



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT  
7400 LEAKE AVENUE  
NEW ORLEANS LA 70118-3651

June 10, 2024

Regulatory Division  
Central Evaluation Branch

Project Manager: Kenny Blanke  
(504) 862-1217  
Kenneth.G.Blanke@usace.army.mil

Application #: MVN-2023-000647-CQ  
408 Application #: 2023-0680

## **PUBLIC NOTICE**

Interested parties are hereby notified that a permit application has been received by the U.S. Army Corps of Engineers (USACE), New Orleans District (CEMVN) pursuant to: [ X ] Section 10 of the Rivers and Harbors Act of March 3, 1899 (30 Stat. 1151; 33 USC 403); and/or [ X ] Section 404 of the Clean Water Act (86 Stat. 816; 33 USC 1344), and/or [ X ] Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 408).

### **ADDENDUM TO PUBLIC NOTICE ISSUED NOVEMBER 20, 2023**

### **MARINE TERMINAL IN MISSISSIPPI RIVER, HEAVY HAUL ROAD, AND INDUSTRIAL FACILITY FOR CLEAN HYDROGEN AND AMMONIA PRODUCTION IN ASCENSION PARISH**

**NAME OF APPLICANT:** Clean Hydrogen Works, c/o CK Associates, Attn: Ms. Olivia Barry, 8591 United Plaza Blvd., Suite 300, Baton Rouge, Louisiana 70809.

**LOCATION OF WORK:** On an approximate 1,738-acre site, located within and along the right descending bank of the Mississippi River, near river mile 180, located at 5323 LA Highway 405, near Donaldsonville, in Ascension Parish, Louisiana, (lat. 30.143889, long. -91.038056), as shown within the attached drawings. (Hydrologic Unit Code 08090302, Lower Mississippi River Basin, West Central Coastal Louisiana Watershed).

**CHARACTER OF WORK:** The proposed project is being readvertised due to additional jurisdictional wetland impacts as a result of the applicant submitting a revised project footprint. The revised project footprint proposes a reduction from two proposed docks to one dock, a reduction in dredge volume from 2.76 million cubic yards to 1.6 million cubic yards, and an increase in jurisdictional forested battue wetland habitat impact from 15.61 acres to 19.03 acres. Proposed changes in project footprint impacts are described below in this section. The applicant is proposing to clear, grade, place and

maintain fill material for the construction of an industrial hydrogen/ammonia facility which includes a heavy haul road, marine terminal, and associated infrastructure. The project will utilize a natural gas pipeline to feed up to six ammonia trains each with a 3,600 metric tons per day capacity. The proposed project targets to capture approximately 98% of the generated carbon dioxide exporting it via pipeline and storing it in subterranean formations. The generated ammonia is being proposed to be exported via a new marine terminal to provide end market applications of marine fuel, power, fertilizer, and hydrogen generation. The proposed project is designed to generate 21,600 metric tons per day of liquid ammonia. The product ammonia is proposed to be stored onsite tankage for ship export and the carbon dioxide produced will be compressed and fed into the nearby Denbury pipeline. The project proposes to impact approximately 40.48 acres of Mississippi River waterbottoms via dredging for marine terminal construction. The dredged waterbottoms would be disposed via temporary dredge pipeline to an upland protected side area located beyond the 1,500-foot buffer from the toe of the Mississippi River levee. The project proposes to directly impact approximately 19.03 acres of Mississippi River bature forested jurisdictional wetlands, and 22.14 acres of jurisdictional Other Waters of the US (Mississippi River and protected side waters). Approximately 83,000 cubic yards of hauled in material would be placed as fill in jurisdictional areas for the heavy haul and pipe rack installation, 31,000 cubic yards of steel piles placed in jurisdictional areas for the proposed marine terminal installation, and 36,500 cubic yards of fill material for the proposed facility. Approximately 1,600,000 of native material in the Mississippi River and 125,000 cubic yards of native material from the bature area would be excavated for the proposed marine terminal construction.

**MITIGATION:** The applicant proposes to avoid direct impacts and minimize secondary impacts to wetlands to the maximum extent practicable. The applicant is proposing to avoid approximately 501.94 acres of jurisdictional wetlands located on the protected side of the project area, 168.12 acres of jurisdictional Mississippi River bature forested wetlands, and 27.99 acres of jurisdictional Other Waters of the US. For compensation for unavoidable wetland impacts, the applicant proposes to use a Corps approved mitigation bank within the watershed of impact.

The comment period on the requested Department of the Army Permit will close **30** days from the date of this public notice. Written comments, including suggestions for modifications or objections to the proposed work, stating reasons thereof, are being solicited from anyone having interest in this permit request, and must be submitted so as to be received before or by the last day of the comment period. Letters and/or comments concerning the subject permit application must reference the Applicant's Name and the Permit Application Number and can be preferably emailed to the CEMVN project manager listed above or forwarded to the CEMVN at the address above, ATTENTION: REGULATORY DIVISION, RGC, **Kenny Blanke**. This public notice is also available for review online at <https://go.usa.gov/xennJ>

## Corps of Engineers Permit Criteria

The decision whether to issue a permit will be based on an evaluation of the probable impacts, 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.

This request will also be reviewed pursuant to Section 408 and USACE Engineering Circular (EC) 1165-2-220, which provides policy and procedural guidance for processing requests to alter USACE civil works projects.

The decision whether to grant permission for the requested alteration will be based on several factors. The benefits that reasonably may be expected to accrue from the proposal will be balanced against its reasonably foreseeable detriments. Review of the requests for modification will be reviewed by a USACE technical review team considering the following factors:

1) Potential to Impair the Usefulness of the Project. Proposed alterations will be reviewed to determine whether the alteration would limit the ability of the USACE project to function as authorized, or would compromise or change any authorized project conditions, purposes or outputs. If USACE determines that the usefulness of the authorized project would be impaired, the request will be denied.

2) Potential to be Injurious to the Public Interest. Proposed alterations will be reviewed to determine the probable impacts, including cumulative impacts, on the public interest. Factors that may be relevant to the public interest depend upon the type of USACE project being altered and may include, but are not limited to, such things as conservation, economic development, historic properties, cultural resources, environmental impacts, water supply, water quality, flood hazards, floodplains, residual risk, induced damages, navigation, shore erosion or accretion, and recreation. This evaluation will consider information received from the interested parties, including tribes, agencies, and the public. The decision whether to approve an alteration will be determined by the consideration of whether benefits are commensurate with risks. If the potential detriments are found to outweigh the potential benefits, then it may be determined that the proposed alteration is injurious to the public interest.

CEMVN is soliciting comments from area residents, 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 CEMVN to determine whether to make, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on communities with environmental justice concerns, endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the 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. Further, all factors that may be relevant to the proposal will be considered, including the potential cumulative effects associated with the proposed project. Further, all factors that may be relevant to the proposal will be considered, including the potential cumulative effects associated with the proposed project. The Section 408 review will consider the potential impact to the usefulness of the Federal project and whether the proposed alteration would be injurious to the public interest. Policy and legal compliance will also be considered.

CEMVN is presently unaware of properties listed on the National Register of Historic Places at or near the proposed work but is pending further review in accordance with the National Historic Preservation Act. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, prehistorical, historical sites, or data. As deemed necessary, copies of this public notice will be sent to the State Archeologist, State Historic Preservation Officer, and federally listed tribes regarding potential impacts to cultural resources.

Our initial finding is that the proposed work would have no affect on any species listed as endangered by the U.S. Department of Commerce, nor affect any habitat designated as critical to the survival and recovery of any such species.

Based on the Information Planning and Consultation (IPaC) tool for Endangered Species in Louisiana, as signed on January 27, 2020, between CEMVN and the U.S. Fish and Wildlife Service, Ecological Services Office (USFWS), it has been determined that the project may affect but not likely to adversely affect (NLAA) the pallid sturgeon. The applicant has stated that the water intake structure proposed for the marine terminal will comply with USFWS recommended screen mesh sizes to help mitigate potential concerns to the pallid sturgeon.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal may result in the destruction, alteration, and/or disturbance of **0** acres of EFH utilized by various life stages of red drum and penaeid shrimp. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries in the Gulf of Mexico. 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.

If the proposed work involves deposits of dredged or fill material into navigable waters, the evaluation of the probable impacts will include the application of guidelines established by the Administrator of the Environmental Protection Agency. Also, a certification that the proposed activity will not violate applicable water quality standards will be required from the LA Department of Environmental Quality before a Department of the Army permit is issued.

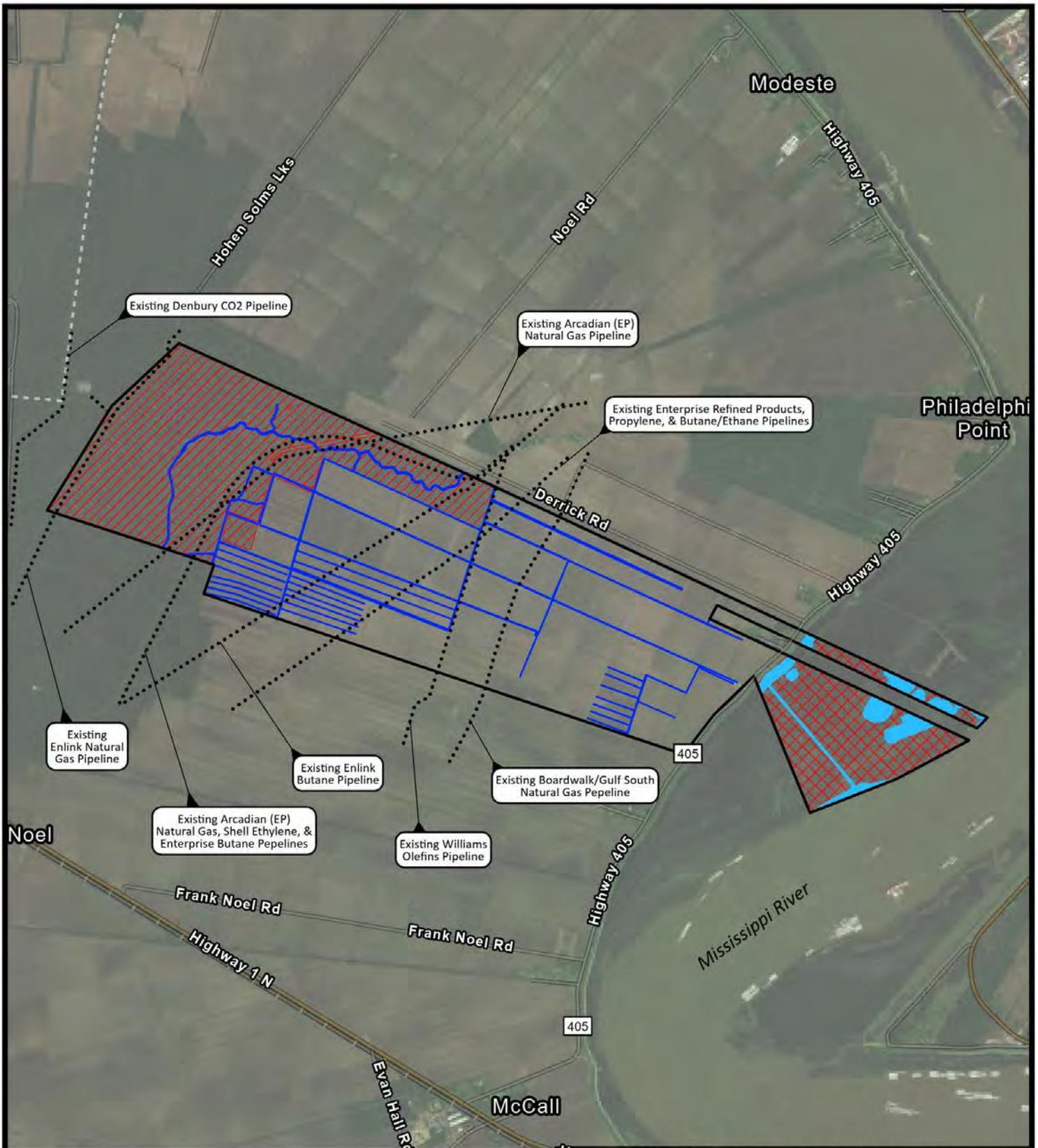
Any person may request, (preferably by email to the project manager, or in writing), within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

You are invited to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

John M. Herman  
Chief, Central Evaluation Branch  
Regulatory Division

Enclosures





Site Boundary  
 Jurisdictional Features  
 Section 404 Wetlands (501.95 Acres)  
 Section 404 Non-wetland Waters of the US (26.68 Acres)  
 Section 10/404 Wetlands (187.15 Acres)  
 Section 10/404 Non-wetland Waters of the US (35.86 Acres)

For permit purposes only, not for construction  
 Imagery: Vivid Maxar 3/31/2022, ESRI

3,000  
US Feet

**Clean Hydrogen Works, La-1, L.L.C.**  
 Donaldsonville, Louisiana

Ascension Clean Energy Project  
 Environmental Permitting

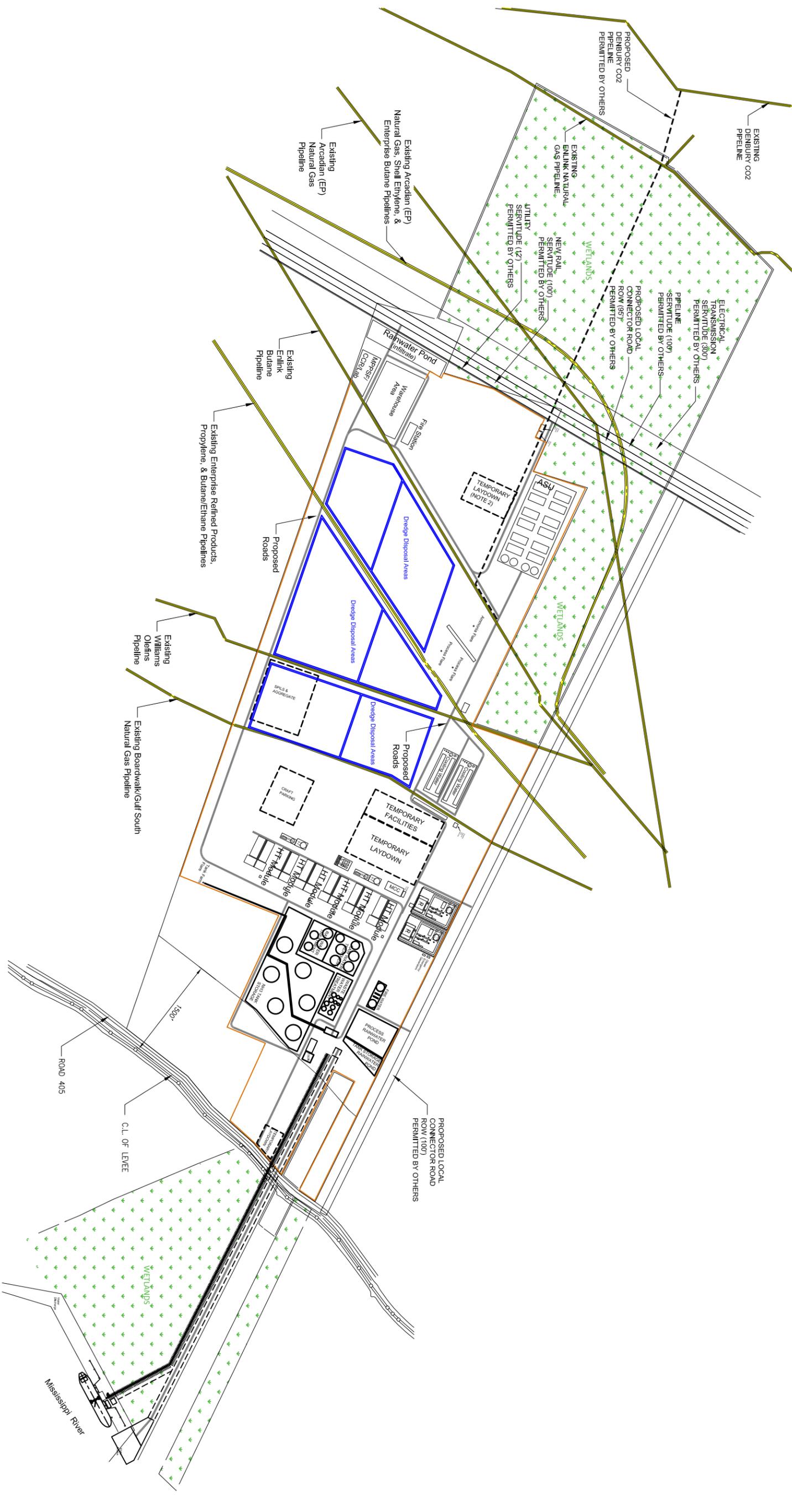
**Existing Conditions**

Ascension Parish

Drawn: CAL Date: 8/22/2023 Dwg. No.: GDB19045	Checked: OPB Approved: CMC
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Figure 2

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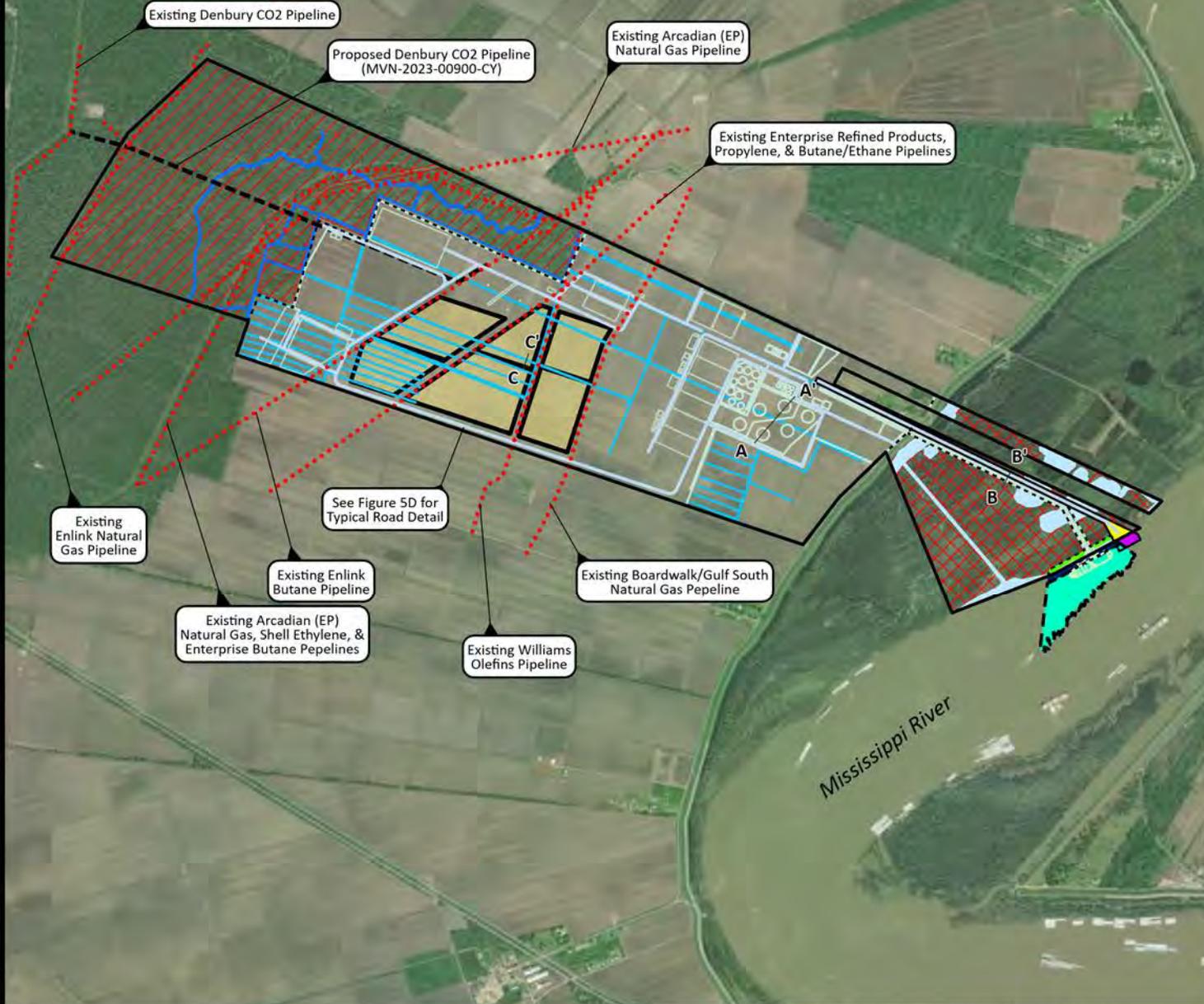
FOR PERMIT APPLICATION USE ONLY  
 NOT TO SCALE  
 Map derived from Wood Group USA, Inc. Drawing No. ACE-256128-PIP-DPL-0002 DRAFT, Dated 31-MAR-23.

**Clean Hydrogen Works**  
 Donaldsonville, Louisiana  
 Ascension Clean Energy Project  
 Environmental Permitting  
**Plot Plan**

Ascension Parish

Drawn: CAL	Checked: OPB
Date: 4/30/2024	Approved: CMC
Dwg. No.: 19045-03	<b>Figure 3</b>

	Site Boundary		Waters of the US to be Impacted (Proposed Dredged Berths)
	Construction Footprint		Waters of the US to be Impacted (Heavy Haul Road)
	Proposed Dredged Berths		Section 10/404 Non-wetland Waters of the US (4.70 acres)
	Dredge Disposal Areas		Section 404 Wetlands (501.94 acres)
	Proposed Roads		Section 404 non-wetland Waters of the US (9.24 acres)
	Waters of the US to be Impacted (Proposed Facility)		Section 10/404 Wetlands (168.12 acres)
	Waters of the US to be Impacted (Marine Terminal)		Section 10/404 Non-wetland Waters of the US (27.99 acres)
	Section 404 Non-wetland Waters of the US (17.44 acres)		
	Section 10/404 Wetlands (10.71 acres)		
	Section 10/404 Non-wetland Waters of the US (6.30 acres)		



Notes:  
 See Figure 3 for Proposed Development Details, Plot Plan  
 See Figure 5A for Cross-Section A-A'  
 See Figure 5B for Cross-Section B-B'  
 See Figure 5C for Cross-Section C-C'



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Imagery: Vivid Maxar 3/31/2022, ESRI

**Clean Hydrogen Works La-1, L.L.C.**  
 Donaldsonville, Louisiana

Ascension Clean Energy Project  
 Environmental Permitting

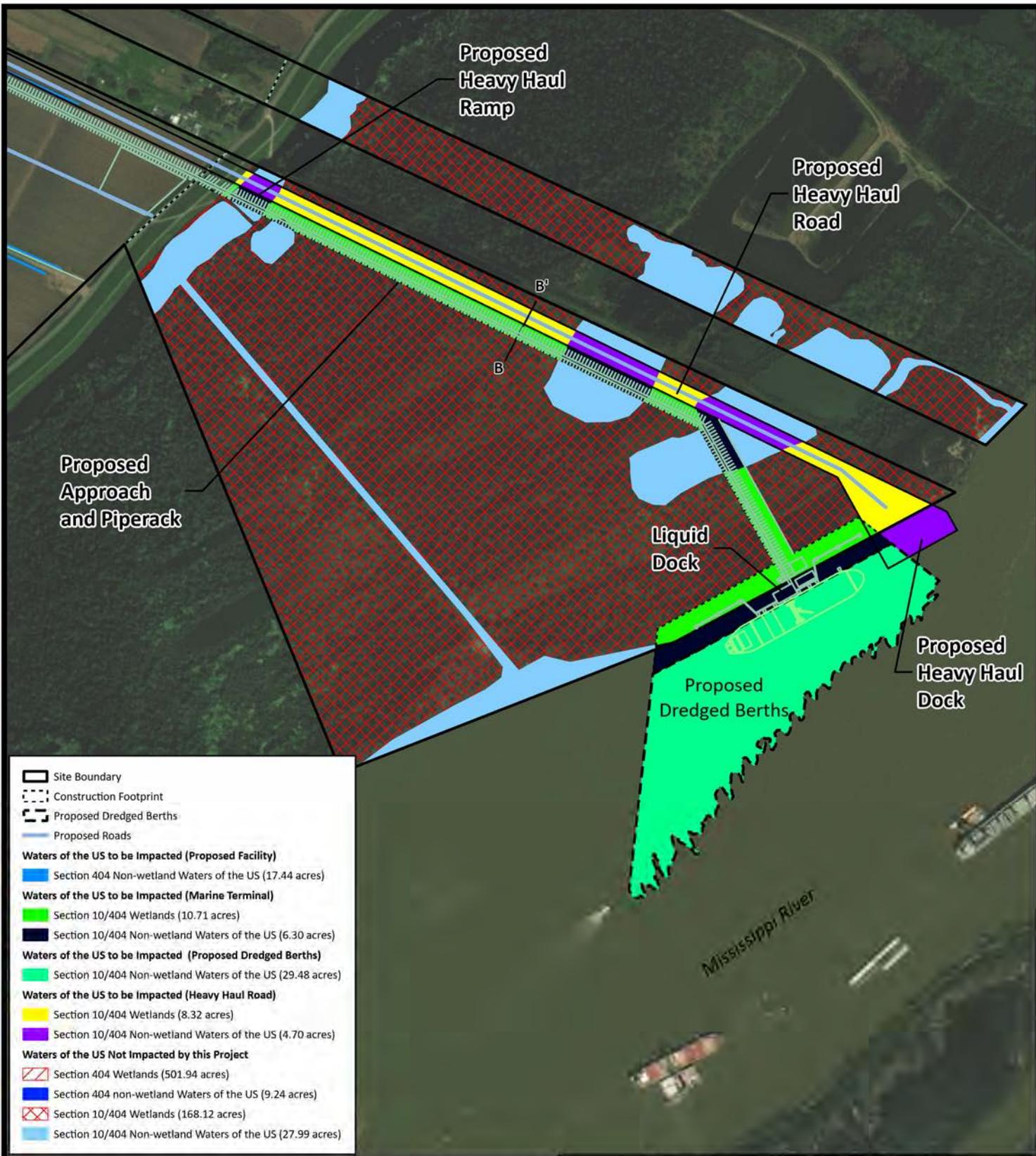
**Plan View**

Ascension Parish



Drawn: CAL	Checked: APK
Date: 4/30/2024	Approved: CMC
Dwg. No.: GDB19045	<b>Figure 4A</b>

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	Site Boundary
	Construction Footprint
	Proposed Dredged Berths
	Proposed Roads
<b>Waters of the US to be Impacted (Proposed Facility)</b>	
	Section 404 Non-wetland Waters of the US (17.44 acres)
<b>Waters of the US to be Impacted (Marine Terminal)</b>	
	Section 10/404 Wetlands (10.71 acres)
	Section 10/404 Non-wetland Waters of the US (6.30 acres)
<b>Waters of the US to be Impacted (Proposed Dredged Berths)</b>	
	Section 10/404 Non-wetland Waters of the US (29.48 acres)
<b>Waters of the US to be Impacted (Heavy Haul Road)</b>	
	Section 10/404 Wetlands (8.32 acres)
	Section 10/404 Non-wetland Waters of the US (4.70 acres)
<b>Waters of the US Not Impacted by this Project</b>	
	Section 404 Wetlands (501.94 acres)
	Section 404 non-wetland Waters of the US (9.24 acres)
	Section 10/404 Wetlands (168.12 acres)
	Section 10/404 Non-wetland Waters of the US (27.99 acres)

Notes:  
 See Lanier & Associates Consulting Engineers Inc.  
 Clean Hydrogen Works LA-1 Ammonia Project  
 Proposed New Marine Terminal  
 Sheet 3 of 26 for Detail  
 See Figure 5B for Cross Section B-B'



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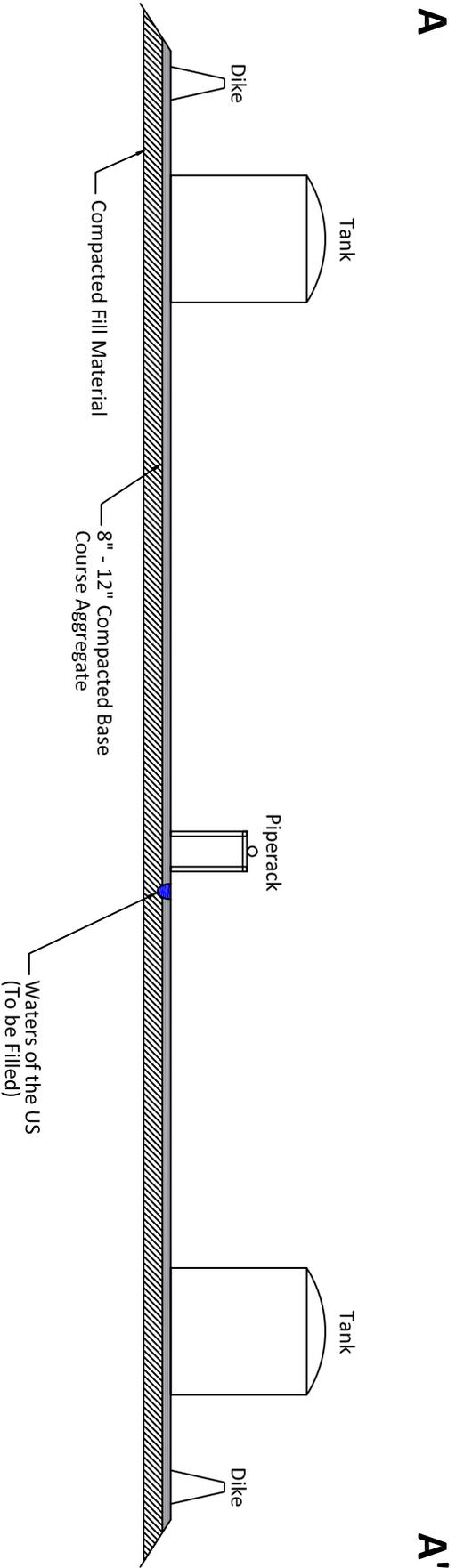
Imagery: Vivid Maxar 3/31/2022, ESRI



**Clean Hydrogen Works, La-1, L.L.C.**  
 Donaldsonville, Louisiana  
 Ascension Clean Energy Project  
 Environmental Permitting  
**Plan View**  
**Marine Terminal and Heavy Haul Road**  
 Ascension Parish

	Drawn: CAL	Checked: RAG
	Date: 11/9/2023	Approved: CMC
Dwg. No.: GDB19045	<b>Figure 4B</b>	

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 PRELIMINARY-FOR PERMIT PURPOSES ONLY

**Clean Hydrogen Works La-1, L.L.C.**

Donaldsonville, Louisiana

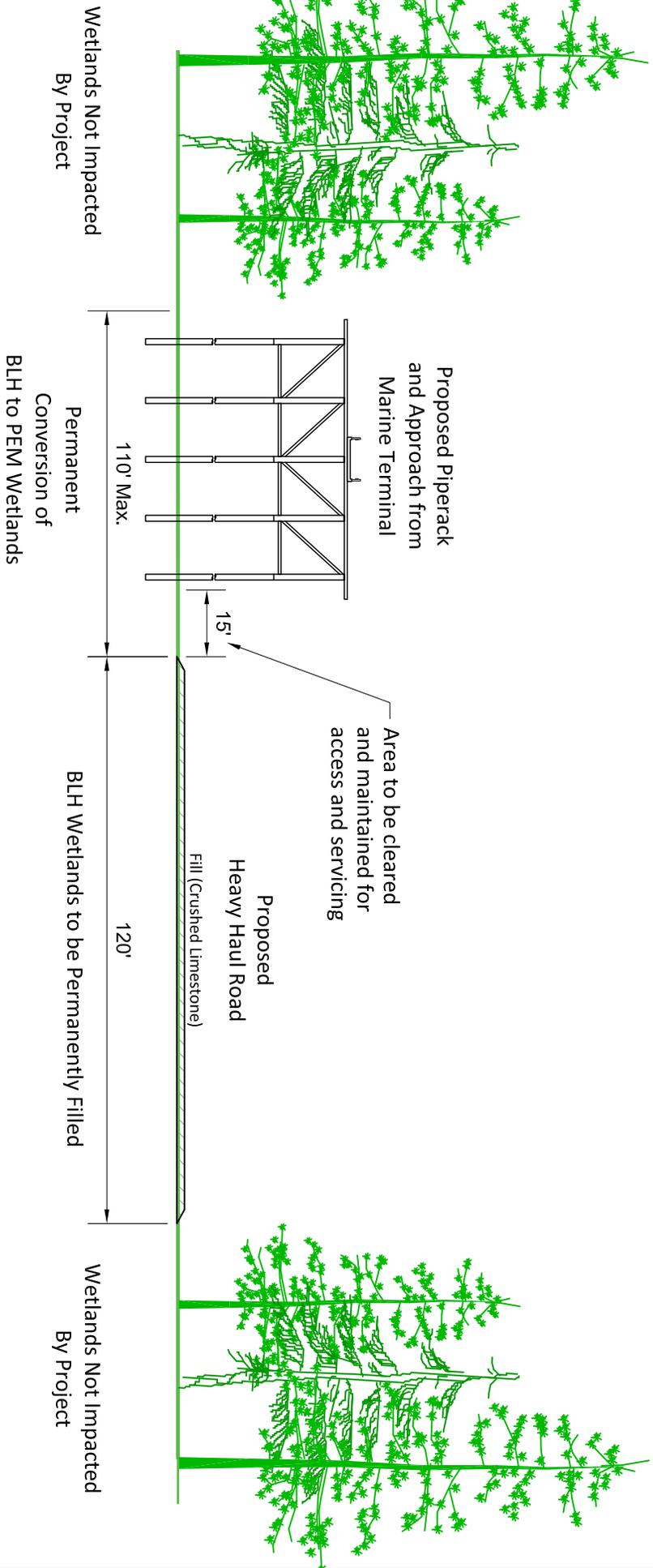
Ascension Clean Energy Project  
 Environmental Permitting

**Cross Section A-A'**

Ascension Parish



Drawn: CAL	Checked: OPB
Date: 4/26/2024	Approved: CMC
DWG. No.: 19045-09	<b>Figure 5A</b>



**Clean Hydrogen Works La-1, L.L.C.**

Donaldsonville, Louisiana  
Ascension Clean Energy Project  
Environmental Permitting

**Cross Section B-B'**

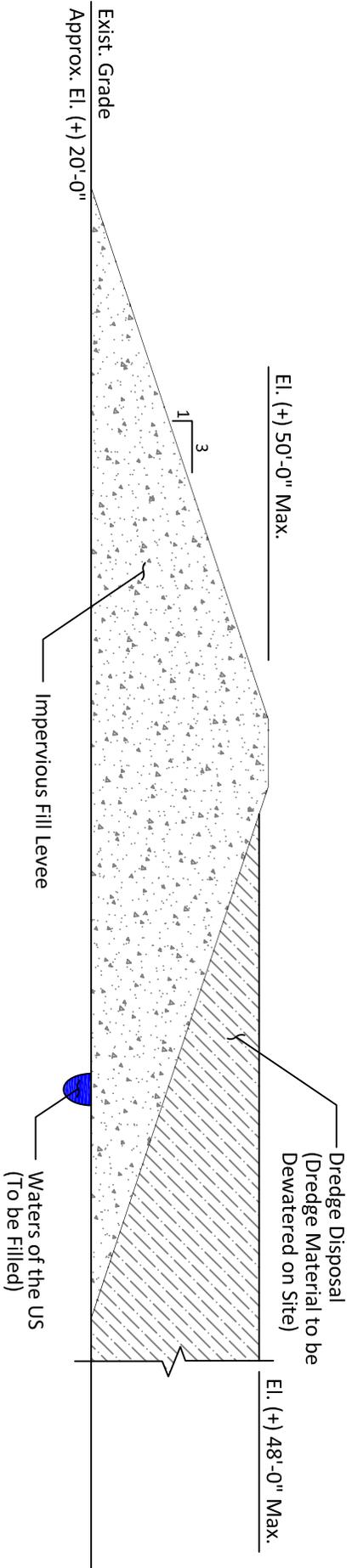
Ascension Parish

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Drawn: CAL	Checked: OPB
Date: 4/29/2024	Approved: CMC
Dwg. No.: 19045-13	<b>Figure 5B</b>



**Clean Hydrogen Works La-1, L.L.C.**  
Donaldsonville, Louisiana

Ascension Clean Energy Project  
Environmental Permitting

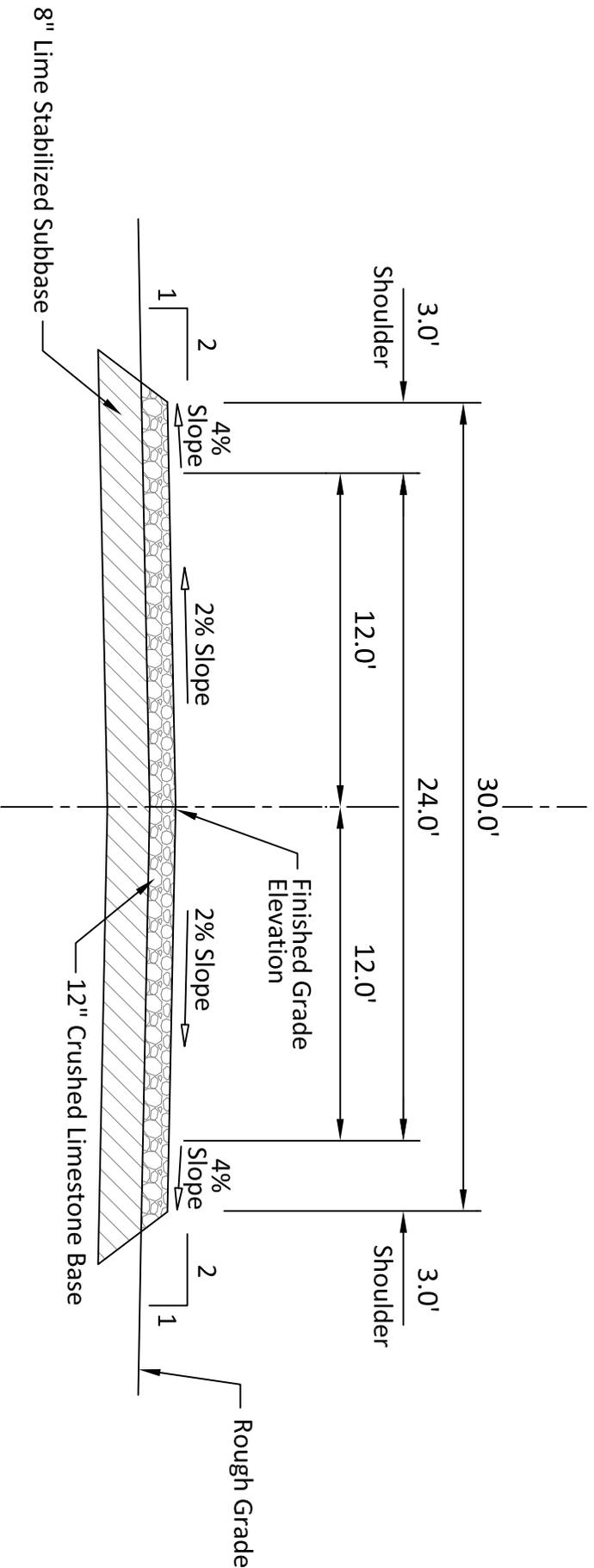
**Cross Section C-C'**

Ascension Parish

NOT TO SCALE

PRELIMINARY-FOR PERMIT PURPOSES ONLY

	
Drawn: CAL	Checked: OPB
Date: 4/30/2024	Approved: CMC
Dwg. No.: 19045-14	<b>Figure 5C</b>



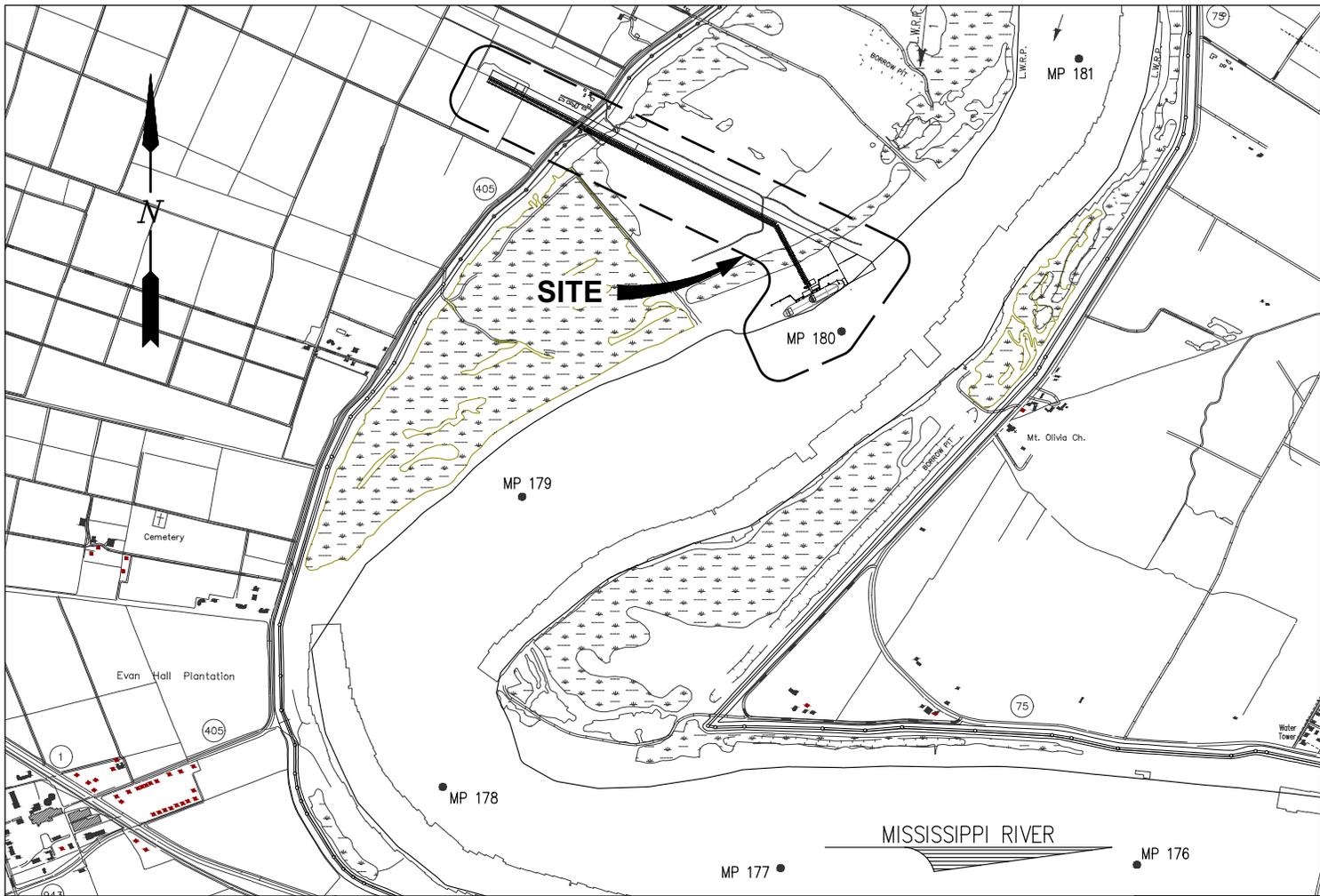
**Typical Road Detail**

NOT TO SCALE

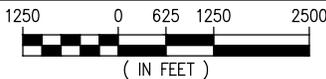
PRELIMINARY-FOR PERMIT PURPOSES ONLY

<p><b>Clean Hydrogen Works La-1, L.L.C.</b>                  Donaldsonville, Louisiana</p>	
<p>Ascension Clean Energy Project                  Environmental Permitting</p>	
<p><b>Typical Road Detail</b></p>	
<p>Ascension Parish</p>	
<p>Drawn: CAL</p>	<p>Checked: OPB</p>
<p>Date: 4/30/2024</p>	<p>Approved: CMC</p>
<p>DWG. No.: 19045-11</p>	<p><b>Figure 5D</b></p>

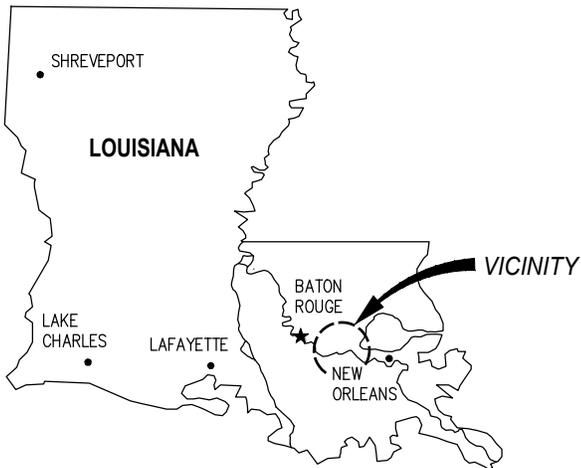




**VICINITY MAP**  
SCALE: 1" = 2500'



ASCENSION PARISH, LA  
LAT. 30° 08' 14.1" N  
LONG. 91° 00' 45.0" W



**AREA MAP**

**NOTES**

1. AS-BUILT DRAWINGS AND/OR PLANS SHALL HAVE WRITTEN ON THEM THE DATE OF COMPLETION OF SAID ACTIVITIES AND SHALL BE SUBMITTED TO THE LOUISIANA DEPARTMENT OF NATURAL RESOURCES, OFFICE OF COASTAL MANAGEMENT, P.O. BOX 44487, BATON ROUGE, LA 70804-4487 WITHIN 30 DAYS FOLLOWING PROJECT COMPLETION.
2. ALL STRUCTURES, FACILITIES, WELLS, AND PIPELINES/FLOWLINES OCCURRING IN OPEN WATER AREAS OR IN OILFIELD CANALS OR SLIPS SHALL BE REMOVED WITHIN 120 DAYS OF ABANDONMENT OF THE FACILITIES FOR THE HEREIN PERMITTED USE UNLESS PRIOR WRITTEN APPROVAL TO LEAVE SUCH STRUCTURES IN PLACE IS RECEIVED FROM THE COASTAL MANAGEMENT DIVISION. THIS CONDITION DOES NOT PRECLUDE THE NECESSITY FOR REVISING THE CURRENT PERMIT OR OBTAINING A SEPARATE COASTAL USE PERMIT, SHOULD ONE BE REQUIRED.
3. STRUCTURES MUST ALSO BE MARKED/LIGHTED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS.
4. IN ORDER TO ENSURE THE SAFETY OF ALL PARTIES, THE PERMITEE SHALL CONTACT THE LOUISIANA ONE CALL SYSTEM (1-800-272-3020) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION (DIGGING, DREDGING, JETTING, ETC.) OR DEMOLITION ACTIVITY.
5. HORIZONTAL DATUM REFERENCED TO LOUISIANA STATE PLANE NAD83.
6. ALL ELEVATIONS ARE EXPRESSED IN FEET AND TENTHS AND ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). UNLESS NOTED OTHERWISE.
7. NO IMPACTS TO RARE, THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITATS ARE ANTICIPATED FROM THE PROPOSED PROJECT. NO STATE OR FEDERAL PARKS, WILDLIFE REFUGES, WILDLIFE MANAGEMENT AREAS OR SCENIC RIVERS ARE KNOWN AT THE SPECIFIED SITE OR WITHIN ¼ MILE OF THE PROPOSED PROJECT. THE WILDLIFE DIVERSITY PROGRAM (WDP) REPORTS SUMMARIZE THE EXISTING INFORMATION KNOWN AT THE TIME OF THE REQUEST REGARDING THE LOCATION IN QUESTION. WDP REPORTS SHOULD NOT BE CONSIDERED FINAL STATEMENTS ON THE BIOLOGICAL ELEMENTS OR AREAS BEING CONSIDERED, NOR SHOULD THEY BE SUBSTITUTED FOR ON-SITE SURVEYS REQUIRED FOR ENVIRONMENTAL ASSESSMENTS. IF AT ANY TIME WDP TRACKED SPECIES ARE ENCOUNTERED WITHIN THE PROJECT AREA, PLEASE CONTACT OUR BIOLOGIST AT 225-763-3554.

CHRIS O'BRIEN  
LA PE #33945

**PRELIMINARY - FOR PERMITTING PURPOSES ONLY, NOT FOR CONSTRUCTION**

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**LANIER & ASSOCIATES**  
CONSULTING ENGINEERS  
INCORPORATED

LA: EF-1120 TX: F-2981  
NEW ORLEANS • BEAUMONT • CORPUS CHRISTI • HOUSTON

**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**VICINITY MAP, AREA MAP & NOTES**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO 11753  
SHEET No.  
**1 OF 26**



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CHRIS O'BRIEN  
LA PE #33945

PRELIMINARY - FOR PERMIT PURPOSES ONLY

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**LANIER & ASSOCIATES**  
CONSULTING ENGINEERS  
INCORPORATED

LA: EF-1120 TX: F-2981  
NEW ORLEANS, LA • BEAUMONT, TX

**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

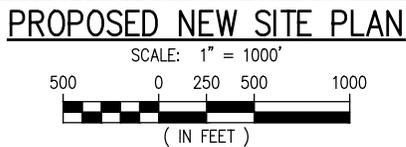
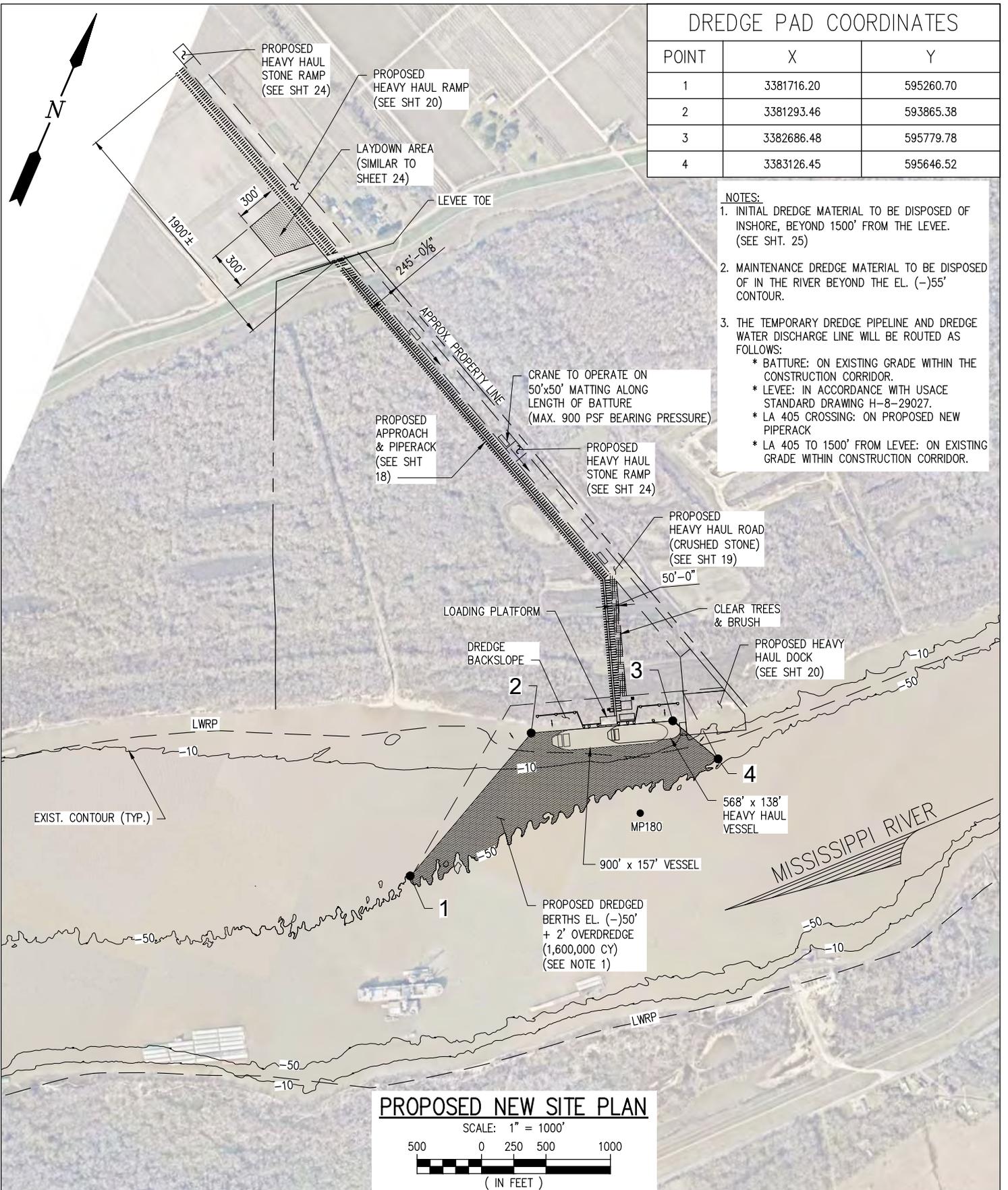
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**EXISTING SITE PLAN**

DATE APRIL '23  
DESIGN CLO  
DRAWN CAP  
CHECK CLO  
JOB NO 11753  
SHEET No.  
2 OF 26

### DREDGE PAD COORDINATES

POINT	X	Y
1	3381716.20	595260.70
2	3381293.46	593865.38
3	3382686.48	595779.78
4	3383126.45	595646.52

- NOTES:**
- INITIAL DREDGE MATERIAL TO BE DISPOSED OF INSHORE, BEYOND 1500' FROM THE LEVEE. (SEE SHT. 25)
  - MAINTENANCE DREDGE MATERIAL TO BE DISPOSED OF IN THE RIVER BEYOND THE EL. (-)55' CONTOUR.
  - THE TEMPORARY DREDGE PIPELINE AND DREDGE WATER DISCHARGE LINE WILL BE ROUTED AS FOLLOWS:
    - \* BATTURE: ON EXISTING GRADE WITHIN THE CONSTRUCTION CORRIDOR.
    - \* LEVEE: IN ACCORDANCE WITH USACE STANDARD DRAWING H-8-29027.
    - \* LA 405 CROSSING: ON PROPOSED NEW PIPERACK
    - \* LA 405 TO 1500' FROM LEVEE: ON EXISTING GRADE WITHIN CONSTRUCTION CORRIDOR.

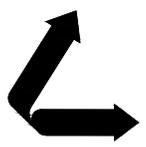


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CHRIS O'BRIEN  
LA PE #33945

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**LANIER & ASSOCIATES**  
CONSULTING ENGINEERS  
INCORPORATED

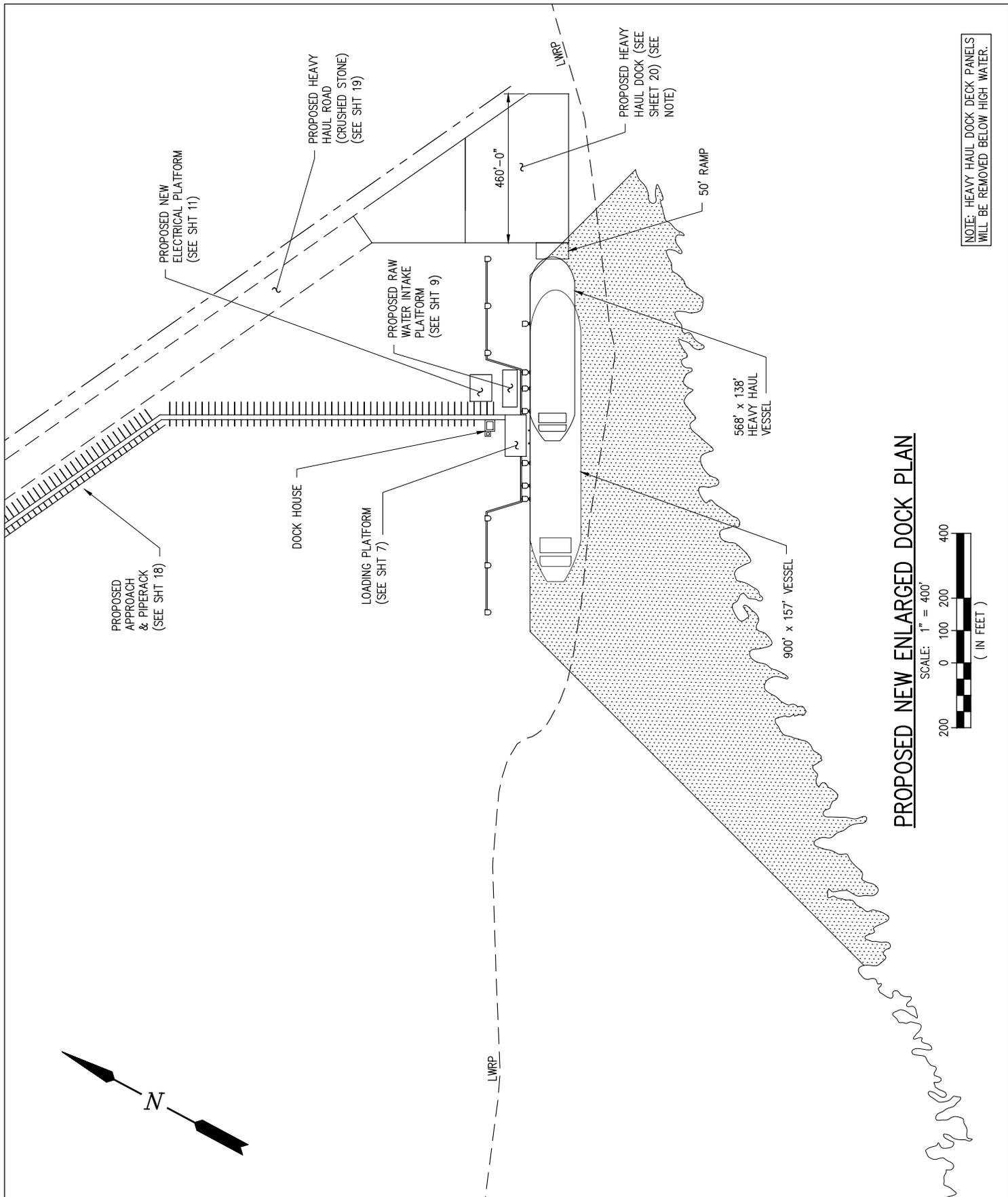
LA: EF-1120 TX: F-2981  
NEW ORLEANS, LA • BEAUMONT, TX

**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED NEW SITE PLAN**

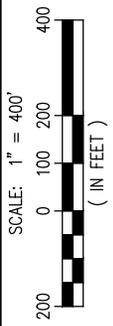
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NOTE: HEAVY HAUL DOCK DECK PANELS WILL BE REMOVED BELOW HIGH WATER.

**PROPOSED NEW ENLARGED DOCK PLAN**



CHRIS O'BRIEN  
LA PE #33945

PRELIMINARY - FOR PERMIT PURPOSES ONLY

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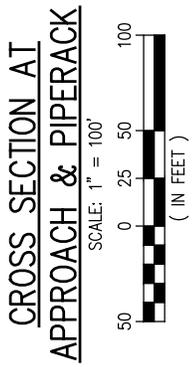
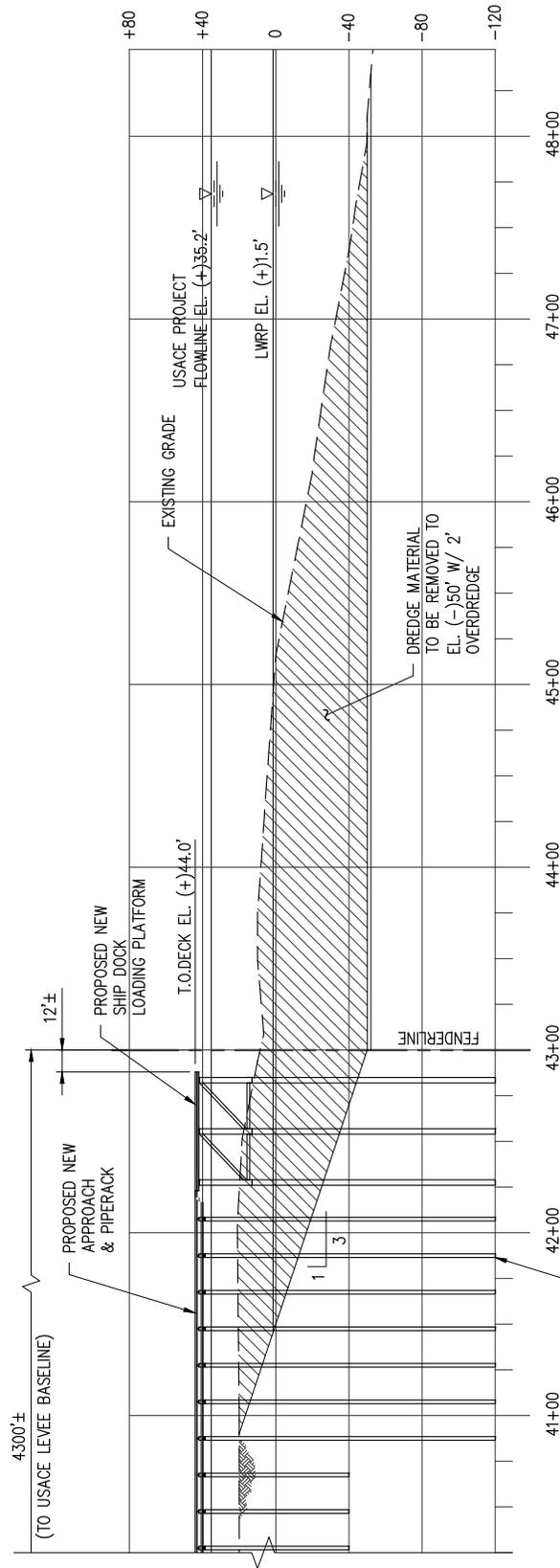
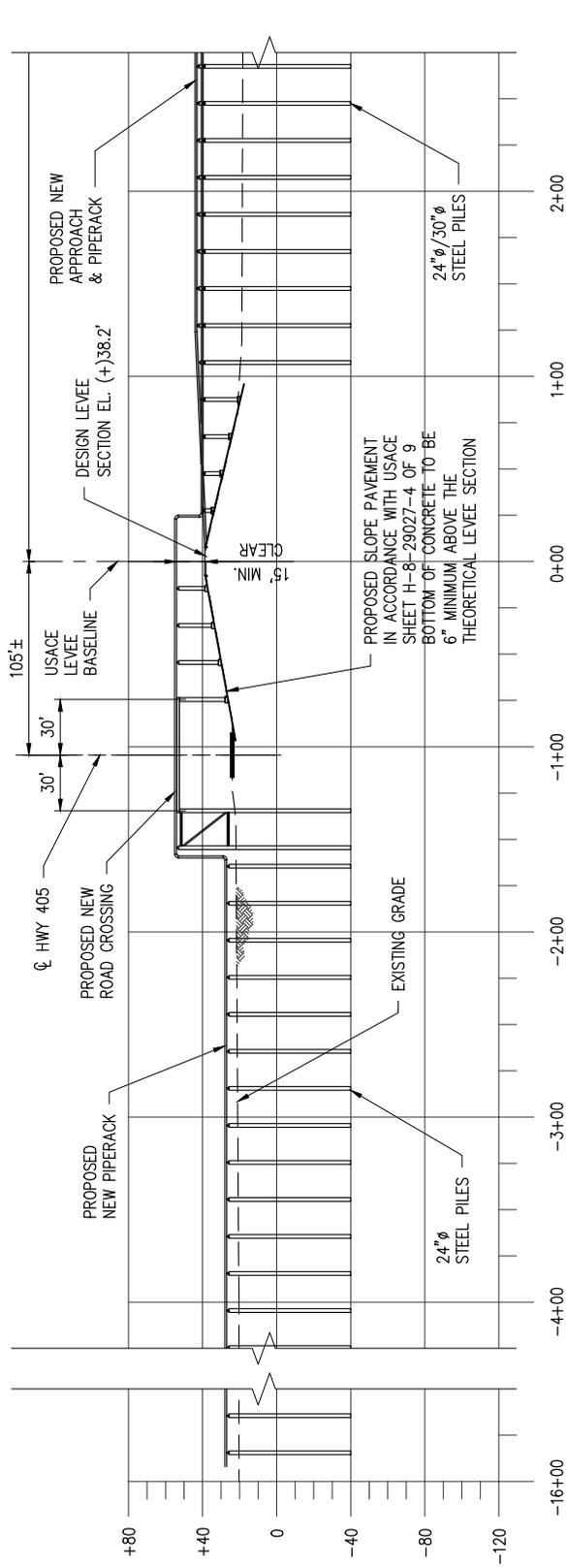
**LANIER & ASSOCIATES**  
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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED NEW ENLARGED DOCK PLAN**

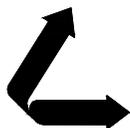
DATE	APRIL '23
DESIGN	CLO
DRAWN	CAP
CHECK	CLO
JOB NO.	11753
SHEET No.	4 OF 26



CHRIS O'BRIEN  
LA PE #33945

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NEW ORLEANS • BEAUMONT • CORPUS CHRISTI • HOUSTON

**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

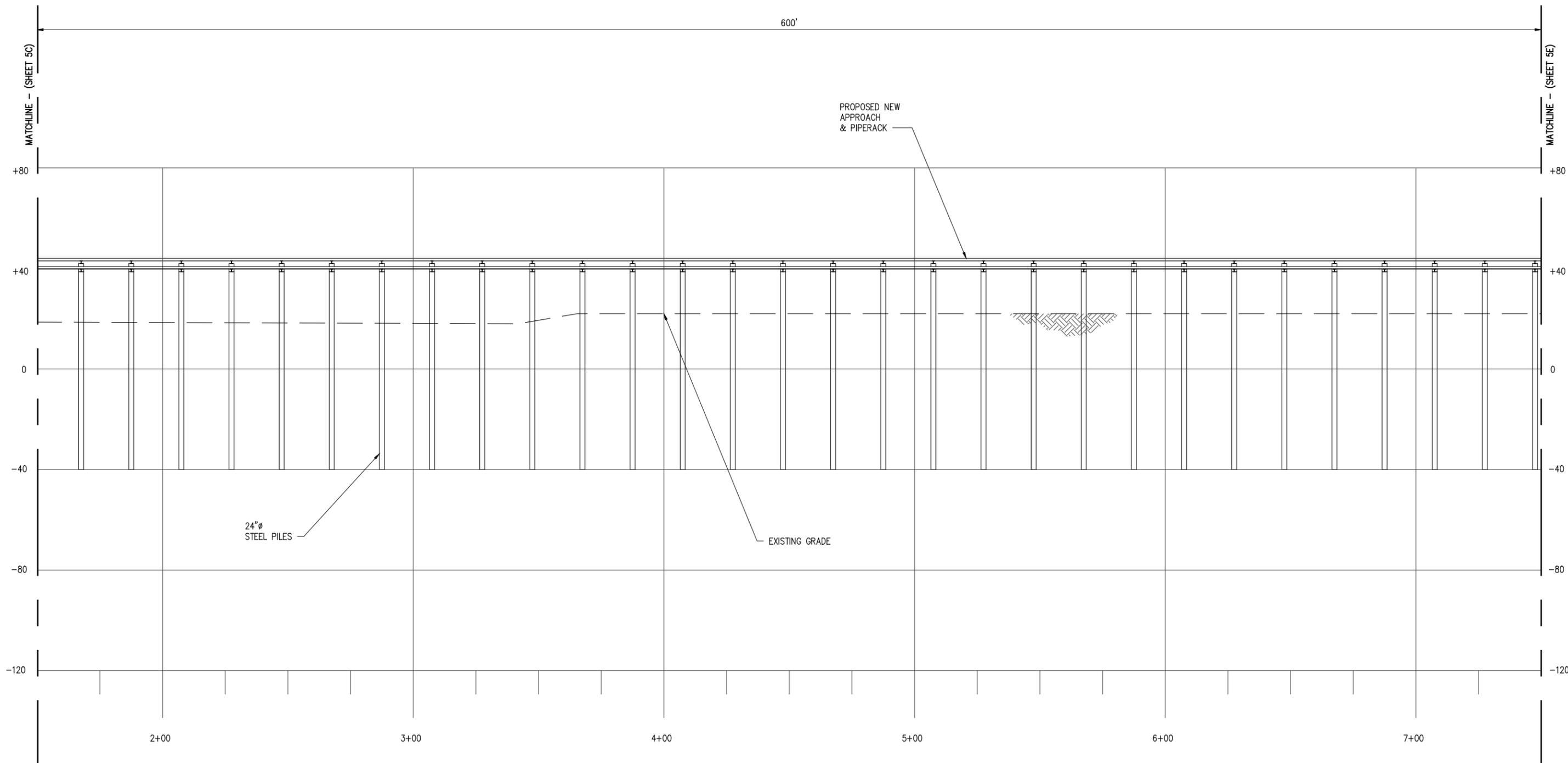
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED NEW APPROACH CROSS SECTION**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO. 11753  
SHEET No. 5 OF 26



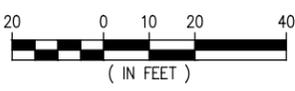






**CROSS SECTION AT  
APPROACH & PIPERACK**

SCALE: 1" = 40'



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REV	DATE	BY	DESCRIPTION
C	4/8/24	CLO	GENERAL REVISION
B	1/12/24	CLO	GENERAL REVISION

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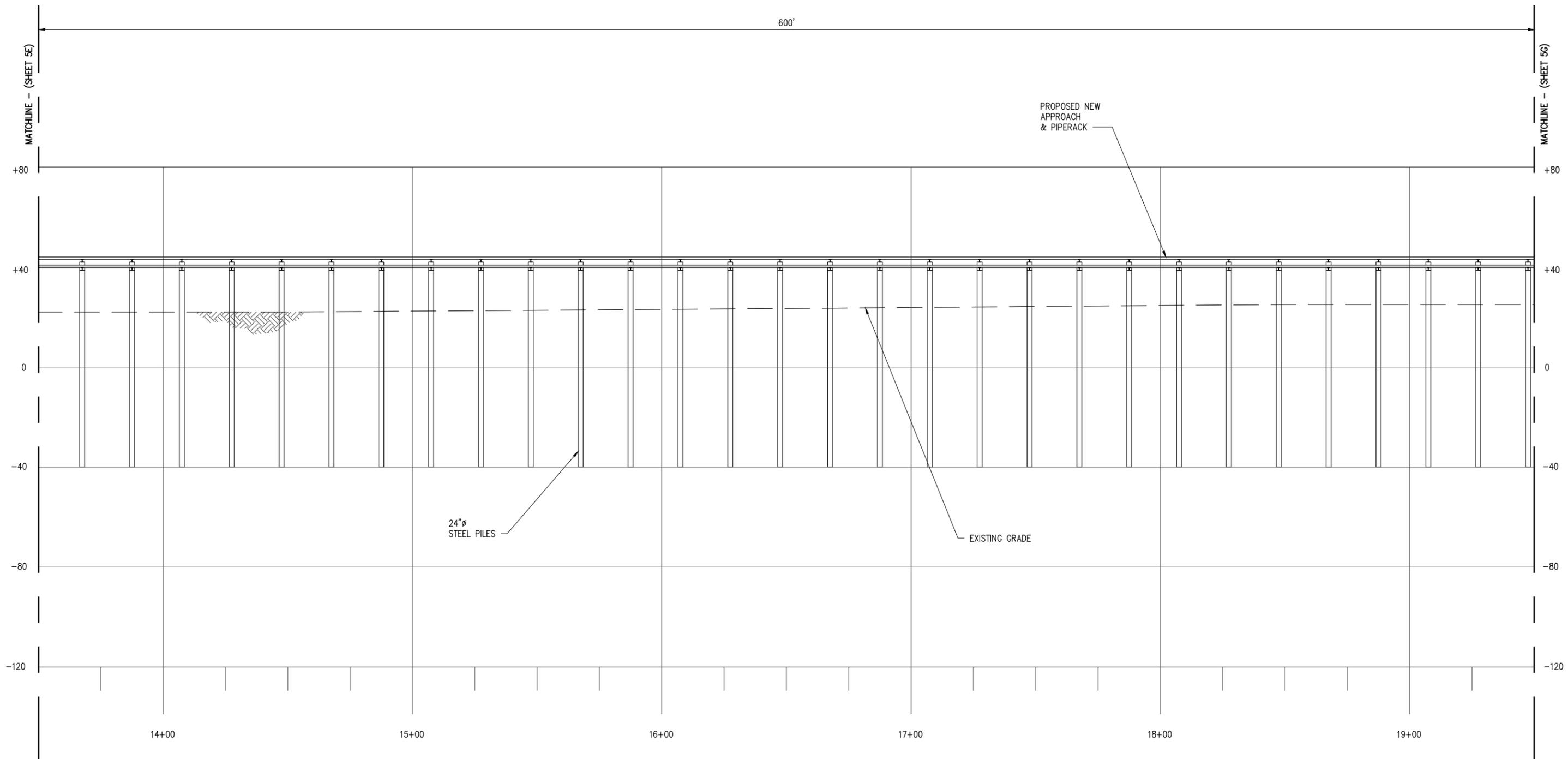
DATE	APRIL '23
SHT SIZE	11"x17"
DESIGN	CLO
DRAWN	BAS
CHECK	CLO
APPR'D	*
JOB NO	11753

**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED NEW APPROACH CROSS SECTION**

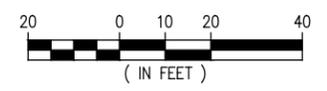
SHEET NO.  
**5D**





**CROSS SECTION AT  
APPROACH & PIPERACK**

SCALE: 1" = 40'



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C	4/8/24	CLO	GENERAL REVISION				
B	1/12/24	CLO	GENERAL REVISION				

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CONSTRUCTION PURPOSES.

DATE	APRIL '23
SHT SIZE	11"x17"
DESIGN	CLO
DRAWN	BAS
CHECK	CLO
APPR'D	*
JOB NO	11753

**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED NEW APPROACH CROSS SECTION**

SHEET NO.  
**5F**





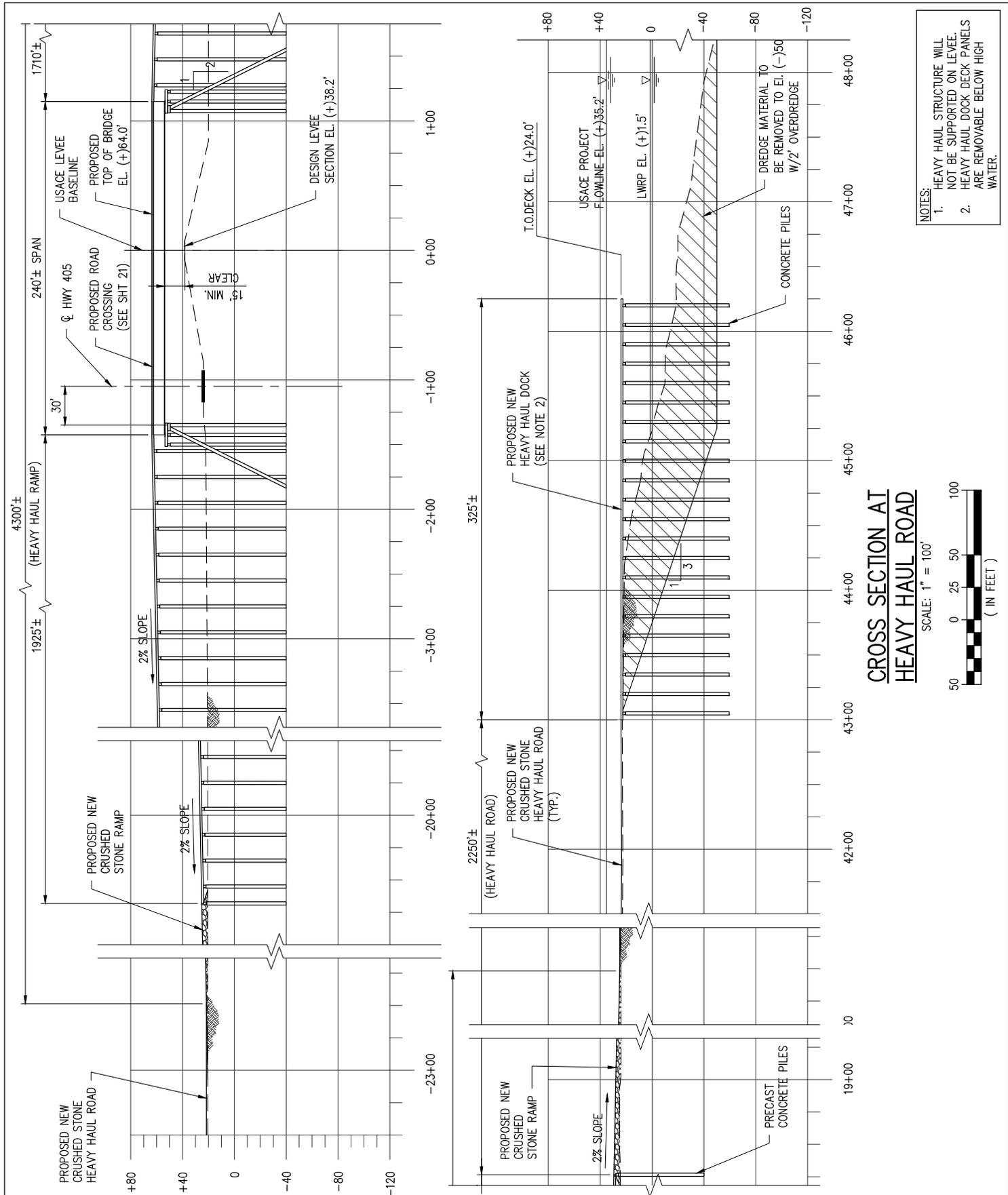












- NOTES:**
1. HEAVY HAUL STRUCTURE WILL NOT BE SUPPORTED ON LEVEE.
  2. HEAVY HAUL DOCK DECK PANELS ARE REMOVABLE BELOW HIGH WATER.

**CROSS SECTION AT  
HEAVY HAUL ROAD**

SCALE: 1" = 100'  
( IN FEET )

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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

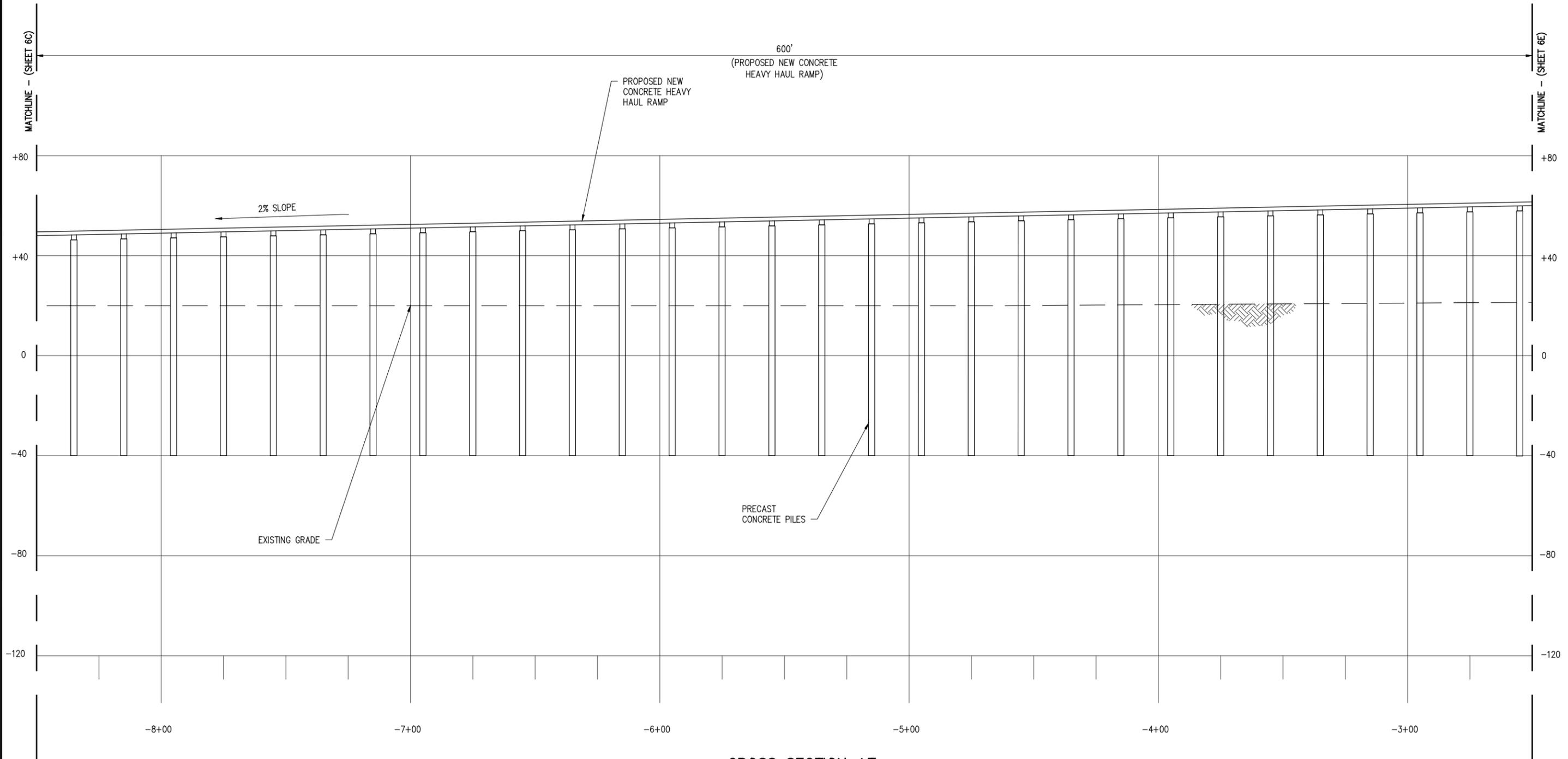
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED NEW HEAVY HAUL ROAD CROSS SECTION**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO 11753  
SHEET No.  
6 OF 26









**CROSS SECTION AT HEAVY HAUL ROAD**  
 SCALE: 1" = 40'  
 20 0 10 20 40  
 ( IN FEET )

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B	1/12/24	CLO	GENERAL REVISION

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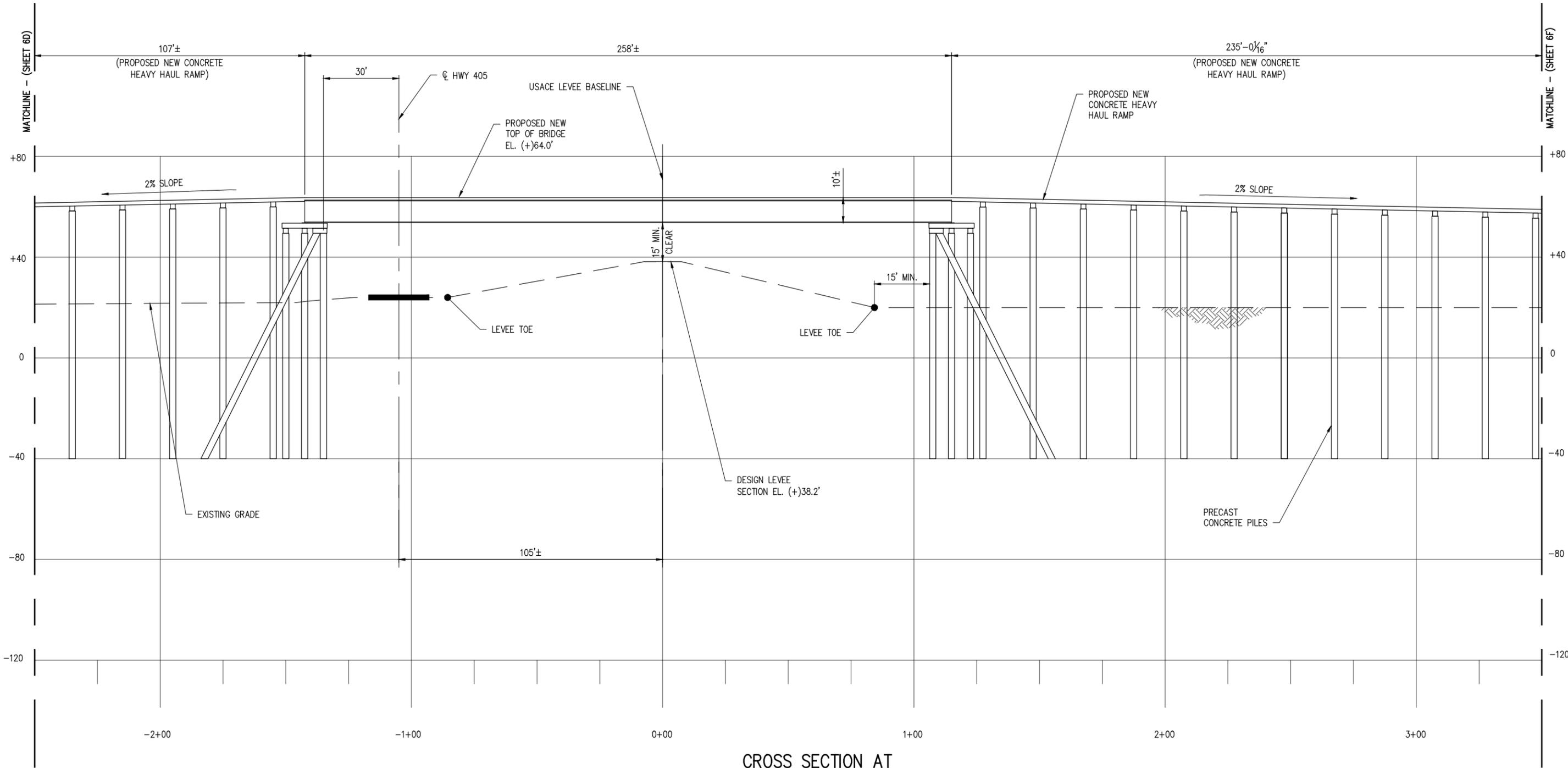
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 LA PE #33945  
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DATE APRIL '23  
 SHT SIZE 11"x17"  
 DESIGN CLO  
 DRAWN BAS  
 CHECK CLO  
 APPR'D \*  
 JOB NO 11753

**CLEAN HYDROGEN WORKS**  
 ASCENSION PARISH LOUISIANA

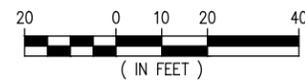
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED NEW HEAVY HAUL ROAD CROSS SECTION**

SHEET NO.  
**6D**



**CROSS SECTION AT  
HEAVY HAUL ROAD**

SCALE: 1" = 40'



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DATE	APRIL '23
SHT SIZE	11"x17"
DESIGN	CLO
DRAWN	BAS
CHECK	CLO
APPR'D	*
JOB NO	11753

**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED NEW HEAVY HAUL ROAD CROSS SECTION**

SHEET NO.  
**6E**

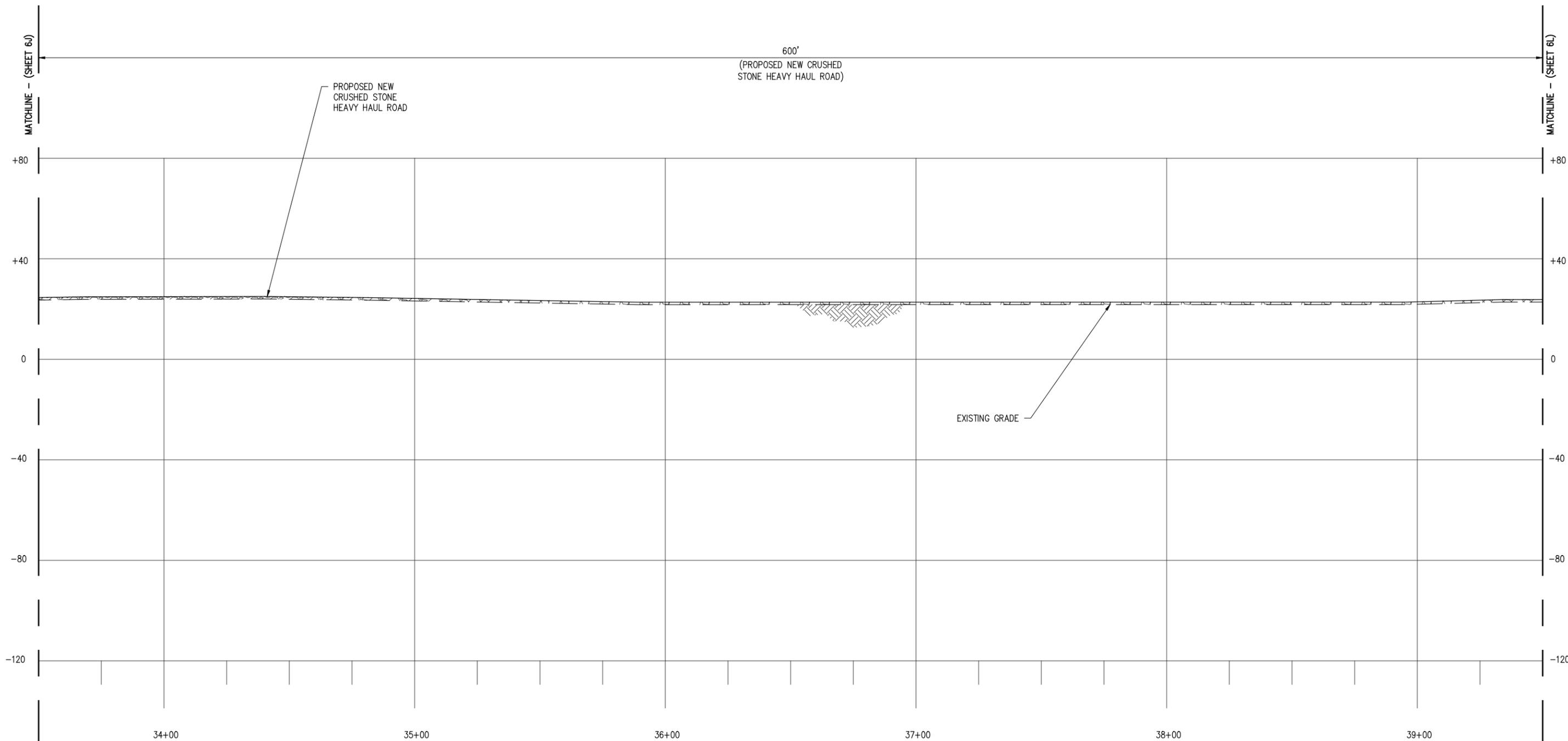




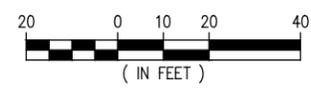








**CROSS SECTION AT  
HEAVY HAUL ROAD**  
SCALE: 1" = 40'



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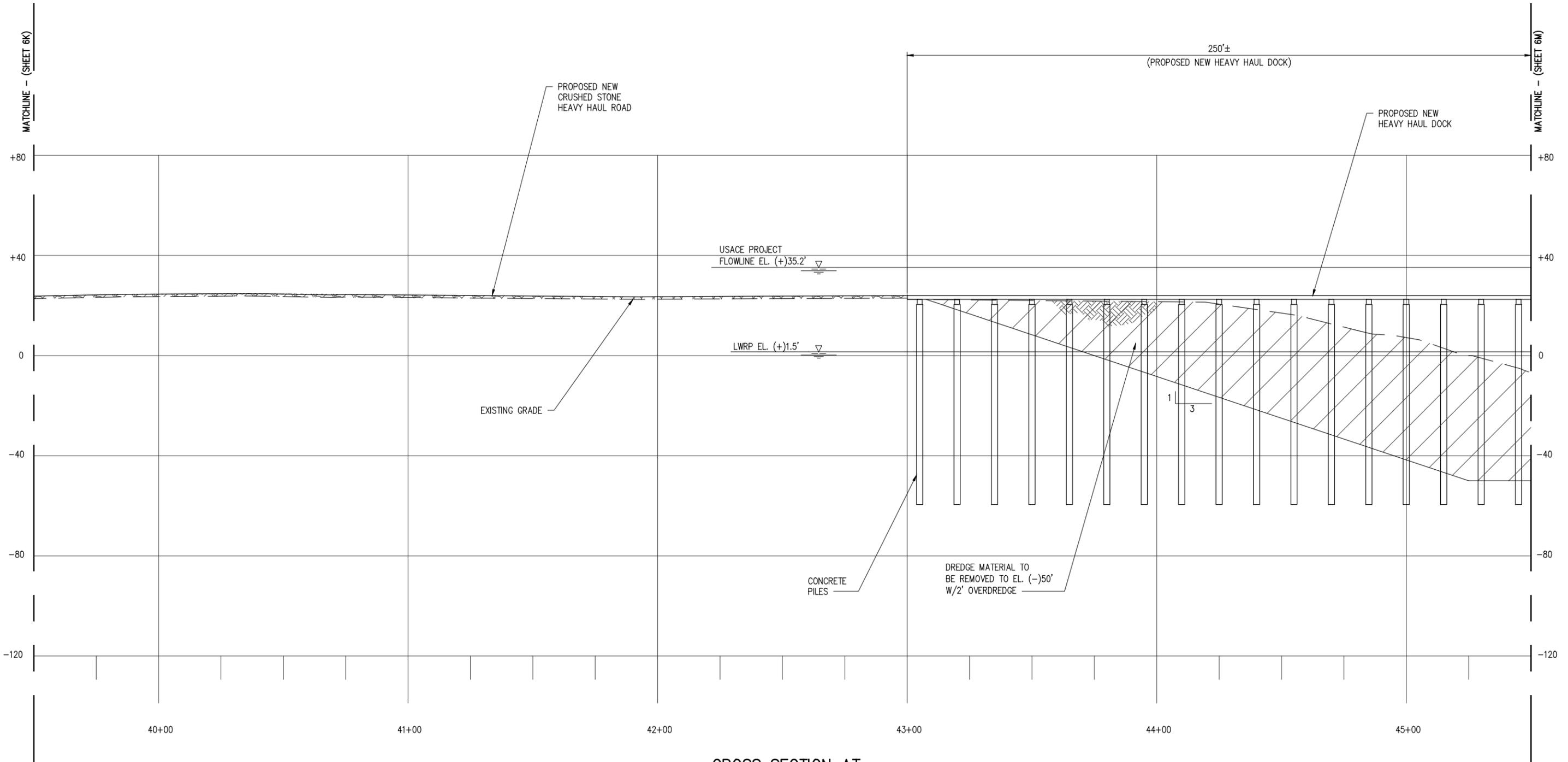
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DATE APRIL '23  
SHT SIZE 11"x17"  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
APPR'D \*  
JOB NO 11753

**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED NEW HEAVY HAUL ROAD CROSS SECTION**

SHEET NO.  
**6K**



**CROSS SECTION AT HEAVY HAUL ROAD**  
 SCALE: 1" = 40'  
 20 0 10 20 40  
 ( IN FEET )

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REV	DATE	BY	DESCRIPTION	REV	DATE	BY	DESCRIPTION
C	4/8/24	CLO	GENERAL REVISION				
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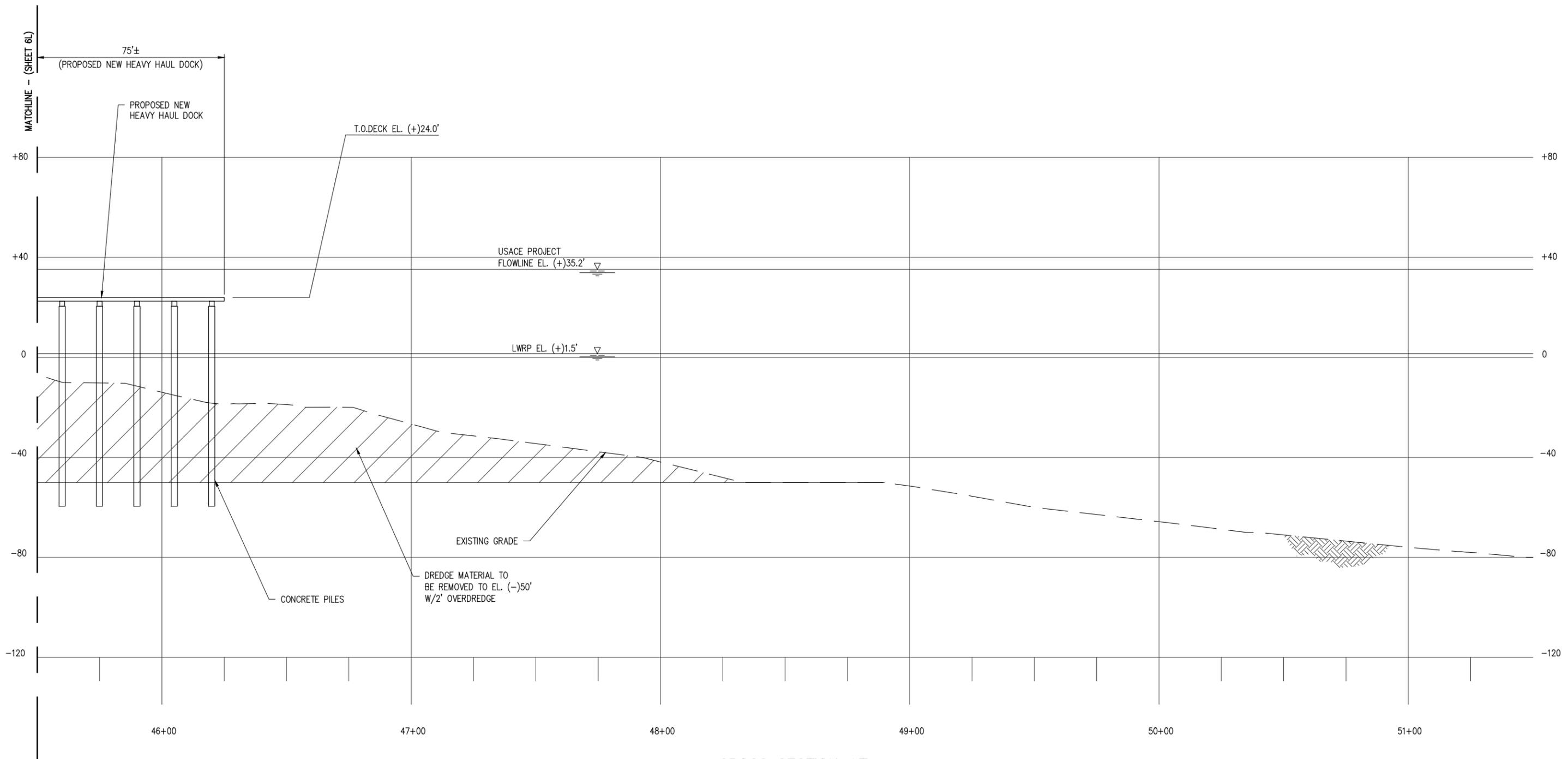
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DATE	APRIL '23
SHT SIZE	11"x17"
DESIGN	CLO
DRAWN	BAS
CHECK	CLO
APPR'D	*
JOB NO	11753

**CLEAN HYDROGEN WORKS**  
 ASCENSION PARISH LOUISIANA

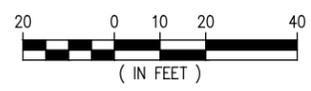
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED NEW HEAVY HAUL ROAD CROSS SECTION**

SHEET NO.  
**6L**



**CROSS SECTION AT  
HEAVY HAUL ROAD**

SCALE: 1" = 40'



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REV	DATE	BY	DESCRIPTION	REV	DATE	BY	DESCRIPTION
C	4/8/24	CLO	GENERAL REVISION				
B	1/12/24	CLO	GENERAL REVISION				

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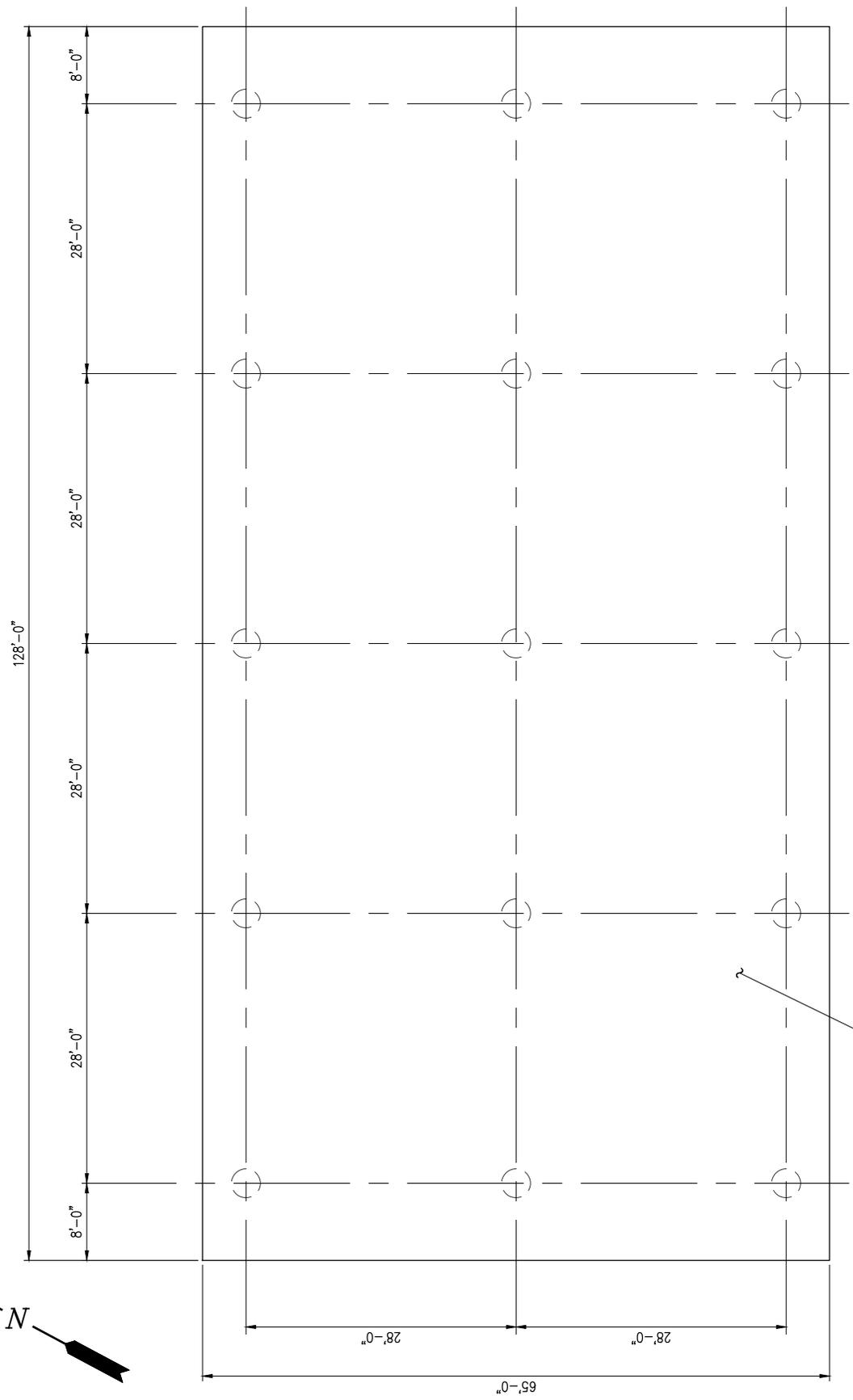
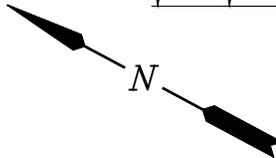
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DATE APRIL '23  
SHT SIZE 11"x17"  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
APPR'D \*  
JOB NO 11753

**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED NEW HEAVY HAUL ROAD CROSS SECTION**

SHEET NO.  
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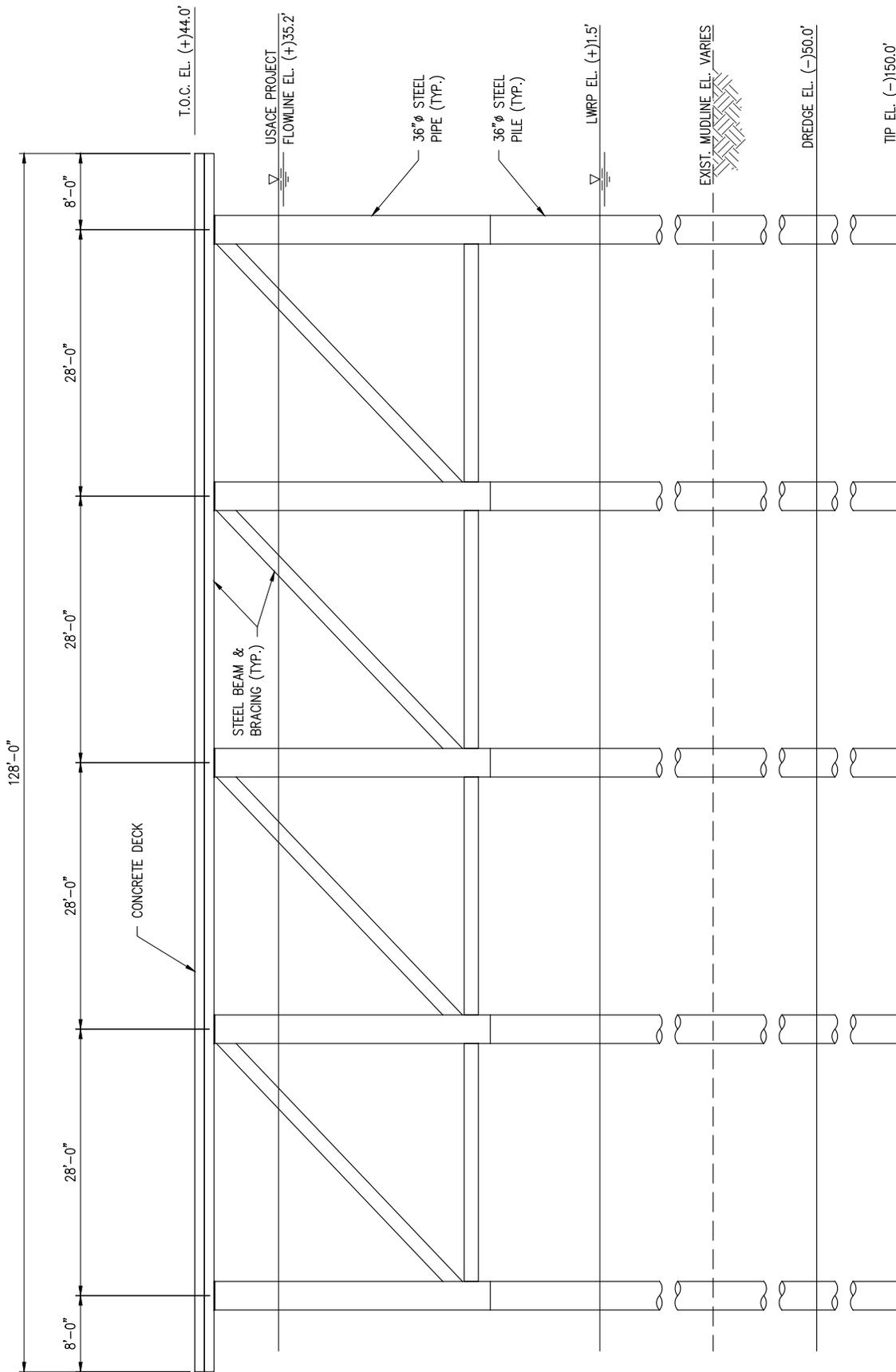


**PROPOSED NEW LOADING PLATFORM PLAN**

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



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<p style="margin: 0;"><b>LANIER &amp; ASSOCIATES</b> CONSULTING ENGINEERS INCORPORATED</p> <p style="margin: 0;">LA: EF-1120 TX: F-2981 NEW ORLEANS • BEAUMONT • CORPUS CHRISTI • HOUSTON</p>	<p><b>CLEAN HYDROGEN WORKS</b></p> <p>ASCENSION PARISH LOUISIANA</p> <hr/> <p><b>LA-1 AMMONIA PROJECT</b></p> <p><b>PROPOSED NEW MARINE TERMINAL</b></p> <p><b>LOADING PLATFORM PLAN</b></p>	<p>DATE <u>APRIL '23</u></p> <p>DESIGN <u>CLO</u></p> <p>DRAWN <u>BAS</u></p> <p>CHECK <u>CLO</u></p> <p>JOB NO <u>11753</u></p> <p>SHEET No.</p> <p style="text-align: right; font-weight: bold;">7 OF 26</p>



**PROPOSED NEW  
LOADING PLATFORM ELEVATION**

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



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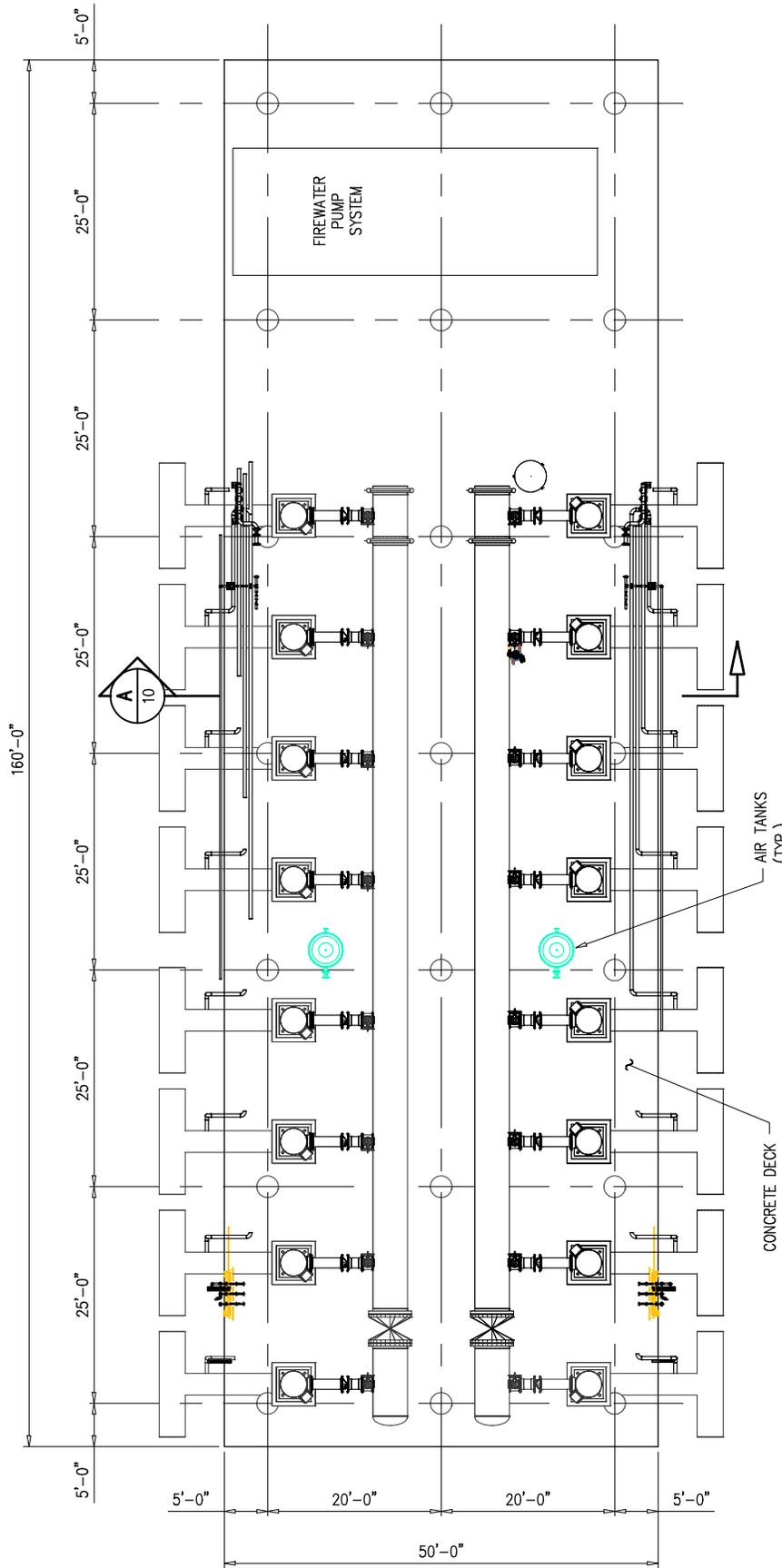
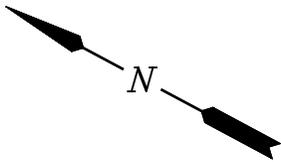
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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**LOADING PLATFORM ELEVATION**

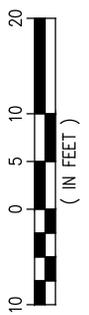
DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO. 11753  
SHEET No.

8 OF 26



**PROPOSED NEW RAW  
WATER INTAKE PLATFORM PLAN**

SCALE: 1" = 20'



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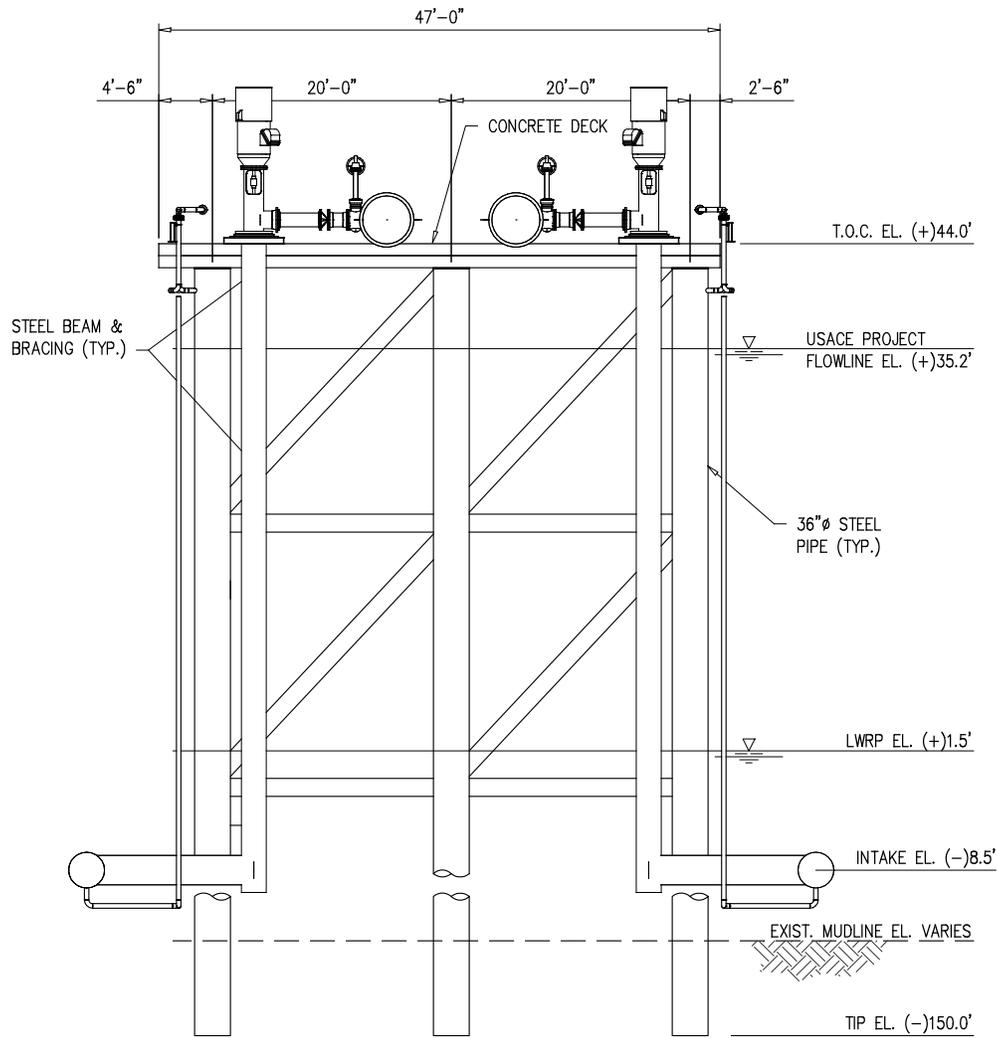
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ASCENSION PARISH LOUISIANA

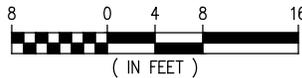
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**WATER INTAKE PLATFORM PLAN**

DATE	APRIL '23
DESIGN	CLO
DRAWN	BAS
CHECK	CLO
JOB NO.	11753
SHEET No.	9 OF 26



**PROPOSED NEW  
WATER INTAKE PLATFORM**

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



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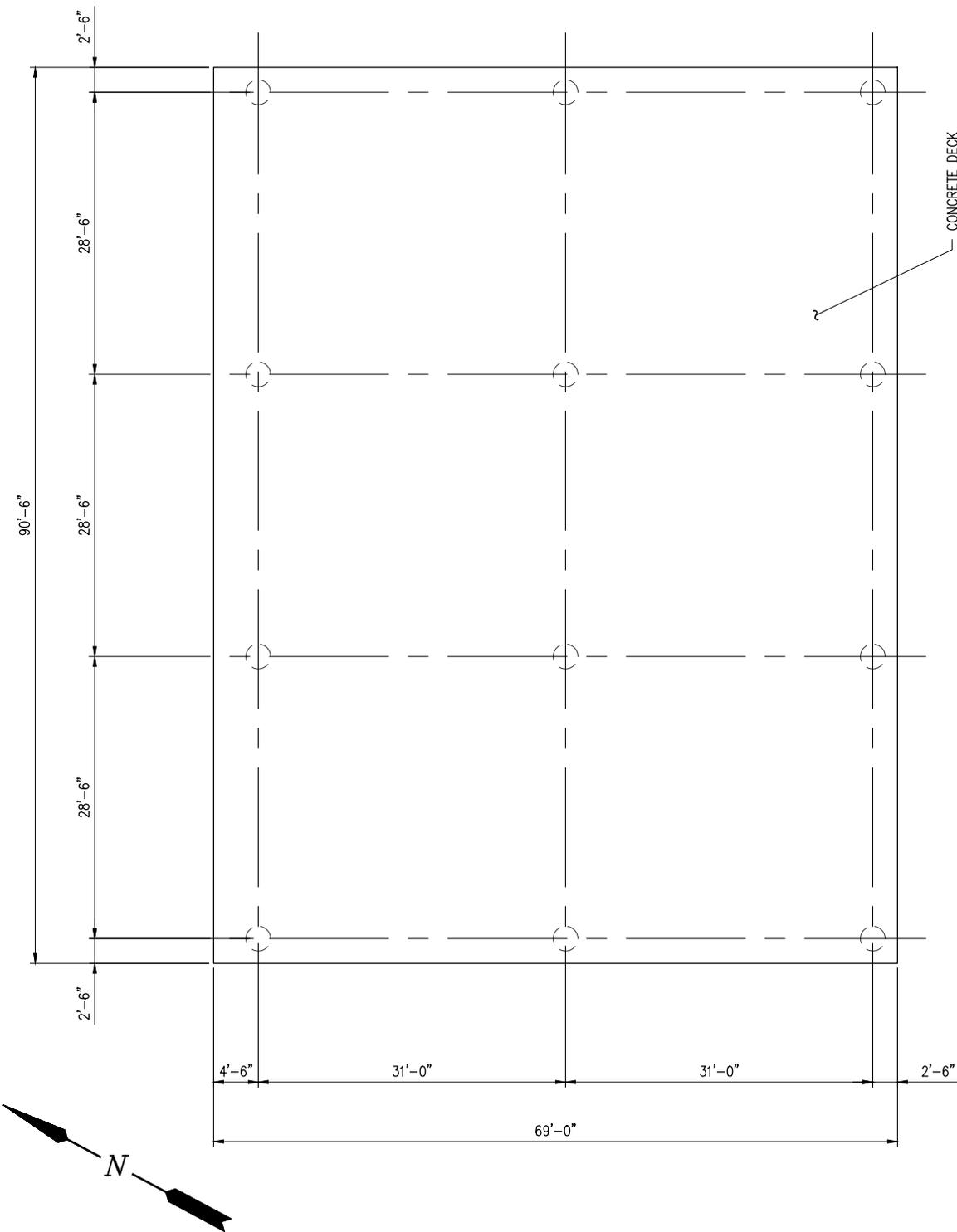
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ASCENSION PARISH LOUISIANA

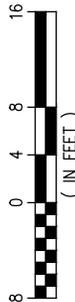
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**WATER INTAKE PLATFORM SECTION**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO 11753  
SHEET No.  
**10 OF 26**



**PROPOSED NEW  
ELECTRICAL PLATFORM PLAN**

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



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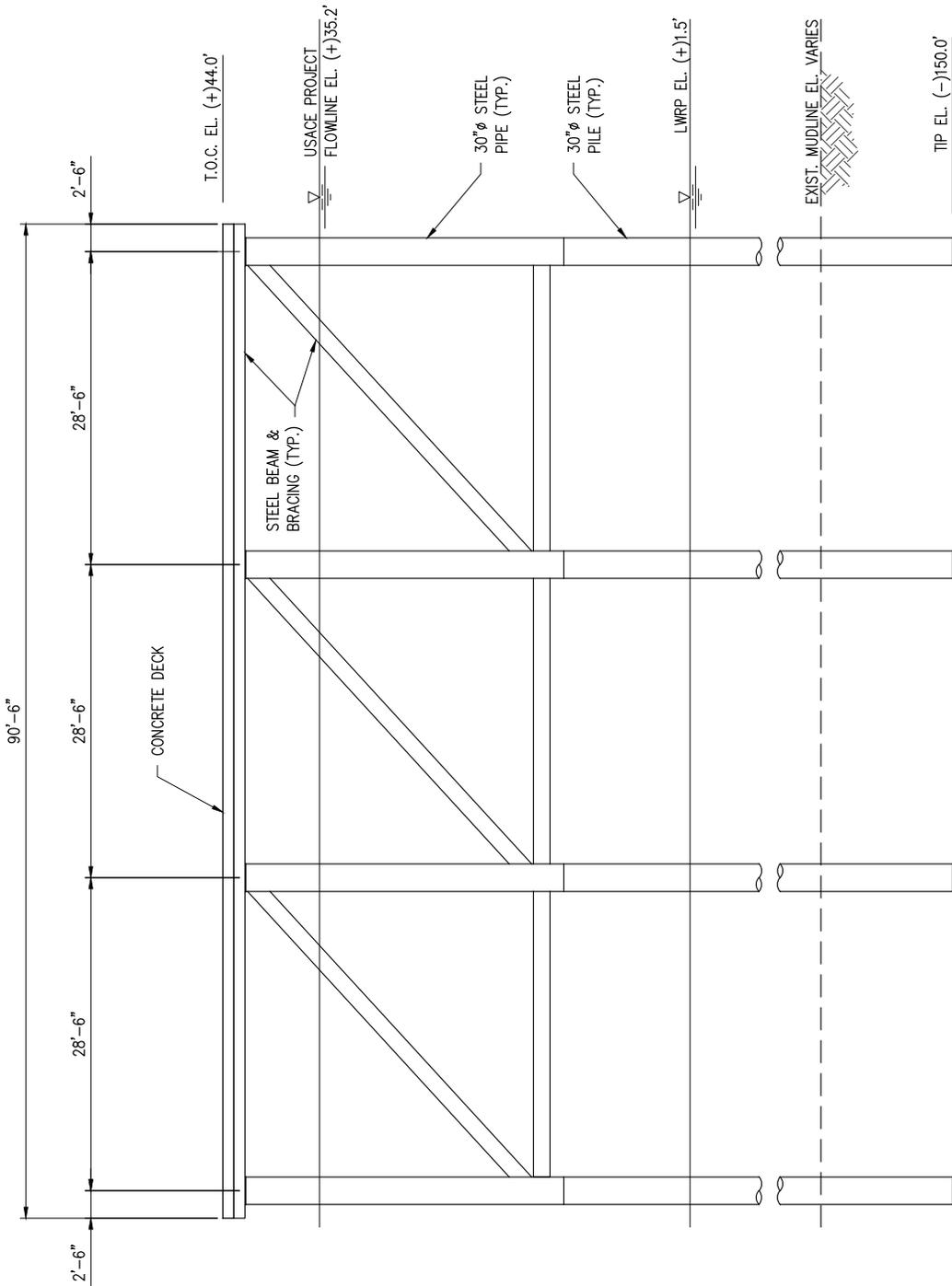
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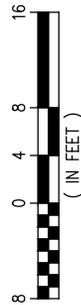
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**ELECTRICAL PLATFORM PLAN**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO 11753  
SHEET No.  
**11** OF **26**



**PROPOSED NEW  
ELECTRICAL PLATFORM ELEVATION**

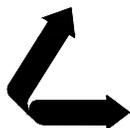
SCALE: 1/16" = 1'-0"



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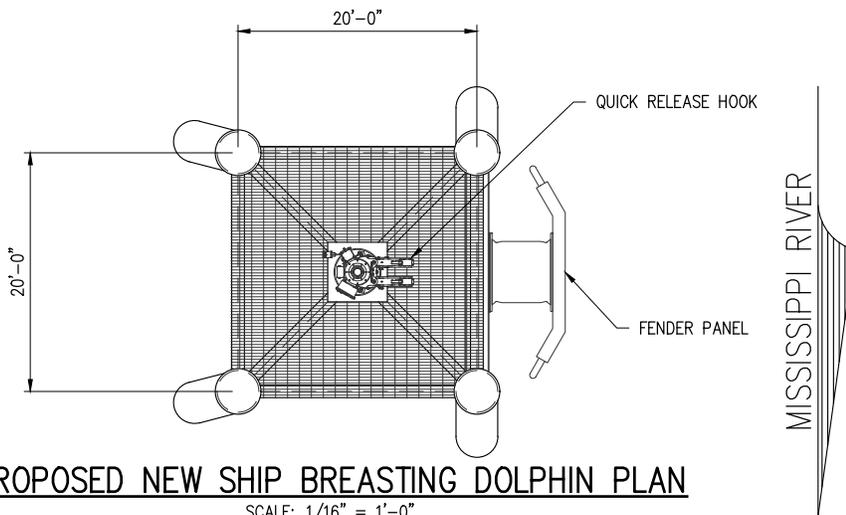
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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

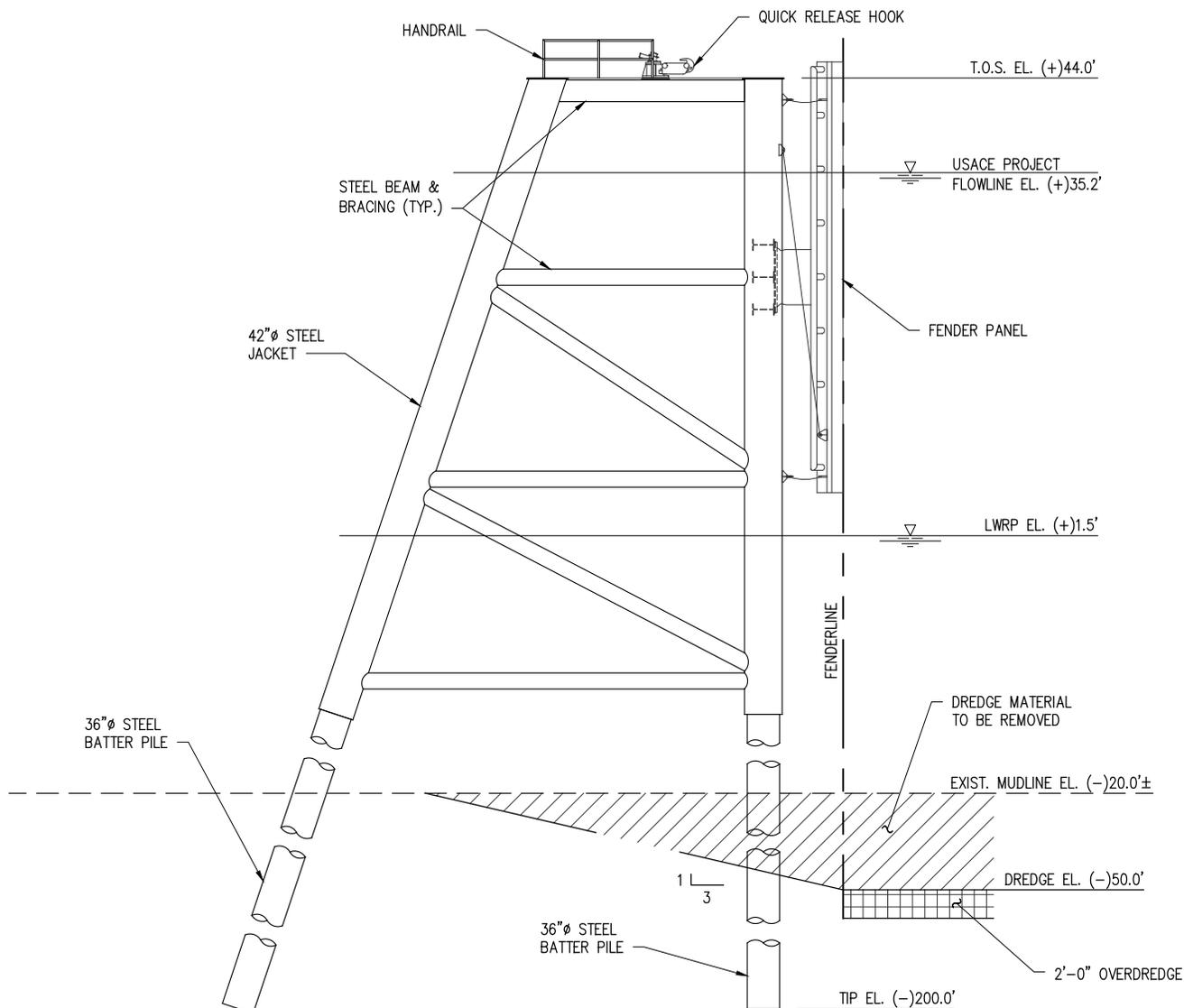
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**ELECTRICAL PLATFORM ELEVATION**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO 11753  
SHEET No.  
12 OF 26



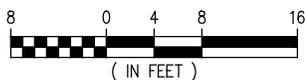
**PROPOSED NEW SHIP BREASTING DOLPHIN PLAN**

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



**PROPOSED NEW SHIP BREASTING DOLPHIN ELEVATION**

SCALE: 1/16" = 1'-0"  
(5 REQUIRED)



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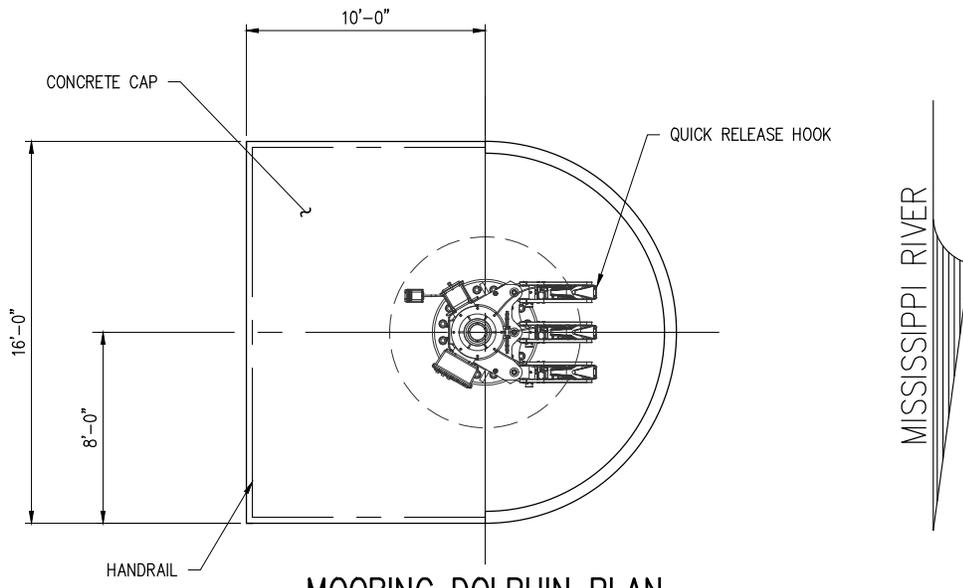
**LANIER & ASSOCIATES**  
CONSULTING ENGINEERS  
INCORPORATED

LA: EF-1120 TX: F-2981  
NEW ORLEANS • BEAUMONT • CORPUS CHRISTI • HOUSTON

**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

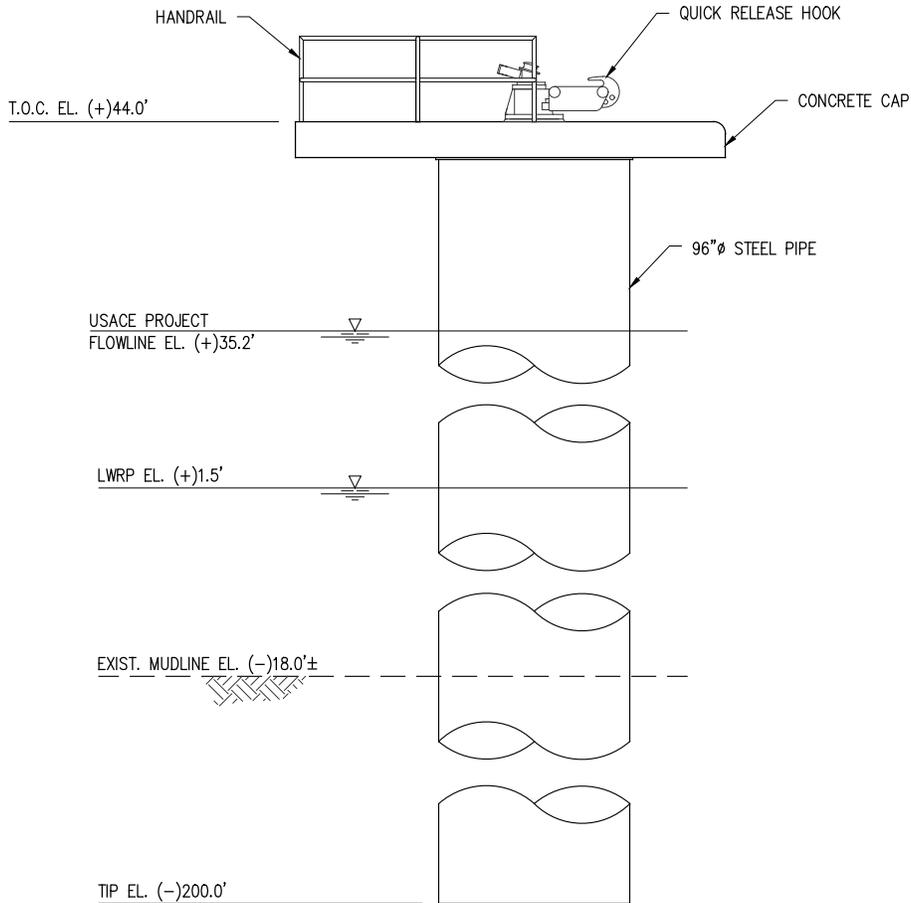
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**SHIP BREASTING DOLPHIN PLAN & ELEVATION**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO. 11753  
SHEET No.  
13 OF 26



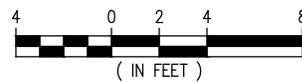
**MOORING DOLPHIN PLAN**

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



**PROPOSED NEW MOORING DOLPHIN ELEVATION**

SCALE: 1/8" = 1'-0"  
(6 REQUIRED)



CHRIS O'BRIEN  
LA PE #33945

PRELIMINARY - FOR PERMITTING PURPOSES ONLY, NOT FOR CONSTRUCTION

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INCORPORATED

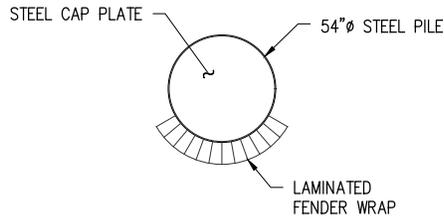
LA: EF-1120 TX: F-2981  
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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**MOORING DOLPHIN PLAN & ELEVATION**

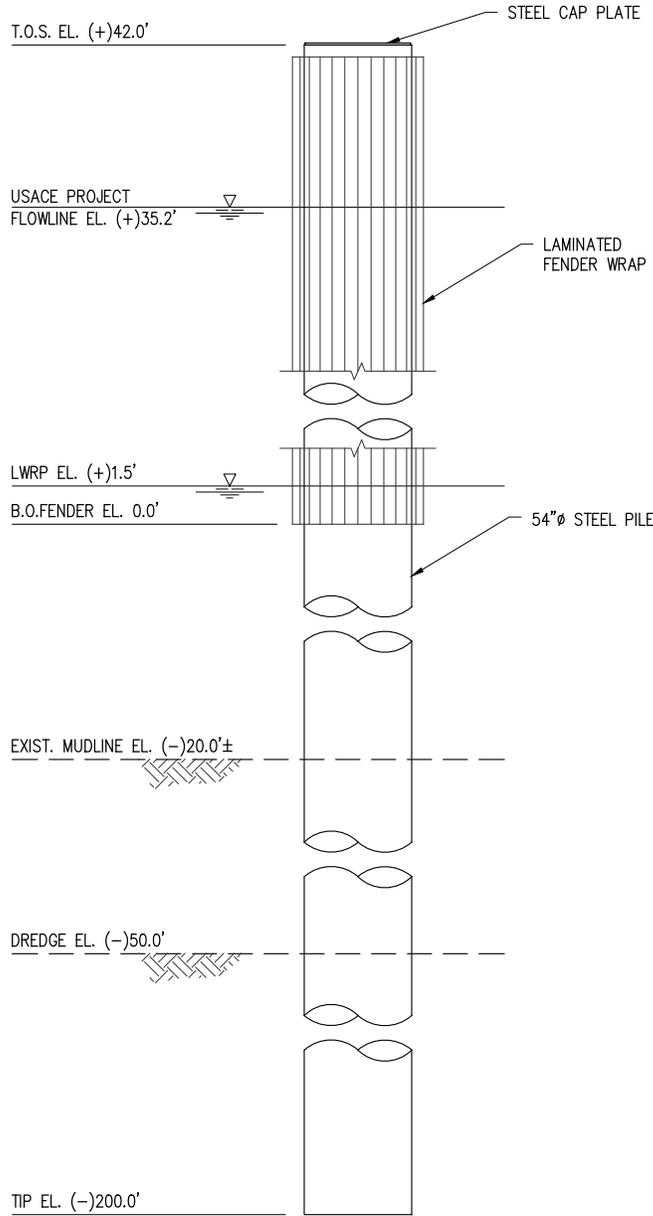
DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO 11753  
SHEET No.

14 OF 26



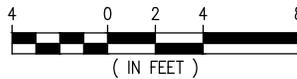
**BARGE DOLPHIN PLAN**

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



**PROPOSED NEW BARGE DOLPHIN ELEVATION**

SCALE: 1/8" = 1'-0"  
(2 REQUIRED)



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LA PE #33945

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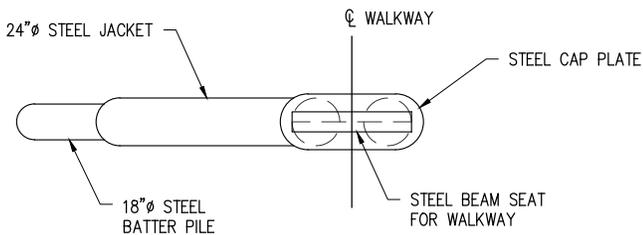
**LANIER & ASSOCIATES**  
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INCORPORATED

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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

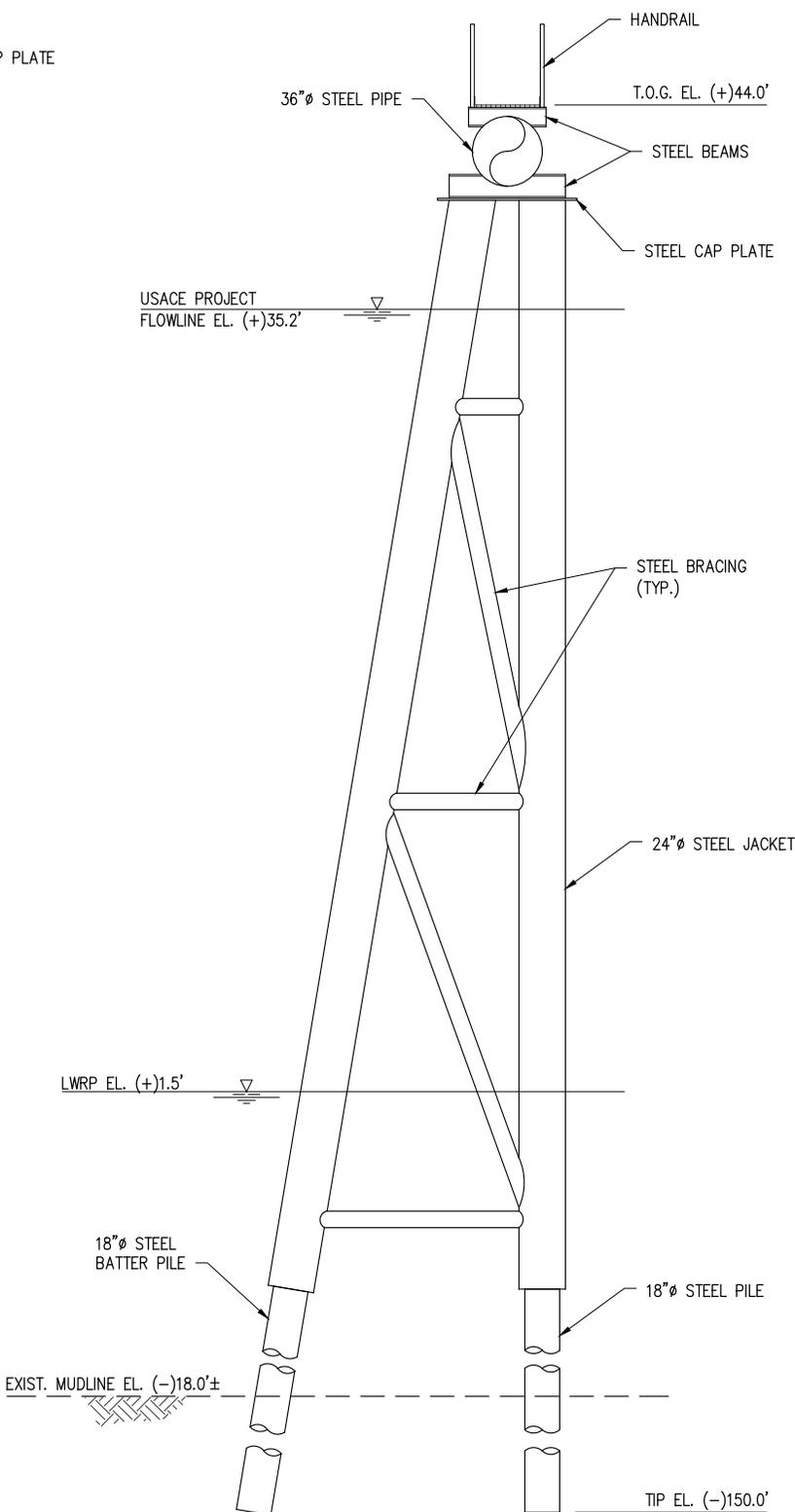
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**BARGE DOLPHIN PLAN & ELEVATION**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO 11753  
SHEET No.  
**15 OF 26**



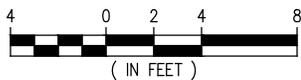
**PROPOSED NEW  
2 PILE WALKWAY BENT PLAN**

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



**PROPOSED NEW  
2 PILE WALKWAY BENT ELEVATION**

SCALE: 1/8" = 1'-0"  
(8 REQUIRED)



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LA PE #33945

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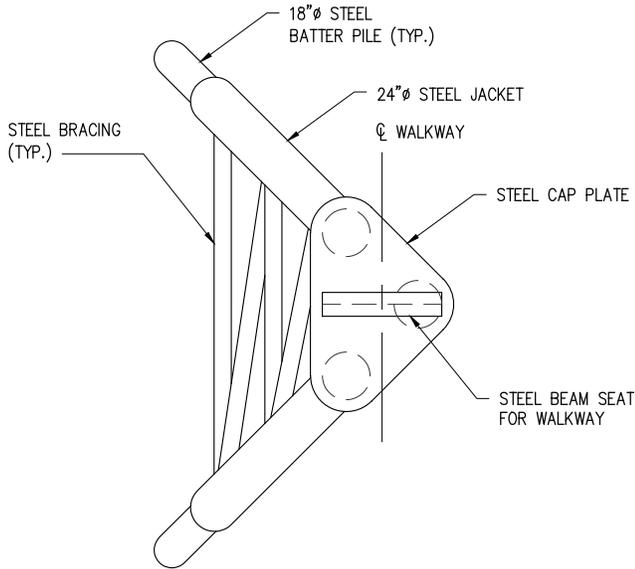
**LANIER & ASSOCIATES**  
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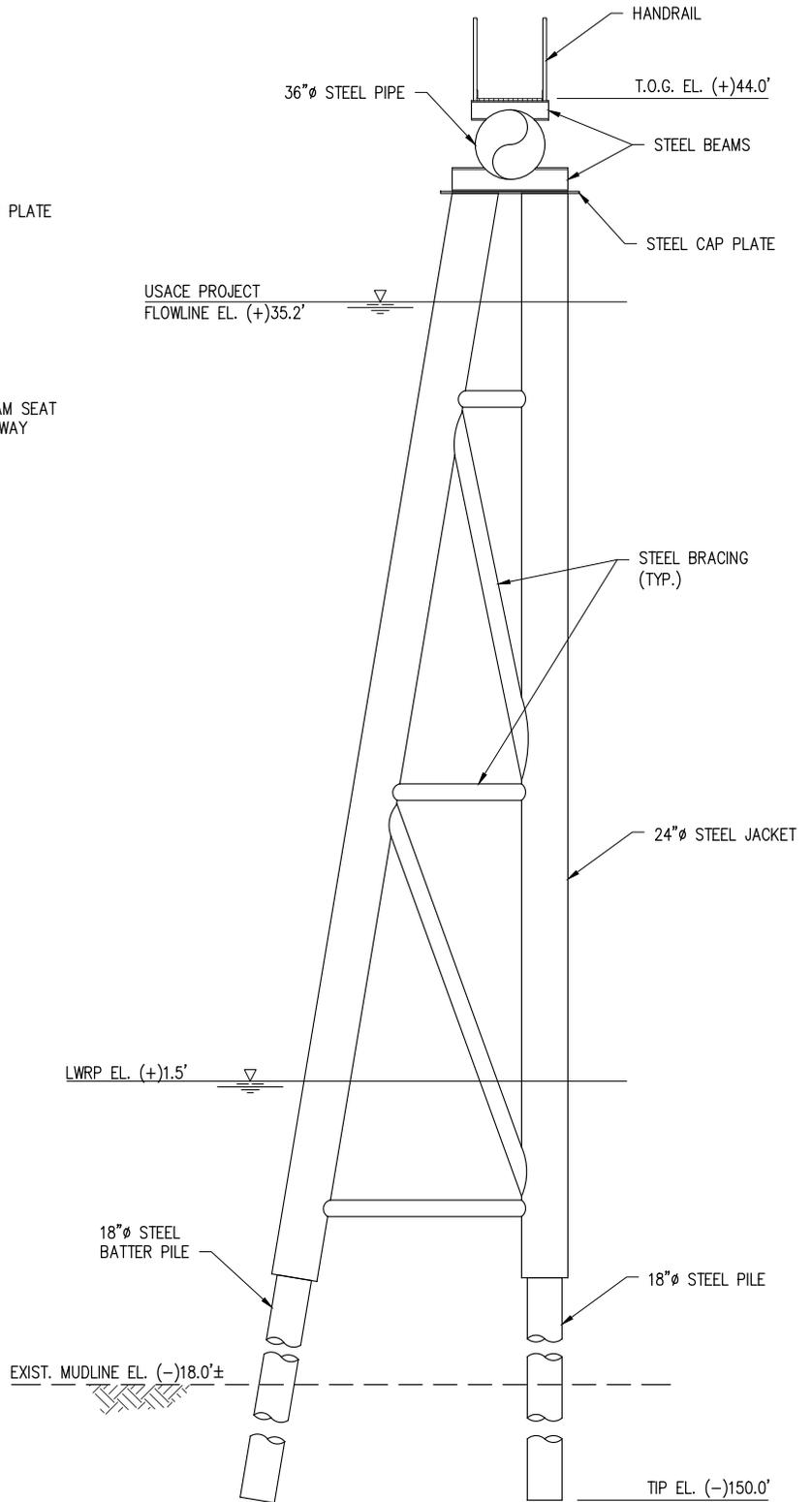
**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**2 PILE WALKWAY BENT PLAN & ELEVATION**

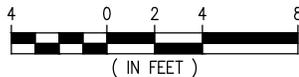
DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO 11753  
SHEET No.  
**16 OF 26**



**PROPOSED NEW  
TRIPOD WALKWAY BENT PLAN**  
SCALE: 1/8" = 1'-0"



**PROPOSED NEW  
TRIPOD WALKWAY BENT ELEVATION**  
SCALE: 1/8" = 1'-0"  
(4 REQUIRED)



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LA PE #33945

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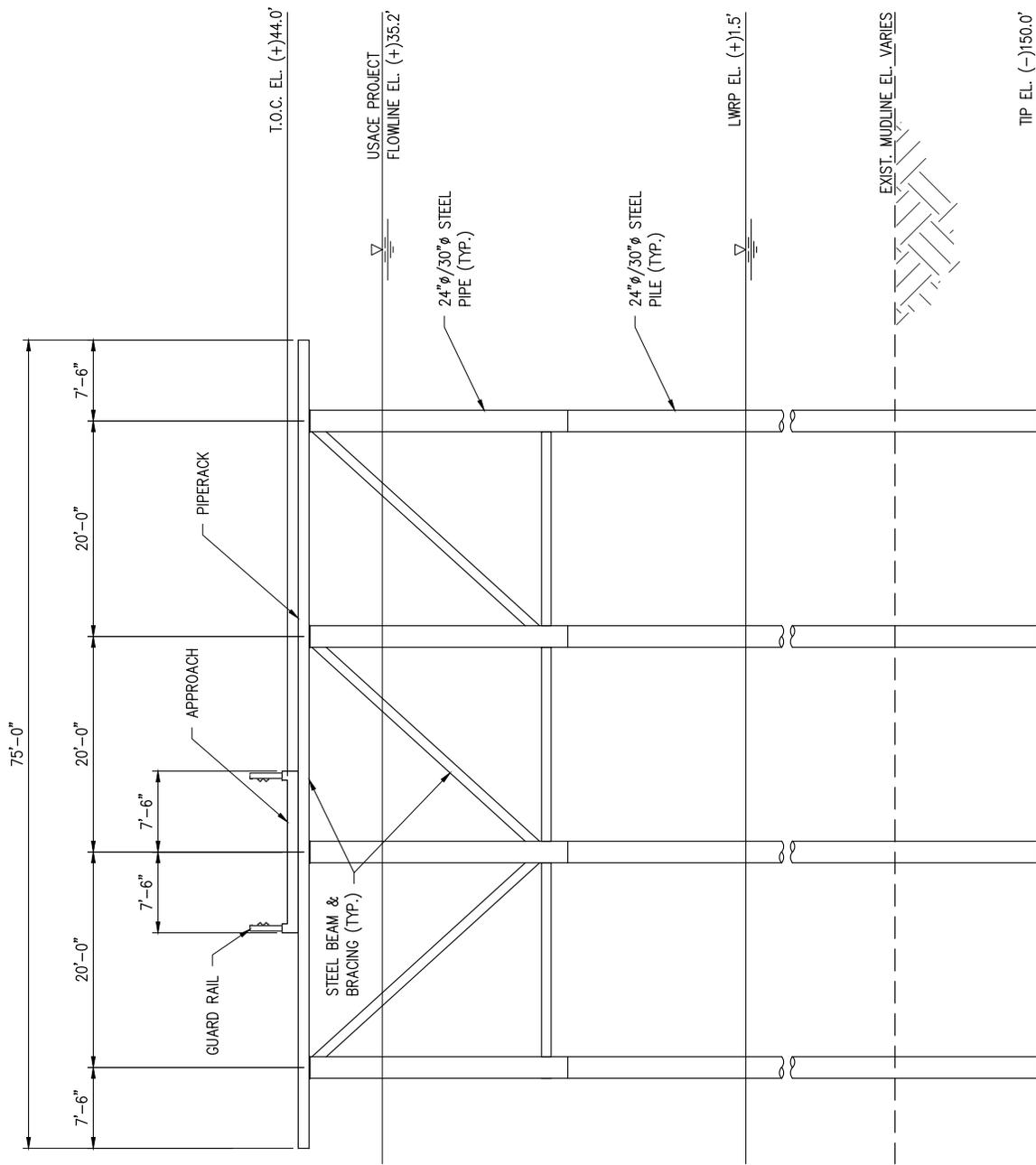
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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

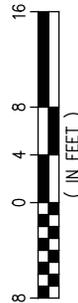
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**TRIPOD WALKWAY BENT PLAN & ELEVATION**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO. 11753  
SHEET No. 17 OF 26



**PROPOSED NEW  
TYPICAL APPROACH BENT ELEVATION**

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



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LA PE #33945

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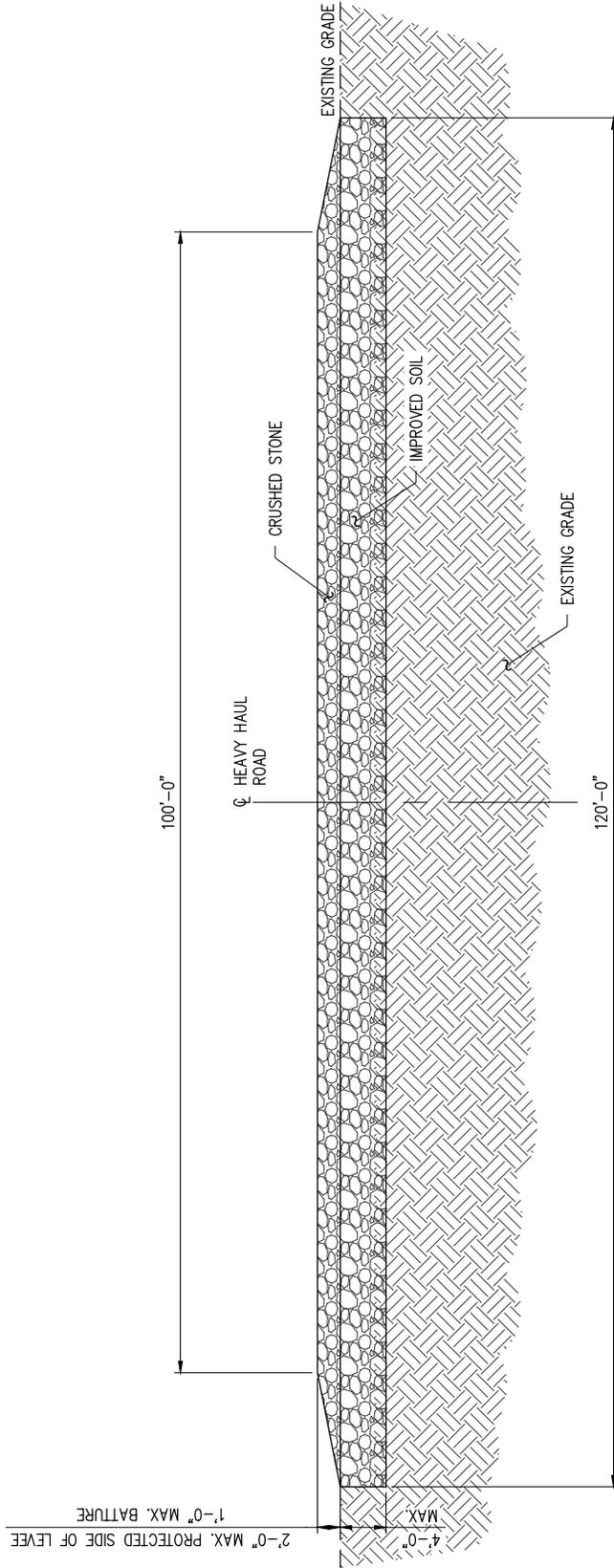
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CONSULTING ENGINEERS  
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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

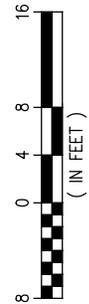
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**TYPICAL APPROACH ELEVATION**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO. 11753  
SHEET No. 18 OF 26



**TYPICAL HEAVY HAUL ROAD SECTION**

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



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LA PE #33945

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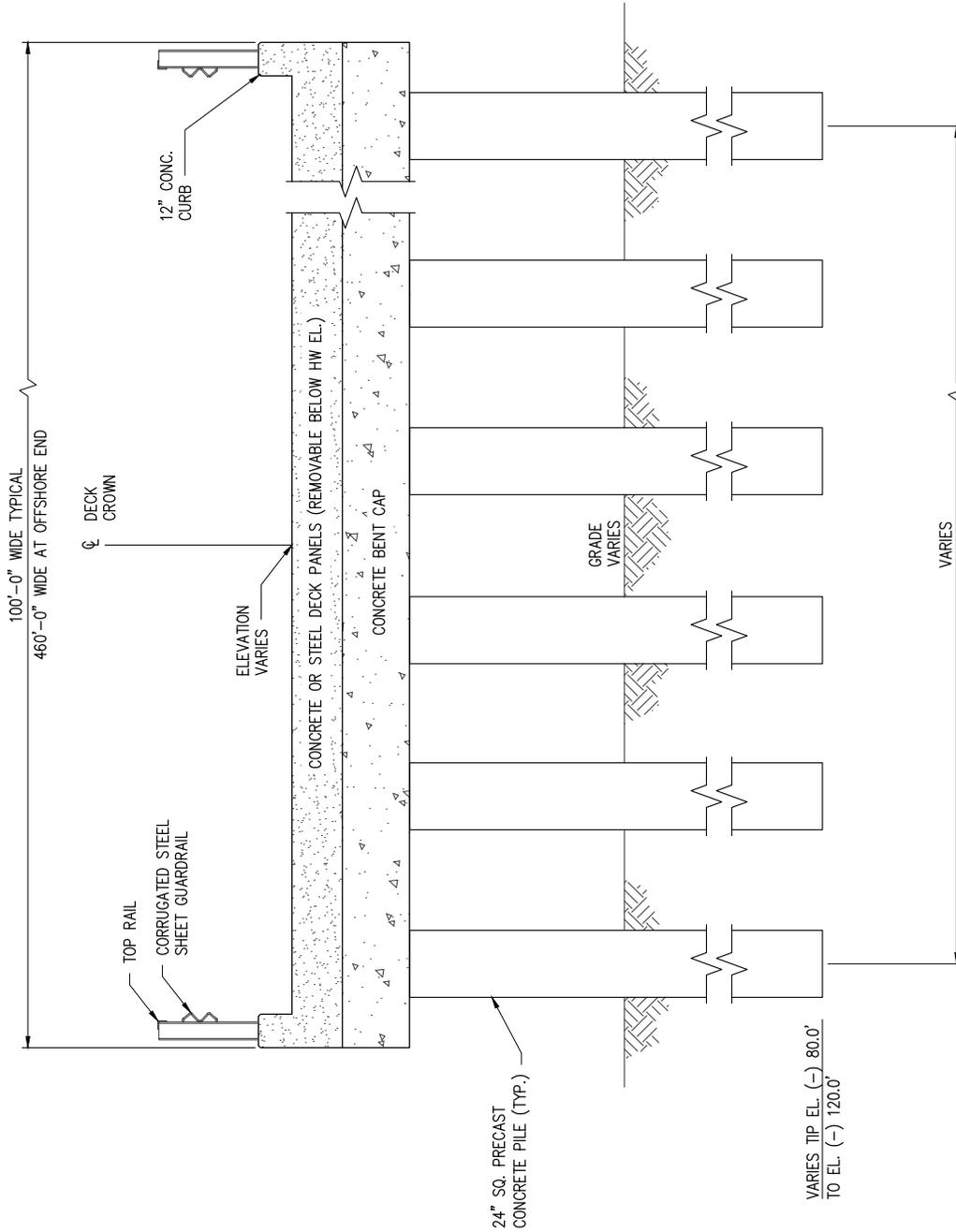
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LA: EF-1120 TX: F-2981  
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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**HEAVY HAUL ROAD TYPICAL SECTION**

DATE	APRIL '23
DESIGN	CLO
DRAWN	BAS
CHECK	CLO
JOB NO	11753
SHEET No.	19 OF 26



**TYPICAL TRUCK TURNING AREA  
AND TYPICAL BENT**

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



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LA PE #33945

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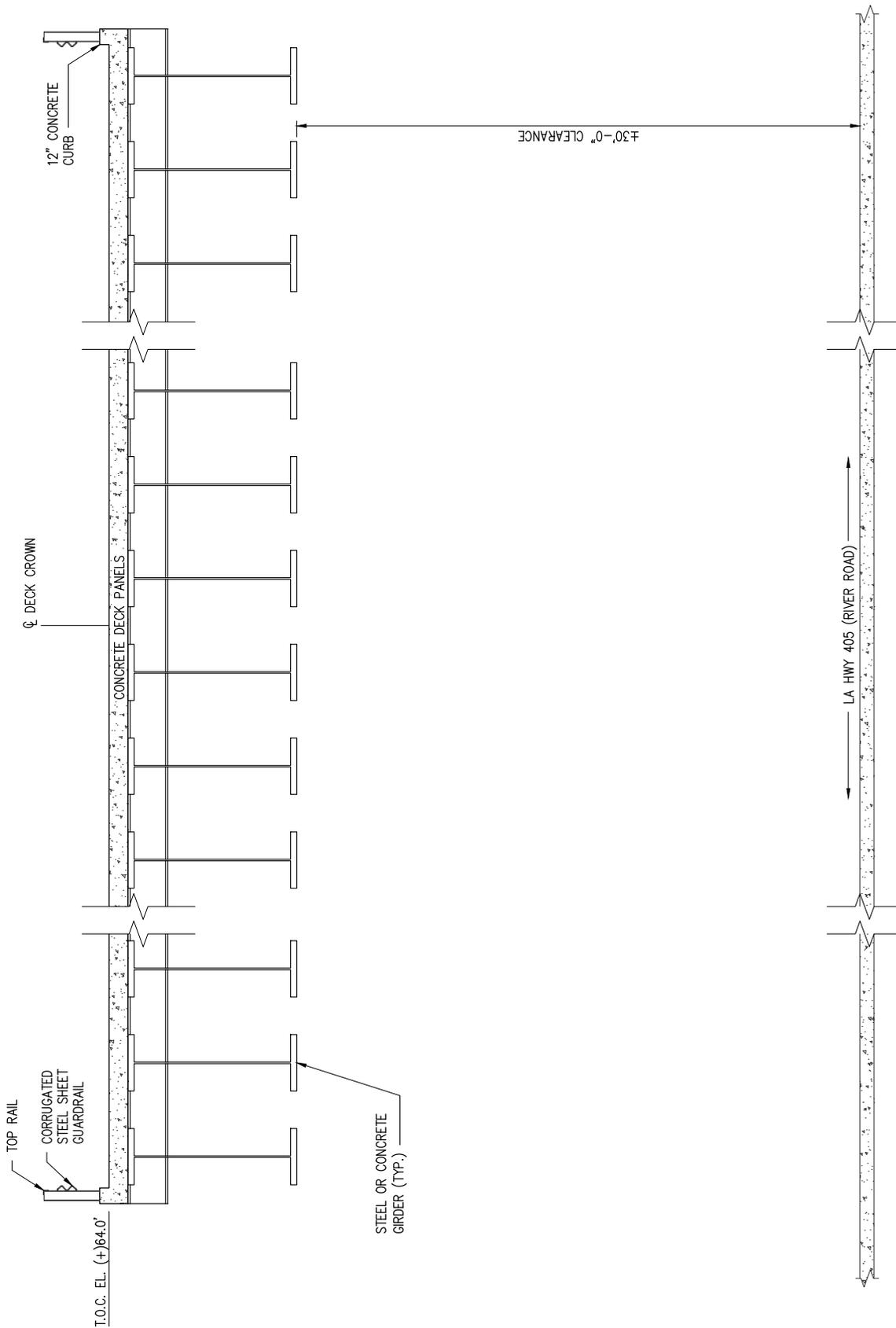
**LANIER & ASSOCIATES**  
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INCORPORATED

LA: EF-1120 TX: F-2981  
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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

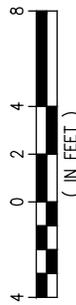
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**TRUCK TURNING AREA TYPICAL SECTION**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO 11753  
SHEET No.  
20 OF 26



**TYPICAL ROAD CROSSING SECTION**

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



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LA PE #33945

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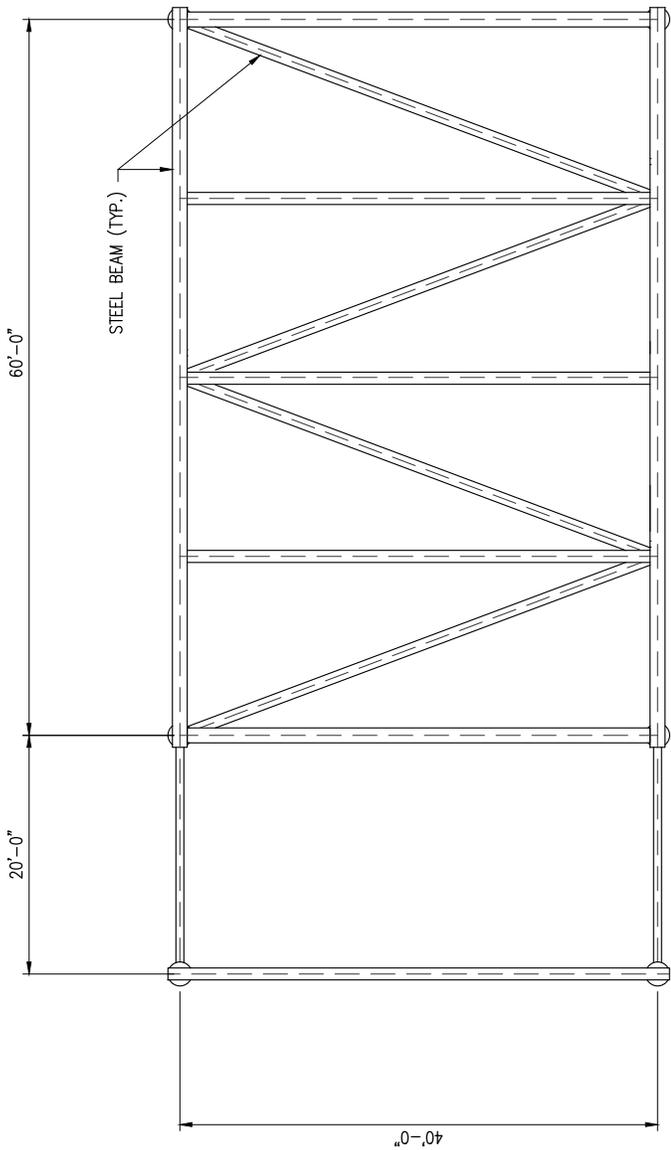
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LA: EF-1120 TX: F-2981  
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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

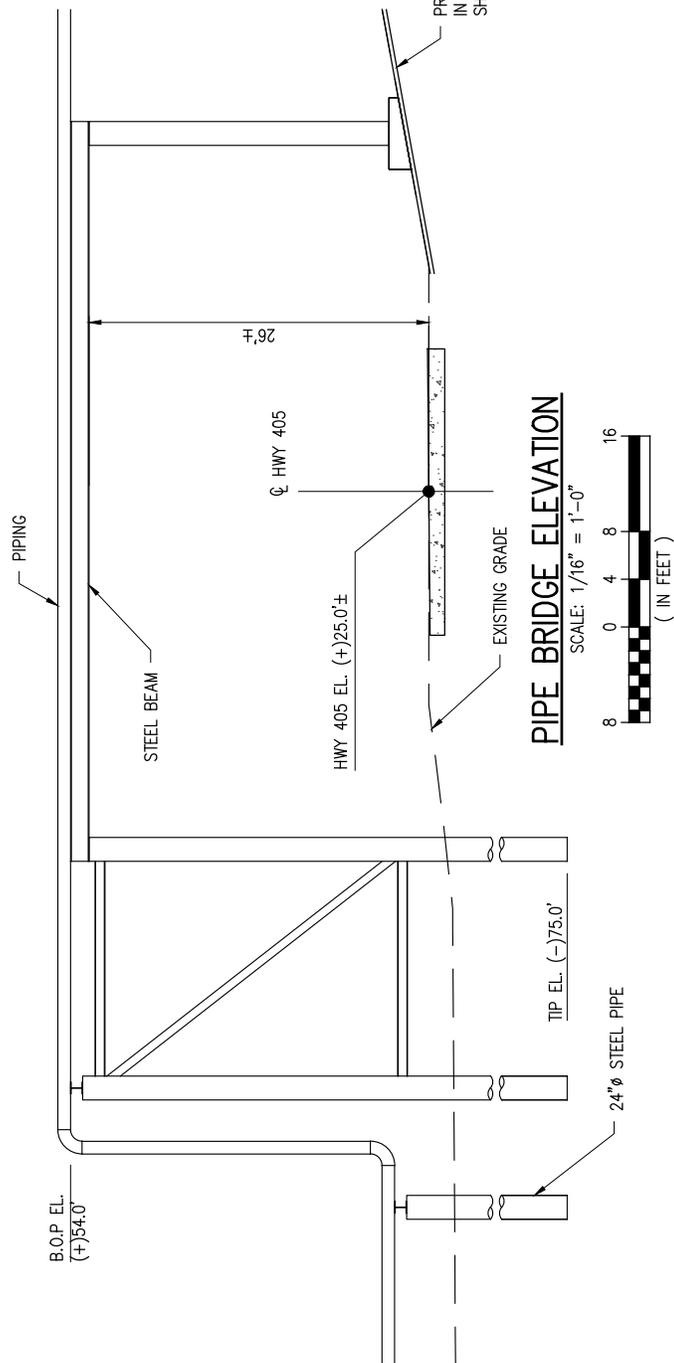
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**TYPICAL ROAD CROSSING SECTION**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO 11753  
SHEET No.  
21 OF 26



**PIPE BRIDGE PLAN**

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



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LA PE #33945

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REV  
C



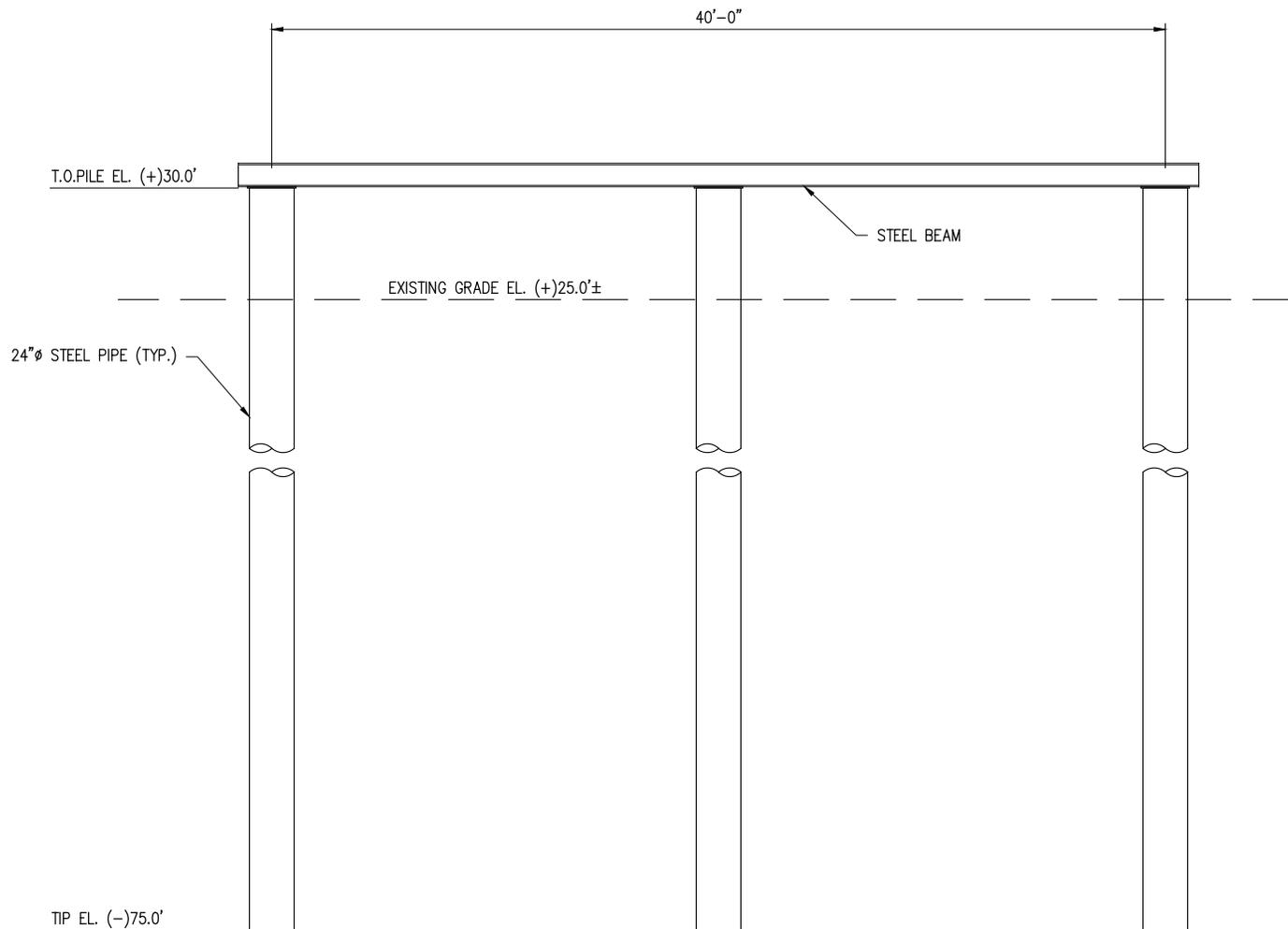
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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PIPE BRIDGE PLAN & ELEVATION**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO 11753  
SHEET No. 22 OF 26



### LOWER PIPE RACK ELEVATION

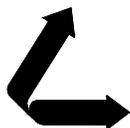
SCALE: 1/8" = 1'-0"



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LA PE #33945

PRELIMINARY - FOR PERMITTING PURPOSES ONLY, NOT FOR CONSTRUCTION

REV  
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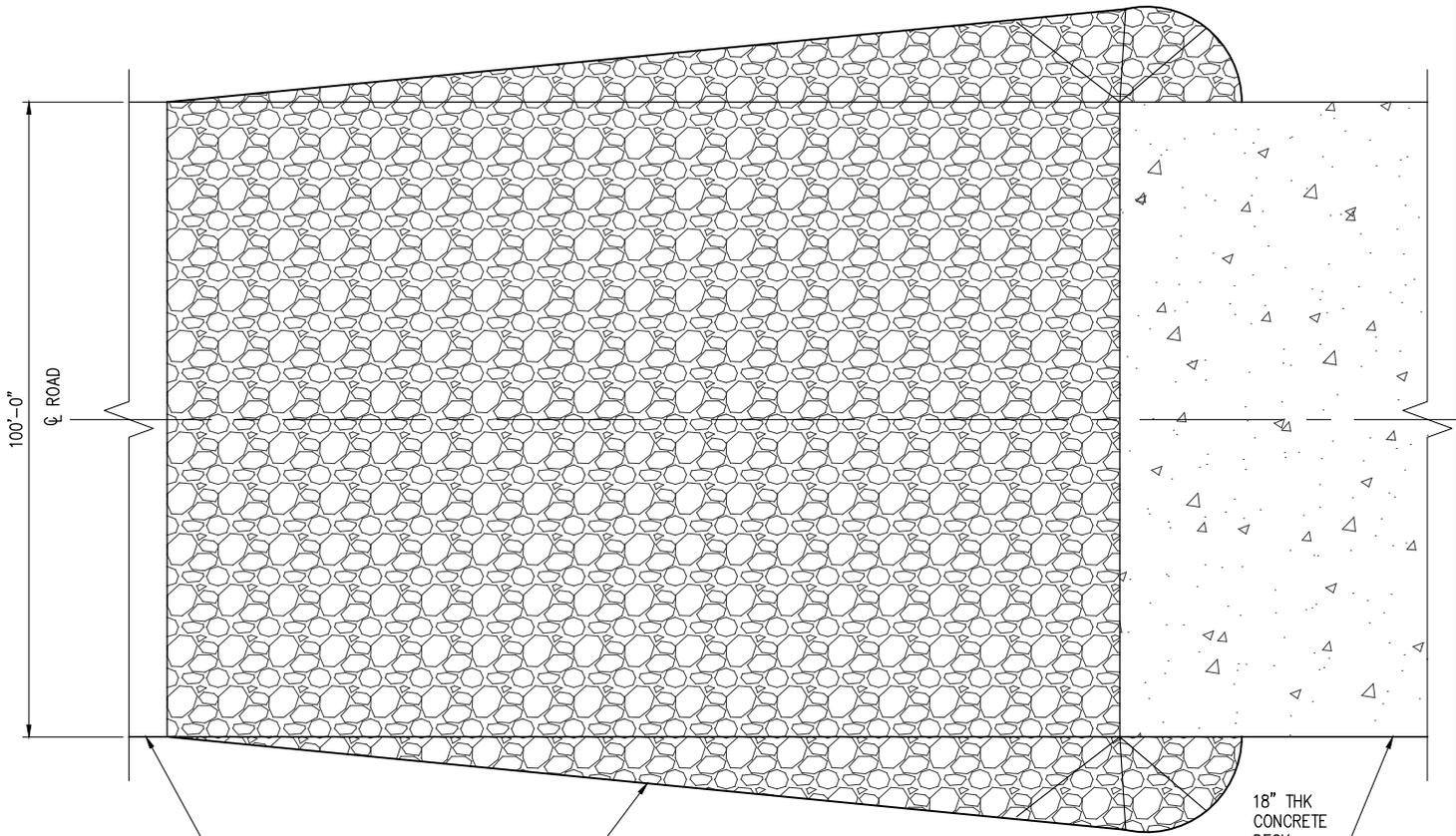
**LANIER & ASSOCIATES**  
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LA: EF-1120 TX: F-2981  
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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

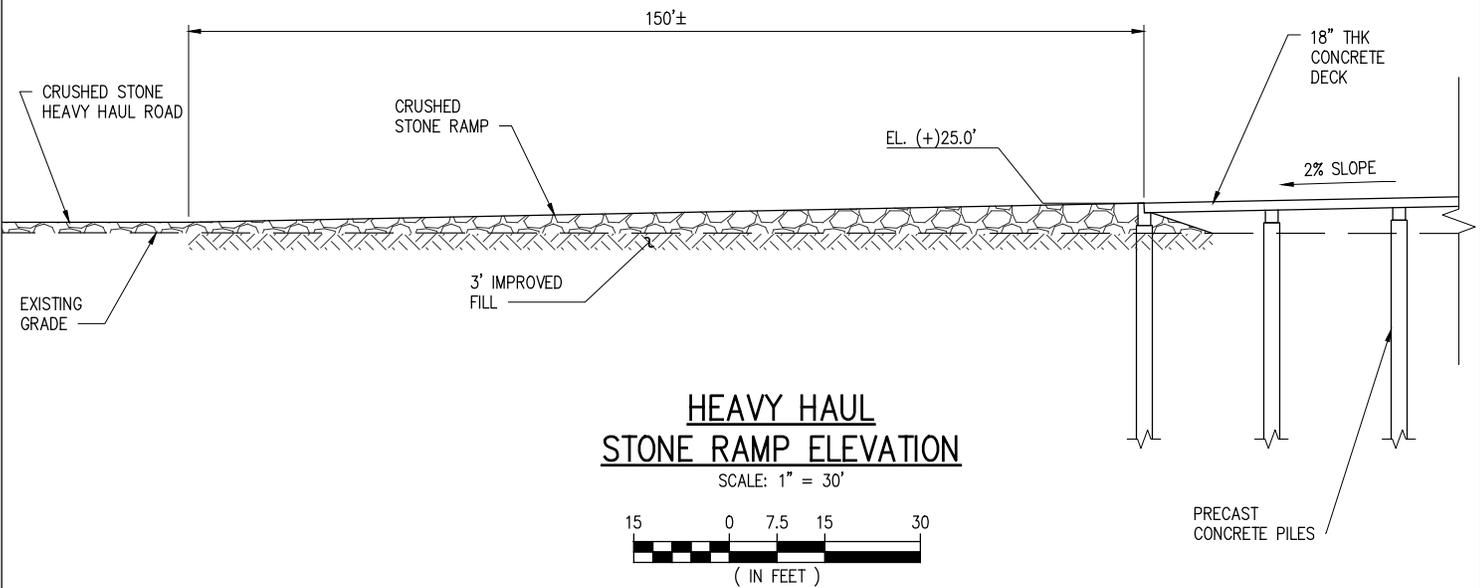
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**LOWER PIPE RACK ELEVATION**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO. 11753  
SHEET No. 23 OF 26



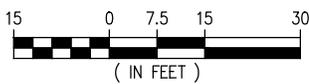
**HEAVY HAUL  
STONE RAMP PLAN**

SCALE: 1" = 30'



**HEAVY HAUL  
STONE RAMP ELEVATION**

SCALE: 1" = 30'



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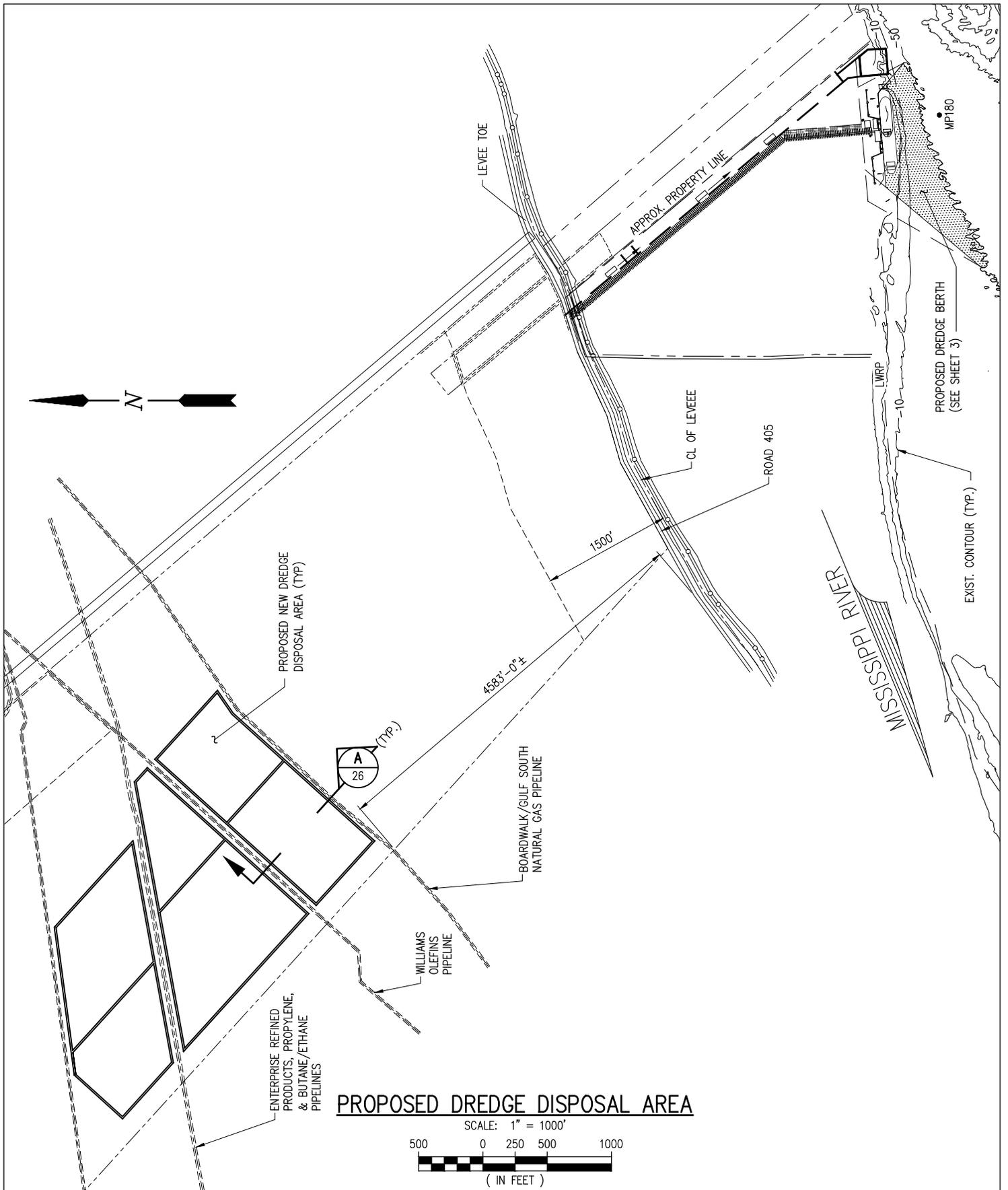
LA: EF-1120 TX: F-2981  
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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

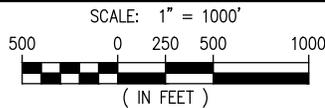
**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED NEW HEAVY HAUL STONE RAMP**

DATE APRIL '23  
DESIGN CLO  
DRAWN BAS  
CHECK CLO  
JOB NO 11753  
SHEET No.  
24 OF 26

J:\110005\11753 MP180 BATTURE SLIP\DRAWINGS\PERMIT\11753-P25.DWG



**PROPOSED DREDGE DISPOSAL AREA**



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LA PE #33945

**PRELIMINARY - FOR PERMIT PURPOSES ONLY**

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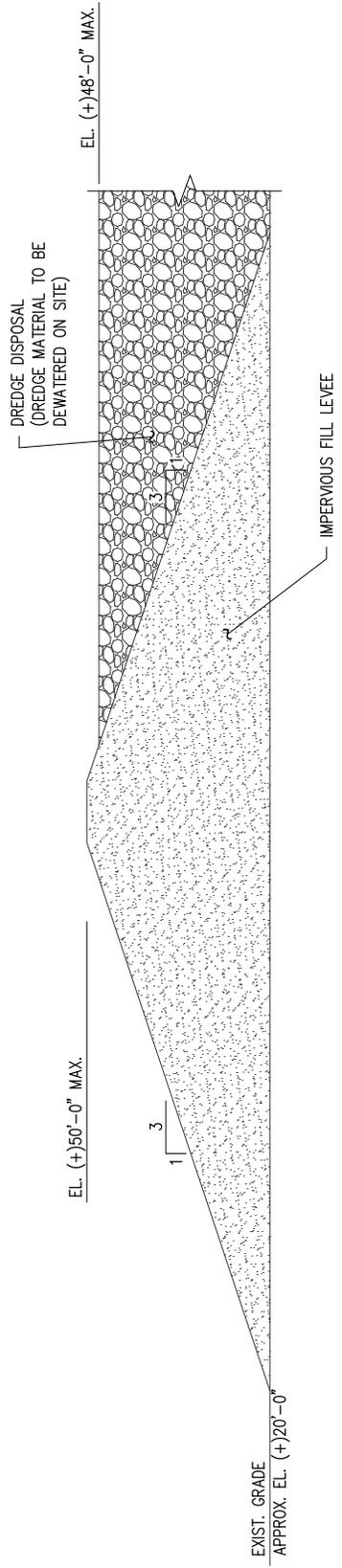
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INCORPORATED

LA: EF-1120 TX: F-2981  
NEW ORLEANS, LA • BEAUMONT, TX

**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**PROPOSED DREDGE DISPOSAL AREA**

DATE APRIL '23  
DESIGN CLO  
DRAWN CAP  
CHECK CLO  
JOB NO 11753  
SHEET No.  
25 OF 26



A  
S25

SECTION - DREDGE DISPOSAL AREA

SCALE: 1"=30'

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LA PE #33945

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VF-185 LSF-10194817

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**CLEAN HYDROGEN WORKS**  
ASCENSION PARISH LOUISIANA

**LA-1 AMMONIA PROJECT**  
**PROPOSED NEW MARINE TERMINAL**  
**SECTION A - DREDGE DISPOSAL AREA**

DATE APRIL '23  
DESIGN CLO  
DRAWN TAC  
CHECK CLO  
JOB NO 11753  
SHEET No.  
**26** OF **26**