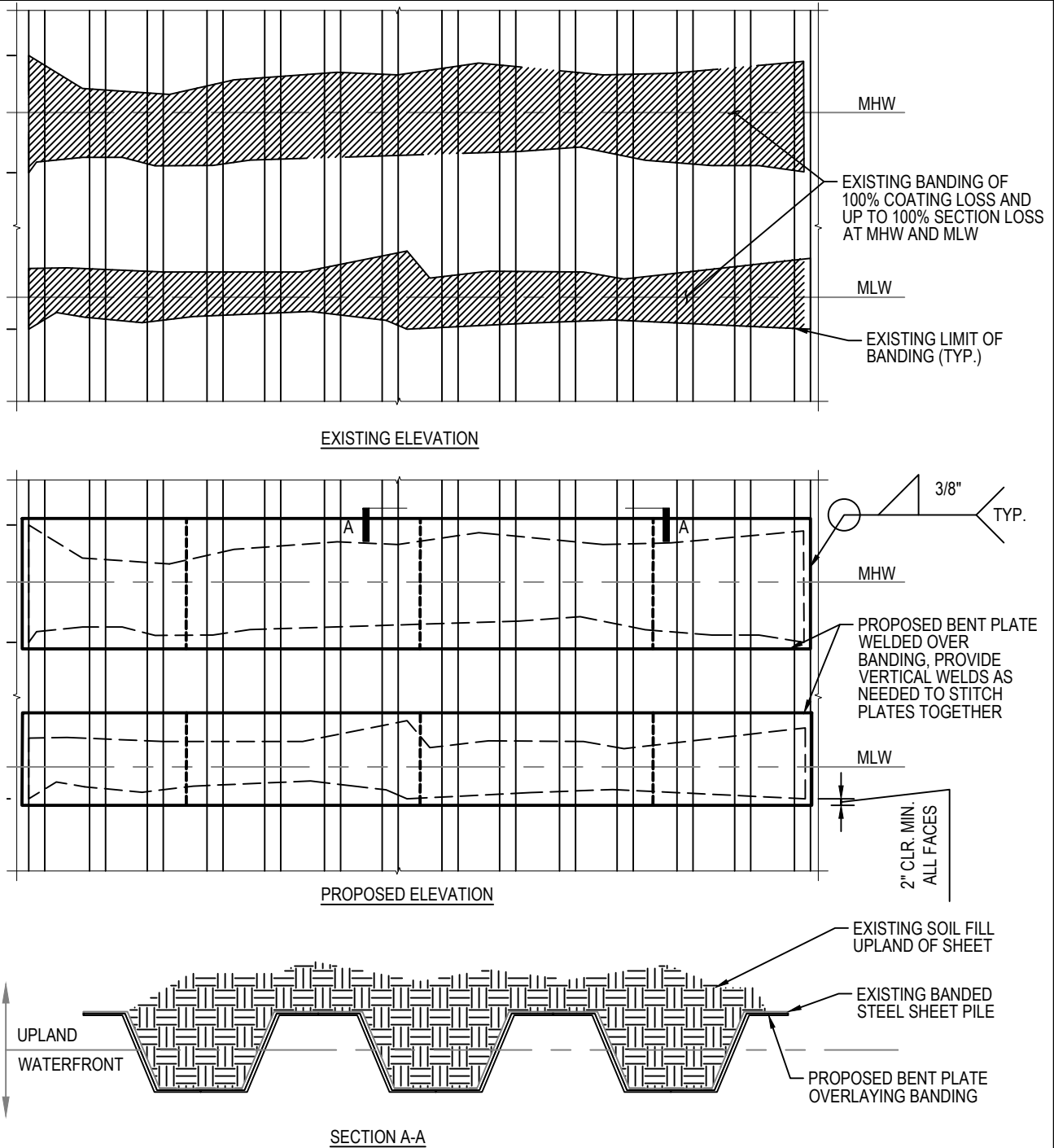
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PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
REPAIR OF HOLE IN SHEET PILE WALL

PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA

SCALE: AS NOTED
DRAWING NO:
33 OF 37



B
34

REPAIR OF BANDING IN SSP WALL

NTS

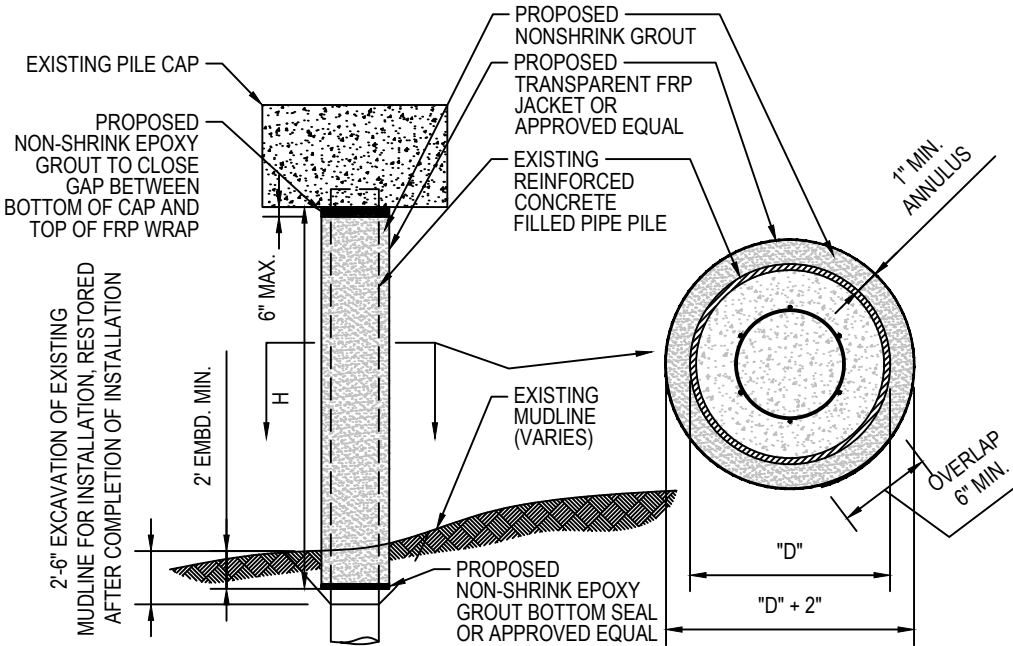
- NOTES:
1. ALL SSP SHALL BE CLEANED TO AT THE MINIMUM, SSPC-2/SSPC-3 PRIOR TO INSTALLATION OF THE BENT PLATE.
 2. WHERE WELDING IS CONDUCTED UNDERWATER OR WITHIN THE TIDAL ZONE, A DIVER SHALL PERFORM THE REPAIR WITH THE APPROPRIATE UNDERWATER WELDING EQUIPMENT.



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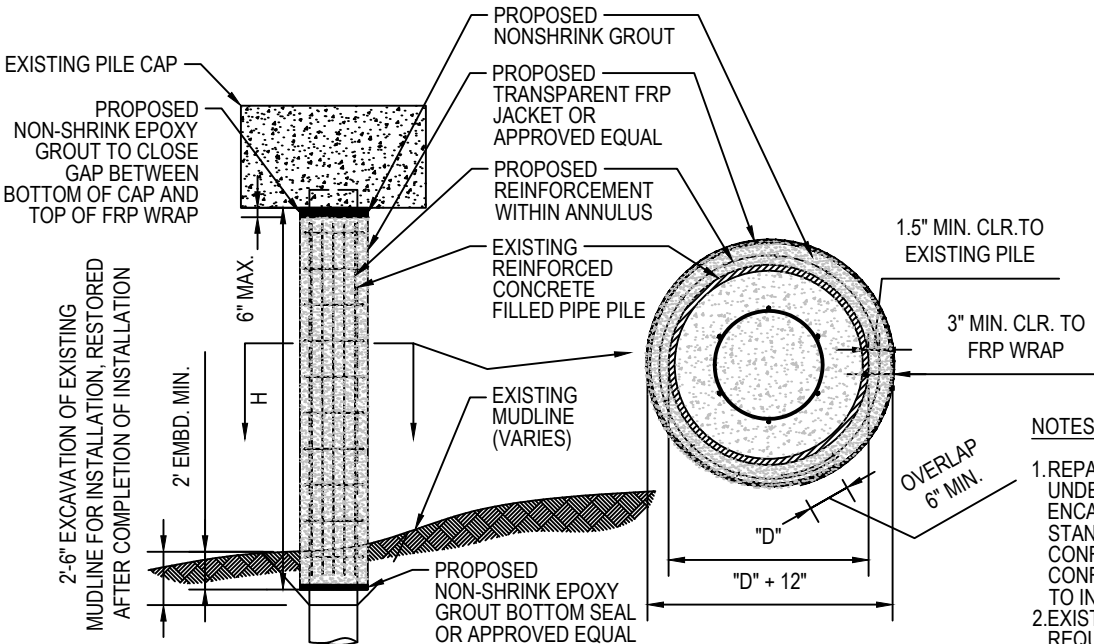
PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE:
REPAIR OF SEVERE SECTION LOSS IN SHEET PILE
WALL
PROJ. NO: 23090
DATE: 04.09.25
DRAWN BY: DDP/AL
CHK'D BY: AH/AA
SCALE: AS NOTED
DRAWING NO:
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- NOTES:
1. REPAIR INTENDED FOR CONCEPTUAL UNDERSTANDING ONLY, FRP ENCASEMENT DETAILS INCLUDING STANDOFFS, SEAM OVERLAPS, AND CONFINEMENT BANDING TO BE CONFIRMED BY MANUFACTURE PRIOR TO INSTALLATION.
 2. EXISTING FAILED ENCASEMENT WILL REQUIRE REMOVAL PRIOR TO INSTALLATION OF NEW ENCAPSULATION.
 3. "D" IS EXPECTED TO BE APPROXIMATELY 14" O.D. X 1/2" THK.

A
35
TYPICAL PIPE PILE ENCAPSULATION
SCALE: 3/16" = 1'-0"



- NOTES:
1. REPAIR INTENDED FOR CONCEPTUAL UNDERSTANDING ONLY, FRP ENCASEMENT DETAILS INCLUDING STANDOFFS, SEAM OVERLAPS, AND CONFINEMENT BANDING TO BE CONFIRMED BY MANUFACTURE PRIOR TO INSTALLATION.
 2. EXISTING FAILED ENCASEMENT WILL REQUIRE REMOVAL PRIOR TO INSTALLATION OF NEW ENCASEMENT.
 3. "D" IS EXPECTED TO BE APPROXIMATELY 14" O.D. X 1/2" THK.
 4. ALL BARS SHALL BE EPOXY COATED UNLESS OTHERWISE NOTED.

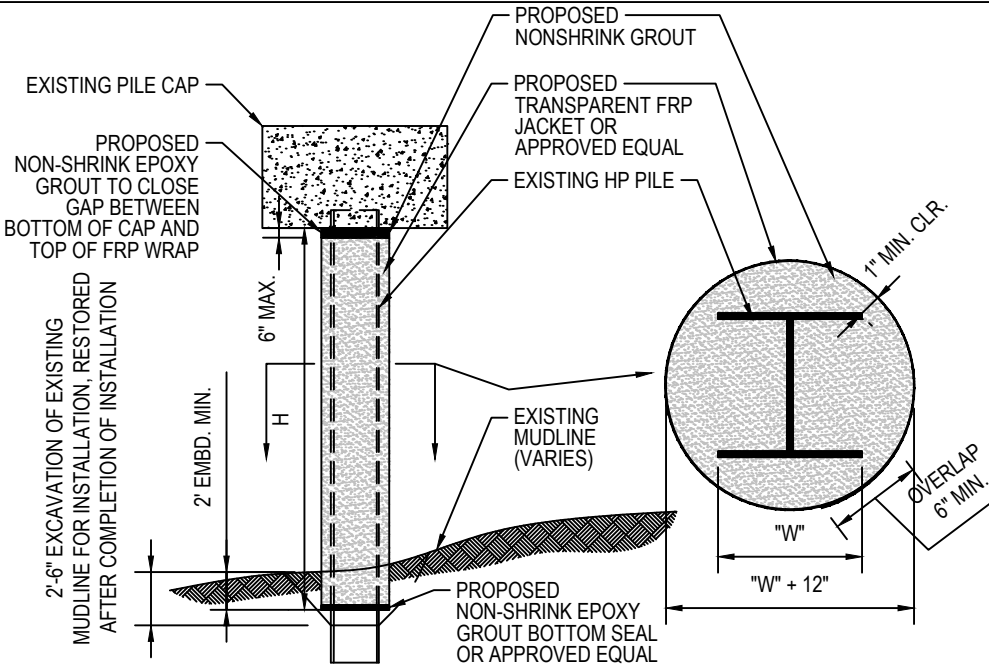
B
35
TYPICAL PIPE PILE ENCASEMENT
SCALE: 3/16" = 1'-0"



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PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE: PILE REPAIR DETAILS I	
PROJ. NO: 23090	SCALE: AS NOTED
DATE: 04.09.25	DRAWING NO:
DRAWN BY: DDP/AL	35 OF 37
CHK'D BY: AH/AA	



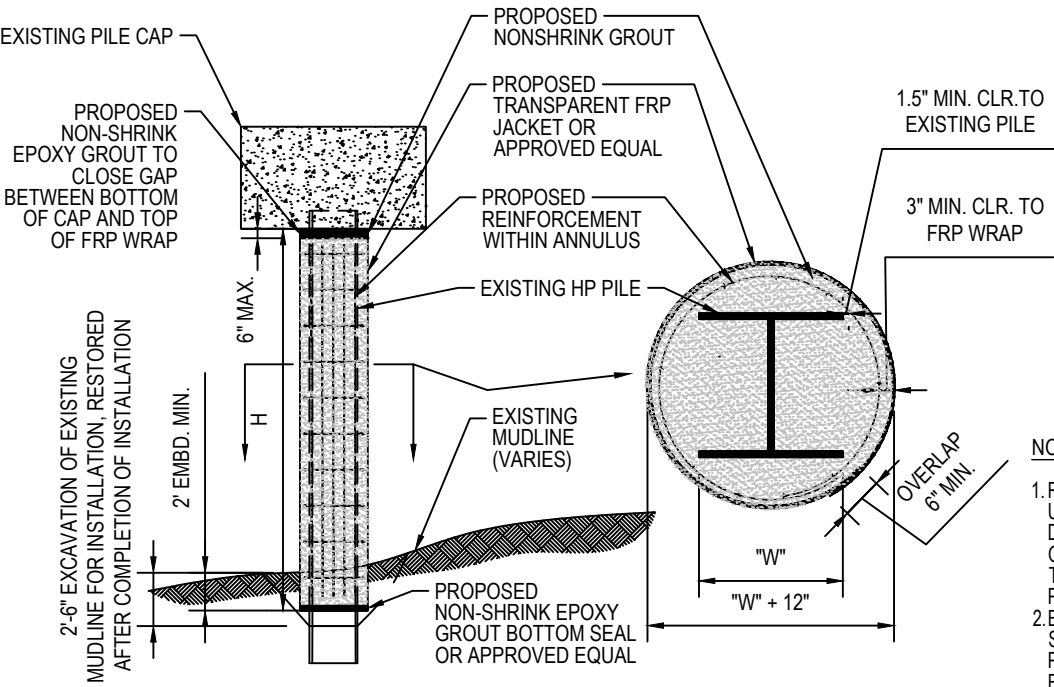
- NOTES:
- REPAIR INTENDED FOR CONCEPTUAL UNDERSTANDING ONLY, FRP ENCASEMENT DETAILS INCLUDING STANDOFFS, SEAM OVERLAPS, AND CONFINEMENT BANDING TO BE CONFIRMED BY MANUFACTURE PRIOR TO INSTALLATION.
 - EXISTING CONCRETE COVER WITH FAILING SPALL REPAIR WILL REQUIRE REMOVAL PRIOR TO INSTALLATION OF PROPOSED ENCASEMENT.
 - W IS EXPECTED TO BE APPROXIMATELY 14".
 - EXISTING ENCASEMENT SHALL BE REMOVED PRIOR TO INSTALLATION OF PROPOSED ENCASEMENT.

C

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TYPICAL HP PILE ENCAPSULATION

SCALE: 3/16" = 1'-0"



- NOTES:
- REPAIR INTENDED FOR CONCEPTUAL UNDERSTANDING ONLY, FRP ENCASEMENT DETAILS INCLUDING STANDOFFS, SEAM OVERLAPS, AND CONFINEMENT BANDING TO BE CONFIRMED BY MANUFACTURE PRIOR TO INSTALLATION.
 - EXISTING CONCRETE COVER WITH FAILING SPALL REPAIR WILL REQUIRE REMOVAL PRIOR TO INSTALLATION OF PROPOSED ENCASEMENT.
 - W IS EXPECTED TO BE APPROXIMATELY 14".
 - ALL BARS SHALL BE EPOXY COATED UNLESS OTHERWISE NOTED.

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TYPICAL HP PILE ENCASEMENT

SCALE: 3/16" = 1'-0"



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PROJECT TITLE:
WATERFRONT MAINTENANCE PROGRAM
LOCATED AT
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD, LIC, NY 11101
PREPARED FOR
RAVENSWOOD OPERATIONS, LLC
38-54 VERNON BLVD, LIC, NY 11101

SHEET TITLE: PILE REPAIR DETAILS II	
PROJ. NO: 23090	SCALE: AS NOTED
DATE: 04.09.25	DRAWING NO:
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REPAIR	QTY	UNIT	ADD'L NOTES
<u>PILE</u>			
PIPE PILE ENCASEMENT	378	EA	
PIPE PILE ENCAPSULATION	5	EA	
H-PILE ENCASEMENT	112	EA	
H-PILE ENCAPSULATION	198	EA	
ANODE INSTALLATION OR REPLACEMENT	6	EA	(2) MOORING DOLPHINS & MANIFOLD
<u>SHEET PILE</u>			
HOLE REPAIR	58.16	SF	ASSUMES 10% LF OF SHEETING REQUIRES HOLE REPAIR, HEIGHT IS MAXIMUM HEIGHT OF HOLE OBSERVED (3')
BANDING REPAIR	175	SF	DETERMINED BASED ON MAXIMUM HEIGHT OF BANDING OBSERVED (3')
SHEET PILE – CONCRETE CLOSURE	2	SF	OBSERVED AT COAL TOWER SINGLE CSO ONLY
CLEANING AND RECOATING SSP ABOVE MLW	601	LF	INCLUDES LEMON CREEK MANIFOLD, PLANT DISCHARGE AND SOUTHERN WHARF
<u>PILE CAP</u>			
CRACKING AT FACE OF PILE CAP	1400	LF	
<u>MUDLINE</u>			
SCOUR PROTECTION	0.45	ACRE	RESTORATION TO ORIGINAL SHORELINE LEVEL ONLY, NO ADDITIONAL FILL TO BE ADDED.
UNDERMINING OF CSO	90	CY	APPROXIMATED BASED ON FIELD MEASUREMENTS AND INSPECTION REPORTS.
<u>STEEL</u>			
FENDER FRAME REPLACEMENT	720	LF	ASSUMES 40 LF OF STEEL/FENDER
REPLACEMENT OF STEEL BRACING	210	LF	STEEL SIZE VARIES
PROPOSED ADD'L STEEL BRACING	450	LF	STEEL SIZE VARIES
<u>MISC.</u>			
CYLINDRICAL FENDER/FENDER HARDWARE REPLACEMENT	3	EA	LEMON CREEK MANIFOLD ONLY, IF REPLACEMENT IS REQUIRED IT SHALL BE IN-KIND. NO ADDITIONAL FILL SHALL BE ADDED TO THE WATERWAY IF ALTERNATES ARE REQUIRED.
BLOCK WALL REPOINTING AND GROUTING	41	LF	
TIMBER WALE REPLACEMENT	50	LF	



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SHEET TITLE:
SUMMARY OF WORK

PROJ. NO: 23090

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