

NORTH BEARDSLEE LAKE MARSH RESTORATION PROJECT CONSTRUCTION DOCUMENTS JACKSON COUNTY, MS

PREPARED FOR:



MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
515 E. AMITE STREET
JACKSON, MISSISSIPPI 39201

MARCH 2022

PREPARED BY:

 **ALLEN** ENGINEERING AND SCIENCE
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JACKSON / HATTIESBURG / MERIDIAN / PASCAGOULA /
ATLANTA / HOUSTON / DALLAS / BATON ROUGE / MOBILE

FUNDING SOURCE: 9926-0004
WORK ORDER NUMBER: 16-00054-01





PROJECT LOCATION MAP
SCALE: NOT TO SCALE

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE THAT HIS EMPLOYEES STRICTLY OBSERVE THE LAWS OF THE UNITED STATES OR OTHER GOVERNING BODY AFFECTING ALL OPERATIONS AT ALL SITES. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS UNDER WHICH HE IS OPERATING INCLUDING THOSE CONCERNING THE INSPECTION AND OPERATION OF EQUIPMENT AND THE LICENSING OF ENGINEERS, LAND SURVEYORS, PILOTS, MECHANICS AND OTHER PERSONNEL. IT IS FURTHER UNDERSTOOD AND AGREED THAT THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR THE SAFETY OF HIS EMPLOYEES, EQUIPMENT, AND MATERIALS.
2. UTILITY LINES OR SERVICE LINES ENCOUNTERED DURING CONSTRUCTION, WHETHER SHOWN ON THE DRAWINGS OR NOT, SHALL BE PROTECTED BY THE CONTRACTOR AND REPAIRS NECESSARY DUE TO DAMAGE TO SAME BY THE CONTRACTOR SHALL BE AT NO ADDITIONAL COST TO OWNER. ANY UTILITY OR SERVICE LINES NOT SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE ENGINEER BEFORE CONTINUING WITH WORK AND SHALL BE INDICATED ON THE AS-BUILT DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING AND EXECUTION OF THE MISSISSIPPI ONE-CALL SYSTEM PURSUANT TO THE MISSISSIPPI CODE OF 1972 TITLE 77 CHAPTER 13 BEFORE AND THROUGHOUT THE WORK.
3. IF EVIDENCE OF THE PRESENCE OF ENDANGERED/THREATENED SPECIES IS FOUND DURING CONSTRUCTION, GROUND DISTURBING ACTIVITIES IN THE IMMEDIATE VICINITY OF THE PROJECT MUST CEASE, AND THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
4. CONSTRUCTION STAKING WILL BE BY THE CONTRACTOR AND SHALL BE AN ABSORBED COST ITEM.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING ALL SAMPLING AND TESTING OF MATERIALS INCORPORATED INTO THE PROJECT AND FOR SUBMISSION OF SAME TO THE ENGINEER FOR REVIEW. ALL TESTING SHALL BE AN ABSORBED COST ITEM. PRIOR-USE TEST RESULTS, MANUFACTURER'S CERTIFICATES OR DATA SHEETS, AND PROPOSED MIX DESIGNS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL BEFORE INCORPORATION INTO THE PROJECT. THIS SHALL INCLUDE FILL, ASPHALT, CONCRETE, FENCING, AGGREGATES, PAINT, SEALANTS, SEED, PIPE, GRATES, COVERS AND OTHER ITEMS AS SPECIFIED BY THE ENGINEER.
6. AT THE CONCLUSION OF THE BORROW EXCAVATION, CONTRACTOR SHALL GRADE ALL DISTURBED AREAS TO DRAIN.
7. OPERATIONS PERFORMED BY THE CONTRACTOR SHALL NOT INTERFERE WITH THE SAFE AND EFFICIENT OPERATION OF THE PASCAGOULA RIVER AND ADJACENT CHANNELS. IN THE EVENT OF AN EMERGENCY SITUATION, CONTRACTOR SHALL HALT WORK, OR PORTIONS THEREOF, AS DEEMED NECESSARY BY THE OWNER. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR THE TEMPORARY BREAK IN WORK.
8. THE CONTRACTOR SHALL NOTE THAT PLAN SCALES WITHIN THIS PLAN ASSEMBLY VARY.
9. AT THE CLOSE OF EACH WORK DAY THE CONTRACTOR SHALL REMOVE ALL DEBRIS, LOOSE MATERIALS, OR OTHER WASTE FROM THE WORK SITE, AND LEAVE THE WORK SITE IN A CLEAN AND SAFE CONDITION.
10. THE CONTRACTOR SHALL SUBMIT A WORK PLAN AS A PART OF THEIR BID PACKAGE BASED ON THE INFORMATION IN THE CONTRACT DOCUMENTS TO INDICATE THE ORIGINAL LOCATION OF THE MATERIAL, TRANSFER METHOD, PLACEMENT METHOD AND PLACEMENT SEQUENCE OF THE FILL MATERIAL. THE PLAN SHALL DESCRIBE ALL ASSUMPTIONS, STATEMENTS OF FACT, AND COMPUTATIONS, AND SHALL INCLUDE A NARRATIVE TO FULLY EXPLAIN THE PROCEDURES THE CONTRACTOR WILL FOLLOW DURING THE CONTRACT. IF REQUIRED, THE CONTRACTOR SHALL INCLUDE THE PIPELINE PLACEMENT ROUTING IN THE WORK PLAN.
11. CONTRACTOR SHOULD ASSURE AN UNDERSTANDING ON THE PART OF EMPLOYEE AND SUPERVISOR ALIKE THAT NO NEW TASK HAVING POTENTIAL AS A HAZARD WILL BE UNDERTAKEN WITHOUT THOROUGH DISCUSSION BETWEEN THEM TO DETERMINE THE SAFEST MEANS TO ACCOMPLISH THE TASK. THE JOB HAZARD ANALYSIS WILL THEN BE MODIFIED ACCORDINGLY.
12. IF ANY SHIPWRECK, ARTIFACT, OR OTHER OBJECTS OF ANTIQUITY THAT HAVE SCIENTIFIC OR HISTORICAL VALUE, OR ARE OF INTEREST TO THE PUBLIC, ARE DISCOVERED, LOCATED, AND/OR RECOVERED, THE CONTRACTOR ACKNOWLEDGES THAT:
 - a. THE SITE(S), ARTICLES, OR OTHER MATERIALS ARE THE PROPERTY OF THE STATE OF MISSISSIPPI, WITH TITLE VESTED IN THE DEPARTMENT OF ARCHIVES AND HISTORY; AND THAT,
 - b. HE SHALL IMMEDIATELY NOTIFY MDEQ. REFER TO SUBPARAGRAPH "PRESERVATION AND RECOVERY OF HISTORIC, ARCHEOLOGICAL, AND CULTURAL RESOURCES" OF SECTION 01 35 43 ENVIRONMENTAL PROTECTION.
13. FINAL CLEANUP SHALL INCLUDE THE REMOVAL OF ALL OF THE CONTRACTOR'S EQUIPMENT AND MATERIAL. EITHER FOR DISPOSAL OR REUSE. EQUIPMENT AND MATERIAL TO BE DISPOSED OF SHALL ONLY BE DISPOSED OF IN A MANNER AND AT LOCATIONS APPROVED BY MDEQ, UNLESS OTHERWISE APPROVED IN WRITING. THE CONTRACTOR WILL NOT BE PERMITTED TO ABANDON PONTOONS OR OTHER EQUIPMENT IN THE DISPOSAL AREA, WATER AREAS, OR OTHER AREAS ADJACENT TO THE WORK SITE. PILINGS AND ANY OTHER DEBRIS REMOVED OR CREATED AS A RESULT OF THE EXECUTION OF THIS CONTRACT SHALL BE DISPOSED OF IN A MANNER AND AT LOCATIONS APPROVED BY MDEQ.
14. STAGING AREAS: THE CONTRACTOR SHALL IDENTIFY STAGING AND ACCESS AREAS. STAGING AND ACCESS AREAS SHALL BE APPROVED BY MDEQ PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE STAGING AREAS SHALL NOT BE USED FOR STOCKPILING OF NOURISHMENT FILL MATERIAL. THE FINAL LIMITS OF THE STAGING AND ACCESS AREAS SHALL BE FIELD-DETERMINED BY MDEQ IN COORDINATION WITH THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INVESTIGATE AND OBTAIN ALL AREAS WHICH MAY BE NECESSARY FOR HIS/HER CONSTRUCTION OPERATIONS.
15. THE CONTRACTOR SHALL EXCLUDE THE PUBLIC FROM THE WORK AREA IN THE IMMEDIATE VICINITY OF HIS OPERATIONS. THE CONTRACTOR SHALL INSTALL WARNING SIGNS TO WARN THE PUBLIC AND ALL COMMERCIAL RECREATIONAL BOATS OF ALL CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL MARK IN A CONSPICUOUS MANNER THE MOORING AND STAGING AREAS FOR ALL EQUIPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL WATER AND LAND ACCESS ROUTES NECESSARY FOR HIS EQUIPMENT TO AND FROM THE WORK SITES. THE CONTRACTOR SHALL ASCERTAIN THE ENVIRONMENTAL CONDITIONS WHICH CAN AFFECT WATER AND LAND ACCESS, SUCH AS CLIMATE, TERRAIN, WINDS, CURRENT, WAVES, SWELLS, DEPTHS, SHOALING, AND SCOURING TENDENCIES.
16. THE CONTRACTOR SHALL DISPLAY SIGNAL LIGHTS AND CONDUCT OPERATIONS IN ACCORDANCE WITH THE GENERAL REGULATIONS OF THE DEPARTMENT OF THE ARMY AND OF THE COAST GUARD GOVERNING LIGHTS AND DAY SIGNALS TO BE DISPLAYED BY TOWING VESSELS WITH TOWS ON WHICH NO SIGNALS CAN BE DISPLAYED. VESSELS WORKING ON WRECKS AND VESSELS ENGAGED IN THE WORK OR IN SUBMARINE OR BANK PROTECTION OPERATIONS, LIGHTS AND DAY SIGNALS TO BE DISPLAYED BY VESSELS OF MORE THAN 65 FEET IN LENGTH MOORED OR ANCHORED IN A FAIRWAY OR CHANNEL, AND THE PASSING BY OTHER VESSELS WORKING IN NAVIGABLE CHANNELS, AS SET FORTH IN COMMANDANT U.S. COAST GUARD INSTRUCTION M16672.2, NAVIGATION RULES: INTERNATIONAL-INLAND (COMDTINST M16672.2), OR 33 CFR 81 APPENDIX A (INTERNATIONAL) AND 33 CFR 84 THROUGH 33 CFR 89 (INLAND) AS APPLICABLE.
17. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND PRESERVE THE PROPER PLACEMENT OF ALL EXISTING NAVIGATIONAL BUOYS.
18. THE CONTRACTOR, OR A REPRESENTATIVE WITH FULL AUTHORITY TO ACT FOR HIM IN ALL MATTERS PERTAINING TO THE ADMINISTRATION OF THE CONTRACT AND TO THE CARE AND OPERATION OF THE PROJECT EQUIPMENT, SHALL BE ON THE ACTUAL WORK SITE AT ALL TIMES WORK IS BEING PERFORMED. THE CONTRACTOR SHALL SUBMIT THE NAMES OF HIS REPRESENTATIVES, INCLUDING RESUMES OF THEIR QUALIFICATIONS, TO MDEQ IN WRITING PRIOR TO THE COMMENCEMENT OF WORK. IT IS EXPRESSLY UNDERSTOOD THAT THE ACTIONS TAKEN BY THE NAMED REPRESENTATIVES WITH RESPECT TO THE ADMINISTRATION OF THE CONTRACT AND TO THE CARE AND OPERATION OF THE EQUIPMENT SHALL BE LEGALLY BINDING ON THE CONTRACTOR.
19. THE CONTRACTOR SHALL FURNISH AND MAINTAIN FOR ITS USE RADIOS FOR COMMUNICATION WITH THE MDEQ, THE US COAST GUARD, AND OTHER VESSELS. RADIO(S) MUST BE CERTIFIED AS BEING OPERABLE ON THE SPECIFIED FREQUENCIES. MARINE VHF RADIO, FCC TYPE ACCEPTED WITH THE FOLLOWING CHANNELS: CHANNEL 16, (156.8 MHZ), CHANNEL 13 (156.65 MHZ), CHANNEL 12, (156.6 MHZ), CHANNEL 14, (156.7 MHZ), AND CHANNELS 26 AND 28 FOR PUBLIC CORRESPONDENCE. A SEPARATE RECEIVER MUST BE PROVIDED ON CHANNEL 13, (156.6 MHZ) IN COMPLIANCE WITH PUBLIC LAW 92-63.
20. THE SITE OF WORK IS EXPOSED TO LOCAL DISTURBANCES IN BEARDSLEE LAKE AND UPPER GULF OF MEXICO WHICH MAY CAUSE SUSPENSION OF THE WORK FOR SHORT PERIODS OF TIME. GENERALLY, THIS SITE DOES NOT PROVIDE SAFE REFUGE FROM TROPICAL STORMS AND/OR HURRICANES WHICH MAY OCCUR FROM JUNE TO DECEMBER. SHOULD A HURRICANE OCCUR DURING THE COURSE OF THE WORK, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SELECT A SAFE HARBOR. THIS WORK AREA IS AFFECTED BY EXTENDED PERIODS OF STRONG WINDS, PREDOMINATELY FROM THE SOUTH OR SOUTHEAST.
21. THE TRAFFIC EXPECTED TO USE THE AREA DURING THE PROGRESS OF THE WORK WILL CONSIST OF PLEASURE CRAFT, FISHING VESSELS, AND TOWBOATS WITH BARGES. THE CONTRACTOR SHALL NOT IMPEDE COMMERCIAL VESSEL NAVIGATION WITHIN THE PASCAGOULA OR ESCATAWPA RIVERS.
22. THE CONTRACTOR WILL BE REQUIRED TO PREPARE AND MAINTAIN DAILY REPORTS OF OPERATIONS TO BE COMBINED WEEKLY. FURTHER INSTRUCTIONS ON THE PREPARATION OF THE REPORTS WILL BE FURNISHED AT THE PRE-CONSTRUCTION CONFERENCE.
23. THE CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF, AND SHALL REPORT TO MDEQ, ALL ACCIDENTS WITHIN 24 HOURS OF THE OCCURRENCE AND ALL SERIOUS ACCIDENTS (THOSE RESULTING IN DEATH OR INJURY REQUIRING MEDICAL ATTENTION) SHALL BE REPORTED IMMEDIATELY.
24. CONTRACTOR IS RESPONSIBLE FOR SECURITY OF THE PROJECT SITE, MATERIAL STOCKPILES, PLANT, EQUIPMENT AND MATERIALS. THE CONTRACTOR SHALL AT ALL TIMES PROTECT AND PRESERVE ALL MATERIALS, SUPPLIES AND EQUIPMENT OF EVERY DESCRIPTION AND ALL WORK PERFORMED.
25. CONTRACTOR WILL BE RESPONSIBLE FOR A MINIMUM OF BI-WEEKLY INSPECTIONS OF THE EQUIPMENT DURING TIMES WHEN REGULAR WORK IS NOT BEING PERFORMED. INSPECTIONS REPORTS SHALL BE SUBMITTED TO THE MDEQ AFTER EACH INSPECTION STATING THE CONDITION OF THE EQUIPMENT AND ANY CORRECTIVE ACTION THAT WAS NECESSARY.
26. THE CONTRACTOR SHALL ENSURE THAT TURBIDITY OUTSIDE THE LIMITS OF 750-FOOT MIXING ZONE SHALL NOT EXCEED TURBIDITY BY MORE THAN 50 NEPHELOMETRIC TURBIDITY UNITS (NTU). TURBIDITY CURTAIN MAY BE LEFT IN PLACE BETWEEN CONSTRUCTION PHASES PROVIDED IT REMAINS IN A CONDITION ACCEPTABLE TO PERFORM ITS INTENDED FUNCTIONS.
27. ANY CLEARING OR RUBBISH DISPOSAL REQUIRED TO OBTAIN FILL MATERIAL FROM DISPOSAL AREAS WILL BE AN ABSORBED COST TO THE CONTRACTOR.
28. CONTRACTOR SHALL PROVIDE TEMPORARY NAVIGATIONAL AIDS AS REQUIRED TO MARK ALL CONSTRUCTION EQUIPMENT, TURBIDITY CURTAIN, AND OTHER APPURTENANCES NECESSARY TO IDENTIFY THE OBSTRUCTION IN DAYLIGHT AND DARK CONDITIONS. TEMPORARY NAVIGATIONAL AIDS SHALL BE INCLUDED AS AN ABSORBED COST ITEM.
29. THE CONTRACTOR SHALL MAINTAIN AS-BUILT DRAWINGS AND PROVIDE SUCH DRAWINGS TO THE ENGINEER WITHIN THREE (3) WEEKS AFTER COMPLETION OF EACH PHASE OF THE PROJECT.

**NORTH BEARDSLEE LAKE
PROJECT LOCATION**

DRAWING INDEX

DRAWING NO.	DESCRIPTION	REVISION NO.
	TITLE PAGE	0
C0.1	PROJECT LOCATION MAP, GENERAL NOTES AND DRAWING INDEX	0
NB0.1	VICINITY MAP	0
NB1.1	EXISTING CONDITIONS PLAN	0
NB1.2	SITE PLAN	0
NB1.3	PLANTING PLAN	0
NB2.1	TYPICAL SECTIONS AND DETAILS	0
NB3.1	PHASED DREDGE PLACEMENT PLAN	0

REV.	ISSUED FOR REVIEW	DESCRIPTION OF REVISION	BY	CURRENT DATE
0	ISSUED FOR REVIEW		JCB	11/02/2021



SCALE: AS SHOWN
DRAWN: P. LANNING
CHECKED: W. PENTECOST
REVIEWED: J. BOURGEOIS
PROJECT MANAGER: J. BOURGEOIS
DATE: 11/02/2021



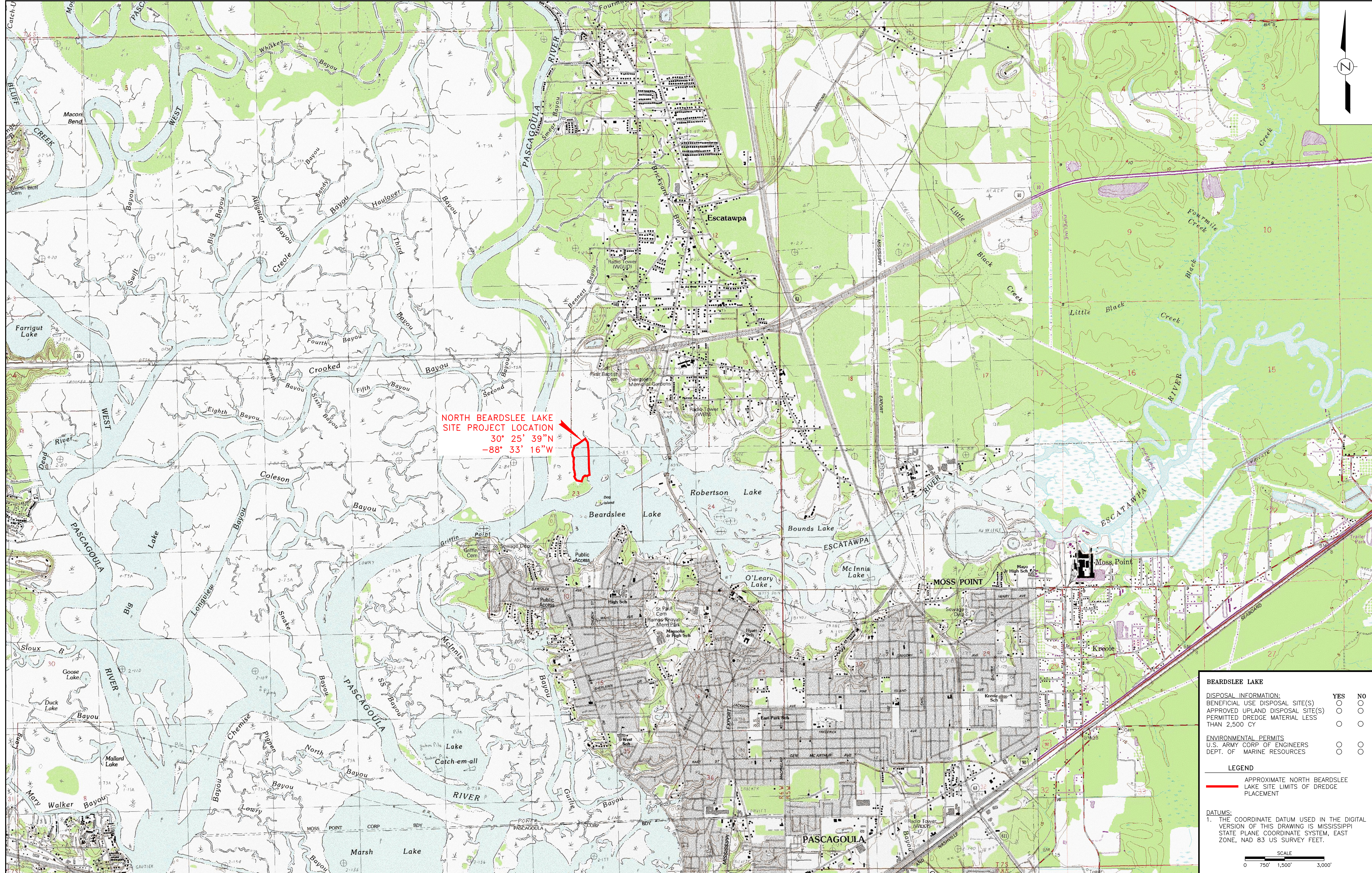
PROJECT TITLE
NORTH BEARDSLEE LAKE
MARSH RESTORATION PROJECT
CONSTRUCTION DOCUMENTS
JACKSON COUNTY, MS

PROJECT LOCATION MAP, GENERAL NOTES AND DRAWING INDEX

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
JACKSON, MISSISSIPPI

DRAWING	REVISION
C0.1	0

PROJECT No. 16115.03
CAD FILE NAME 110221 DWGCO.1 R00 PLM



NORTH BEARDSLEE LAKE
SITE PROJECT LOCATION
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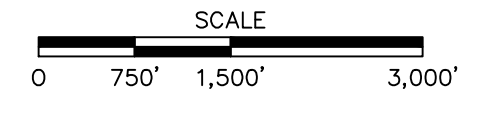
BEARDSLEE LAKE		YES	NO
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APPROVED UPLAND DISPOSAL SITE(S)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PERMITTED DREDGE MATERIAL LESS THAN 2,500 CY	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ENVIRONMENTAL PERMITS			
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DEPT. OF MARINE RESOURCES	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

LEGEND

— APPROXIMATE NORTH BEARDSLEE LAKE SITE LIMITS OF DREDGE PLACEMENT

DATUMS:

1. THE COORDINATE DATUM USED IN THE DIGITAL VERSION OF THIS DRAWING IS MISSISSIPPI STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83 US SURVEY FEET.



REV.	ISSUED FOR REVIEW	DESCRIPTION OF REVISION	BY	DATE
0	ISSUED FOR REVIEW		JCB	11/02/2021
1				



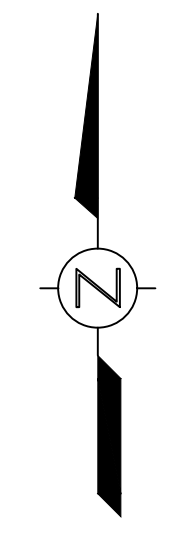
SCALE: 1" = 1,500'
 DRAWN: P. LANNING
 CHECKED: W. PENTECOST
 REVIEWED: J. BOURGEOIS
 PROJECT MANAGER: J. BOURGEOIS
 DATE: 11/02/2021



PROJECT TITLE
 NORTH BEARDSLEE LAKE
 MARSH RESTORATION PROJECT
 CONSTRUCTION DOCUMENTS
 JACKSON COUNTY, MS

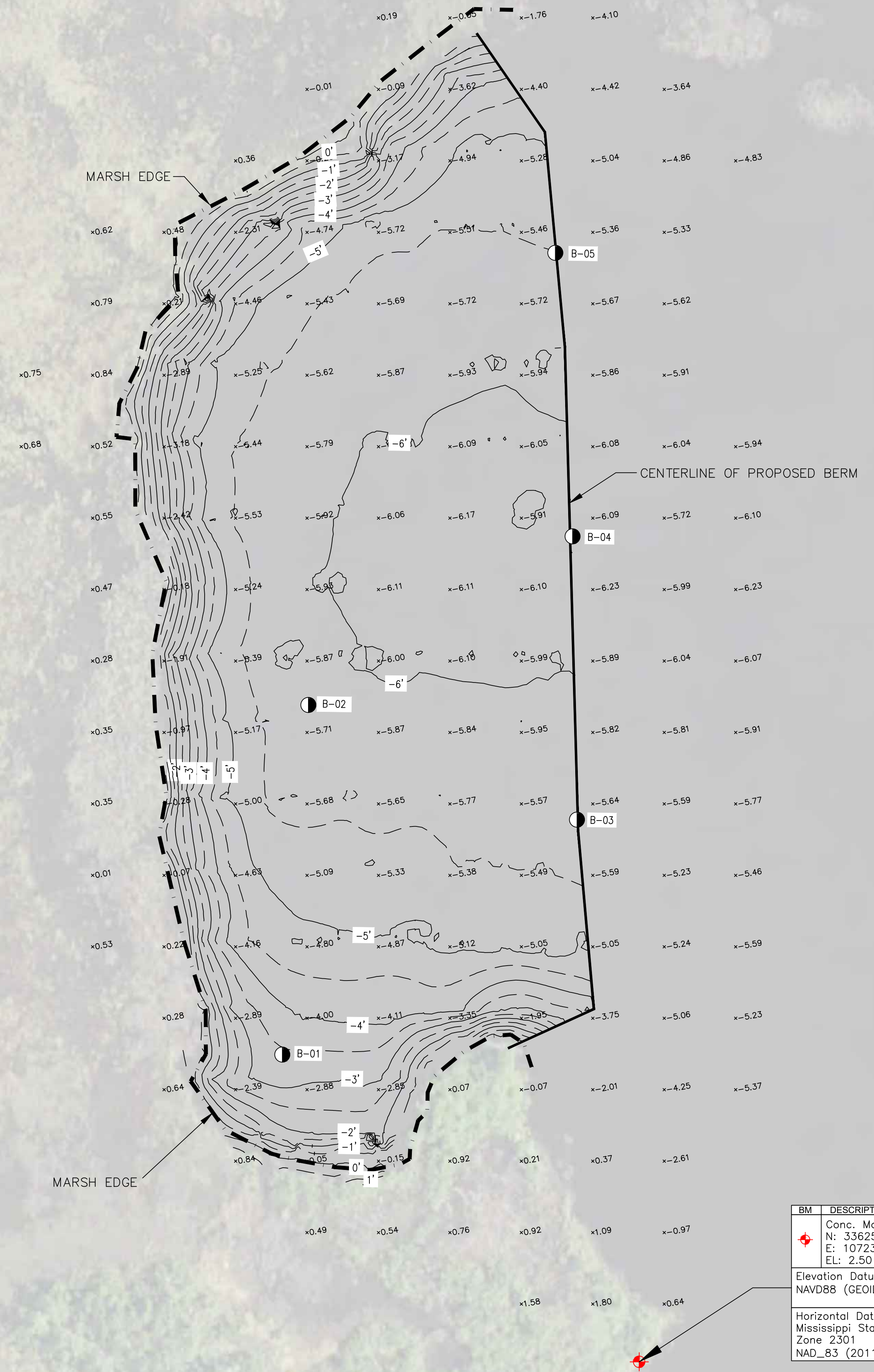
VICINITY MAP
 MISSISSIPPI DEPARTMENT OF
 ENVIRONMENTAL QUALITY
 JACKSON, MISSISSIPPI

PROJECT No.
16115.03
 CAD FILE NAME
110221 DWGNB0.1 RO VM
 DRAWING REVISION
NB0.1 0



PASCAGOULA RIVER

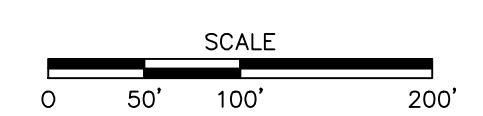
BEARDSLEE LAKE



BM	DESCRIPTION
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	Elevation Datum: NAVD88 (GEOID 12B)
	Horizontal Datum: Mississippi State Plane East Zone 2301 NAD_83 (2011)

Point No.	Northing	Easting
B-01	336680.92	1071848.49
B-02	337170.29	1071885.01
B-03	337009.68	1072260.93
B-04	337406.17	1072254.68
B-05	337803.07	1072230.63

- LEGEND**
- APPROXIMATE NORTH BEARDSLEE LAKE SITE LIMITS OF DREDGE PLACEMENT
 - 0' — APPROXIMATE 1' CONTOUR INTERVAL
 - - - APPROXIMATE 0.5' CONTOUR INTERVAL
 - +




REV.	DESCRIPTION OF REVISION	BY	CURRENT DATE
0	ISSUED FOR REVIEW	JCB	11/02/2021



SCALE: 1" = 100'
 DRAWN: P. LANNING
 CHECKED: W. PENTECOST
 REVIEWED: J. BOURGEOIS
 PROJECT MANAGER: J. BOURGEOIS
 DATE: 11/02/2021

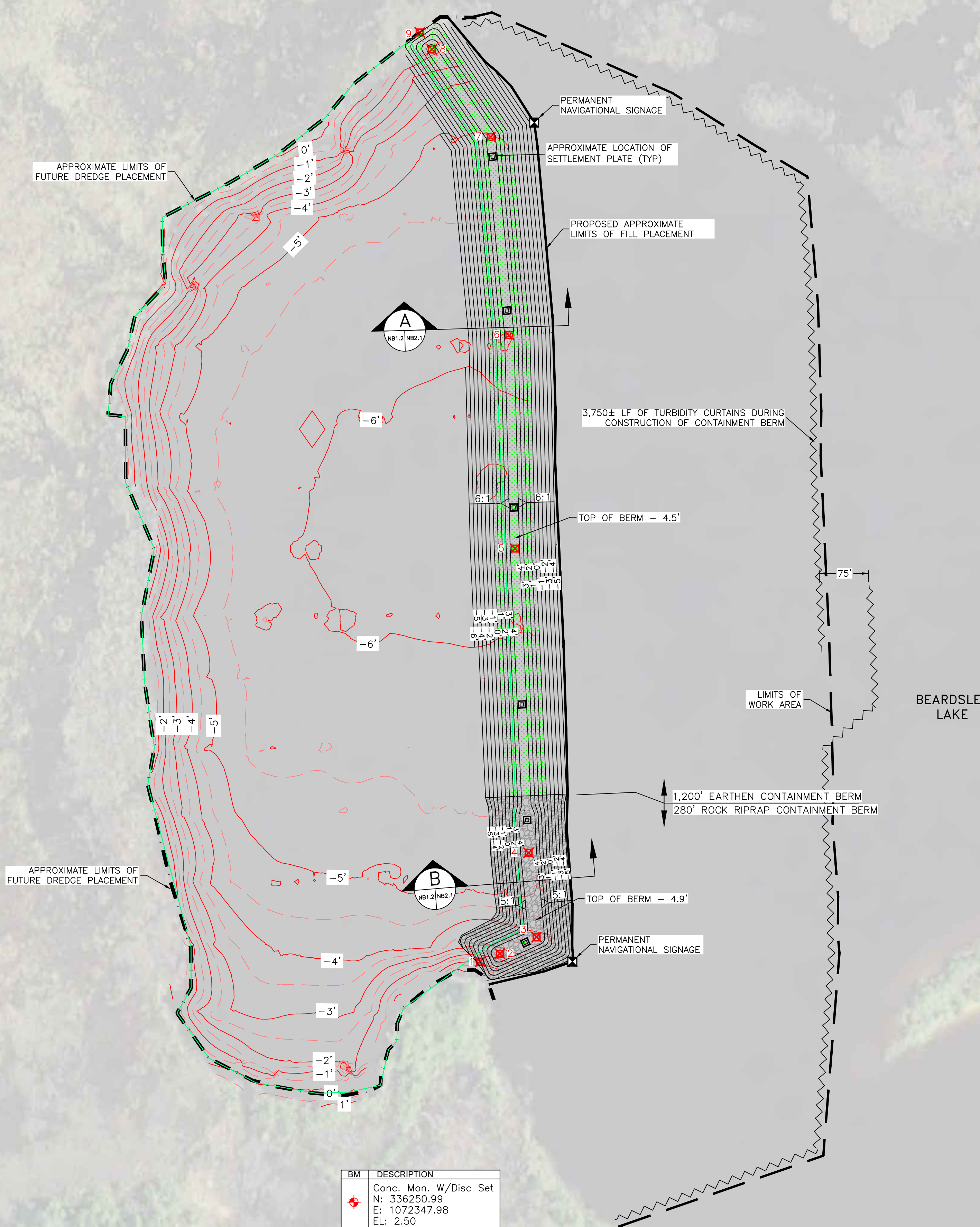
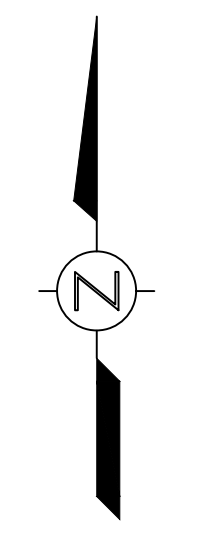


BASE SURVEY PROVIDED BY:

 923 FORD ST. SUITE 100
 JACKSON, MISSISSIPPI 39202
 PHONE: 601-582-1200
 FAX: 601-582-2300

PROJECT TITLE
 NORTH BEARDSLEE LAKE
 MARSH RESTORATION PROJECT
 CONSTRUCTION DOCUMENTS
 JACKSON COUNTY, MS

EXISTING CONDITIONS PLAN
 MISSISSIPPI DEPARTMENT OF
 ENVIRONMENTAL QUALITY
 JACKSON, MISSISSIPPI

PROJECT No.	CAD FILE NAME	DRAWING	REVISION
16115.03	110221 DWGNB1.1 RO ECP	NB1.1	0



CONSTRUCTION PHASING PLAN

PHASE 1

1. THE CONTRACTOR SHALL CONSTRUCT THE CONTAINMENT BERM TO APPROXIMATE MLLW.
2. THE CONTRACTOR SHALL INSTALL AND MONITOR SETTLEMENT PLATES IN THE CONTAINMENT BERM.
3. THE CONTRACTOR WILL ASSUME UP TO 180 DAYS OF PRIMARY CONSOLIDATION/ SETTLEMENT.
4. THE CONTRACTOR SHALL INSPECT AND MAINTAIN TEMPORARY AIDS TO NAVIGATION DURING THE PRIMARY CONSOLIDATION/SETTLEMENT PERIOD.
5. THE CONTRACTOR SHALL PERFORM AND PROVIDE TO THE ENGINEER SETTLEMENT SURVEYS REFERENCING SPECIFICATION SECTION 01 32 23.

PHASE 2

1. THE ENGINEER SHALL EVALUATE SETTLEMENT AND AFTER THE BERMS HAVE ACHIEVED THEIR APPROPRIATE SETTLEMENT SHALL COMMUNICATE THAT INFORMATION TO THE CONTRACTOR, AND COORDINATE THE START OF PHASE 2 CONSTRUCTION.
2. THE CONTRACTOR SHALL CONSTRUCT THE CONTAINMENT BERM TO THE FINAL DESIGN ELEVATIONS AND COMPLETE ALL WORK REQUIRED BY THE CONTRACT DOCUMENTS.

PASCAGOULA RIVER

BEARDSLEE LAKE

CONTAINMENT STRUCTURE LAYOUT PLAN

Point No.	Northing	Easting
1	336720.95	1072176.74
2	336733.06	1072206.38
3	336757.93	1072261.68
4	336885.25	1072249.6
5	337343.34	1072229.14
6	337664.99	1072220.41
7	337963.31	1072192.68
8	338095.18	1072103.82
9	338120.81	1072085.55

BM	DESCRIPTION
+	Conc. Mon. W/Disc Set N: 336250.99 E: 1072347.98 EL: 2.50
Elevation Datum: NAVD88 (GEOID 12B)	
Horizontal Datum: Mississippi State Plane East Zone 2301 NAD_83 (2011)	

LEGEND

- APPROXIMATE NORTH BEARDSLEE LAKE SITE LIMITS OF DREDGE PLACEMENT
- APPROXIMATE 1' EXISTING CONTOUR INTERVAL
- APPROXIMATE 0.5' EXISTING CONTOUR INTERVAL
- PROPOSED 1' CONTOUR
- LIMITS OF WORK AREA
- SURVEY BENCHMARK
- CONTROL POINT
- SETTLEMENT PLATE
- ROCK RIPRAP
- PLANTED VEGETATION
- TURBIDITY CURTAIN

SCALE
0 50' 100' 200'

REV.	DESCRIPTION OF REVISION	BY	CURRENT DATE
0	ISSUED FOR REVIEW	JCB	12/03/2021



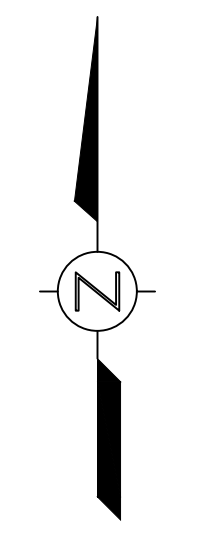
SCALE: 1" = 100'
 DRAWN: P. LANNING
 CHECKED: W. PENTECOST
 REVIEWED: J. BOURGEOIS
 PROJECT MANAGER: J. BOURGEOIS
 DATE: 12/03/2021



PROJECT TITLE
 NORTH BEARDSLEE LAKE MARSH RESTORATION PROJECT
 CONSTRUCTION DOCUMENTS
 JACKSON COUNTY, MS

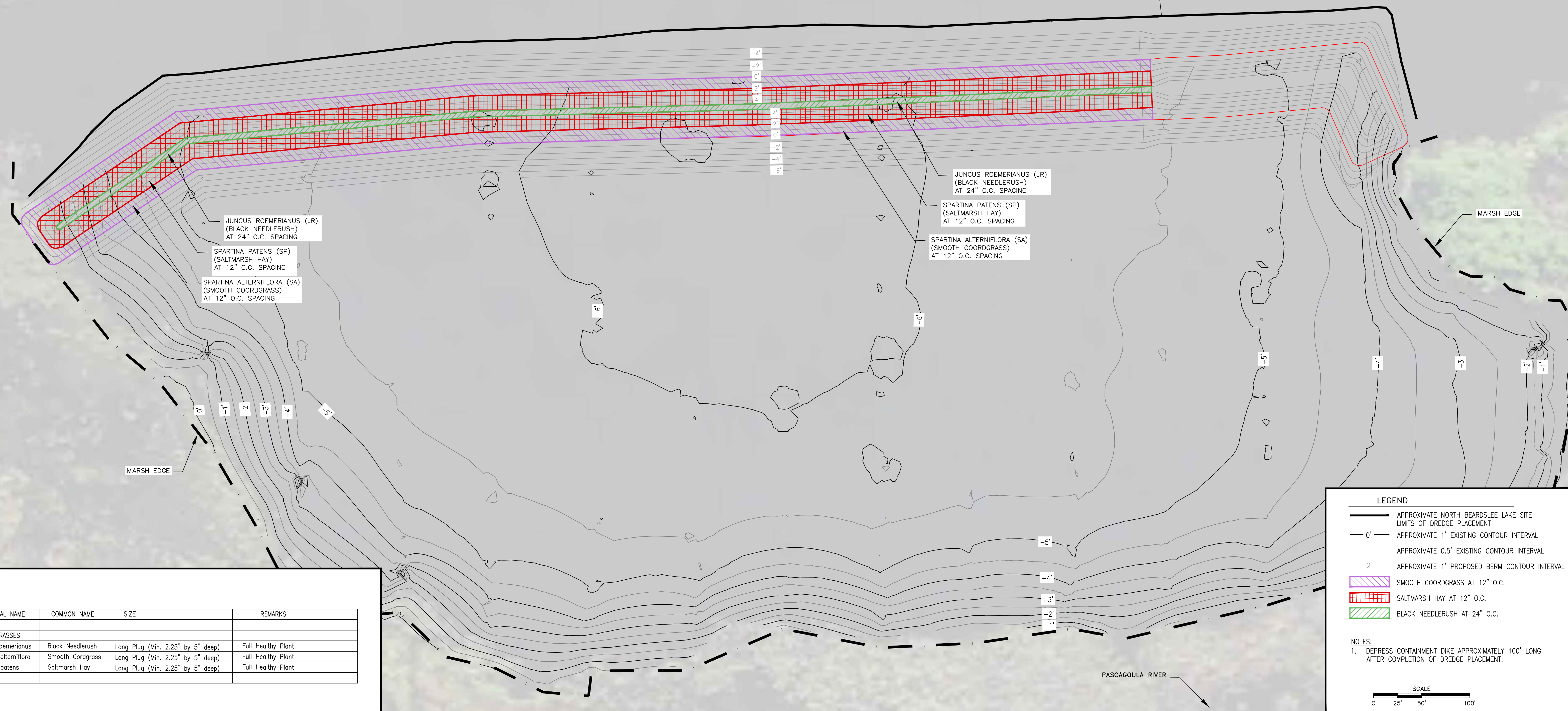
SITE PLAN
 MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
 JACKSON, MISSISSIPPI

PROJECT No.	CAD FILE NAME	DRAWING	REVISION
16115.03	120321 DWGNB1.2 R00 SP	NB1.2	0



BEARDSLEE LAKE

EARTHEN CONTAINMENT BERM
ROCK RIPRAP CONTAINMENT BERM



JUNCUS ROEMERIANUS (JR)
(BLACK NEEDLERUSH)
AT 24" O.C. SPACING

SPARTINA PATENS (SP)
(SALTMARSH HAY)
AT 12" O.C. SPACING

SPARTINA ALTERNIFLORA (SA)
(SMOOTH COORDGRASS)
AT 12" O.C. SPACING

JUNCUS ROEMERIANUS (JR)
(BLACK NEEDLERUSH)
AT 24" O.C. SPACING

SPARTINA PATENS (SP)
(SALTMARSH HAY)
AT 12" O.C. SPACING

SPARTINA ALTERNIFLORA (SA)
(SMOOTH COORDGRASS)
AT 12" O.C. SPACING

PLANT LIST

ID	SF	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
		NATIVE GRASSES			
JR	7,046	Juncus roemerianus	Black Needlerush	Long Plug (Min. 2.25" by 5" deep)	Full Healthy Plant
SA	29,430	Spartina alterniflora	Smooth Cordgrass	Long Plug (Min. 2.25" by 5" deep)	Full Healthy Plant
SP	38,425	Spartina patens	Saltmarsh Hay	Long Plug (Min. 2.25" by 5" deep)	Full Healthy Plant

LEGEND

- APPROXIMATE NORTH BEARDSLEE LAKE SITE LIMITS OF DREDGE PLACEMENT
- 0' — APPROXIMATE 1' EXISTING CONTOUR INTERVAL
- APPROXIMATE 0.5' EXISTING CONTOUR INTERVAL
- 2 — APPROXIMATE 1' PROPOSED BERM CONTOUR INTERVAL
- ▨ SMOOTH COORDGRASS AT 12" O.C.
- ▨ SALTMARSH HAY AT 12" O.C.
- ▨ BLACK NEEDLERUSH AT 24" O.C.

NOTES:

1. DEPRESS CONTAINMENT DIKE APPROXIMATELY 100' LONG AFTER COMPLETION OF DREDGE PLACEMENT.

SCALE
0 25' 50' 100'

REV.	DESCRIPTION OF REVISION	BY	CURRENT DATE
0	ISSUED FOR REVIEW	JCB	11/02/21

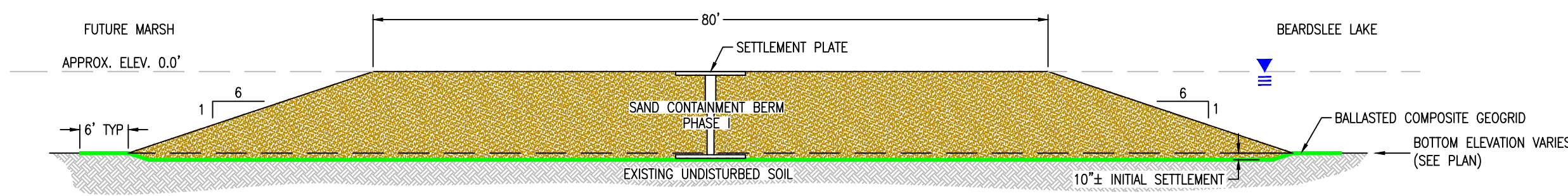
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DRAWN: P. LANNING
CHECKED: W. PENTECOST
REVIEWED: J. BOURGEOIS
PROJECT MANAGER: J. BOURGEOIS
DATE: 11/02/21

PROJECT TITLE
NORTH BEARDSLEE LAKE
MARSH RESTORATION PROJECT
60% DESIGN DRAWINGS
JACKSON COUNTY, MS

PLANTING PLAN

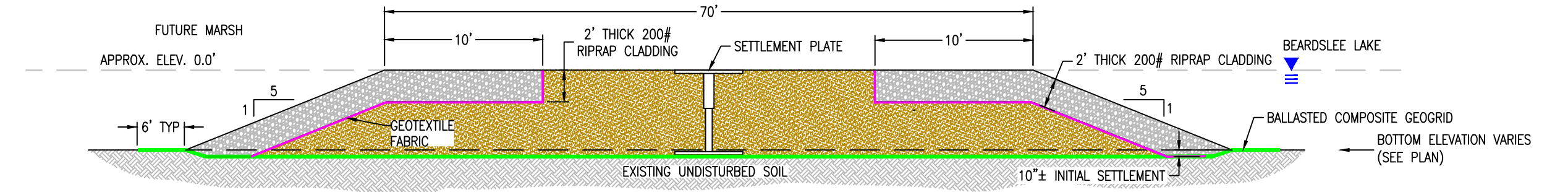
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
JACKSON, MISSISSIPPI

PROJECT No. 16115.03
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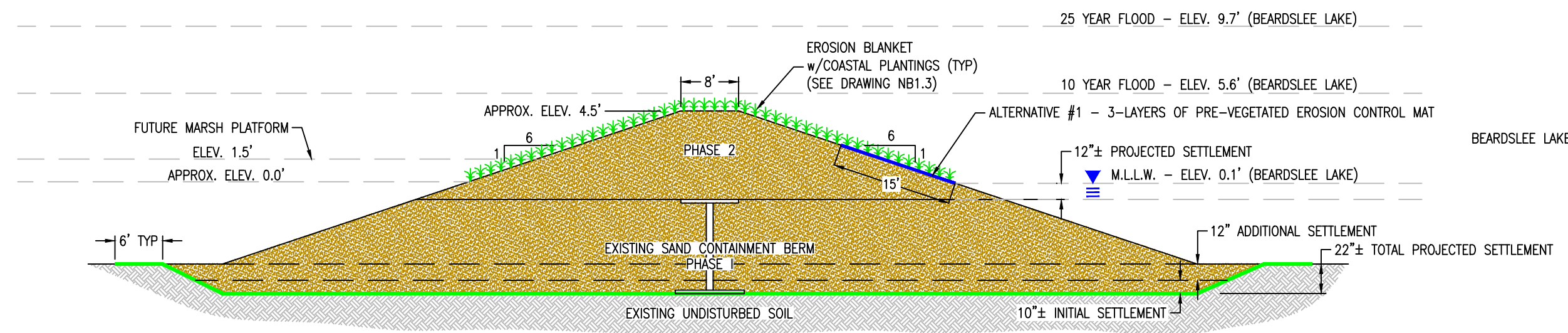
A SAND CONTAINMENT BERM SECTION – PHASE 1
SCALE: N.T.S.

NOTE:
AFTER THE COMPLETION OF PHASE 1, THE CONTRACTOR SHOULD ANTICIPATE A SETTLEMENT PERIOD FOR THE PHASE 1 WORK OF A MINIMUM OF 120 DAYS, BUT NOT MORE THAN 180 DAYS. CONTRACT TIME WILL CONTINUE THROUGHOUT THE SETTLEMENT PERIOD.



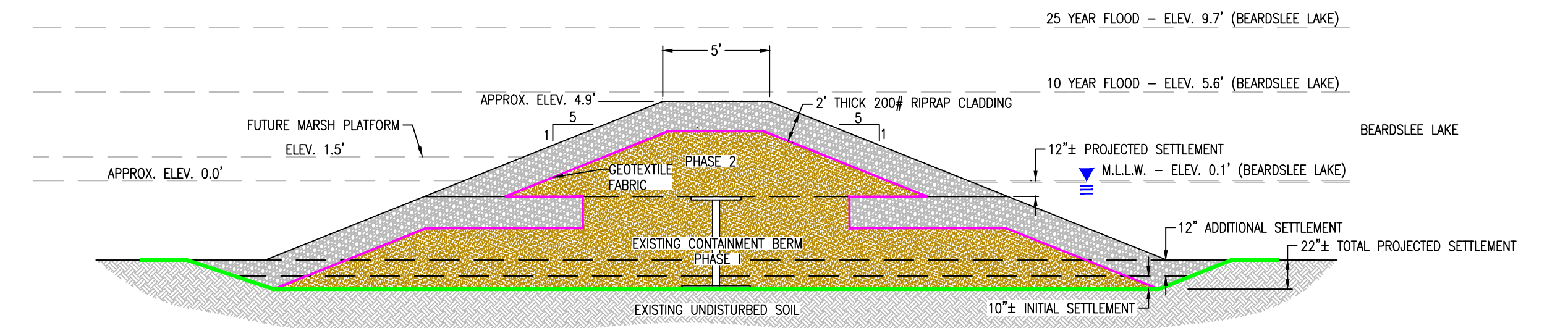
B ROCK RIPRAP CLAD CONTAINMENT BERM SECTION – PHASE 1
SCALE: N.T.S.

NOTE:
AFTER THE COMPLETION OF PHASE 1, THE CONTRACTOR SHOULD ANTICIPATE A SETTLEMENT PERIOD FOR THE PHASE 1 WORK OF A MINIMUM OF 120 DAYS, BUT NOT MORE THAN 180 DAYS. CONTRACT TIME WILL CONTINUE THROUGHOUT THE SETTLEMENT PERIOD.

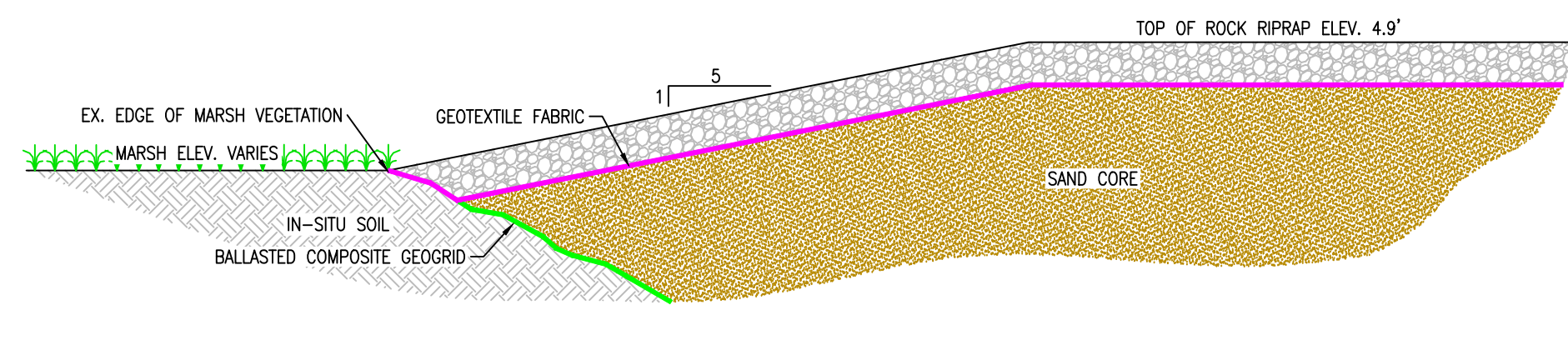


A SAND CONTAINMENT BERM SECTION – PHASE 2
SCALE: N.T.S.

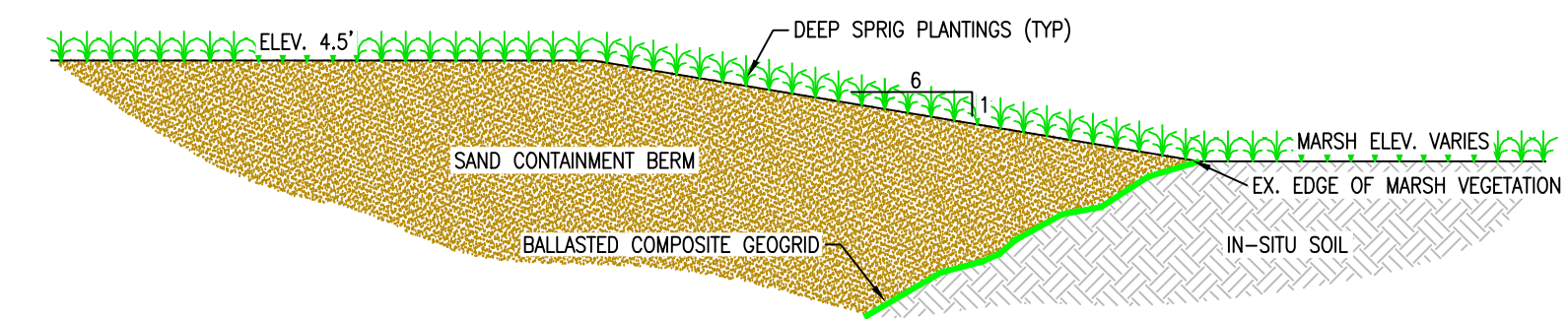
NOTE:
1. CONTRACTOR SHALL PLANT NEW WETLAND VEGETATION ON COMPLETED SAND BERM. PLANTINGS SHALL EXTEND DOWN SLOPES TO M.L.L.W. ELEVATION AND ACROSS THE TOP OF THE BERM.
2. ALL COASTAL PLANTINGS SHALL BE FULL HEALTHY PLANTS.
3. CONTRACTOR SHALL PROTECT SETTLEMENT PLATES THROUGHOUT CONSTRUCTION.
4. ALTERNATIVE #1 – CONTRACTOR SHALL INSTALL 3 LAYERS OF PRE-VEGETATED EROSION CONTROL MAT, SIMILAR TO MARTIN ECOSYSTEMS – VEGETATED ECO-SHIELD OR EQUAL, BEGINNING AT THE M.L.L.W. LINE.



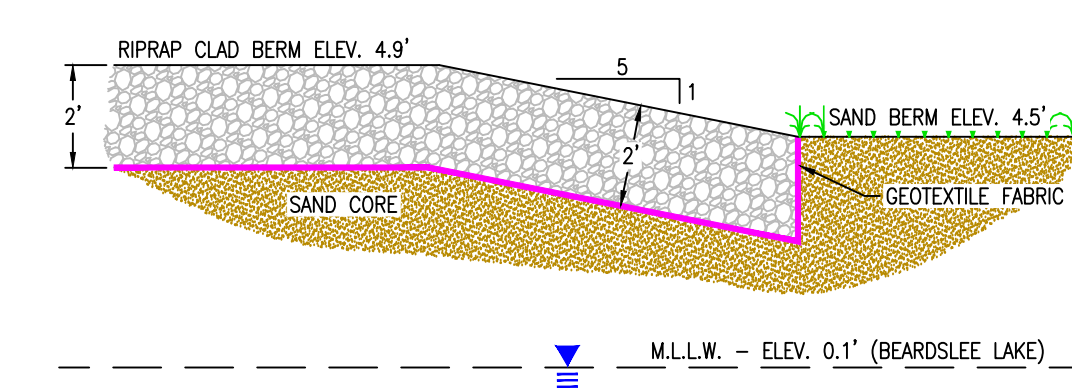
B ROCK RIPRAP CLAD CONTAINMENT BERM SECTION – PHASE 2
SCALE: N.T.S.



ROCK RIPRAP BERM TO MARSH TRANSITION
SCALE: N.T.S.



EARTHEN BERM TO MARSH TRANSITION
SCALE: N.T.S.



ROCK RIPRAP TO SAND BERM TRANSITION
SCALE: N.T.S.

LEGEND	
	UNDISTURBED SOIL
	SAND
	ROCK RIPRAP
	BALLASTED COMPOSITE GEOGRID
	GEOTEXTILE FABRIC
	PRE-VEGETATED EROSION CONTROL MATTING

REV.	ISSUED FOR REVIEW	DESCRIPTION OF REVISION	BY	CURRENT DATE
0	ISSUED FOR REVIEW		JCB	11/02/2021



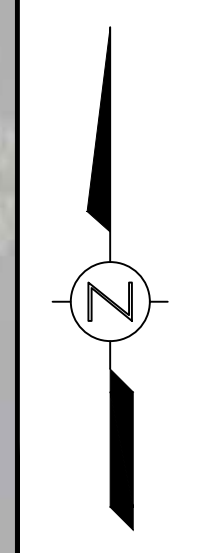
SCALE: NOT TO SCALE
DRAWN: N. SISSON
CHECKED: W. PENTECOST
REVIEWED: J. BOURGEOIS
PROJECT MANAGER: J. BOURGEOIS
DATE: 11/02/2021



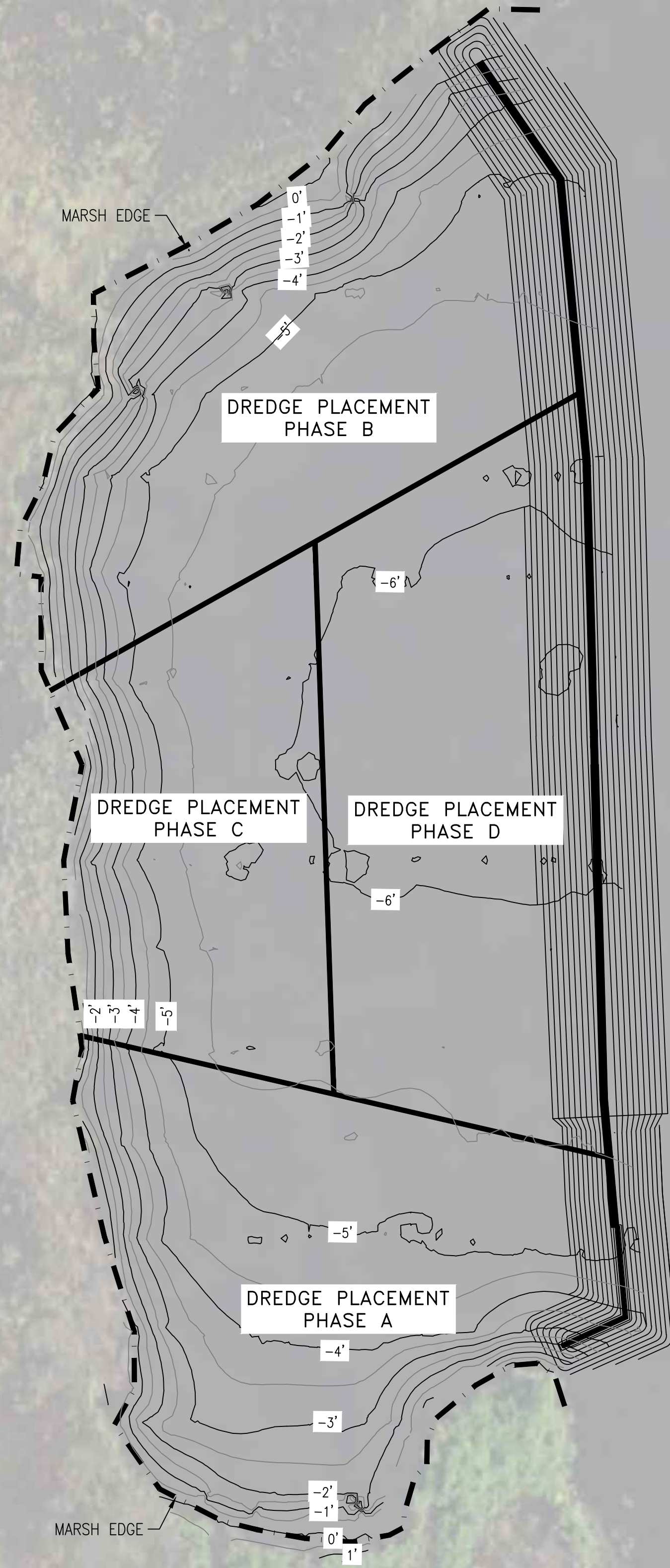
PROJECT TITLE
NORTH BEARDSLEE LAKE MARSH RESTORATION PROJECT CONSTRUCTION DOCUMENTS JACKSON COUNTY, MS

TYPICAL SECTIONS AND DETAILS
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY JACKSON, MISSISSIPPI

PROJECT No. 16115.03	CAD FILE NAME 110221 DWGNB2.1 RO TSAD
DRAWING NB2.1	REVISION 0



PASCAGOULA RIVER



BEARDSLEE LAKE

ALL DREDGE PLACEMENT BY OTHERS. NOT IN THIS CONTRACT.

LEGEND

- APPROXIMATE NORTH BEARDSLEE LAKE SITE LIMITS OF DREDGE PLACEMENT
- APPROXIMATE 1' CONTOUR INTERVAL
- APPROXIMATE 0.5' CONTOUR INTERVAL
- SURVEY BENCHMARK

SCALE

0 50' 100' 200'

REV.	DESCRIPTION OF REVISION	BY	CURRENT DATE
0	ISSUED FOR REVIEW	JCB	11/02/2021



SCALE: 1" = 100'
 DRAWN: P. LANNING
 CHECKED: W. PENTECOST
 REVIEWED: J. BOURGEOIS
 PROJECT MANAGER: J. BOURGEOIS
 DATE: 11/02/21



PROJECT TITLE
 NORTH BEARDSLEE LAKE
 MARSH RESTORATION PROJECT
 CONSTRUCTION DOCUMENTS
 JACKSON COUNTY, MS

PHASED DREDGE PLACEMENT PLAN
 MISSISSIPPI DEPARTMENT OF
 ENVIRONMENTAL QUALITY
 JACKSON, MISSISSIPPI

PROJECT No. 16115.03
CAD FILE NAME 110221 DWGNB3.1 R00 PD
DRAWING REVISION NB3.1 0