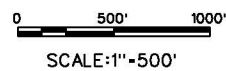


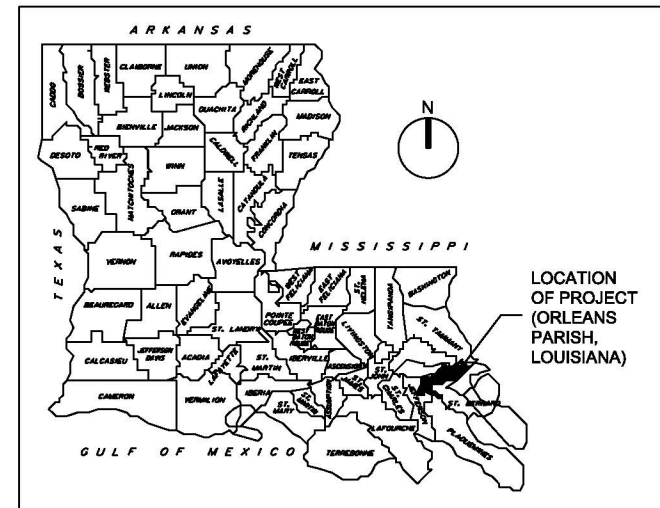
LOCATION MAP

SCALE: 1" = 500'



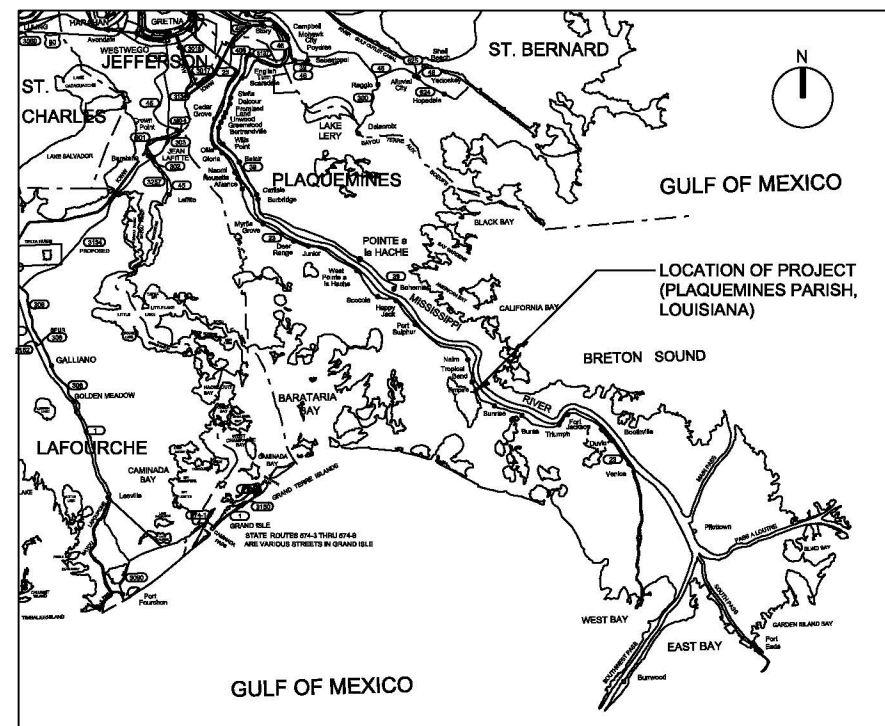
NOTES:

1. THE DESCRIPTIONS OF HORIZONTAL AND VERTICAL CONTROL POINTS ARE AVAILABLE FROM THE NEW ORLEANS DISTRICT SURVEY SECTION (504)862-2995.
2. ORIGINAL DATA COMPILED NAD 83 US SURVEY FOOT UNLESS OTHERWISE NOTED.
3. ELEVATIONS REFER TO NAVD88 (2009.55) UNLESS OTHERWISE NOTED.
4. INSIDE PLAN AREAS, POLYCONIC PROJECTION 1983 NORTH AMERICAN DATUM IS REPRESENTED BY SOLID TICKS AND LAMBERT CONFORMAL CONIC PROJECTION IS REPRESENTED BY DASHED TICKS.
5. AERIAL PHOTOGRAPHY FLOWN IS INDICATED ON SPECIFIC IMAGE SHEETS.



VICINITY MAP - STATE OF LOUISIANA

SCALE: N.T.S.



VICINITY MAP

SCALE: N.T.S.

BENCHMARKS		
DESIGNATION:	HORIZ. CONTROL:	VERT. CONTROL:
1193 B (PRIMARY BM) (PID DH3213)	LAT. = 29°23'20.47644" N LONG. = -89°35'47.21023" E	N = 327,501.19 E = 3,833,959.75 ELEV. = 12.162' (NAVD 88, EPOCH 2009.55)
DESCRIPTION: DESCRIBED BY 3001, INC (MH) THE STATION IS LOCATED IN PLAQUEMINES PARISH AT EMPIRE, LA AT THE EMPIRE LOCKS (COE) ABOUT 5.0 MILES NORTHWEST OF BURAS, LA AND 8.7 MILES SOUTHEAST OF PORT SULPHUR, LA OWNERSHIP-COE TO REACH THE STATION FROM THE INTERSECTION OF LA 11 AND LOCKS RD IN EMPIRE, LA JUST SOUTHWEST OF LOCKS, TO NORTHEAST ABOUT 500' TO EMPIRE LOCKS GATE AND ENTER THROUGH GATE TO THE NORTHEAST CORNER END OF LOCKS AND MARK. THE STATION IS NATIONAL OCEAN SERVICE DISK, STAMPED 1193B 1996 SET ON THE NORTH SIDE OF LOCKS ON TOP OF THE NORTHEAST END OF CONCRETE LOCK WALL NEAR LOCK GATES AND LEVEE SHEET-PILING CROSSING SET FLUSH IN TOP OF CONCRETE 3' SOUTHEAST OF A SOLAR PANEL BOX POLE.		

GENERAL LEGEND

	BENCHMARK		WATER VALVE		LIGHT POLE		EXISTING CULVERT PIPE
	BORING LOCATION AND NUMBER		CATCH BASIN		WATER METER		EXISTING RIGHT OF WAY
	FILL		FIRE HYDRANT		STAGING AREA		LIMITS OF CONSTRUCTION
	CUT		P.I. POINT		SHEET PILE		CONSTRUCTION EASEMENT
	LEVEE		MANHOLE		RIP-RAP		EXISTING OVERHEAD POWER
	DEMOLITION		POWER POLE		CONCRETE		SILT FENCE
			EXCAVATION & COMPACTED FILL				WATER MAIN
							SECURITY FENCE

GENERAL CROSS-REFERENCING SYMBOLS

	SECTION/DETAIL TITLE ON SAME DRAWING (CENTERED UNDER SECTION/DETAIL)		SECTION/DETAIL TITLE ON ANOTHER DRAWING (CENTERED UNDER SECTION/DETAIL)		VIEW SUBTITLE (CENTERED UNDER EACH VIEW)
	SECTION CUT W/ VIEW SHOWN ON SAME DRAWING		SECTION CUT W/ VIEW SHOWN ON ANOTHER DRAWING		DETAIL SYMBOL W/ VIEW SHOWN ON SAME DRAWING
	DETAIL SYMBOL W/ VIEW SHOWN ON ANOTHER DRAWING				

ABBREVIATIONS

* UNLESS OTHERWISE NOTED ON EACH SHEET

ALT	ALTERNATE	L/W	LANDWARD
ALUM	ALUMINUM	MAX	MAXIMUM
ANCH	ANCHOR	MFG	MANUFACTURER
APPROX	APPROXIMATE	MIN	MINIMUM
BF	BOTTOM FACE	MIRR	MIRRORED
BITUM	BITUMINOUS	MISC	MISCELLANEOUS
BRKT	BRACKET	NF	NEAR FACE
BOT	BOTTOM	NO	NUMBER
CL OR CL	CENTER LINE	NS	NEAR SIDE
C&G	CURB & GUTTER	NWL	NORMAL WATER LEVEL
C.G.	CENTER OF GRAVITY	OF	OUTSIDE FACE
CLR	CLEAR	O.C.	ON CENTER
C/J	CONSTRUCTION JOINT	PL	PLATE
CJP	COMPLETE JOINT PENETRATION	PROT	PROTECTION
CMP	CORRUGATED METAL PIPE	R	RADIUS
CONC	CONCRETE	REINF	REINFORCING
CPT	CONE PENETRATION TEST	REQ'D	REQUIRED
C.R.S.	CORROSION RESISTANT STEEL	R/W	RIGHT-OF-WAY
DIA	DIAMETER	SAV	SANITARY
DWG	DRAWING	SPS	SPACES
EA	EACH	SPEC	SPECIFICATIONS
EF	EACH FACE	SST	STAINLESS STEEL
EJ	EXPANSION JOINT	STD	STANDARD
EL	ELEVATION	SYM	SYMMETRICAL
EW	EACH WAY	T&B	TOP AND BOTTOM
EXIST	EXISTING	TF	TOP FACE
FB	FLAT BAR	TRS	TEMPORARY RETAINING STRUCTURE
FCM	FRACTURE CRITICAL MEMBER	TYP	TYPICAL
FF	FRONT FACE	UNO	UNLESS NOTED OTHERWISE
FES	FRONT END SECTION	UGND	UNDERGROUND
F.H.M.S.	FLAT HEAD MACHINE SURFACE	W	WIDTH
FS	FAR SIDE	W	WITH
GALV	GALVANIZED	WL	WALL LINE
HORZ	HORIZONTAL	WT	WALL THICKNESS
HR	HAND RAIL	WWR	WELDED WIRE REINFORCEMENT
HT	HEIGHT	XS	EXTRA STRONG
IF	INSIDE FACE		
LG	LONG		

BENCHMARKS

DESIGNATION:	HORIZ. CONTROL:	VERT. CONTROL:
BLD 152 (VERIFICATION BM)	LAT. = 29°23'28.00891" N LONG. = -89°35'52.64883" E	N = 328,254.694 E = 3,833,467.162 ELEV. = 16.24' (NAVD 88, EPOCH 2009.55)
DESCRIPTION: BRASS CAP FOUND 0.5 FEET BELOW THE SURFACE OF THE TOP LEVEE, STAMPED "BLD-152 08-126C 2008"		

BENCHMARKS

DESIGNATION:	HORIZ. CONTROL:	VERT. CONTROL:
EMPIRE AZ MK 2 (PID AT0231) (VERIFICATION BM)	LAT. = 29°23'38.14510" N LONG. = -89°36'11.36711" E	N = 329,253.43 E = 3,831,796.03 ELEV. = -.67' (NAVD 88, EPOCH 2009.55)
DESCRIPTION: DESCRIBED BY NATIONAL GEODETIC SURVEY 1971 0.5 MI NW FROM EMPIRE. ABOUT 0.5 MILES NORTHWEST ALONG STATE HIGHWAY 23 FROM THE DRAW BRIDGE OVER THE DOULLUT CANAL AT EMPIRE, AT THE JUNCTION OF THE HIGHWAY AND A SHELL DRIVEWAY WHICH LEADS TO A TWO-STORY BRICK BUILDING, 35½ FEET NORTHEAST OF THE CENTER LINE OF THE HIGHWAY, 33 FEET NORTHWEST OF THE CENTER LINE OF THE DRIVEWAY, 16.4 FEET SOUTHWEST OF THE SOUTHWEST RAIL OF THE MISSOURI PACIFIC RAILROAD, 2½ FEET SOUTHWEST OF TELEPHONE POLE NUMBER 1327½, 0.7 FEET NORTHEAST OF A METAL WITNESS POST, ABOUT 1 FOOT BELOW THE LEVEL OF THE HIGHWAY, AND SET IN THE TOP OF A CONCRETE POST WHICH IS 0.5 FEET BELOW THE SURFACE OF THE GROUND.		

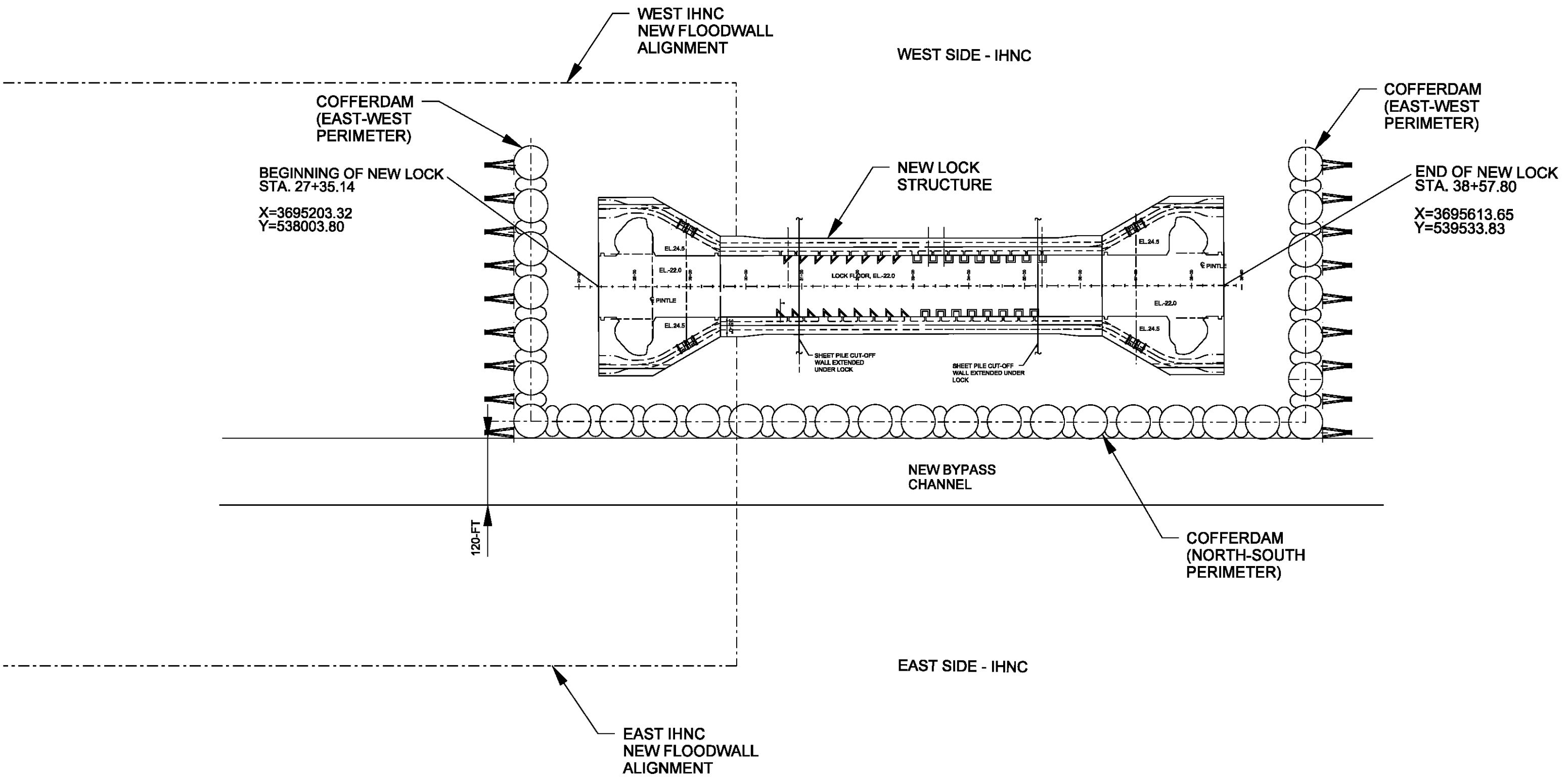
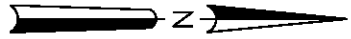


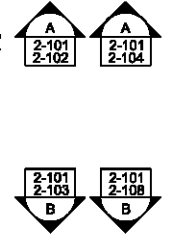
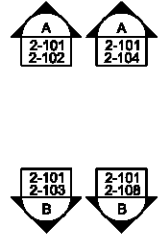
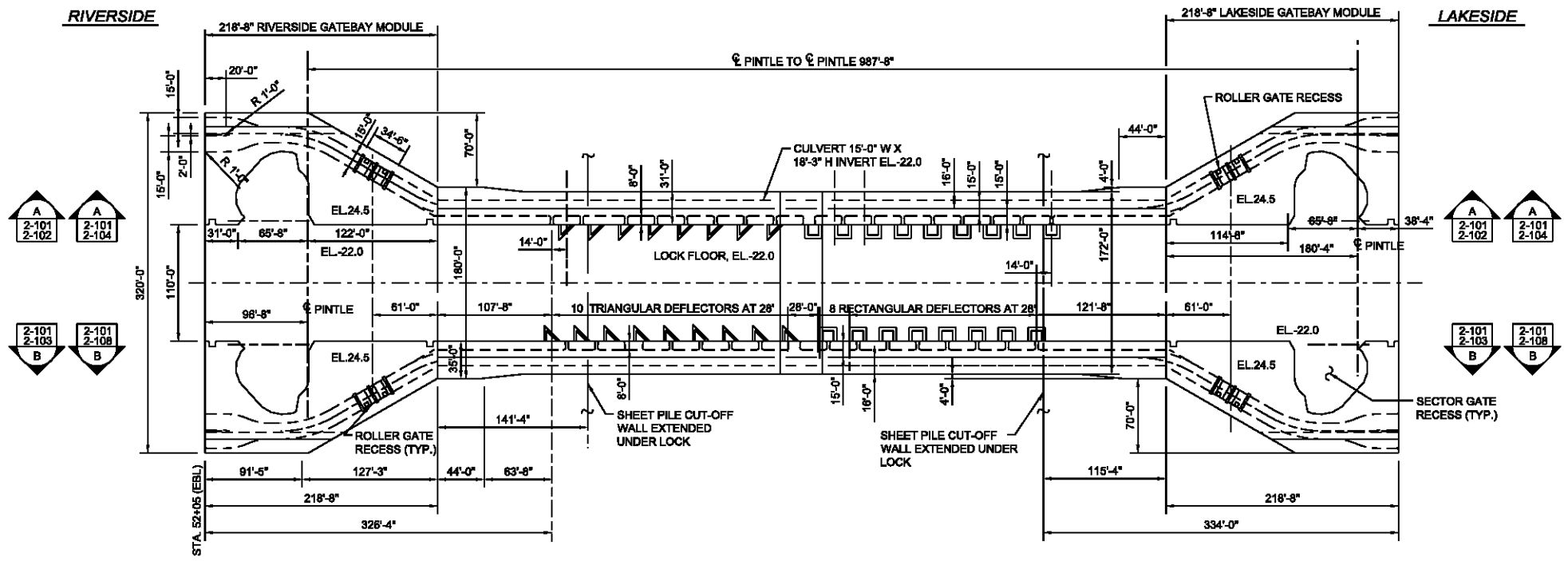
DATE	DESCRIPTION

DESIGNED BY: JEREMY D. LAYTON	DATE: MAY 2018	SUBMITTED BY: DAVID P. LOVETT, JR., P.E.	DESIGNATION NO.:
DRAWN BY: DAVID P. LOVETT, JR., P.E.	FILE NAME: 1444000_G-002_DGN	CONTRACT NO.:	FILE NUMBER:
PROJECT NAME: MISSISSIPPI RIVER - GULF OUTFLET NEW LOCK AND CONNECTION CHANNEL INDUSTRIAL CANAL LOCK REPLACEMENT ORLEANS PARISH, LOUISIANA FEASIBILITY STUDY	ANSI D		

LOCATION AND VICINITY MAP

SHEET IDENTIFICATION
G-002



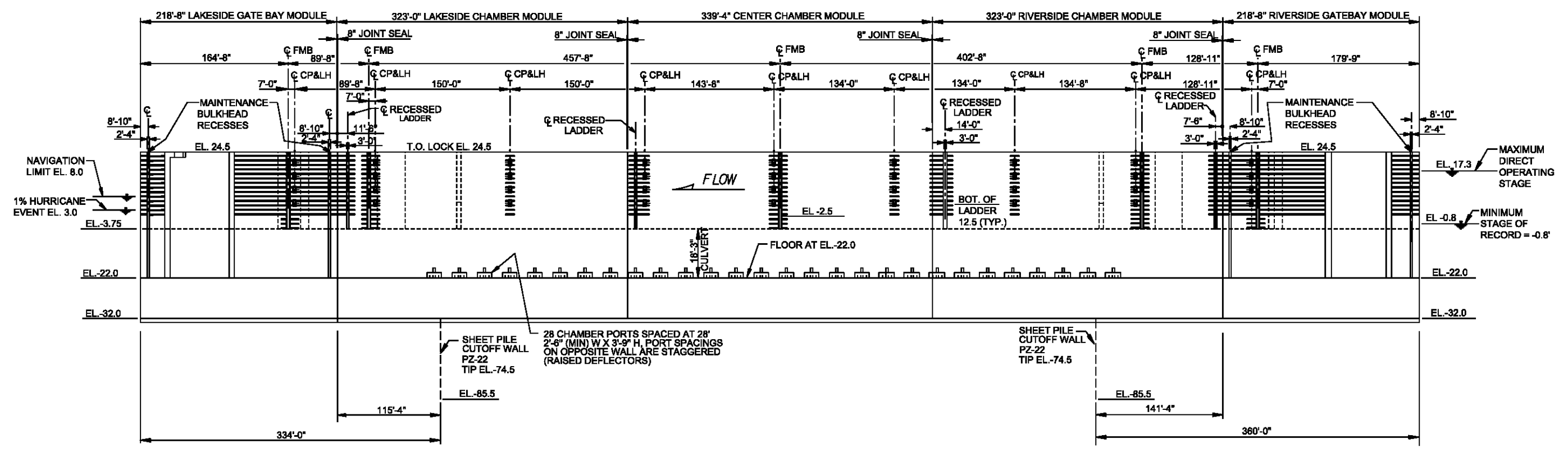


PLAN 2 (TSP)
110' X 900'
SILL EL. -22.0

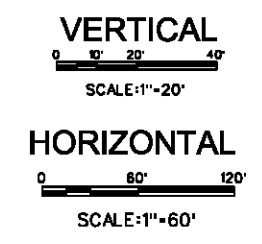
LOCK MODULES PLAN
SCALE: 1" = 60'

LAKESIDE

RIVERSIDE



EAST INTERIOR FACE ELEVATION



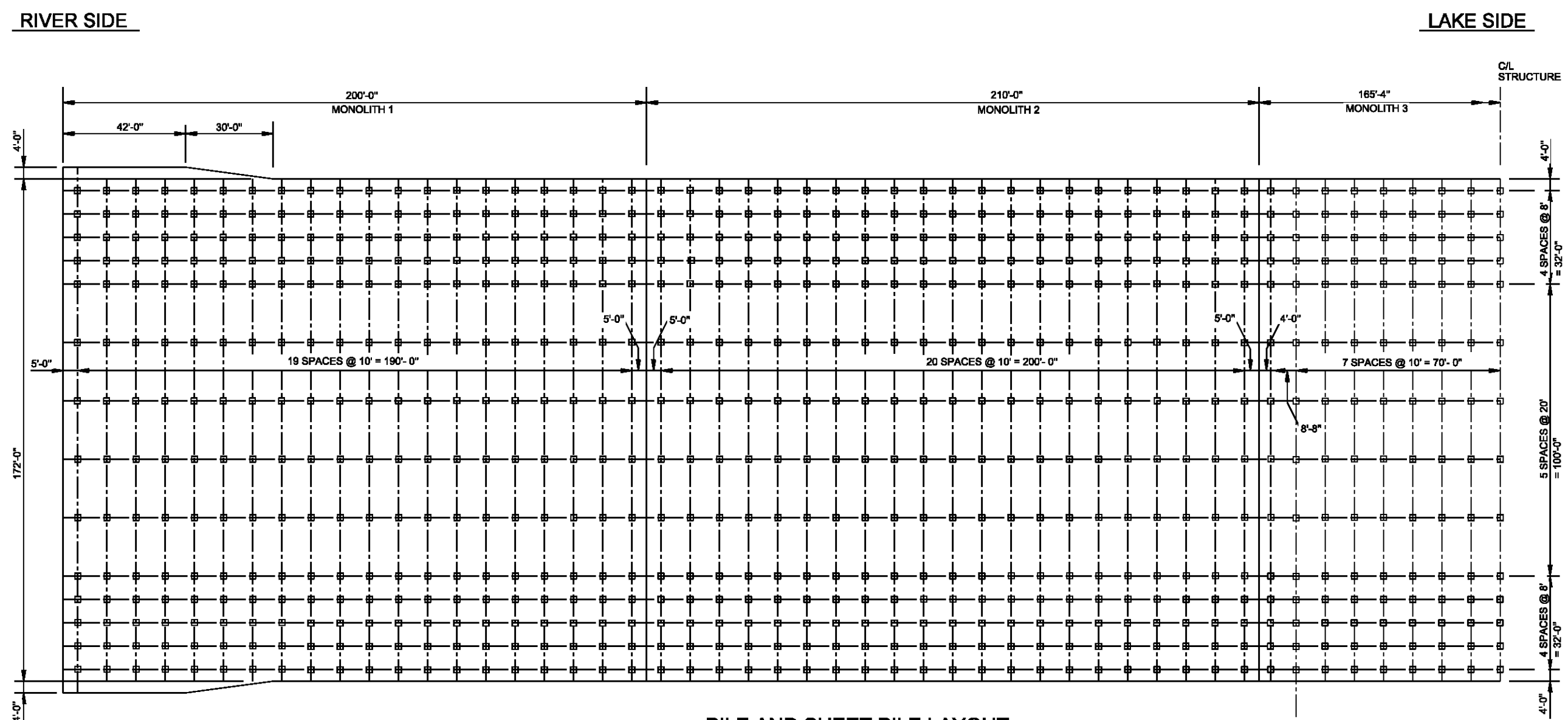
DATE	DESCRIPTION

DESIGNED BY: JERRY C. LASTER	DATE: MAY 2018	SOLICITATION NO.:	FILE NUMBER:
DRAWN BY: D.M.M.	DATE:		
ISSUED BY: DAVID P. LOVETT, JR. P.E.	DATE:	CONTRACT NO.:	FILE NUMBER:
PROJECT NAME: MISSISSIPPI RIVER - GULF OUTLET	DATE:	CONTRACT NO.:	FILE NUMBER:
PROJECT NO.:	DATE:	CONTRACT NO.:	FILE NUMBER:
PROJECT NO.:	DATE:	CONTRACT NO.:	FILE NUMBER:

MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY

LOCK ELEVATION & DETAILS

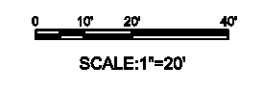
SHEET IDENTIFICATION
S-201



PILE AND SHEET PILE LAYOUT
SCALE: 1" = 20'

CHAMBER MASONRY PILE SCHEDULE					
MONOLITH	TOTAL NUMBER OF PILES	PILE TIP ELEVATION	PAYMENT LENGTH WITH 12" EMBED	SERVICE LOAD	
				COMP (K)	TENSION (K)
1	280	-185	133 FT	520	200
2	294	-185	133 FT	520	200
3	238	-185	133 FT	520	200
4	294	-185	133 FT	520	200
5	280	-185	133 FT	520	200

- NOTE:**
- PILE LAYOUT FOR CHAMBER IS SYMMETRIC ABOUT C/L
 - PILE C/L DIMENSIONS TAKEN AT EL. - 22.0.
 - ALL PILES ARE 24" SQUARE PPC PILES W/18, 1/2" 0, 7 WIRE, LOW-RELAXATION STRAND, GR 270.



MARK	DESCRIPTION	DATE	APPR	DATE	APPR

DESIGNED BY: JERRY D. LAYNE	DATE: MAY 2018
ISSUED BY: D.M.	SUBMITTAL NO.:
DESIGNED BY: DAVID P. LOVETT, JR. P.E.	CONTRACT NO.:
PROJECT NO.:	FILE NUMBER:
PROJECT NAME: MISSISSIPPI RIVER - GULF OUTLET	PROJECT NO.:
PROJECT LOCATION: NEW ORLEANS DISTRICT	PROJECT NO.:
PROJECT LOCATION: NEW ORLEANS, LOUISIANA	PROJECT NO.:

MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY
**CHAMBER MONOLITHS - LOCK
PILE LAYOUT**

SHEET IDENTIFICATION
S-202

A

B

C

D

1

2

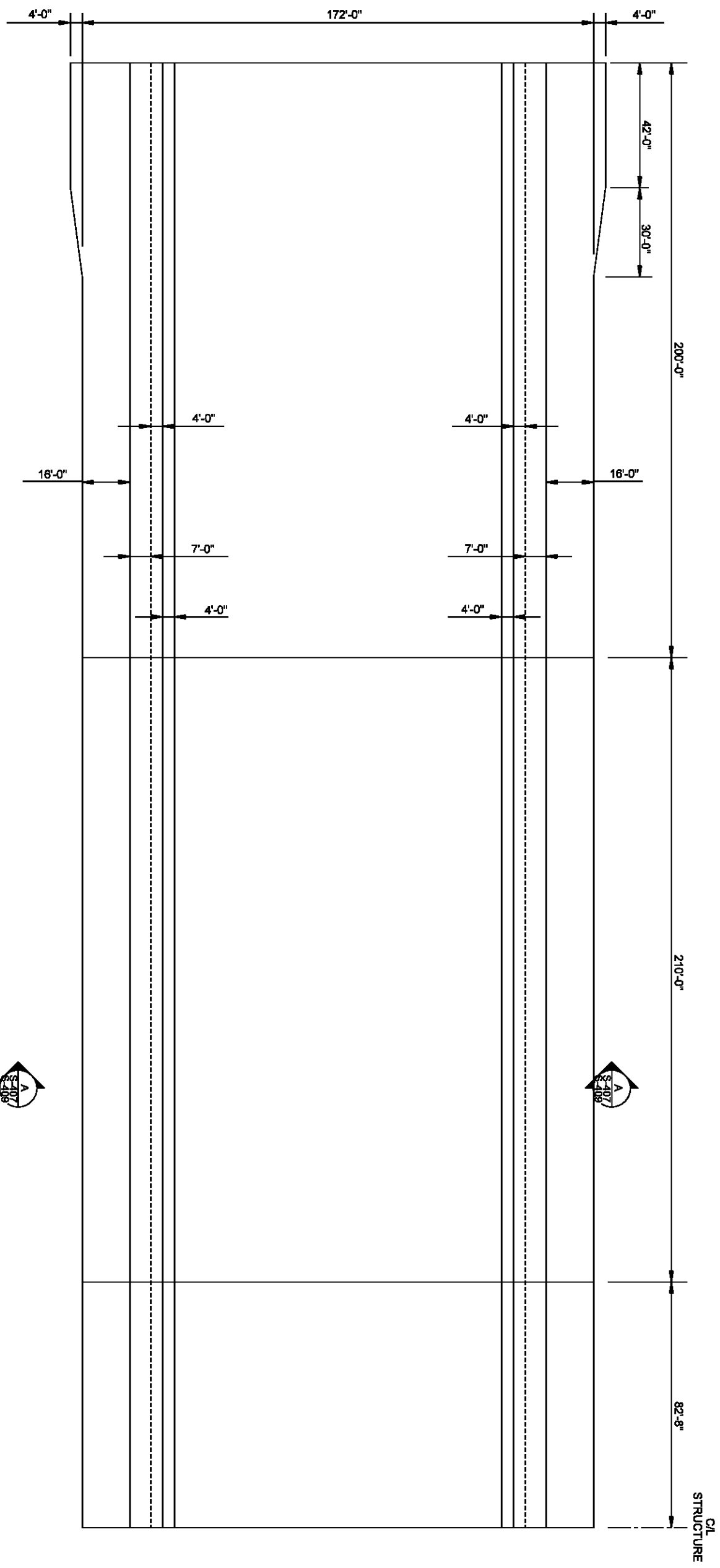
3

4

5

RIVER SIDE

LAKE SIDE



CHAMBER MASONRY PLAN AT EL. 24.5

SCALE: 1" = 20'

NOTE:
1. MASONRY PLAN FOR CHAMBER IS SYMMETRIC ABOUT C/L



MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY

**CHAMBER MASONRY PLAN
LOCK
AT EL. 24.5**

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA		DESIGNED BY: JEREMY D. LASTER	DATE: MAY 2018
		DRAWN BY: D.M.E.	SOLICITATION NO.:
		SUBMITTED BY: DAVID P. LOVETT, JR. P.E.	CONTRACT NO.:
		PLOT SCALE: No	FILE NUMBER:
SIZE: ANSI D	FILE NAME: sheet_mason.dgn		

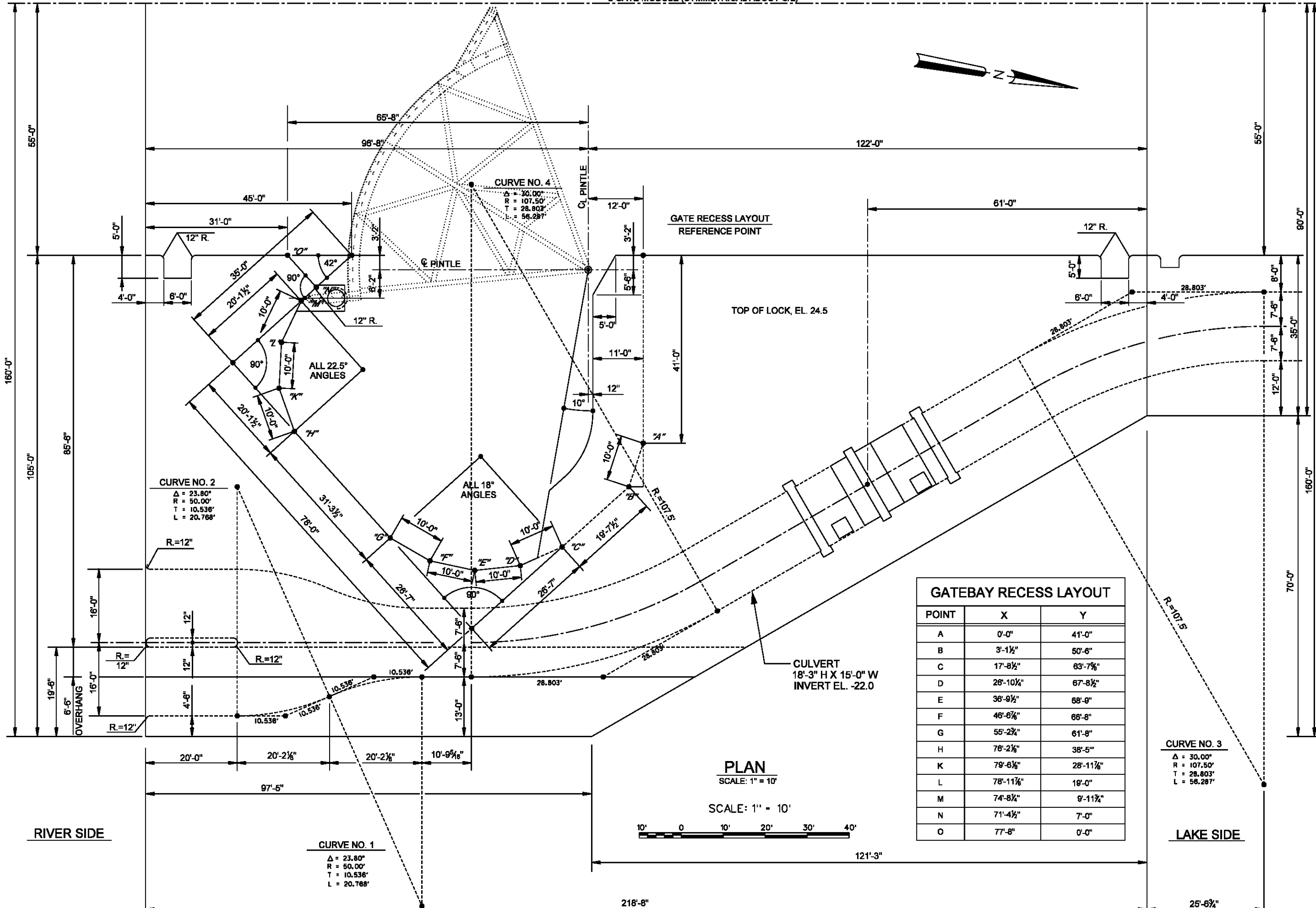
MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

US Army Corps
of Engineers
New Orleans District

SHEET
IDENTIFICATION
S-203

☉ GATE MODULE (SYMMETRICAL ABOUT C/L)

D
C
B
A



GATEBAY RECESS LAYOUT

POINT	X	Y
A	0'-0"	41'-0"
B	3'-1½"	50'-6"
C	17'-8½"	63'-7½"
D	28'-10¼"	67'-8½"
E	36'-9½"	68'-8"
F	46'-6¼"	66'-8"
G	55'-2¼"	61'-8"
H	78'-2¼"	38'-5"
K	79'-6¼"	28'-11¼"
L	78'-11¼"	19'-0"
M	74'-8¼"	9'-11¼"
N	71'-4¼"	7'-0"
O	77'-8"	0'-0"

PLAN
SCALE: 1" = 10'



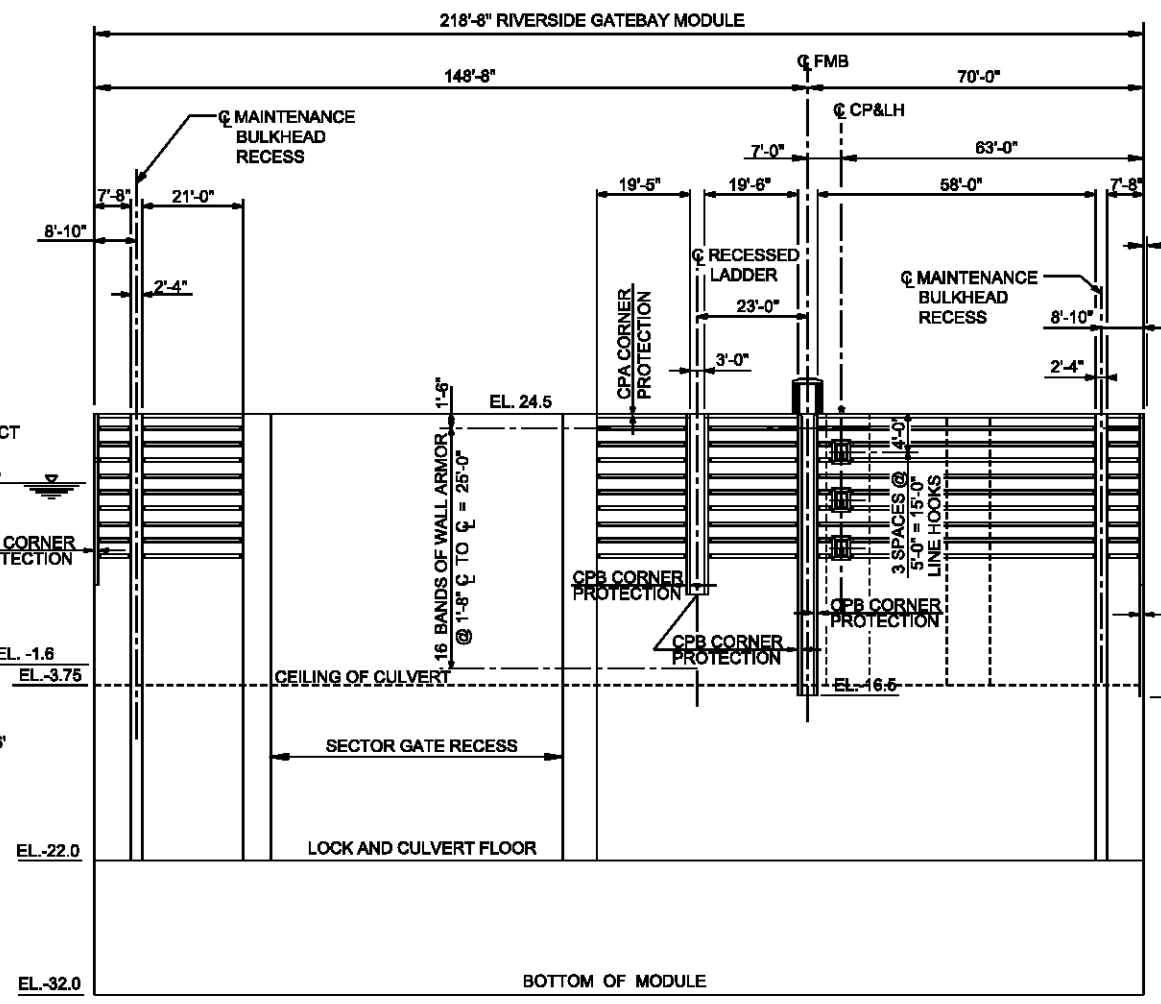
MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: JERRY C. LASTER	DATE:
DRAWN BY: J. D. L.	REVISED BY: W. B. P. / J. D. L.
ISSUED BY: DAVID P. LOVETT, JR. P.E.	CONTRACT NO.:
PROJECT NO.:	FILE NUMBER:
SCALE:	DATE:
SIZE:	FILE NAME:
APP. ID:	

MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY
CAST - IN PLACE
R/S GATEBAY
MASONRY PLAN EL. 23.0

SHEET IDENTIFICATION
S-300

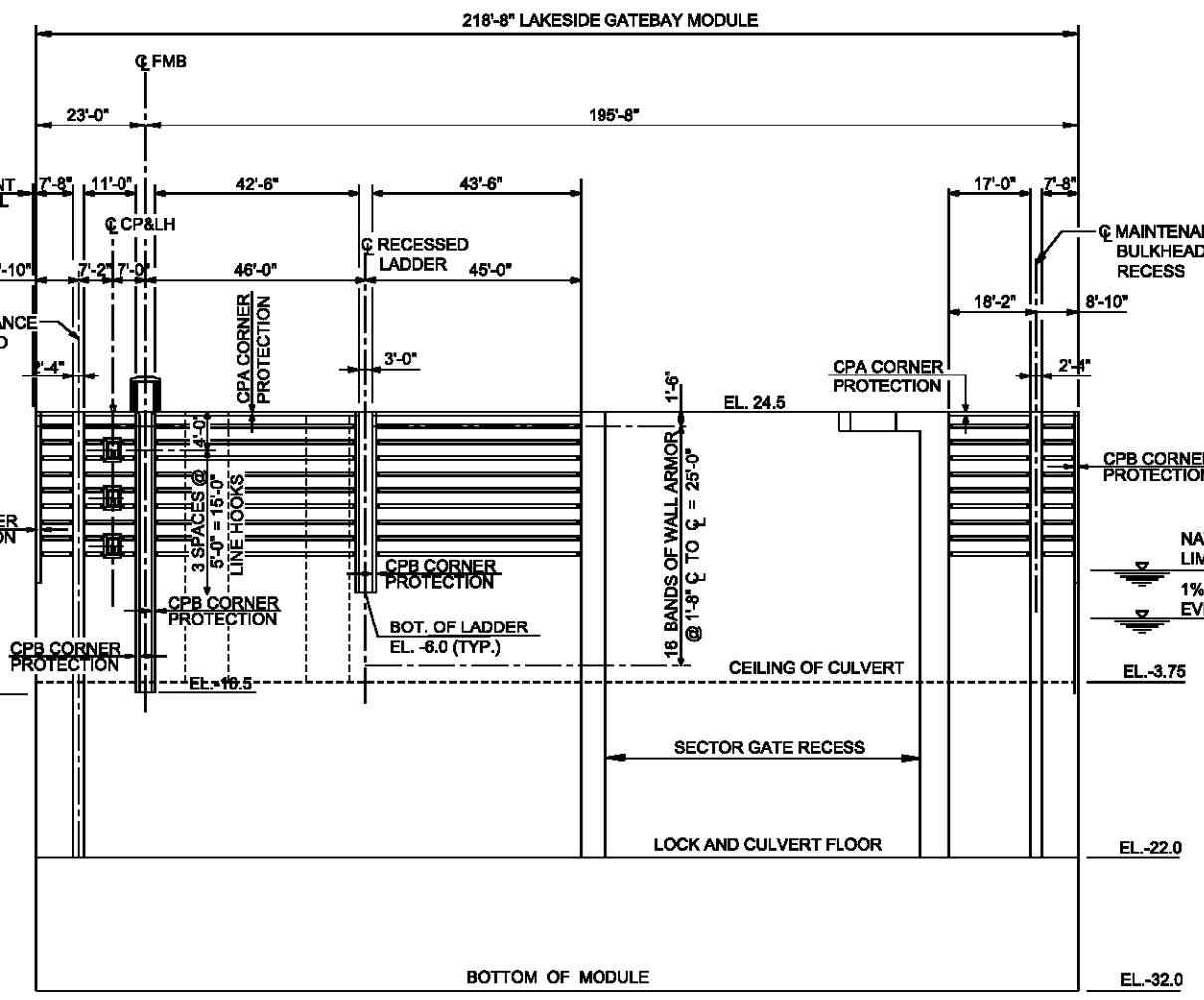
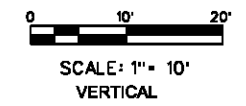
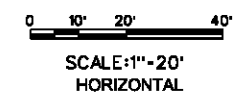
D
C
B
A



ELEVATION **A**
2-101
2-104

SCALE: HORIZ. 1"=20'
VERT. 1"=10'

**RIVERSIDE GATEBAY MODULE
WEST INTERIOR WALL FACE**



ELEVATION **A**
2-101
2-104

SCALE: HORIZ. 1"=20'
VERT. 1"=10'

**LAKESIDE GATEBAY MODULE
WEST INTERIOR WALL FACE**

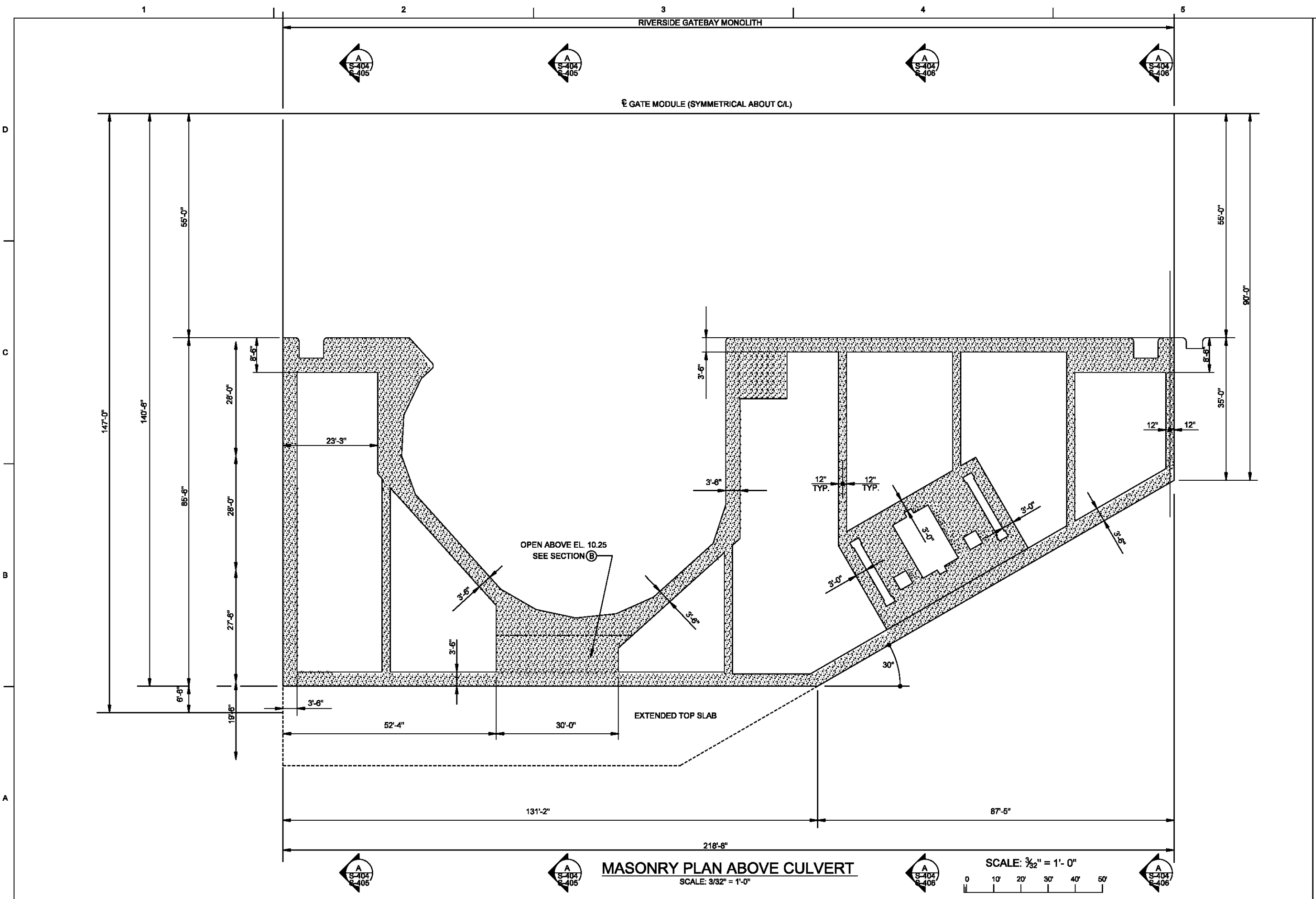
DATE	DESCRIPTION	APPR.

DESIGNED BY: JERRY D. LASTER	DATE: MAY 2018	SUBMITTAL NO.:	FILE NUMBER:
DRAWN BY: D.M.	DESIGNED BY: D.M.	CONTRACT NO.:	
REVIEWED BY: DAVID P. LOVETT, JR., P.E.	DESIGNED BY: DAVID P. LOVETT, JR., P.E.		

MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY

**GATEBAY MODULE
ELEVATION**

SHEET IDENTIFICATION
S-301



MARK	DESCRIPTION	DATE	APPL.	MARK	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA	DESIGNED BY:	DATE:	SOLICITATION NO.: CONTRACT NO.: FILE NUMBER:
	DRAWN BY:	REV. DATE:	
	CHECKED BY:	FILE NAME:	
SUBMITTED BY: DAVID P. LOVETT, JR., P.E. PLOT SCALE:	NO. FILE NO.	DATE:	NO. FILE NO.

MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY

**R/S GATEBAY
MASONRY PLAN ABOVE CULVERT**

SHEET IDENTIFICATION
S-302

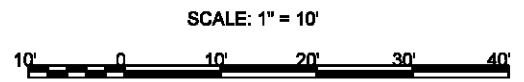
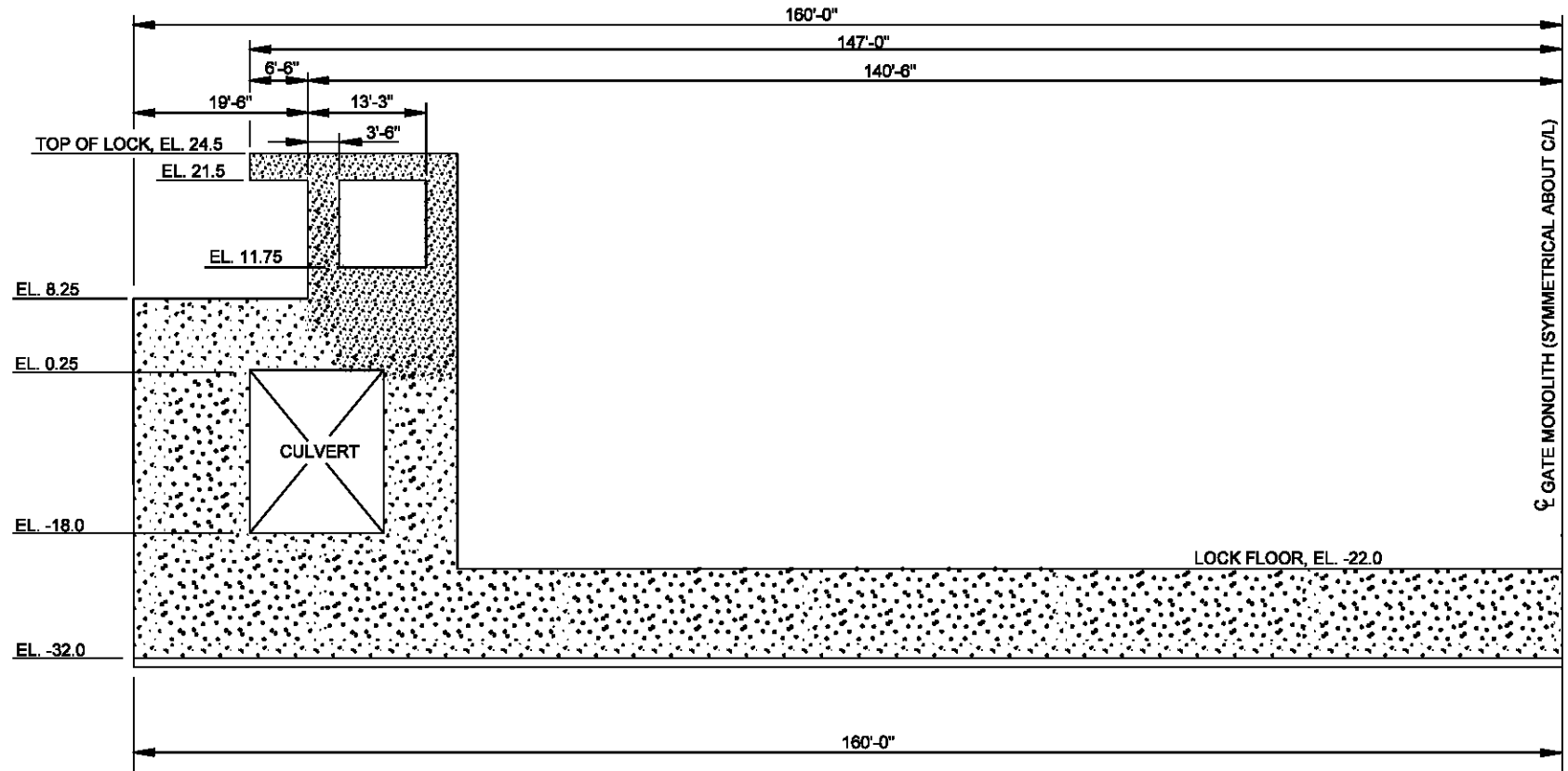
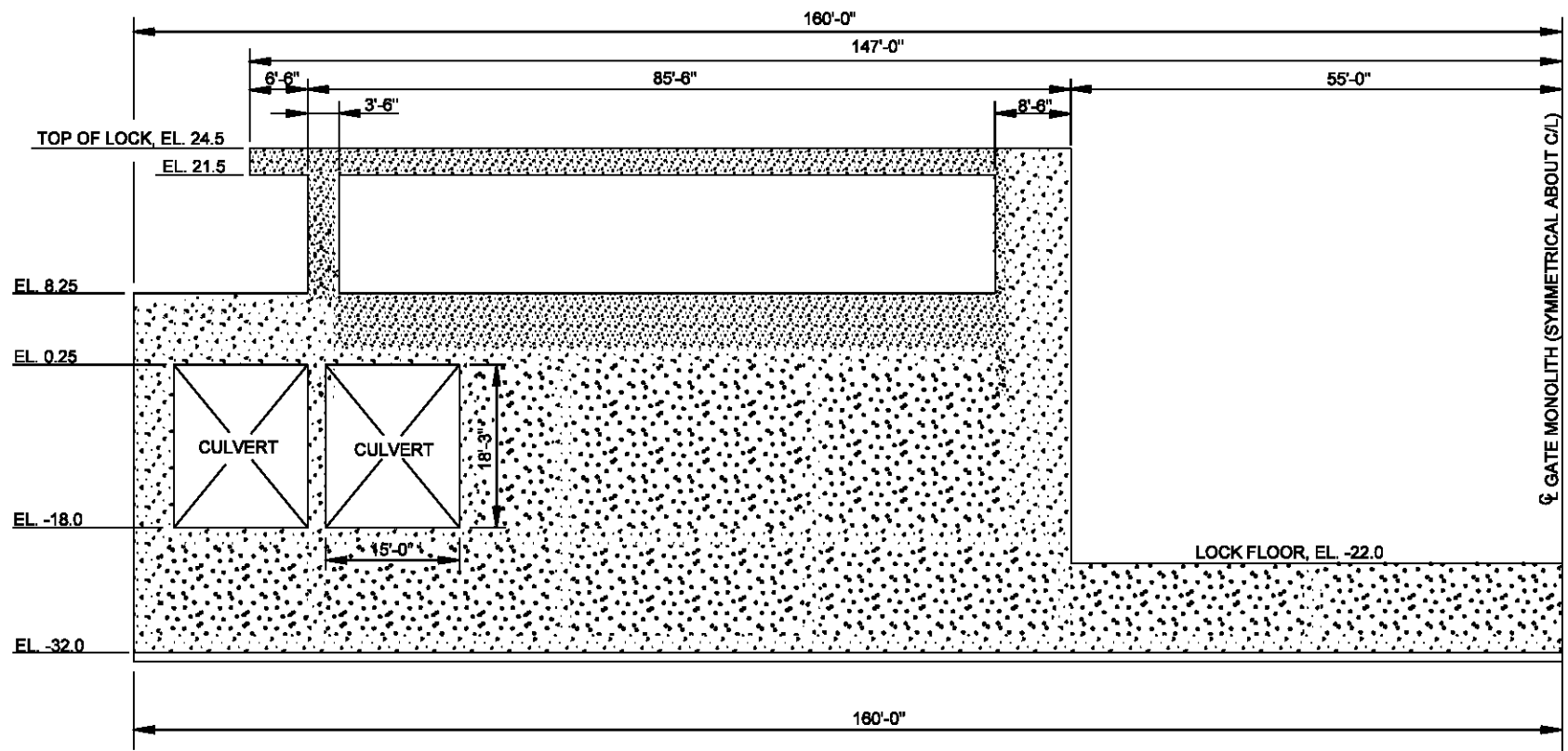
1

2

3

4

5



MARK	DESCRIPTION	DATE	APPL	INVRK

DESIGNED BY: JERRY D. LASTER	DATE: MAY 2018
DRAWN BY: D.M.	DESIGNED BY: JERRY D. LASTER
ISSUED BY: DAVID P. LOVETT, JR. P.E.	DESIGNED BY: JERRY D. LASTER
PROJECT SCALE: XX	DESIGNED BY: JERRY D. LASTER
PROJECT DATE: XX	DESIGNED BY: JERRY D. LASTER
PROJECT NO.: H40000	DESIGNED BY: JERRY D. LASTER
FILE NAME: #sheet_#_#.dgn	DESIGNED BY: JERRY D. LASTER

MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY
GATEWAY MASONRY SECTION
AT END & GATE RECESS

SHEET IDENTIFICATION
S-303

entc_line

1

2

3

4

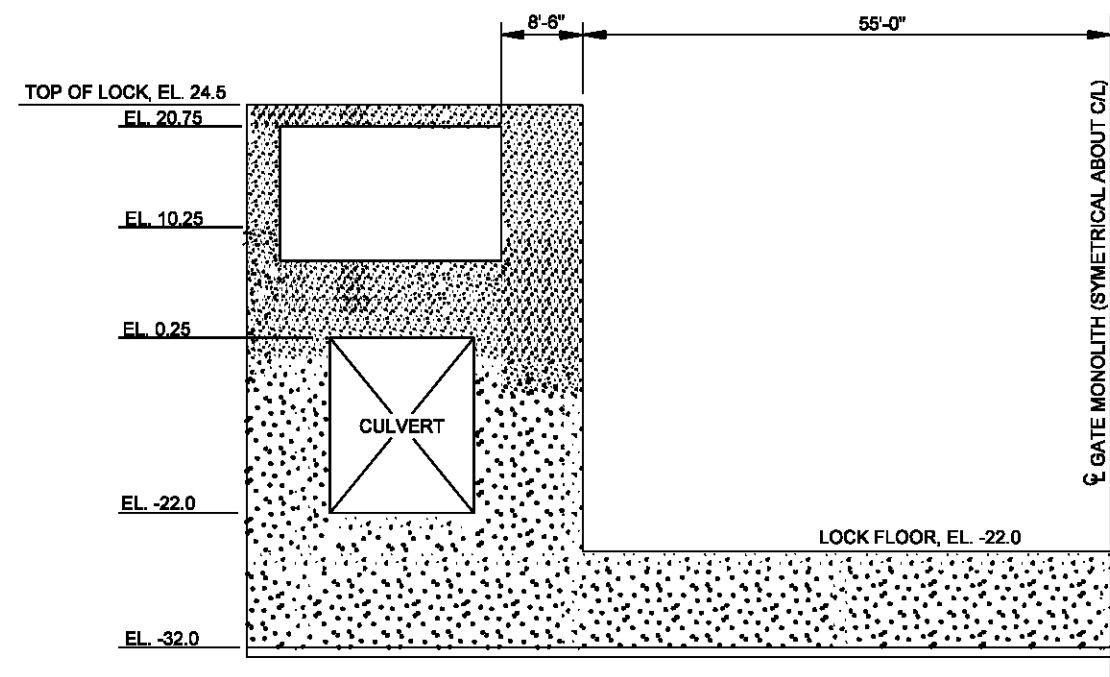
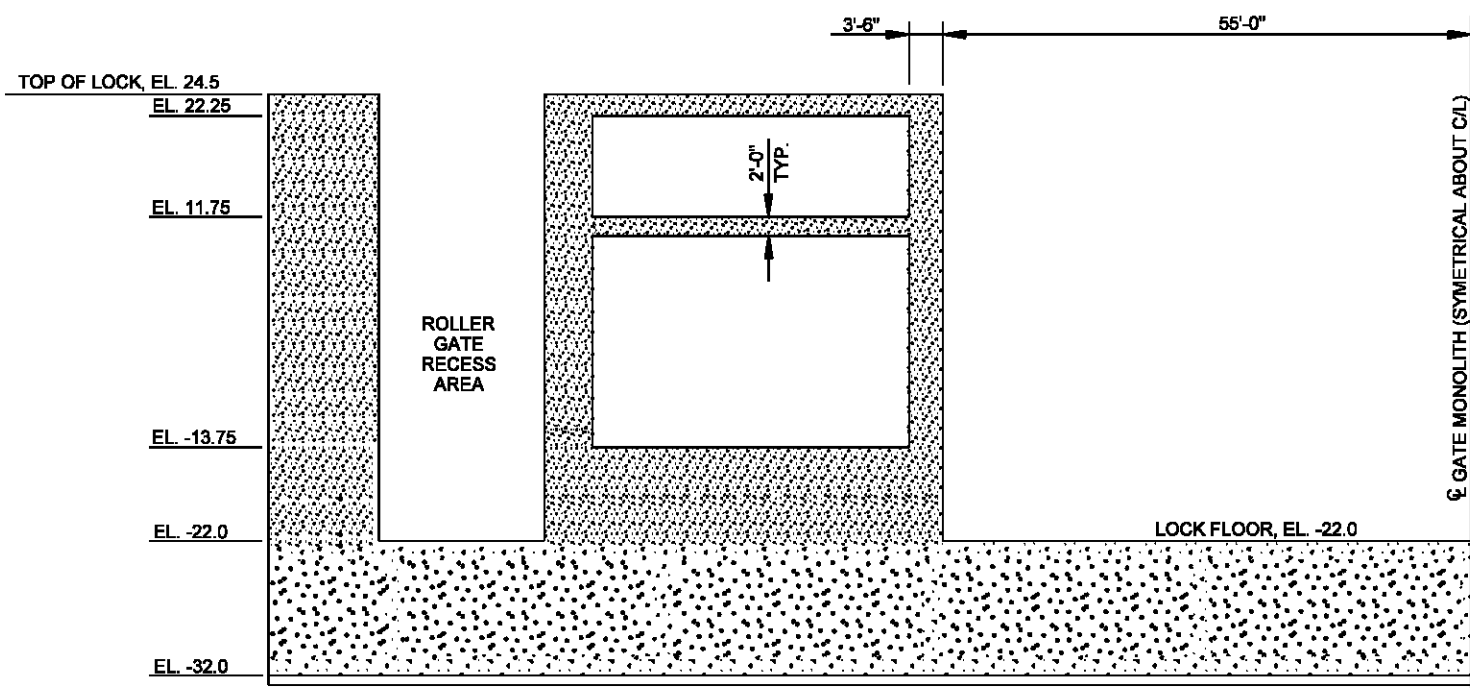
5

D

C

B

A



MARK	DESCRIPTION	DATE	APPL	INVR	DATE	APPR

DESIGNED BY: JERRY D. LASTER	DATE:	SOLICITATION NO.:
	MAY 2018	
DRAWN BY: DAN M. BOYD	FILE NAME:	CONTRACT NO.:
	sheet_001.dgn	
ISSUED BY: DAVID P. LOVETT, JR. P.E.	FILE NUMBER:	FILE NUMBER:
	H40000	
PLotted BY: DAVID P. LOVETT, JR. P.E.	NO.:	
PLotted DATE:	XX:	
PLotted SCALE:	XX:	
PLotted DATE:	XX:	

MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY

GATEWAY MASONRY SECTION
AT ROLLER GATE RECESS & CHAMBER

SHEET IDENTIFICATION
S-304

cuts.dwg

1

2

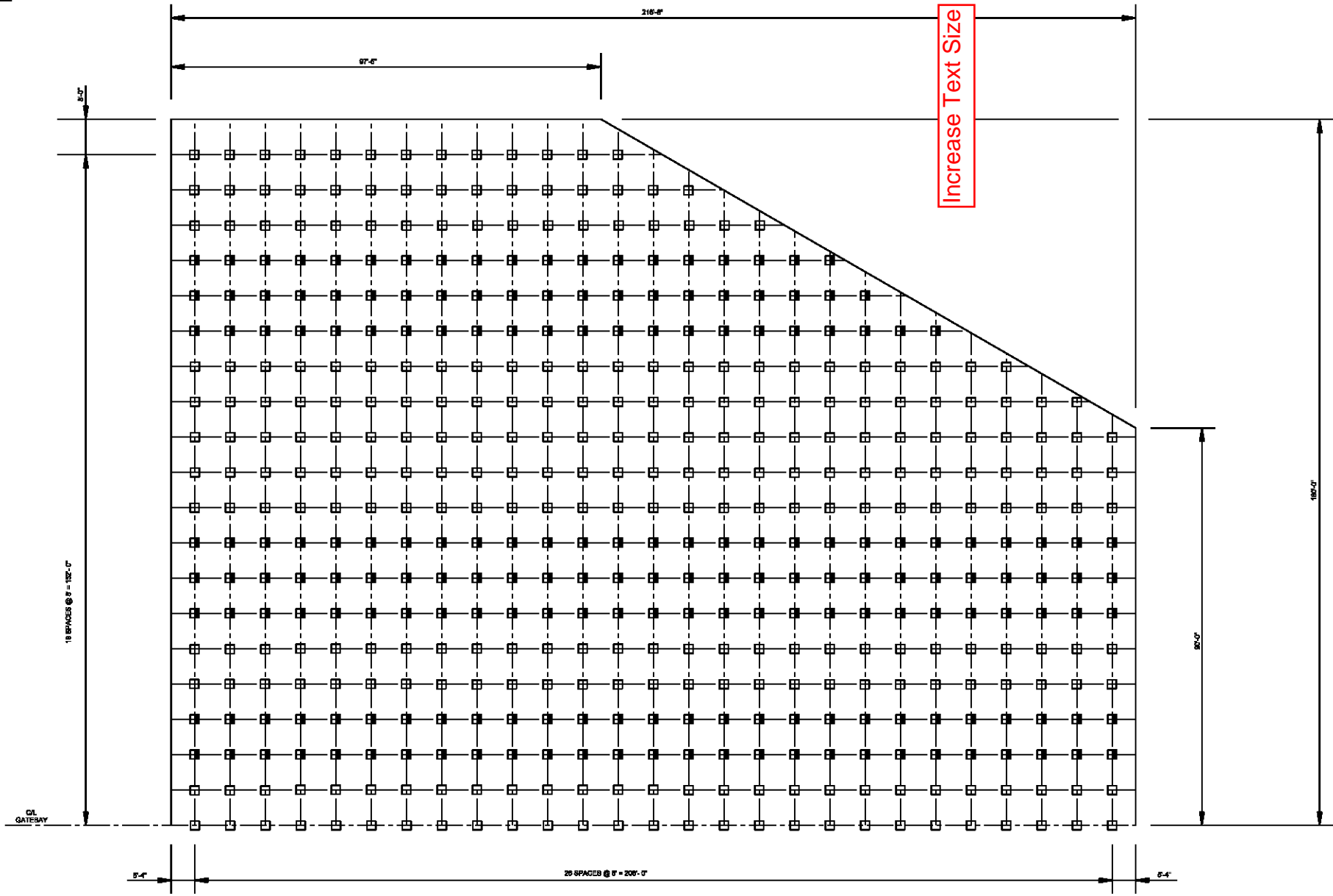
3

4

5

RIVER SIDE

LAKE SIDE



PILE LAYOUT
SCALE: 1" = 10'

NOTE

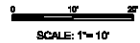
1. ALL PILES ARE 24" SQUARE PPC PILES WITH 18
1/2" # 7 WIRE, LOW-RELAXATION STRAND, OR 210.

FILE LEGEND

- 12V ON 1H BATTER PILES
- VERTICAL PILES
- PILE NUMBER

NOTES

1. PILE CL DIMENSIONS TAKEN AT EL. -32.0
2. PILE LAYOUT SYMMETRICAL ABOUT CL
3. LAKESIDE GATEWAY SIMILAR



SCALE: 1" = 10'

R/S GATEWAY STRUCTURE PILE SCHEDULE

TOTAL NUMBER OF PILES	PILE BATTER	PILE TIP ELEVATION	PAYMENT LENGTH WITH 12" EMBED	SERVICE LOAD	
				COMP. (K)	TENSION (K)
861	VERTICAL	-161	120 FT	620	-200
382	12V ON 1H	-161	120.9 FT	820	-300



US Army Corps of Engineers
New Orleans District

MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR

DESIGNED BY: JERRY D. LASTER	DATE: MAY 2018	SUBMITTED BY: D.M.	SOLICITATION NO.:
DRAWN BY: DAVID P. LOVETT, JR. P.E.	CONTRACT NO.:	FILE NUMBER: H-XXXXX	
SCALE: AS SHOWN	FILE NAME: R/S_Gateway.dgn	PLANT DATE: XX	

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY
R/S GATEWAY MONOLITH
PILE LAYOUT

SHEET IDENTIFICATION
S-305

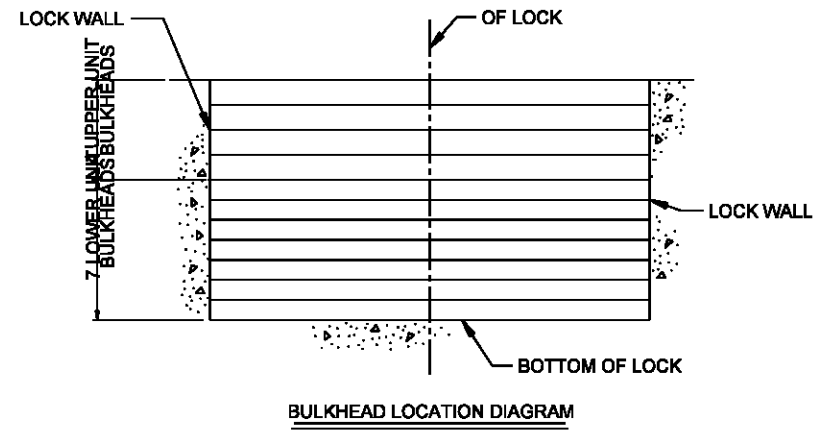
MARK	DESCRIPTION	DATE	APPL	INVR

DESIGNED BY: JERRY D. LASTER	DATE: MAY 2018	DESIGNED BY: JERRY D. LASTER	DATE: MAY 2018
DRAWN BY: DAN M. BULL	DATE: MAY 2018	DRAWN BY: DAN M. BULL	DATE: MAY 2018
ISSUED BY: DAVID P. LOVETT, JR. P.E.	DATE: MAY 2018	ISSUED BY: DAVID P. LOVETT, JR. P.E.	DATE: MAY 2018
FILE NUMBER: H-4000	FILE NAME: H-4000.dgn	FILE NUMBER: H-4000	FILE NAME: H-4000.dgn

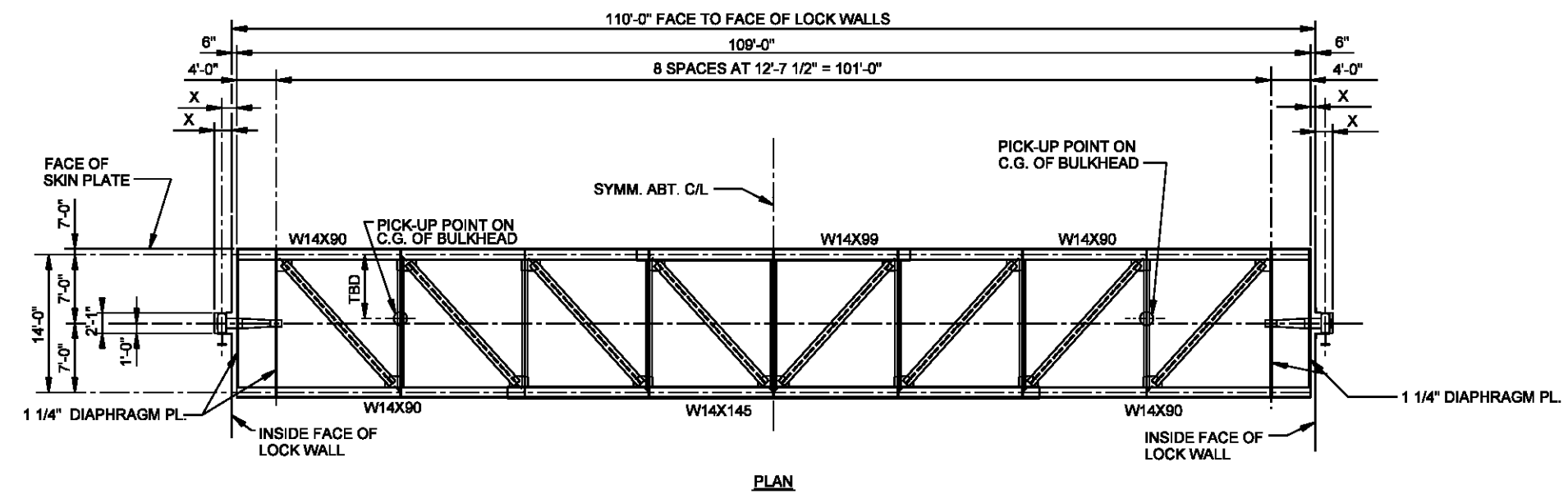
MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY
UPPER MAINT. BULKHEAD
PLAN AND ELEVATIONS

SHEET IDENTIFICATION
S-400

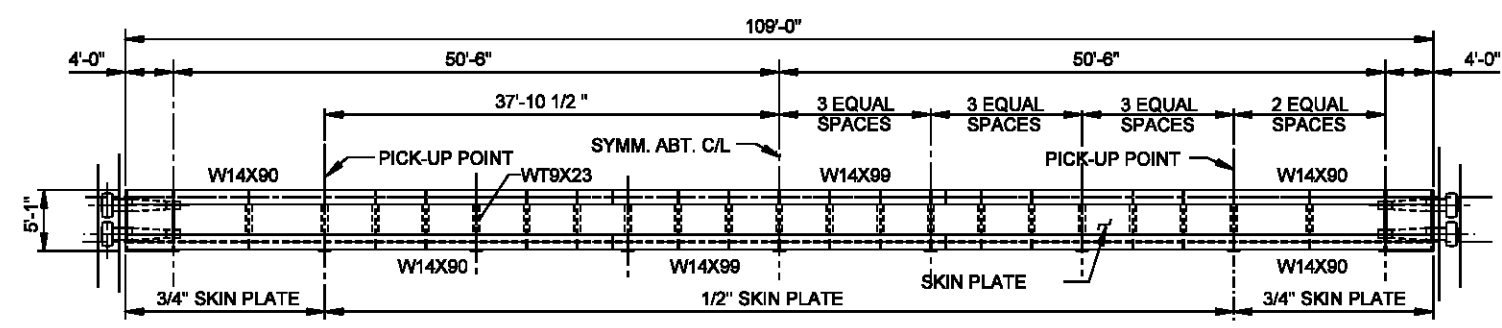
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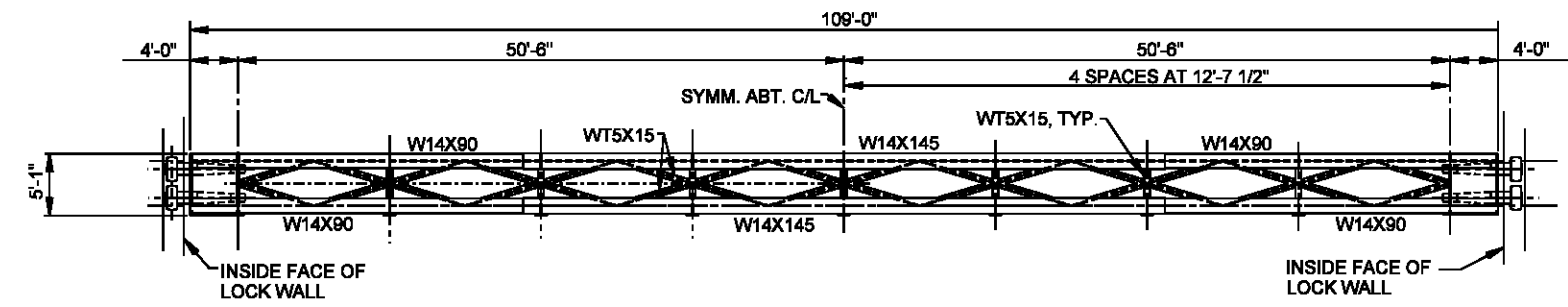
NOTE:
LOWER UNIT BULKHEAD MAX. DESIGN HEAD = 58'-0"
UPPER UNIT BULKHEAD MAX. DESIGN HEAD = 25'-0"



PLAN



BULKHEAD WET SIDE (SKIN PLATE) ELEVATION
(LOWER UNIT)
SCALE: 1/8" = 1' - 0"



BULKHEAD CHAMBER SIDE ELEVATION
(LOWER UNIT)
SCALE: 1/8" = 1' - 0"

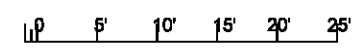
DESIGN DATA

CLASS C HYDRAULIC STEEL STRUCTURE (EM 1110-2-2105, CHANGE 1, 31 MAY 94)

LOWER UNIT
DEAD LOAD SELFWEIGHT (150 KIPS)
HYDROSTATIC LOAD 58' HEAD
IMPACT: NONE
COMBINED LOAD: 1.0XDL + 1.0XHYDRO
ALLOWABLE STRESS: 1.1 X NORMAL AISC ALLOWABLES

UPPER UNIT
DEAD LOAD SELFWEIGHT (140 KIPS)
HYDROSTATIC LOAD: 25' HEAD
IMPACT: 100 KIPS AT CENTERLINE
COMBINED LOAD: 0.75 X HYDROSTATIC + 1.0 X IMPACT
ALLOWABLE STRESS: 1.1 X NORMAL AISC ALLOWABLES

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



1 2 3 4 5

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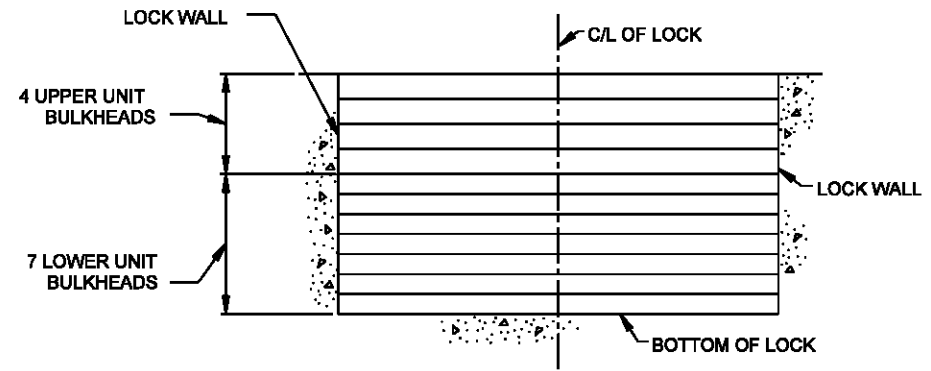
DATE	DESCRIPTION	APPR.

DESIGNED BY: JERRY D. LASTER	DATE: MAY 2018	SOLICITATION NO.:
DRAWN BY: J. M. B. J.	FILE NO.:	
CHECKED BY: DAVID P. LOVETT, JR. P.E.	FILE NUMBER: H40000	
DATE: XX/XX/XX	FILE NAME: sheet_lower.dgn	
SCALE: AS SHOWN	ANSI D	

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT
 NEW ORLEANS, LOUISIANA

MISSISSIPPI RIVER - GULF OUTLET
 NEW LOCK AND CONNECTION CHANNEL
 INDUSTRIAL CANAL LOCK REPLACEMENT
 ORLEANS PARISH, LOUISIANA
 FEASIBILITY STUDY
LOWER MAINT. BULKHEAD
 PLAN AND ELEVATIONS

SHEET IDENTIFICATION
S-401



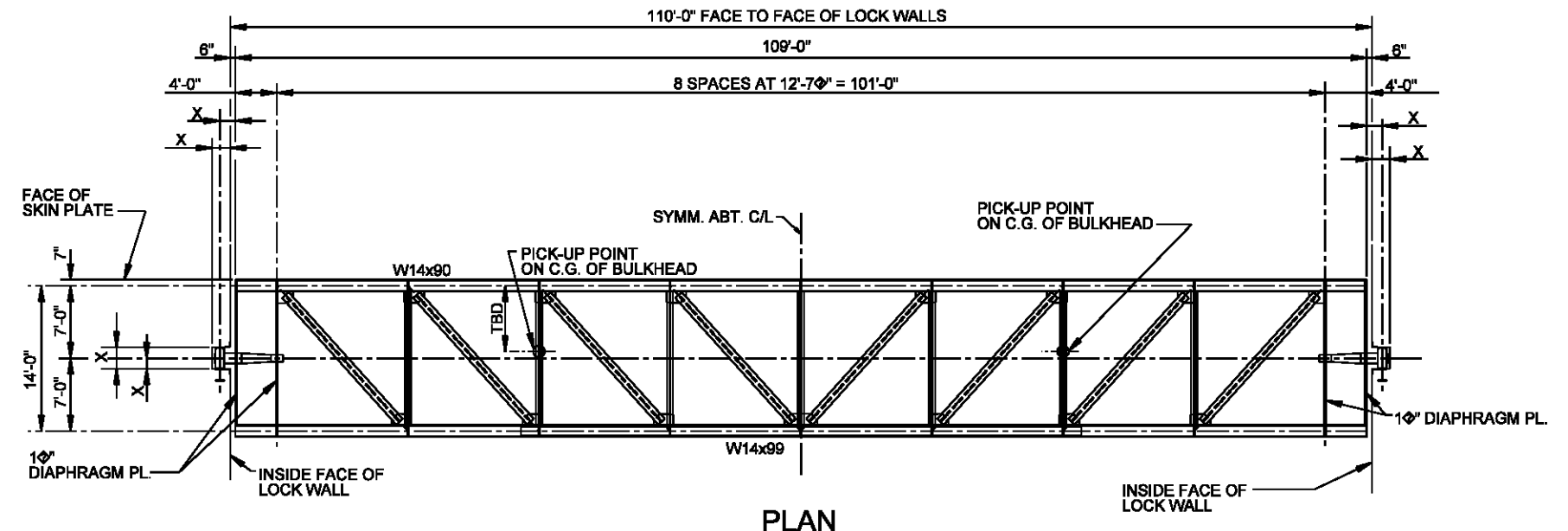
BULKHEAD LOCATION DIAGRAM

NOTE:
 LOWER UNIT BULKHEAD MAX. DESIGN HEAD = 58'-0"
 UPPER UNIT BULKHEAD MAX. DESIGN HEAD = 25'-0"

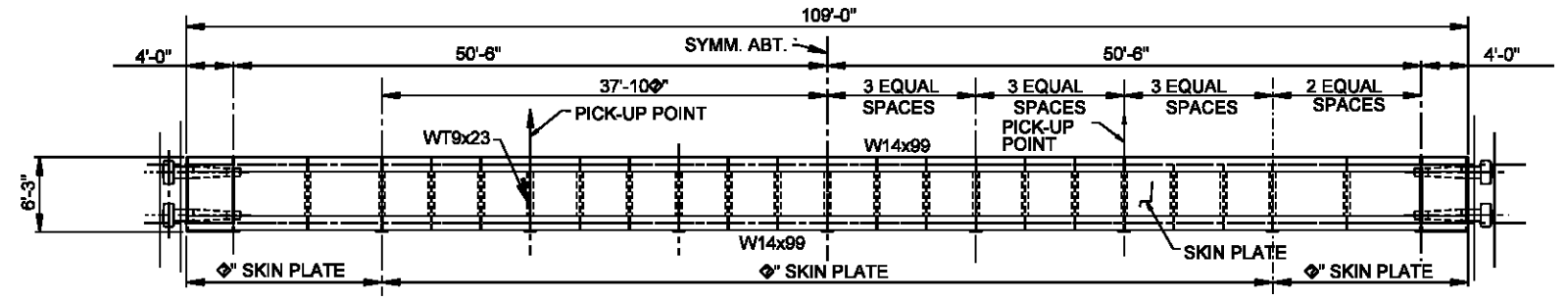
DESIGN DATA
 CLASS C HYDRAULIC STEEL STRUCTURE (EM 1110-2-2105, CHANGE 1, 31 MAY 94)

LOWER UNIT
 DEAD LOAD SELFWEIGHT (150 KIPS)
 HYDROSTATIC LOAD 58' HEAD
 IMPACT: NONE
 COMBINED LOAD: 1.0XDL + 1.0XHLYDRO
 ALLOWABLE STRESS: 1.1 X NORMAL AISC ALLOWABLES

UPPER UNIT
 DEAD LOAD SELFWEIGHT (140 KIPS)
 HYDROSTATIC LOAD: 25' HEAD
 IMPACT: 100 KIPS AT CENTERLINE
 COMBINED LOAD: 0.75 X HYDROSTATIC + 1.0 X IMPACT
 ALLOWABLE STRESS: 1.1 X NORMAL AISC ALLOWABLES

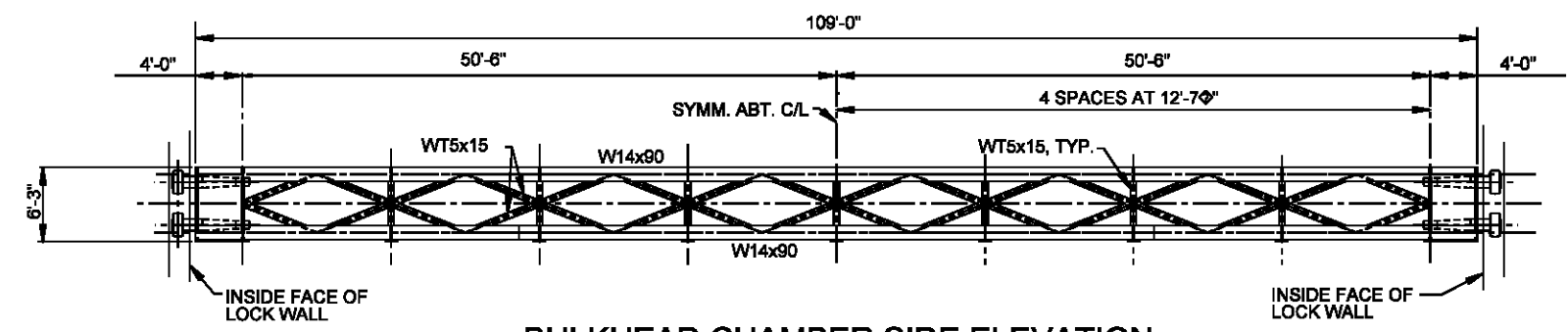


PLAN



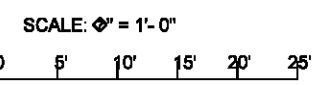
BULKHEAD WET SIDE (SKIN PLATE) ELEVATION

(UPPER UNIT)
 SCALE: 1/4" = 1' - 0"



BULKHEAD CHAMBER SIDE ELEVATION

(UPPER UNIT)
 SCALE: 1/4" = 1' - 0"

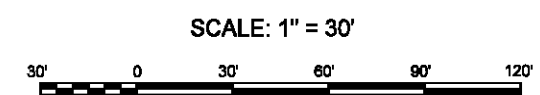
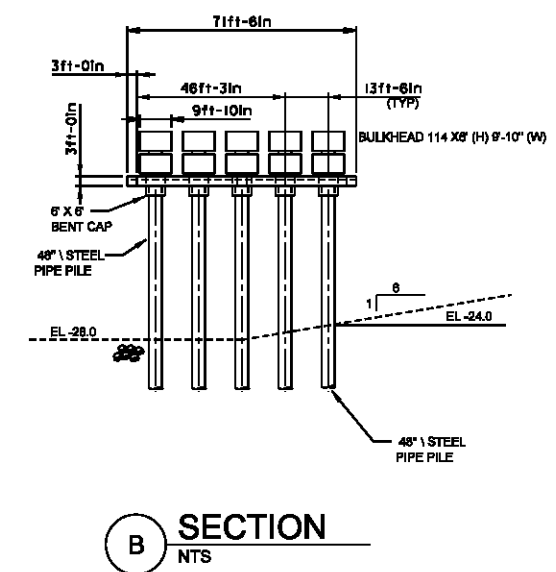
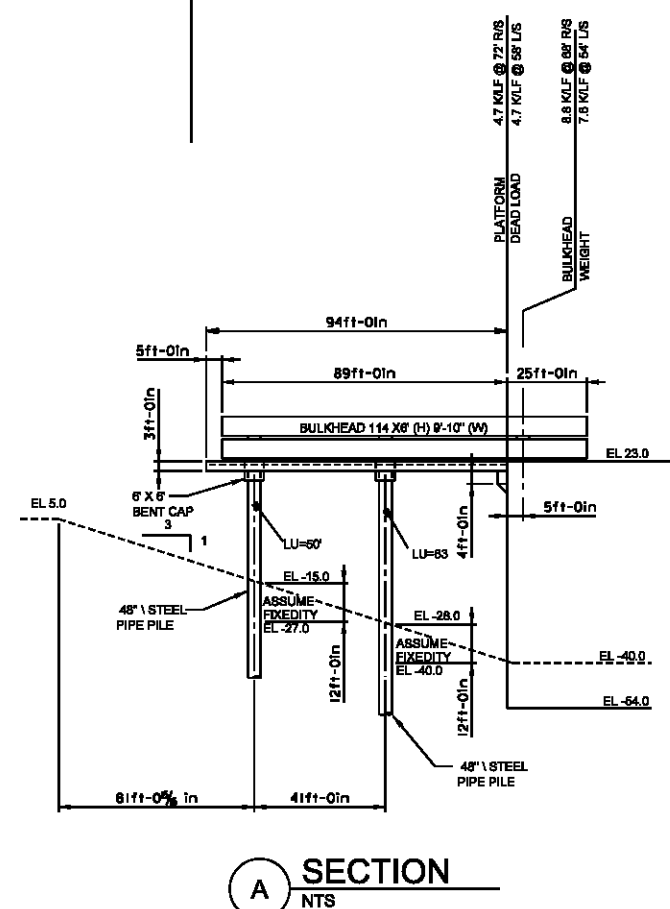
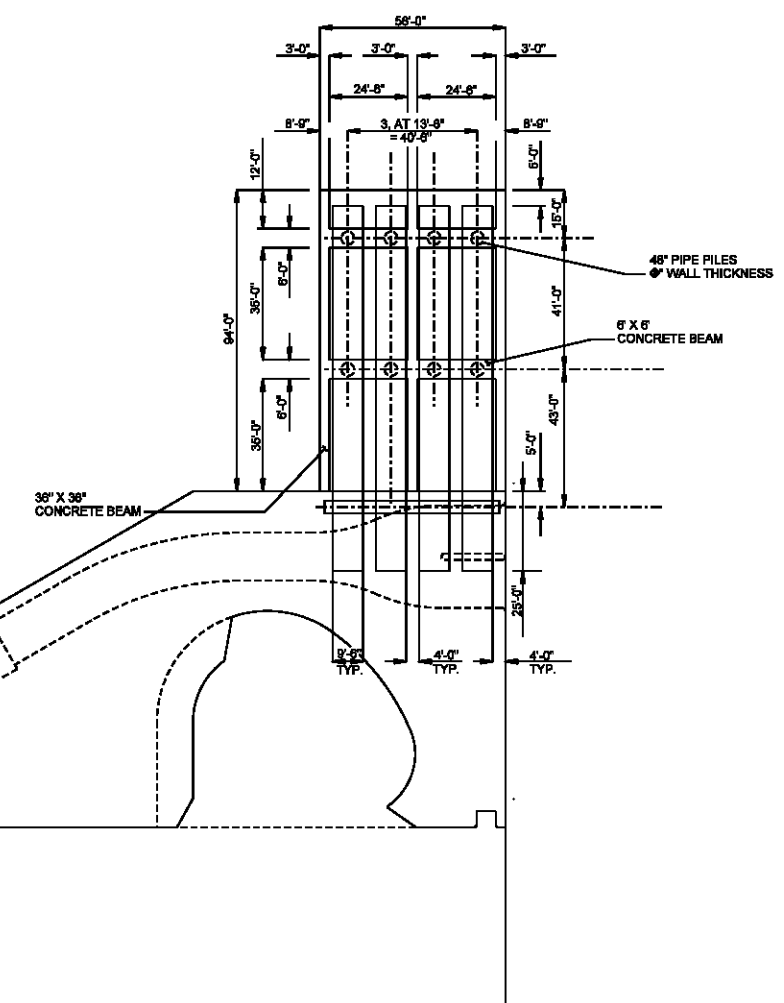
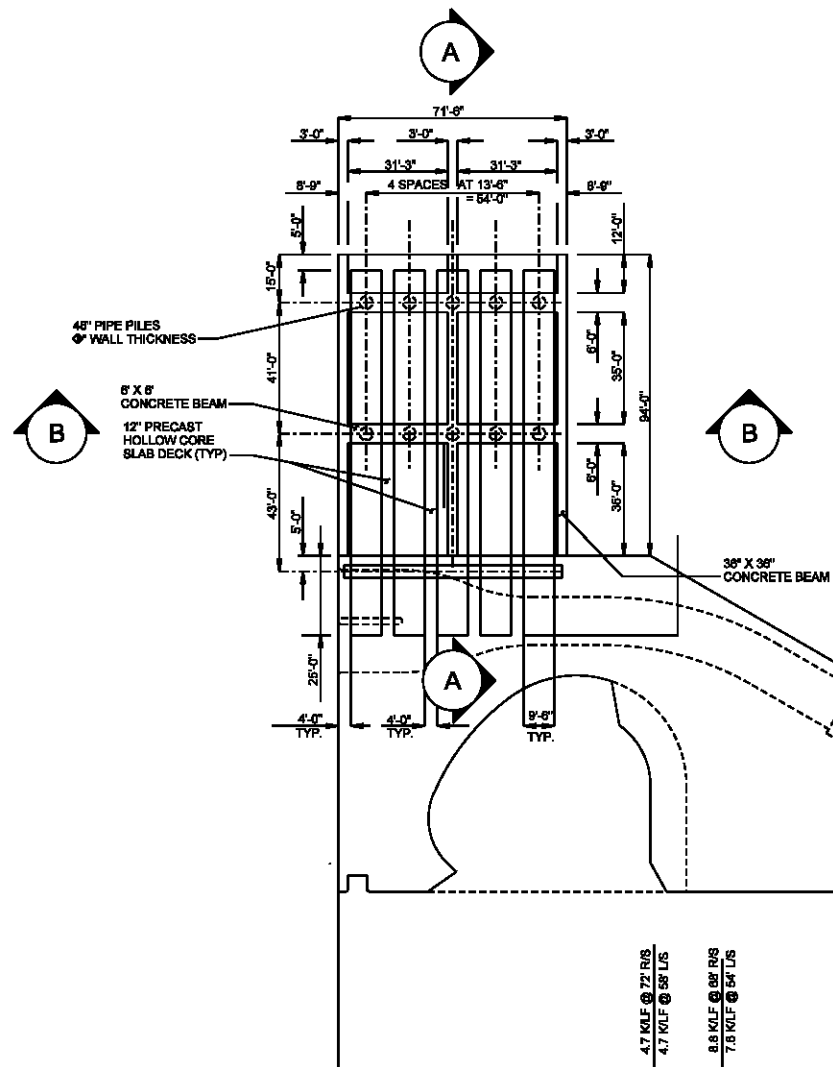


D

C

B

A



MARK	DESCRIPTION	DATE	APPL	MARK	DESCRIPTION	DATE	APPL

DESIGNED BY: JERRY D. LASTER	DATE: MAY 2018	SUBMITTED BY: D.M.	SOLICITATION NO.:
DRAWN BY: DAVID P. LOVETT, JR. P.E.	FILE NUMBER: H40000	DATE: XX	CONTRACT NO.:
CHECKED BY: DAVID P. LOVETT, JR. P.E.	FILE NAME: sheet_maint.dgn	DATE: XX	CONTRACT NO.:
SCALE: AS SHOWN	FILE NAME: sheet_maint.dgn	DATE: XX	CONTRACT NO.:

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT
 NEW ORLEANS, LOUISIANA

MISSISSIPPI RIVER - GULF OUTLET
 NEW LOCK AND CONNECTION CHANNEL
 INDUSTRIAL CANAL LOCK REPLACEMENT
 ORLEANS PARISH, LOUISIANA
 FEASIBILITY STUDY

MAINT. BULKHEAD SUPPORTS
 FRAME PLAN AND ELEVATIONS

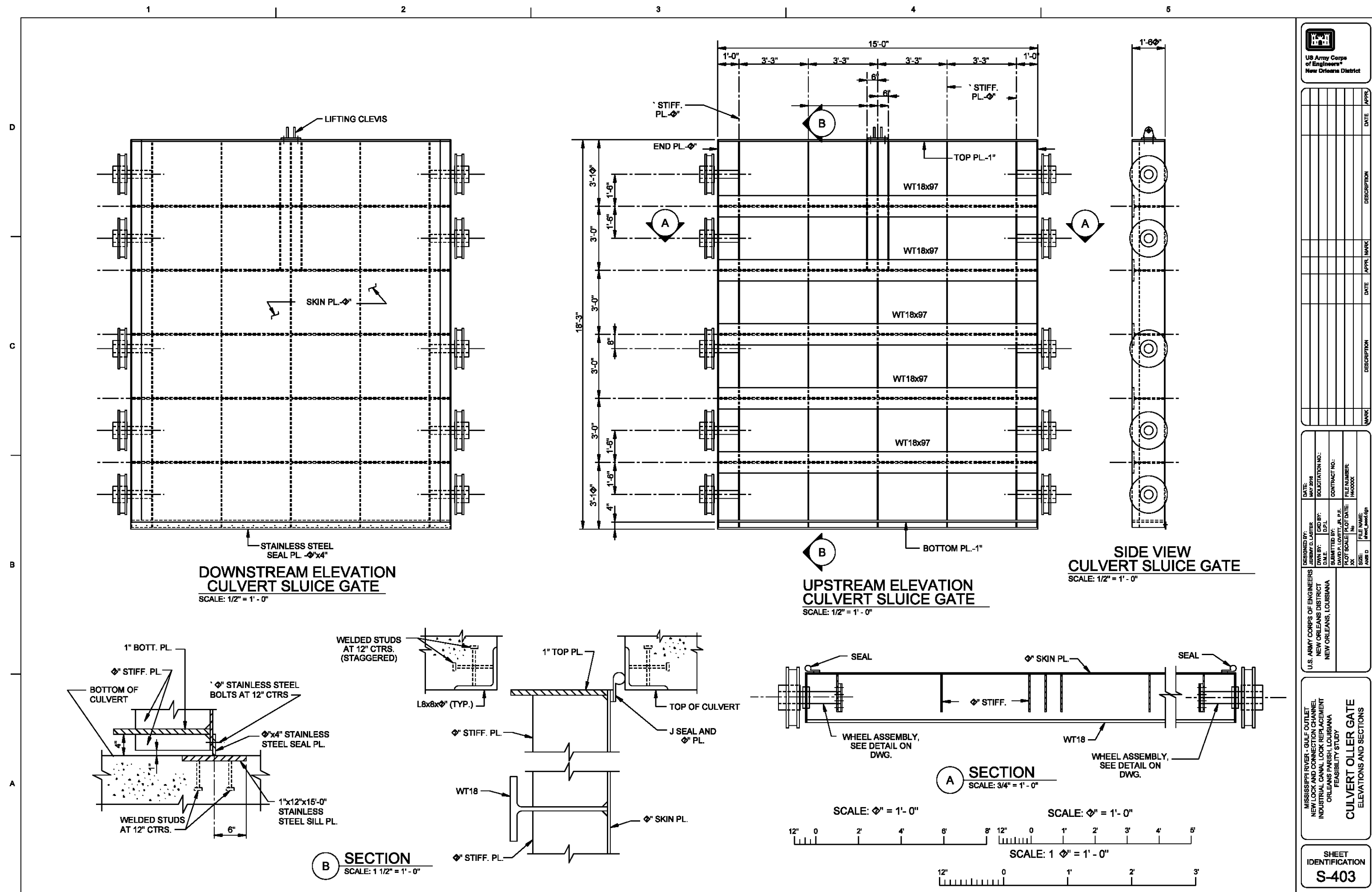
SHEET IDENTIFICATION
S-402

DATE	DESCRIPTION	APPR.

DESIGNED BY: ANDREW D. LASTER	DATE: MAY 2018
DRAWN BY: D.M. M	SOLICITATION NO.:
ISSUED BY: DAVID P. LOVETT, JR. P.E.	CONTRACT NO.:
PROJECT NAME: MISSISSIPPI RIVER - GULF OUTLET	FILE NUMBER: H4000K
SCALE: AS SHOWN	DATE: XX
NO.:	DATE:
FILE NAME: sluic_gate.dwg	DATE:
APP. ID:	DATE:

MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY
CULVERT OLLER GATE
ELEVATIONS AND SECTIONS

SHEET IDENTIFICATION
S-403



**DOWNSTREAM ELEVATION
CULVERT SLUICE GATE**
SCALE: 1/2" = 1' - 0"

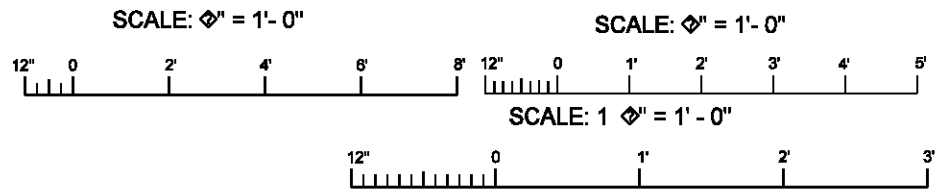
**UPSTREAM ELEVATION
CULVERT SLUICE GATE**
SCALE: 1/2" = 1' - 0"

**SIDE VIEW
CULVERT SLUICE GATE**
SCALE: 1/2" = 1' - 0"

SECTION A
SCALE: 3/4" = 1' - 0"

SECTION B
SCALE: 1 1/2" = 1' - 0"

SECTION A
SCALE: 3/4" = 1' - 0"





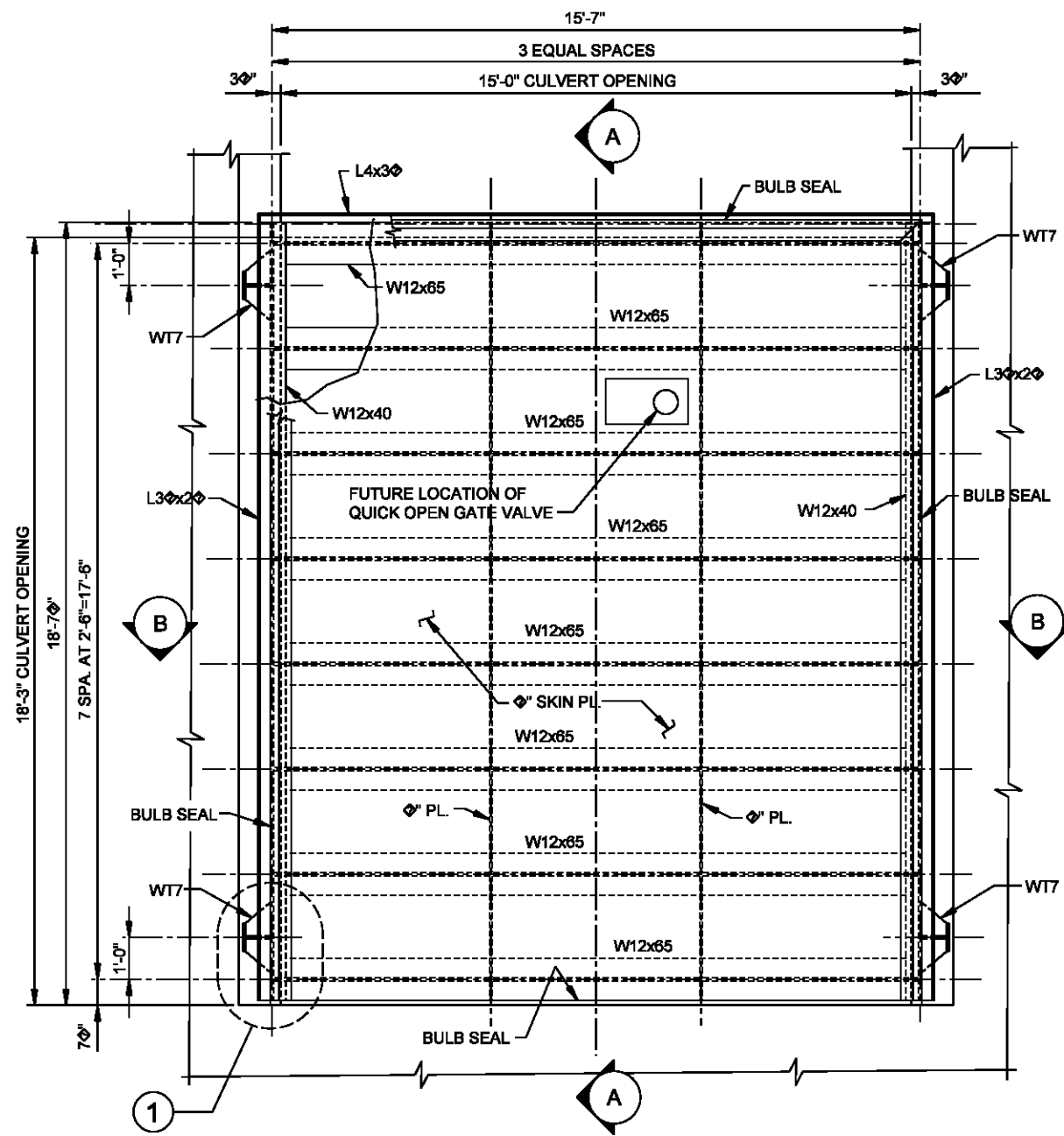
US Army Corps of Engineers
New Orleans District

DATE	DESCRIPTION

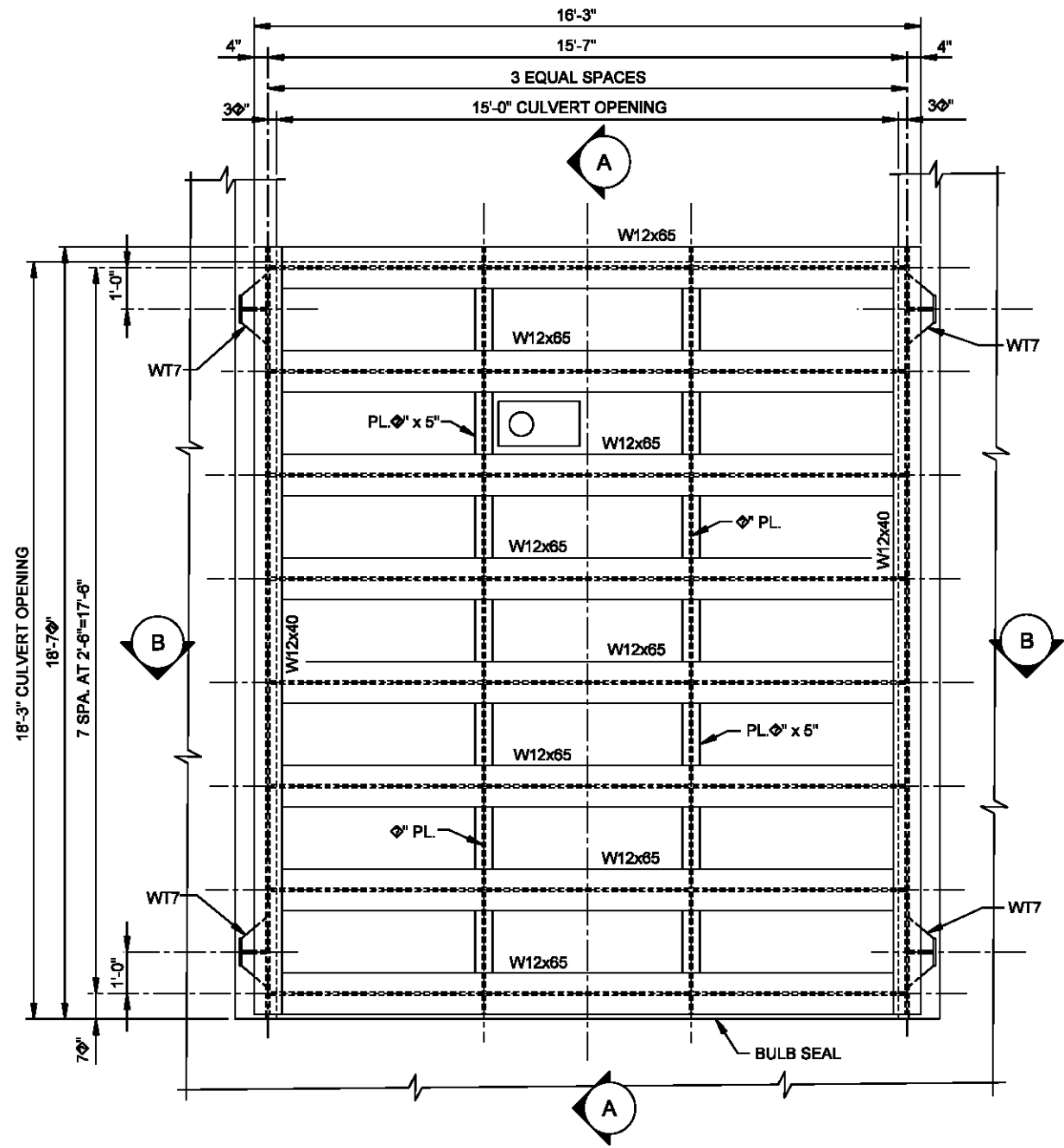
DESIGNED BY: JERRY D. LASTER	DATE: MAY 2018	DESIGNED BY: JERRY D. LASTER	DATE: MAY 2018
DRAWN BY: DAVID P. LOVETT, JR. P.E.	DATE: MAY 2018	DRAWN BY: DAVID P. LOVETT, JR. P.E.	DATE: MAY 2018
FILE NUMBER: H40000		FILE NUMBER: H40000	

MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY
CULVERT ROLLER GATE
ELEVATIONS AND SECTIONS

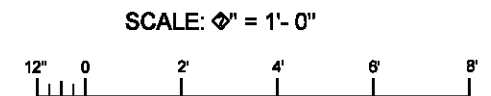
SHEET IDENTIFICATION
S-404



**DOWNSTREAM ELEVATION
CULVERT MAINTENANCE BULKHEAD**
SCALE: 1/2" = 1' - 0"



**UPSTREAM ELEVATION
CULVERT MAINTENANCE BULKHEAD**
SCALE: 1/2" = 1' - 0"

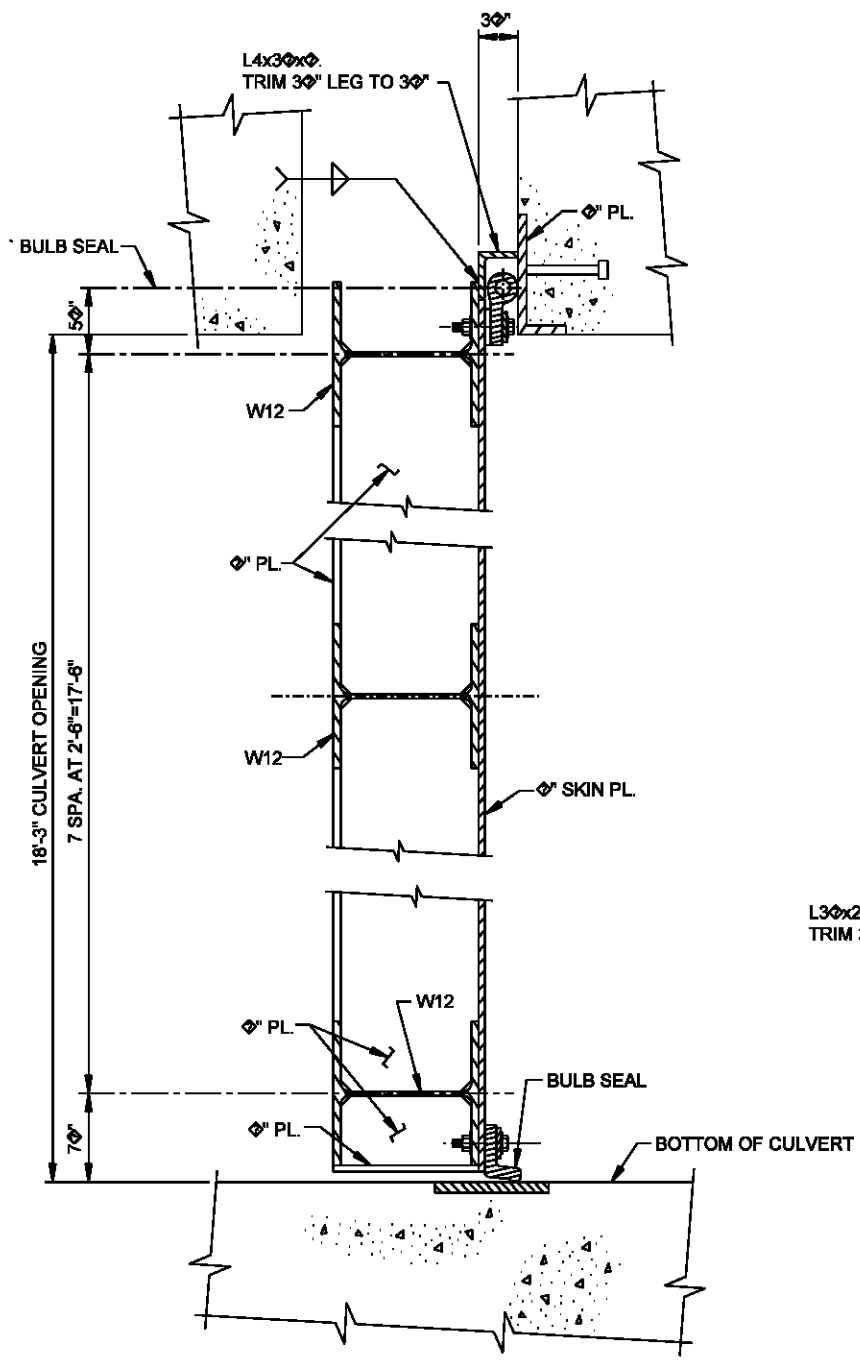


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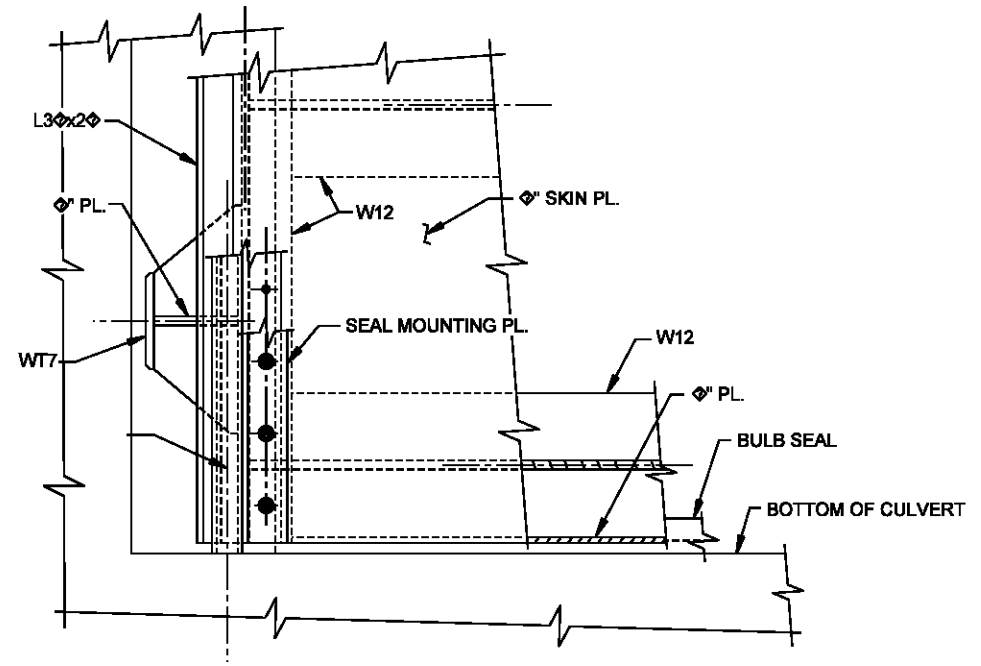
C

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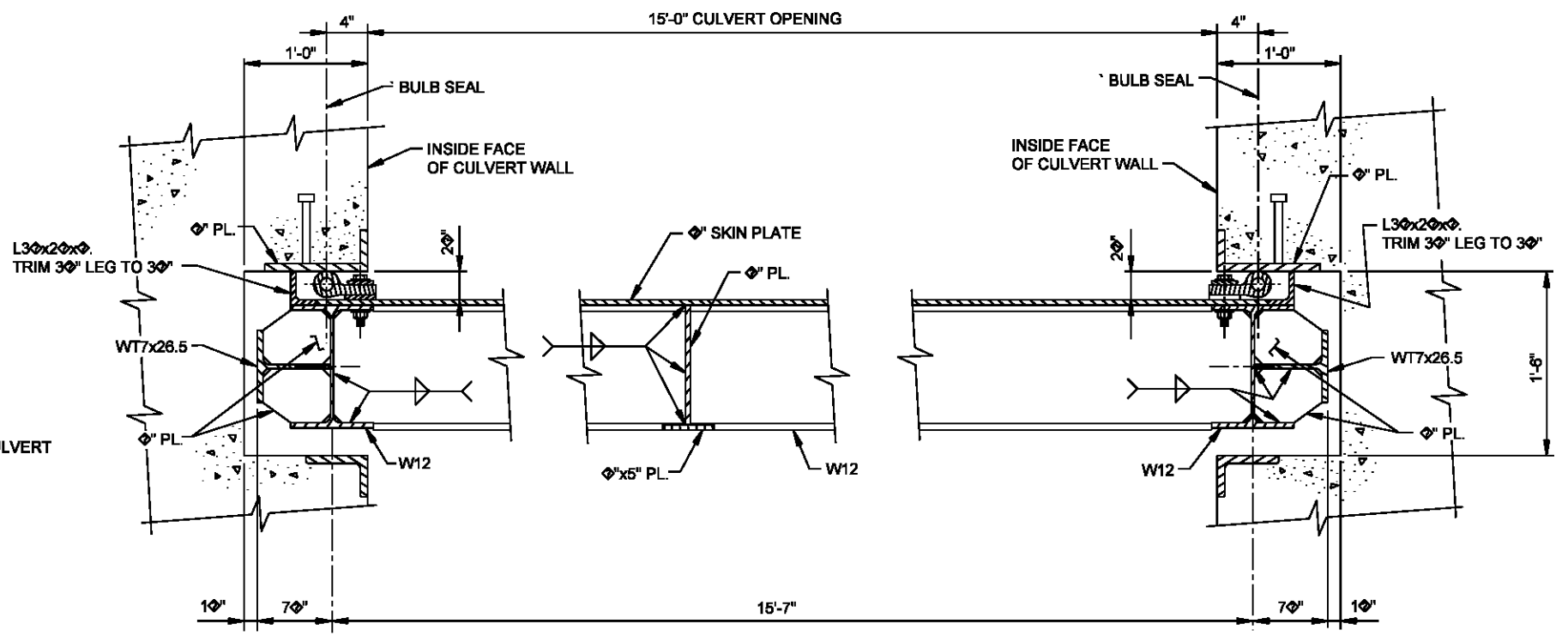
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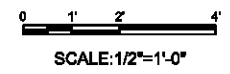
A SECTION
SCALE: 1 1/2" = 1' - 0"



1 DETAIL
SCALE: 1 1/2" = 1' - 0"



B SECTION
SCALE: 1 1/2" = 1' - 0"



DATE	DESCRIPTION	MARK	DATE	APPR

DESIGNED BY: JERRY D. LAYTON	DATE: MAY 2018	SUBMITTED BY: DAN M. ...	CONTRACT NO.:
ISSUED BY: DAVID P. LOVETT, JR. P.E.	FILE NO.:	FILE DATE:	FILE NUMBER: H40000
SCALE: AS SHOWN	FILE NAME: Sheet_Head.dgn	APP'D:	

MISSISSIPPI RIVER - GULF OUTLET
NEW LOCK AND CONNECTION CHANNEL
INDUSTRIAL CANAL LOCK REPLACEMENT
ORLEANS PARISH, LOUISIANA
FEASIBILITY STUDY
**CULV. MAINTENANCE
BULKHEAD**
SECTIONS AND DETAILS

SHEET
IDENTIFICATION
S-405