



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

April 1, 2024

Regulatory Division
Central Evaluation Branch

Project Manager
Jeremy Rodriguez
(504) 862-1577
Jeremy.D.Rodriguez@usace.army.mil
Application Number: MVN-2018-00991-CR

PUBLIC NOTICE

Interested parties are hereby notified that a permit application has been received by the New Orleans District of the US Army Corps of Engineers pursuant to: [X] Section 10 of the Rivers and Harbors Act of March 3, 1899 (30 Stat. 1151; 33 USC 403), [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).

FACILITY MODIFICATION INCLUDING CONSTRUCTION OF A ENERGY SUBSTATION, SHIP DOCK, INTAKE STRUCTURE, AND HEAVY HAUL ROAD ON THE MISSISSIPPI RIVER LDB RM 187.5 IN IBERVILLE AND ASCENSION PARISHES

NAME OF APPLICANT: PCS Nitrogen Fertilizer, LP, c/o Olivia Barry of CK Associates, 8591 United Plaza Blvd., Suite 300, Baton Rouge, LA 70123.

LOCATION OF WORK: At the existing PCS Nitrogen facility at RM 187.5 in the Mississippi River LDB in Geismar, Louisiana within Iberville and Ascension Parishes. The project lies within the Pontchartrain and Mississippi Basins in hydrologic units (HUC 08070202, 08070204, and 08070100), as shown on the attached drawings (Latitude 30.219132 N, Longitude -91.059634 W).

CHARACTER OF WORK: The applicant has requested Department of the Army authorization to clear, grade, excavate and deposit fill and/or aggregate material to construct and maintain a clean ammonia plant to include a river water intake structure and ship dock, a pipeline crossing over the levee, an Entergy substation, and a heavy haul road crossing the levee for the existing, adjacent facility previously authorized as LMNOD Mississippi River 609 on 11 October 1965 to Williams Energy Services with subsequent modifications under MVN-1997-04258-CX for adjacent associated dock structures to new operator/owners Allied Corp (now Honeywell, Inc.) and PCS Nitrogen. The most recent modification included a parking lot and laydown yard issued on 31 March 2021 as MVN-2018-00991-CG which authorized impacts to a total of 3.5 acres of wetlands and 0.52 acres of non-wetland waters. This modification expands the footprint of the previous authorization and proposes approximately 3.16 additional acres of wetland impacts and approximately 8.91 acres of impacts to non-wetland waters. Of this, approximately 5.93

acres of impacts to Traditionally Navigable Waters and 0.36 acres of impacts to jurisdictional wetlands will be permanent. Approximately 540 CY of clay, 80 CY of limestone, 640 CY of rip-rap, and 400 CY of concrete will be placed for the expansion.

MITIGATION: The applicant proposes to avoid additional direct impacts and minimize secondary impacts to the maximum extent practicable. Any further reduction would limit usage of the property and therefore function, deeming the project impracticable.

The applicant proposes to avoid additional direct impacts and minimize secondary impacts by limiting the overall pipeline lengths necessary to operate water intake structure, utilizing previously permitted areas in the existing facility to construct the substation and associated infrastructure, reducing the need for excavation by installing the entirety of the pipe rack aboveground on pilings, limiting the construction activity to the designated construction areas onsite, utilizing best management practices for erosion and siltation control during and after the construction phase of the project, and disposing of all removed fill and vegetation not approved as fill material to an off-site, non-jurisdictional location. As compensation for unavoidable wetland impacts, the applicant proposes to use a Corps approved mitigation bank within the watershed of impact.

The comment period for the Department of Army will close in **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 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 preferably emailed to the Corps of Engineers project manager listed above or forwarded to the Corps of Engineers at the address above **ATTENTION: REGULATORY DIVISION, RGC, Jeremy D. Rodriguez.** 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 that may alter or impact 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.

The U.S. Army Corps of Engineers is soliciting comments from the public, federal, state, and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers 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 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. 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.

The New Orleans District utilizes the National Register of Historic Places to identify properties listed on or near the proposed work and is presently unaware of non-listed eligible properties near the project site. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, prehistorical, historical sites, or data. However, extent of impacts is undetermined at this time pending a National Historic Preservation Act compliance determination. As deemed necessary, copies of this notice are made available to the State Archeologist and the State Historic Preservation Officer, and federally recognized Native American tribes regarding potential impacts to cultural resources.

Our initial finding is that the proposed work would have no effect 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 endangered species under their jurisdiction.

Utilizing the Information & Planning Consultation (IPaC) tool for Endangered Species in Louisiana protocol, as signed on January 27, 2020, between the U.S. Army Corps of Engineers, New Orleans District (CEMVN) and the U.S. Fish and Wildlife Service, CEMVN has determined that the proposed project is located in waters known to be utilized by the West Indian Manatee (*Trichechus manatus*) and the Pallid Sturgeon (*Scaphirhynchus albus*). However, with the inclusion of the Standard Manatee Conditions for In-Water Activities, the proposed work is not likely to adversely affect the West Indian Manatee. Additionally, the proposed work has been determined not likely to adversely affect Pallid Sturgeon as there will be no dredging activities associated with the work and the applicant has stated they will comply with the guidance for water intake structures detailed in Section 316(b) of the Clean Water Act.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal would result in the destruction or alteration of NA 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.

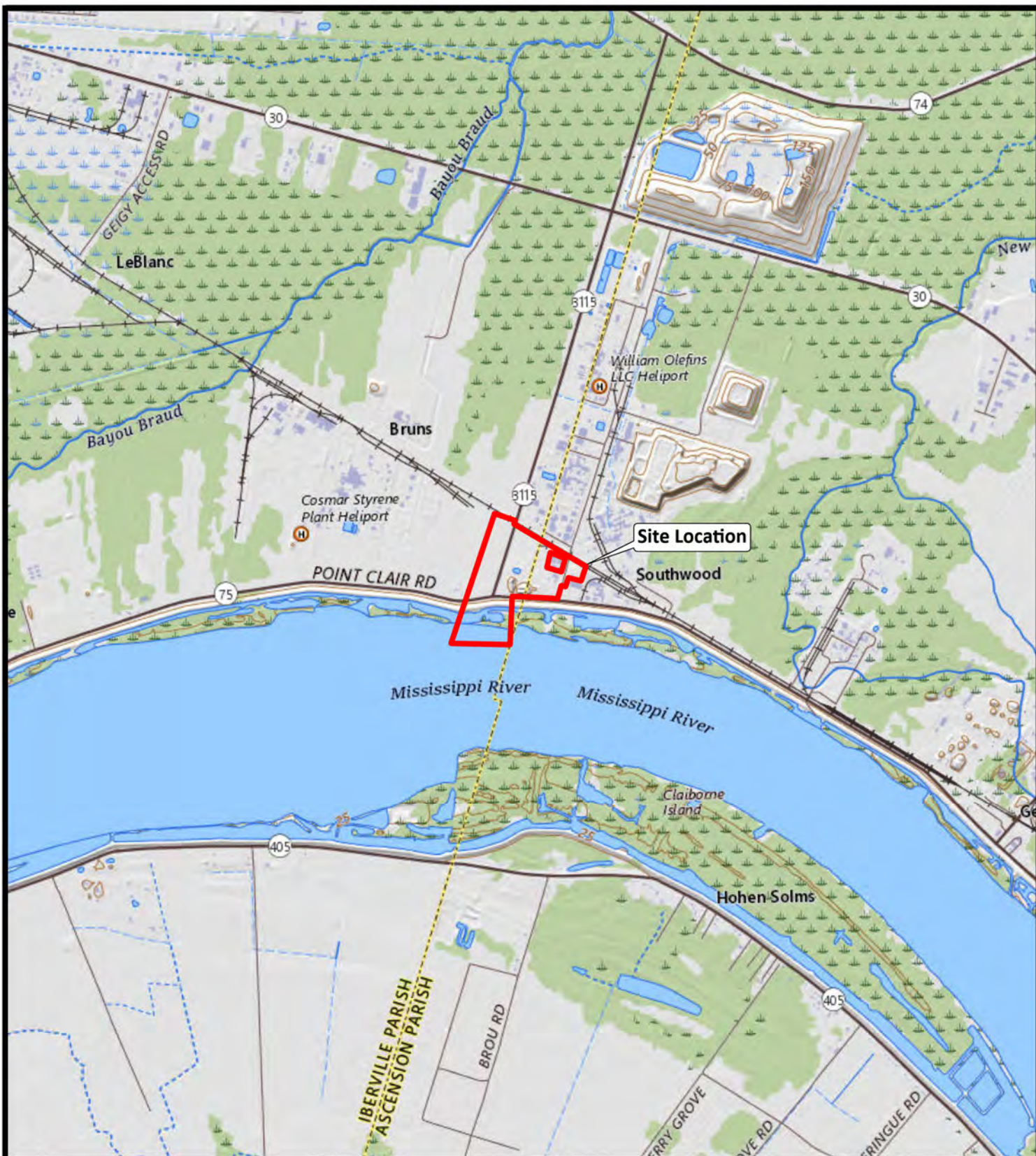
If the proposed work involves deposits of dredged or fill material into navigable waters, the evaluation of the probable impacts will include the application of guidelines established by the Administrator of the Environmental Protection Agency. Also, a certification that the proposed activity will not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

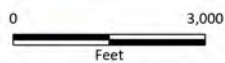
You are invited to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

John M. Herman
Chief, Central Evaluation Branch
Regulatory Division

Enclosures



 Facility Boundary



IBERVILLE PARISH
ASCENSION PARISH

USGS Topo Map, ESRI



PCS Nitrogen Fertilizer, LP

Geismar, Louisiana

Clean Ammonia Plant

Site Location Map

Iberville and Ascension Parishes

Drawn: OPB

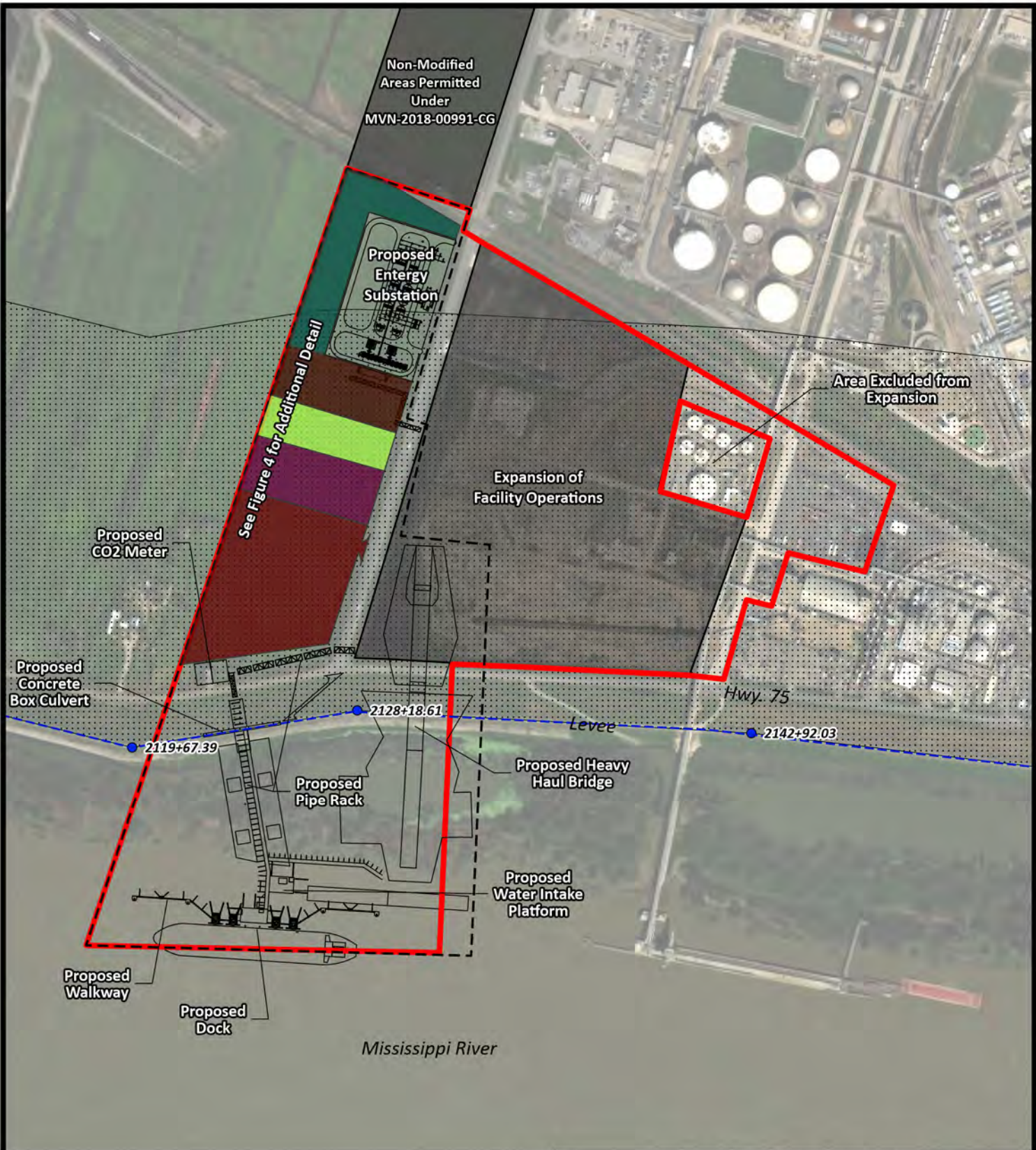
Checked: OPB

Date: 07/05/2023

Approved: APK

Dwg. No.: 19512

Figure 1



Non-Modified
Areas Permitted
Under
MVN-2018-00991-CG

Proposed
Energy
Substation

See Figure 4 for Additional Detail

Area Excluded from
Expansion

Expansion of
Facility Operations

Proposed
CO2 Meter

Proposed
Concrete
Box Culvert

Hwy. 75

Levee

2119+67.39

2128+18.61

2142+92.03

Proposed
Pipe Rack

Proposed Heavy
Haul Bridge

Proposed
Water Intake
Platform

Proposed
Walkway

Proposed
Dock

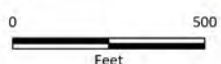
Mississippi River

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- Levee Stations
- - - Mississippi River Levee Centerline
- ▭ Facility Boundary
- - - Limits Of Construction
- ⋯ 1,500-ft Buffer from Levee Centerline



NOTE: PROPOSED HEAVY HAUL BRIDGE/ROAD IS TEMPORARY IN NATURE AND WILL BE REMOVED UPON COMPLETION OF THE PROJECT.



Imagery: Vivid Maxar 3/31/2022, ESRI

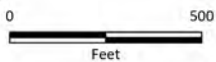


PCS Nitrogen Fertilizer, LP Geismar, Louisiana	
Clean Ammonia Plant	
Project Overview	
Iberville and Ascension Parishes	
Drawn: CAL Date: 11/27/2023 Dwg. No.: 19512	Checked: OPB Approved: APK
Figure 2	





- Facility Boundary
- Limits Of Construction
- MVN-2018-00991-SL
- Wetlands (6.6 acres)
- Non-Wetland Waters of the U.S. (3.7 acres)
- Desktop Delineation**
- Wetlands (0.79 acres)
- Non-Wetland Waters of the U.S. (12.25 acres)



Imagery: Vivid Maxar 3/31/2022, ESRI



PCS Nitrogen Fertilizer, LP
Geismar, Louisiana

Clean Ammonia Plant

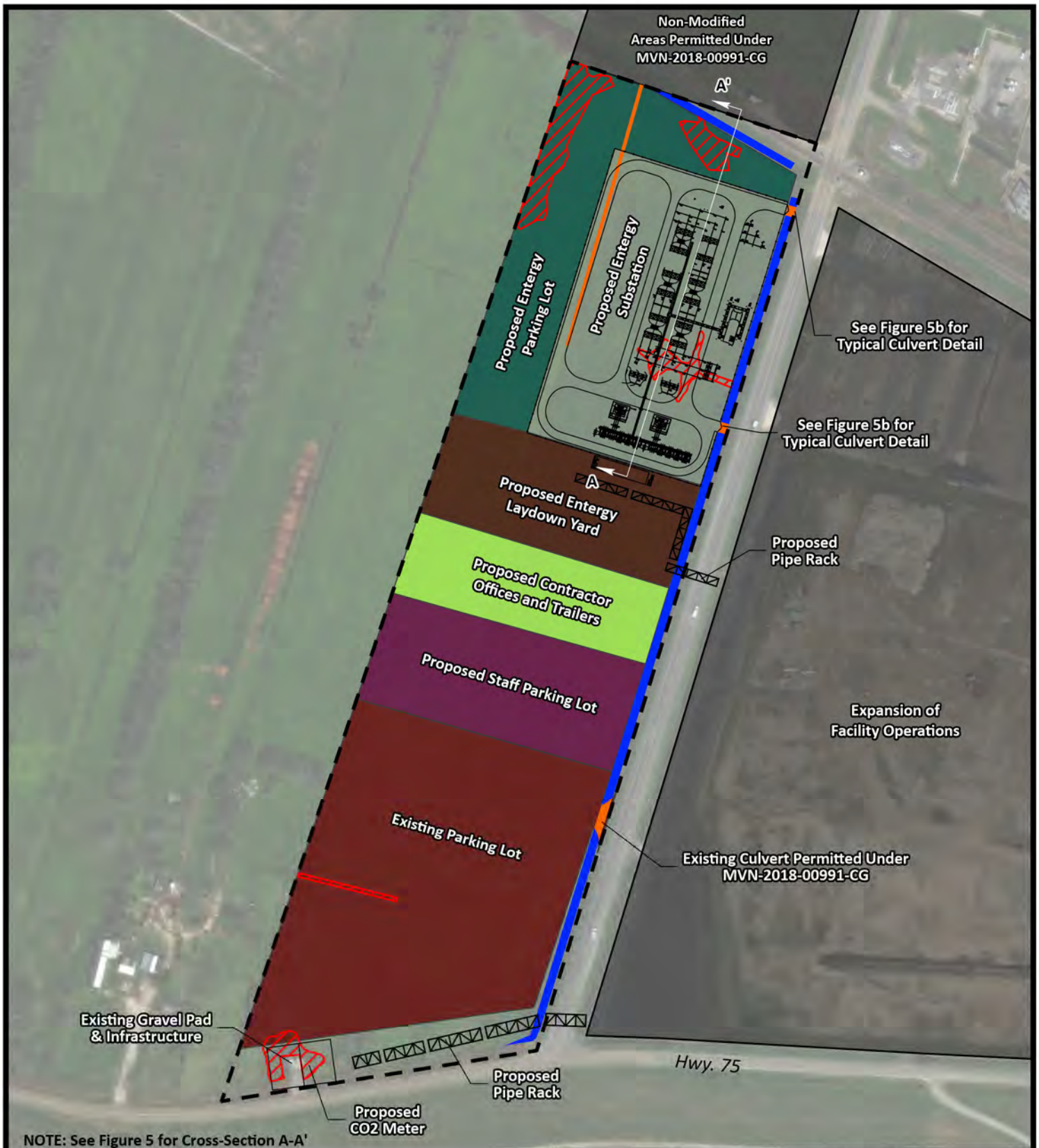
Existing Conditions

Iberville and Ascension Parishes

Drawn: OPB
Date: 3/8/2024
Dwg. No.: 19512

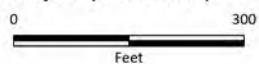
Checked: OPB
Approved: APK

Figure 3



NOTE: See Figure 5 for Cross-Section A-A'

- Limits of Construction
- MVN-2018-00991-CG Impacts - Previously Permitted
- Wetlands (0.76 acres)
- Revised Impacts to Non-Wetland Waters of the U.S.
- Non-wetland Waters Not Impacted by Project (0.64 Acres)
- Non-wetland Waters Impacted by Project (0.11 Acres)



PCS Nitrogen Fertilizer, LP
 Geismar, Louisiana
 Clean Ammonia Plant
Landside Clean Ammonia Plant
Plan View

Iberville and Ascension Parishes

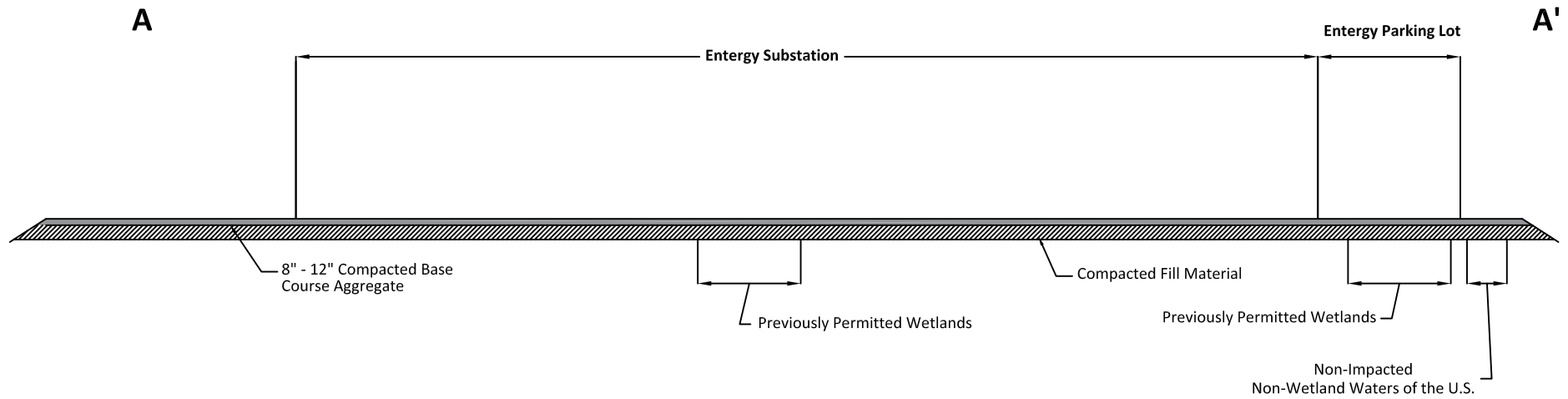



Drawn: OPB	Checked: OPB
Date: 07/05/2023	Approved: APK
Dwg. No.: 19512	Figure 4

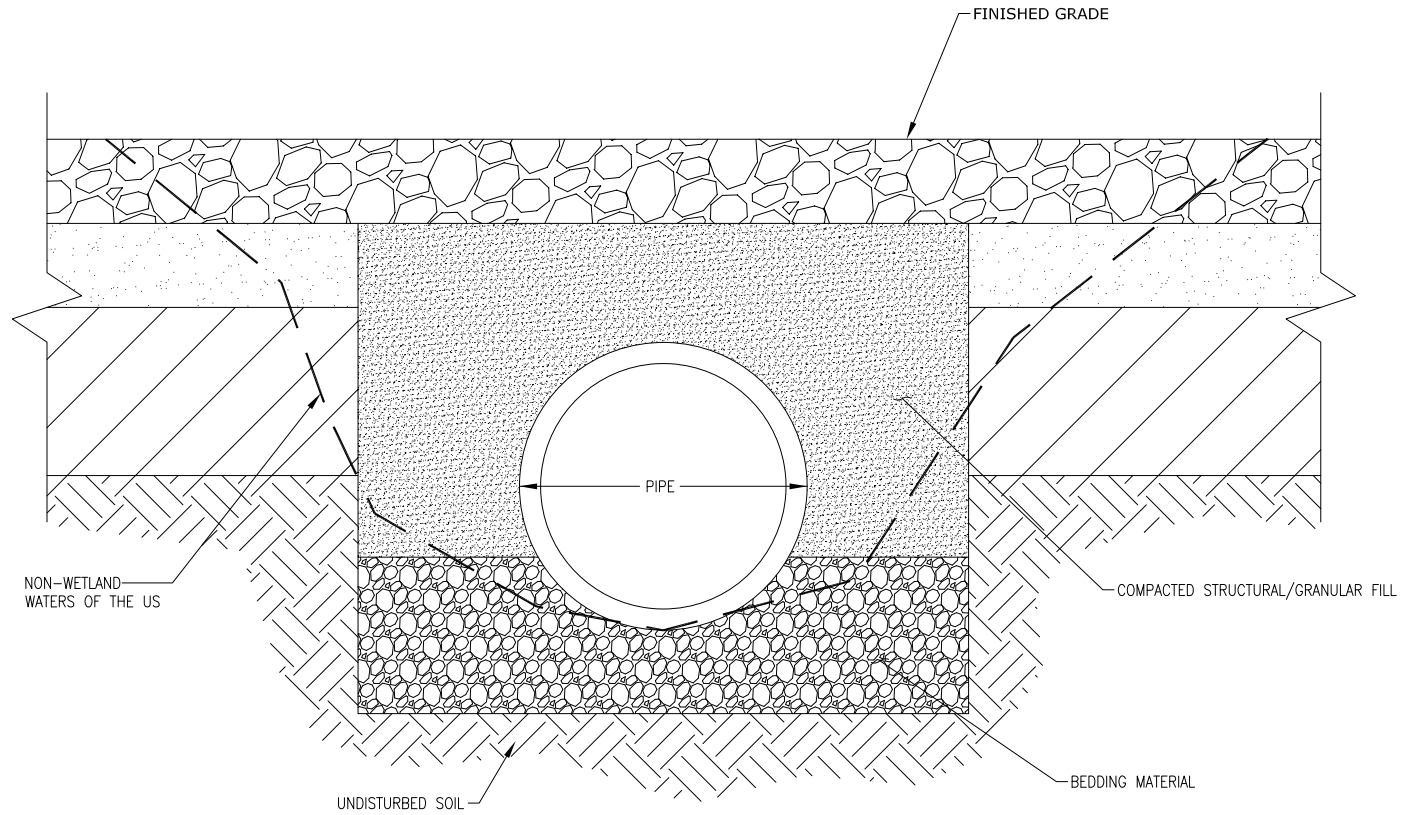
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Imagery: Vivid Maxar 3/31/2022, ESRI


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PCS Nitrogen Fertilizer, LP Geismar, Louisiana	
Clean Ammonia Plant	
Landside Clean Ammonia Plant Cross-Section	
Iberville and Ascension Parishes	
	Drawn: CAL Date: 12/14/2023
	Checked: OPB Approved: APK
Dwg. No.: 19512-02	Figure 5



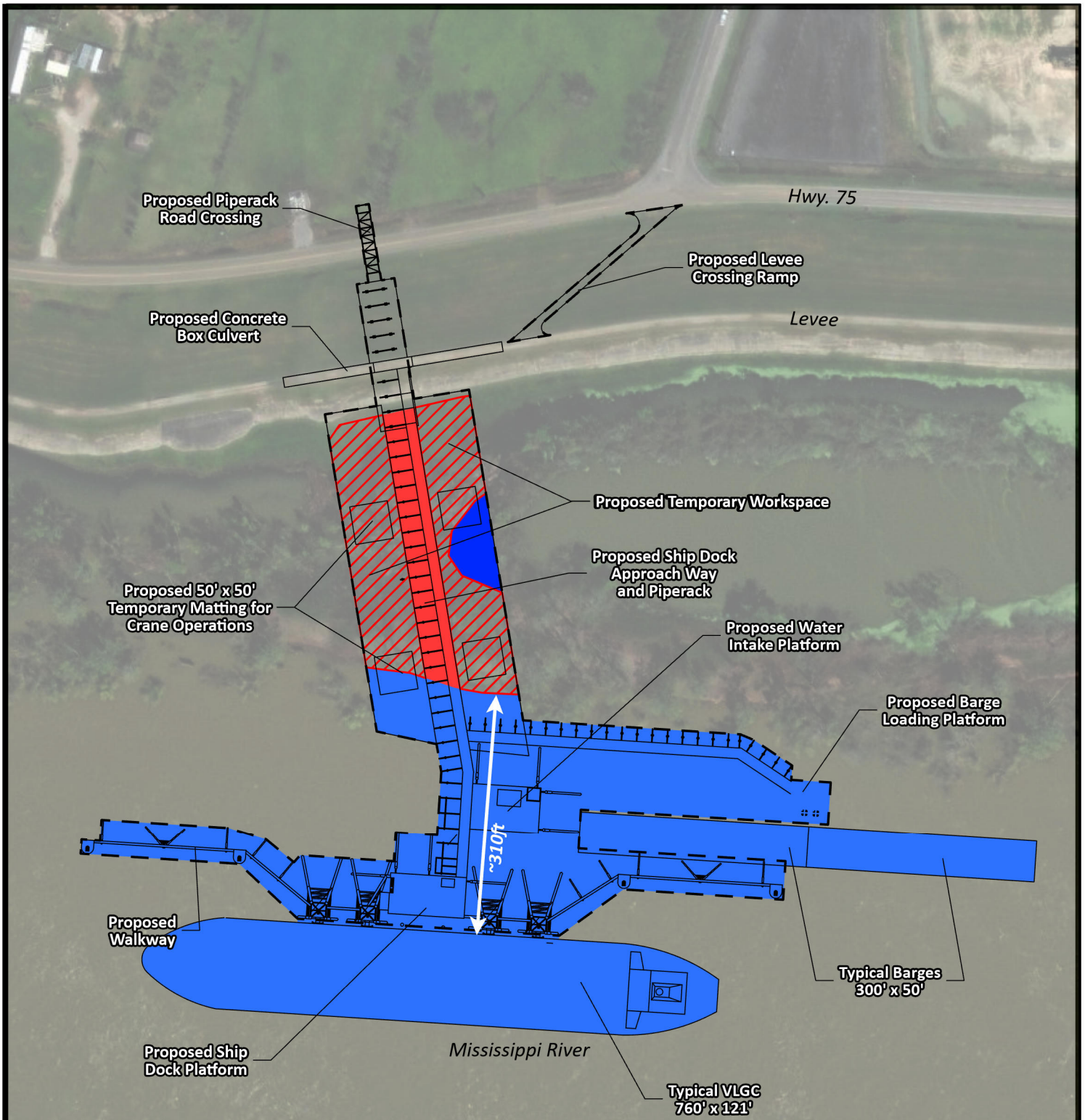
TYPICAL CULVERT DETAIL
NON-WETLAND WATERS OF THE US TO BE CULVERTED

PCS Nitrogen Fertilizer, LP Geismar, Louisiana	
Clean Ammonia Plant	
Typical Culvert Detail	
Iberville and Ascension Parish	
	Drawn: CAL Checked: APK
	Date: 3/6/2024 Approved: OPB
Dwg. No.: 19512-03	Figure 5b

For permitting purposes only. Not to be used for construction.

Drawings derived from Nutrien, Drawing No. SK-00107-2, REV. 0, Dated 01/20.

E:\Mapping\19512\19512-03_Typical_Culvert_Detail.dwg



Note: Approximately 36 piles will be installed within wetlands for the proposed pipe rack resulting in permanent impacts.

Limits Of Construction
 MVN-2018-00991-SL Impacts
 Wetlands, Conversion (0.35 acres) & Permanent (0.007 Acres)
 Wetlands, Temporary (1.11 acres)
 Non-Wetland Waters of the U.S., Temporary (0.12 acres)
 Desktop Delineation Impacts
 Non-Wetland Waters of the U.S., Permanent (5.93 acres)

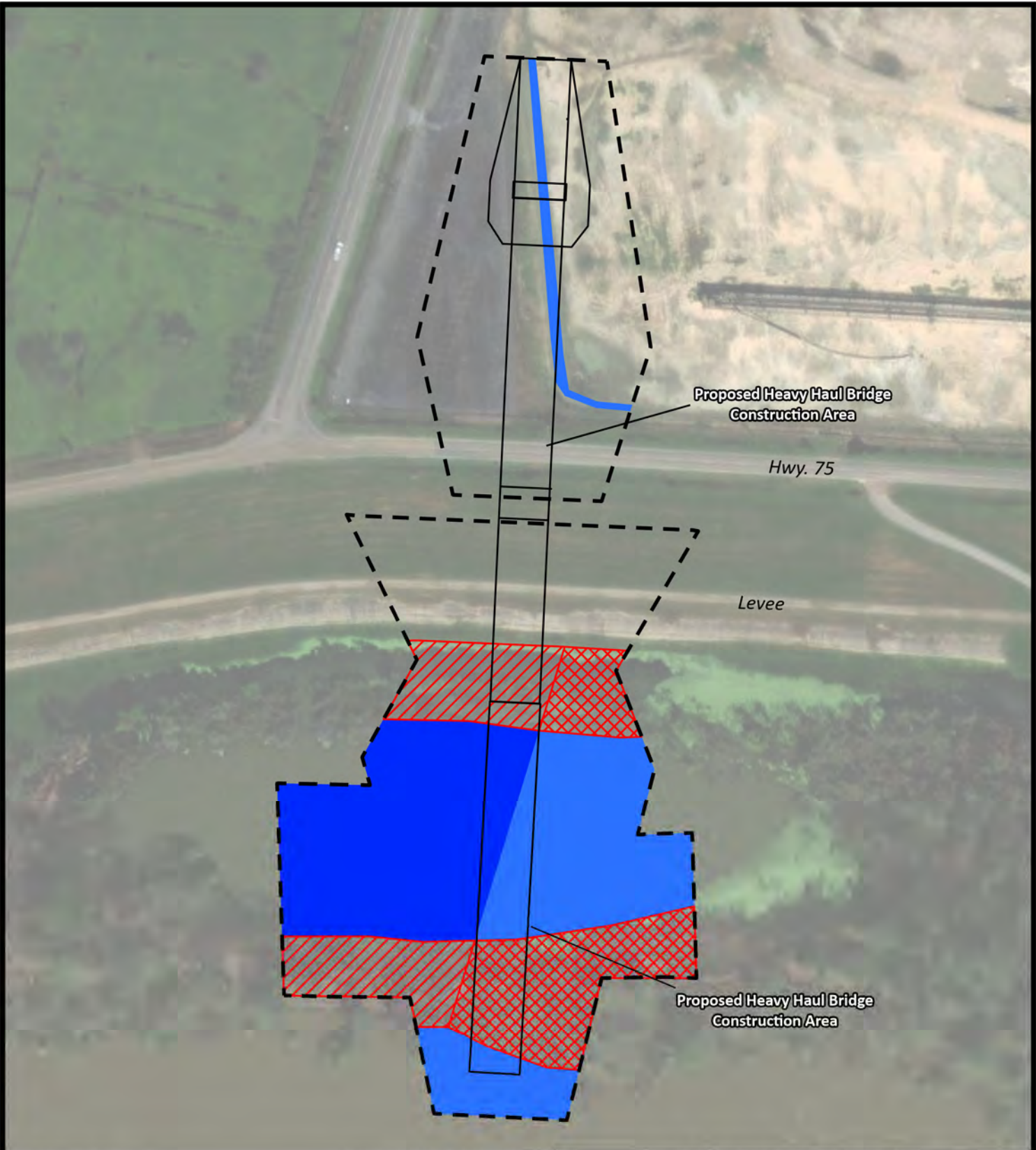
Imagery: Vivid Maxar 3/31/2022, ESRI
 0 200 Feet

PCS Nitrogen Fertilizer, LP
 Geismar, Louisiana
 Clean Ammonia Plant
**Water Intake and Dock Structure
 Plan View**
 Iberville and Ascension Parishes

CK ASSOCIATES Environmental Consultants	Drawn: OPB Date: 12/01/2023 Dwg. No.: 19512	Checked: OPB Approved: APK
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Figure 6

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Limits of Construction

Imagery: Vivid Maxar 3/31/2022, ESRI

MVN-2018-00991-SL Impacts

Wetlands, Temporary (0.77 Acres)

Non-wetland Waters of the US, Temporary (1.42 Acres)

Desktop Delineation Impacts

Wetlands, Temporary (0.92 Acres)

Non-wetland Waters of the US, Temporary (1.44 Acres)

NOTE: PROPOSED HEAVY HAUL BRIDGE/ROAD IS TEMPORARY IN NATURE AND WILL BE REMOVED UPON COMPLETION OF THE PROJECT.



PCS Nitrogen Fertilizer, LP

Geismar, Louisiana

Clean Ammonia Plant

**Heavy Haul Bridge
Plan View**

Iberville and Ascension Parishes

Drawn: OPB

Checked: OPB

Date: 12/14/2023

Approved: APK

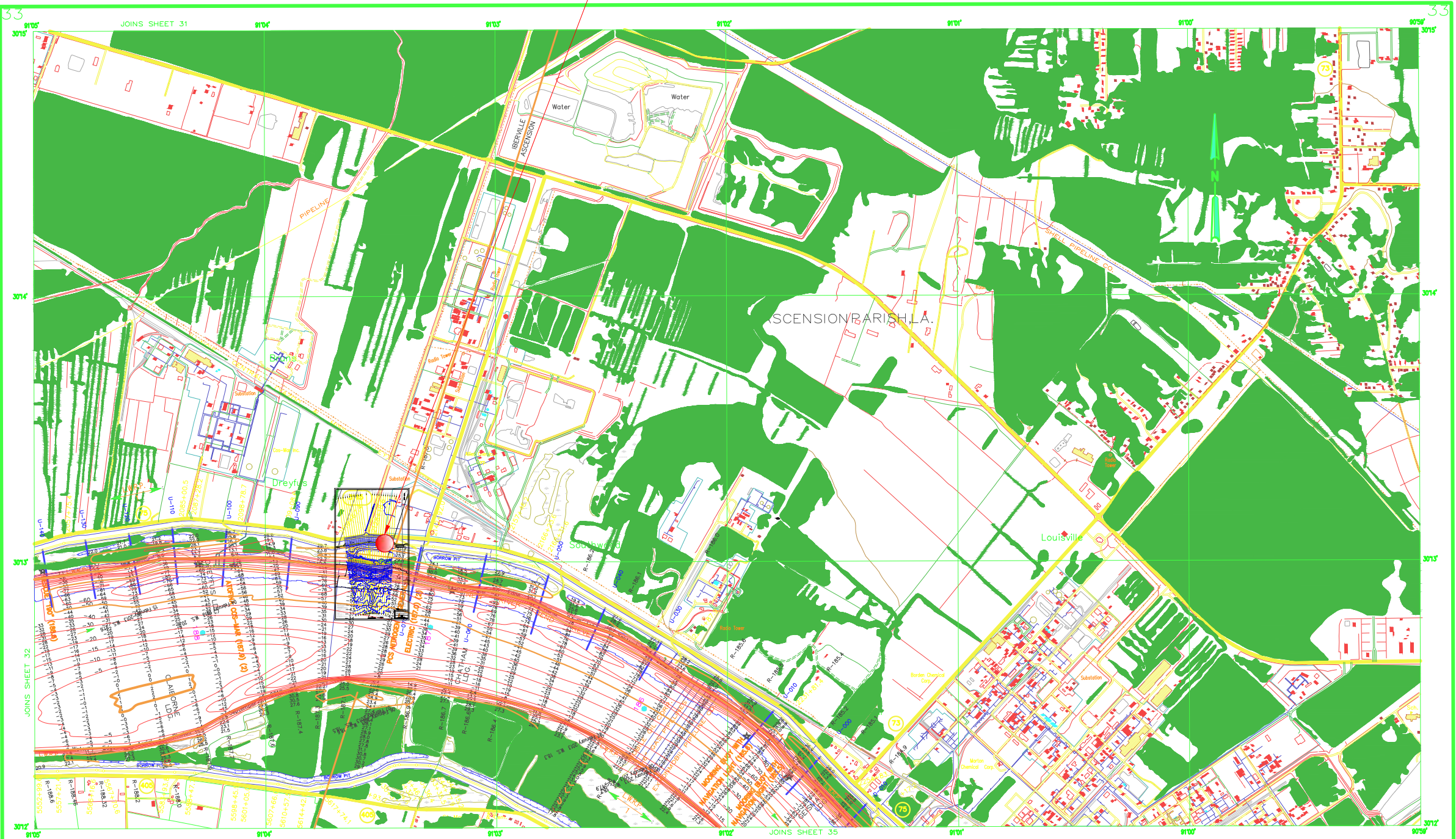
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Figure 7

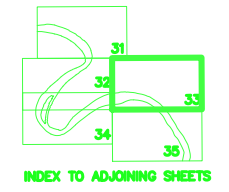
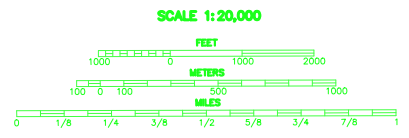
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APPROXIMATE PROJECT LOCATION



All elevations are expressed in feet and refer to North American Vertical Datum of 1988.
 Contours below Low Water Reference Plane are expressed in feet at 5 and 10 ft. intervals.
 Contours above Low Water Reference Plane are expressed in feet at 5 ft. intervals.
 Planimetry from aerial photographs from February 2002.
 Distances on Mississippi River above Head of Passes are shown at 1 mile intervals.
 1962 survey.
 Projection: Lambert Conformal Conic
 Horizontal Datum: North American Datum 1983 (NAD 83)
 Ellipsoid: GRS 80
 L.W.R.P. - Low Water Reference Plane.



MISSISSIPPI RIVER
 HYDROGRAPHIC SURVEY 2013
**BLACK HAWK, LA TO HEAD OF PASSES, LA
 ALSO SOUTHWEST, SOUTH, AND PASS A LOUIRE.**
 IN 86 SHEETS
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS,
 CORPS OF ENGINEERS

FILE NO. H-5-47753

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DRAWING STATUS
ISSUED FOR PERMIT

REFERENCE DRAWINGS/DOCUMENTS		
REF	DRAWING NUMBER	REV
01	HYDROCONSULTANTS DWG# C44-295-01	0
02	HYDROCONSULTANTS DWG# E44-295-01	0
03	15117456-P033-D-T06-01 MODULE 32-1041-M10	01
04	15117456-P033-D-T06-02 MODULE 32-1041-M10	02
05	15117456-P033-D-T12-01 MODULE 12-1050-M30	01
06	EUSTIS ENGINEERING PROJECT NO. L0580	00

REV.	DESCRIPTION:	DATE:	DRAWN:	CHECKED:
03	Added Legend Identifier/PVC Drainage Added	05MAR24	MCoo 940152	JTol 940132
02	Updated References/Issued for Permit	28JUN23	MCoo 940152	JTol 940132
01	Revised Trailer Arrangement/Loadings	19MAY23	MCoo 940152	JTol 940132
00	First Issue	09MAY23	MCoo 940152	JTol 940132

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CLIENT: **PCS NITROGEN FERTILIZER, L.P.**

PROJECT: **GEISMAR NITROGEN EXPANSION**

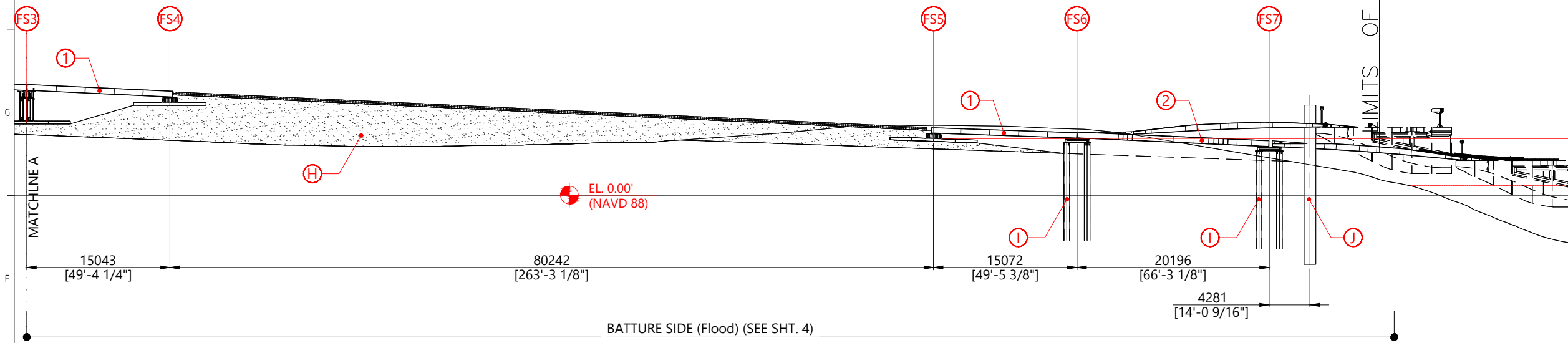
TITLE: **STA. 2131+69 30° 13'4.37"N / 91° 3'29.09"W
 NEAR MISSISSIPPI RIVER MILE MARKER 187
 ASCENSION PARISH, GEISMAR LOUISIANA**



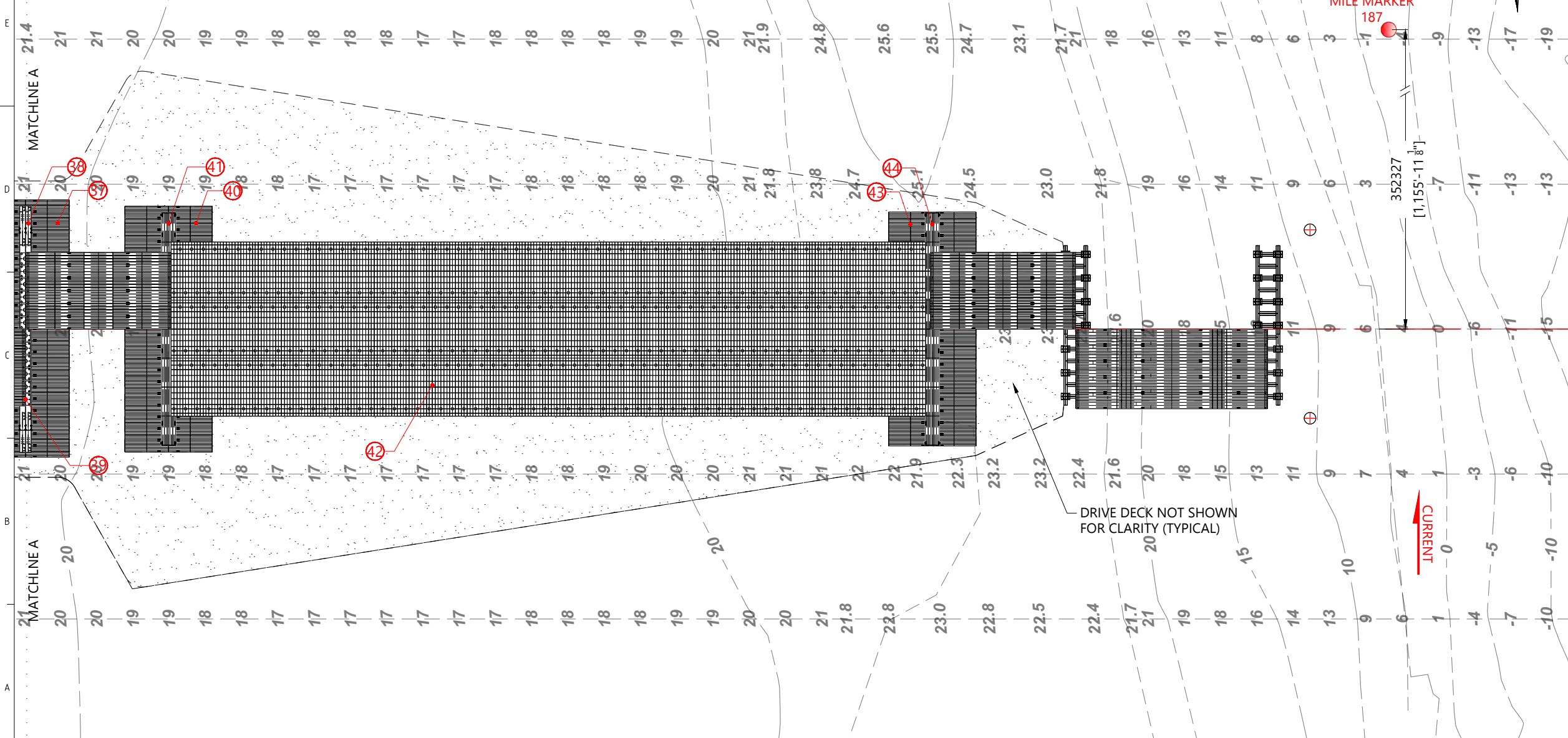
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LEVEE STA. 2131+69
ELEVATION VIEW
(GENERAL ARRANGEMENT)



LEVEE STA. 2131+69
PLAN VIEW
(GENERAL ARRANGEMENT)



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LEGEND

COMPACTED FILL MATERIAL
(PER GEO-TECH
RECOMMENDATIONS/REPORT)

DRAWING STATUS

ISSUED FOR PERMIT

REFERENCE DRAWINGS/DOCUMENTS

REF	DRAWING NUMBER	REV
01	HYDROCONSULTANTS DWG# C44-295-01	0
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03	15117456-P033-D-T06-01 MODULE 32-1041-M10	01
04	15117456-P033-D-T06-02 MODULE 32-1041-M10	02
05	15117456-P033-D-T12-01 MODULE 12-1050-M30	01
06	EUSTIS ENGINEERING PROJECT NO. L0580	00

REV.	DESCRIPTION:	DATE:	DRAWN:	CHECKED:
03	Added Legend Identifier/PVC Drainage Added	05MAR24	MCoo 940152	JTol 940132
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CLIENT: **PCS NITROGEN FERTILIZER, L.P.**

PROJECT: **GEISMAR NITROGEN EXPANSION**

TITLE: **STA. 2131+69 30° 13'4.37"N / 91° 3'29.09"W
NEAR MISSISSIPPI RIVER MILE MARKER 187
ASCENSION PARISH, GEISMAR LOUISIANA**

MAMMOET
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www.mammoet.com

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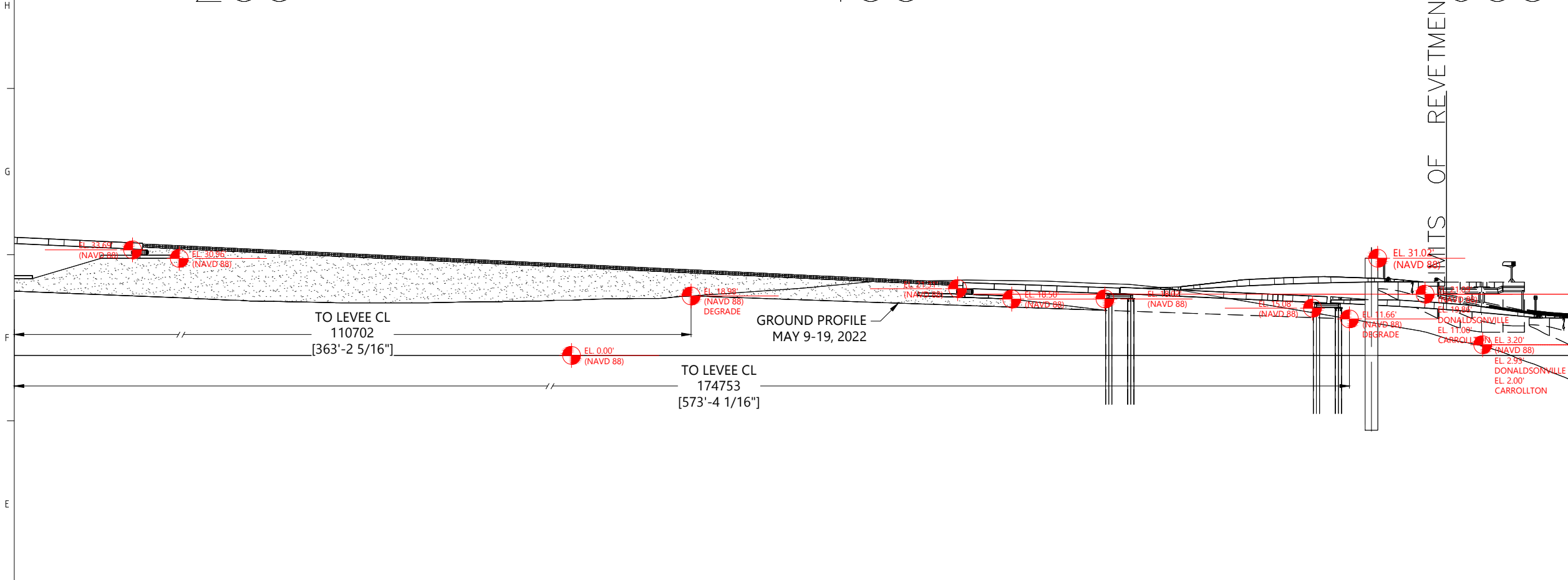
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SKETCH	D	15117456- P033 - D - SK01 - 3/10 - 03

LEVEE STA. 2131+69
ELEVATION VIEW
BATTURE SIDE (Flood)

200

400

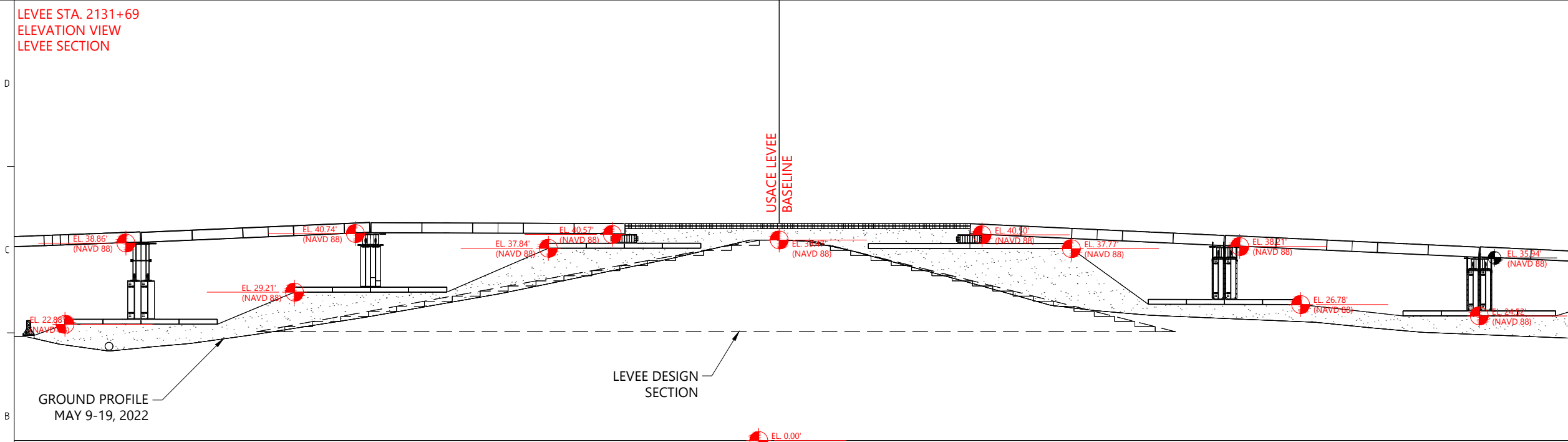
600



LEGEND

COMPACTED FILL MATERIAL
(PER GEO-TECH
RECOMMENDATIONS/REPORT)

LEVEE STA. 2131+69
ELEVATION VIEW
LEVEE SECTION



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00	First Issue	09MAY23	MCoo 940152	JTol 940132

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CLIENT: **PCS NITROGEN FERTILIZER, L.P.**

PROJECT: **GEISMAR NITROGEN EXPANSION**

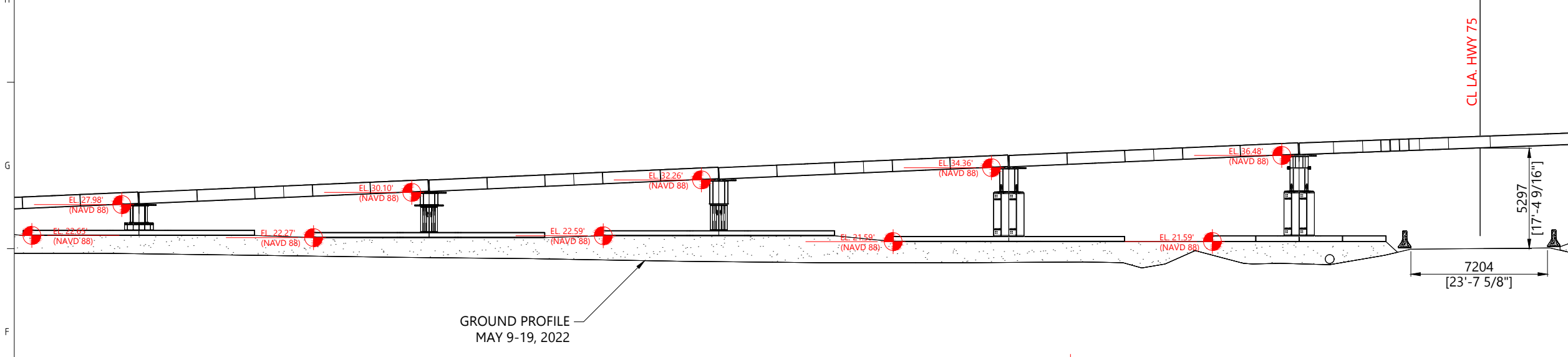
TITLE: **STA. 2131+69 30° 13'4.37"N / 91° 3'29.09"W
NEAR MISSISSIPPI RIVER MILE MARKER 187
ASCENSION PARISH, GEISMAR LOUISIANA**

MAMMOET
MAMMOET USA
20525 FM 521, Rosharon, TX 77583
Tel. +1 (281) 369-2200 / Fax. +1 (281) 369-2178
www.mammoet.com

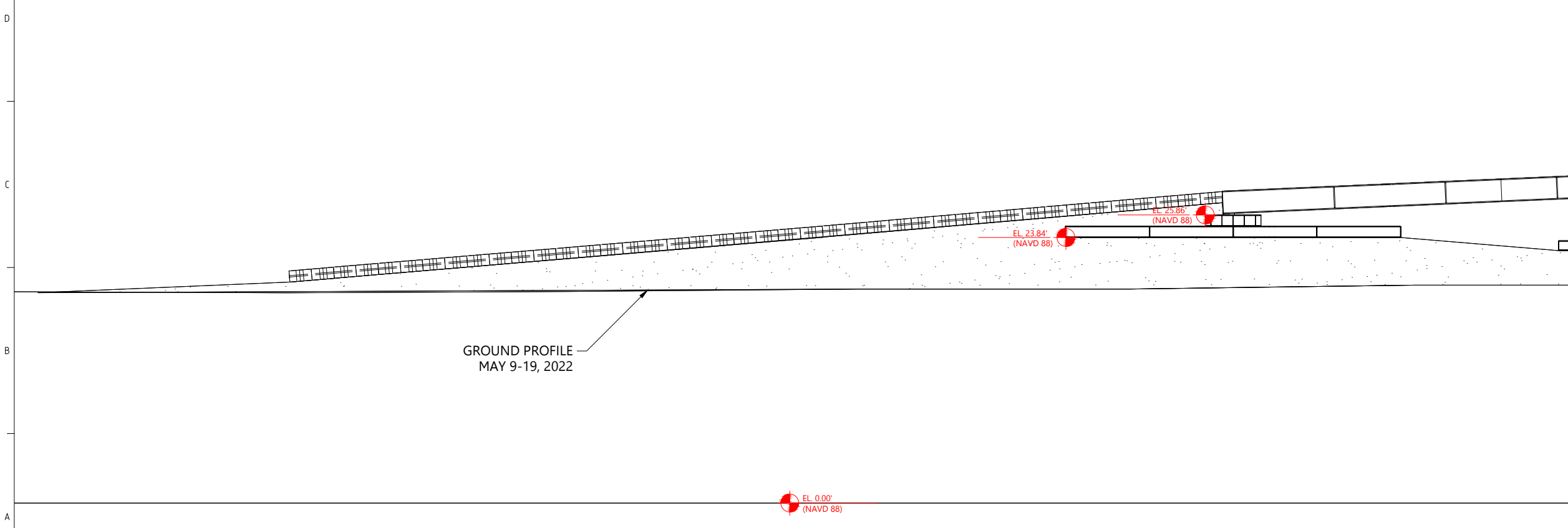
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SAP No:	SIZE:	DRAWING NUMBER
SKETCH	D	15117456- P033 - D - SK01 - 4/10 - 03

LEVEE STA. 2131+69
ELEVATION VIEW
PROTECTED SIDE



LEVEE STA. 2131+69
ELEVATION VIEW
RELIEVING PLATFORM



GENERAL NOTES	
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LEGEND

COMPACTED FILL MATERIAL
(PER GEO-TECH
RECOMMENDATIONS/REPORT)

DRAWING STATUS

ISSUED FOR PERMIT

REFERENCE DRAWINGS/DOCUMENTS		
REF	DRAWING NUMBER	REV
01	HYDROCONSULTANTS DWG# C44-295-01	0
02	HYDROCONSULTANTS DWG# E44-295-01	0
03	15117456-P033-D-T06-01 MODULE 32-1041-M10	01
04	15117456-P033-D-T06-02 MODULE 32-1041-M10	02
05	15117456-P033-D-T12-01 MODULE 12-1050-M30	01
06	EUSTIS ENGINEERING PROJECT NO. L0580	00

03	Added Legend Identifier/PVC Drainage Added	05MAR24	MCoo 940152	JTol 940132
02	Updated References/Issued for Permit	28JUN23	MCoo 940152	JTol 940132
01	Revised Trailer Arrangement/Loadings	19MAY23	MCoo 940152	JTol 940132
00	First Issue	09MAY23	MCoo 940152	JTol 940132

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CLIENT: **PCS NITROGEN FERTILIZER, L.P.**

PROJECT: **GEISMAR NITROGEN EXPANSION**


TITLE: **STA. 2131+69 30° 13'4.37"N / 91° 3'29.09"W
NEAR MISSISSIPPI RIVER MILE MARKER 187
ASCENSION PARISH, GEISMAR LOUISIANA**

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SCALE:	SIZE: D	DRAWING NUMBER			
SAP No:	PROJECT No:	SUB:	DOC:	PART:	REV:
SKETCH	15117456- P033 - D -	SK01	- 5/10 -	03	

MATERIALS LIST (STRUCTURAL)							MATERIALS LIST (CIVIL/AGGREGATE)				MATERIALS LIST (CIVIL/PILES)				
POS	QTY	DESCRIPTION	MATERIAL/CAPACITY	DIMENSIONS	WEIGHT (each) LBS	WEIGHT (total) LBS	POS	DESCRIPTION	VOLUME (95% COMPACTION) CU.YDS.	EST. VOLUME (LOOSE) U.S. TONNAGE	POS	DESCRIPTION	QTY.	LENGTH/EA (AVERAGE)	EST. TOTAL LENGTH
1	120	P030LSP-505324	A572 Gr 50	50'-1" x 4'-3 7/16" x 2'-2"	28,628	3,435,360	A	.610 LIMESTONE	2,022	3,336	I	24" OD, .500 WALL PIPE	28	100'	2,800'
2	20	P030LSP-666425	A992	66'-1" x 5'-4 7/16" x 2'-2 1/4"	51,179	1,023,580	B	.610 LIMESTONE	3,024	4,990	J	48" OD, .500 WALL PIPE	2	150'	300'
-	12	[NON-INVENTORIED ASSET]	A572 Gr 50	45'-1" x 4'-3 7/16" x 2'-2"	23,580	282,960	C	.610 LIMESTONE	713	1,176					
3	52	P030CRM-284812	-	28' x 4' x 1'	7,360	382,720	D	.610 LIMESTONE	1,223	2,018					
4	19	P030LSP-304812	A572 Gr 50	30'-1 1/2" x 4'-0 3/8" x 1'-0 1/8"	8,123	154,337	E	.610 LIMESTONE	916	1,511					
5	2	P030LSP-404812	A572 Gr 50	40' x 4'-0 3/8" x 1'-0 1/8"	10,400	20,800	F	.610 LIMESTONE	1,988	3,280					TOTAL: 3,100
6	19	P030LSP-404812	A572 Gr 50	40' x 4'-0 3/8" x 1'-0 1/8"	10,400	197,600	G	.610 LIMESTONE	1,000	1,650					
7	2	P030LSP-404812	A572 Gr 50	40' x 4'-0 3/8" x 1'-0 1/8"	10,400	20,800	H	.610 LIMESTONE	16,533	27,279					
8	12	P030SU-H36-24D-1	Fy = 35 ksi	3'-4" x 3'-4" x 3'	1,380	16,560				TOTAL:					45,240
9	19	P030LSP-404812	A572 Gr 50	40' x 4'-0 3/8" x 1'-0 1/8"	10,400	197,600									
10	2	P030SUB-751855	Fy = 50 ksi	75'-6 3/4" x 2'-0 1/2" x 4'-9 5/8"	45,625	91,250									
11	12	P030SU-H24-24D-2	Fy = 35 ksi	4' x 3'-4" x 2'	1,172	14,064									
12	19	P030LSP-404812	A572 Gr 50	40' x 4'-0 3/8" x 1'-0 1/8"	10,400	197,600									
13	2	P030SUB-751855	Fy = 50 ksi	75'-6 3/4" x 2'-0 1/2" x 4'-9 5/8"	45,625	91,250									
14	12	P030SU-H48-24D-1	Fy = 35 ksi	4' x 3'-4" x 4'	1,741	20,892									
15	23	P030LSP-404812	A572 Gr 50	40' x 4'-0 3/8" x 1'-0 1/8"	10,400	239,200									
16	2	P030GB-KBR-L100-1	Fy = 50 ksi	100' x 2'-7 5/8" x 7'-6 1/2"	92,846	185,692									
17	12	P030SU-H48-24D-1	Fy = 35 ksi	4' x 3'-4" x 4'	1,741	20,892									
18	24	P030LSP-304812	A572 Gr 50	30'-1 1/2" x 4'-0 3/8" x 1'-0 1/8"	8,123	194,952									
19	2	P030GB-KBR-L100-1	Fy = 50 ksi	100' x 2'-7 5/8" x 7'-6 1/2"	92,846	185,692									
20	11	P030SU-H24-24D-2	Fy = 35 ksi	4' x 3'-4" x 2'	1,172	12,892									
21	11	P030SU-H48-24D-1	Fy = 35 ksi	4' x 3'-4" x 4'	1,741	19,151									
22	24	P030LSP-304812	A572 Gr 50	30'-1 1/2" x 4'-0 3/8" x 1'-0 1/8"	8,123	194,952									
23	2	P030GB-KBR-L100-1	Fy = 50 ksi	100' x 2'-7 5/8" x 7'-6 1/2"	92,846	185,692									
24	11	P030SU-H40-24D-2	Fy = 35 ksi	4' x 3'-4 1/8" x 3'-4"	1,900	20,900									
25	11	P030SU-H48-24D-1	Fy = 35 ksi	4' x 3'-4" x 4'	1,741	19,151									
26	30	P030LSP-304812	A572 Gr 50	30'-1 1/2" x 4'-0 3/8" x 1'-0 1/8"	8,123	243,690									
27	2	P030GB-KBR-L124-1	Fy = 50 ksi	123' 6" x 1' 11-1/2" x 9' 7-1/4"	96,624	193,248									
28	12	P030SU-H24-24D-2	Fy = 35 ksi	4' x 3'-4" x 2'	1,172	14,064									
29	21	P030LSP-304812	A572 Gr 50	30'-1 1/2" x 4'-0 3/8" x 1'-0 1/8"	8,123	170,583									
30	1	P030LSP-805821	CSA G40.21 50W	80'-1" x 5'-3 13/16" x 1'-8 5/8"	86,952	86,952									
31	51	P030CRM-204812	-	20' x 4' x 1'	5,240	267,240									
32	20	P030LSP-404812	A572 Gr 50	40' x 4'-0 3/8" x 1'-0 1/8"	10,400	208,000									
33	1	P030LSP-805821	CSA G40.21 50W	80'-1" x 5'-3 13/16" x 1'-8 5/8"	86,952	86,952									
34	22	P030LSP-304812	A572 Gr 50	30'-1 1/2" x 4'-0 3/8" x 1'-0 1/8"	8,123	178,706									
35	2	P030GB-KBR-L85-1	Fy = 49 ksi	85' x 1'-11 1/2" x 8'-2 1/2"	73,264	146,528									
36	12	P030SU-H24-24D-2	Fy = 35 ksi	4' x 3'-4" x 2'	1,172	14,064									
37	22	P030LSP-304812	A572 Gr 50	30'-1 1/2" x 4'-0 3/8" x 1'-0 1/8"	8,123	178,706									
38	2	P030GB-KBR-L85-1	Fy = 49 ksi	85' x 1'-11 1/2" x 8'-2 1/2"	73,264	146,528									
39	12	P030SU-H24-24D-2	Fy = 35 ksi	4' x 3'-4" x 2'	1,172	14,064									
40	21	P030LSP-304812	A572 Gr 50	30'-1 1/2" x 4'-0 3/8" x 1'-0 1/8"	8,123	170,583									
41	1	P030LSP-805821	CSA G40.21 50W	80'-1" x 5'-3 13/16" x 1'-8 5/8"	86,952	86,952									
42	195	P030CRM-204812	-	20' x 4' x 1'	5,240	1,021,800									
43	21	P030LSP-304812	A572 Gr 50	30'-1 1/2" x 4'-0 3/8" x 1'-0 1/8"	8,123	170,583									
44	1	P030LSP-805821	CSA G40.21 50W	80'-1" x 5'-3 13/16" x 1'-8 5/8"	86,952	86,952									
				TOTAL:		10,822,734									

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ISSUED FOR PERMIT					
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02	HYDROCONSULTANTS DWG# E44-295-01				0
03	15117456-P033-D-T06-01 MODULE 32-1041-M10				01
04	15117456-P033-D-T06-02 MODULE 32-1041-M10				02
05	15117456-P033-D-T12-01 MODULE 12-1050-M30				01
06	EUSTIS ENGINEERING PROJECT NO. L0580				00
03	Added Legend Identifier/PVC Drainage Added	05MAR24	MCoo 940152	JTol 940132	
02	Updated References/Issued for Permit	28JUN23	MCoo 940152	JTol 940132	
01	Revised Trailer Arrangement/Loadings	19MAY23	MCoo 940152	JTol 940132	
00	First Issue	09MAY23	MCoo 940152	JTol 940132	
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TITLE:	STA. 2131+69 30° 13'4.37"N / 91° 3'29.09"W NEAR MISSISSIPPI RIVER MILE MARKER 187 ASCENSION PARISH, GEISMAR LOUISIANA				
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SKETCH	15117456- P033 - D -	SK01	-	6/10	- 03

NET LOAD FS5					NET LOAD FS1					NET LOAD PS4				
POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS	POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS	POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS
44	P030LSP-805821	1	86,952	86,952	31	P030CRM-204812	15	5,240	78,600	18	P030LSP-304812	24	8,123	194,952
43	P030LSP-304812	21	8,123	170,583	32	P030LSP-404812	20	10,400	208,000	19	P030GB-KBR-L100-1	2	92,846	185,692
1	P030LSP-505324	6	28,628	171,768	33	P030LSP-805821	1	86,952	86,952	20	P030SU-H40-24D-2	11	1,172	12,892
42	P030CRM-204812	9	5,240	47,160	1	P030LSP-505324	6	28,628	171,768	21	P030SU-H48-24D-1	11	1,741	19,151
				TOTAL: 476,463					TOTAL: 545,320					
AREA (SQ.FT.)				2,415	AREA (SQ.FT.)				3,224	1 P030LSP-505324 6 28,628 171,768				
PSF (NET LOAD)				197	PSF (NET LOAD)				169	TOTAL: 840,350				
										AREA (SQ.FT.) 2,904				
										PSF (NET LOAD) 289				
NET LOAD FS4					NET LOAD PS1					NET LOAD PS5				
POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS	POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS	POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS
40	P030LSP-304812	21	8,123	170,583	29	P030LSP-304812	21	8,123	170,583	15	P030LSP-404812	23	10,400	239,200
41	P030LSP-805821	1	86,952	86,952	30	P030LSP-805821	1	86,952	86,952	16	P030GB-KBR-L100-1	2	92,846	185,692
1	P030LSP-505324	6	28,628	171,768	31	P030CRM-204812	12	5,240	62,880	17	P030SU-H48-24D-1	12	1,741	20,892
42	P030CRM-204812	12	5,240	62,880	1	P030LSP-505324	6	28,628	171,768	1	P030LSP-505324	12	28,628	343,536
				TOTAL: 492,183					TOTAL: 492,183	TOTAL: 789,320				
AREA (SQ.FT.)				2,552	AREA (SQ.FT.)				2,538	AREA (SQ.FT.) 3,712				
PSF (NET LOAD)				193	PSF (NET LOAD)				194	PSF (NET LOAD) 213				
NET LOAD FS3					NET LOAD PS2					NET LOAD PS6				
POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS	POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS	POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS
37	P030LSP-304812	22	8,123	178,706	26	P030LSP-304812	21	8,123	170,583	12	P030LSP-404812	19	10,400	197,600
38	P030GB-KBR-L85-1	2	73,264	146,528	27	P030GB-KBR-L124-1	2	96,624	193,248	13	P030SUB-751855	2	45,625	91,250
39	P030SU-H24-24D-2	12	1,172	14,064	28	P030SU-H24-24D-2	12	1,172	14,064	14	P030SU-H48-24D-1	12	1,741	20,892
1	P030LSP-505324	12	28,628	343,536	1	P030LSP-505324	6	28,628	171,768	1	P030LSP-505324	12	28,628	343,536
				TOTAL: 682,834	-	[NON-INVENTORIED ASSET]	6	23,580	141,480	TOTAL: 653,278				
AREA (SQ.FT.)				2,673					TOTAL: 691,143	AREA (SQ.FT.) 3,064				
PSF (NET LOAD)				255	AREA (SQ.FT.)				3,630	PSF (NET LOAD) 213				
					PSF (NET LOAD)				190					
NET LOAD FS2					NET LOAD PS3					NET LOAD PS7				
POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS	POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS	POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS
34	P030LSP-304812	22	8,123	178,706	22	P030LSP-304812	24	8,123	194,952	9	P030LSP-404812	19	10,400	197,600
35	P030GB-KBR-L85-1	2	73,264	146,528	23	P030GB-KBR-L100-1	2	92,846	185,692	10	P030SUB-751855	2	45,625	91,250
36	P030SU-H24-24D-2	12	1,172	14,064	24	P030SU-H40-24D-2	11	1,900	20,900	11	P030SU-H24-24D-2	12	1,172	14,064
1	P030LSP-505324	12	28,628	343,536	25	P030SU-H48-24D-1	11	1,741	19,151	1	P030LSP-505324	12	28,628	343,536
				TOTAL: 682,834	2	P030LSP-666425	5	51,179	255,895	TOTAL: 646,450				
AREA (SQ.FT.)				2,673	-	[NON-INVENTORIED ASSET]	6	23,580	141,480	AREA (SQ.FT.) 3,064				
PSF (NET LOAD)				255					TOTAL: 818,070	PSF (NET LOAD) 211				
					AREA (SQ.FT.)				2,904					
					PSF (NET LOAD)				281					

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04	15117456-P033-D-T06-02 MODULE 32-1041-M10	02	
05	15117456-P033-D-T12-01 MODULE 12-1050-M30	01	
06	EUSTIS ENGINEERING PROJECT NO. L0580	00	
03	Added Legend Identifier/PVC Drainage Added	05MAR24	MCo 940152 JTol 940132
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SKETCH	15117456- P033 - D -	SK01	7/10 - 03

NET LOAD PS8				
POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS
6	P030LSP-404812	19	10,400	197,600
7	P030LSP-404812	2	10,400	20,800
8	P030SU-H36-24D-1	12	1,380	16,560
1	P030LSP-505324	12	28,628	343,536
				TOTAL: 578,496
	AREA (SQ.FT.)			3,064
	PSF (NET LOAD)			189

NET LOAD PS9				
POS	DESCRIPTION	QTY.	WEIGHT (each) LBS	WEIGHT (total) LBS
3	P030CRM-284812	6	7,360	44,160
4	P030LSP-304812	19	8,123	154,337
5	P030LSP-404812	2	10,400	20,800
1	P030LSP-505324	6	28,628	171,768
				TOTAL: 391,065
	AREA (SQ.FT.)			2,306
	PSF (NET LOAD)			170

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05	15117456-P033-D-T12-01 MODULE 12-1050-M30	01
06	EUSTIS ENGINEERING PROJECT NO. L0580	00

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REV. DESCRIPTION: DATE: DRAWN: CHECKED:

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CLIENT: **PCS NITROGEN FERTILIZER, L.P.**

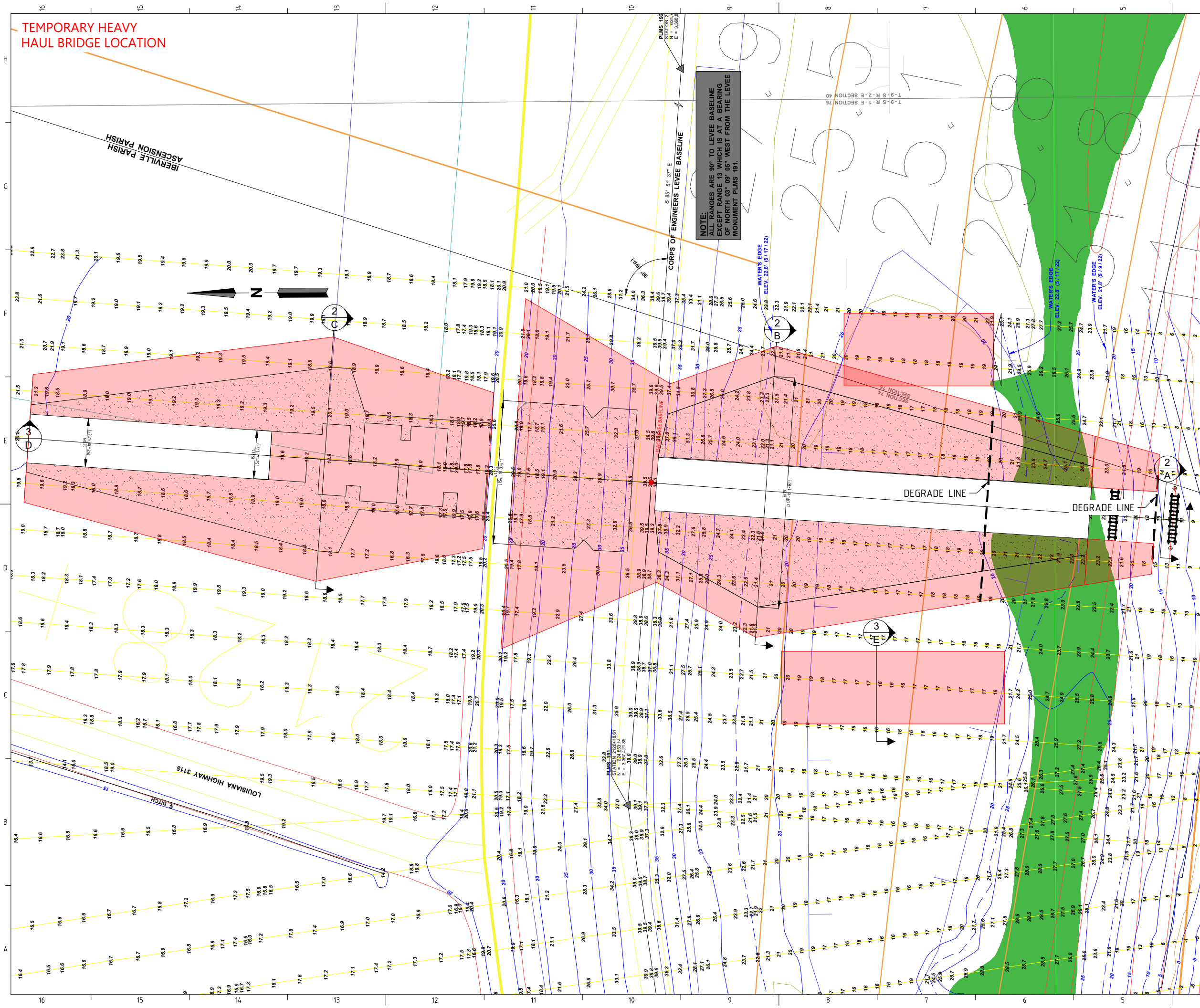
PROJECT: **GEISMAR NITROGEN EXPANSION**

TITLE: **STA. 2131+69 30° 13'4.37"N / 91° 3'29.09"W
NEAR MISSISSIPPI RIVER MILE MARKER 187
ASCENSION PARISH, GEISMAR LOUISIANA**

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SAP No:	PROJECT No:	SUB: DOC: PART: SHT. REV.
SKETCH	15117456 - P033 - D - SK01 - 8/10 - 03	

TEMPORARY HEAVY HAUL BRIDGE LOCATION



NOTE:
ALL RANGES ARE 90° TO LEVEE BASELINE
EXCEPT RANGE 13 WHICH IS AT A BEARING
OF NORTH 03° 09' 05" WEST FROM THE LEVEE
MONUMENT PLMS 191.

LEGEND

- FRESHWATER FORESTED/SHRUB WETLAND
- LIMITS OF DISTURBANCE

DRAWING STATUS

ISSUED FOR INFORMATION

REFERENCE DRAWINGS/DOCUMENTS

REF	DRAWING NUMBER	REV
01	HYDROCONSULTANTS DWG# C44-295-01	0
02	HYDROCONSULTANTS DWG# E44-295-01	0

- NOTES:**
- PROPOSED HEAVY HAUL BRIDGE/ROAD IS A TEMPORARY IN NATURE AND WILL BE REMOVED UPON COMPLETION OF THE PROJECT
 - THE LOCATION SHALL BE RESTORED TO ORIGINAL CONDITION UPON REMOVAL OF TEMPORARY HEAVY HAUL BRIDGE/ROAD

REV.	DESCRIPTION:	DATE:	DRAWN:	CHECKED:
02	Notations added/Added Legend identifier	05MAR24	MCoo	JTol
01	Degrade Lines (Plan View) added/LOD Extended	10JAN24	MCoo	JTol
00	First Issue	11JULY23	MCoo	JTol

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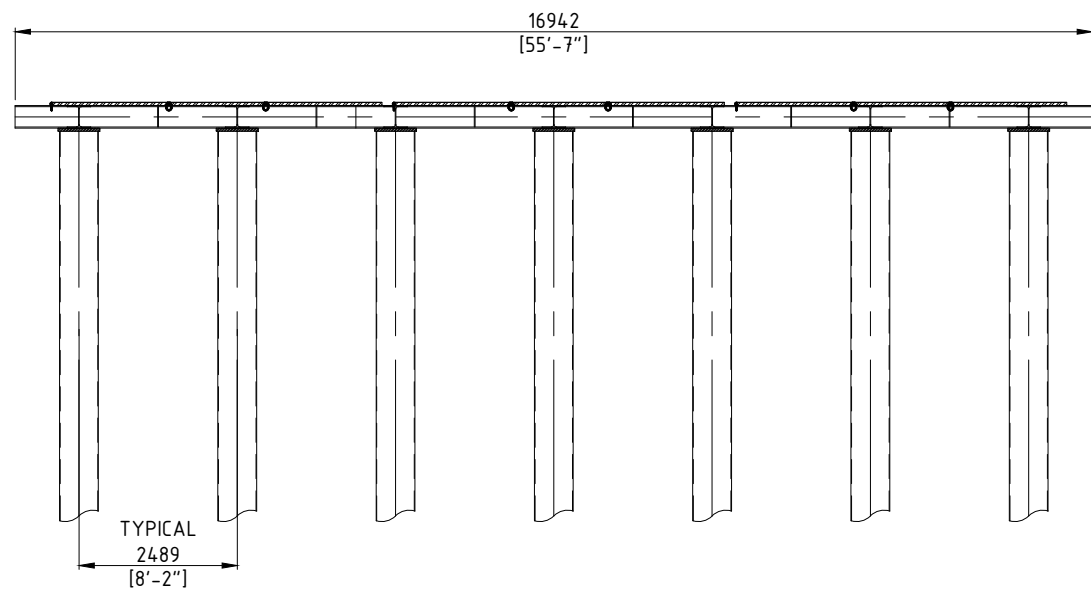
CLIENT: **PCS NITROGEN FERTILIZER, L.P.**

PROJECT: **GEISMAR NITROGEN EXPANSION**

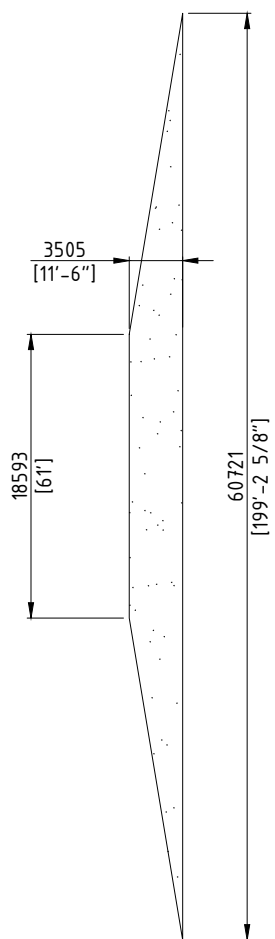
TITLE: **STA. 2131+69 30° 13'4.37"N / 91° 3'29.09"W
NEAR MISSISSIPPI RIVER MILE MARKER 187
ASCENSION PARISH, GEISMAR LOUISIANA**

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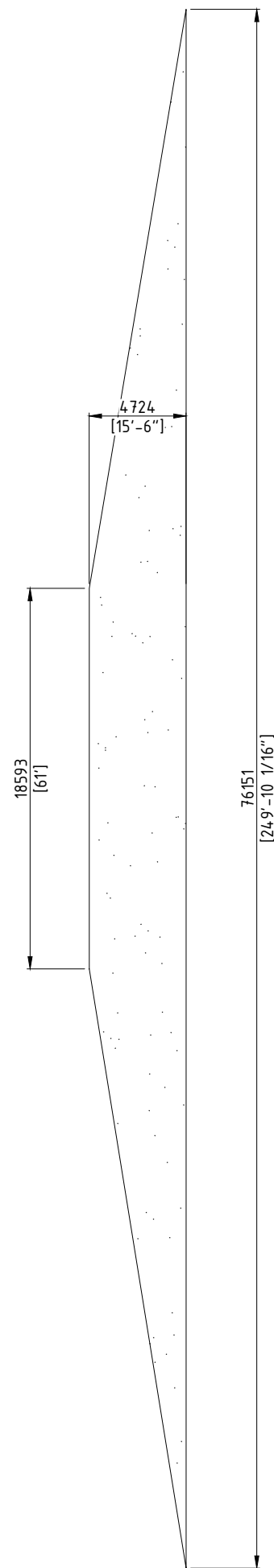
SCALE:	SIZE: D	DRAWING NUMBER	
SAP No:	PROJECT No:	SUB:	DOC: PART: SHT. REV.
SKETCH	15117456- P033 - D - SK04 - 1/3 - 02		



SECTION A
TYP

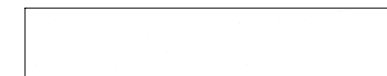


SECTION C



SECTION B

LEGEND



COMPACTED FILL MATERIAL
(PER GEO-TECH
RECOMMENDATIONS/REPORT)

DRAWING STATUS
ISSUED FOR INFORMATION

REFERENCE DRAWINGS/DOCUMENTS		
REF	DRAWING NUMBER	REV
01	HYDROCONSULTANTS DWG# C44-295-01	0
02	HYDROCONSULTANTS DWG# E44-295-01	0

NOTES:



- PROPOSED HEAVY HAUL BRIDGE/ROAD IS A TEMPORARY IN NATURE AND WILL BE REMOVED UPON COMPLETION OF THE PROJECT
- THE LOCATION SHALL BE RESTORED TO ORIGINAL CONDITION UPON REMOVAL OF TEMPORARY HEAVY HAUL BRIDGE/ROAD

02	Notations added/Added Legend identifier	05MAR24	MCoo 940152	JTol 940132	
01	Degrade Lines (Plan View) added/LOD Extended	10JAN24	MCoo 940152	JTol 940132	
00	First Issue	11JULY23	MCoo 940152	JTol 940132	

REV. DESCRIPTION: DATE: DRAWN: CHECKED:

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CLIENT: **PCS NITROGEN FERTILIZER, L.P.**

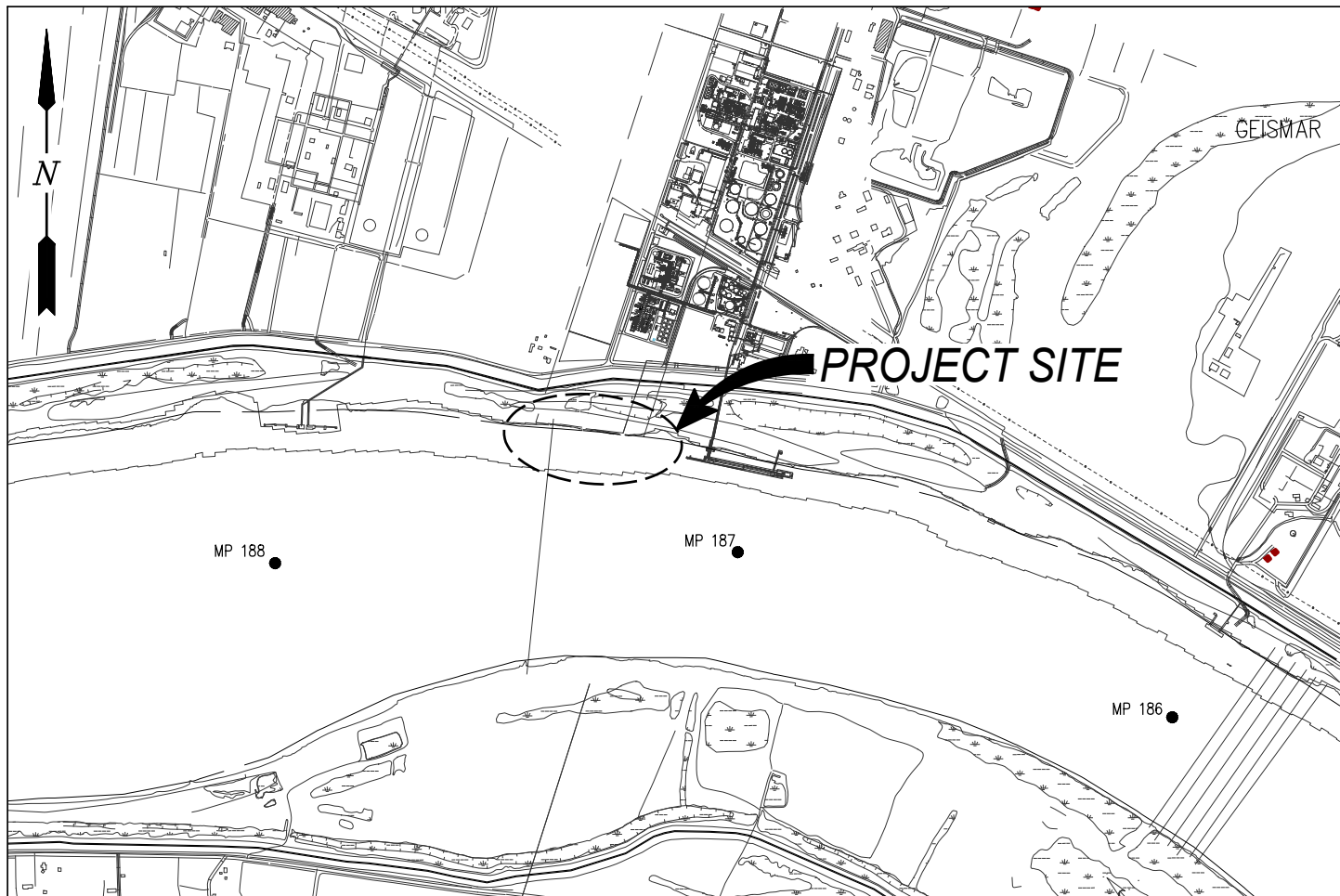
PROJECT: **GEISMAR NITROGEN EXPANSION**

TITLE: **STA. 2131+69 30° 13'4.37"N / 91° 3'29.09"W
NEAR MISSISSIPPI RIVER MILE MARKER 187
ASCENSION PARISH, GEISMAR LOUISIANA**

MAMMOET
MAMMOET USA
20525 FM 521, Rosharon, TX 77583
Tel. +1 (281) 369-2200 / Fax. +1 (281) 369-2178
www.mammoet.com

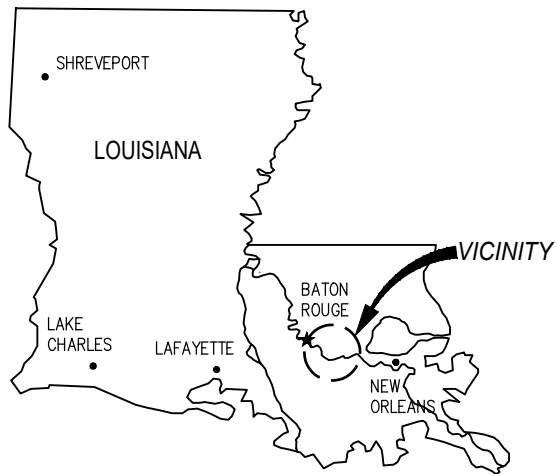
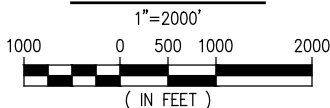
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SAP No:	PROJECT No:	SUB:	DOC:	PART:	SHT.	REV.
SKETCH	15117456 - P033 - D -	SK04	-	2/3	-	02



LAT. 30° 13' 1.78"
LONG. 91° 03' 39.56"

VICINITY MAP



AREA MAP

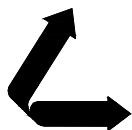
NOTES

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, WELL 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. ALL ELEVATIONS REFER TO NAVD 88 UNLESS NOTED OTHERWISE.

CHRIS O'BRIEN
LA PE #33945

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GEISMAR

NUTRIEN

LOUISIANA

**PROPOSED NEW MARINE FACILITY
VICINITY MAP, AREA MAP, & NOTES**

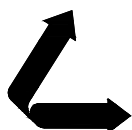
DATE SEPT. '22
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO. 12143
SHEET No.
1 OF 23

DRAWING INDEX		
DRAWING No.	REVISION	TITLE
1	A	VICINITY MAP, AREA MAP AND NOTES
2	A	DRAWING INDEX
3	A	EXISTING SITE PLAN
4	A	NEW SITE PLAN
5	A	ENLARGED NEW SITE PLAN
6	A	SHIP DOCK CROSS SECTION
7	A	BARGE DOCK CROSS SECTION
8	A	SHIP DOCK PLATFORM – PLAN AND ELEVATION
9	A	WATER INTAKE PLATFORM – PLAN AND ELEVATION
10	A	BARGE LOADING PLATFORM – PLAN AND ELEVATION
11	A	SHIP BREASTING DOLPHIN – PLAN AND ELEVATION
12	A	SHIP MOORING DOLPHIN – PLAN AND ELEVATION
13	A	PROTECTION DOLPHIN – PLAN AND ELEVATION
14	A	BARGE DOLPHIN – PLAN AND ELEVATION
15	A	SHIP DOCK APPROACHWAY AND PIPERACK – TYPICAL SECTION
16	A	BARGE DOCK APPROACHWAY AND PIPERACK – TYPICAL SECTION
17	A	PIPERACK ROAD CROSSING – ELEVATIONS
18	A	PIPERACK ROAD CROSSING – PLAN AND ELEVATION
19	A	TYPICAL WALKWAY BENT – ELEVATION
20	A	CULVERT – PLAN AND ELEVATION
21	A	REVTMENT REPAIR DETAILS
22	A	USACE LEVEE RAMP CROSSING DETAILS
23	A	USACE SLOPE PAVING DETAILS

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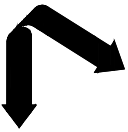
**PROPOSED NEW MARINE FACILITY
DRAWING INDEX**

DATE JAN. '23
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO 12143
SHEET No.
2 OF 23

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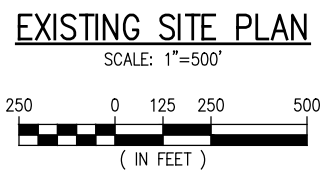
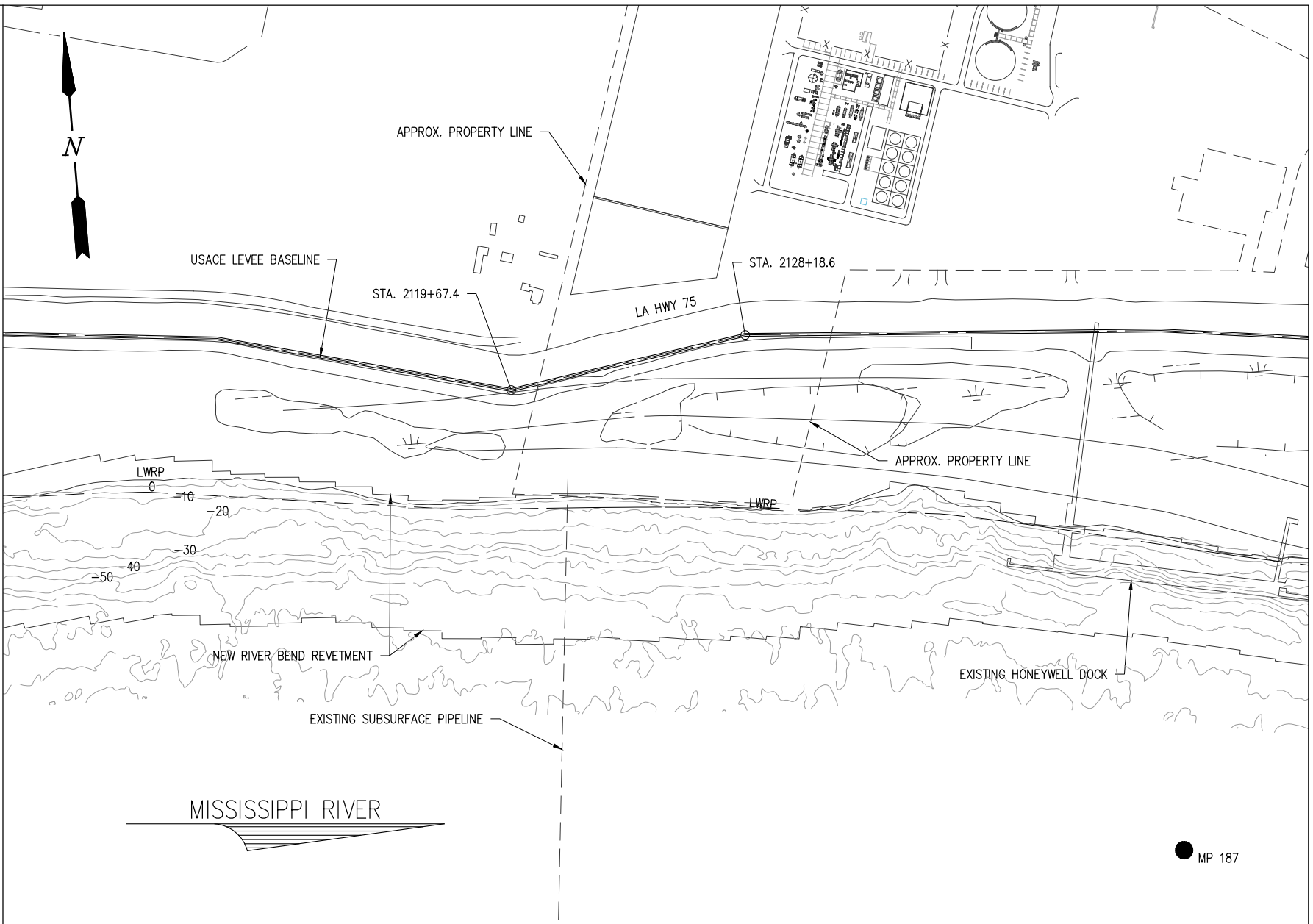
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**PROPOSED NEW MARINE FACILITY
EXISTING SITE PLAN**

DATE	JAN. '23
DESIGN	JPM
DRAWN	TAC
CHECK	CLO
JOB NO.	12143
SHEET No.	3 OF 23

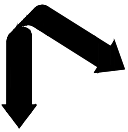


- NOTE:**
1. APPROX. PIPELINES LOCATION AS IDENTIFIED IN LA DEPARTMENT OF NATURAL RESOURCES DATABASE. PRECISE LOCATION WILL BE DETERMINED PRIOR TO CONSTRUCTION.

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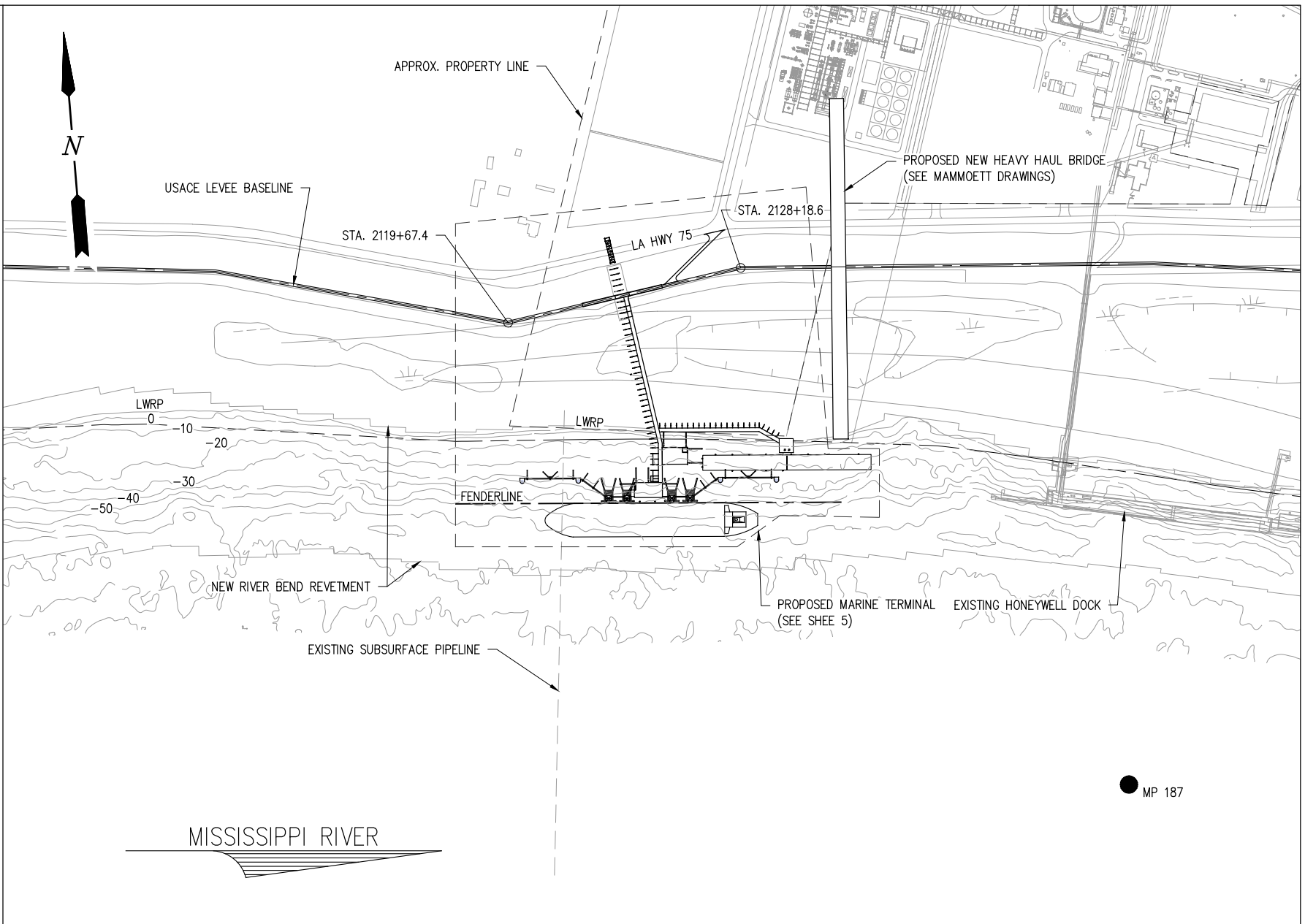
GEISMAR

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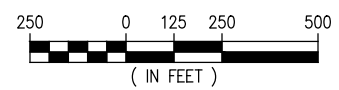
**PROPOSED NEW MARINE FACILITY
NEW SITE PLAN**

DATE	JAN. '23
DESIGN	JPM
DRAWN	TAC
CHECK	CLO
JOB NO.	12143
SHEET No.	4 OF 23



NEW SITE PLAN

SCALE: 1"=500'



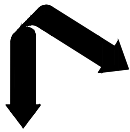
NOTE:

1. APPROX. PIPELINES LOCATION AS IDENTIFIED IN LA DEPARTMENT OF NATURAL RESOURCES DATABASE. PRECISE LOCATION WILL BE DETERMINED PRIOR TO CONSTRUCTION.

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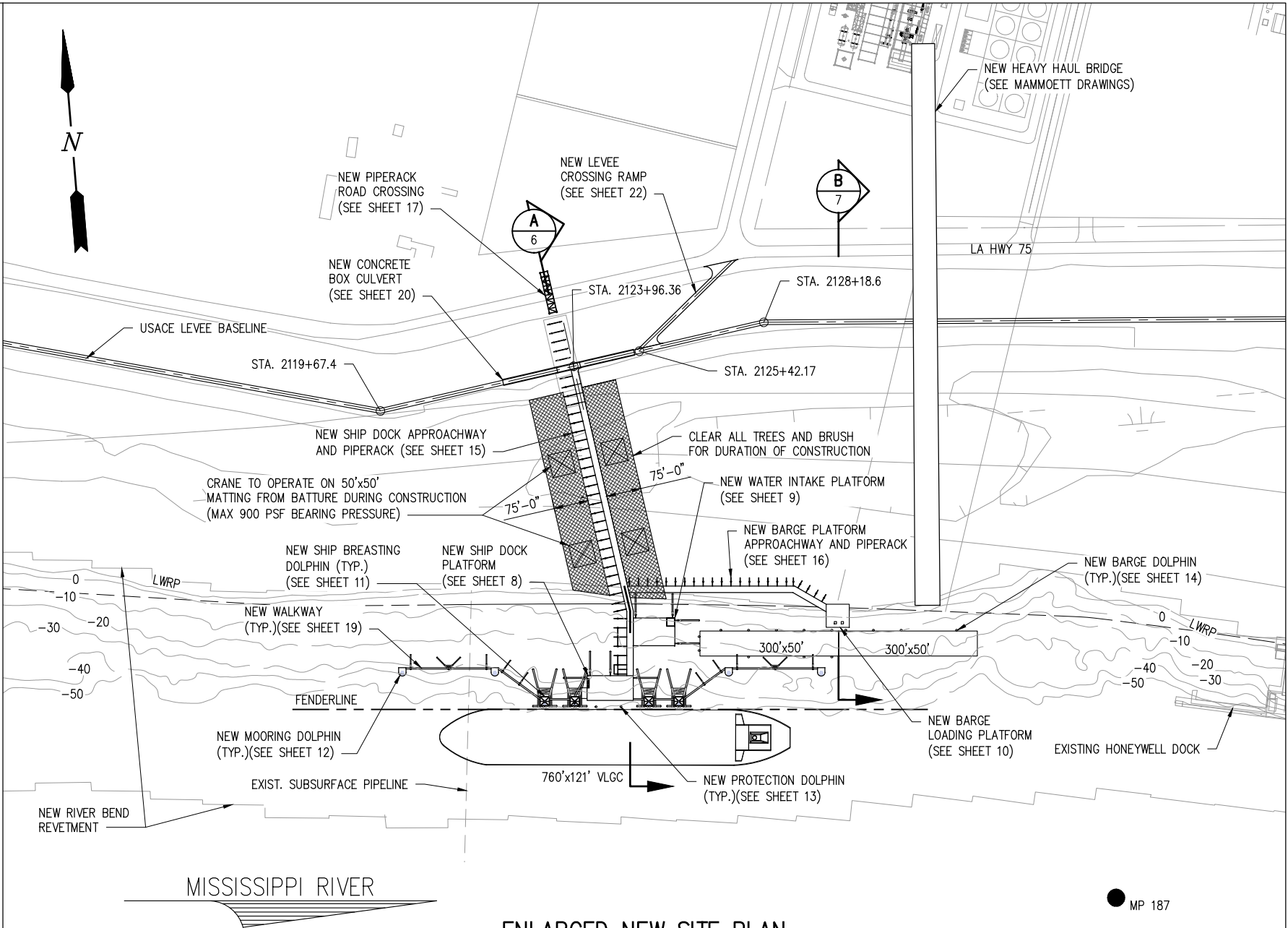
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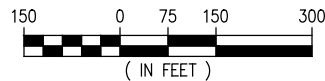
**PROPOSED NEW MARINE FACILITY
ENLARGED NEW SITE PLAN**

DATE: JAN. '23
DESIGN: JPM
DRAWN: TAC
CHECK: CLO
JOB NO: 12143
SHEET No. 5 OF 23



ENLARGED NEW SITE PLAN

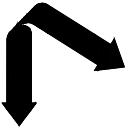
SCALE: 1"=300'



NOTE:

- APPROX. PIPELINES LOCATION AS IDENTIFIED IN LA DEPARTMENT OF NATURAL RESOURCES DATABASE. ADDITION INVESTING WILL BE REQUIRED TO IDENTIFY PRECISE LOCATIONS.

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PROPOSED NEW MARINE FACILITY

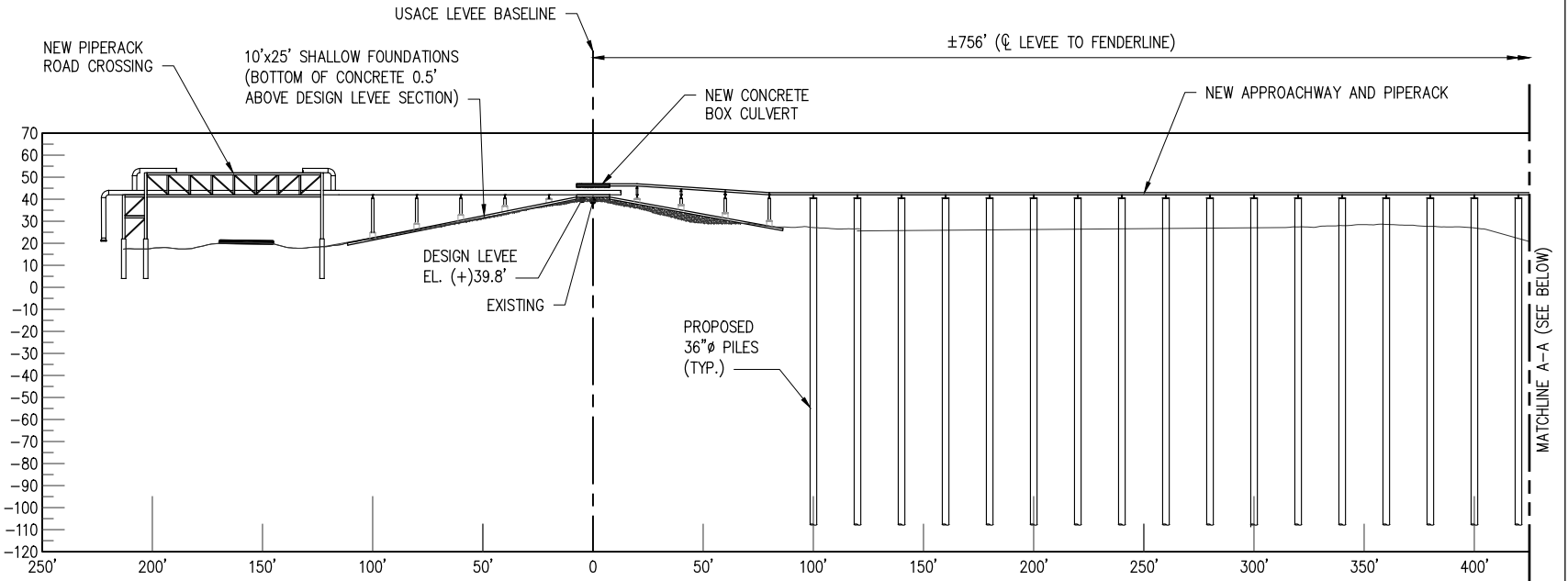
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SHIP DOCK CROSS SECTION

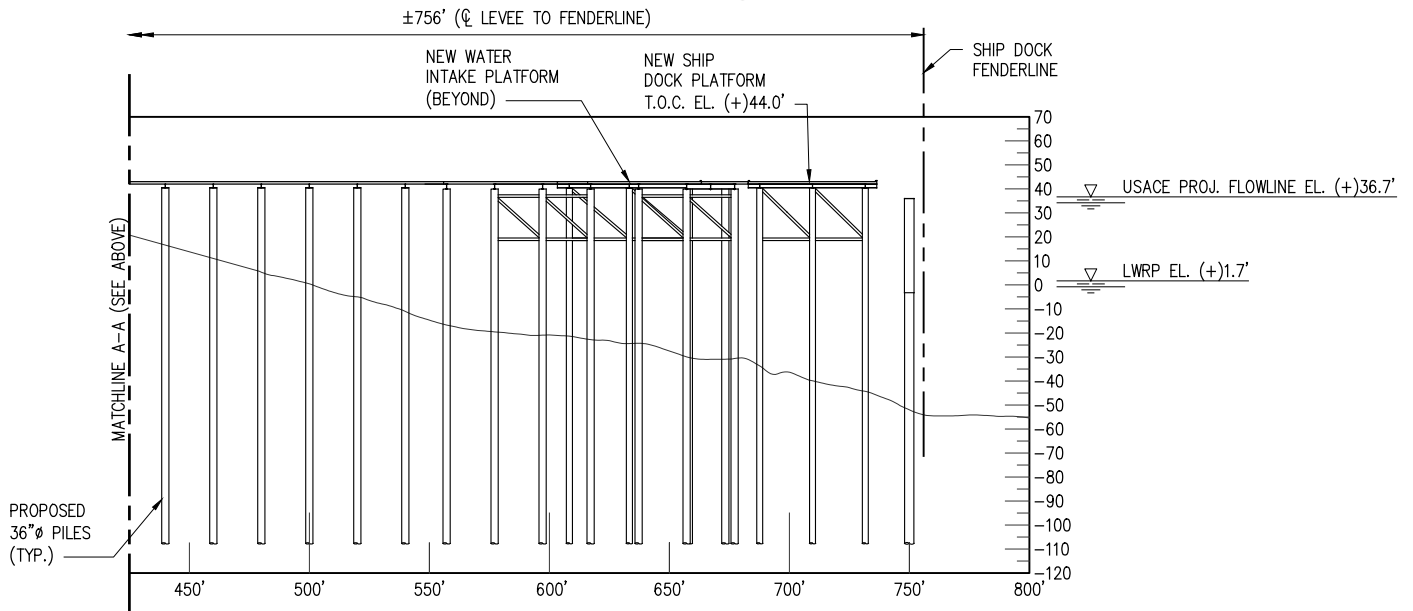
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DESIGN: JPM
DRAWN: TAC
CHECK: CLO
JOB NO: 12143
SHEET No. 6 OF 23

REV
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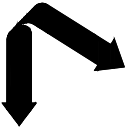


SECTION A
SCALE: 1"=80'

NOTE: PROVIDE/REPAIR SLOPE PAVING IN ACCORDANCE WITH SHEET 23.



SECTION A
SCALE: 1"=80'



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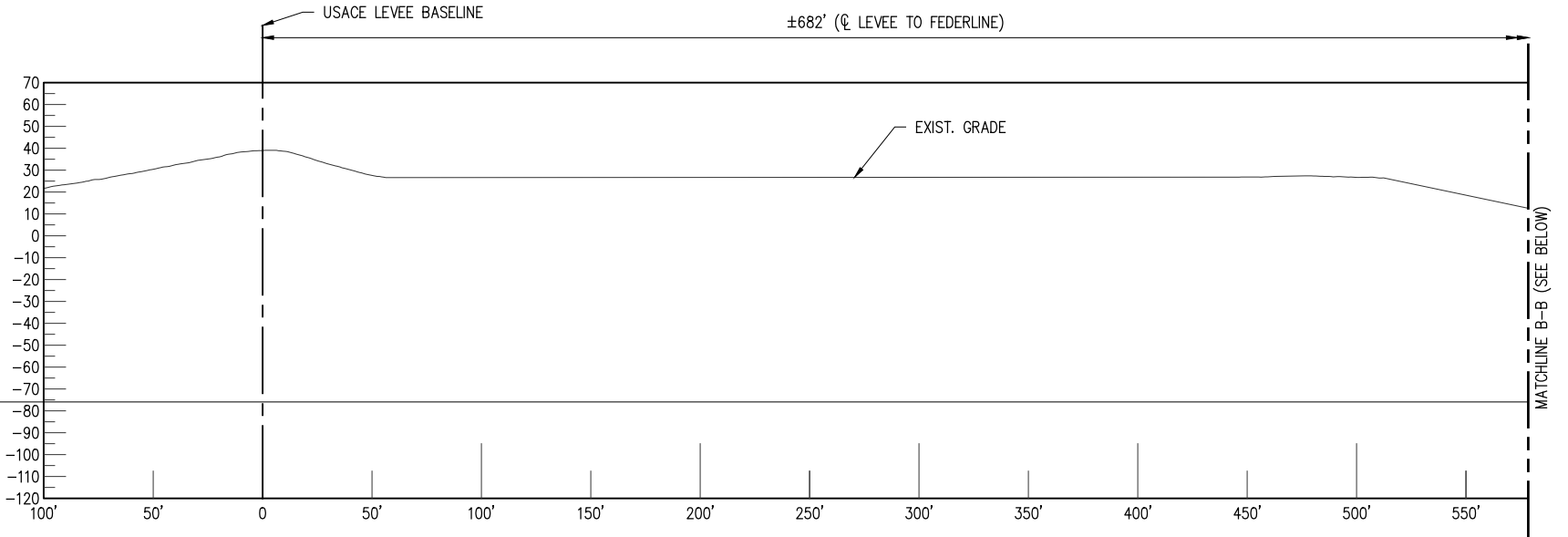
LOUISIANA

PROPOSED NEW MARINE FACILITY

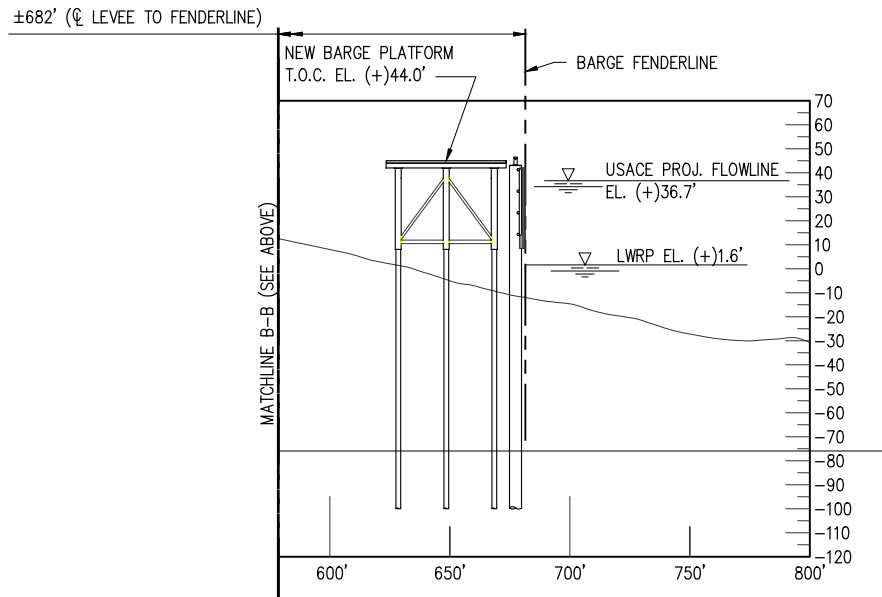
BARGE DOCK CROSS SECTION

DATE JAN. '23
 DESIGN JPM
 DRAWN TAC
 CHECK CLO
 JOB NO 12143
 SHEET No. 7 OF 23

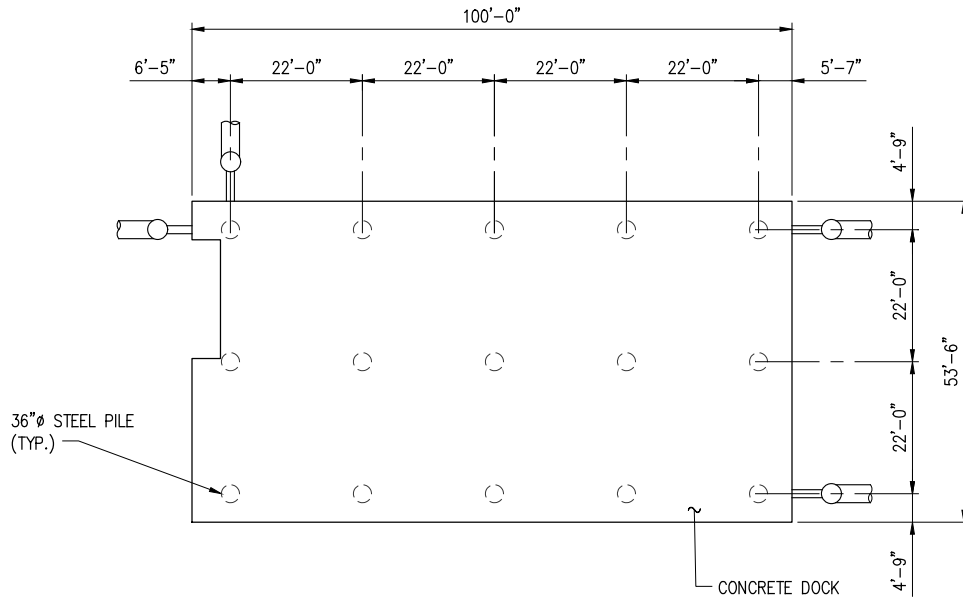
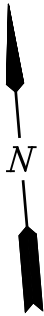
REV
 A



SECTION B
 SCALE: 1"=80'

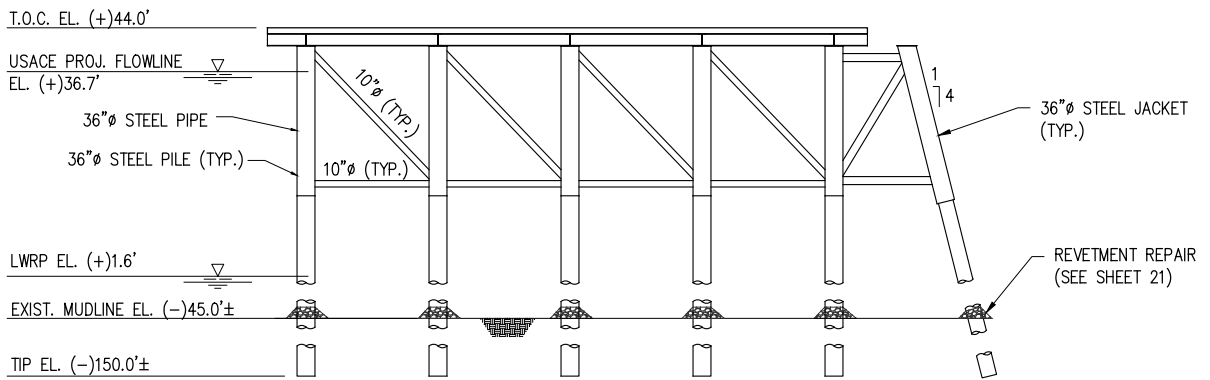


SECTION B
 SCALE: 1"=80'



SHIP DOCK PLATFORM – PLAN

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



SHIP DOCK PLATFORM – ELEVATION

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

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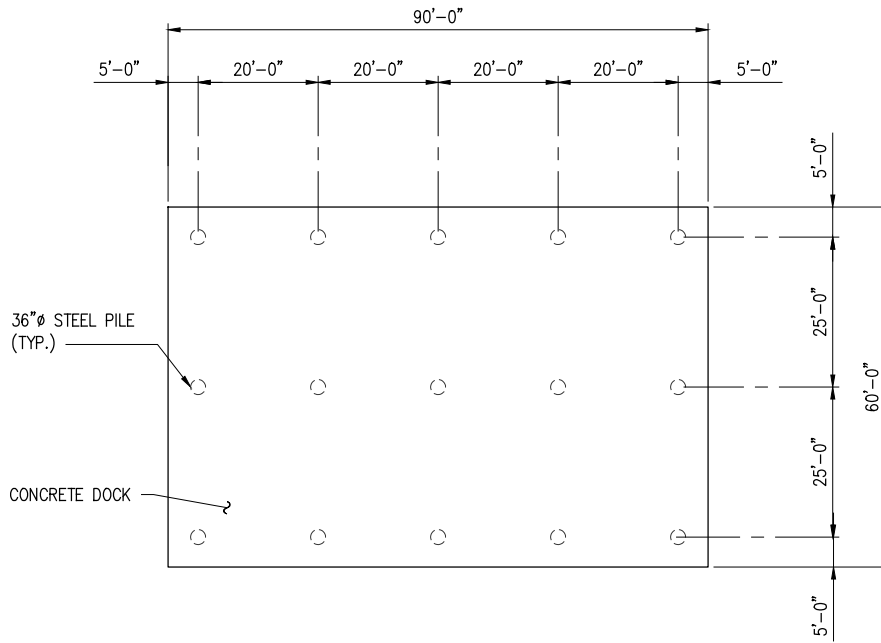
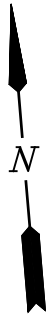
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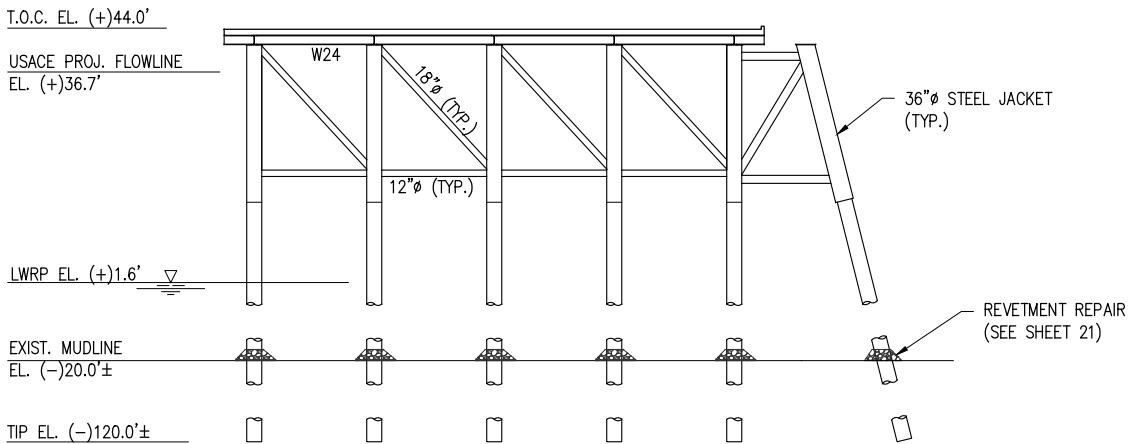
**PROPOSED NEW MARINE FACILITY
SHIP DOCK PLATFORM
PLAN AND ELEVATION**

DATE JAN. '23
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO. 12143
SHEET No.
8 OF 23



WATER INTAKE PLATFORM – PLAN

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



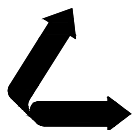
WATER INTAKE PLATFORM – ELEVATION

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

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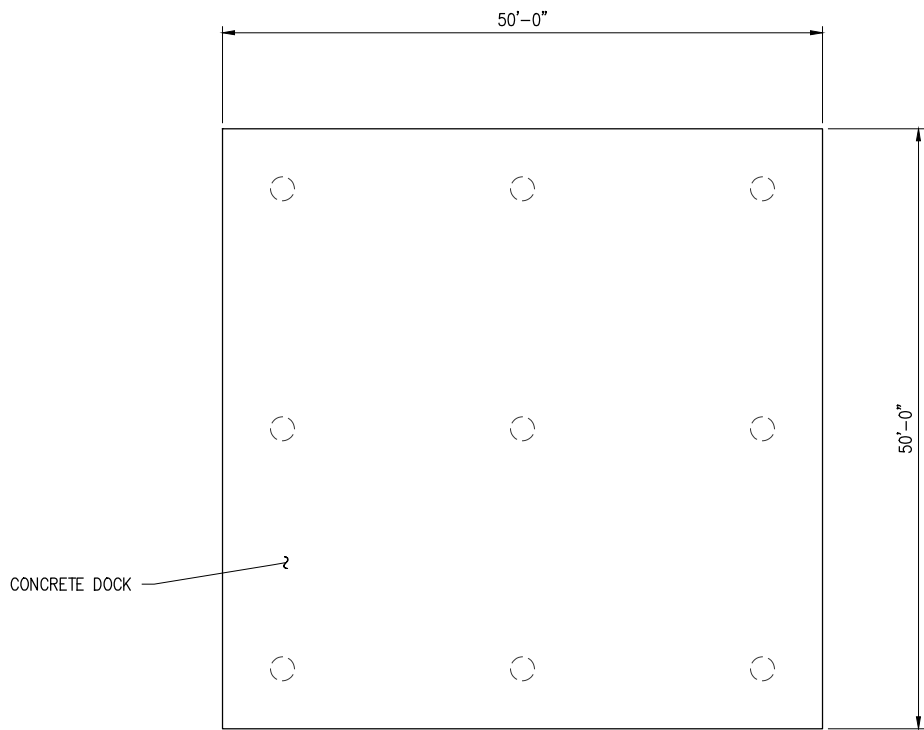
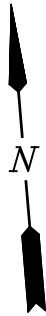
GEISMAR

NUTRIEN

LOUISIANA

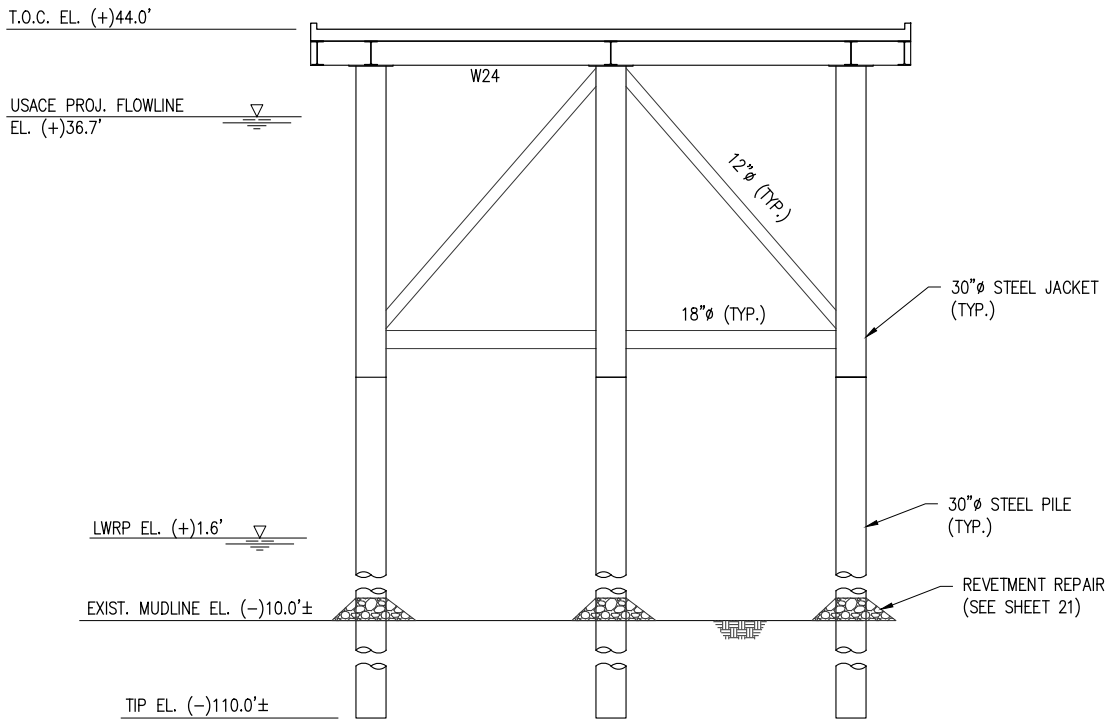
**PROPOSED NEW MARINE FACILITY
WATER INTAKE PLATFORM
PLAN AND ELEVATION**

DATE	JAN. '23
DESIGN	JPM
DRAWN	TAC
CHECK	CLO
JOB NO.	12143
SHEET No.	9 OF 23



BARGE LOADING PLATFORM – PLAN

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



BARGE LOADING PLATFORM – ELEVATION

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

j:\120005\12143 B&V CONCEPTUAL MARINE TERMINAL \DRAWINGS\PERMIT\12143-P10.DWG

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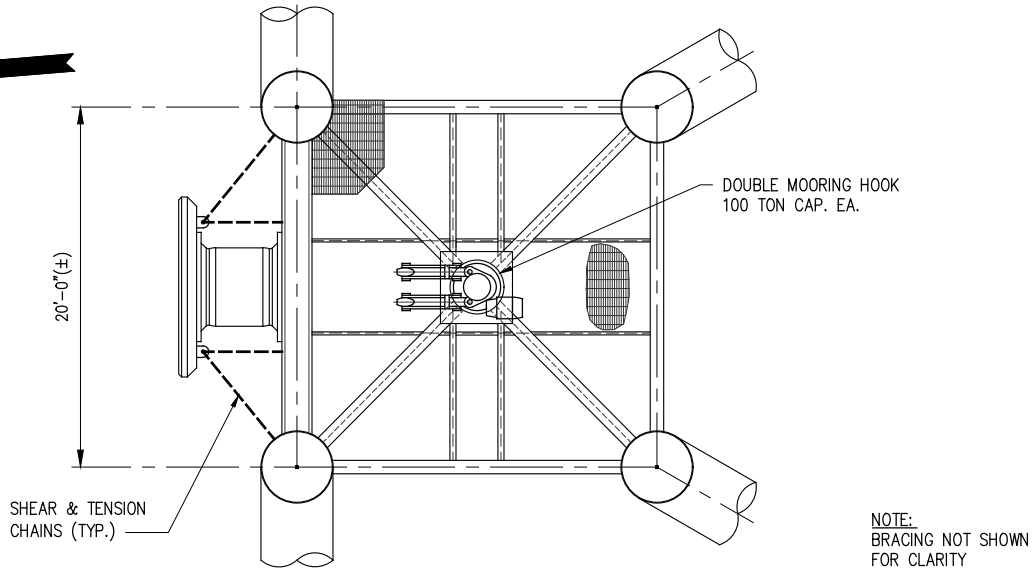
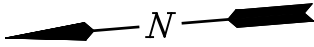
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NUTRIEN

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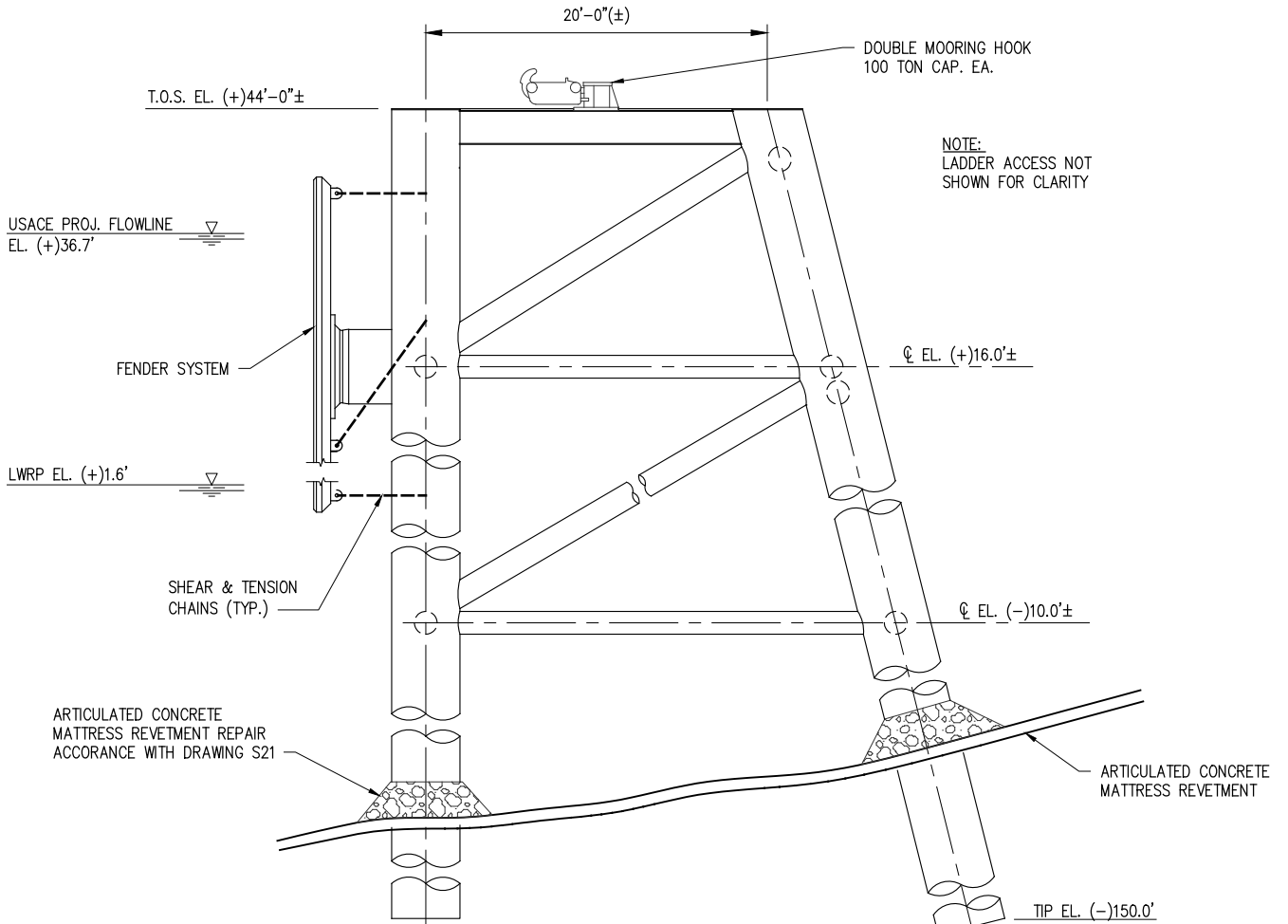
**PROPOSED NEW MARINE FACILITY
BARGE LOADING PLATFORM
PLAN AND ELEVATION**

DATE JAN. '23
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO. 12143
SHEET No.
10 OF 23



SHIP BREASTING DOLPHIN – PLAN

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



SHIP BREASTING DOLPHIN – ELEVATION

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

CHRIS O'BRIEN
LA PE #33945

PRELIMINARY - FOR PERMIT PURPOSES ONLY

REV
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INCORPORATED

LA: EF-1120 TX: F-2981
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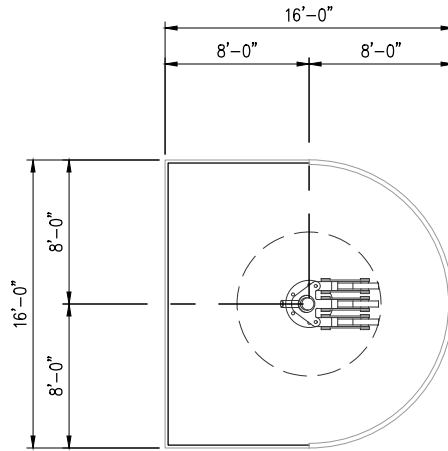
GEISMAR

NUTRIEN

LOUISIANA

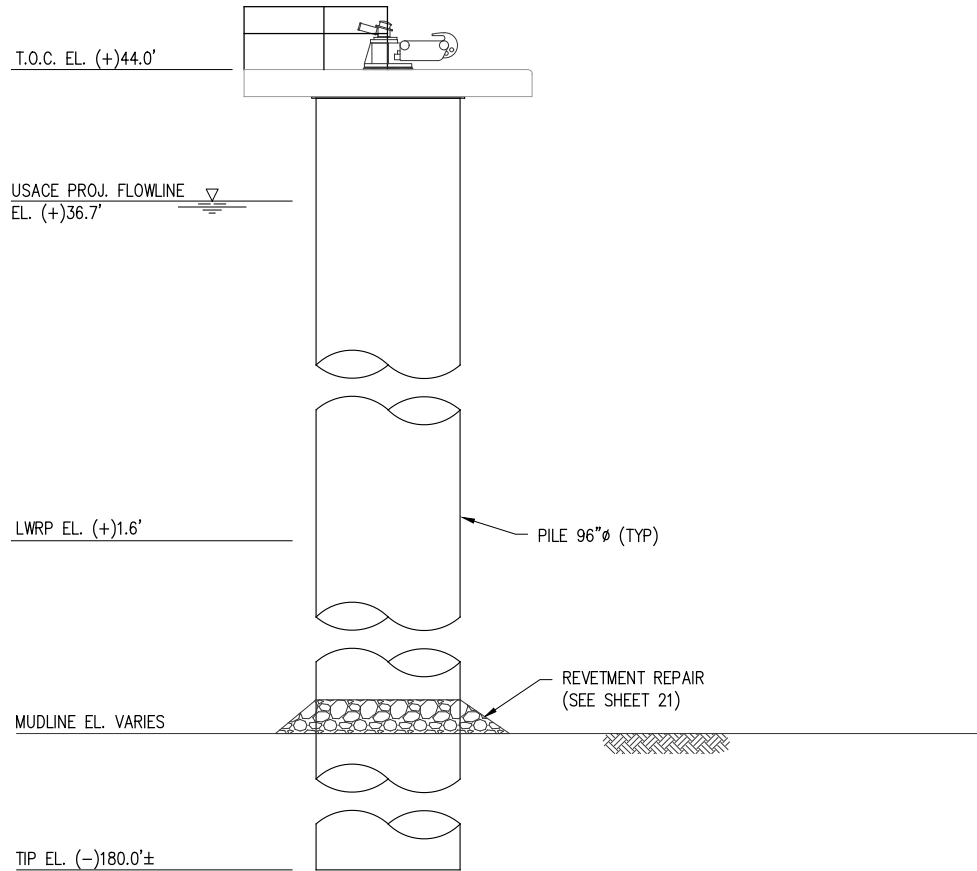
**PROPOSED NEW MARINE FACILITY
SHIP BREASTING DOLPHIN
PLAN AND ELEVATION**

DATE JAN. '23
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO. 12143
SHEET No.
11 OF 23



SHIP MOORING DOLPHIN – PLAN

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



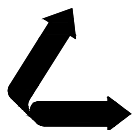
SHIP MOORING DOLPHIN – ELEVATION

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

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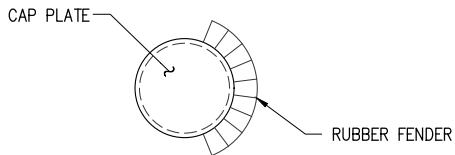
GEISMAR

NUTRIEN

LOUISIANA

PROPOSED NEW MARINE FACILITY
SHIP MOORING DOLPHIN
PLAN AND ELEVATION

DATE JAN. '23
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO 12143
SHEET No.
12 OF 23

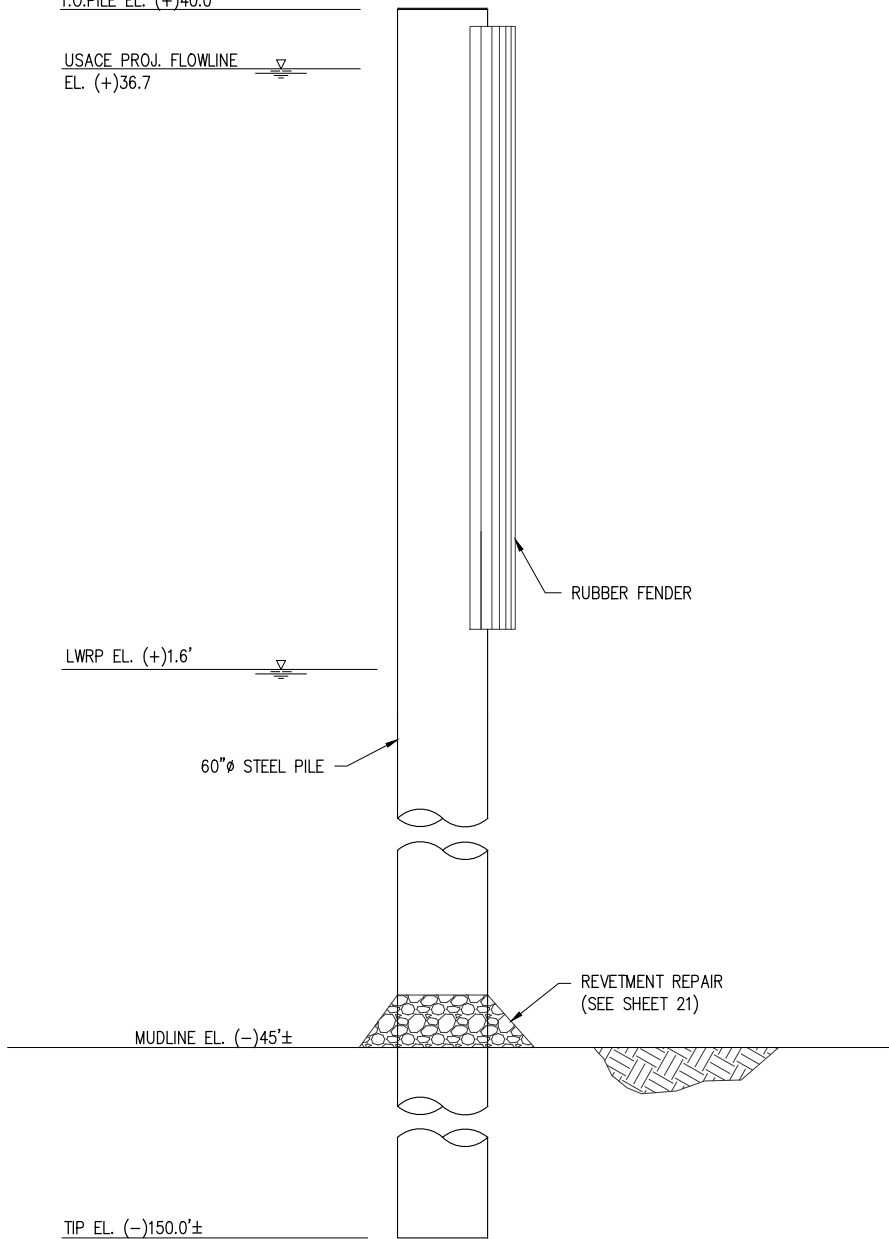


PROTECTION DOLPHIN - PLAN

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

T.O.PILE EL. (+)40.0'

USACE PROJ. FLOWLINE
EL. (+)36.7



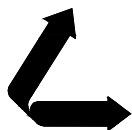
PROTECTION DOLPHIN - ELEVATION

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

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LA PE #33945

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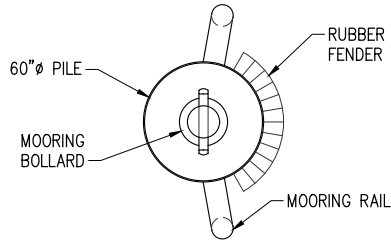
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NUTRIEN

LOUISIANA

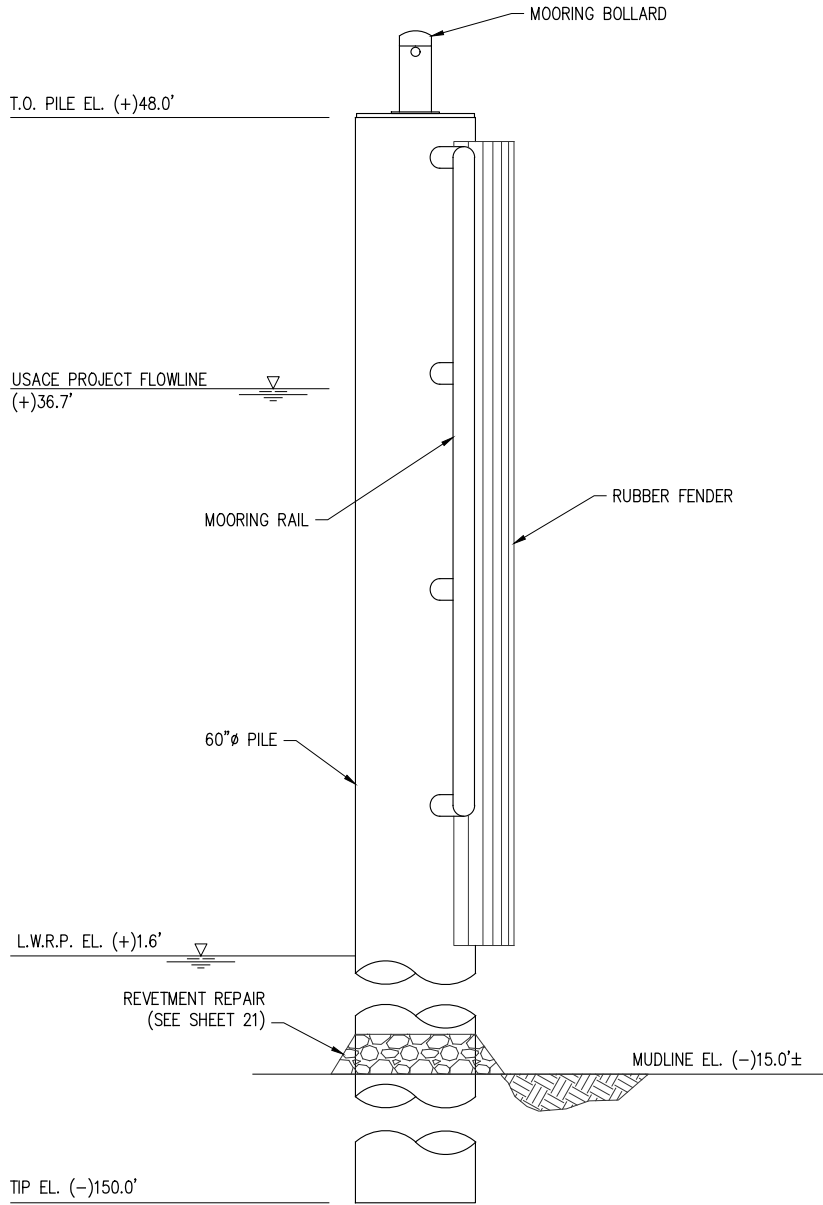
**PROPOSED NEW MARINE FACILITY
PROTECTION DOLPHIN
PLAN AND ELEVATION**

DATE	JAN. '23
DESIGN	JPM
DRAWN	TAC
CHECK	CLO
JOB NO.	12143
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BARGE DOLPHIN – PLAN

SCALE: 1/4" = 1'-0"



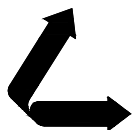
BARGE DOLPHIN – ELEVATION

SCALE: 1/4" = 1'-0"

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LA PE #33945

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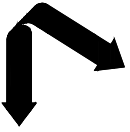
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LOUISIANA

**PROPOSED NEW MARINE FACILITY
BARGE DOLPHIN
PLAN & ELEVATION**

DATE JAN. '23
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO 12143
SHEET No.
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LA PE #53945

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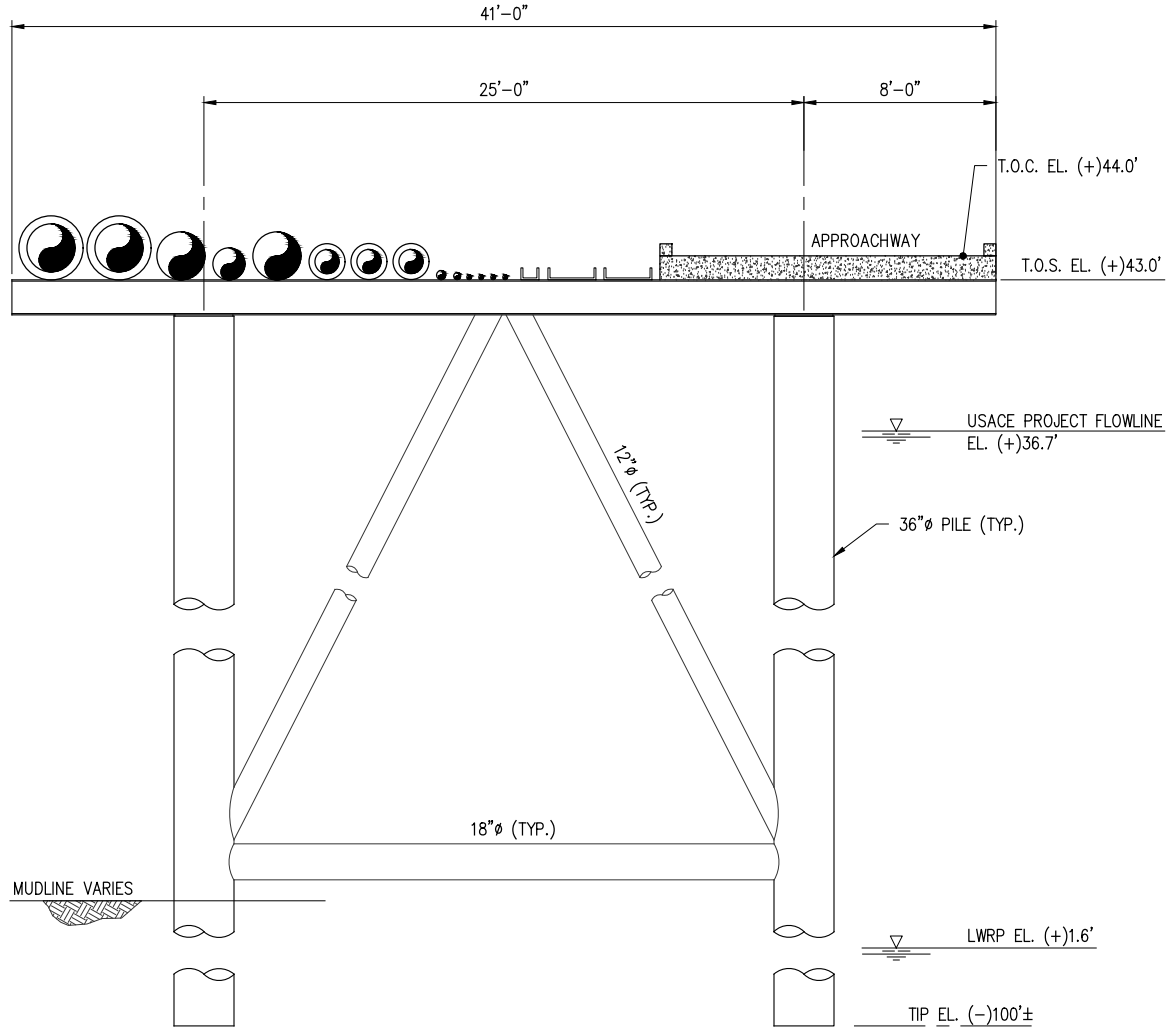
NUTRIEN

LOUISIANA

**PROPOSED NEW MARINE FACILITY
SHIP DOCK APPROACHWAY & PIPERACK
TYPICAL SECTION**

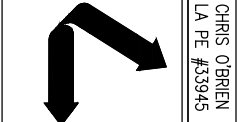
DATE JAN. '23
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO 12143
SHEET No. 15 OF 23

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SHIP DOCK APPROACHWAY & PIPERACK – TYPICAL SECTION

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



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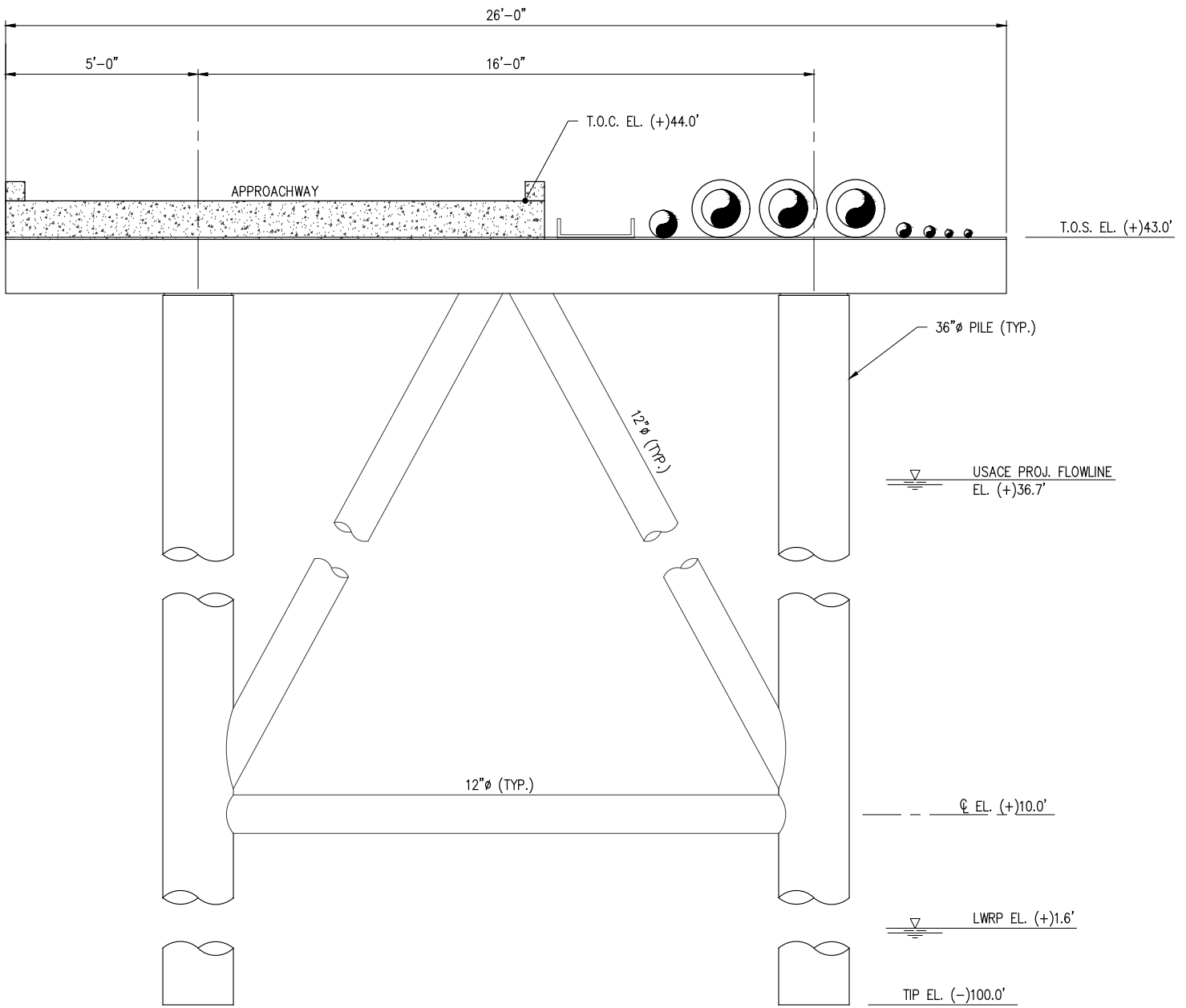
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PROPOSED NEW MARINE FACILITY
BARGE DOCK APPROACHWAY & PIPERACK
TYPICAL SECTION
LOUISIANA
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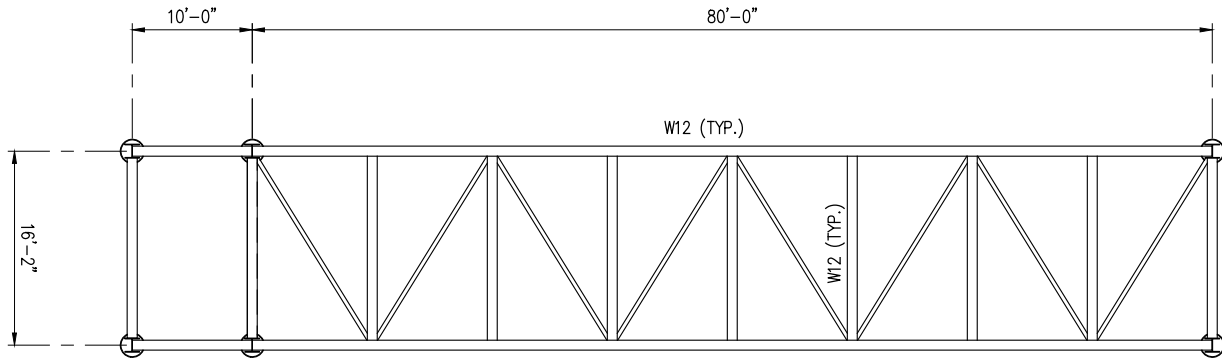
DATE JAN. '23
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO 12143
SHEET No. 16 OF 23

REV
A



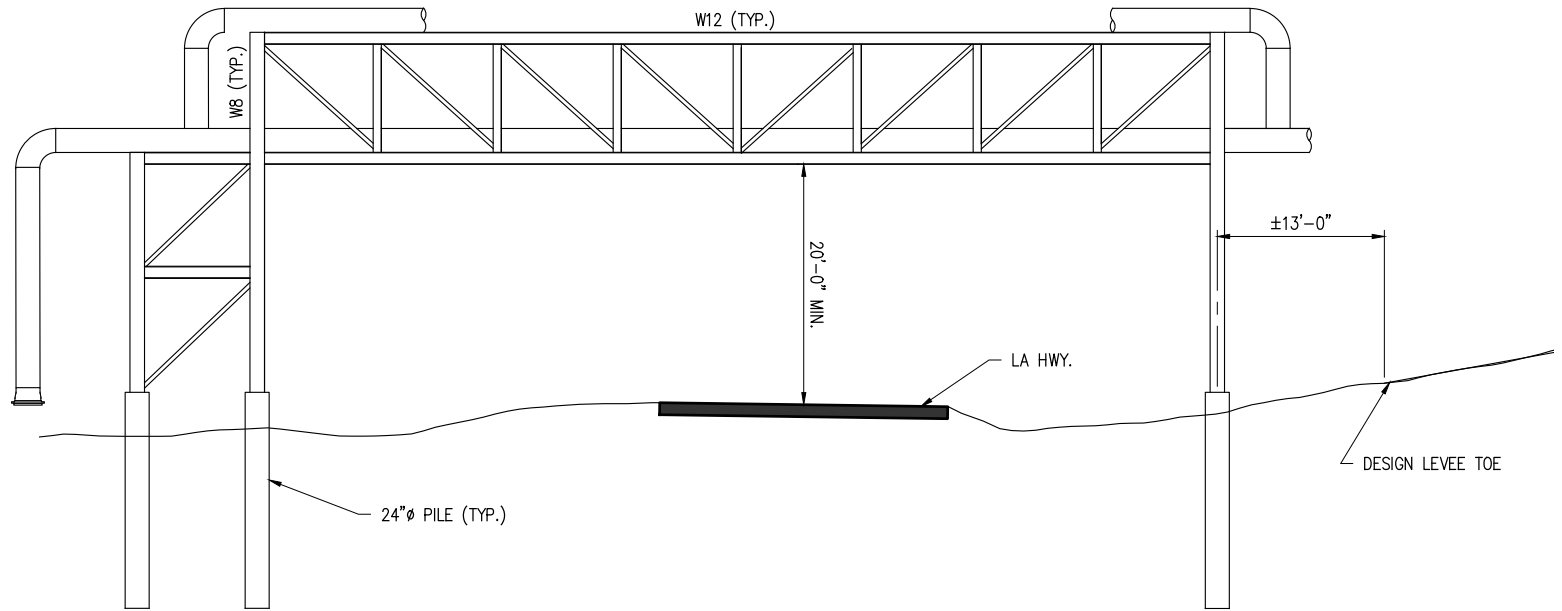
BARGE DOCK APPROACHWAY & PIPERACK – TYPICAL SECTION

SCALE: 1/4" = 1'-0"



ELEVATED ROAD CROSSING – PLAN

SCALE: 1/16=1'-0"



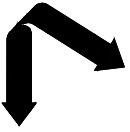
PIPERACK ROAD CROSSING – ELEVATION

SCALE: 1/16=1'-0"

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LA PE #53945

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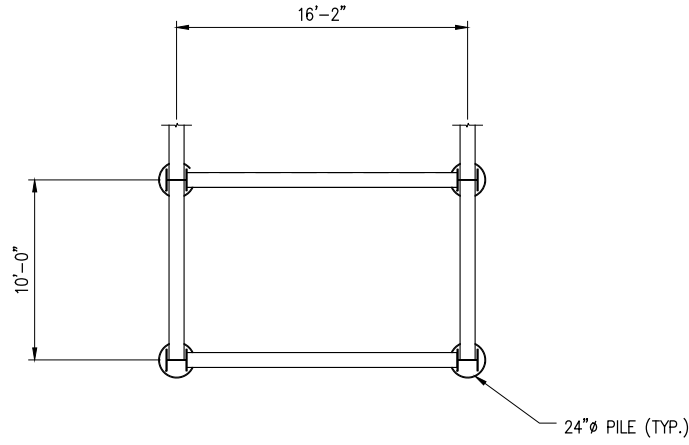
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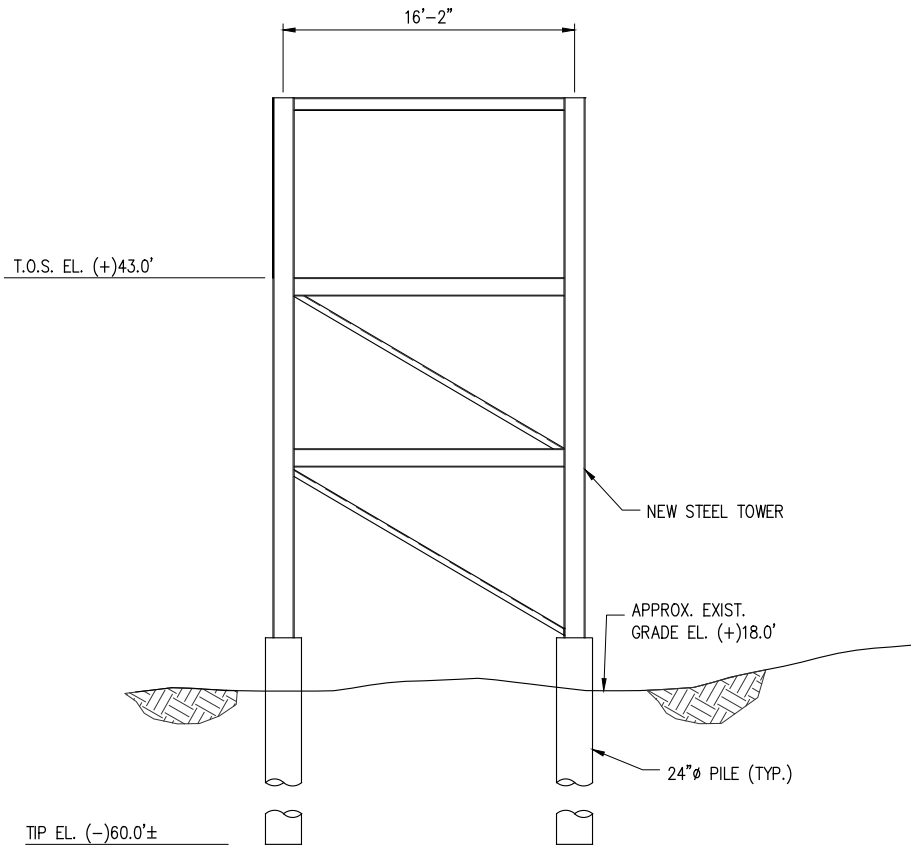
LOUISIANA

**PROPOSED NEW MARINE FACILITY
PIPERACK ROAD CROSSING
PLAN & ELEVATION**

DATE	JAN. '23
DESIGN	JPM
DRAWN	TAC
CHECK	CLO
JOB NO	12143
SHEET No.	17 OF 23



PIPERACK ROAD CROSSING – PLAN
SCALE: 3/32" = 1'-0"

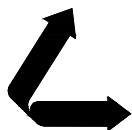


TYPICAL PIPERACK ROAD CROSSING – ELEVATION
SCALE: 3/32" = 1'-0"

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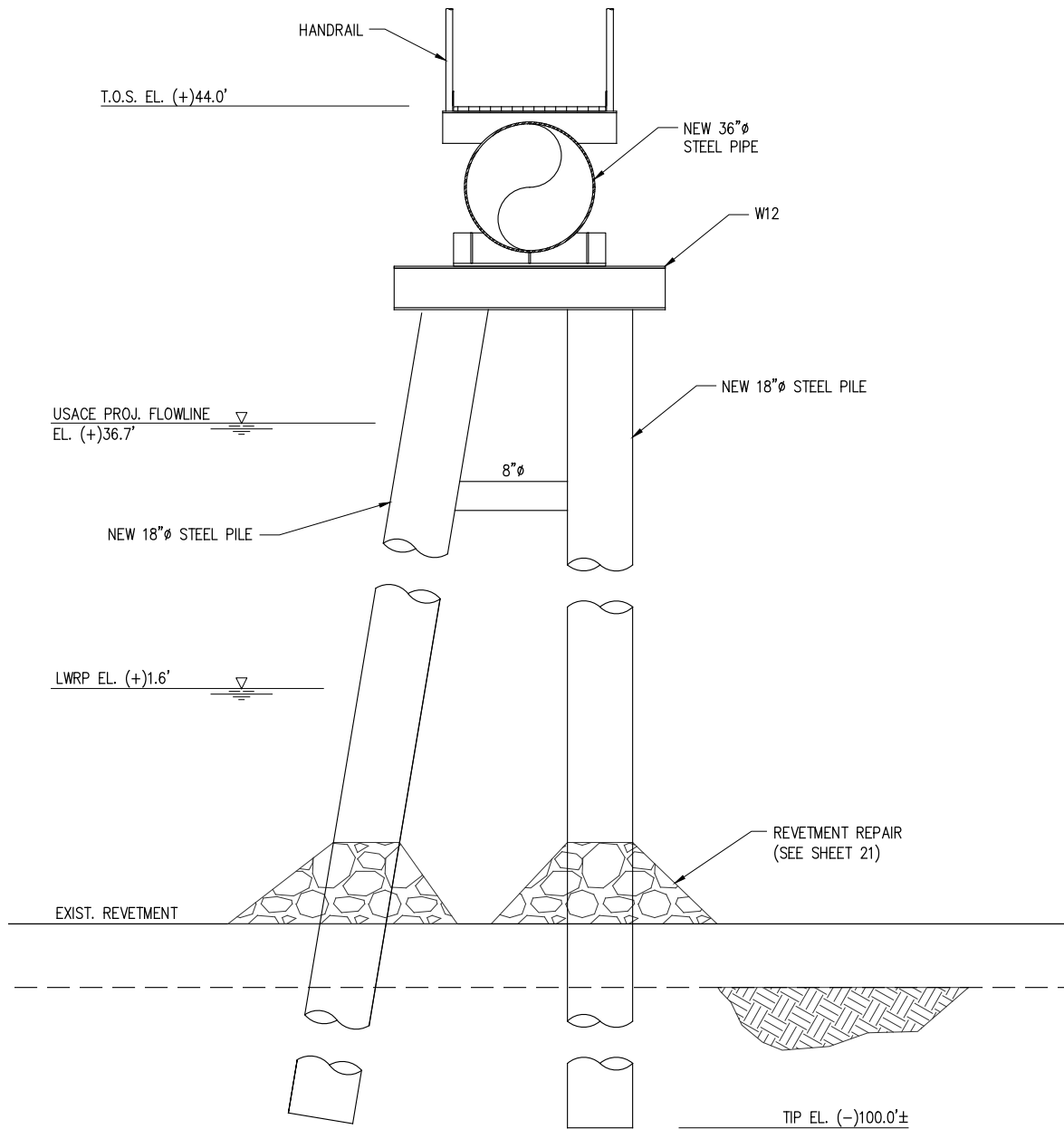
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**PROPOSED NEW MARINE FACILITY
PIPERACK ROAD CROSSING
PLAN AND ELEVATION**

DATE JAN. '23
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO 12143
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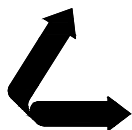
TYPICAL WALKWAY BENT – ELEVATION

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

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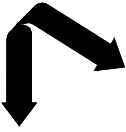
GEISMAR

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**PROPOSED NEW MARINE FACILITY
TYPICAL WALKWAY BENT
ELEVATION**

DATE JAN. '23
DESIGN JPM
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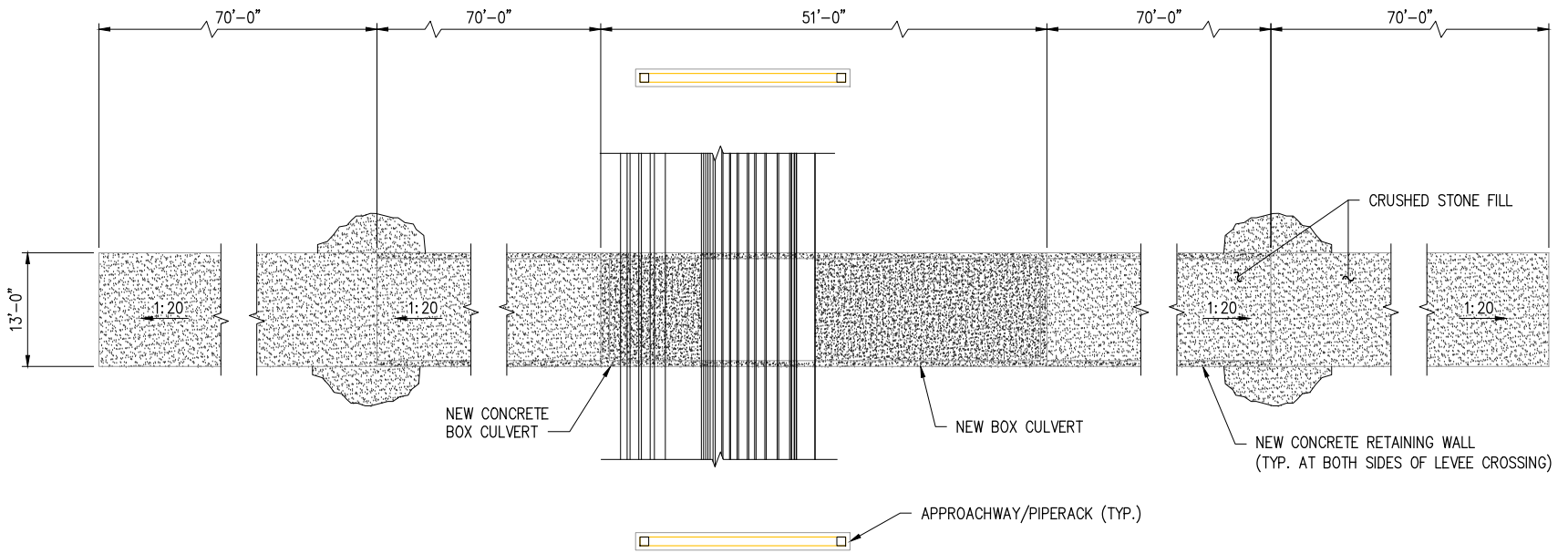
NUTRIEN

LOUISIANA

**PROPOSED NEW MARINE FACILITY
 CONCRETE BOX CULVERT
 PLAN AND ELEVATION**

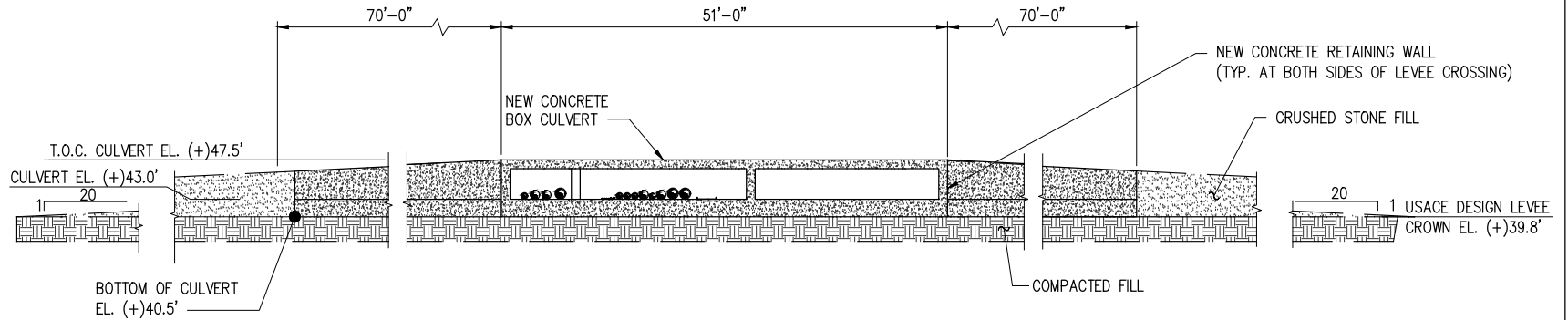
DATE JAN. '23
 DESIGN JPM
 DRAWN TAC
 CHECK CLO
 JOB NO 12143
 SHEET No.
 20 OF 23

REV
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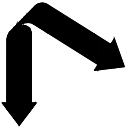
CONCRETE BOX CULVERT - PLAN

SCALE: 1"=20'



CONCRETE BOX CULVERT - ELEVATION

SCALE: 1"=20'



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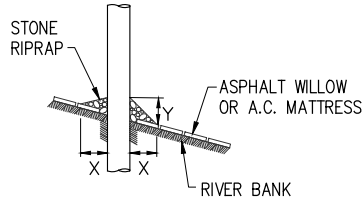
PROPOSED NEW MARINE FACILITY

REVETMENT REPAIR DETAILS

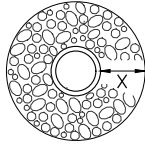
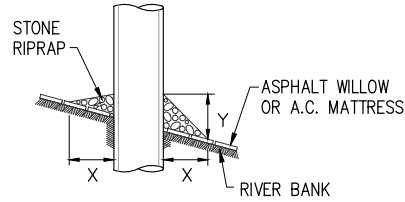
DATE JAN. '23
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO 12143
SHEET No. 21 OF 23

REV
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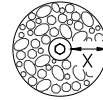
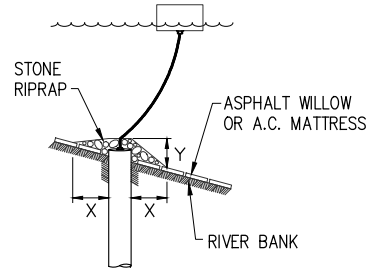
PILE



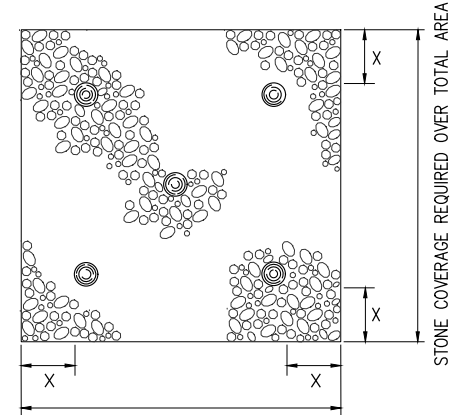
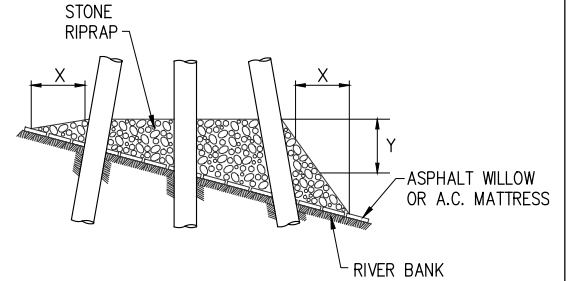
CAISSON



SPUD PILE
(BUOY AND ANCHOR CHAIN)



PILE CLUSTER



STONE COVERAGE REQUIRED OVER TOTAL AREA

TOTAL AREA OF STONE RIPRAP = 470 SQ. YDS.
TOTAL VOLUME OF STONE RIPRAP = 200 CU YDS.

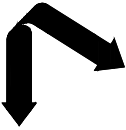
DEPTH OF WATER IN FEET AT POINT OF PENETRATION AT TIME OF STONE PLACEMENT	DIMENSIONS IN FEET FOR PROTECTION AREA REQUIRED							
	PILE		CAISSON		SPUD PILE (BUOY AND ANCHOR CHAIN)		PILE CLUSTER	
	X	Y	X	Y	X	Y	X	Y
1' - 10'	3	1.5	5	2			3	1
11' - 40'	5	2	8	3	7	3	6	2
41' - 60'	8	3	12	4	12	4	10	3

NOTES:

1. SIZE OF RIPRAP TO VARY BETWEEN 6 POUNDS AND 125 POUNDS WITH 40 PERCENT TO 60 PERCENT OF THE STONE WITHIN THE RANGE OF 25 POUNDS TO 75 POUNDS.
2. WHEN PENETRATING THE UPPER BANK PAVING IN A REVETMENT AREA WITH PILES, CAISSONS AND/OR PILE CLUSTERS, A 10 INCH THICK RIPRAP STONE LAYER SHALL BE PLACED OVER ALL AREAS WHERE THE BANK PAVING IS DISTURBED BY DRIVING OPERATIONS.
3. WHEN USING AN ANCHOR CHAIN AND BUOY SYSTEM, THE ANCHOR CHAIN MUST BE ATTACHED AT THE TOP OF THE PILE TO MINIMIZE REVETMENT DAMAGE.

REVETMENT REPAIR DETAILS

SCALE: N.T.S.



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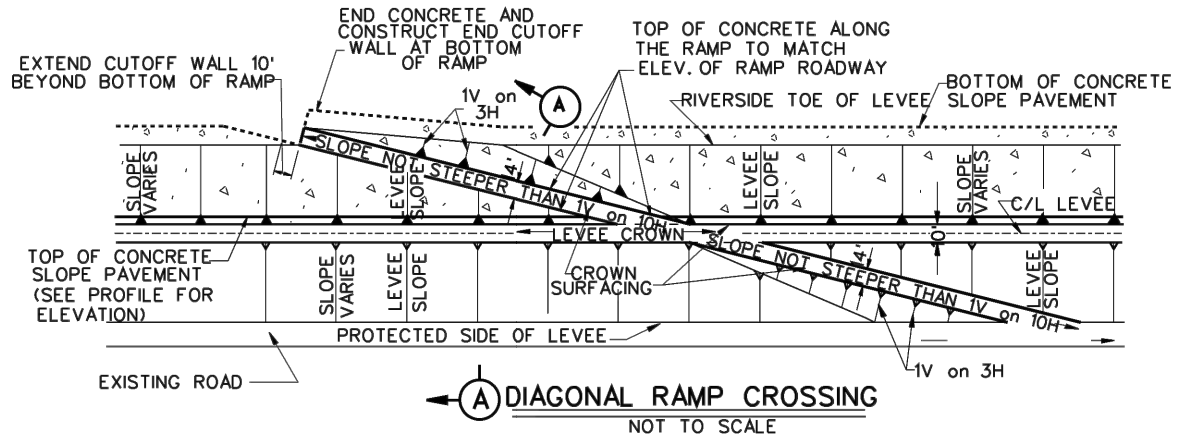
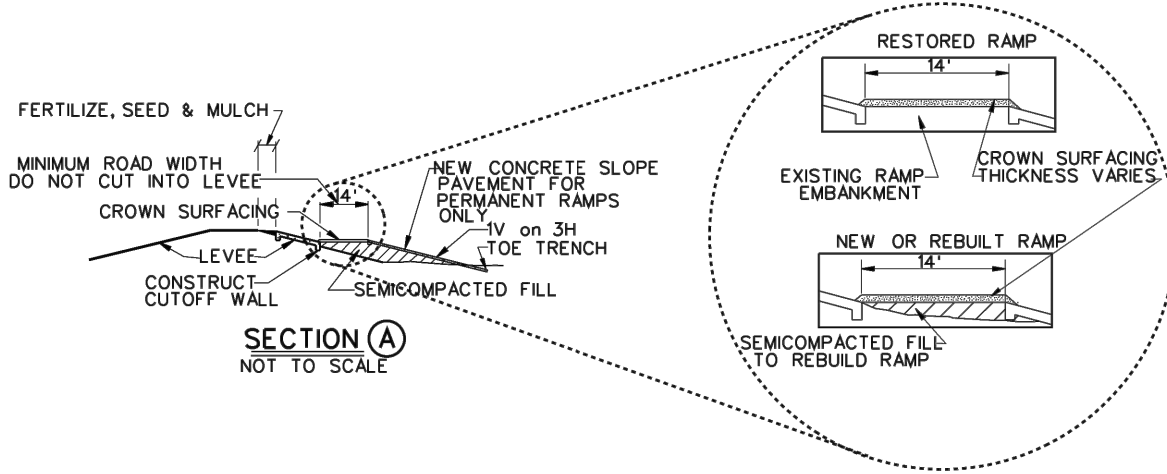
GEISMAR

NUTRIEN

LOUISIANA

PROPOSED NEW MARINE FACILITY

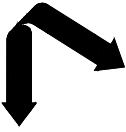
USACE LEVEE RAMP CROSSING DETAILS



REFERENCE USACE DRAWING:
PIPE LINE CROSSINGS OVER LEVEES AND FLOODWALLS
SURFACE CROSSINGS TYPICAL OF RIVER LEVEES
FILE NUMBER H-8-29027, DRAWING 6 OF 9

DATE JAN. '23
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO 12143
SHEET No. 22 OF 23

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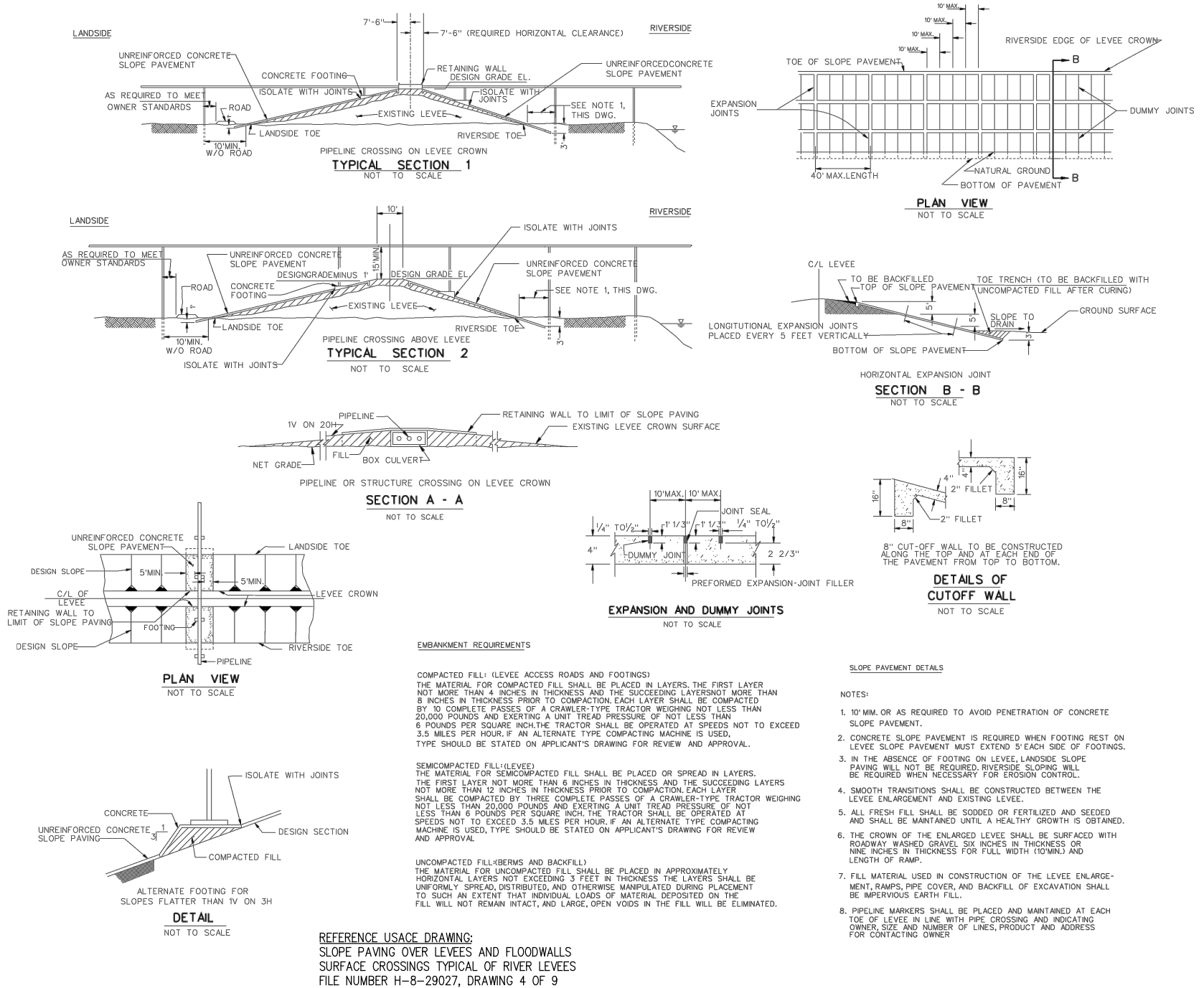
NUTRIEN

LOUISIANA

PROPOSED NEW MARINE FACILITY
USACE SCOPE PAVING DETAILS

DATE JAN. '23
DESIGN JPM
DRAWN TAC
CHECK CLO
JOB NO 12143
SHEET No. 23 OF 23

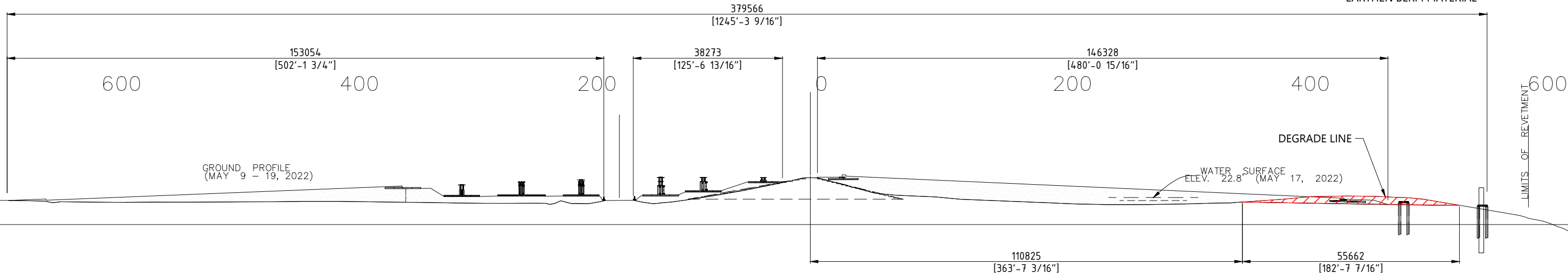
REV A



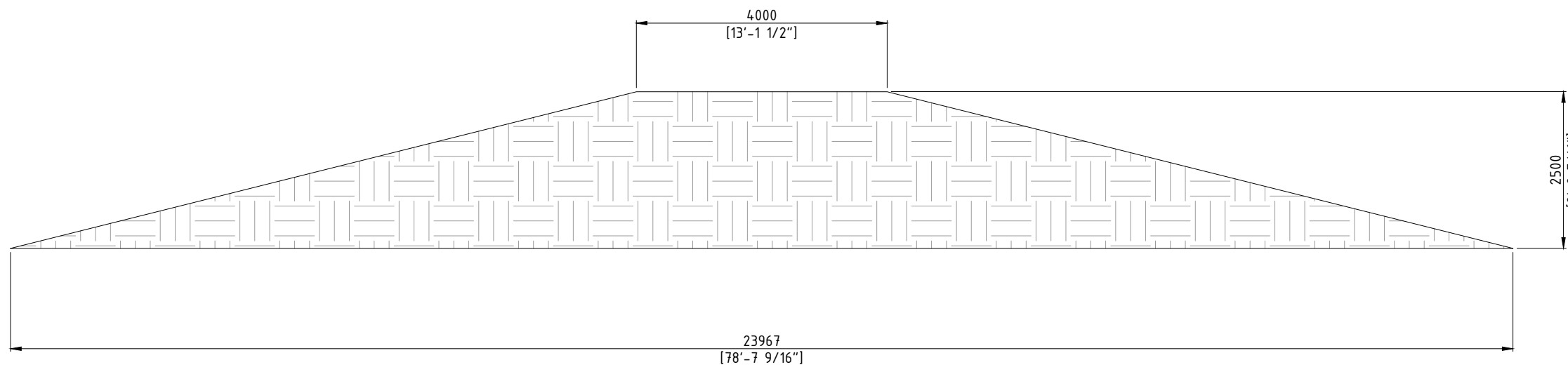
LEGEND

COMPACTED FILL MATERIAL
(PER GEO-TECH
RECOMMENDATIONS/REPORT)

EARTHEN BERM MATERIAL



SECTION D



SECTION E
TYP

DRAWING STATUS

ISSUED FOR INFORMATION

REFERENCE DRAWINGS/DOCUMENTS

REF	DRAWING NUMBER	REV
01	HYDROCONSULTANTS DWG# C44-295-01	0
02	HYDROCONSULTANTS DWG# E44-295-01	0

NOTES:



- PROPOSED HEAVY HAUL BRIDGE/ROAD IS A TEMPORARY IN NATURE AND WILL BE REMOVED UPON COMPLETION OF THE PROJECT
- THE LOCATION SHALL BE RESTORED TO ORIGINAL CONDITION UPON REMOVAL OF TEMPORARY HEAVY HAUL BRIDGE/ROAD

REV.	DESCRIPTION:	DATE:	DRAWN:	CHECKED:
02	Notations added/Added Legend identifier	05MAR24	MCoo 940152	JTol 940132
01	Degrade Lines (Plan View) added/LOD Extended	10JAN24	MCoo 940152	JTol 940132
00	First Issue	11JULY23	MCoo 940152	JTol 940132

Without authorized signatures this document is uncontrolled, not binding and for indicative purposes only.

CLIENT: **PCS NITROGEN FERTILIZER, L.P.**

PROJECT: **GEISMAR NITROGEN EXPANSION**

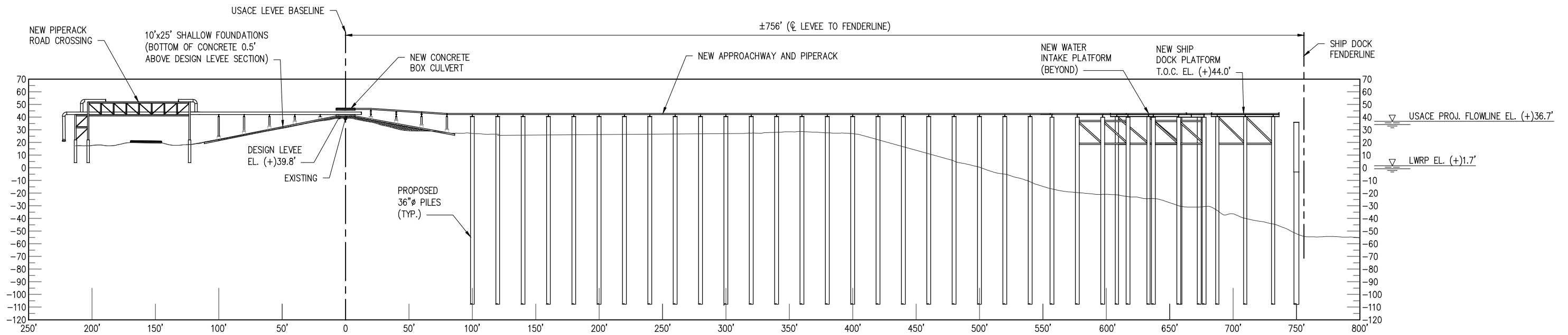
TITLE: **STA. 2131+69 30° 13'4.37"N / 91° 3'29.09"W
NEAR MISSISSIPPI RIVER MILE MARKER 187
ASCENSION PARISH, GEISMAR LOUISIANA**

MAMMOET

MAMMOET USA
20525 FM 521, Rosharon, TX 77583
Tel. +1 (281) 369-2200 / Fax. +1 (281) 369-2178
www.mammoet.com

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SCALE:	SIZE:	DRAWING NUMBER
SKETCH	D	15117456 - P033 - D - SK04 - 3/3 - 02



SECTION
SCALE: 1"=80'



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REV	DATE	BY	DESCRIPTION	REV	DATE	BY	DESCRIPTION

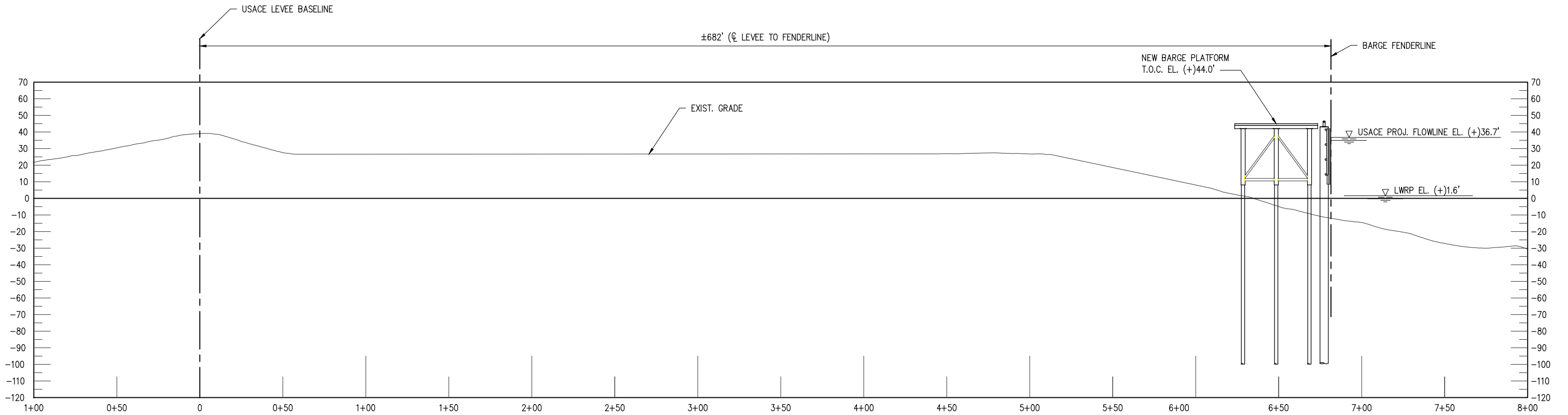
CHRIS O'BRIEN P.E.
LA PE #33945

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DATE AUG. '22
SHT SIZE 11"x17"
DESIGN JPM
DRAWN TAC
CHECK CLO
APPR'D CLO
JOB NO 12143

NUTRIEN
GIESMAR LOUISIANA
PROPOSED NEW MARINE FACILITY
SECTION A

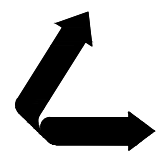
SHEET NO.
X1



SECTION B
SCALE: 1"=60'

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LA PE #33945

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REV	DATE	BY	DESCRIPTION	REV	DATE	BY	DESCRIPTION

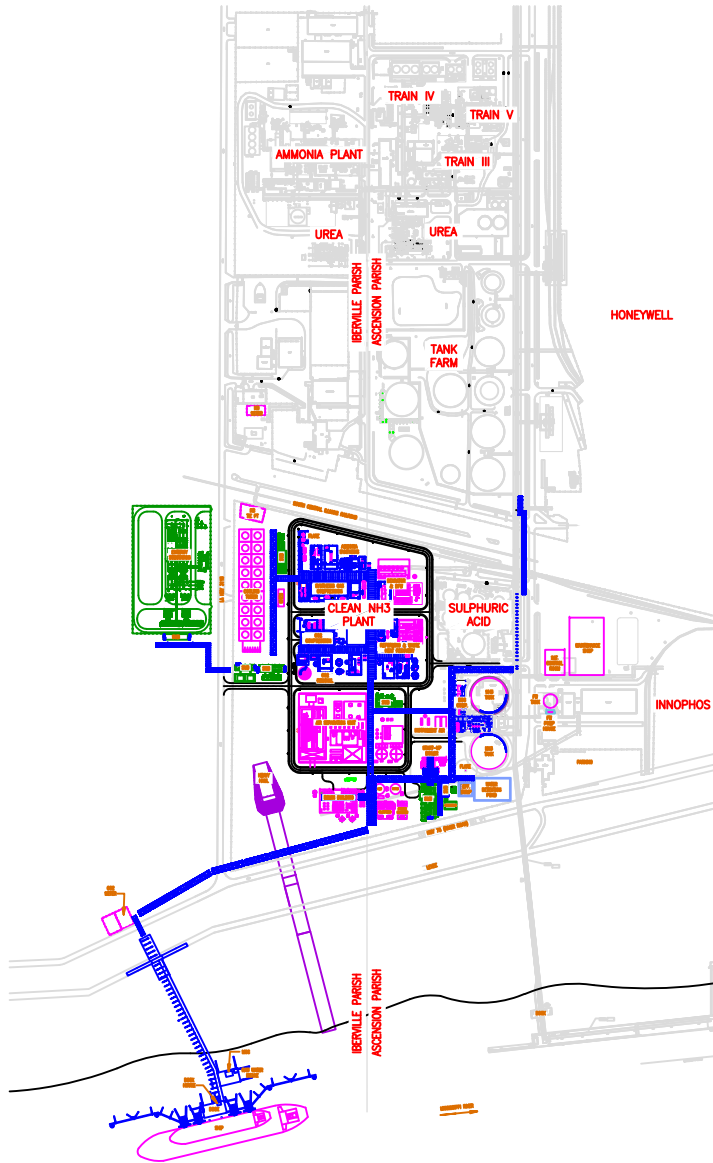
DATE AUG. '22
SHT SIZE 11"x17"
DESIGN JPM
DRAWN TAC
CHECK CLO
APPR'D CLO
JOB NO 12143

NUTRIEN	
GIESMAR	LOUISIANA
PROPOSED NEW MARINE FACILITY	
SECTION B	

SHEET NO.
X2



NOTES
 1. FUTURE FACILITIES = 



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NO.	DATE	REVISIONS AND RECORD OF ISSUE	ISSUED BY	CHKD BY	DATE
C	25/MAY/23	ISSUED FOR CLIENT REVIEW	BM/JM	—	—
B	14/DEC/22	ISSUED FOR CLIENT REVIEW	BM/JM	—	—
A	07/JUL/21	ISSUED FOR CLIENT REVIEW	BM/JM	—	—
NO.	DATE	REVISIONS AND RECORD OF ISSUE	ISSUED BY	CHKD BY	DATE



JOB NO. BAY DRAWING NO. 412630-0000-G2000
 BAY PROJ. C

Nutrien
 GEISMAR, LA

CLEAN AMMONIA PLANT
 SITE PLAN

DRAWN BY	REV	DATE	SCALE
—	—	07/JUL/22	1"=250'-0"
CHECKED BY	DATE	DRAWING NO.	REV.
JAE	—	110-D-1000	C
APPROVED BY	DATE	DRAWING NO.	REV.
JAE	07/JUL/22	110-D-1000	C

USERNAME: JAE DATE/TIME: 07/20/23 10:07 AM

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