

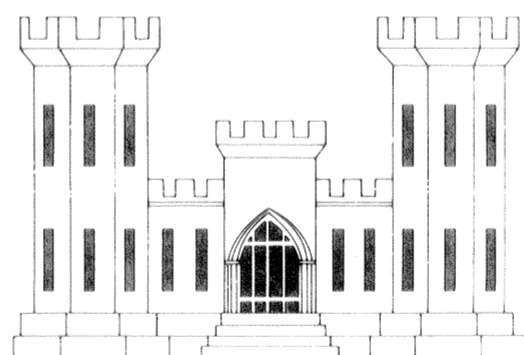
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
ORLEANS PARISH, LA.

INNER HARBOR NAVIGATION CANAL WEST LEVEE

FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE, (STA. 206+16.73 TO STA. 26+55)

PLANS FOR

LEVEE AND FLOODWALL



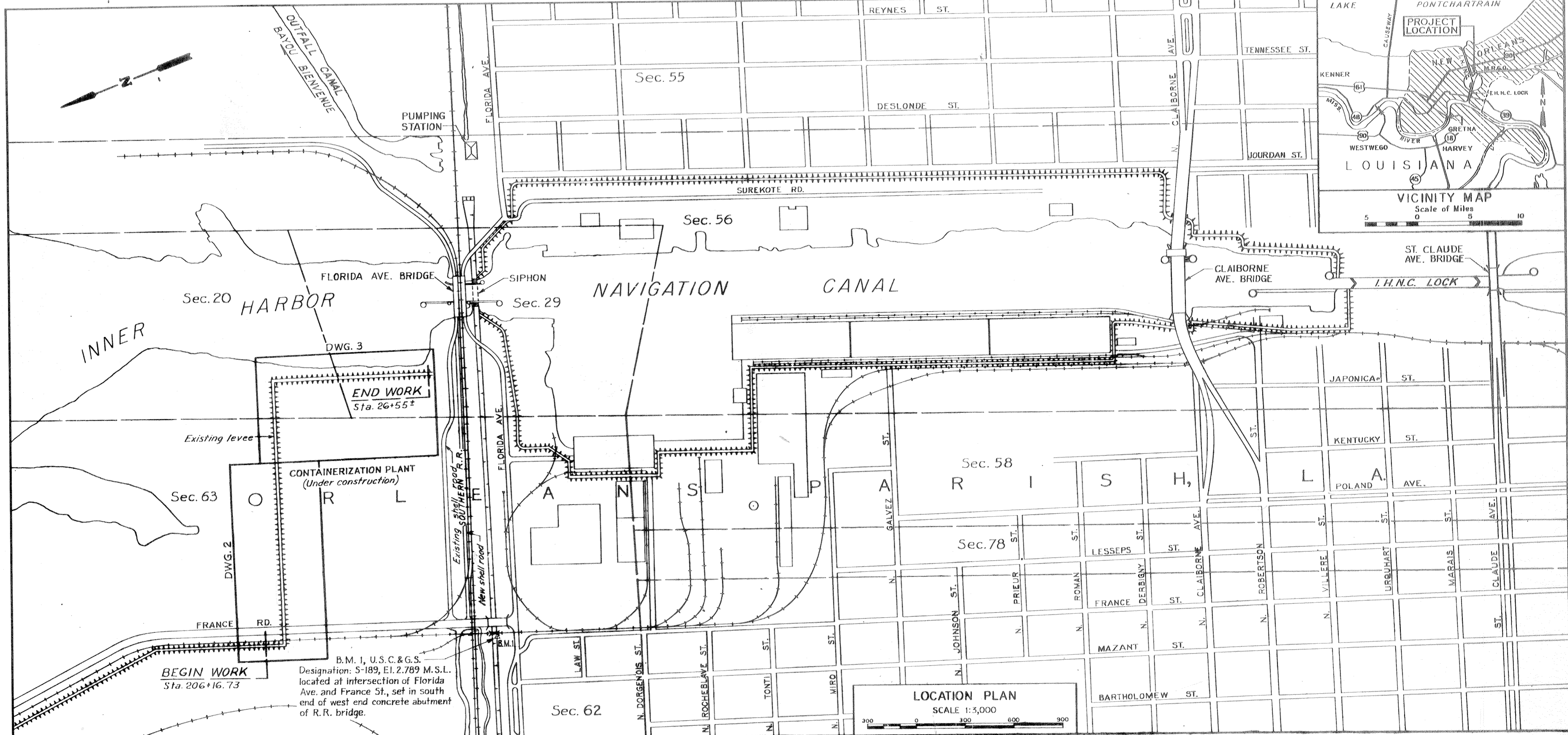
*Safety is a Part
of Your Contract*

DRAWINGS IN THIS FOLIO
HAVE BEEN REDUCED ONE
HALF THE ORIGINAL SCALE

U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS, LA.

CORPS OF ENGINEERS

1972



GENERAL NOTES

Elevations are expressed in feet and refer to mean sea level. Items marked C.R.S. shall be corrosion-resisting steel, solid or clad. All unformed surfaces shall be given a wood float finish. Unless otherwise indicated, all exterior formed surfaces not to be covered by backfill shall be class "A" finish. All exterior formed surfaces to be covered by backfill shall be class "D" finish. The exposed surface of all floodwalls and gate monoliths will have a sack-rubbed finish both sides.

All exposed joints, edges, external corners, vertical expansion joints and horizontal construction joints shall be chamfered 3/4 inch and dummy chamfers and false joints shall be used to provide a neat and uniform appearance. See dwg. 5.

Unless otherwise indicated, all "I"-wall monoliths shall be 30 feet ± and each "I"-wall joint shall begin and end at sheet pile interlocks. All primary reinforcement shall have a minimum cover of 2 1/2 inches. The cover of secondary reinforcing may be reduced from the above by the size of the bar.

Reinforcing tie spacing in columns shall be reduced where necessary to miss 4" recesses for gate latches.

Reinforcing bar designation numbers conform to the current numbering system of the "Concrete Reinforcing Steel Institute."

All reinforcing splices shall be lapped according to the following table:

Bar Size No.	3	4	5	6	7	8	9	10
Minimum Lap Length, In.	12	14	18	22	25	30	39	49

All holes cut in sheet piling to pass reinforcement shall not exceed 2". Before placing concrete in the base slab remove the concrete and stirrups from the driving head of the piling to expose the reinforcing steel as shown on dwg. 12.

Stud anchors shall be welded in accordance with para 7-12.4 of specs.

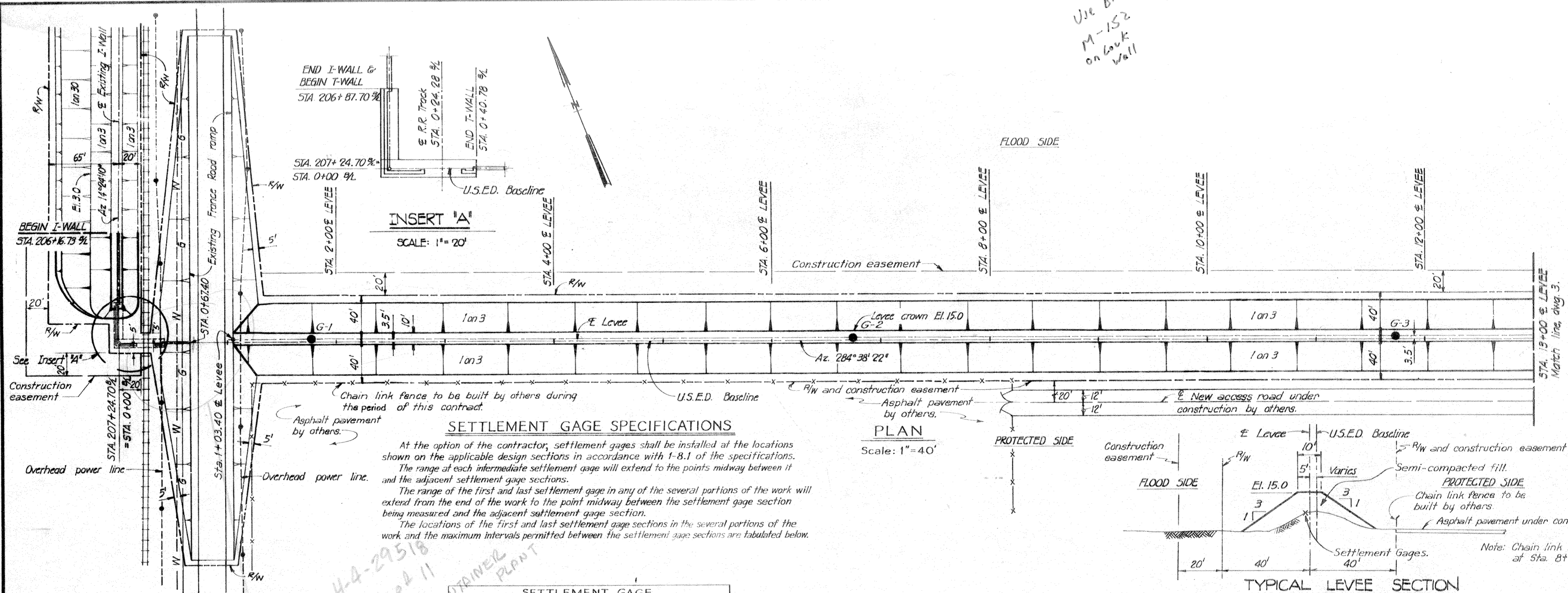
INDEX TO DRAWINGS

DWG.	TITLE	DWG.	TITLE
GENERAL DRAWINGS			
1	LOCATION PLAN, VICINITY MAP AND INDEX	19	SWING GATE - SEALS
2	PLAN AND PROFILE	20	SWING GATE - HINGE DETAILS
3	PLAN AND PROFILE	21	SWING GATE - HINGE DETAILS
4	PILING AND MONOLITH LAYOUT	MISCELLANEOUS	
5	TYPICAL WALL AND LEVEE SECTIONS	22	MISCELLANEOUS DETAILS
6	TYPICAL WALL JOINTS	23	RAILROAD FALSEWORK - GATE 10-W
7	BORINGS, REFERENCE BOLTS AND BONDING OF PILING	24	CONSTRUCTION DETAIL OF WHARF RAMPS
GATE MONOLITHS - MASONRY AND REINFORCEMENT			
8	GATE MONOLITH - GATE 10-W	25	BORROW AREA LOCATION - BONNET CARRE SPILLWAY
9	T-WALL MONOLITH, STA. 206+87.80 TO 201+20.70	26	SOIL BORING LEGEND
10	GATE MONOLITHS - GATES 11-W AND 12-W		
11	STORAGE MONOLITHS - GATES 11-W AND 12-W		
12	PRECAST, PRESTRESSED CONCRETE PILE DETAIL AND SWING GATE LATCHING DEVICES		
ROLLER GATES AND SWING GATE			
13	MISCELLANEOUS DETAILS FOR ROLLER GATES		
14	SWING GATE 10-W		
15	ROLLER GATES 11-W AND 12-W		
16	ROLLER GATES 11-W AND 12-W		
17	ROLLER GATE - SEALS		
18	ROLLER GATE DETAILS		



REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA.			
SUBMITTED:		LAKE PONCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION)	
APPROVED:		INNER HARBOR NAVIGATION CANAL - WEST LEVEE	
DESIGNED:		FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE	
DRAWN:		STA. 206+16.73 TO STA. 26+55.0	
CHECKED:		LEVEE AND FLOODWALL	
DATE:		ORLEANS PARISH, LOUISIANA	
SCALE:		LOCATION PLAN,	
FILE NO.:		VICINITY MAP AND INDEX	
T. F. P.	S.S.G. D.A.M.	JULY 1972	AS SHOWN
SPEC NO.:		H-4-25958	
DACW29-73-B-0009		dwg. 1	of 26

Use BM
M-152
on back wall

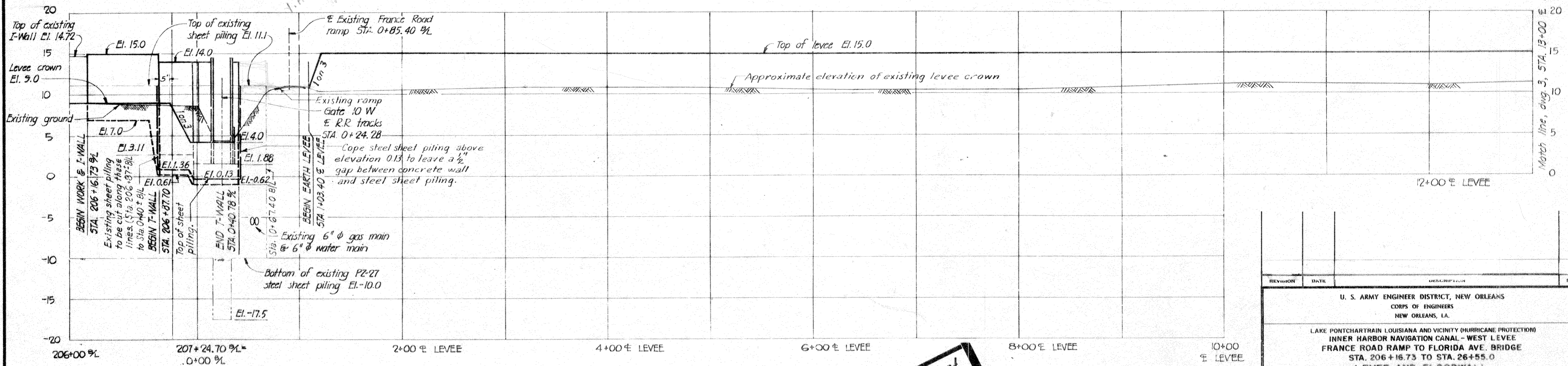
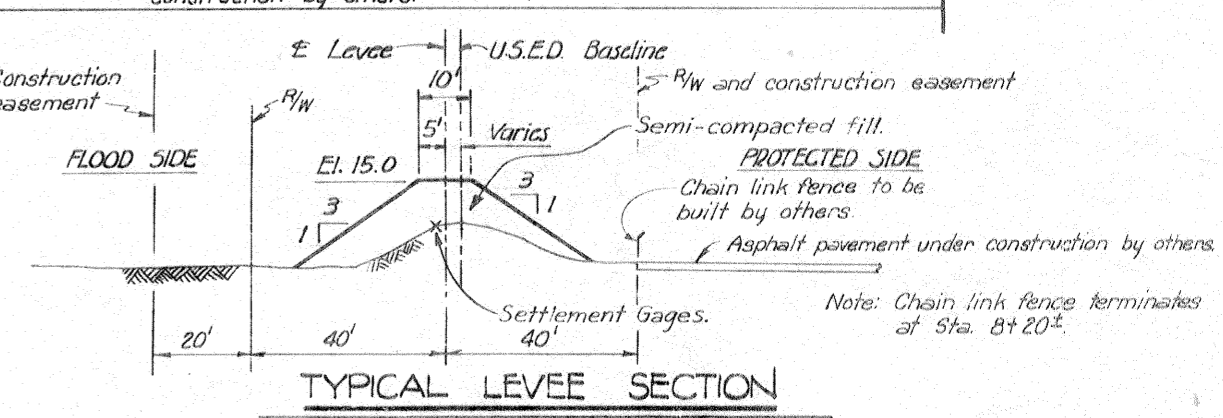


SETTLEMENT GAGE SPECIFICATIONS

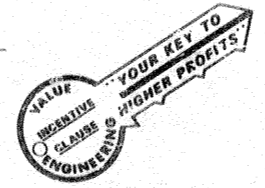
At the option of the contractor, settlement gages shall be installed at the locations shown on the applicable design sections in accordance with 1-8.1 of the specifications. The range at each intermediate settlement gage will extend to the points midway between it and the adjacent settlement gage sections. The range of the first and last settlement gage in any of the several portions of the work will extend from the end of the work to the point midway between the settlement gage section being measured and the adjacent settlement gage section. The locations of the first and last settlement gage sections in the several portions of the work and the maximum intervals permitted between the settlement gage sections are tabulated below.

SETTLEMENT GAGE		
FROM STATION	TO STATION	INTERVALS
1+50	16+50	300'

1/8" Gage Steel Plate, Square Minimum 2'X2'



PROFILE
SCALE: Horiz. 1"=40'
Vert. 1"=5'

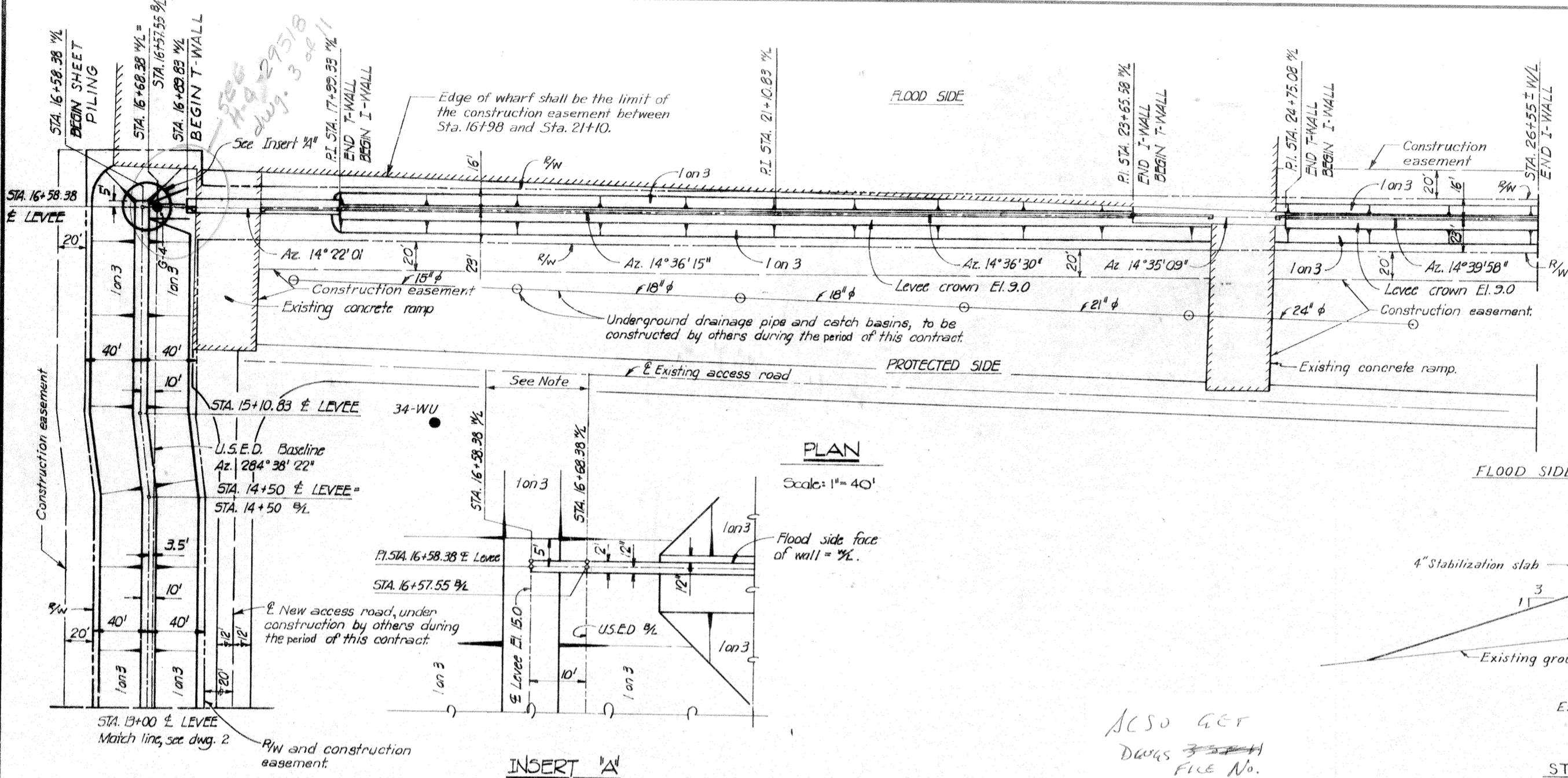


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Notes:
For general notes see dwg. 1
For soil borings G-1, G-2, and G-3 see dwg. 7.

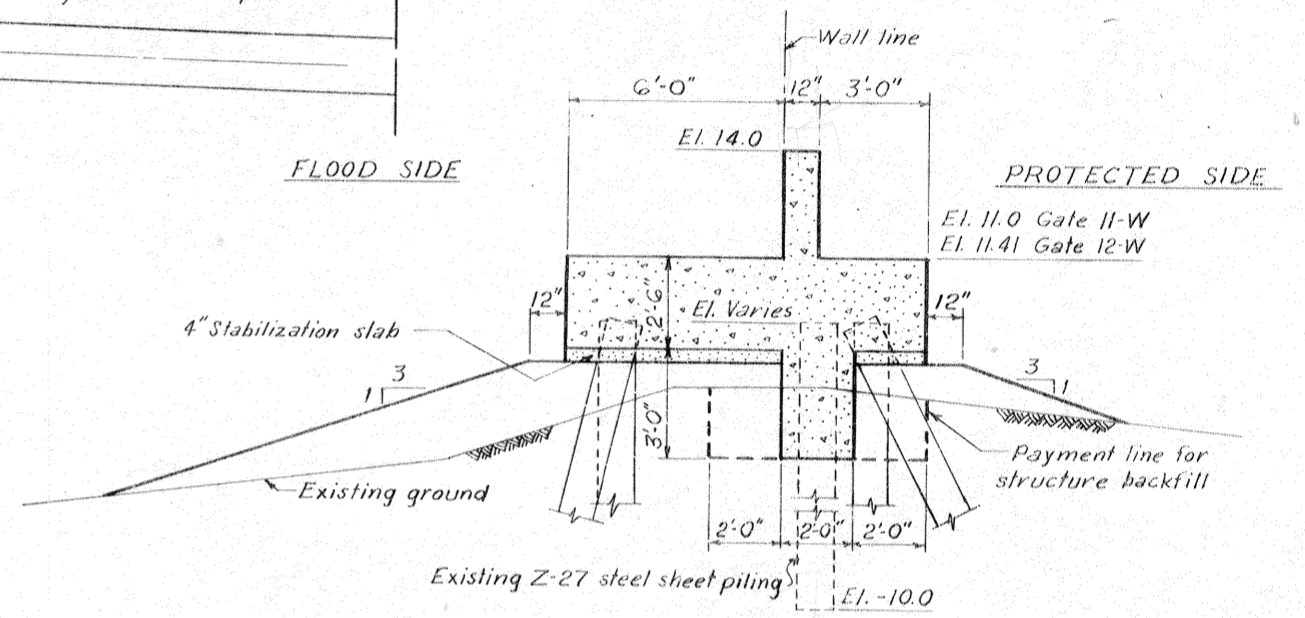
See H-4-29518
dwg. 3 of 11
I.H.M.C. WEST LEVEE
PLA. ALE. & CONTAINER PLANT

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
T.F.P.	R.D.M.	D.A.M.	JULY 1972	AS SHOWN	H-4-259
<p>U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA.</p> <p>LAKE PONCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA</p> <p>PLAN AND PROFILE</p>					
SUBMITTED			SPEC. NO.		
David A. M... ..			DACW29-73-B-0009		
			DWG. 2 OF 21		

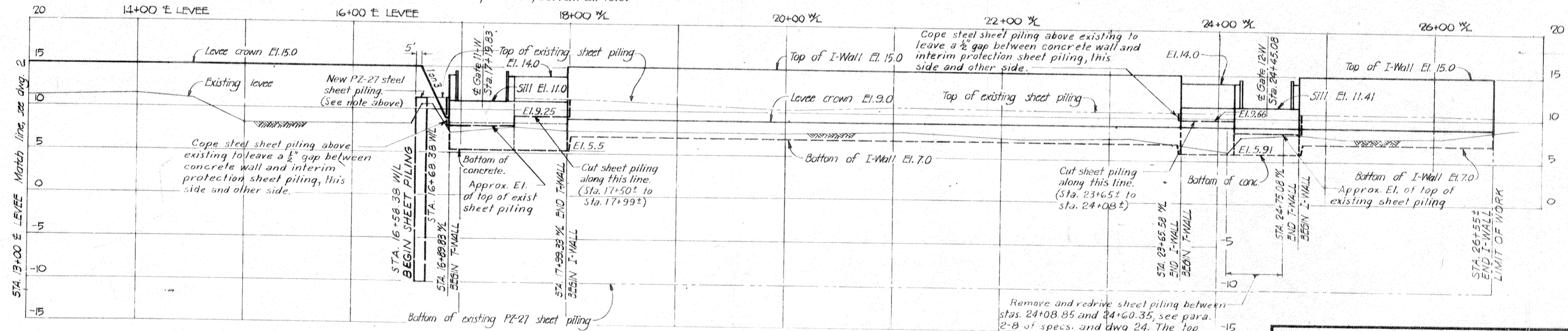


INSERT 'A'
Scale: 1"=10'

Note: The contractor shall drive 10 linear feet (±) of PZ-27 steel sheet piling between Sta. 16+58.38 W/L and Sta. 16+68.38 W/L - top El. 11.50, bottom El. -10.0.

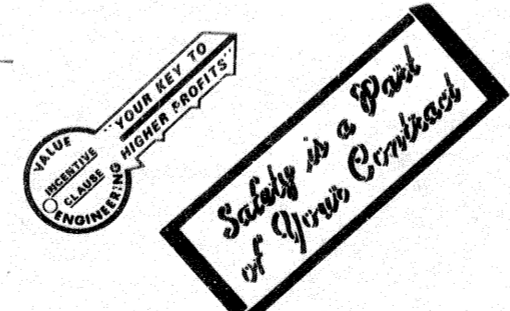


STA. 16+89.83 W/L TO STA. 17+99.33 W/L
STA. 23+65.58 W/L TO STA. 24+75.08 W/L
TYPICAL SECTION FOR T-WALL AND GATE MONOLITH
Scale: 3/8"=1'-0"



- Notes:
1. For general notes, see dwg. 1.
 2. For soil borings G-4, G-5 and 34-WU, see dwg. 7.
 3. Sheet piling between stas. 24+08.85 and 24+60.35 shall be pulled and redriven.
 3. Do not cap steel sheet piling between stas. 16+58.38 and 16+89.83.

PROFILE
Scale: Horiz. 1"=40', Vert. 1"=5'



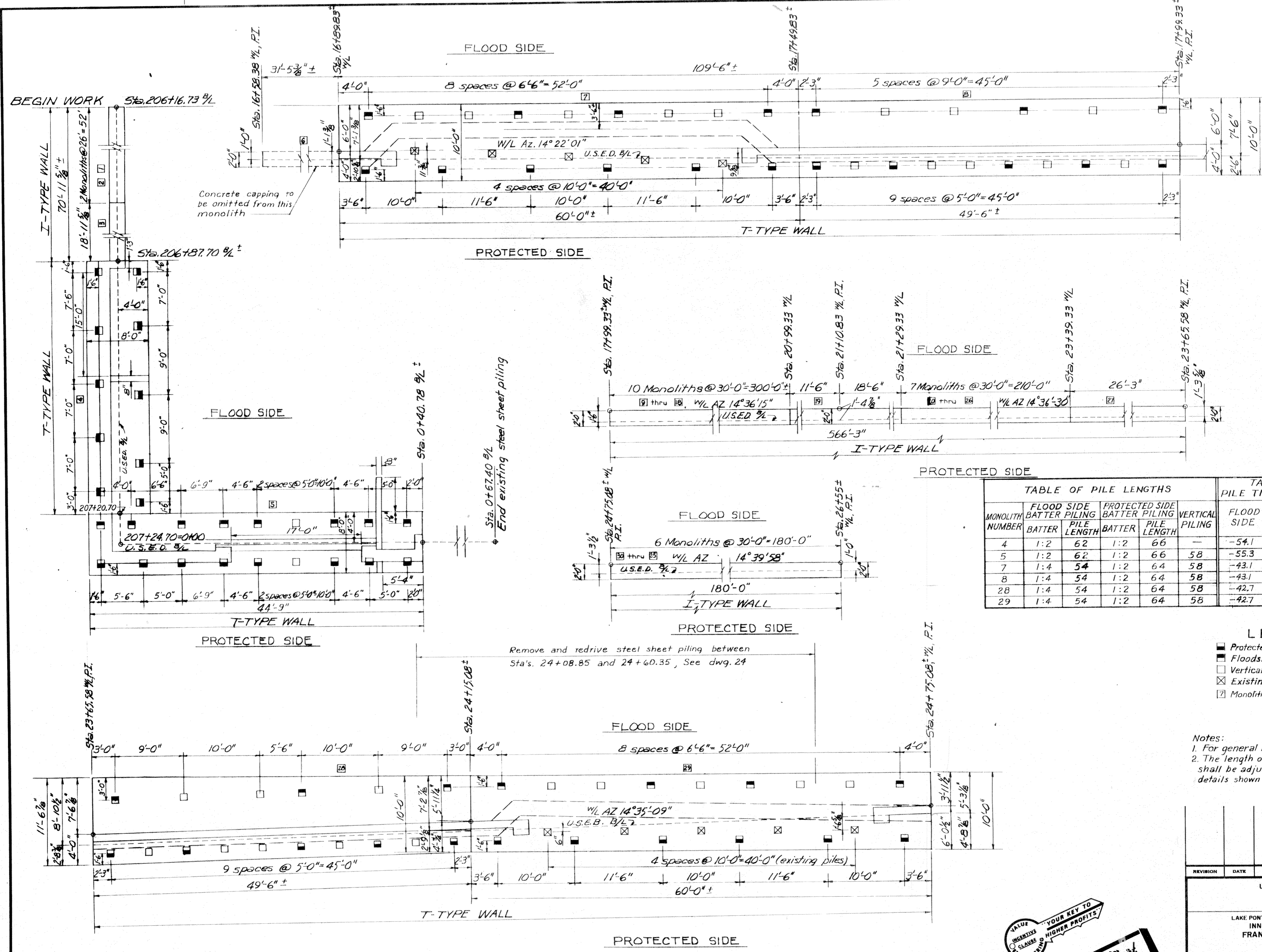
Remove and redrive sheet piling between stas. 24+08.85 and 24+60.35, see para. 2-B of specs. and dwg. 24. The top elevation of the redriven sheet piling shall match the elevation of the existing sheet piling.

U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LA.

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY (HURRICANE PROTECTION)
INNER HARBOR NAVIGATION CANAL - WEST LEVEE
FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE
STA. 206+16.73 TO STA. 26+55.0
LEVEE AND FLOODWALL
ORLEANS PARISH, LOUISIANA

PLAN AND PROFILE

DESIGNED: T.F.R.	DRAWN: R.D.M.	CHECKED: D.A.M.	DATE: JULY 1972	SCALE: AS SHOWN	FILE NO. H-4-25958
SUBMITTED: <i>David A. Mauldin</i>			APPROVED: DACW29-73-B-0009	DWG. 3	OF 26



MONOLITH NUMBER	TABLE OF PILE LENGTHS				VERTICAL PILING	TABLE OF PILE TIP ELEVATIONS	
	FLOOD SIDE BATTER	FLOOD SIDE PILE LENGTH	PROTECTED SIDE BATTER	PROTECTED SIDE PILE LENGTH		FLOOD SIDE	PROTECTED SIDE
4	1:2	62	1:2	66	—	-54.1	-57.8
5	1:2	62	1:2	66	58	-55.3	-58.9
7	1:4	54	1:2	64	58	-43.1	-48.0
8	1:4	54	1:2	64	58	-43.1	-48.0
28	1:4	54	1:2	64	58	-42.7	-47.6
29	1:4	54	1:2	64	58	-42.7	-47.6

- LEGEND**
- Protected side batter piling.
 - Floodside batter piling.
 - Vertical piling.
 - ⊗ Existing piling.
 - ⊠ Monolith No. (Typical)

Notes:
 1. For general notes, see dwg. 1.
 2. The length of adjacent T-wall and I-wall monoliths shall be adjusted to conform with the appropriate details shown on dwg. G.

PLAN
 Scale: 1"=5'-0"



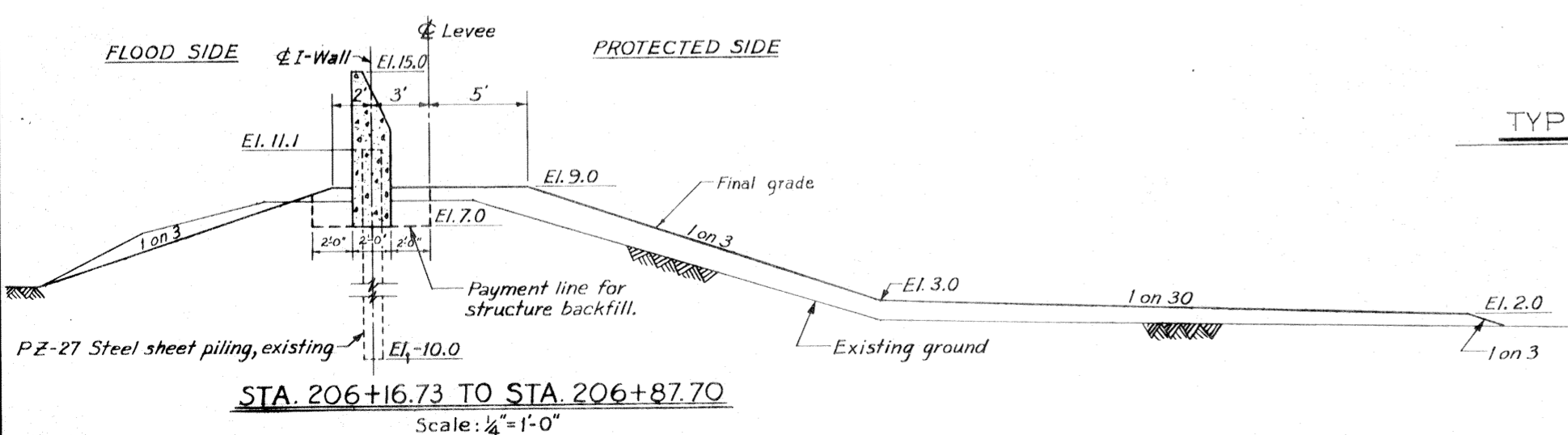
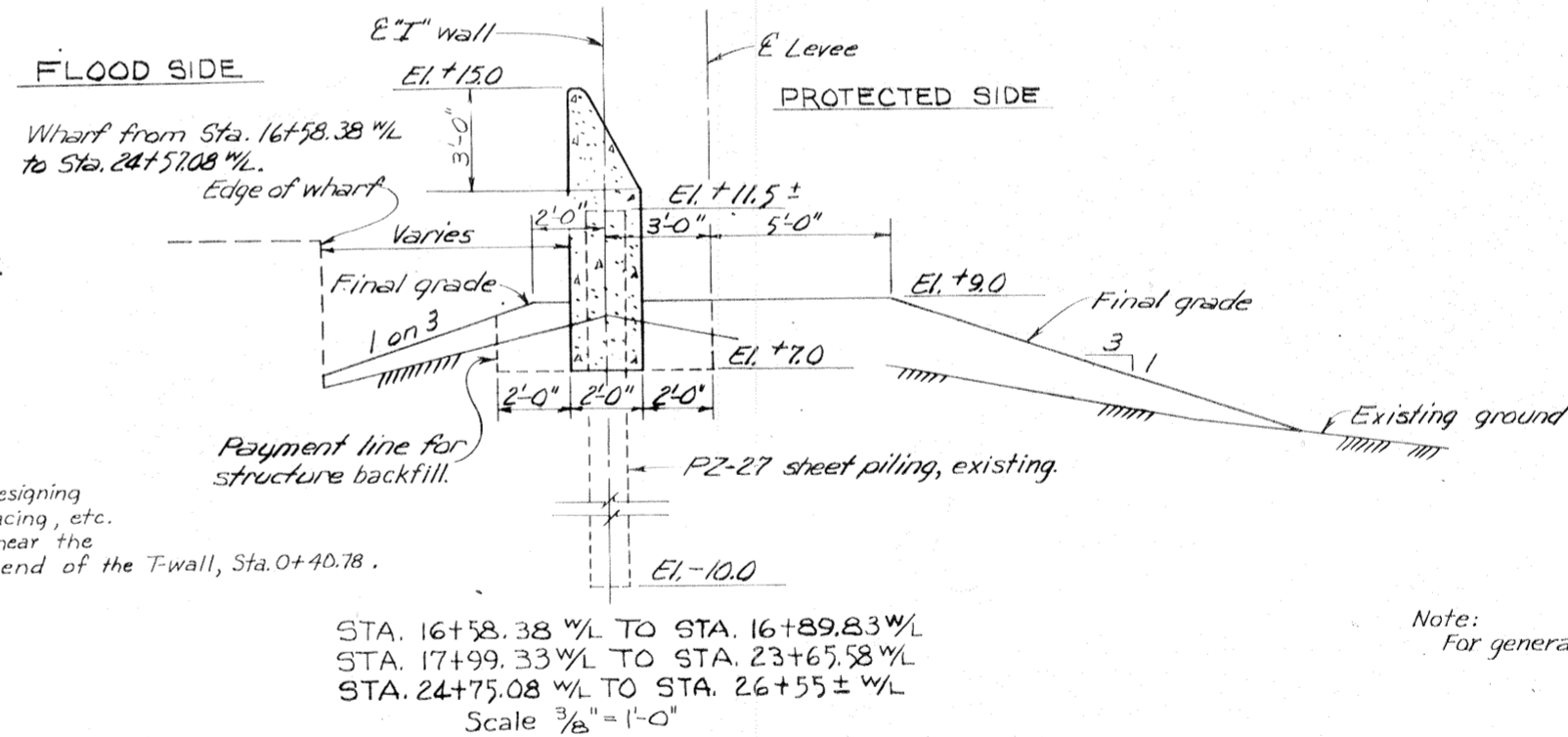
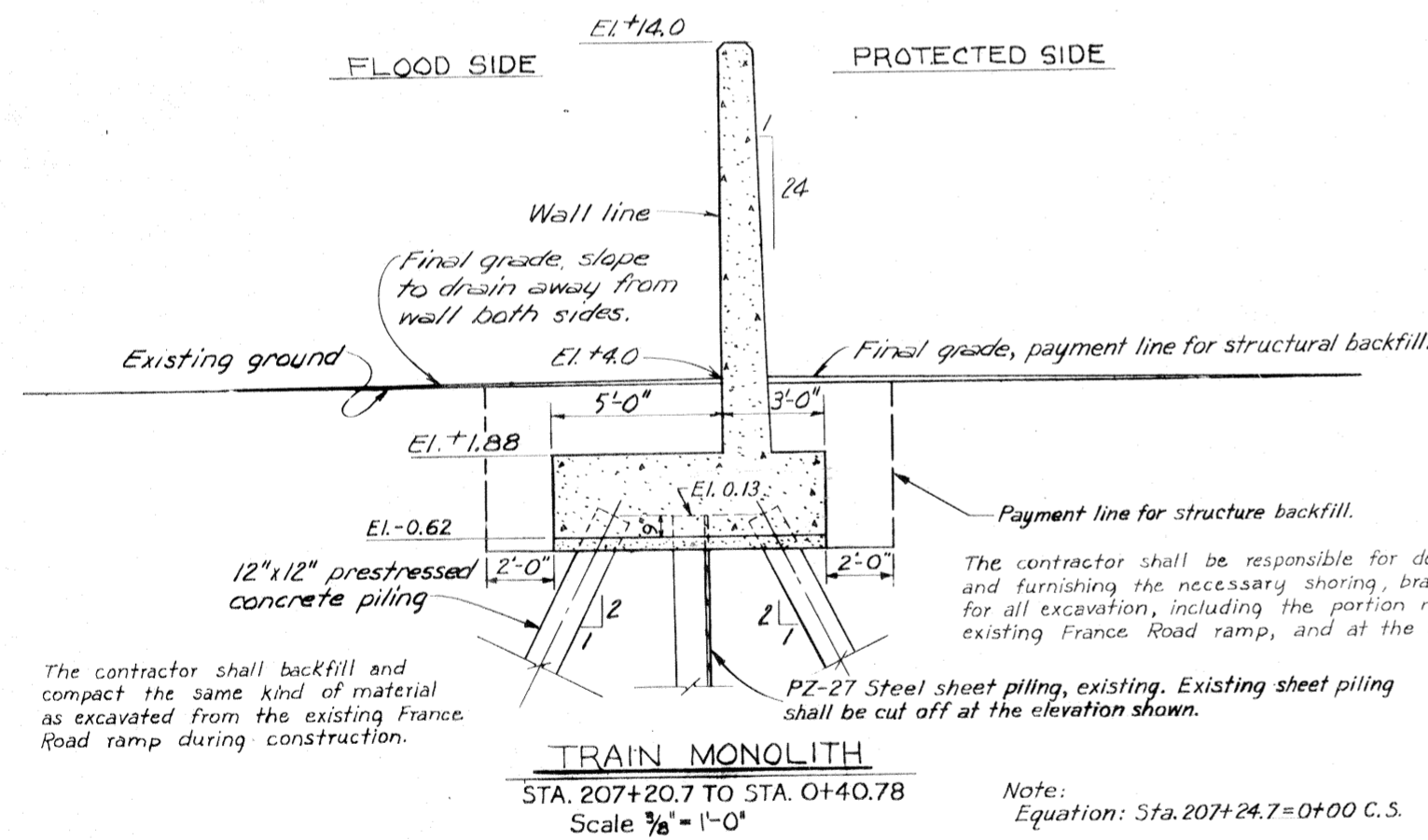
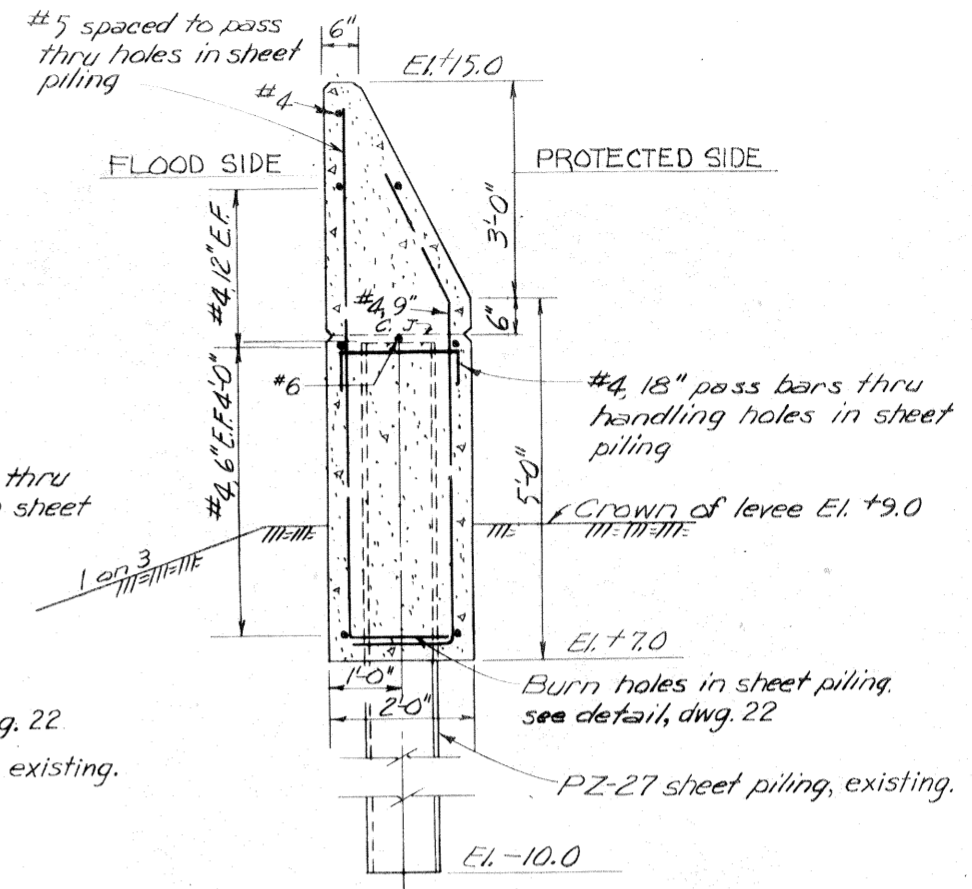
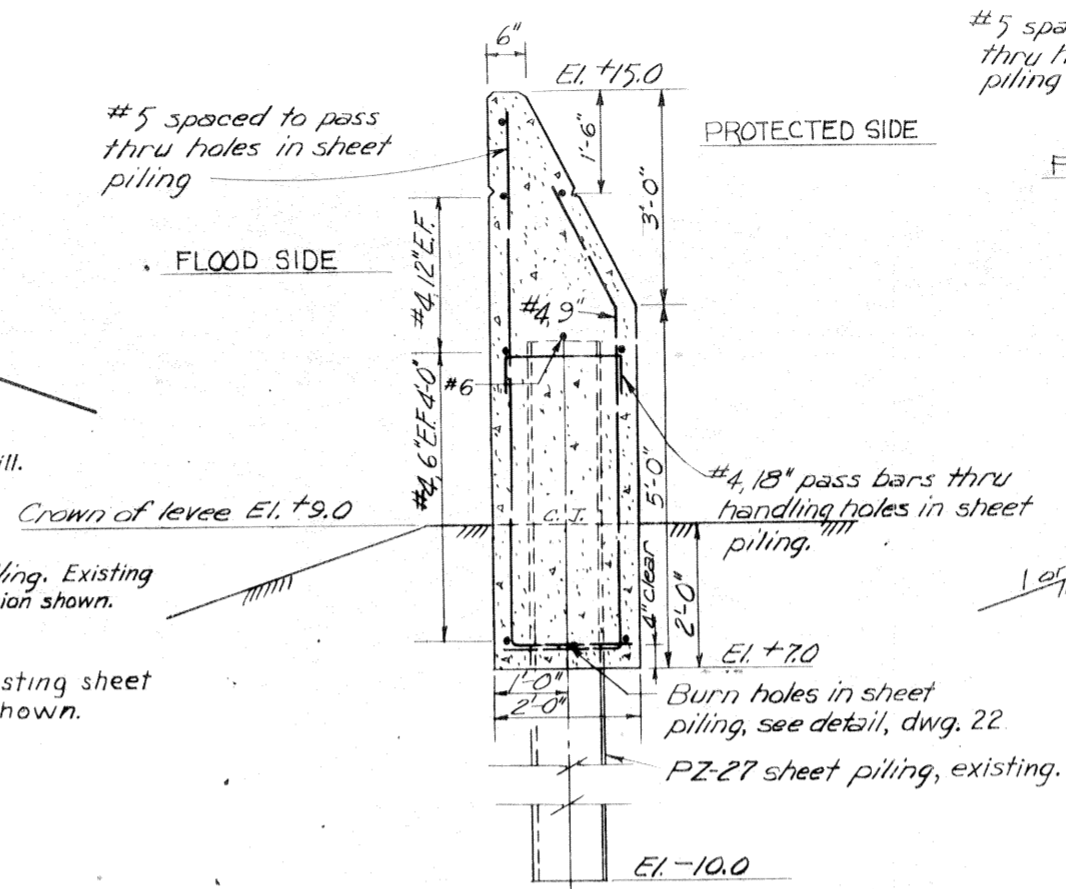
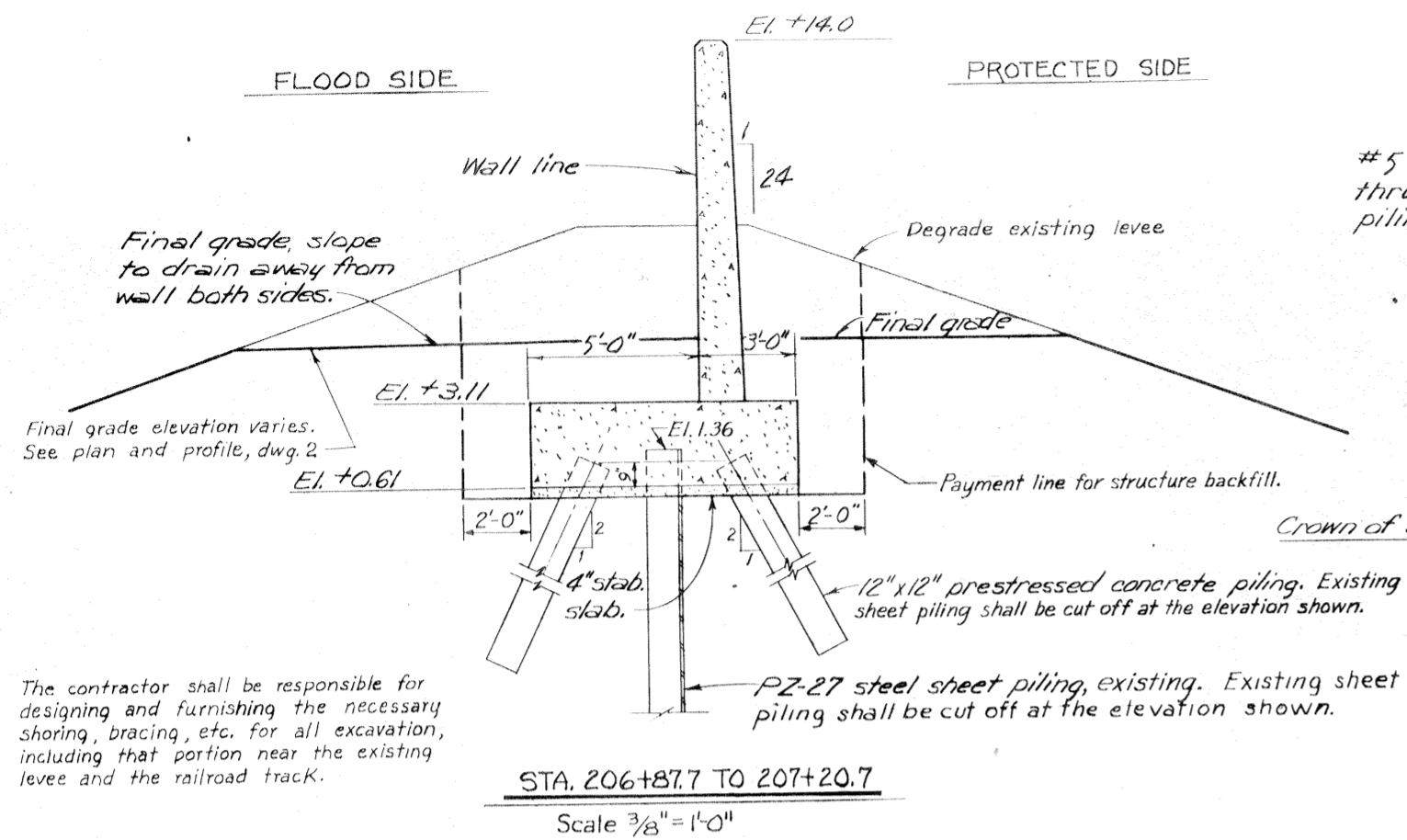
REVISION	DATE	DESCRIPTION	BY

U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LA.

LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION)
 INNER HARBOR NAVIGATION CANAL - WEST LEVEE
 FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE
 STA. 206+16.73 TO STA. 26+55.0
 LEVEE AND FLOODWALL
 ORLEANS PARISH, LOUISIANA

PILING AND MONOLITH LAYOUT

DESIGNED T.F.P.	DRAWN D.K.G.	CHECKED D.A.M.	DATE JULY 1972	SCALE AS SHOWN	FILE NO. H-4-25958
APPROVED <i>David A. Mansueti</i>			SPEC. NO. DACW29-73-B-0009	DWG. 4 OF 26	

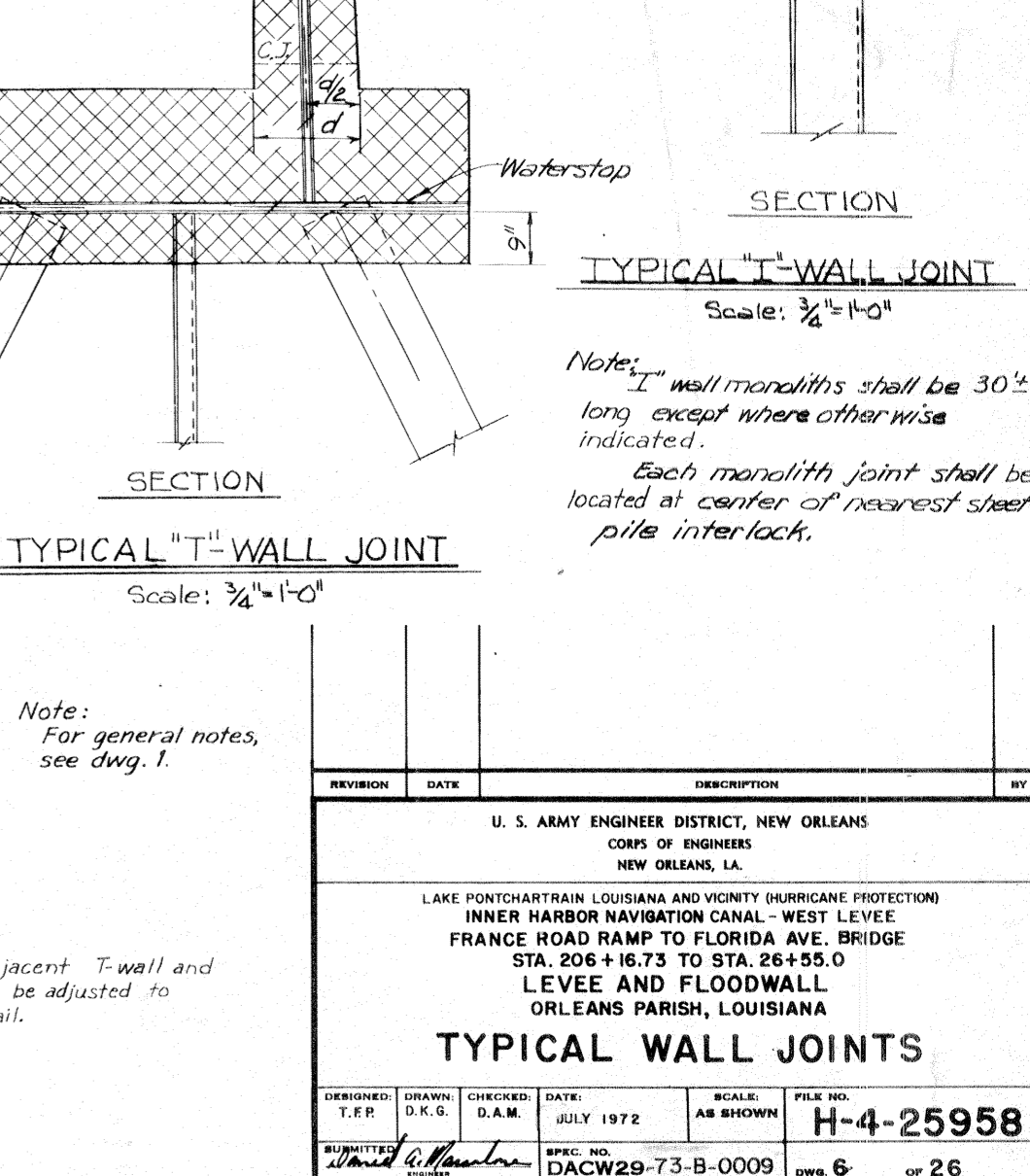
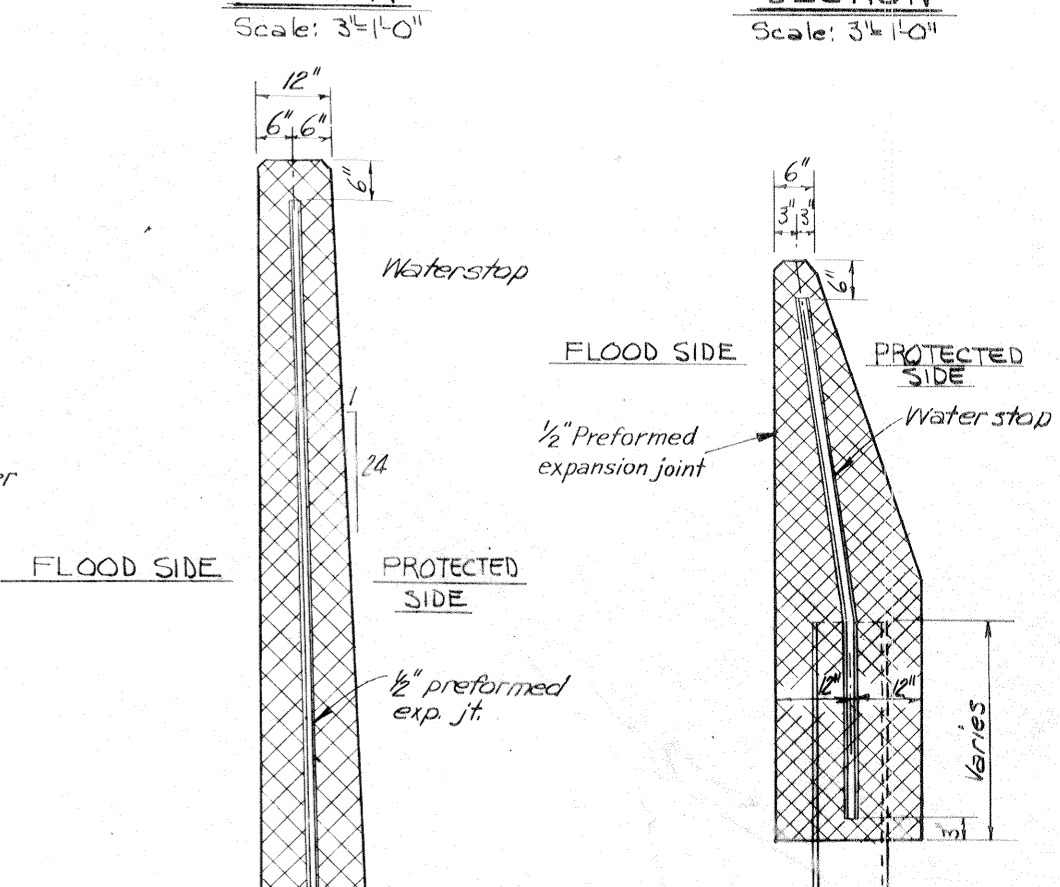
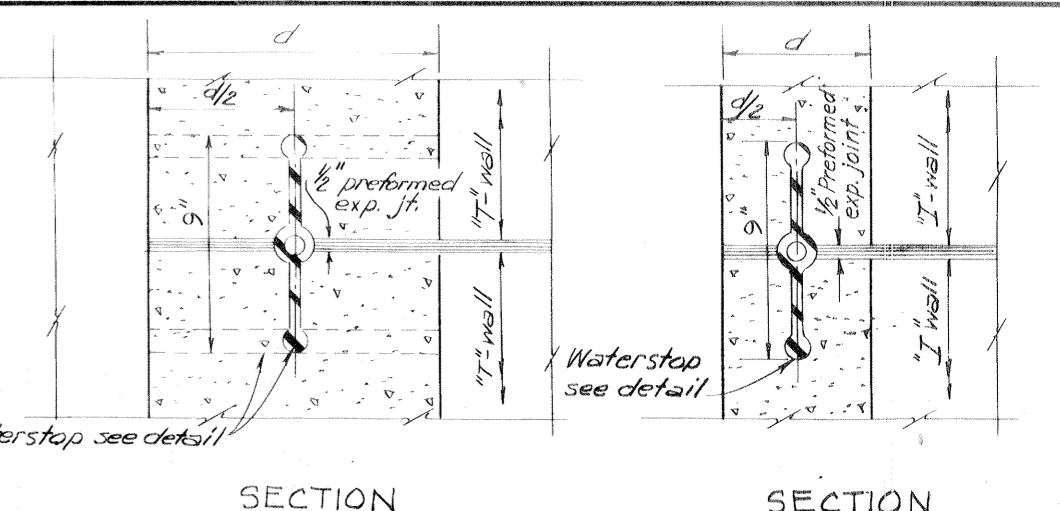
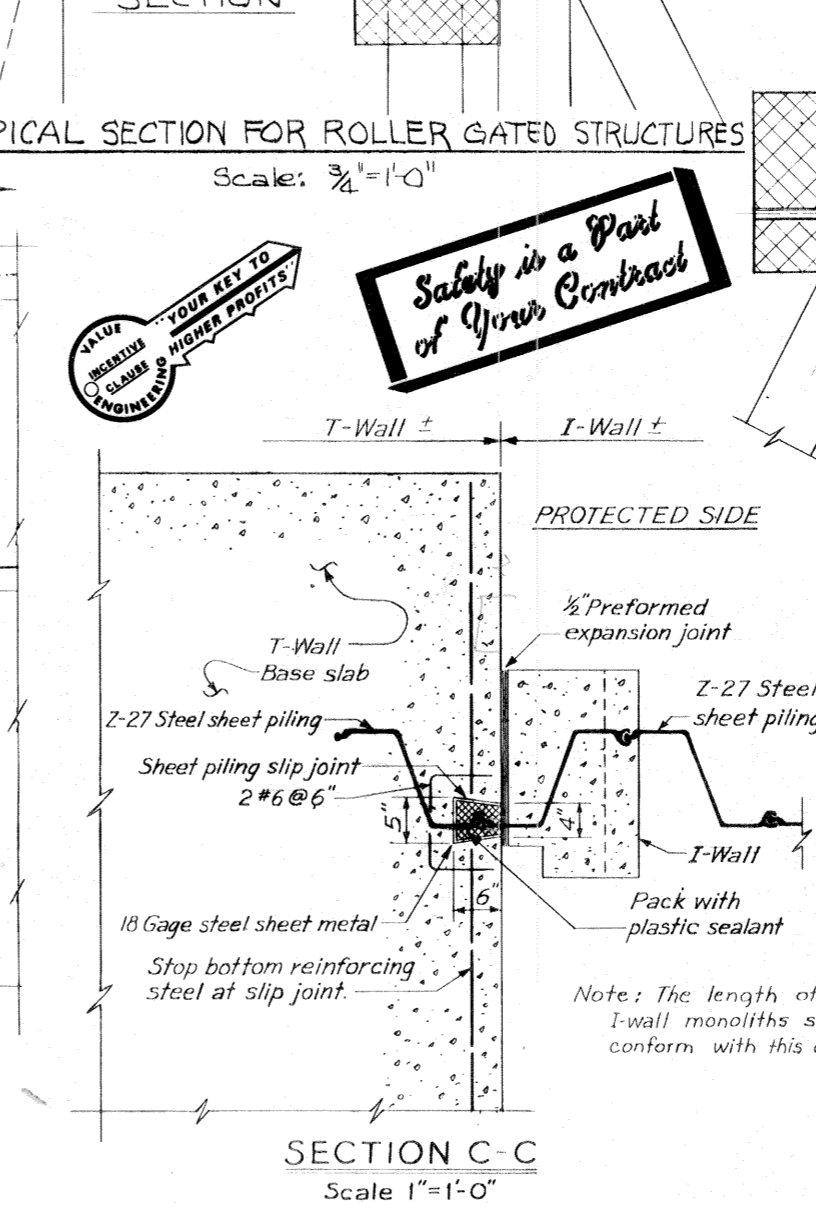
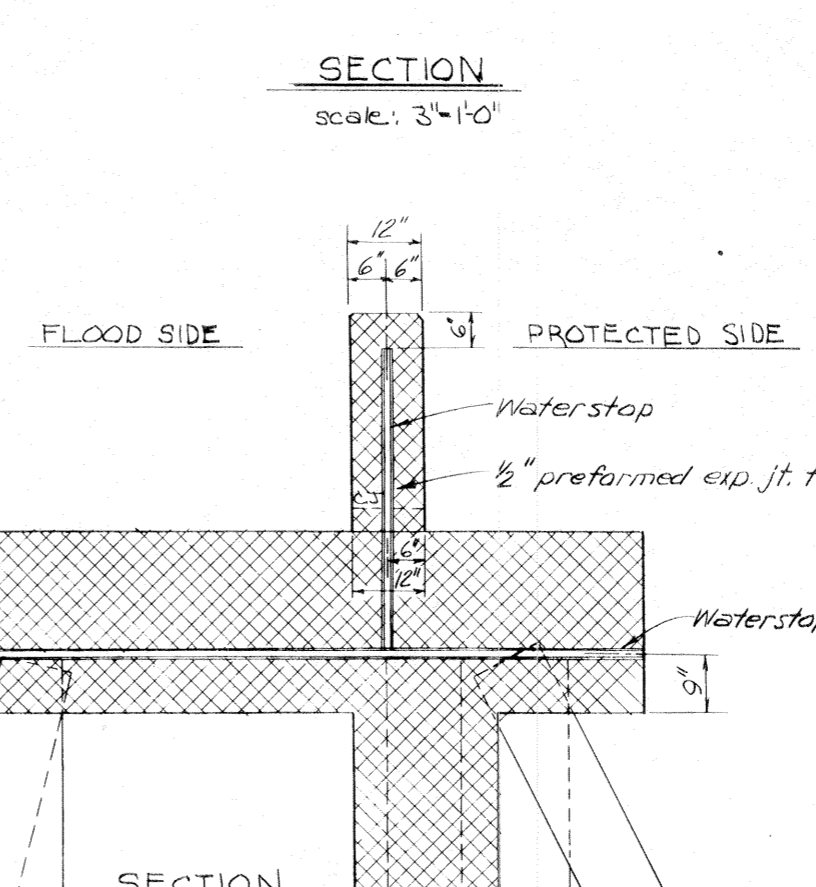
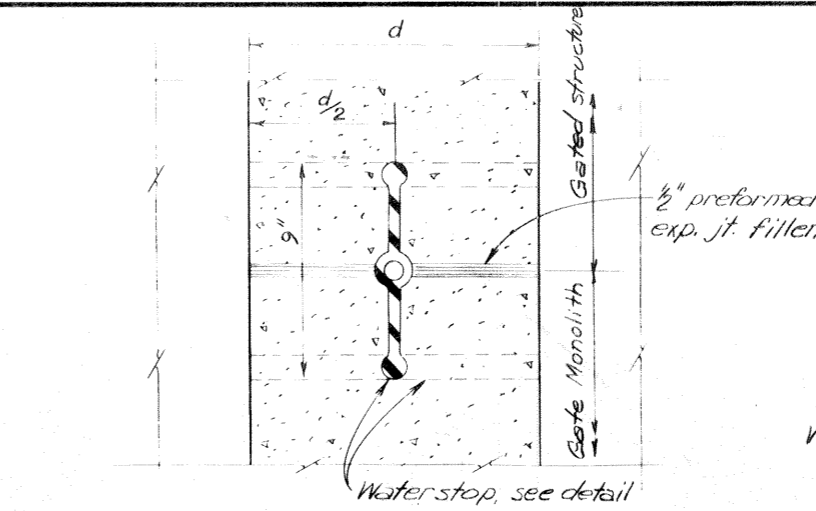
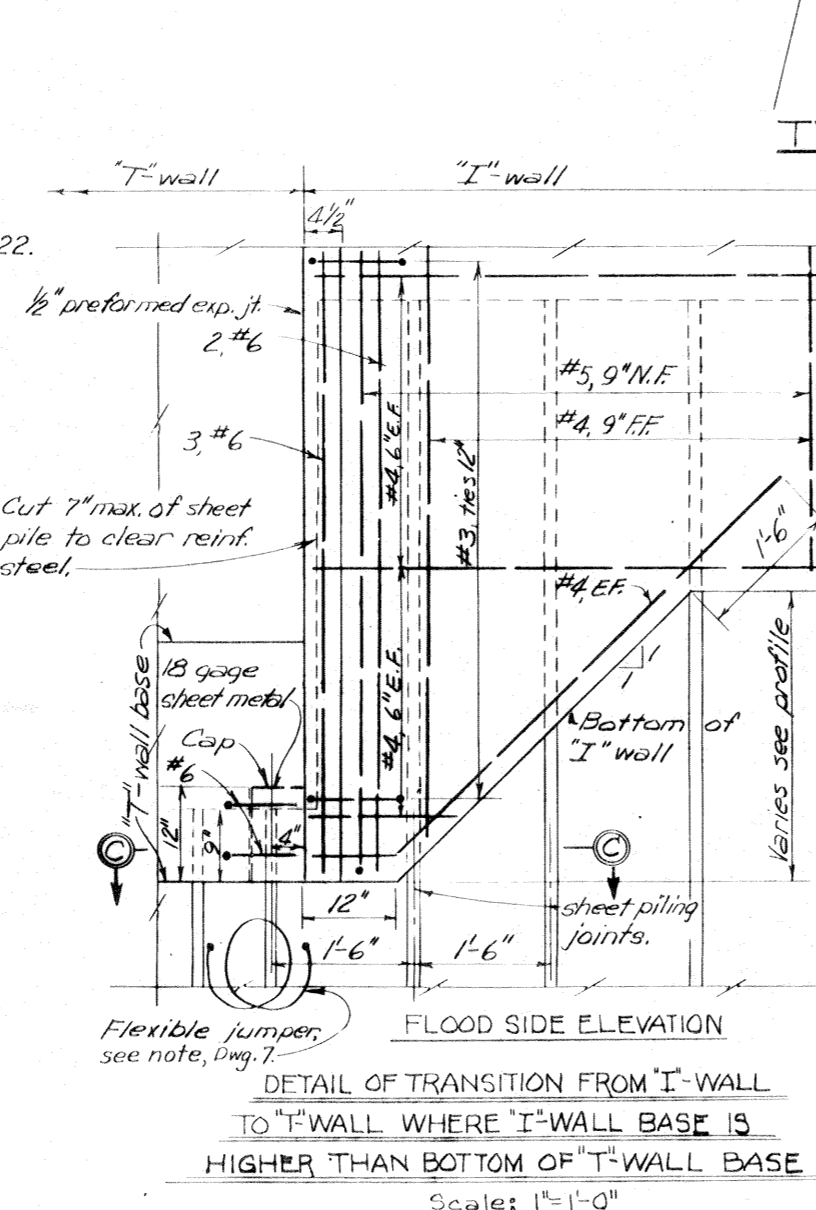
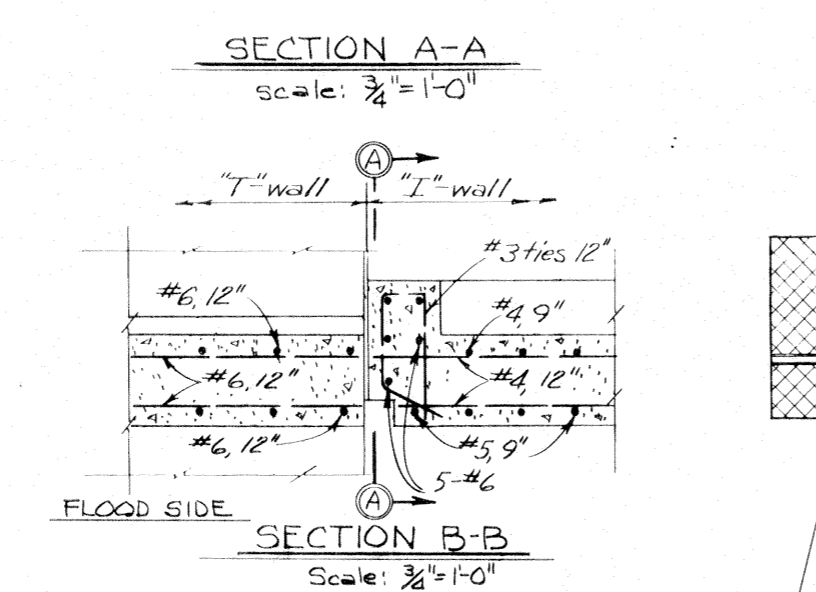
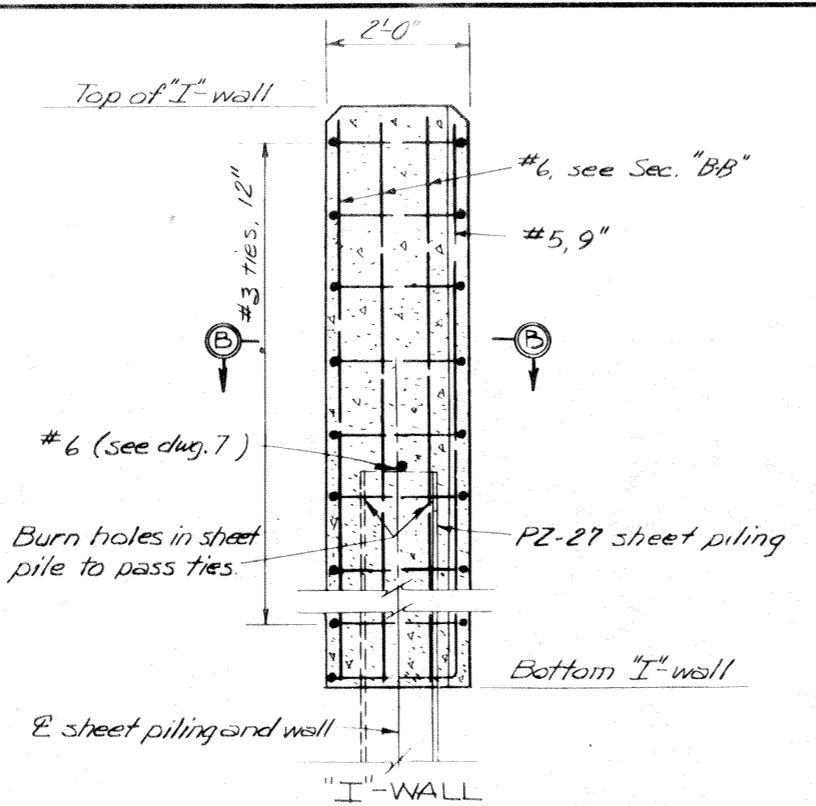
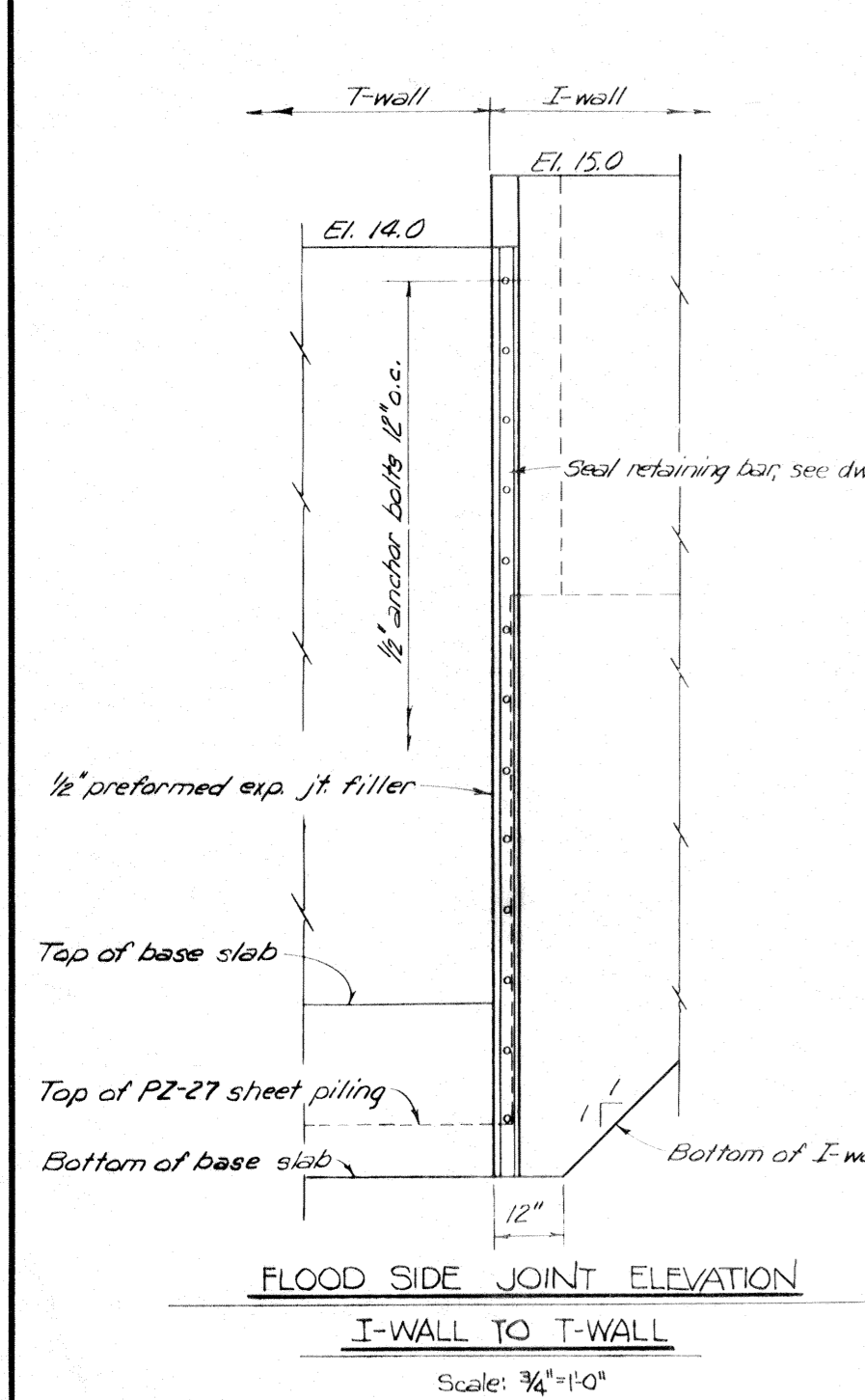
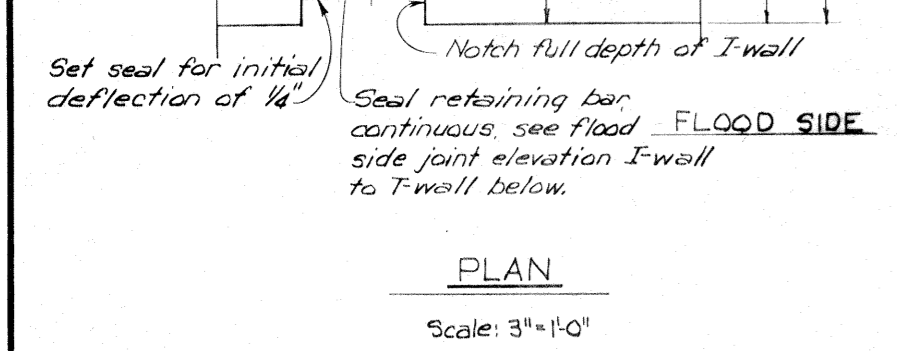
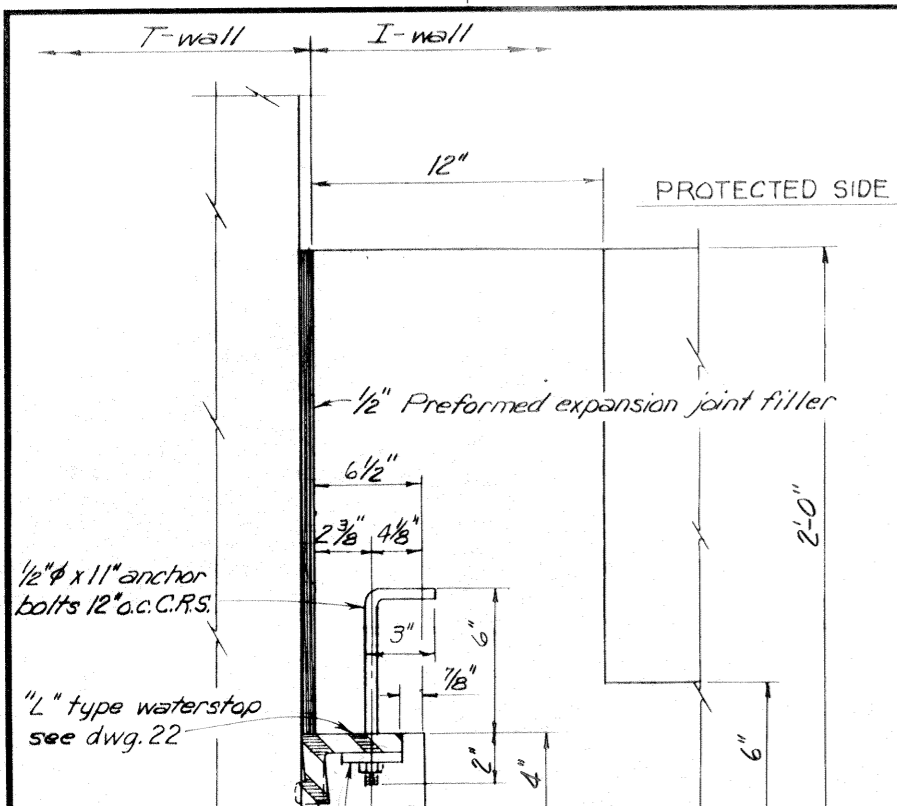


TYPICAL WALL AND LEVEE SECTIONS



Note:
For general notes, see dwg. 1

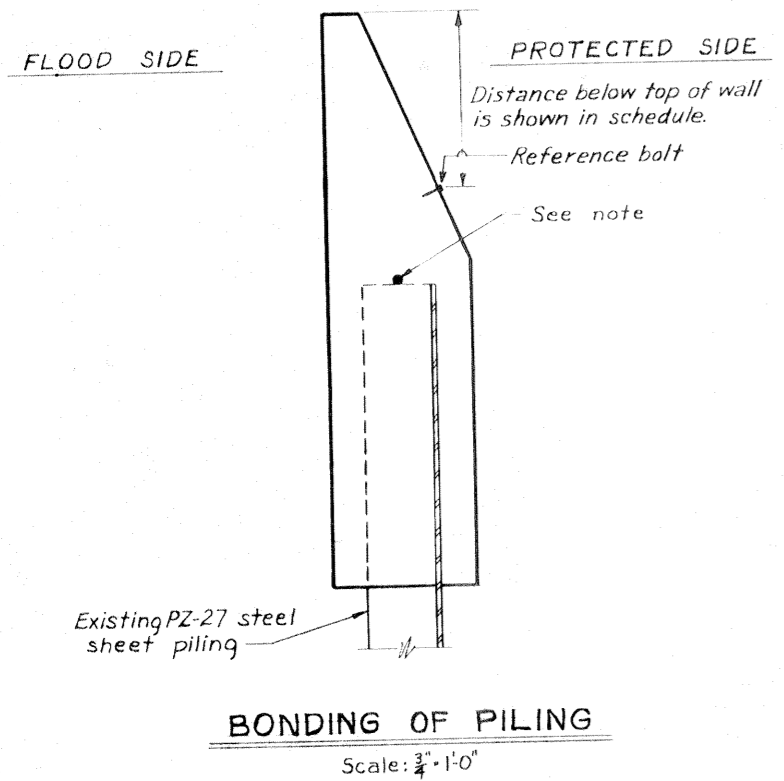
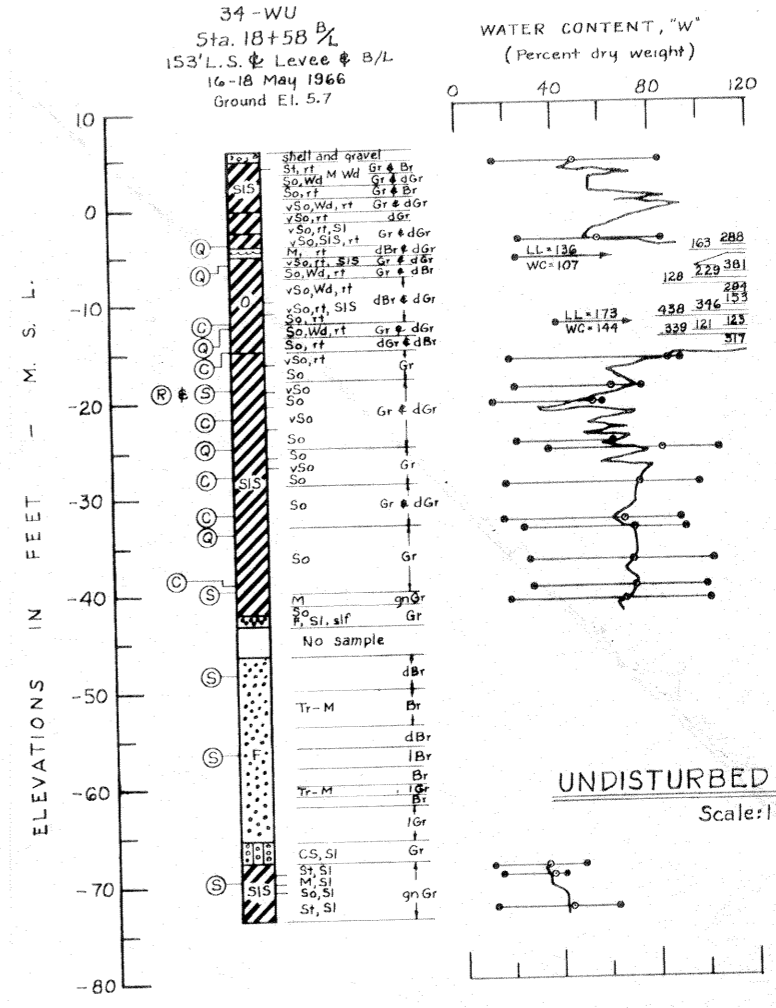
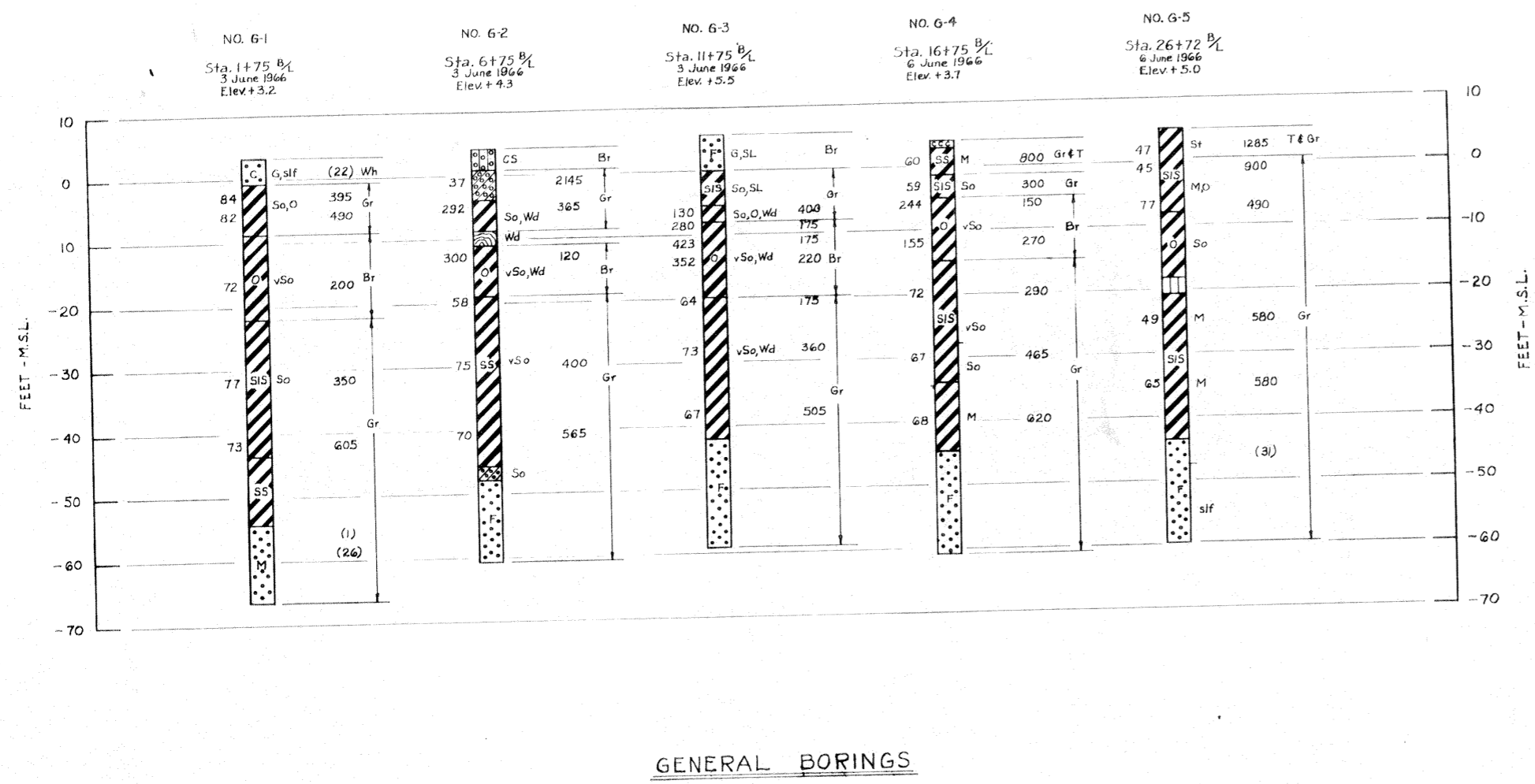
REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA.			
LAKE PONCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA			
TYPICAL WALL AND LEVEE SECTIONS			
DESIGNED: T.F.R.	DRAWN: D.K.G.	CHECKED: D.A.M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO. H-4-25958	
SUBMITTED: March 21, 1972		SPEC. NO. DACW29-73-B-0009	
		DWG. 5 OF 26	



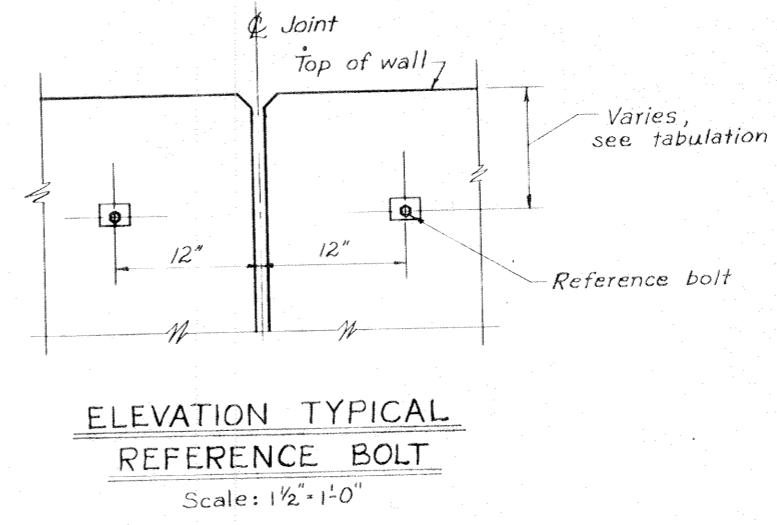
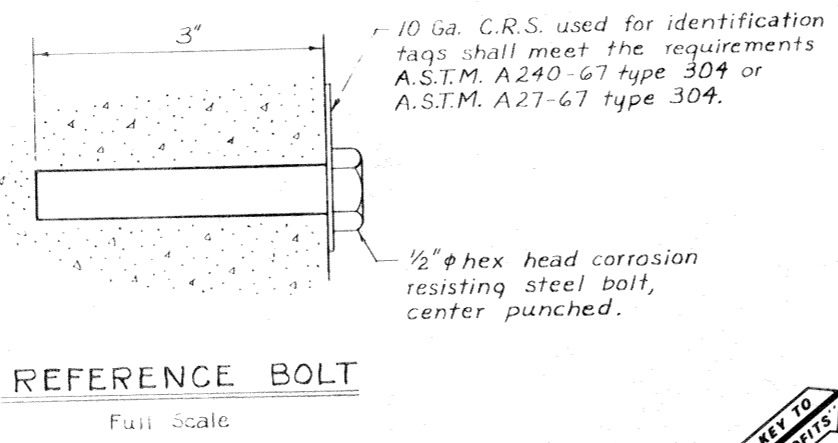
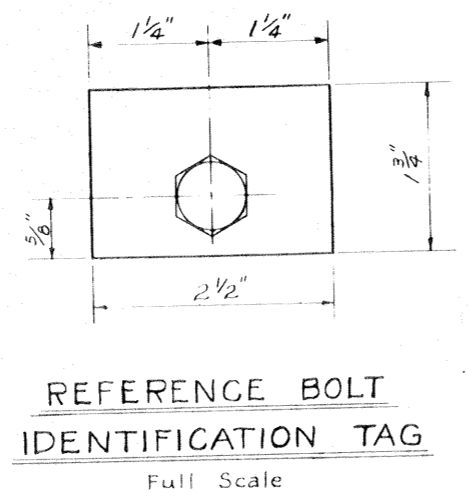
VALVE ENGINEERING
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Note: I-wall monoliths shall be 30'± long except where otherwise indicated.
 Each monolith joint shall be located at center of nearest sheet pile interlock.

REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA. LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA TYPICAL WALL JOINTS			
DESIGNED: T.F.P.	DRAWN: D.K.G.	CHECKED: D.A.M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO. H-4-25958	
SUBMITTED: David A. Williams		SPRC. NO. DACW29-73-B-0009	
DWG. 6		OF 26	



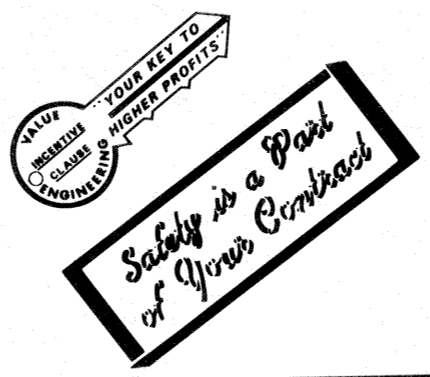
Note:
#6 Reinforcing bar shall be welded to the top of each sheet pile. #6 reinforcing bar shall not extend across the monolith joint. Install flexible jumper at all monolith joints. Jumpers shall be insulated No. 1/8 AWG copper type USE insulated with a minimum of 95 mils of cross linked polyethylene in a 8" dia. loop. Jumper shall be welded as specified to adjacent steel sheet piles 3" below the bottom of the concrete cap as shown on dwg. 6. Welded connections shall be coated with splicing epoxy to obtain moisture proof joints.



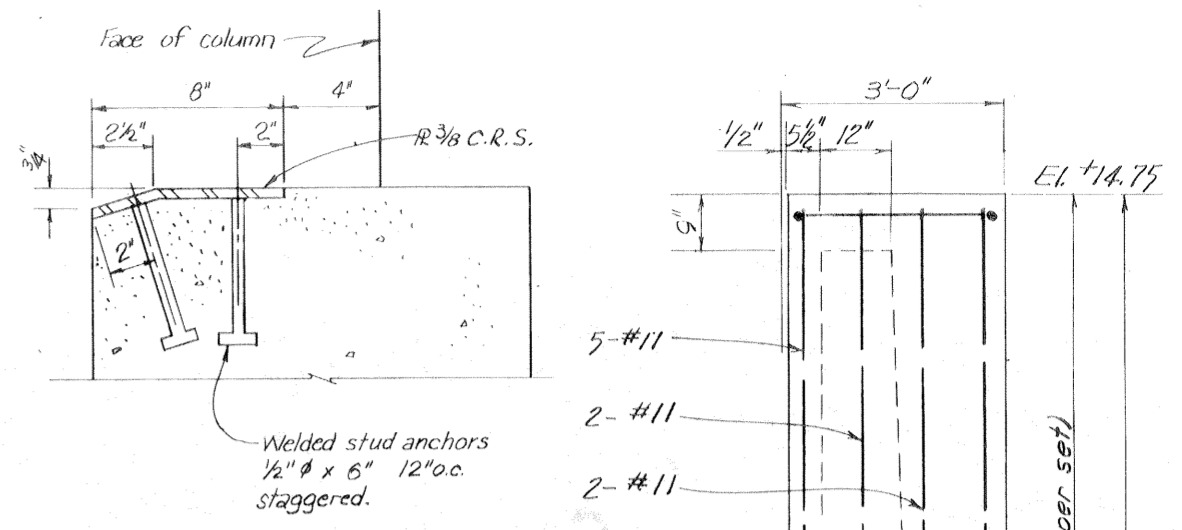
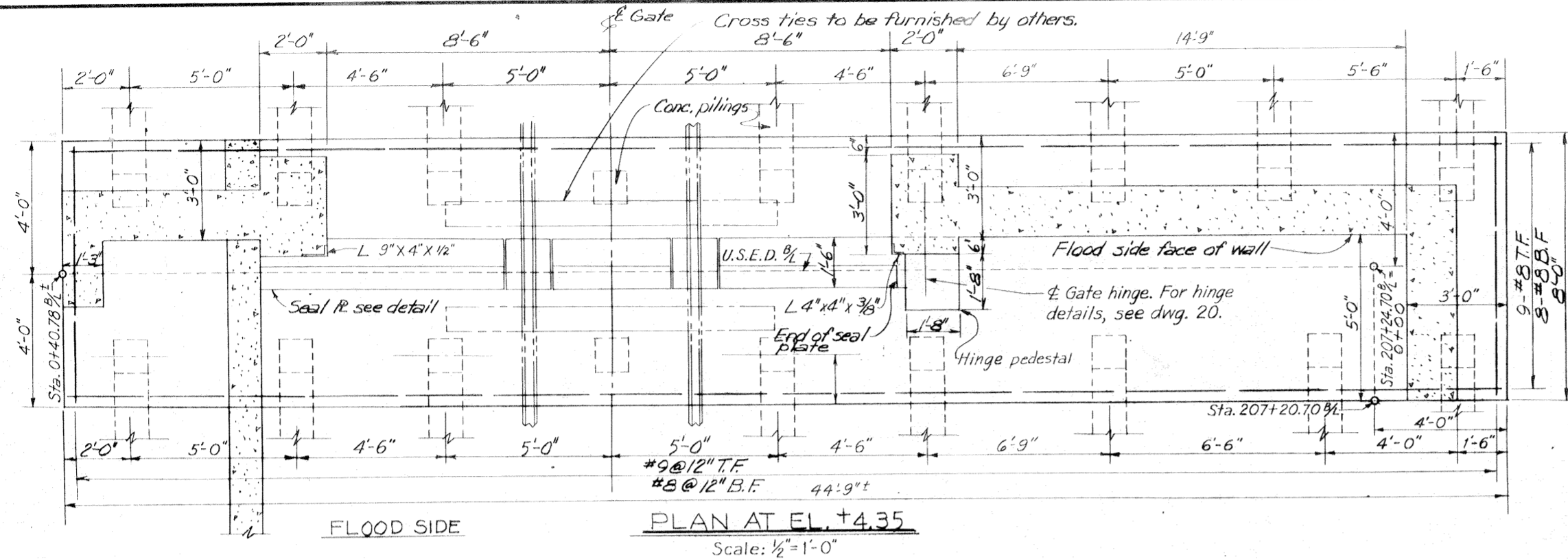
SETTLEMENT REFERENCE BOLT SCHEDULE

STATION	DISTANCE BELOW TOP OF WALL
B/L 206+17.73	2'
206+86.70	2'
206+88.70	1'
0+12	1'
B/L 0+39.78	1'
W/L 16+88.83	2'
16+90.83	1'
17+46	1'
17+98.33	1'
18+00.83	2'
21+00	2'
23+64.58	2'
23+66.58	1'
24+19.58	1'
24+74.08	1'
24+76.08	2'
W/L 26+54±	2'

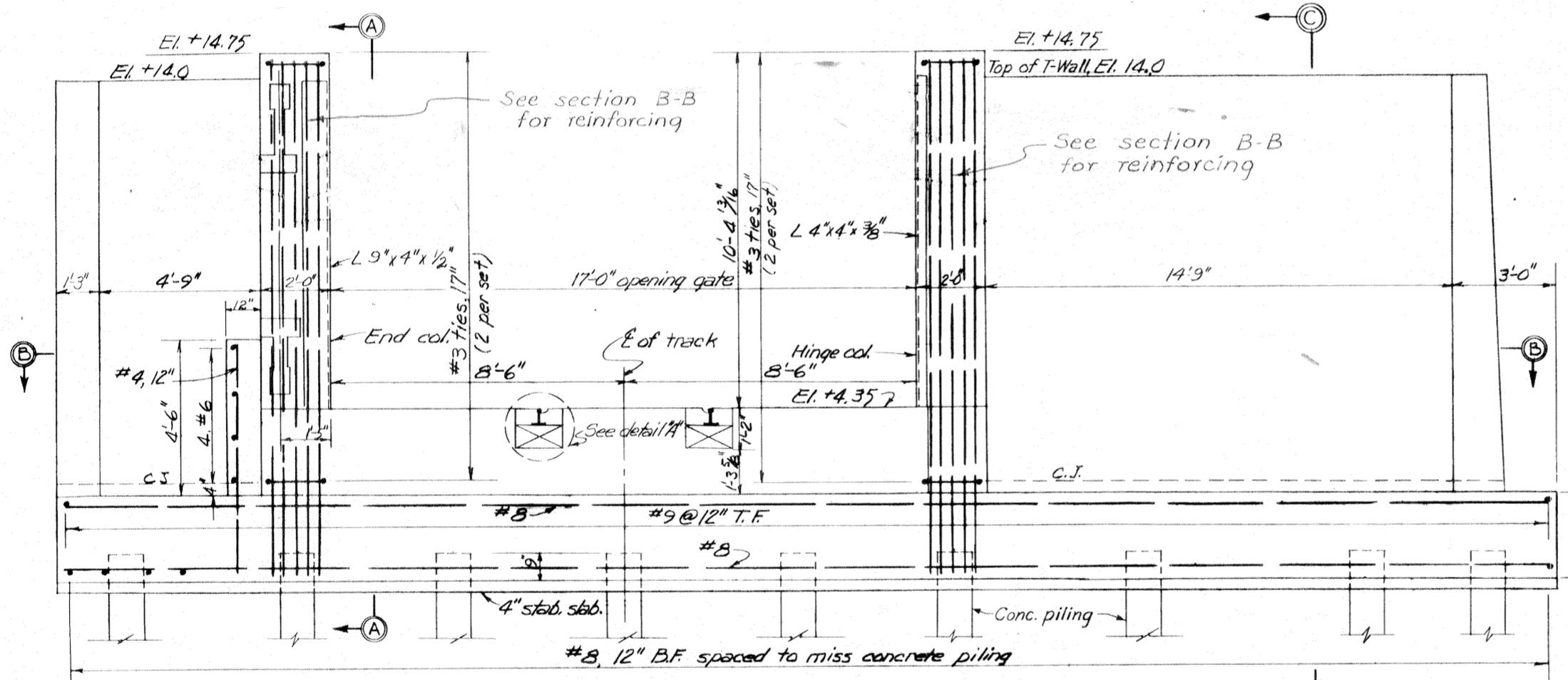
Note:
For general notes, see dwg. 1.



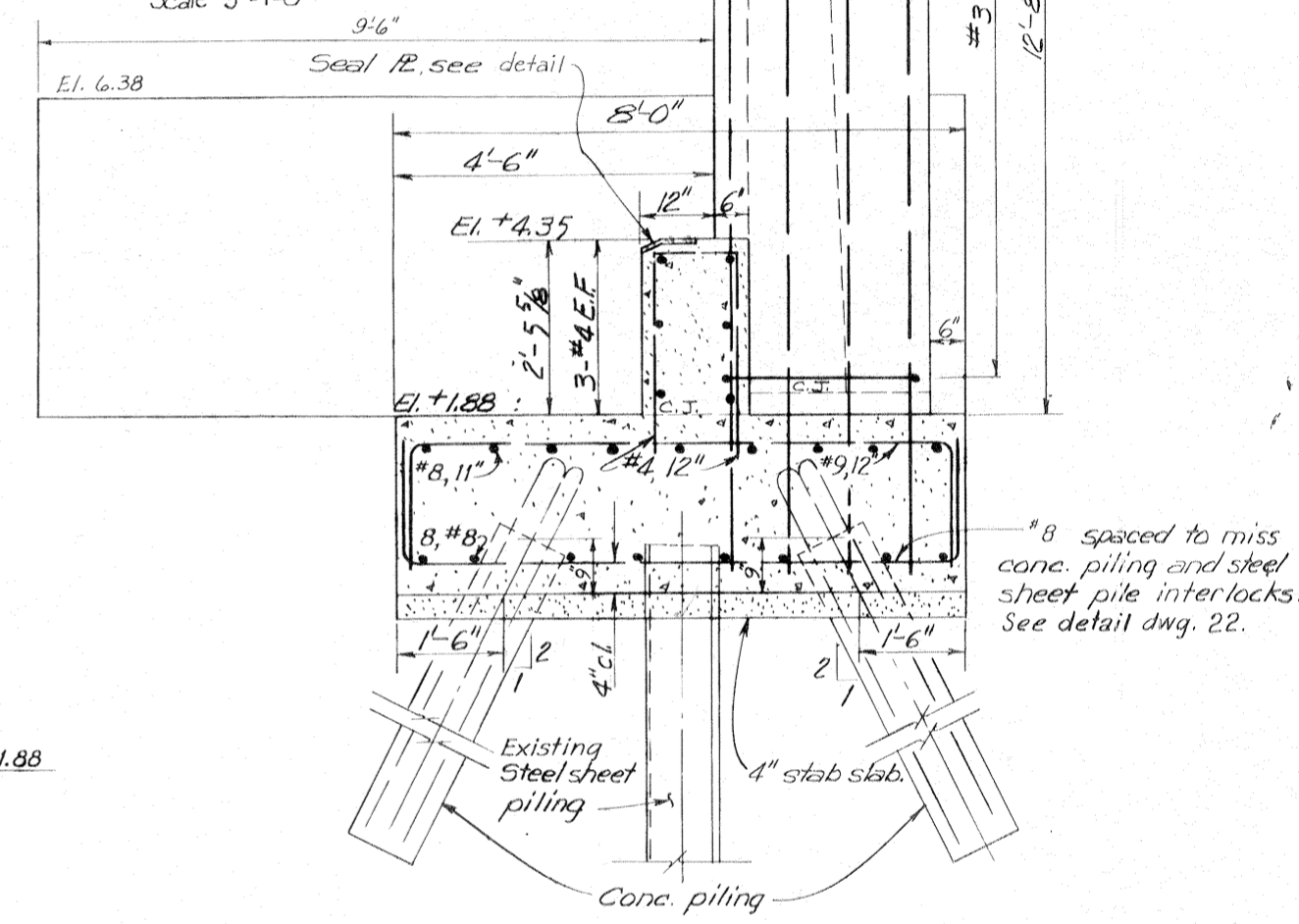
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U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA. LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA BORINGS, REFERENCE BOLTS AND BONDING OF PILING			
DESIGNED: T.F.P.	DRAWN: C.L.R.	CHECKED: D.A.M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO: H-4-25958	
SPEC. NO. DACW29-73-B-0009		DWG. 7 OF 26	



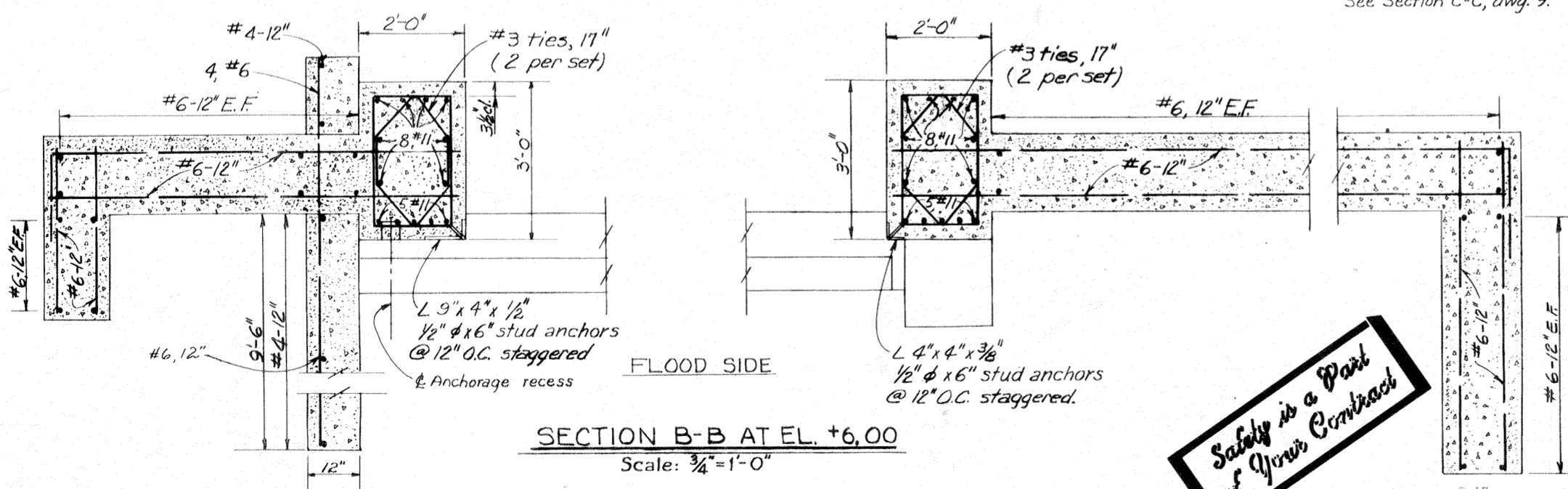
SWING GATE SEAL PLATE
Scale 3\"/>



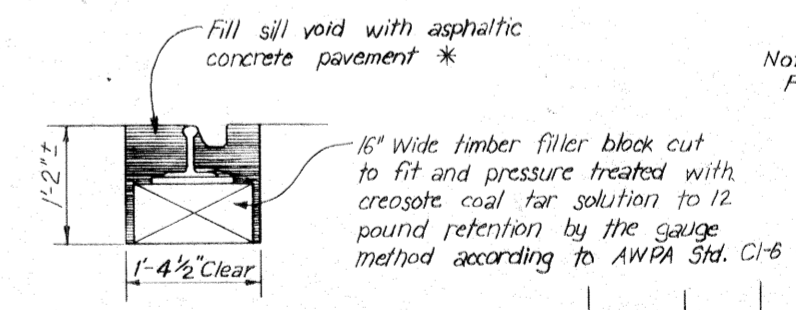
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Scale: 1/2\"/>



SECTION A-A
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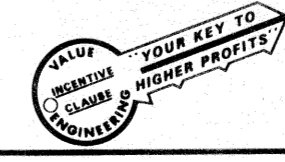
SECTION B-B AT EL. +6.00
Scale: 3/4\"/>



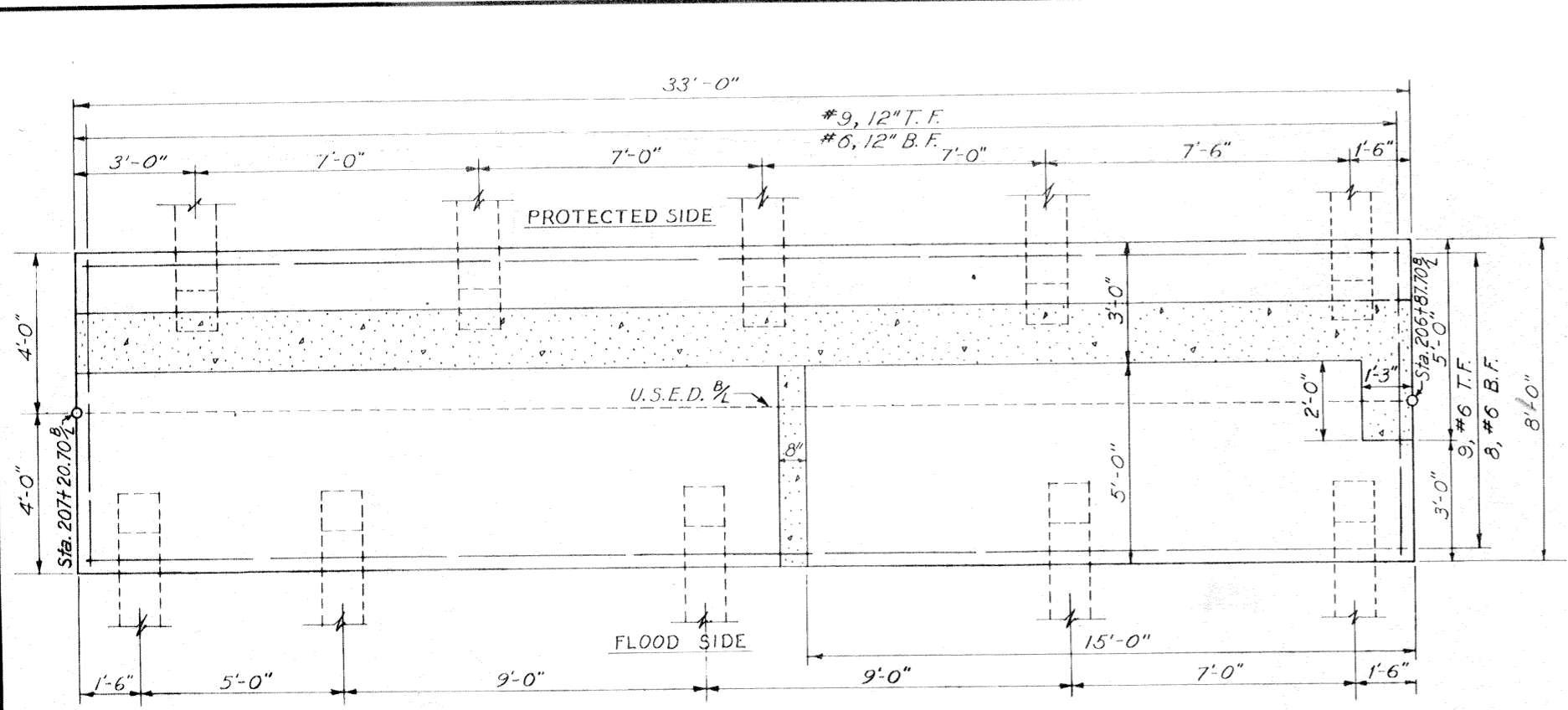
DETAIL 'A'
Scale: 1\"/>

Safety is a Part of Your Contract

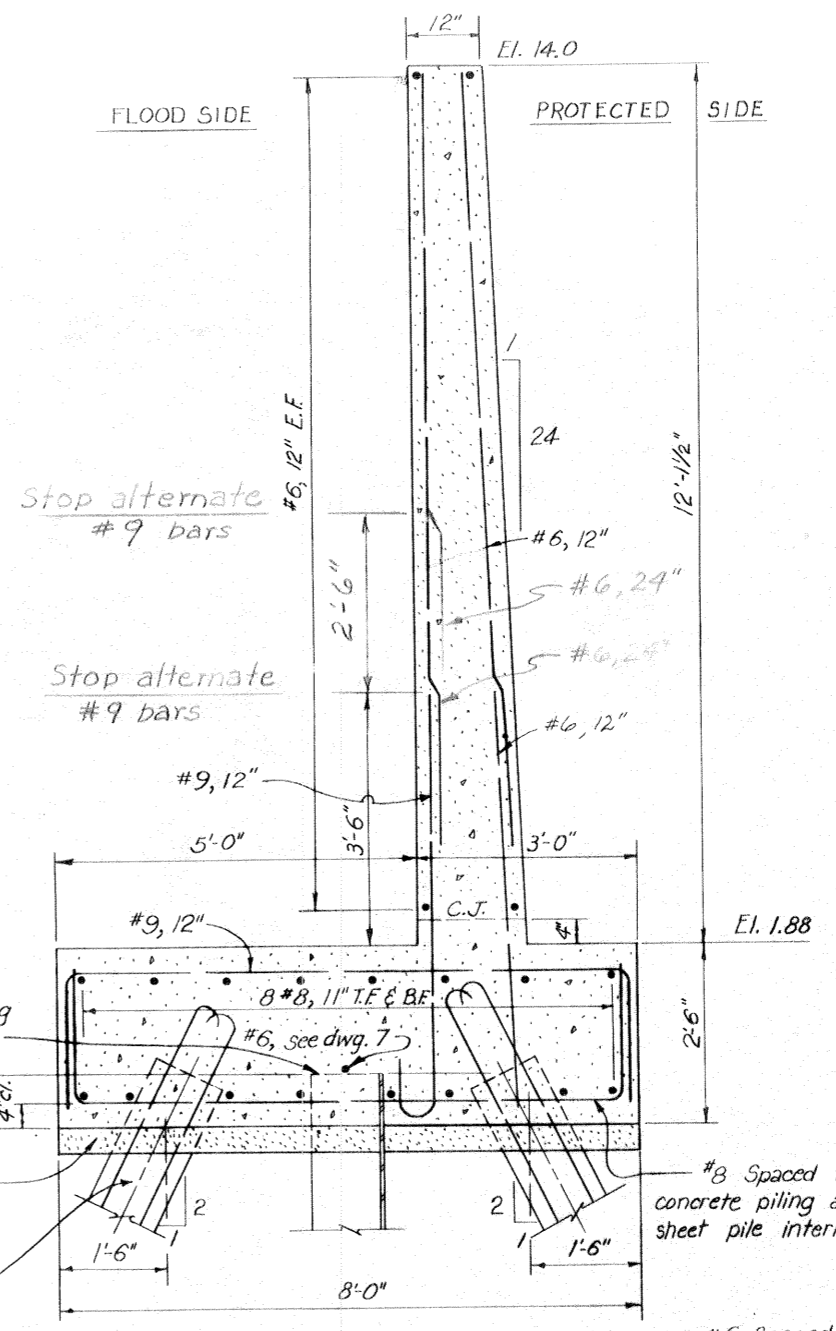
* Asphaltic concrete pavement shall be type 1 basecourse as described in "standard specification for roads and bridges" published by the State of Louisiana Department of Highways.



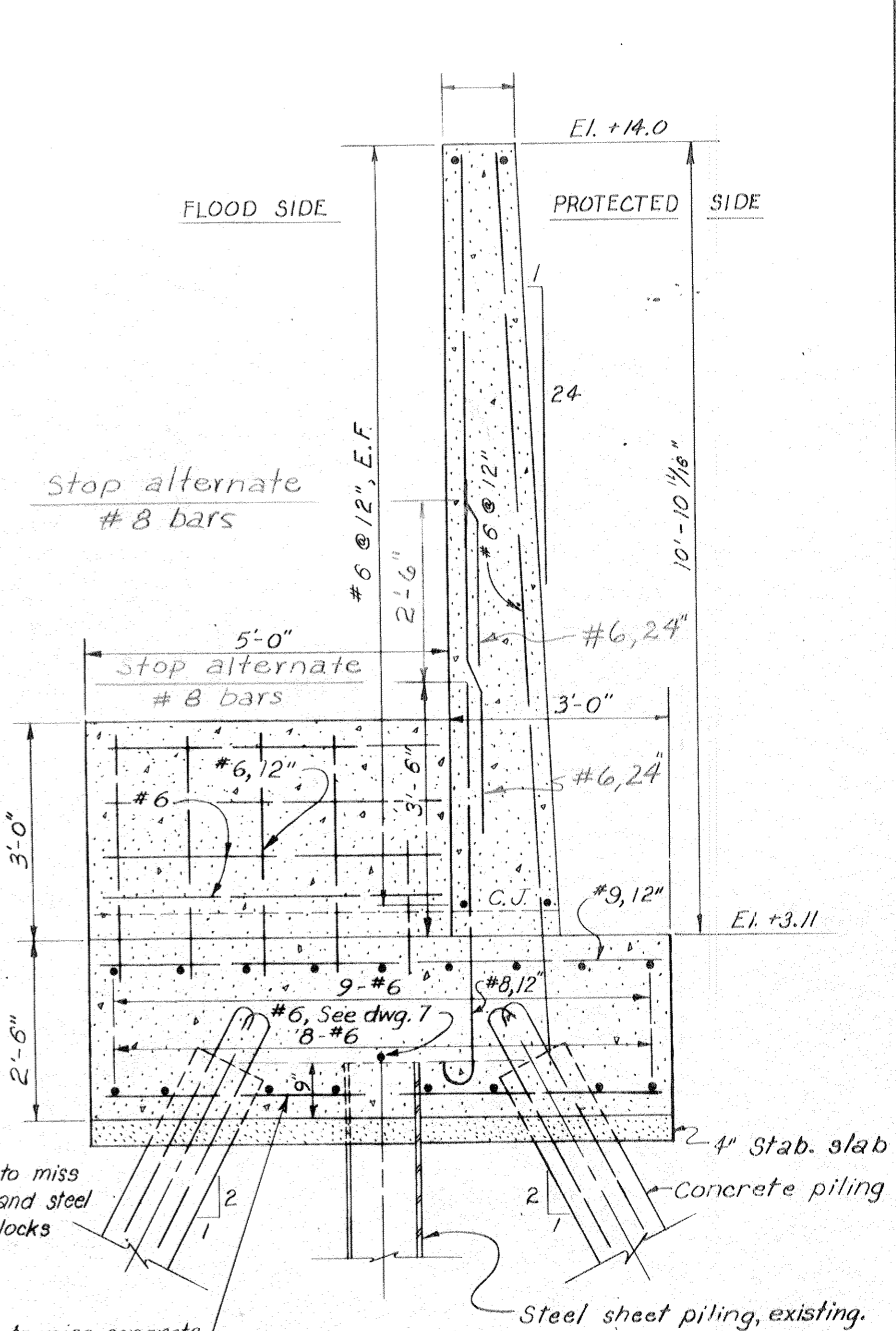
REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA.			
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA			
GATE MONOLITH - GATE 10-W			W-26
DESIGNED: C. G.	DRAWN: D. K. G.	CHECKED: D. A. M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO. H-4-25958	
SUBMITTED: David A. ...		SHEET NO. DACW29-73-B-0009	
		DWA 8 OF 26	



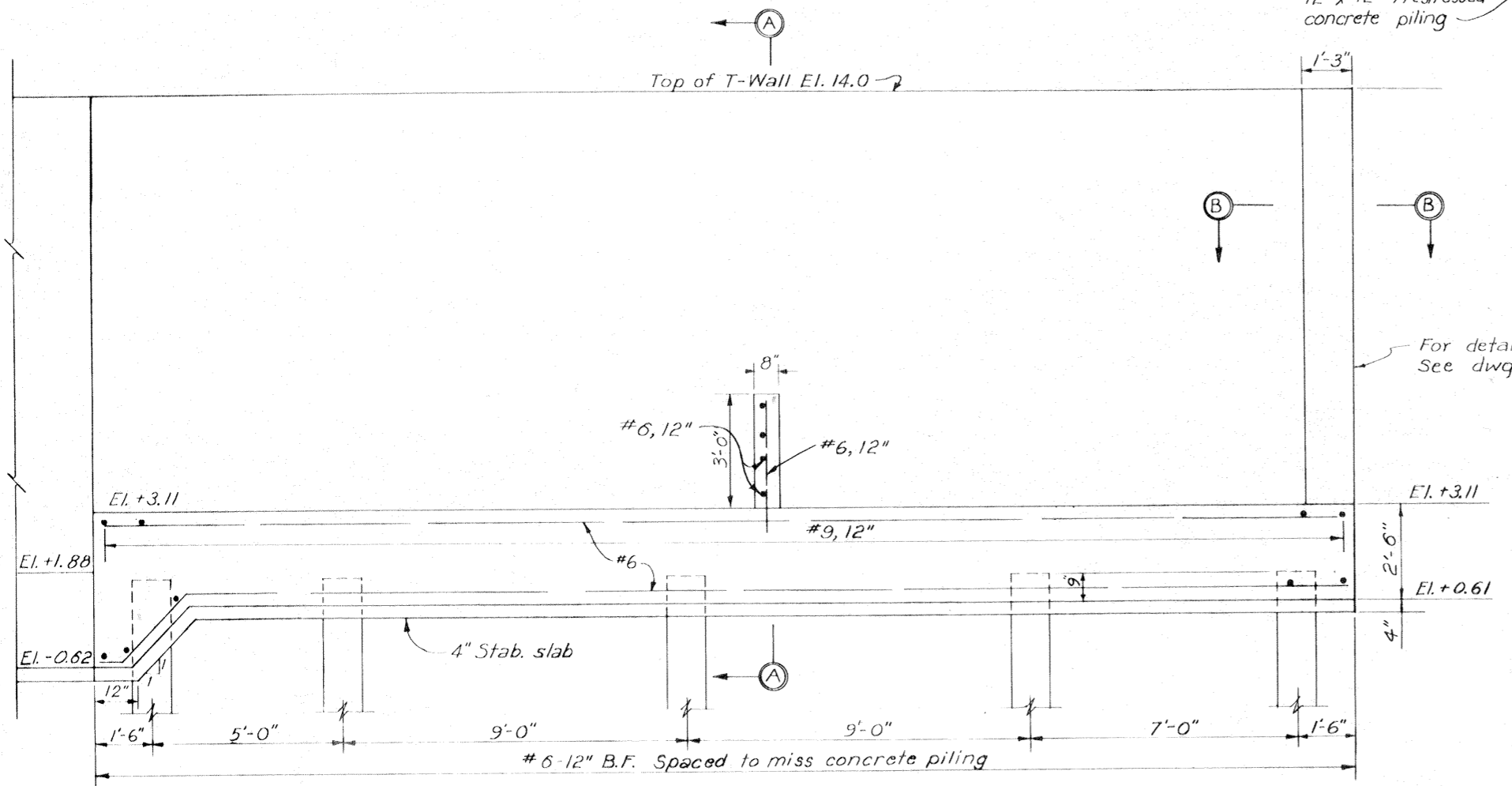
PLAN AT ELEVATION +3.11
Scale: 1/2" = 1'-0"



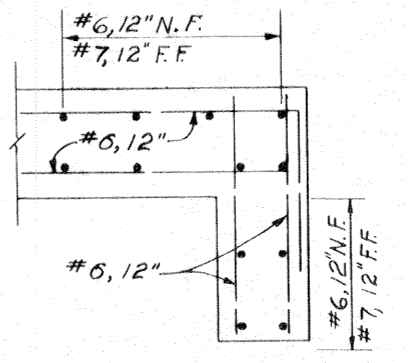
SECTION C-C
Scale: 3/4" = 1'-0"



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



FLOOD SIDE ELEVATION
Scale: 1/2" = 1'-0"



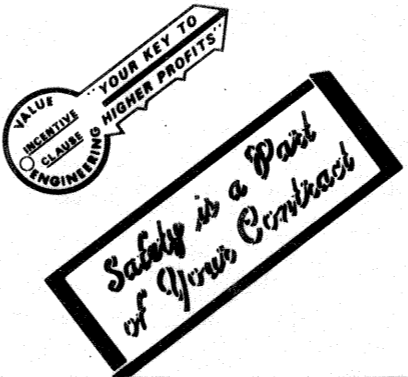
SECTION B-B
Scale: 3/4" = 1'-0"

Existing PZ-27 sheet piling to be cut off at El. +0.13

4" Stabilized slab
12" x 12" Prestressed concrete piling

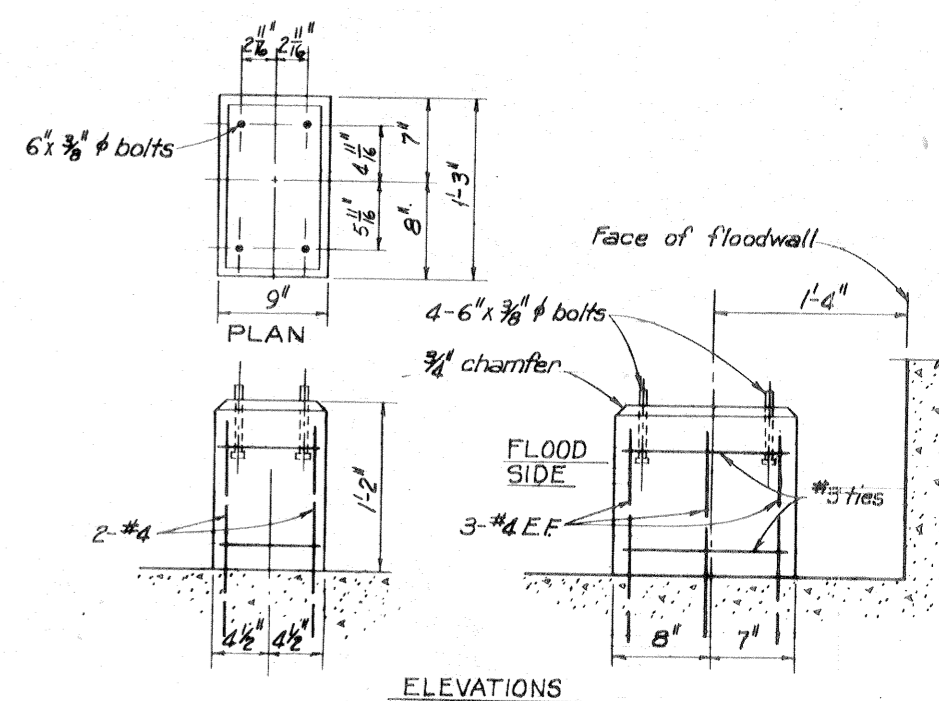
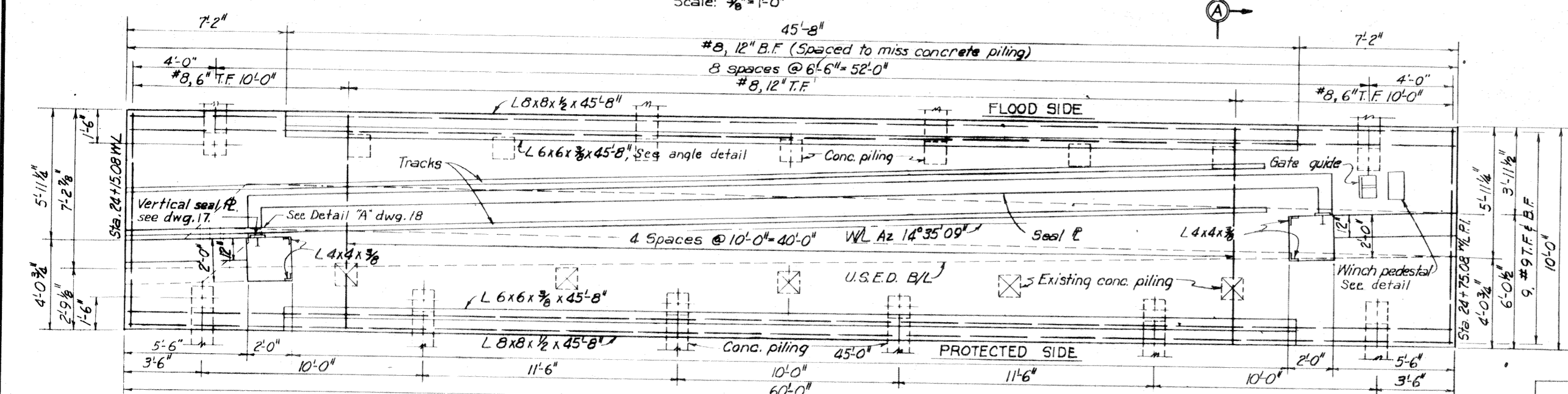
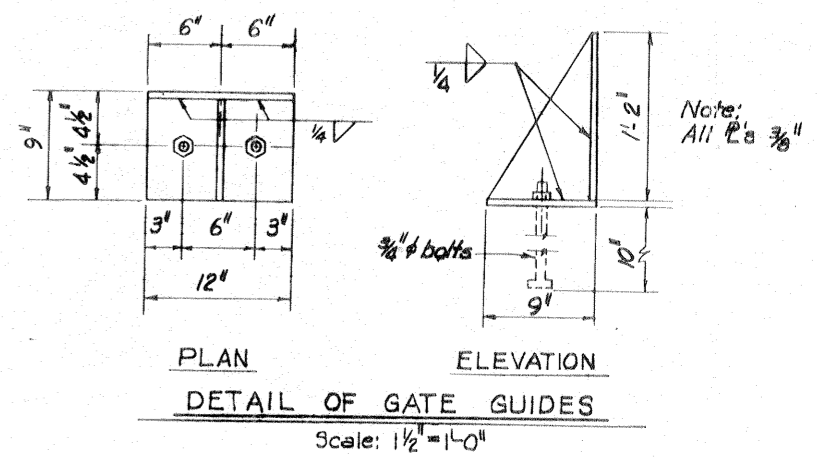
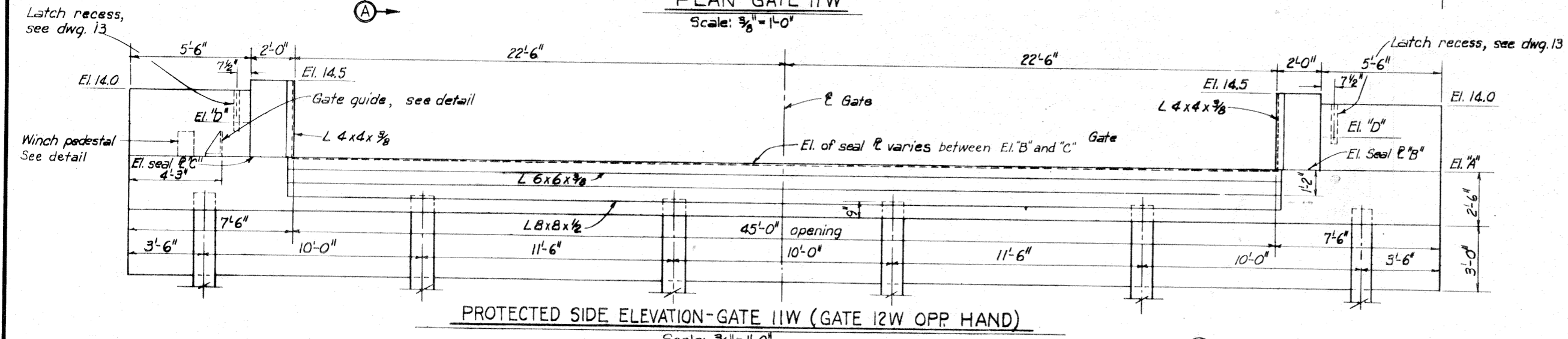
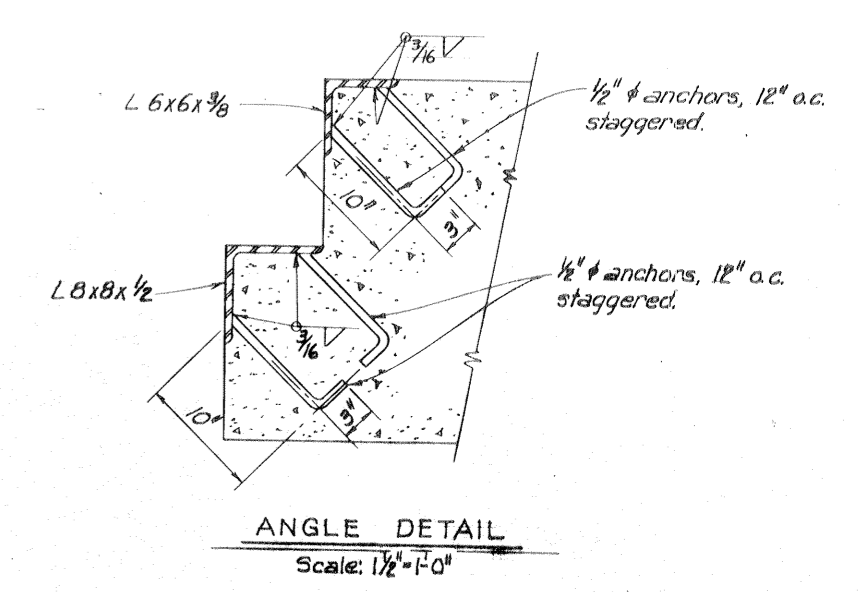
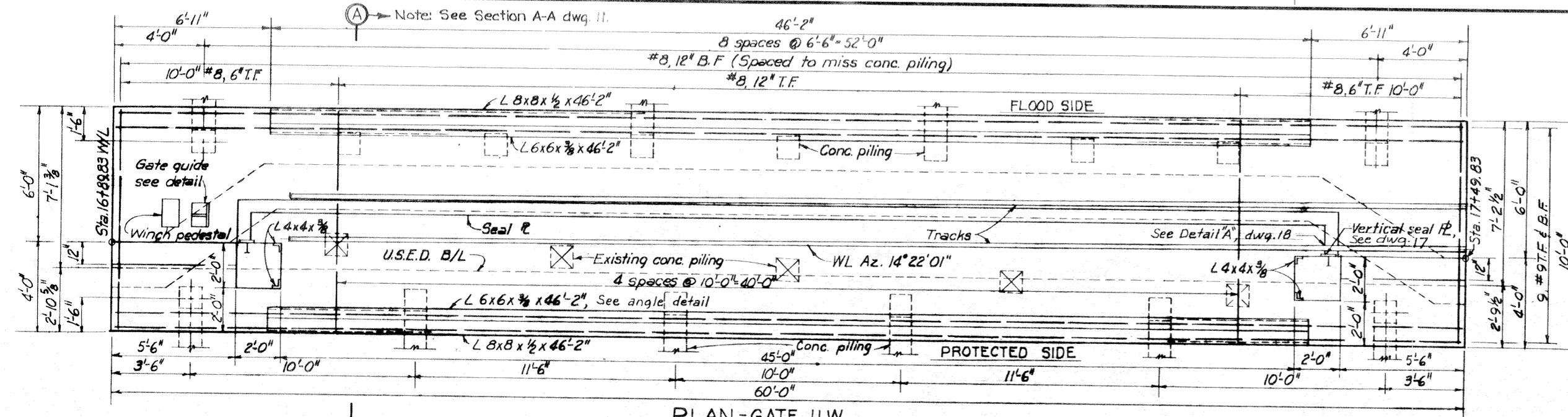
#8 Spaced to miss concrete piling and steel sheet pile interlocks
#6 Spaced to miss concrete piling and steel sheet pile interlocks, see detail dwg. 22

4" Stab. slab
Concrete piling
Steel sheet piling, existing.

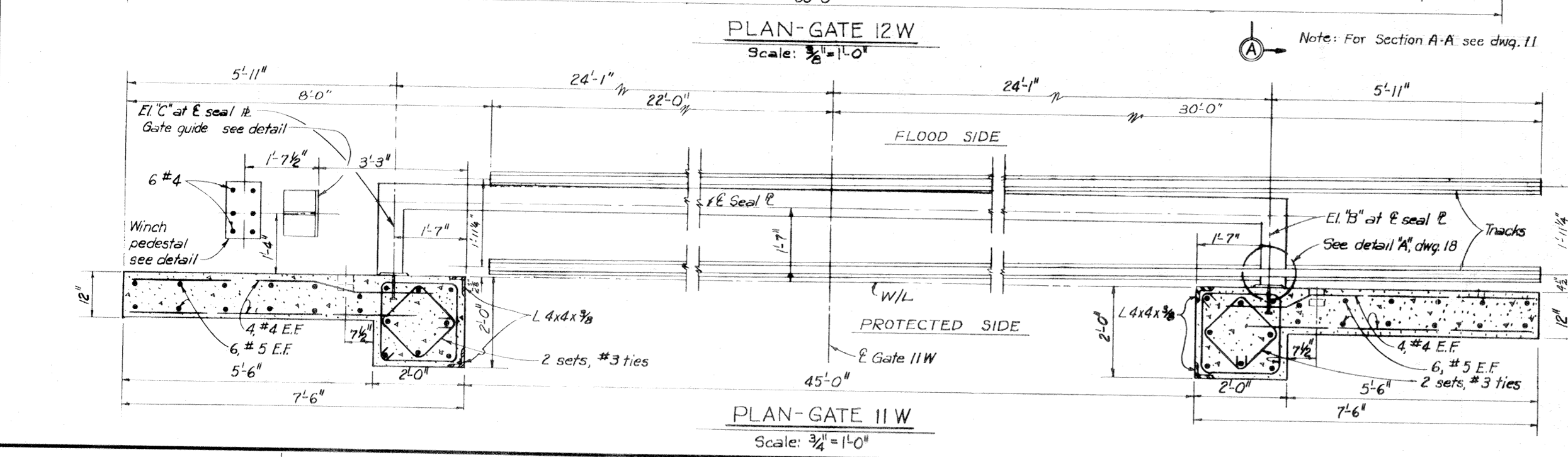


Notes:
For general notes, see dwg. 1.
For location of Section C-C see dwg. 8

REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA. LAKE PONCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA T-WALL MONOLITH STA. 206+87.80 TO 207+20.70			
DESIGNED:	DRAWN:	CHECKED:	DATE:
C. G.	L. R. M.	D. A. M.	JULY 1972
SCALE:		FILE NO.:	
AS SHOWN		H-4-25958	
SUBMITTED BY:		DWG. NO.:	
D. A. M.		DACW29-73-B-0009	
		DWG. 9 OF 26	



ELEVATIONS			
GATE 11W		GATE 12W	
A	11.00	A	11.41
B	11.03	B	11.44
C	11.11	C	11.52
D	12.33	D	12.74



Note:
For general notes, see dwg. 1.
For details of track and seal plate supports, see dwgs. 13, 18 and 22.

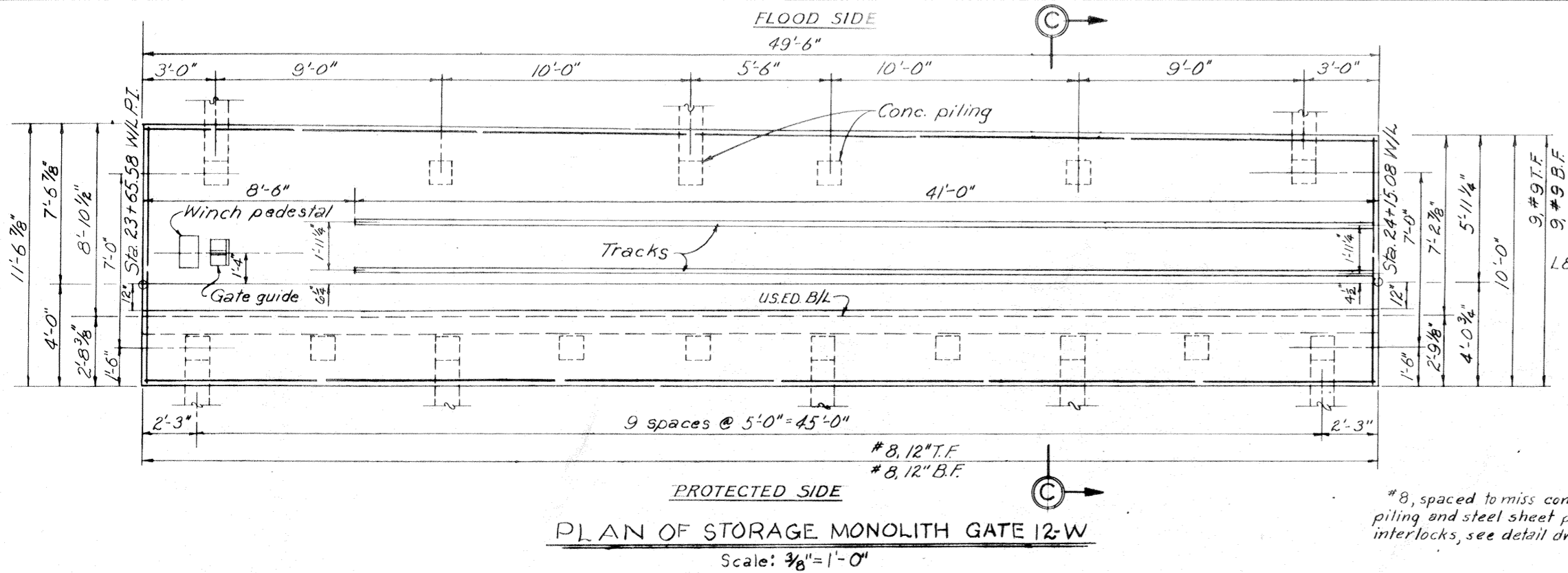
REVISION	DATE	DESCRIPTION	BY

U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LA.

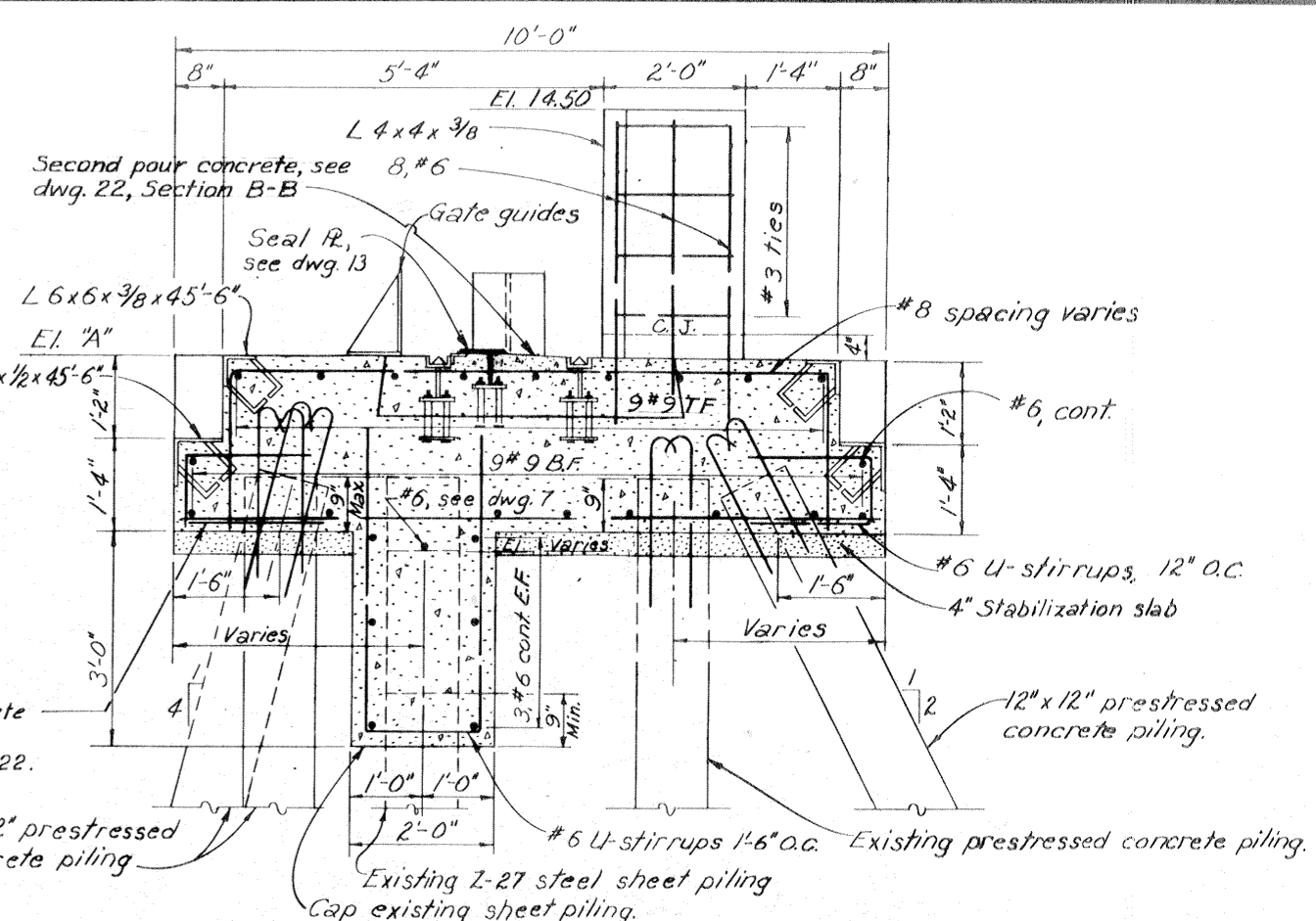
LAKE PONCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION)
INNER HARBOR NAVIGATION CANAL - WEST LEVEE
FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE
STA. 206+16.73 TO STA. 26+55.0
LEVEE AND FLOODWALL
ORLEANS PARISH, LOUISIANA

GATE MONOLITHS 11-W AND 12-W

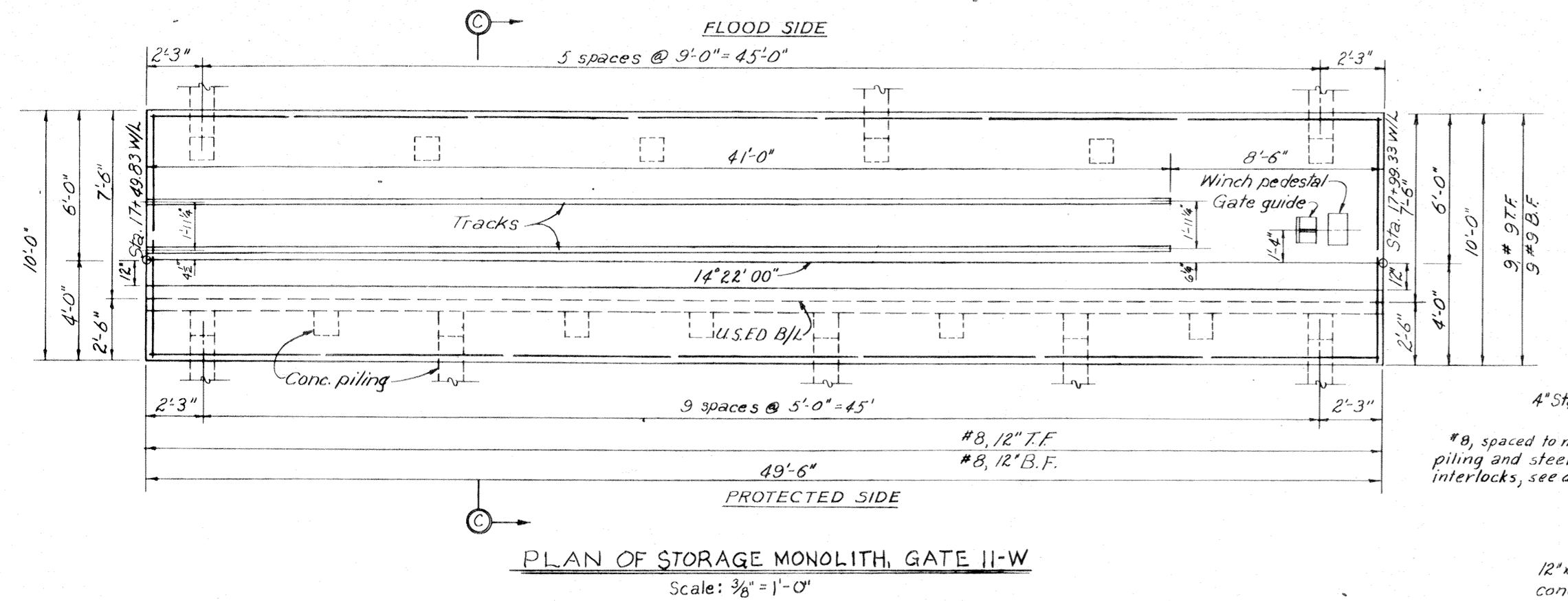
DESIGNED: T. F. P.	DRAWN: C. L. R.	CHECKED: D. A. M.	DATE: JULY 1972	SCALE: AS SHOWN	FILE NO. H-4-25958
SUBMITTED: H. M. M. M. M.			SPEC. NO. DACW29-73-B-0009	DWG. 10 OF 26	



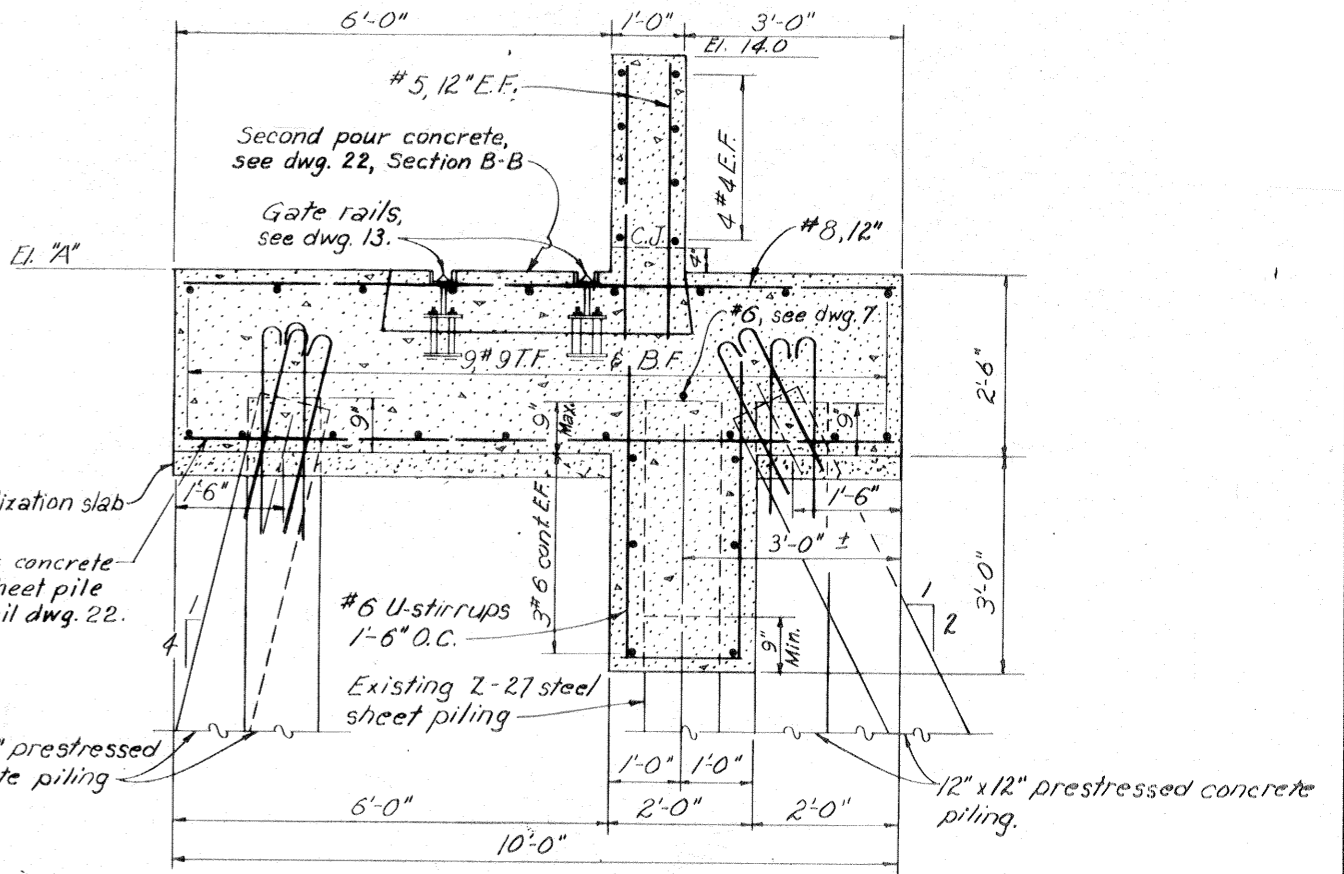
PLAN OF STORAGE MONOLITH GATE 12-W
Scale: 3/8" = 1'-0"



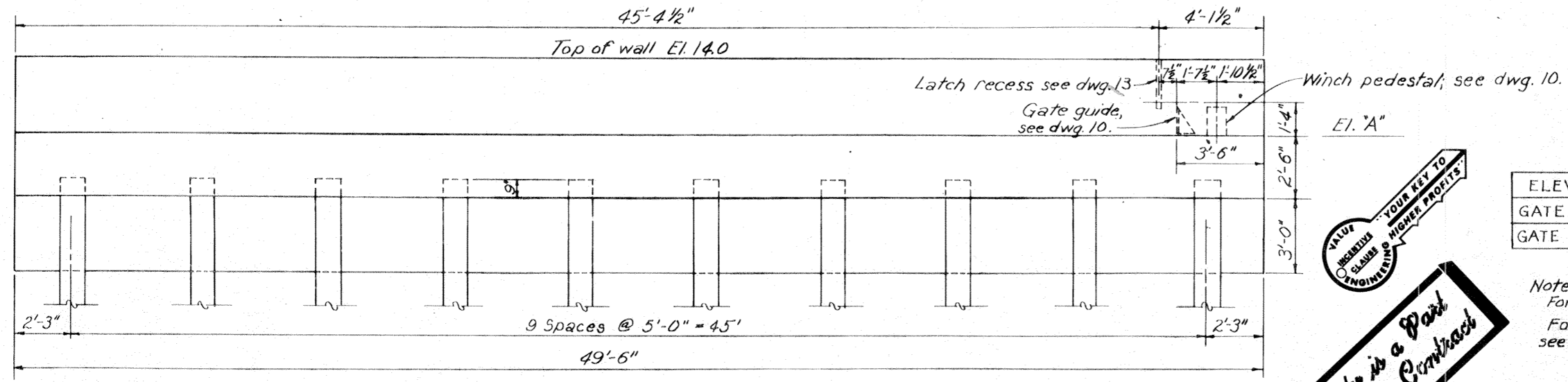
SECTION A-A
Scale: 3/4" = 1'-0"



PLAN OF STORAGE MONOLITH GATE 11-W
Scale: 3/8" = 1'-0"



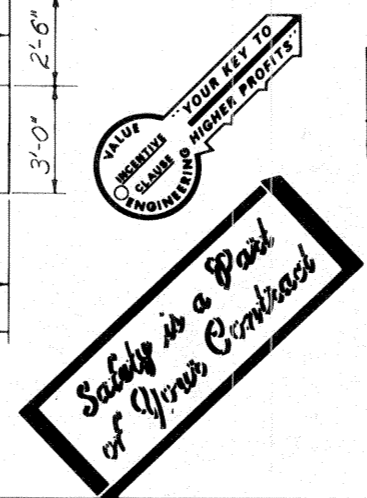
SECTION C-C
Scale: 3/4" = 1'-0"



PROTECTED SIDE ELEVATION, STORAGE MONOLITH, GATE 11-W
STORAGE MONOLITH, GATE 12-W, OPPOSITE HAND
Scale: 3/8" = 1'-0"

ELEVATION "A"	
GATE 11-W	11.0
GATE 12-W	11.41

Note:
For general notes, see dwg. 1.
For location of Section A-A,
see dwg. 10.



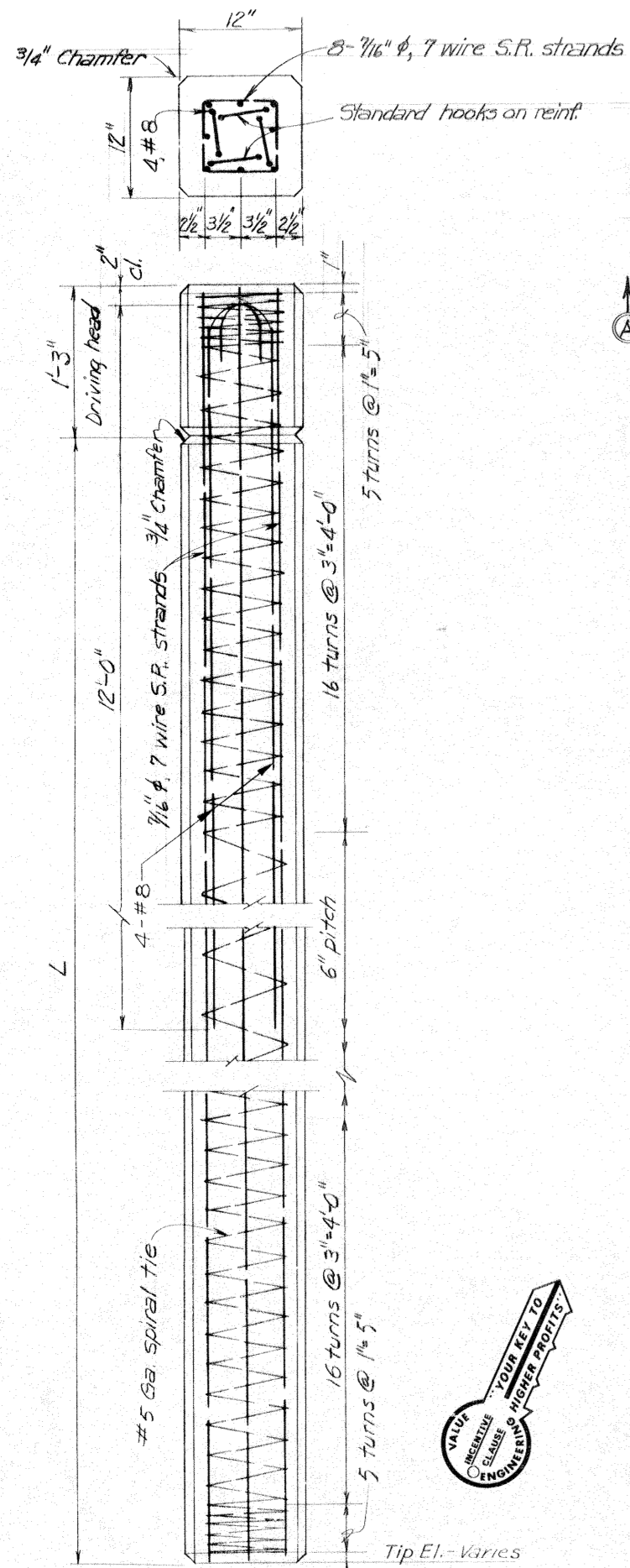
REVISION	DATE	DESCRIPTION	BY

U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LA.

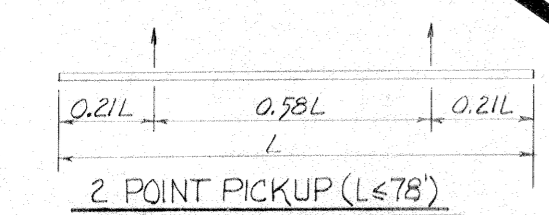
LAKE PONCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION)
INNER HARBOR NAVIGATION CANAL - WEST LEVEE
FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE
STA. 206+16.73 TO STA. 26+55.0
LEVEE AND FLOODWALL
ORLEANS PARISH, LOUISIANA

STORAGE MONOLITHS GATES 11-W AND 12-W

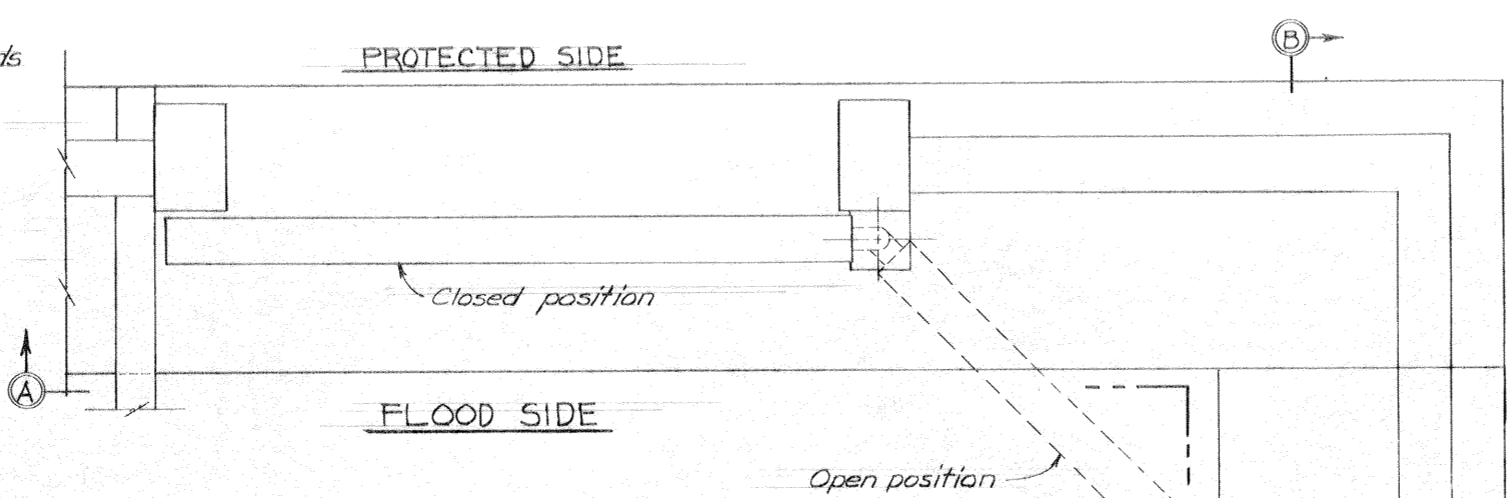
DESIGNED: T.F.P.	DRAWN: D.K.G.	CHECKED: D.A.M.	DATE: JULY 1972	SCALE: AS SHOWN	FILE NO. H-4-25958
SPEC. NO. DACW29-73-B-0009				DWG. NO. 11 OF 26	



Note: Grind prestressed strands flush with pile head and pile tip.
PRESTRESSED PRECAST CONCRETE PILE
 Scale: 1/2" = 1'-0"

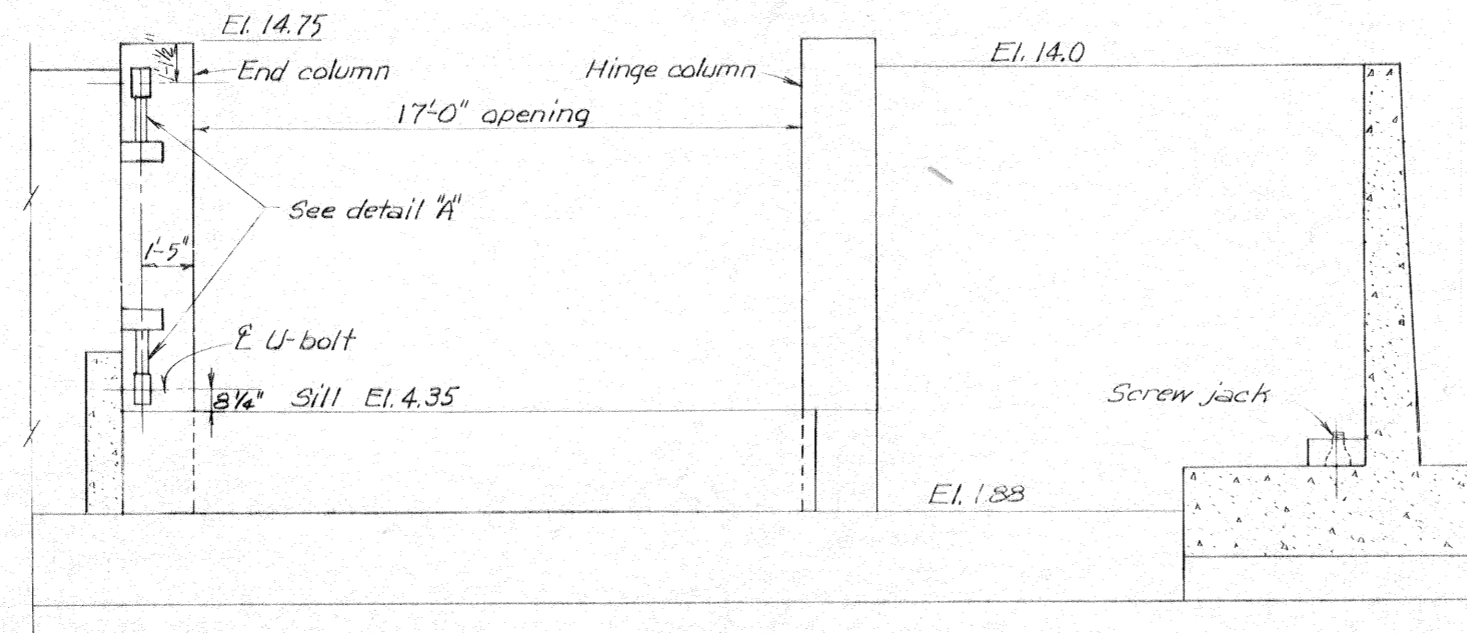


Note: Pickup points to be plainly marked on piles.

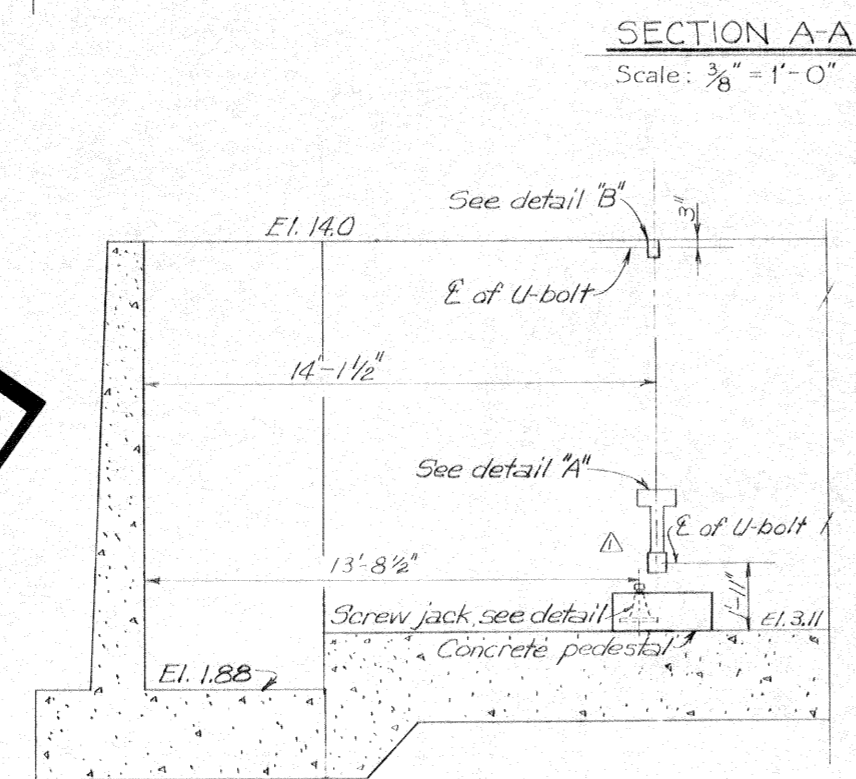


PLAN OF SWING GATE II-W
 Scale: 3/8" = 1'-0"

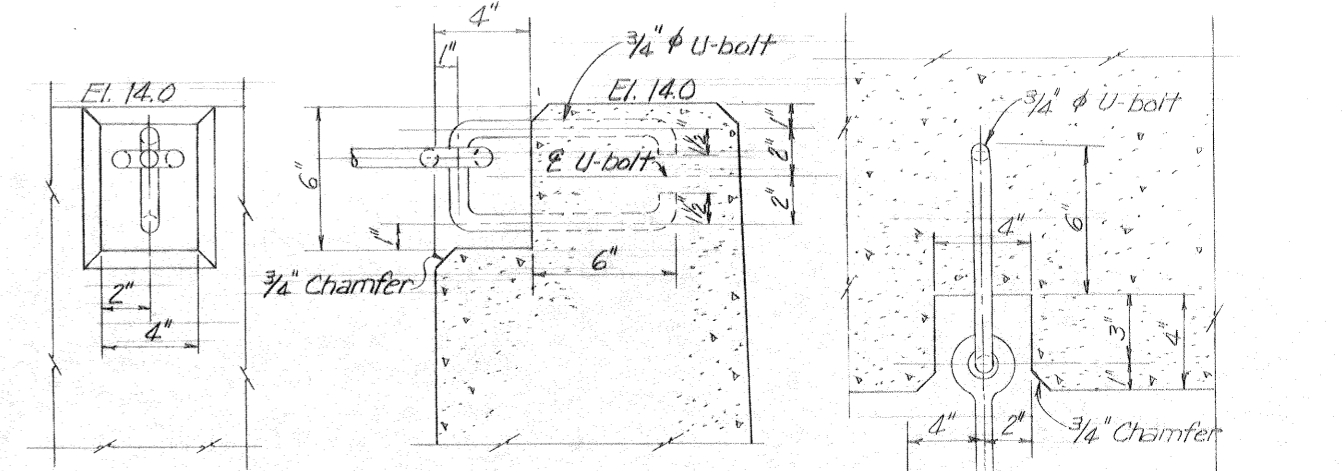
THIS PLAN ACCOMPANIES
 MODIFICATION P00003 TO
 CONTRACT NO. DACW29-
 73-C-0022



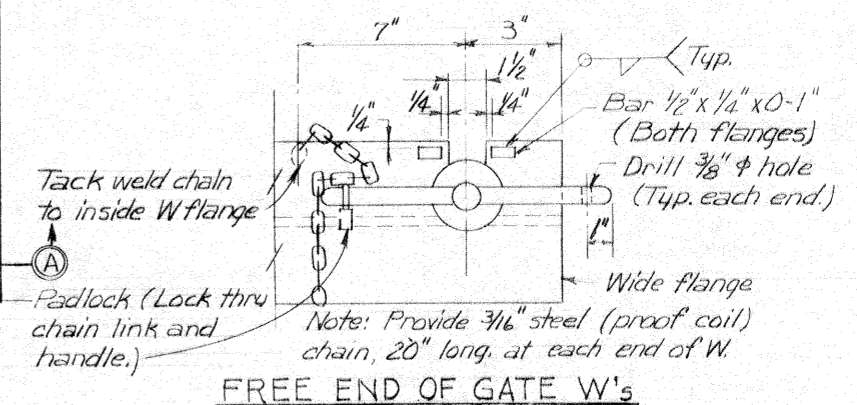
SECTION A-A
 Scale: 3/8" = 1'-0"



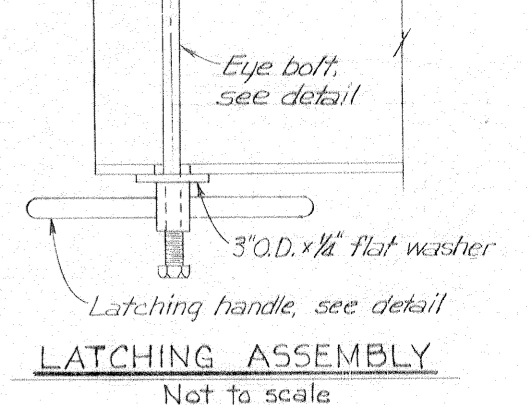
SECTION B-B
 Scale: 3/8" = 1'-0"



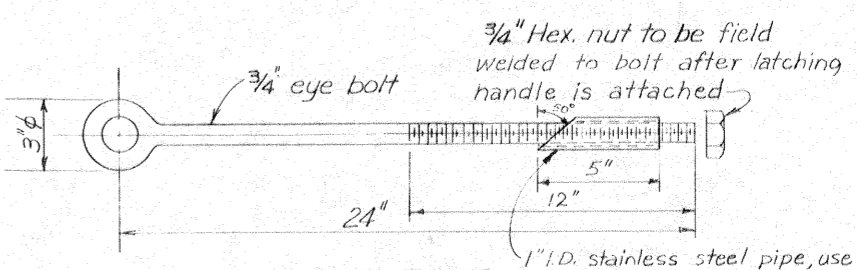
DETAIL "B"
 Scale: 3" = 1'-0"



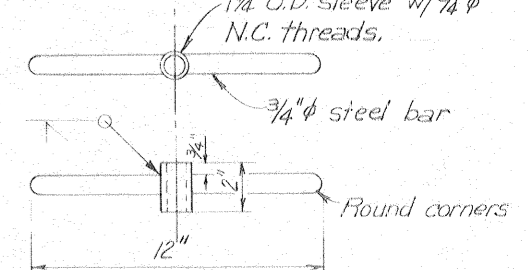
FREE END OF GATE W's
 Scale: 3" = 1'-0"



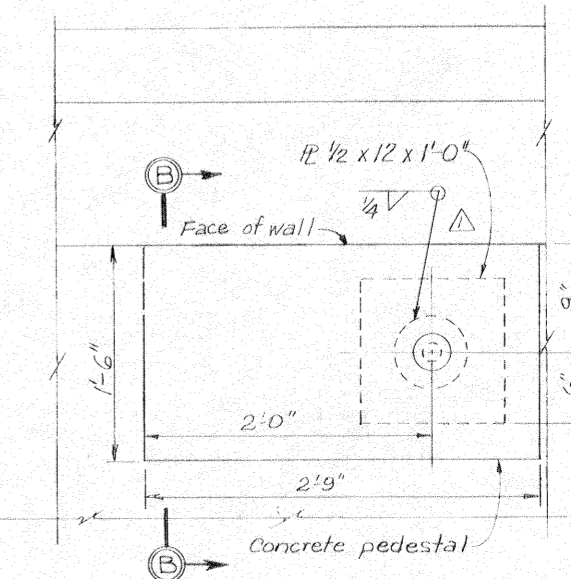
LATCHING ASSEMBLY
 Not to scale



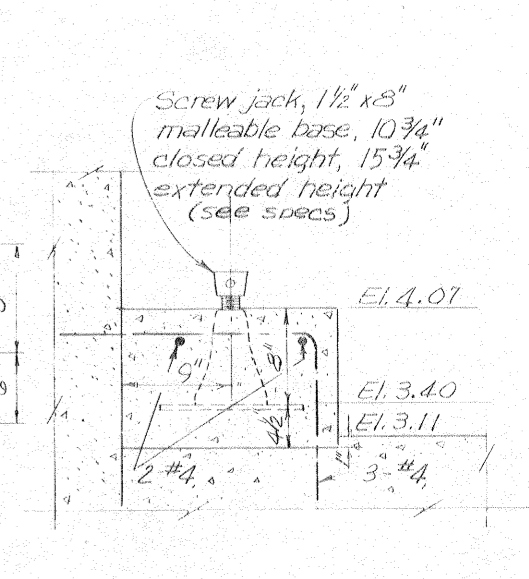
EYE BOLT
 Scale: 3" = 1'-0"



LATCHING HANDLE
 Scale: 3" = 1'-0"



PLAN



SECTION B-B

SCREW JACK DETAIL

Scale: 1/2" = 1'-0"

REVISION	DATE	DESCRIPTION	BY
1	4-25-73	Changed location of pedestal, Mod. # 3	

- Notes:
- For general notes, see dwg. 1.
 - All materials for latching devices shall be C.R.S.
 - For pile length see table on dwg. 4.

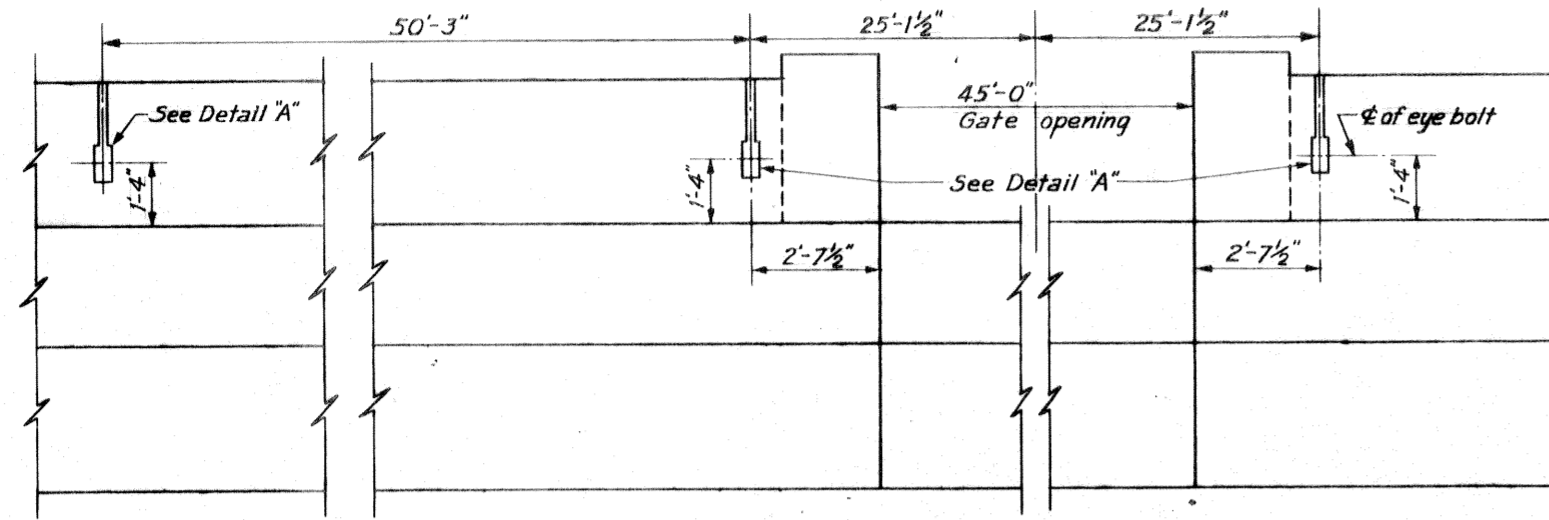
NOTE: DRAWING REDUCED TO ONE HALF SCALE

U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LA.

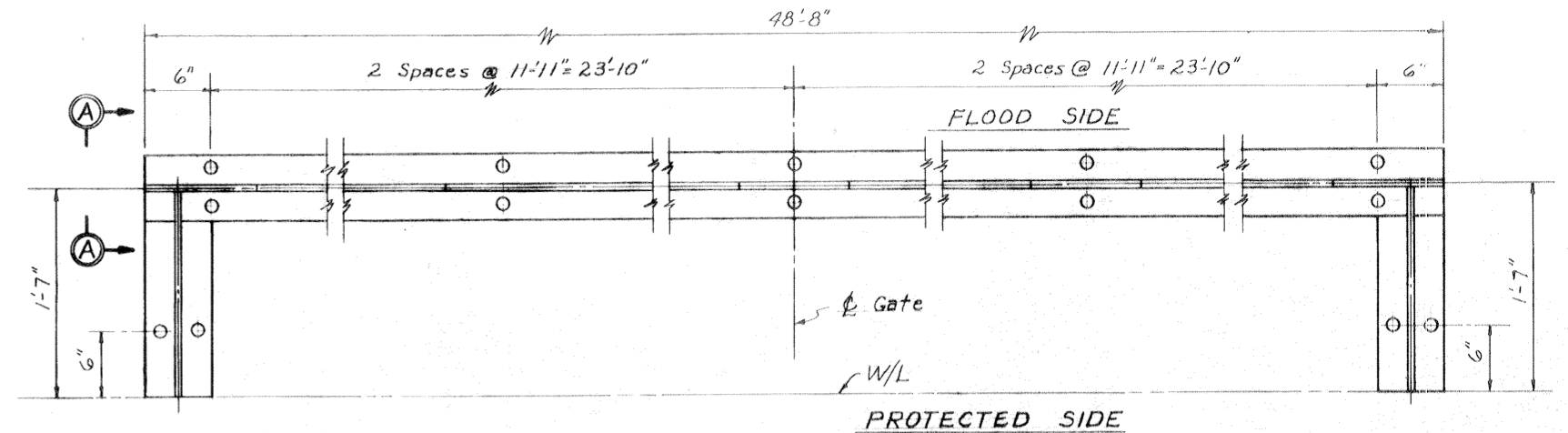
LAKE PONCHARTRAIN, LOUISIANA AND VICINITY (HURRICANE PROTECTION)
 INNER HARBOR NAVIGATION CANAL - WEST BRIDGE
 FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE
 STA. 206+16.73 TO STA. 26+55.0
 LEVEE AND FLOODWALL
 ORLEANS PARISH, LOUISIANA

**PRECAST, PRESTRESSED CONCRETE PILE
 DETAIL AND SWING GATE LATCHING DEVICES**

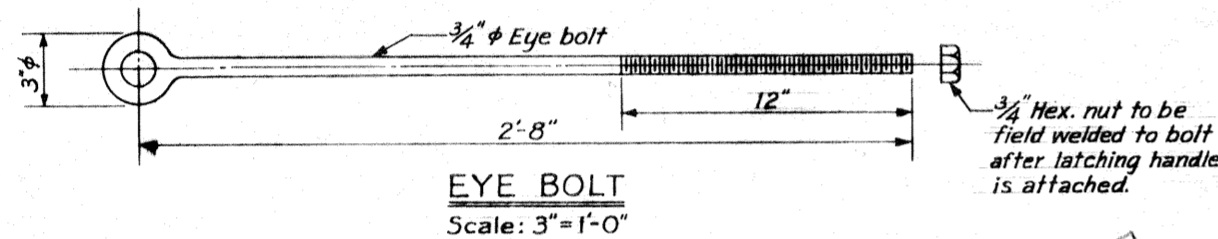
DESIGNED J. G.	DRAWN D. K. G.	CHECKED D. A. M.	DATE JULY 1972	SCALE AS SHOWN	FILE NO. H-4-25958
SUBMITTED BY A. M. M. L.			SPEC. NO. DACW29-73-B-0009	DWG. NO. 12	OF 26



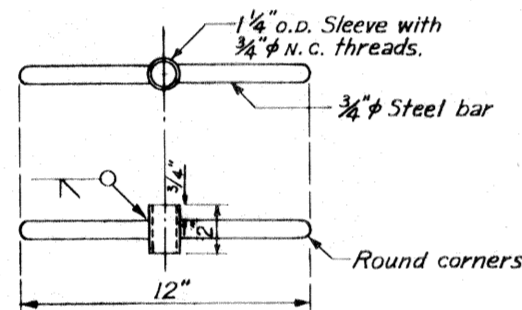
FLOOD SIDE ELEVATION OF GATE 11-W
(Gate 12-W opposite hand)
Scale: 1/2"=1'-0"



Note: Seal plate is not shown.
PLAN OF SEAL SUPPORT BEAM WITH ANCHOR BOLTS
Scale: 1/2"=1'-0"

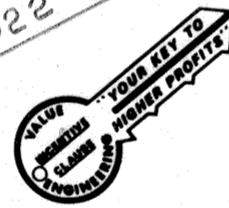


EYE BOLT
Scale: 3"=1'-0"

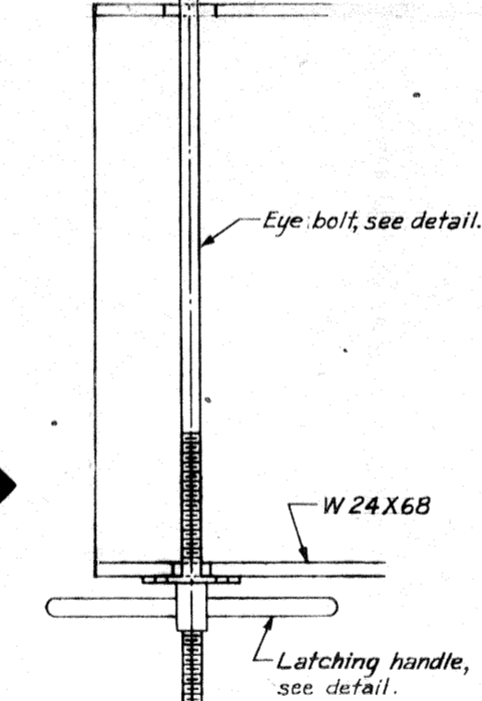
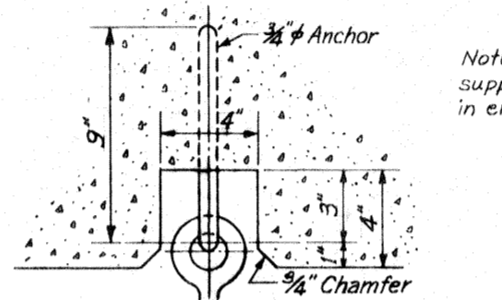


LATCHING HANDLE
Scale: 3"=1'-0"

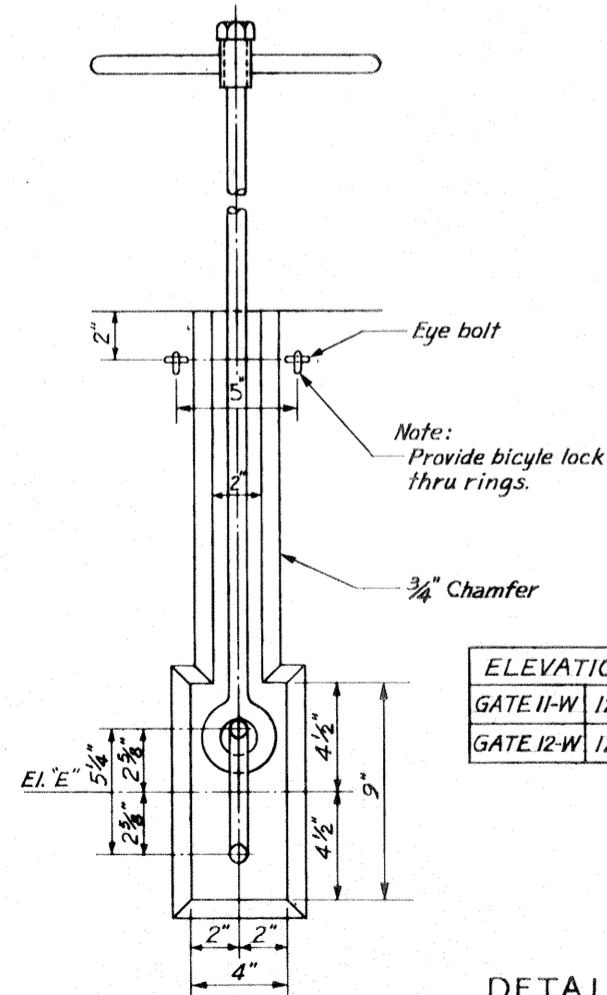
THIS PLAN ACCOMPANIES
MODIFICATION P00002 TO
CONTRACT NO. DACW29-
73-C-0022



Safety is a Part of Your Contract

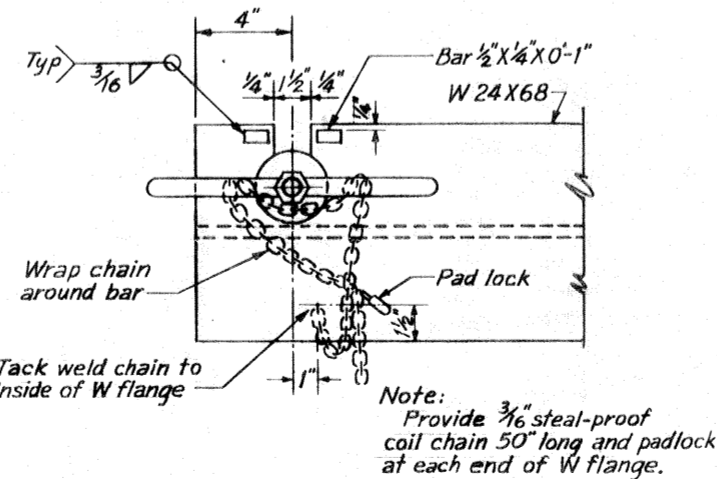


LATCHING ASSEMBLY
Scale: 3"=1'-0"

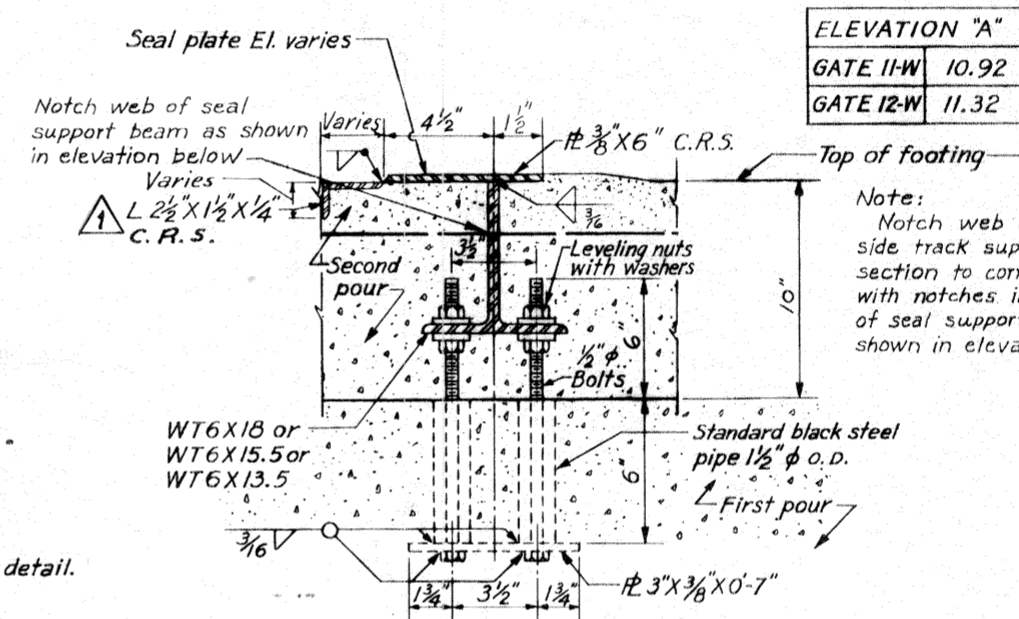


ELEVATION "E"	
GATE 11-W	12.33
GATE 12-W	12.74

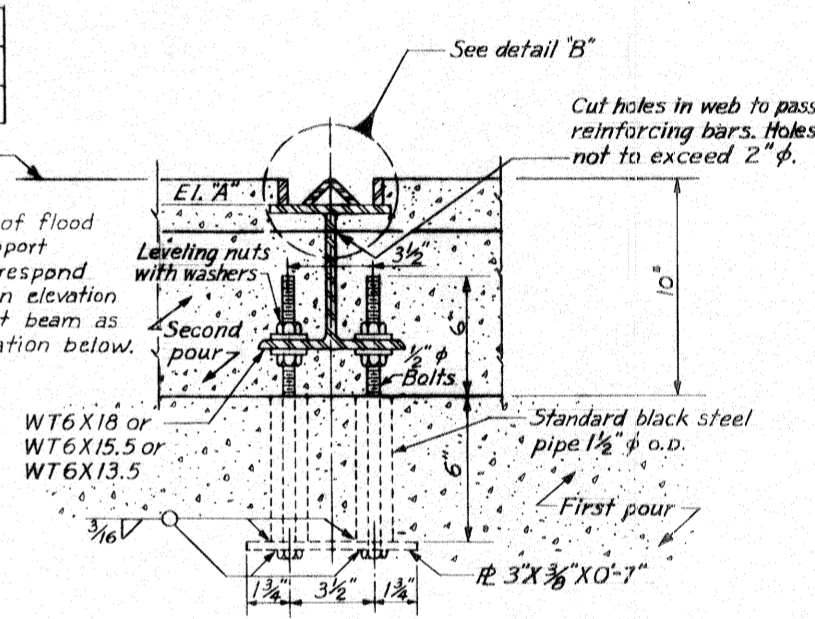
DETAIL "A"
Scale: 3"=1'-0"



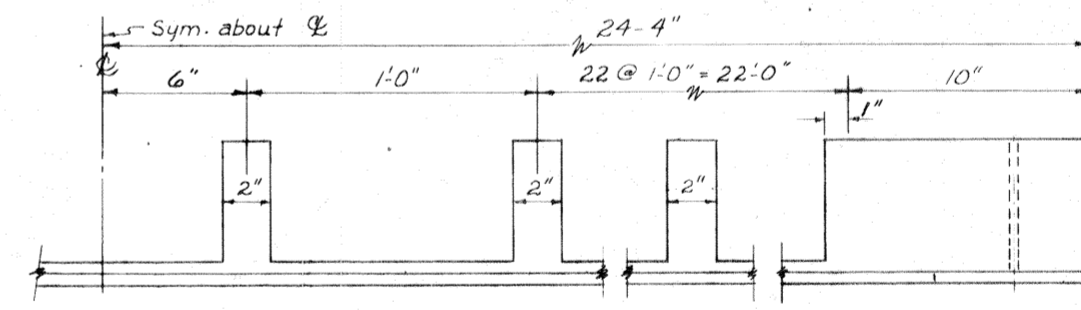
END OF GATE
Scale: 3"=1'-0"



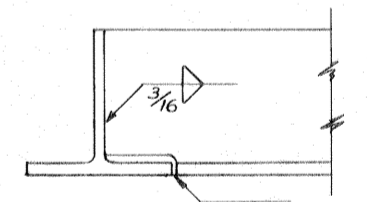
TYPICAL SECTION THRU SEAL PLATE
Scale: 3"=1'-0"



SECTION THRU TRACK AND SUPPORT
Scale: 3"=1'-0"

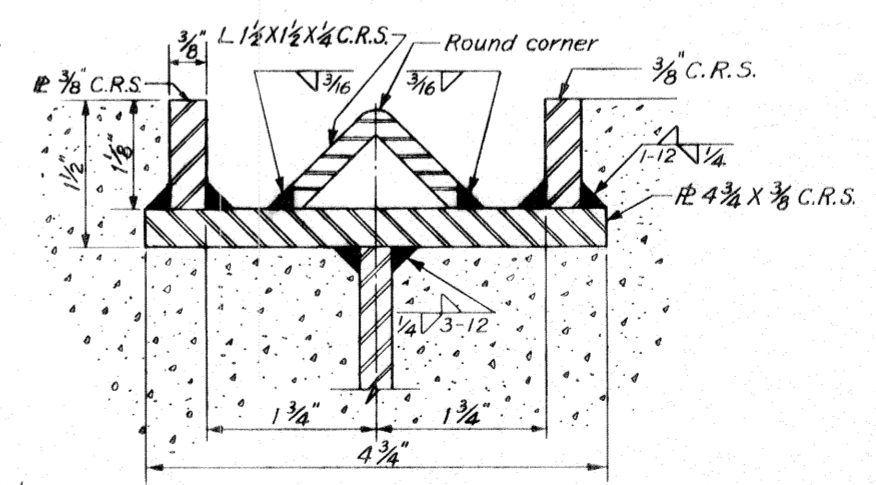


ELEVATION OF SEAL SUPPORT BEAM
Scale: 3"=1'-0"



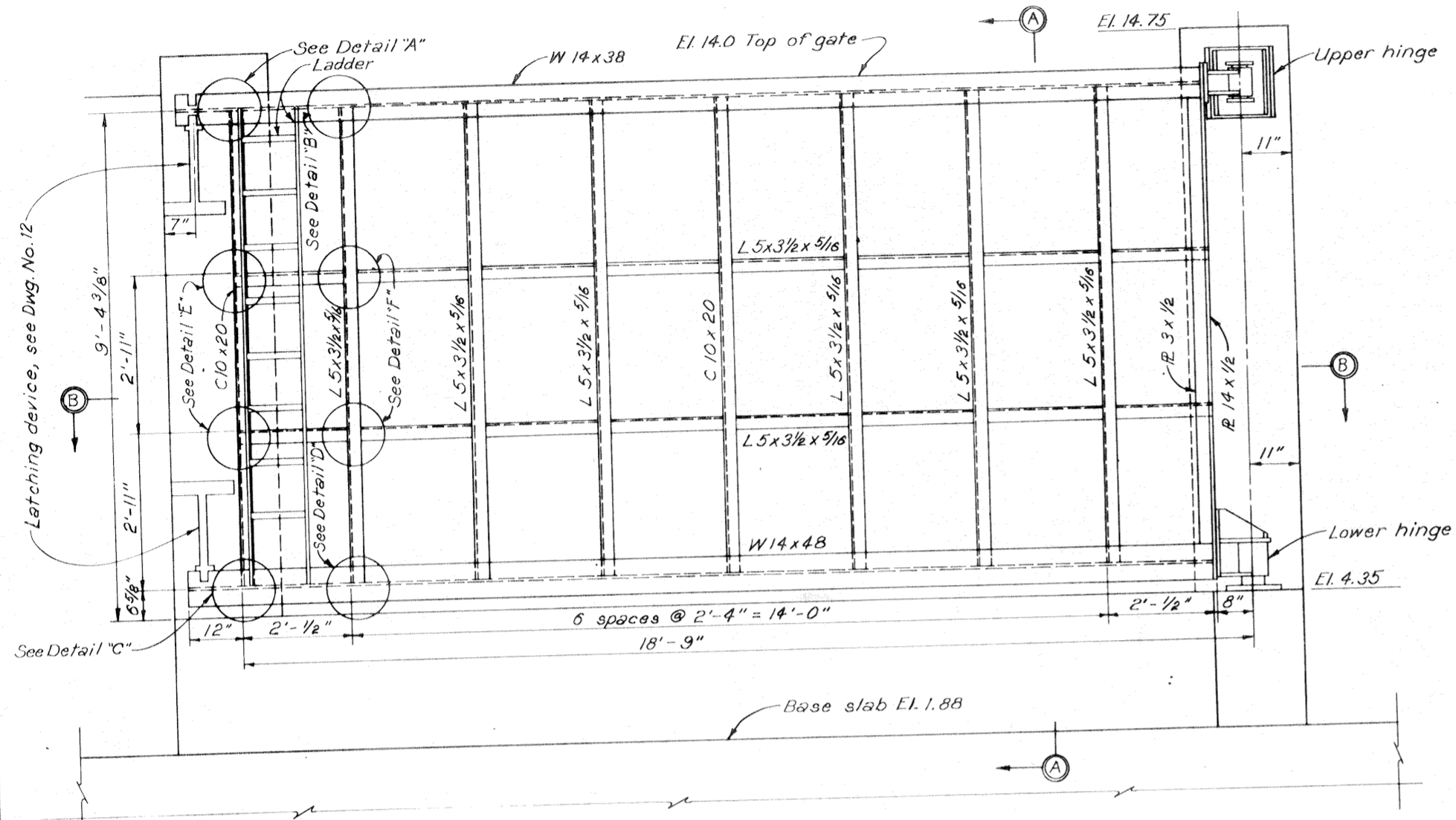
ELEVATION A-A
Scale: 3"=1'-0"

- Notes:
1. For general notes, see dwg. 1.
2. All material for latching devices shall be C.R.S.
3. For additional track details see Dwg. 18 and 22.

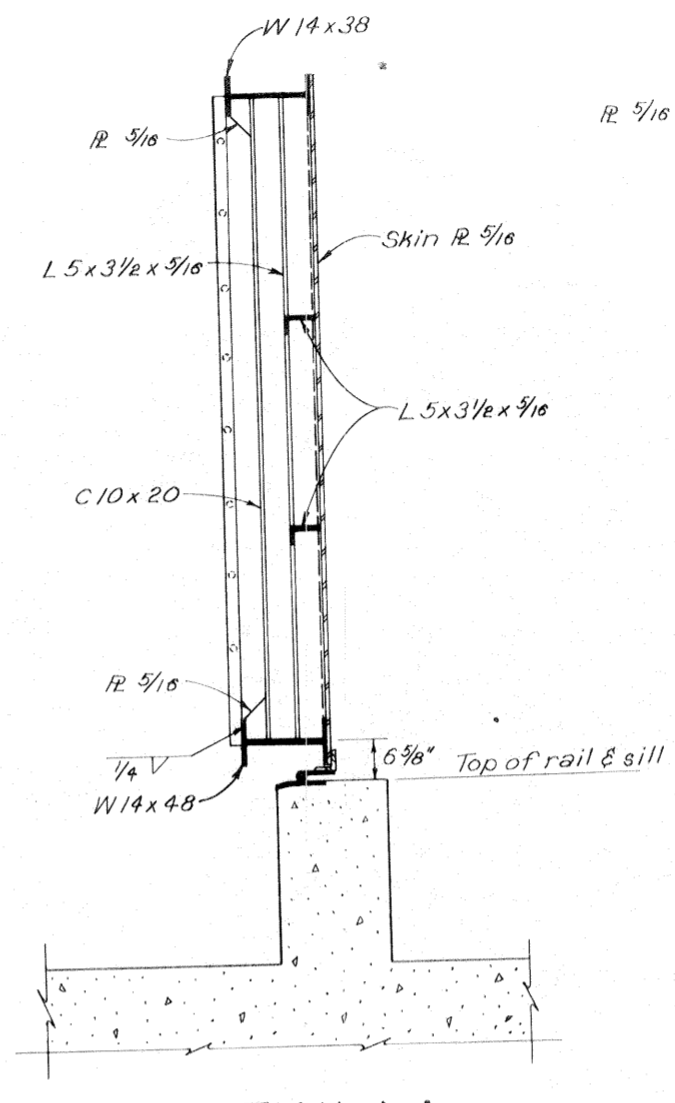


DETAIL "B"
Full Size

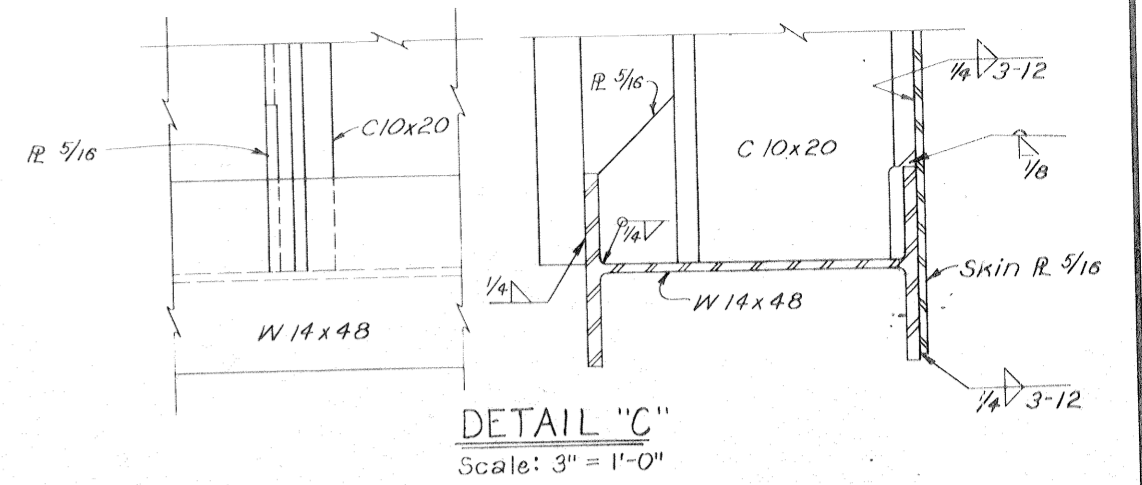
1	1-9-73	Changed angle to C.R.S. Mod. # 2	D.H.H.
REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA.			
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA			
MISCELLANEOUS DETAILS FOR ROLLER GATES			
DESIGNED: T.F.P.	DRAWN: R.G.S.	CHECKED: D.A.M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO. H-4-25958	
SUBMITTED BY: H. J. M. M. M.			
PROJECT NO. DACW29-73-B-0009			
DWG. NO. 13 OF 26			



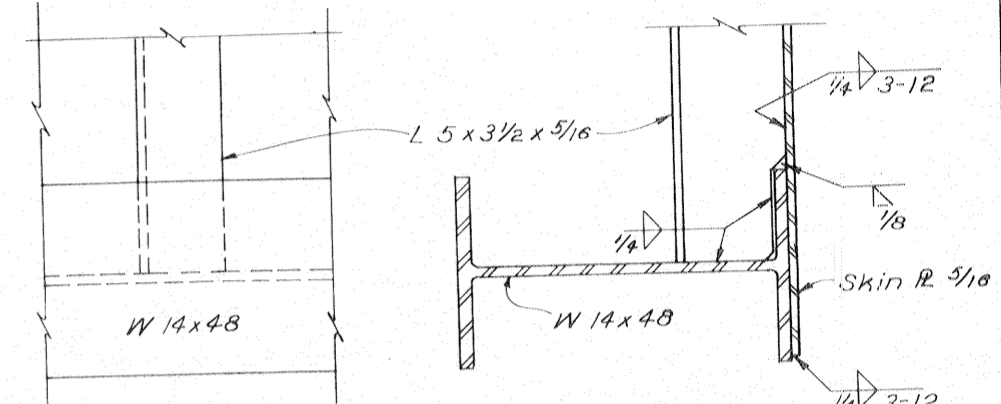
FLOOD SIDE ELEVATION
Scale: 3/4" = 1'-0"



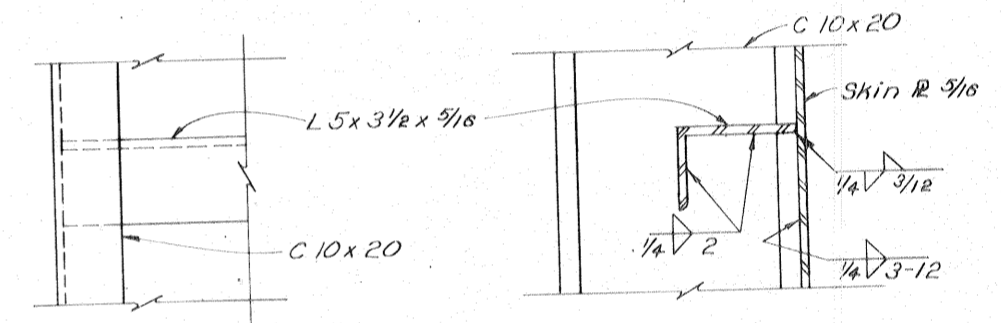
SECTION A-A
Scale: 3/4" = 1'-0"



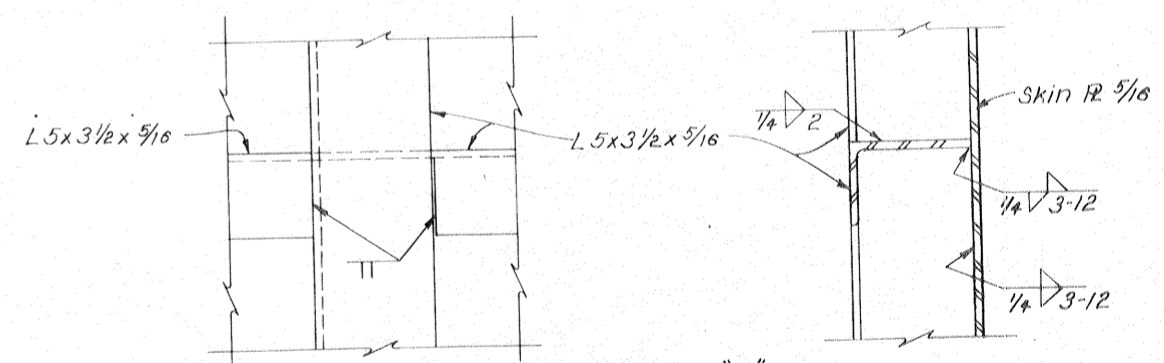
DETAIL "C"
Scale: 3" = 1'-0"



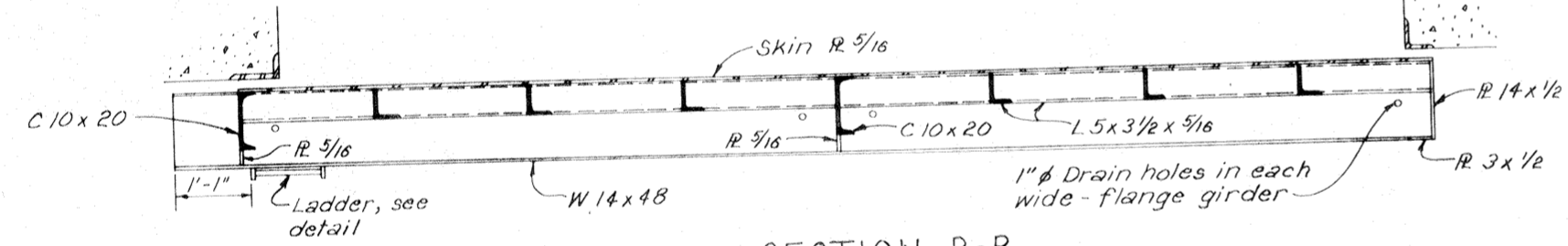
DETAIL "D"
Scale: 3" = 1'-0"



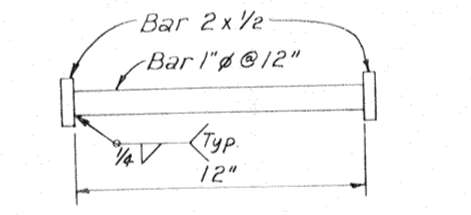
DETAIL "E"
Scale: 3" = 1'-0"



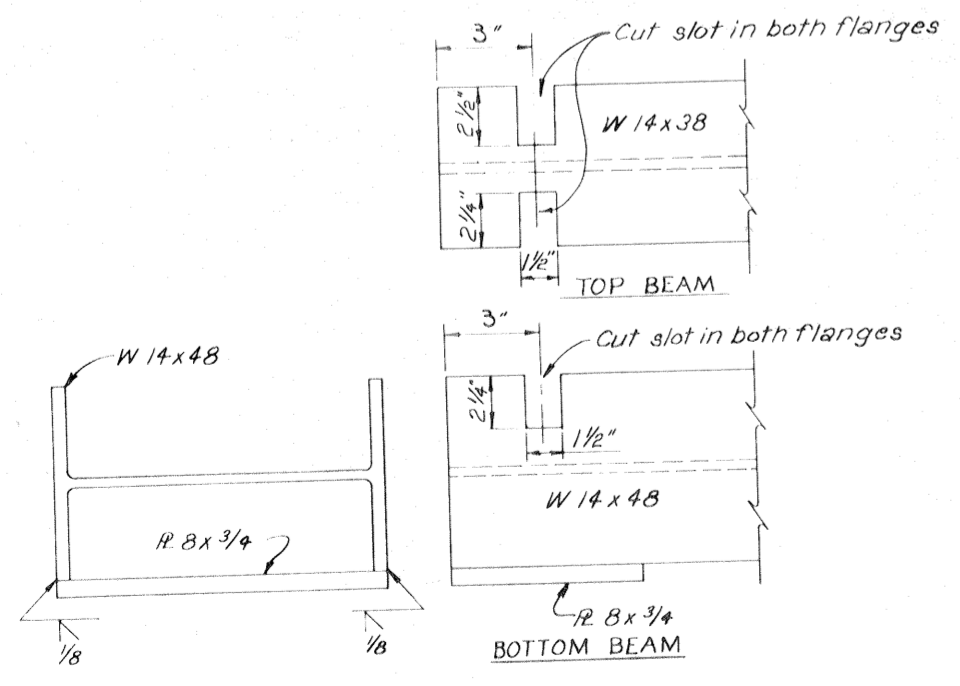
DETAIL "F"
Scale: 3" = 1'-0"



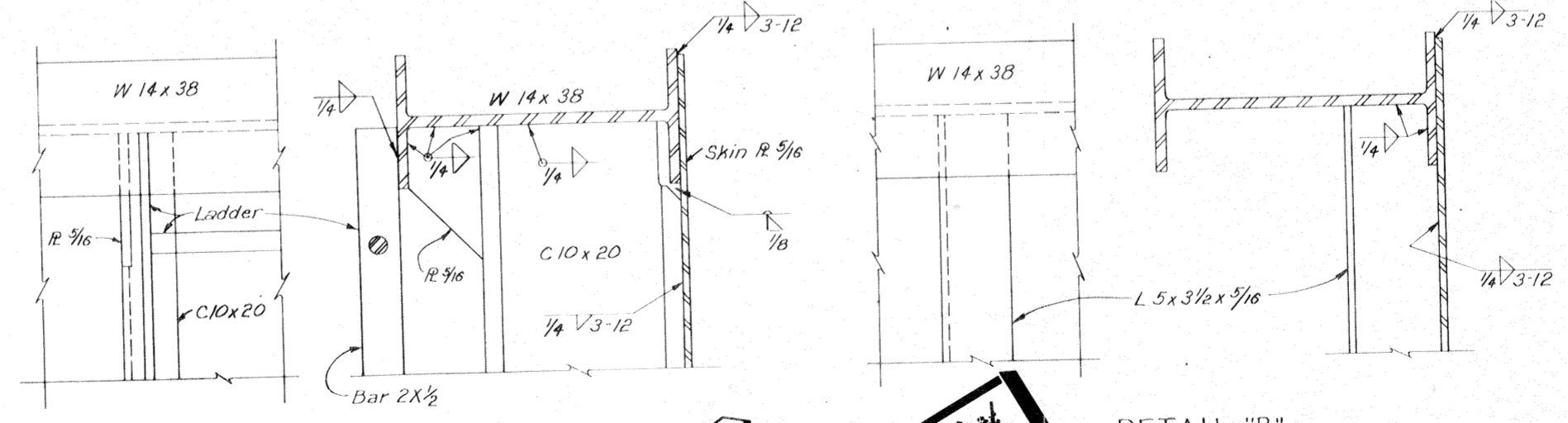
SECTION B-B
Scale: 3/4" = 1'-0"



PLAN LADDER DETAIL
Scale: 3" = 1'-0"



LOCKING DEVICE NOTCHES IN WF's
Scale: 3" = 1'-0"

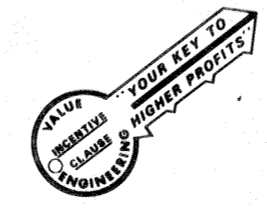


DETAIL "A"
Scale: 3" = 1'-0"

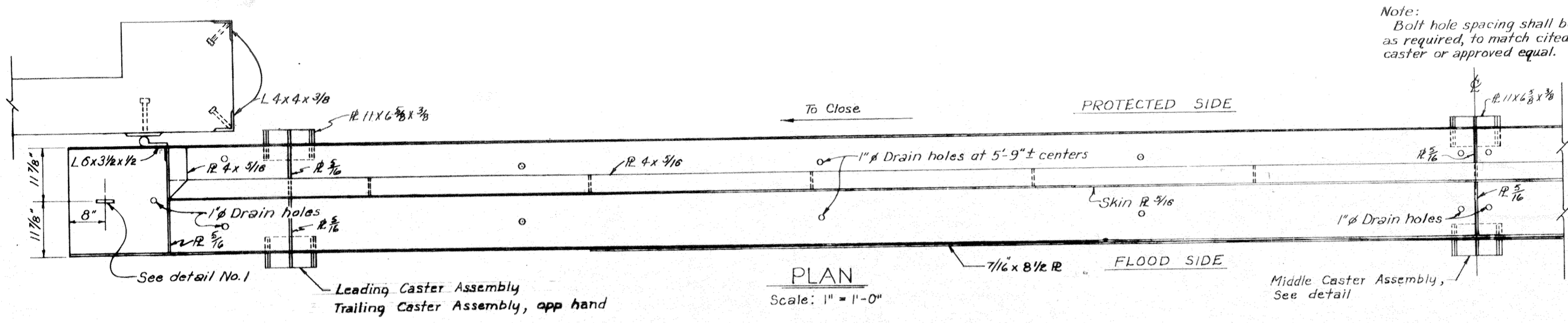
DETAIL "B"
Scale: 3" = 1'-0"

- Notes:
1. For general notes, see dwg. 1.
 2. A 1/8 inch watertight weld shall be used for the length between all intermittent welds.
 3. For swing gate seal details, see dwg. 19.
 4. For swing gate hinge details, see dwgs. 20 and 21.

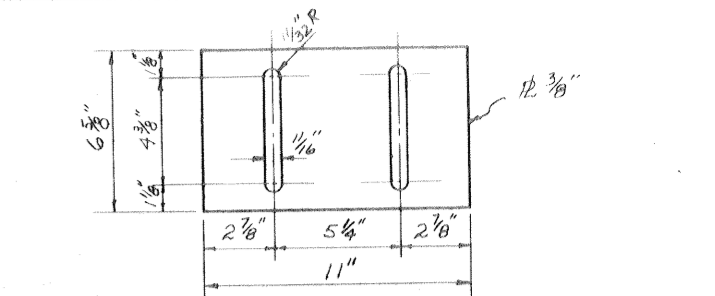
REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA. LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA W-26 SWING GATE 10-W			
DESIGNED:	J. G.	DRAWN:	L. R. M.
CHECKED:	D. A. M.	DATE:	JULY 1972
SCALE:	AS SHOWN	FILE NO.:	H-4-25958
SUBMITTED:	W. A. D. Moulton	SPEC. NO.:	DACW29-73-B-0009
DWG. NO.:	14	OF	26



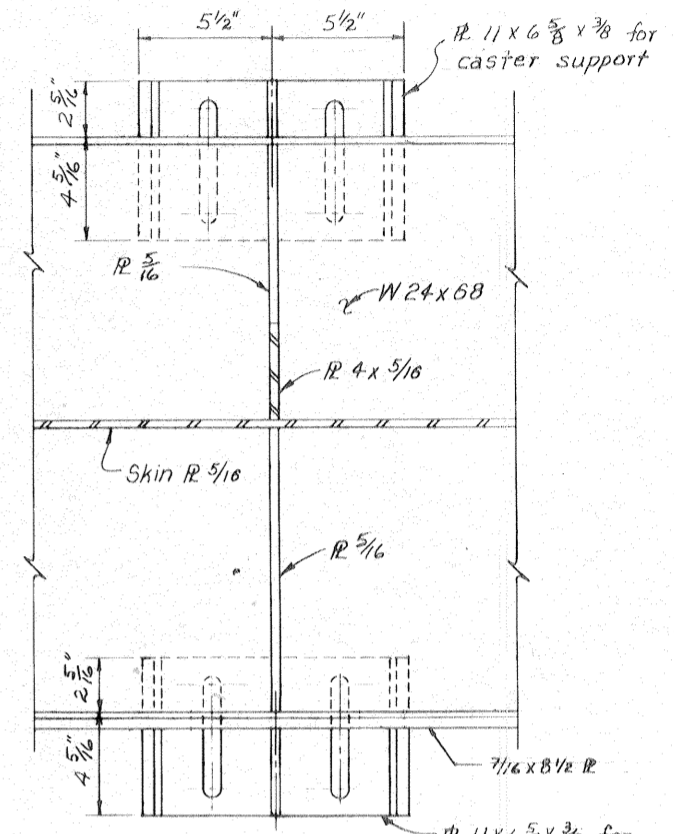
Safety is a Part of Your Contract



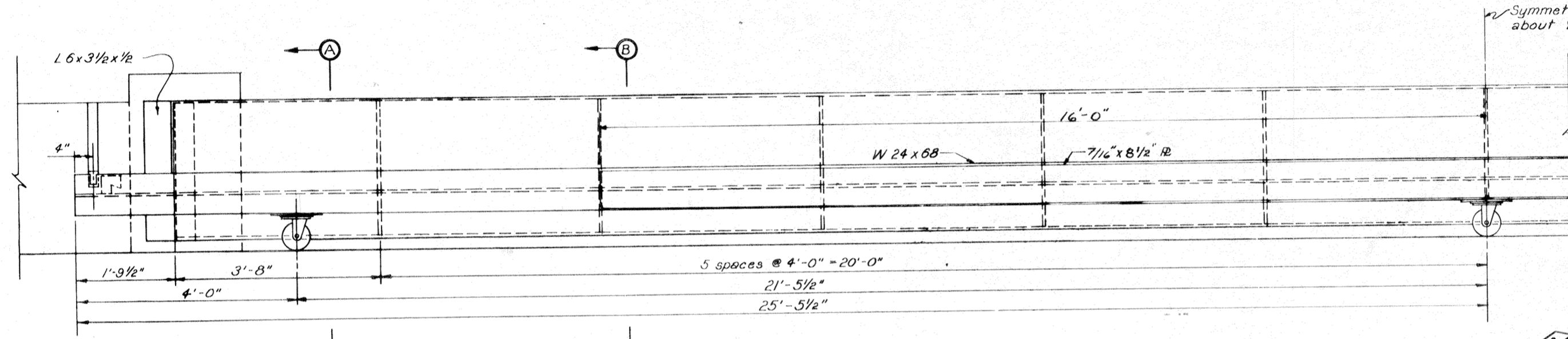
Note:
Bolt hole spacing shall be revised,
as required, to match cited catalogue
caster or approved equal.



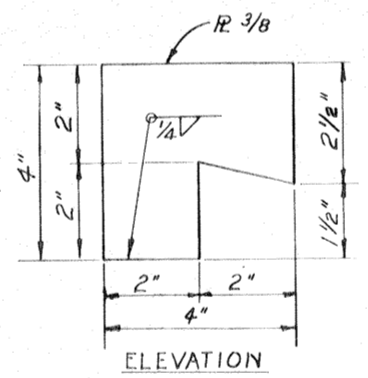
DETAIL OF CASTER SUPPORT PLATE
Scale: 3" = 1'-0"



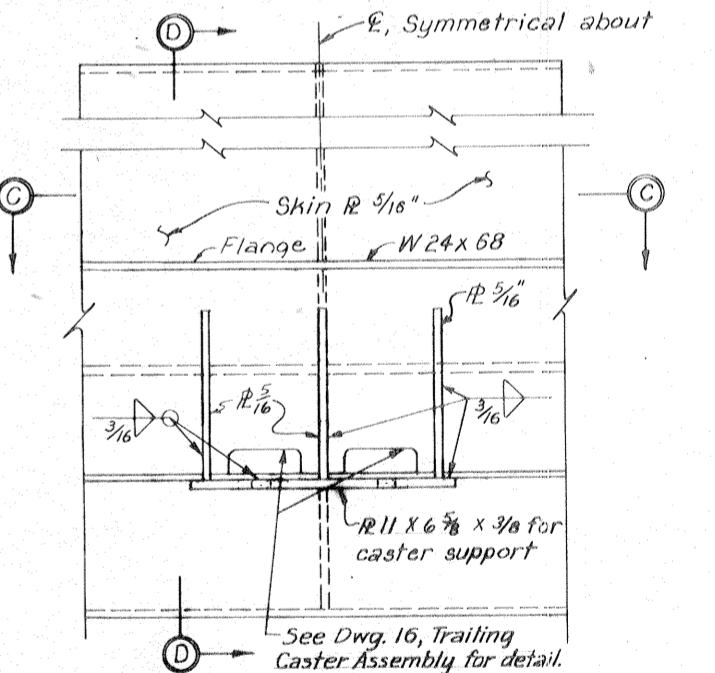
SECTION C-C
Scale: 3" = 1'-0"



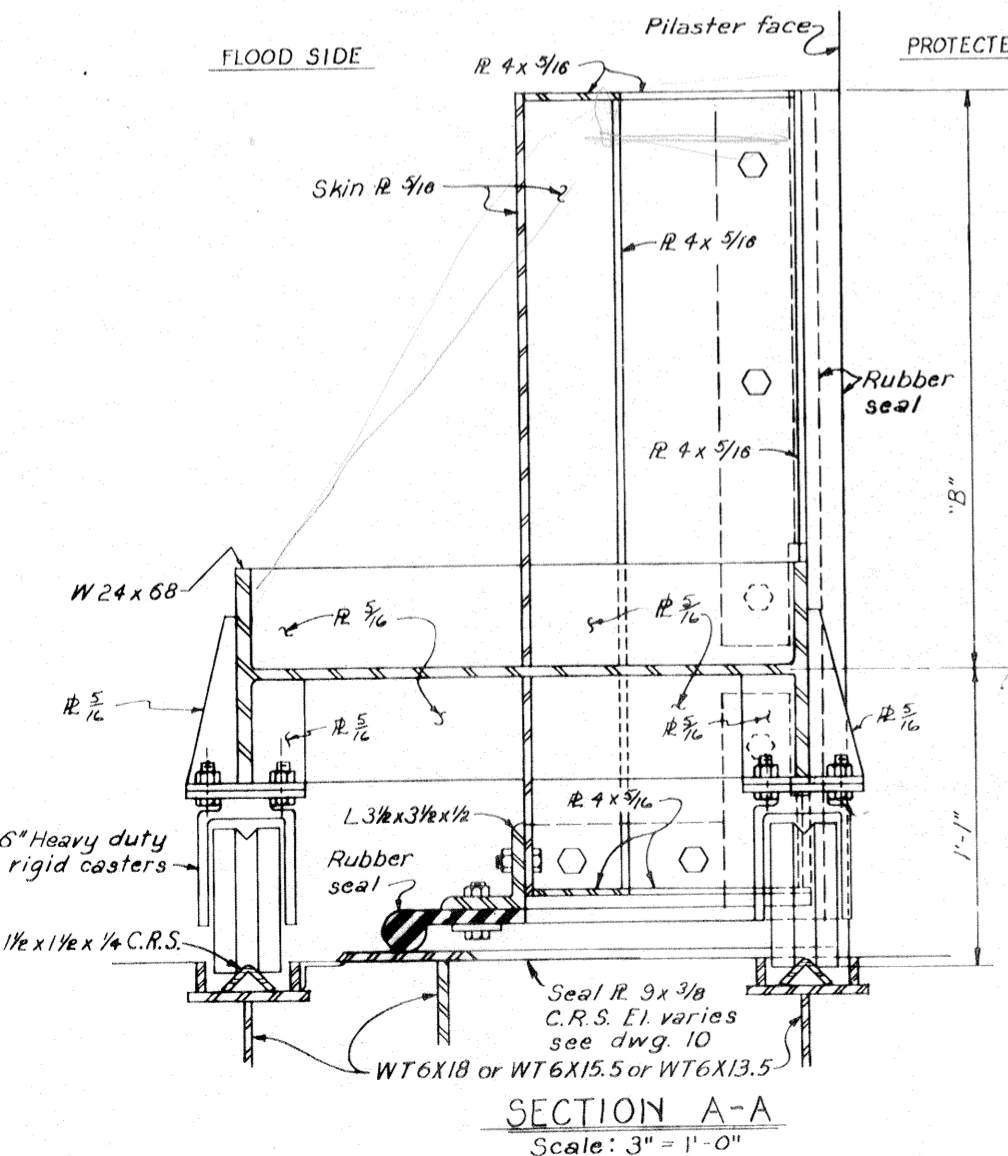
FLOOD SIDE ELEVATION
Scale: 1" = 1'-0"



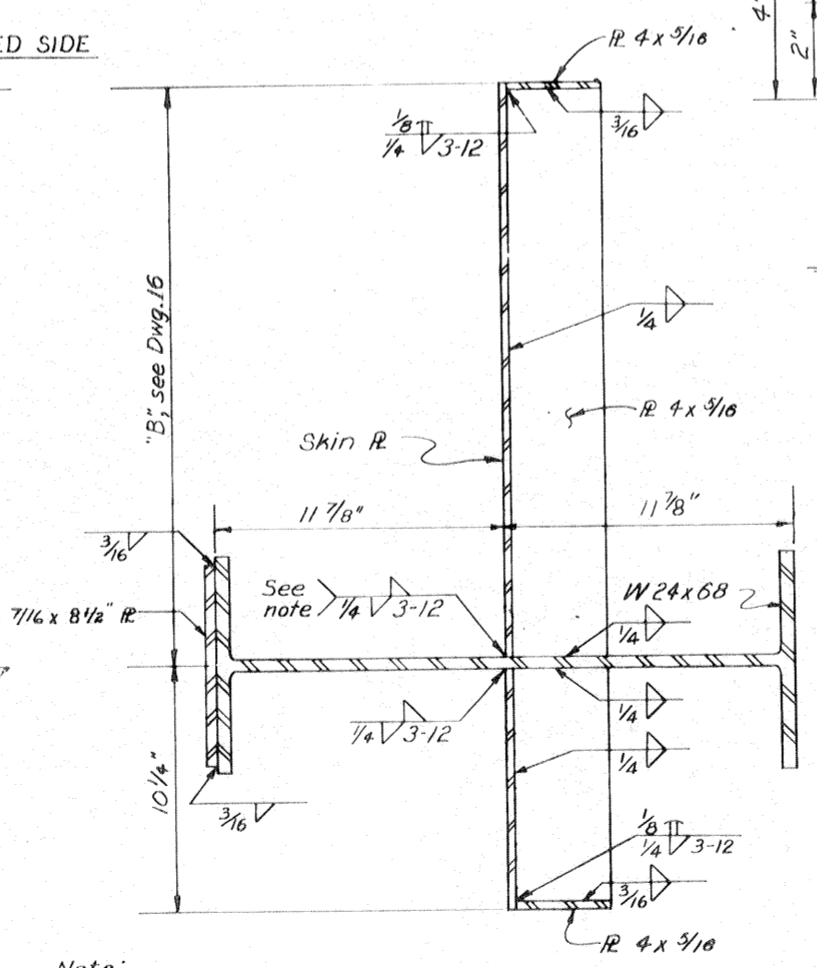
ELEVATION
DETAIL NO. 1
Scale: 1/2" = 1'-0"



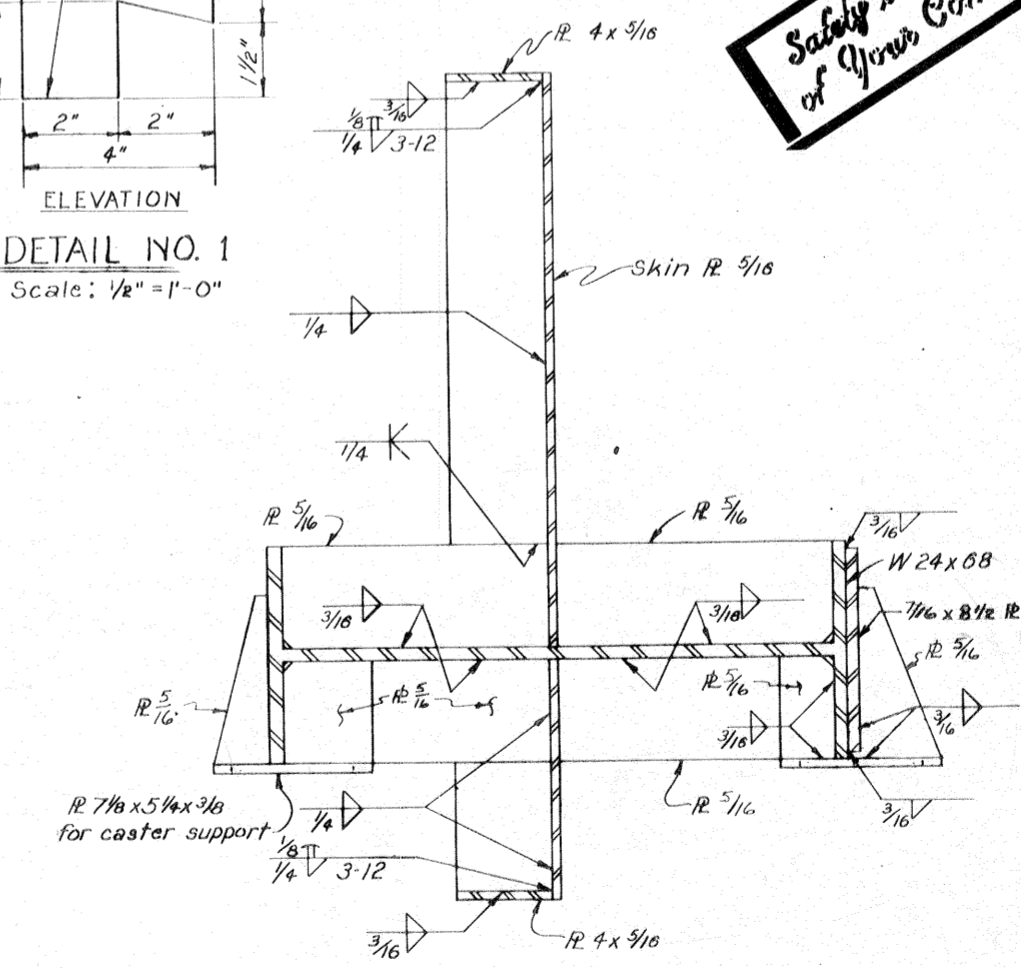
MIDDLE CASTER ASSEMBLY
Scale: 3" = 1'-0"



SECTION A-A
Scale: 3" = 1'-0"



SECTION B-B
Scale: 3" = 1'-0"



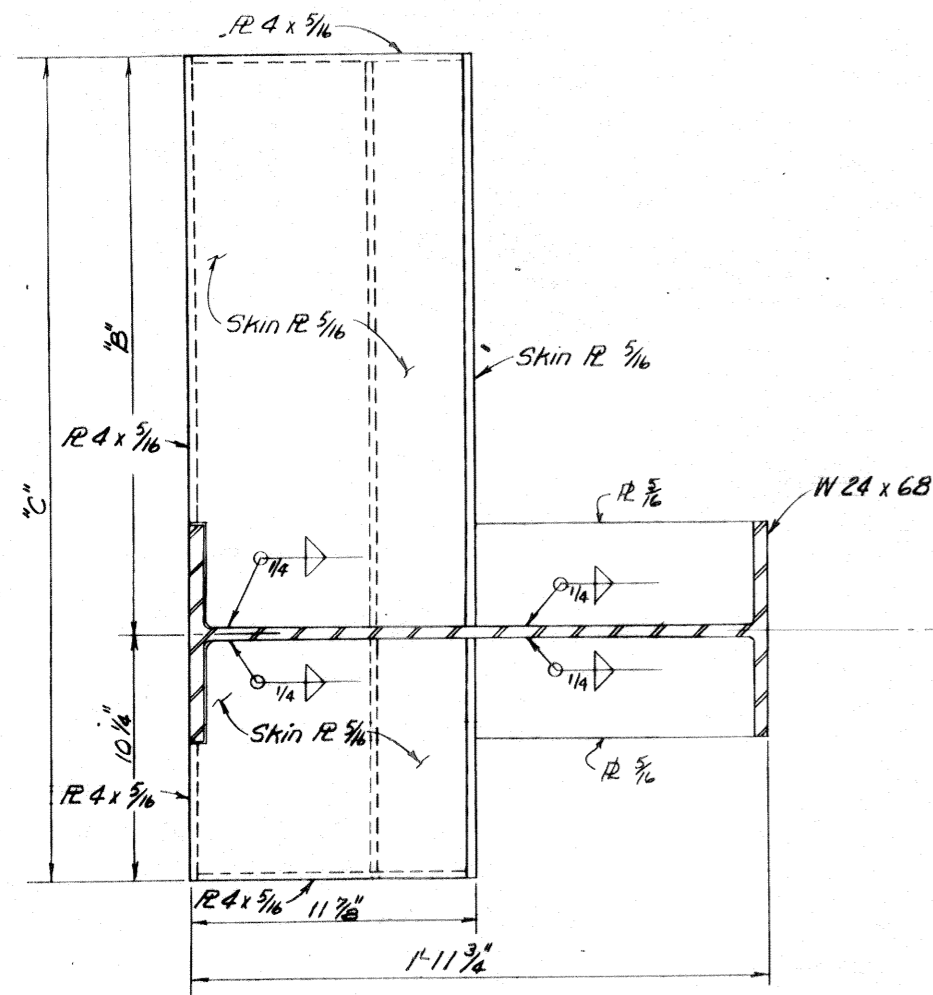
SECTION D-D
Scale: 3" = 1'-0"

Note:
For dimension "B"
see dwg. 16

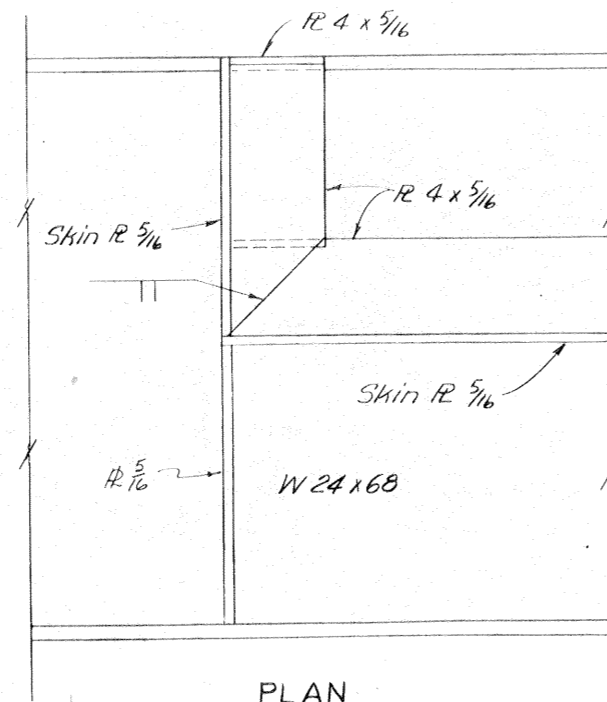
Note:
For general notes, see dwg. 1.
A 1/8" watertight weld shall be
used for the length between
all intermittent welds.

REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA. LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA ROLLER GATES II-W AND I2-W			
DESIGNED: T.F.F.	DRAWN: L.R.M.	CHECKED: D.A.M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO. H-4-25958	
SUBMITTED: Daniel A. Marscher		SPEC. NO. DACW29-73-B-0009	
DWG. 15		OF 26	

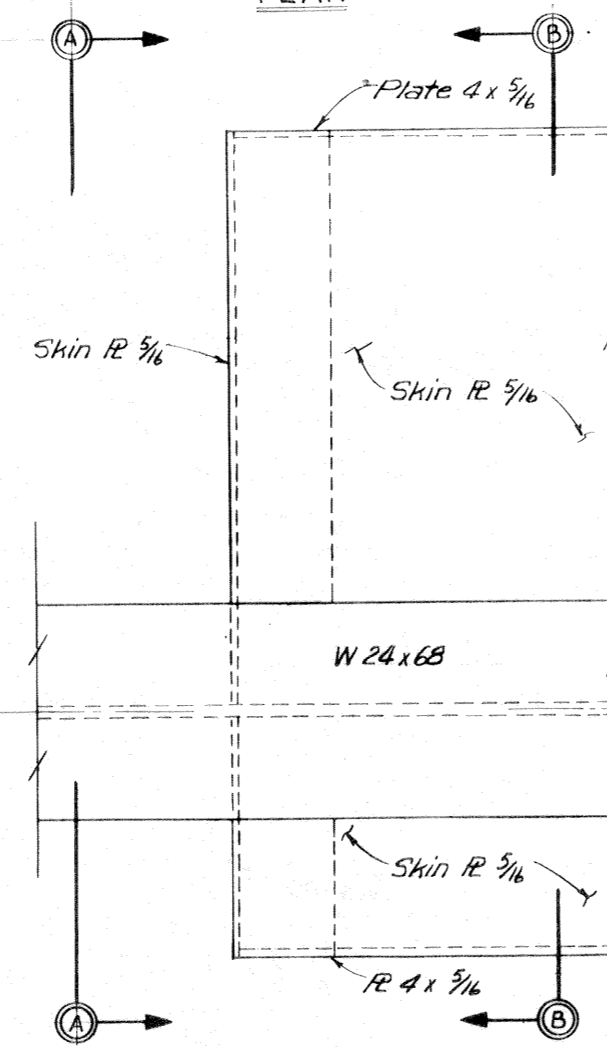
GATE DIMENSIONS			
GATE 11W		GATE 12W	
A	1'-7 1/2"	A	1'-2 7/8"
B	2'-0"	B	1'-7 1/8"
C	2'-10 1/4"	C	2'-5 7/8"



SECTION A-A

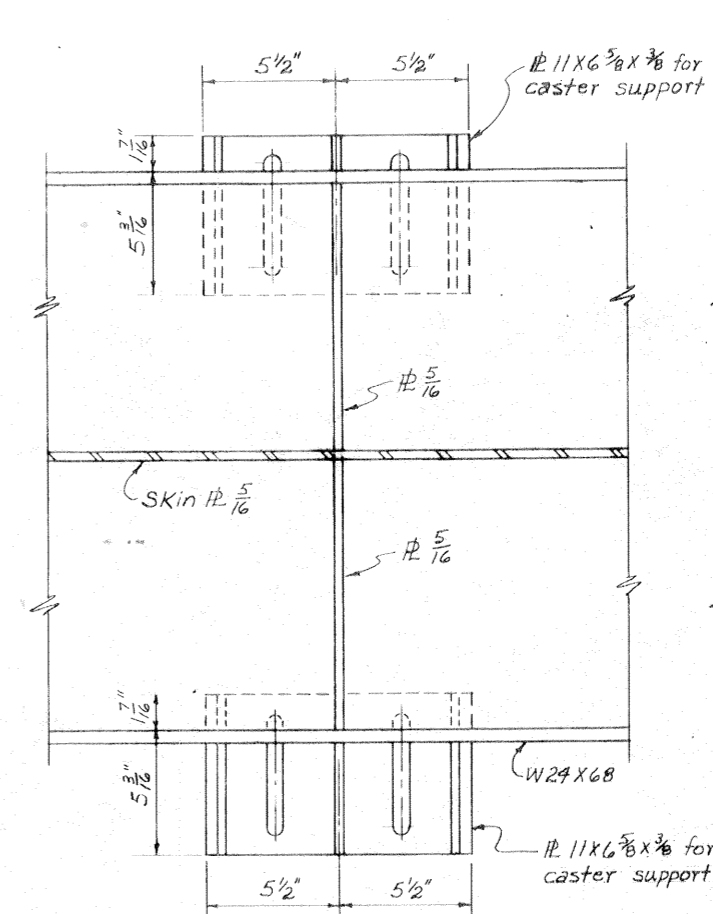


PLAN

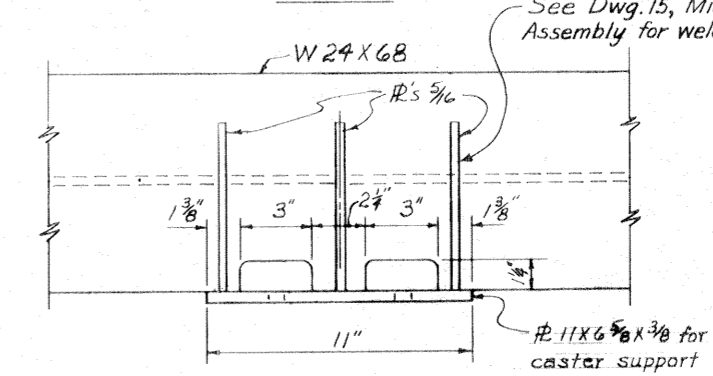


ELEVATION AT END OF GATE

Scale: 3" = 1'-0"

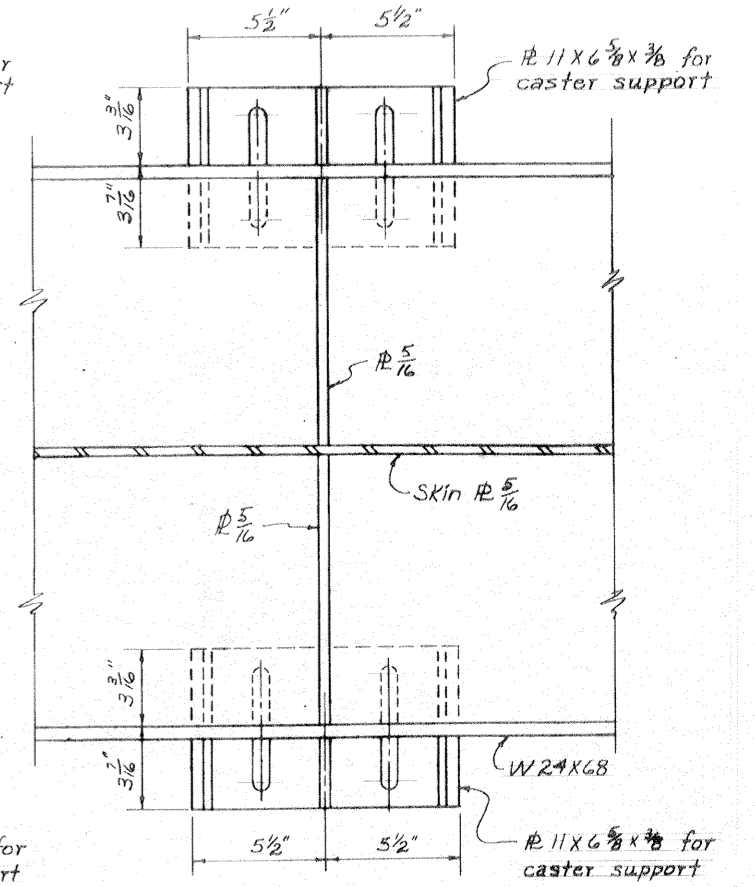


PLAN

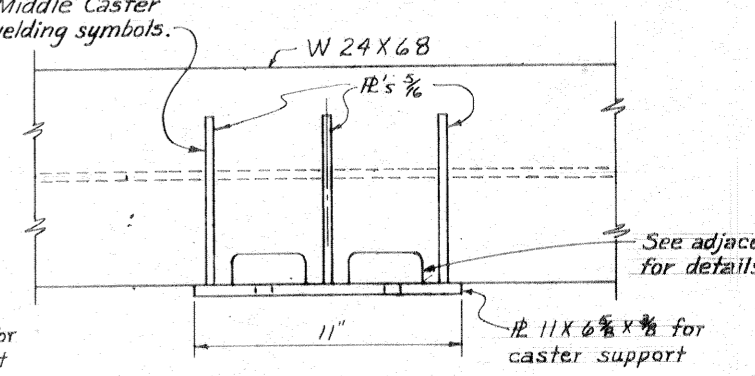


TRAILING CASTER ASSEMBLY

Scale: 3" = 1'-0"

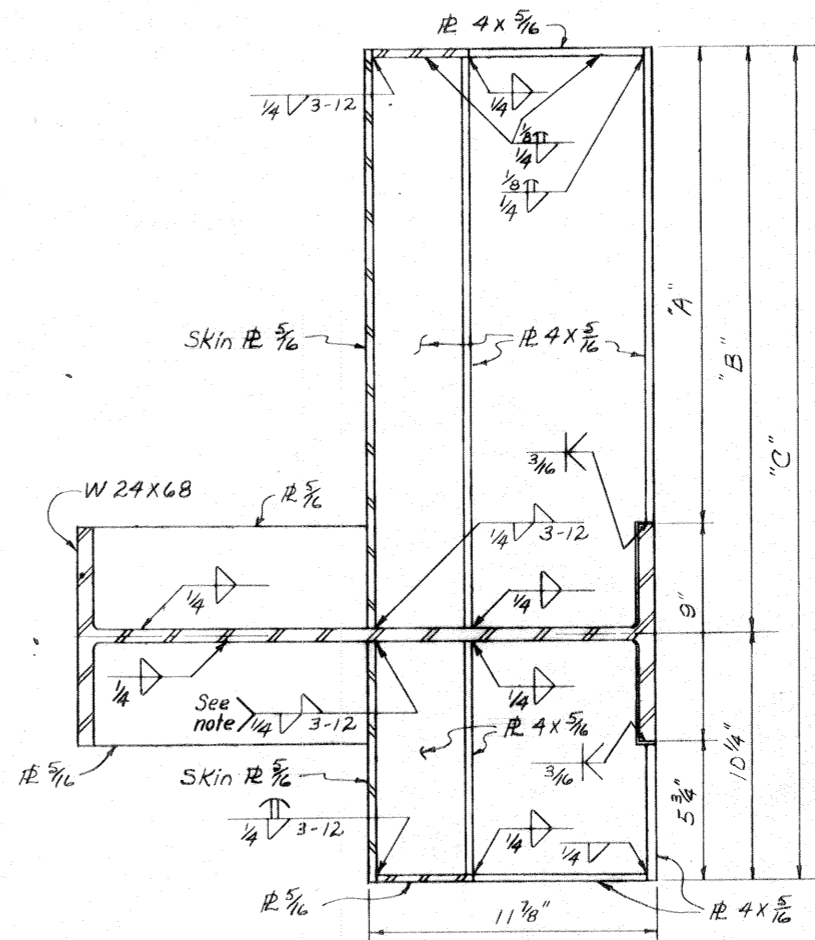


PLAN



LEADING CASTER ASSEMBLY

Scale: 3" = 1'-0"

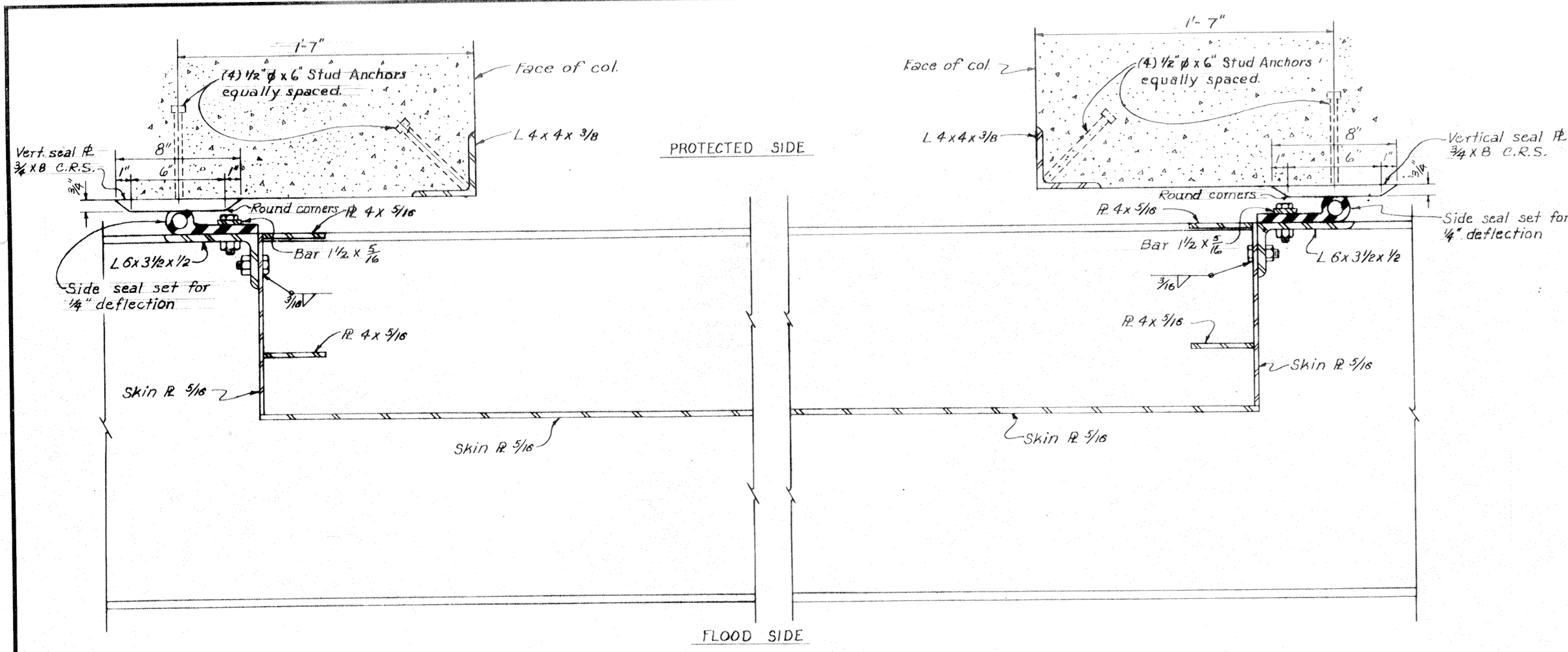


SECTION B-B

Note:
A 1/8 inch watertight weld shall be provided on flood side of skin plate.

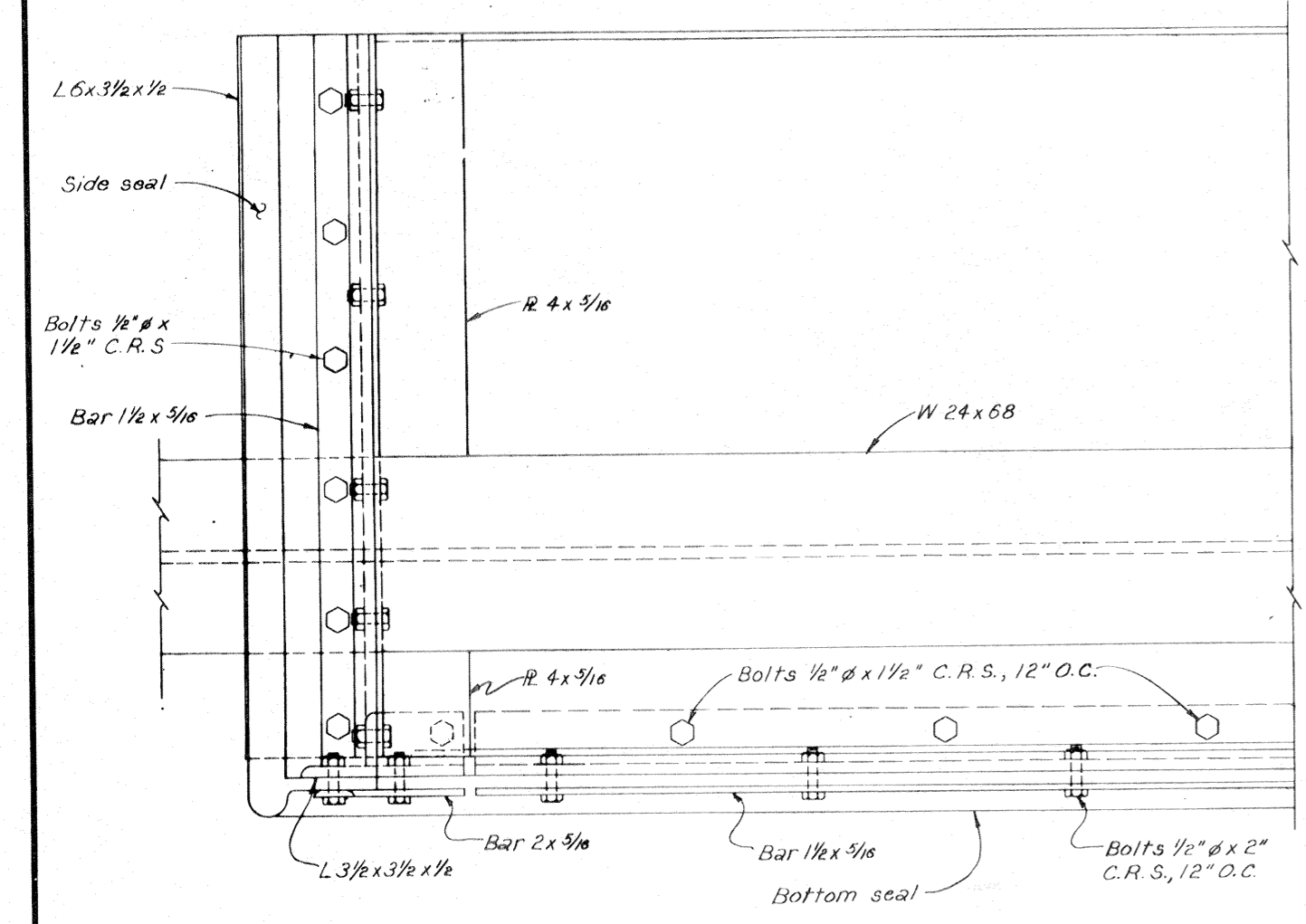


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U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA. LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA ROLLER GATES 11-W AND 12-W			
DESIGNED: T.F.P.	DRAWN: D.K.G.	CHECKED: D.A.M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO. H-4-25958	
SUBMITTED BY: David L. Marschan		SPEC. NO. DACW29-73-B-0009	
DWG. NO. 16		OF 26	



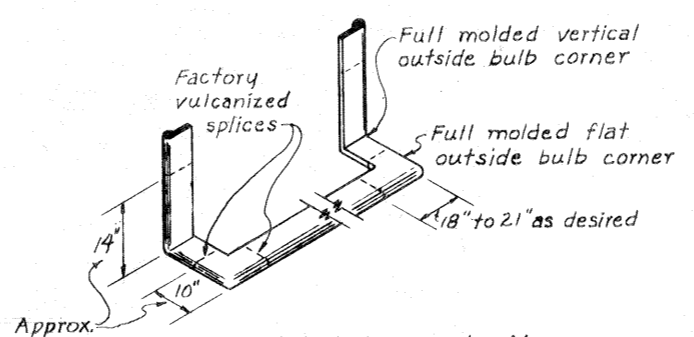
SECTION THRU ROLLER GATE

Scale: 3" = 1'-0"



PROTECTED SIDE ELEVATION AT END OF GATE

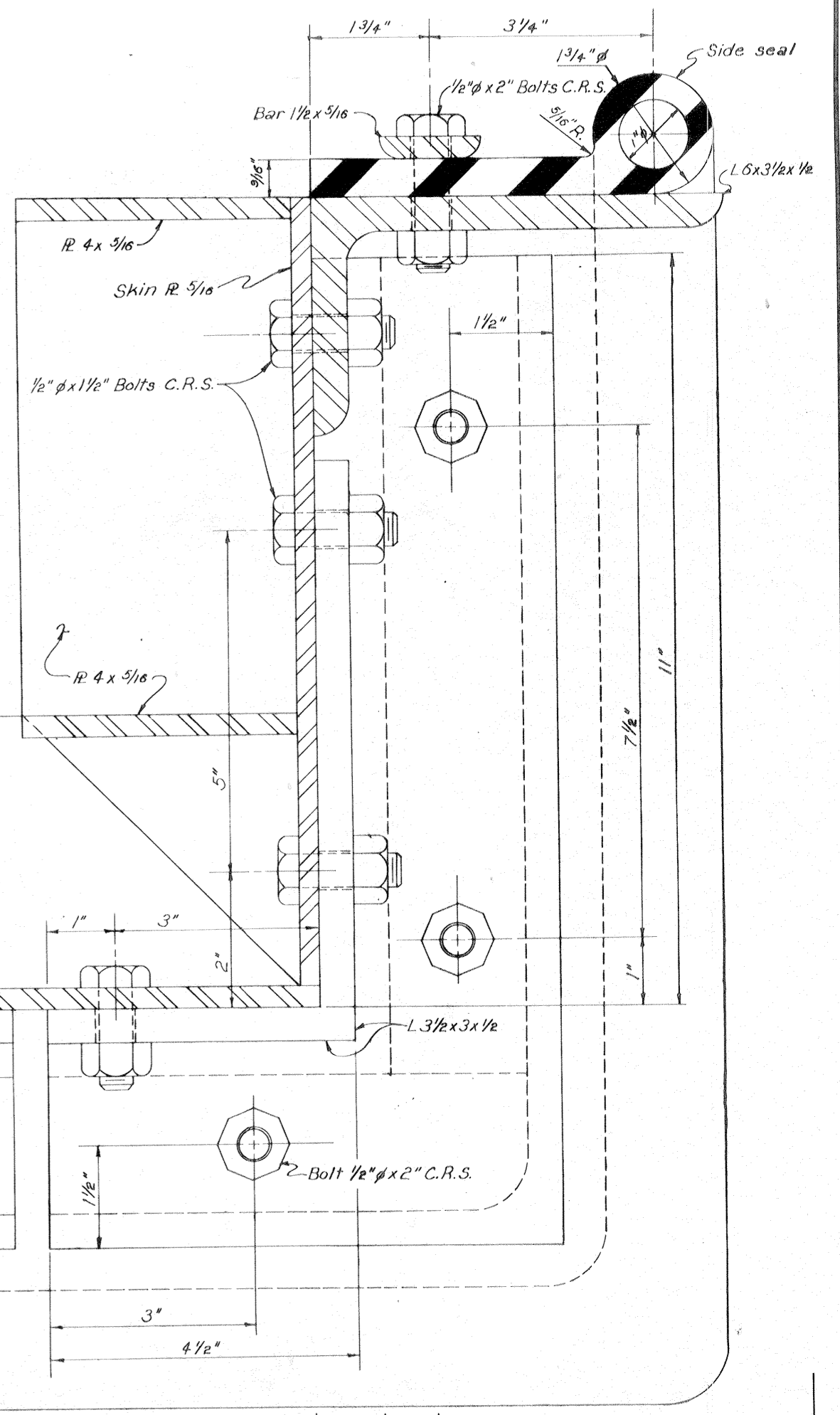
Scale: 3" = 1'-0"



TYPICAL GATE SEAL

N.T.S.

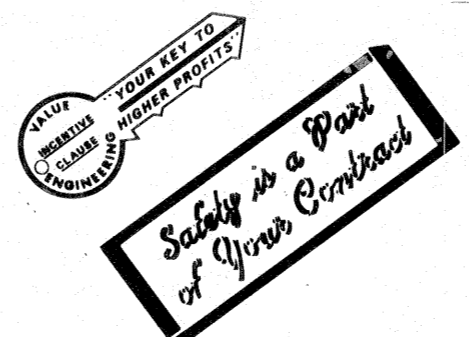
- Notes:
1. All individual 90° corner intersections will be fully molded.
 2. All splices will be factory made in heavy steel press type molds under pressure and heat.
 3. All splice joints must develop a strength of at least 50% of the minimum tensile strength required of the rubber.



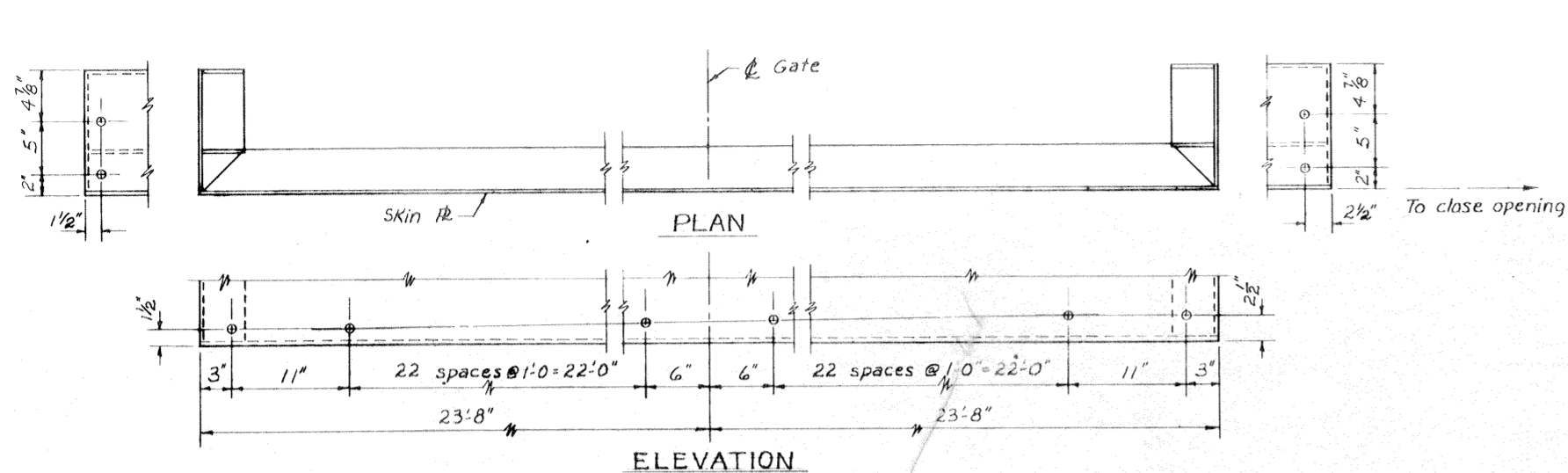
PLAN OF TYPICAL GATE END

Scale: 1" = 1"

Note: For general notes, see dwg. 1.

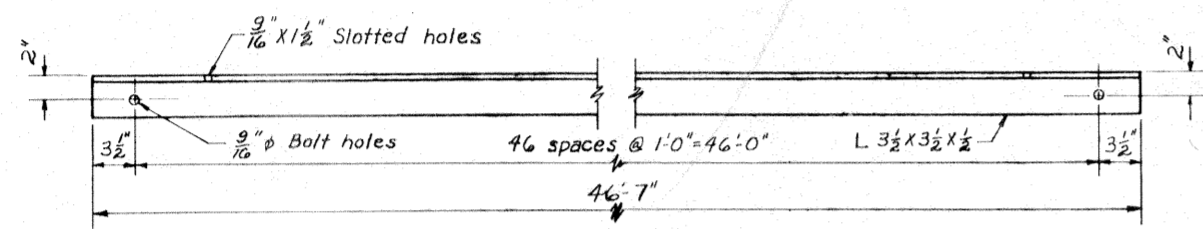


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U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA. LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA ROLLER GATE - SEALS			
DESIGNED: T.F.P.	DRAWN: L.R.M.	CHECKED: D.A.M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO. H-4-25958	
SUBMITTED: Walter A. Mansueti		SPEC. NO. DACW29-73-B-0009	
		Dwg. 17 of 26	

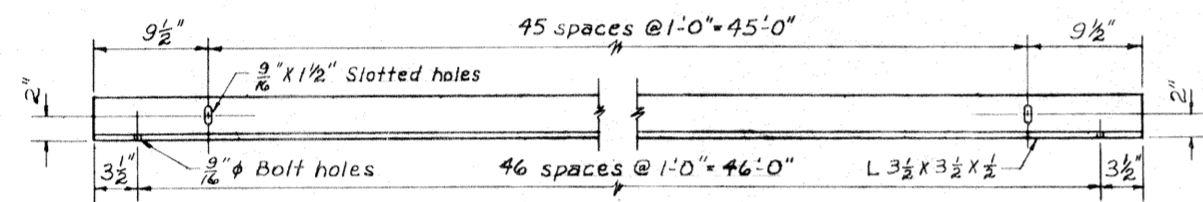


BOLT HOLE SCHEME FOR SEAL SUPPORT ANGLE

Scale: 1/2"=1'-0"



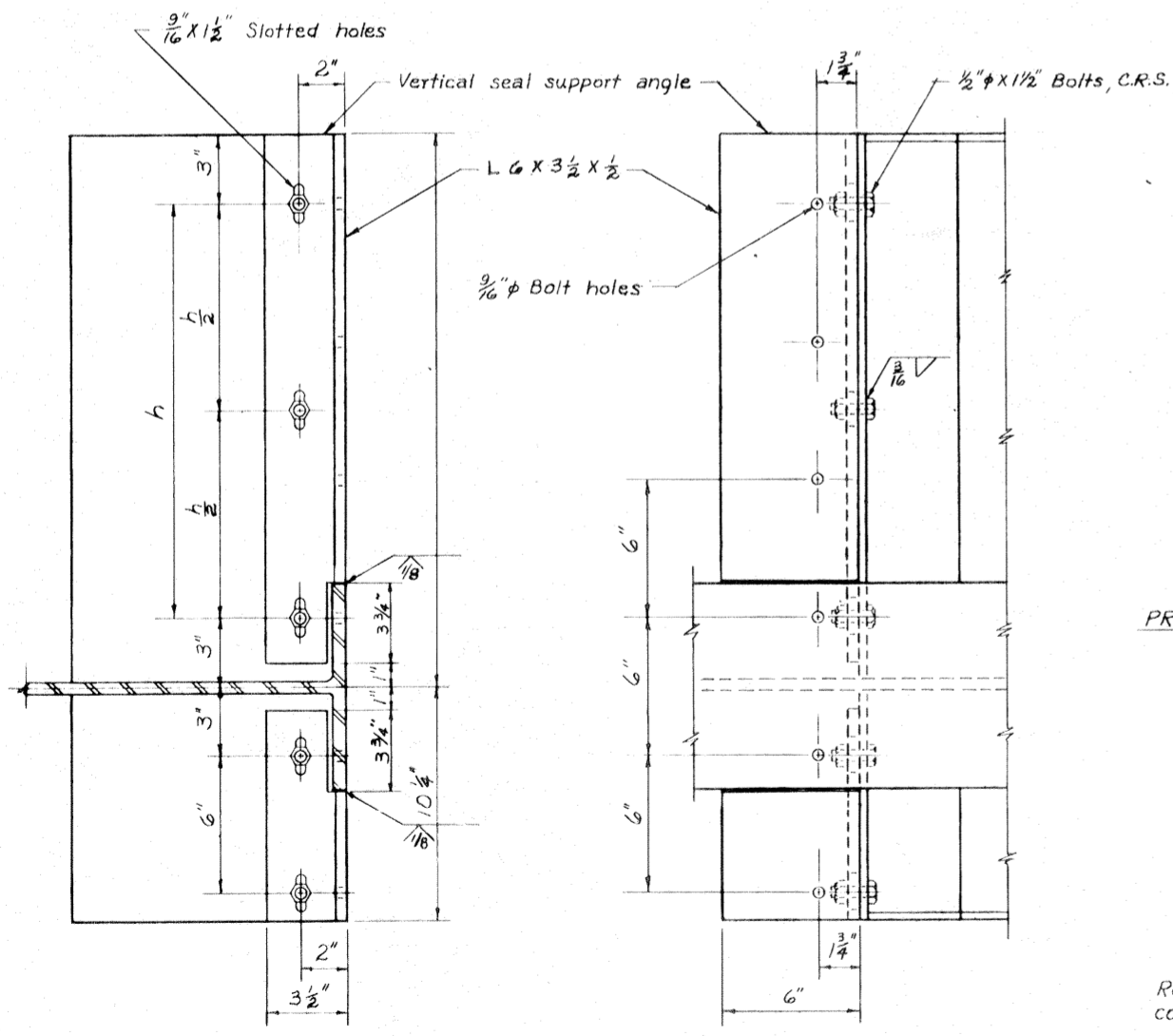
PLAN



ELEVATION

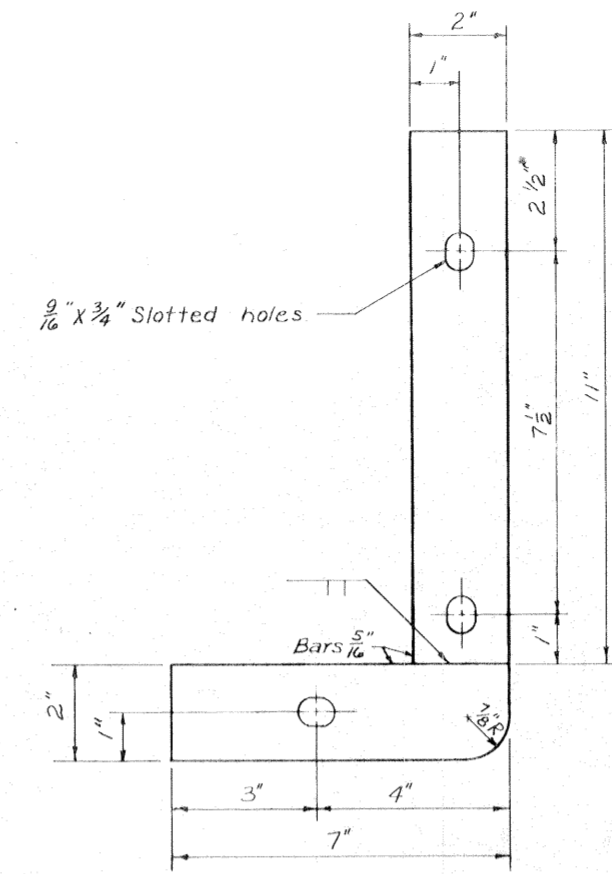
BOLT HOLE SCHEME IN SEAL SUPPORT ANGLE

Scale: 1/2"=1'-0"



ELEVATION OF VERTICAL SEAL SUPPORT ANGLE

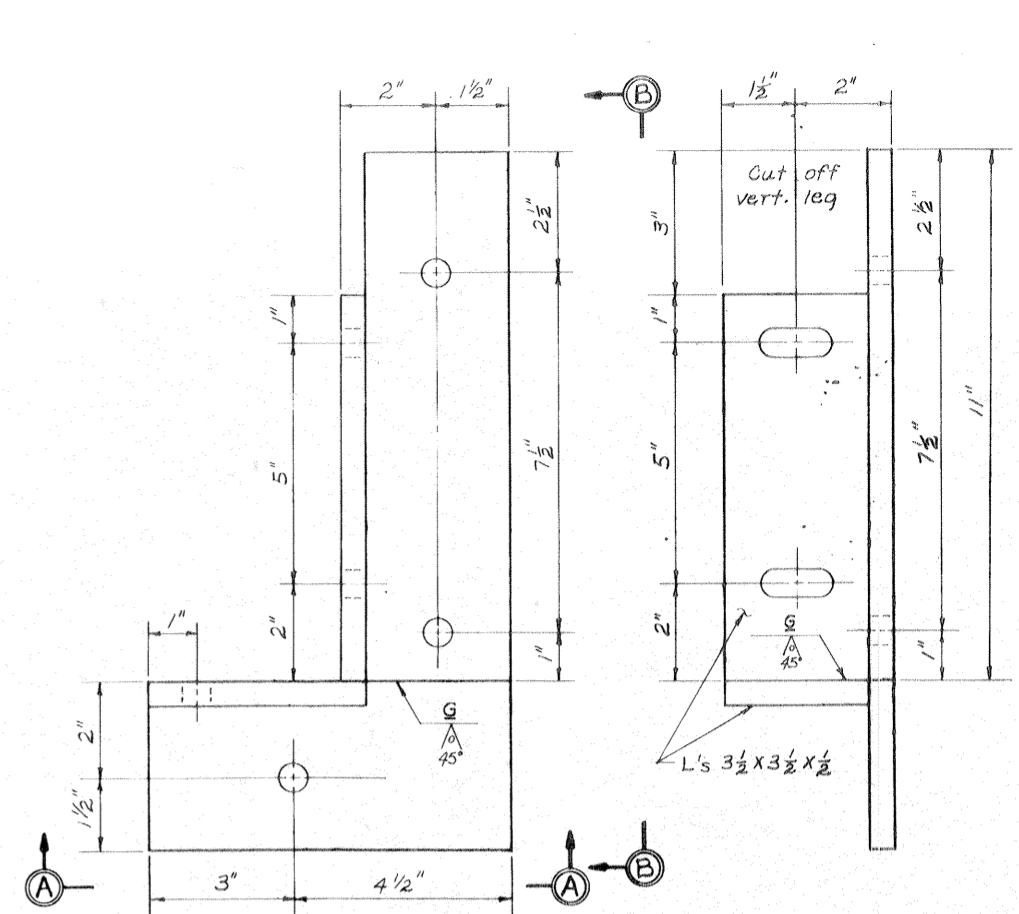
Scale: 3"=1'-0"



SEAL SUPPORT BAR AT END OF GATE

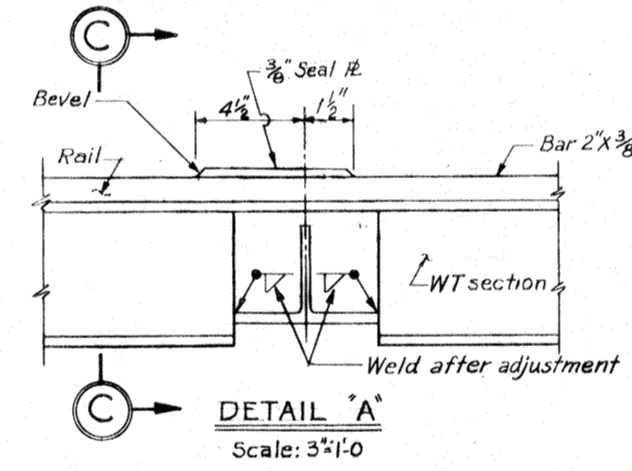
Half Scale

Note: 2 reqd. at each gate (1 opp. hand); round corners in contact with seal.



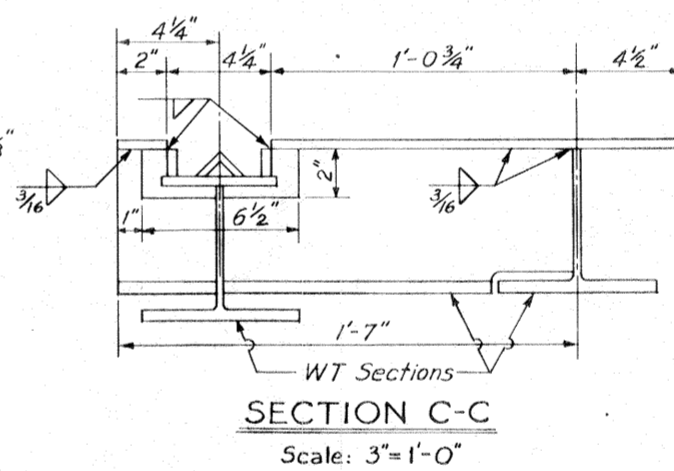
PLAN

ELEVATION B-B



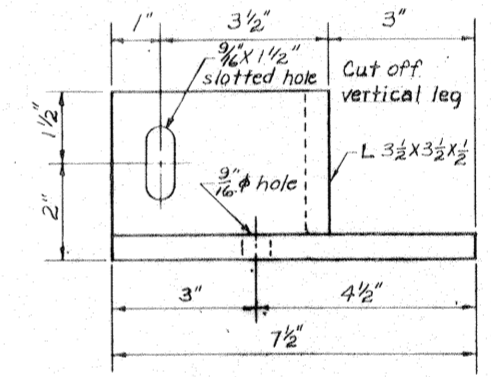
DETAIL A-A

Scale: 3"=1'-0"



SECTION C-C

Scale: 3"=1'-0"

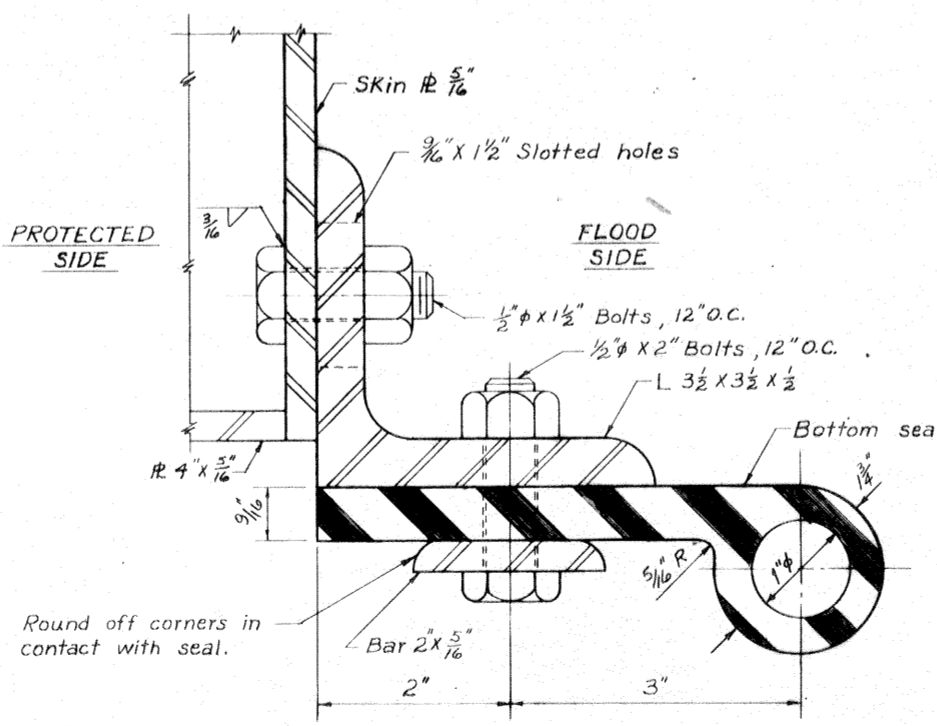


ELEVATION A-A

DETAIL OF SEAL SUPPORT ANGLE AT END OF GATE

Half Scale

Note: 2 reqd. at each gate (1 opp. hand).



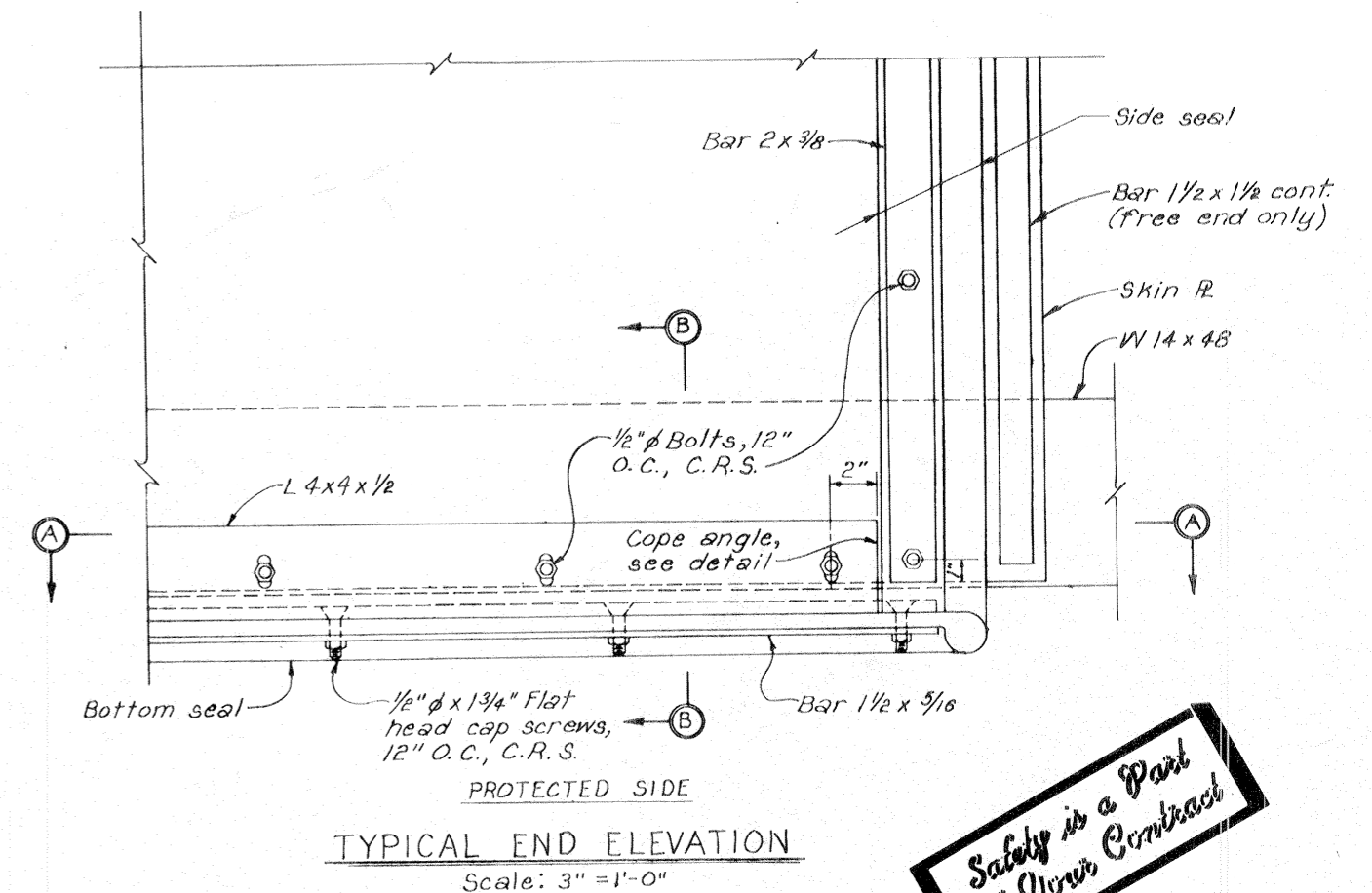
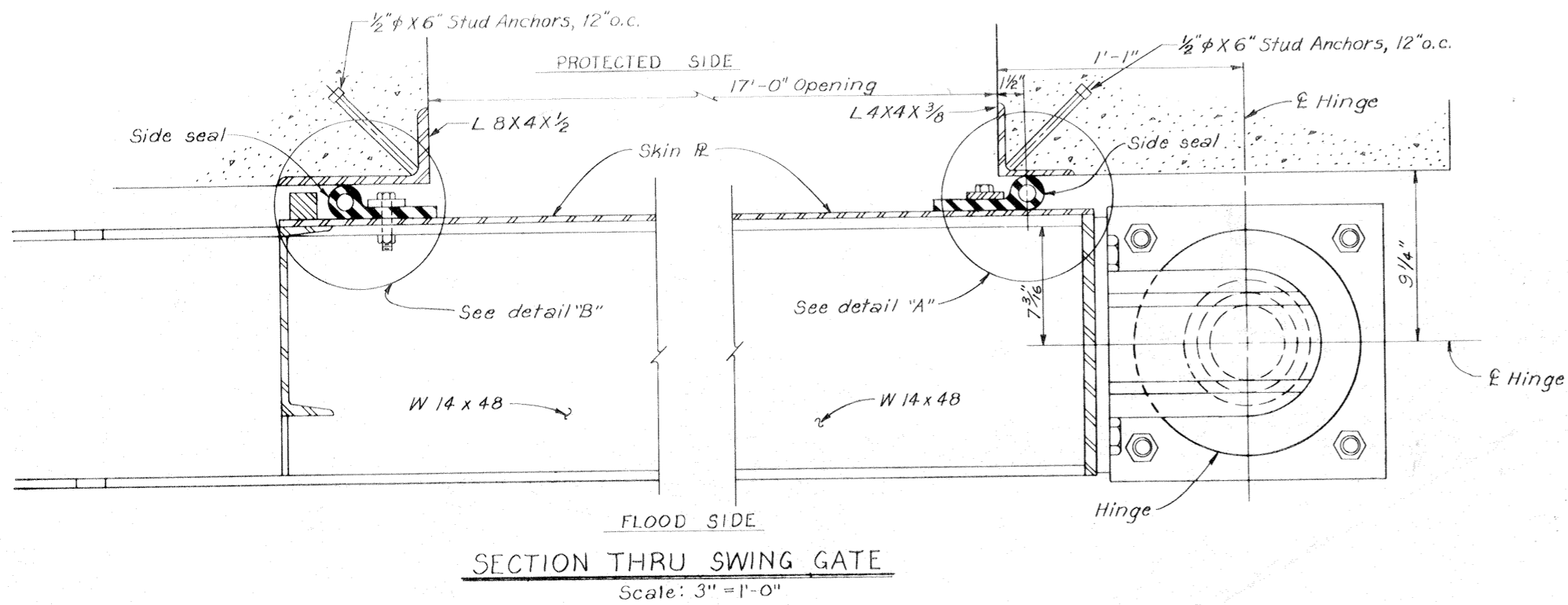
TYPICAL SECTION THRU BOTTOM SEAL

Full Scale



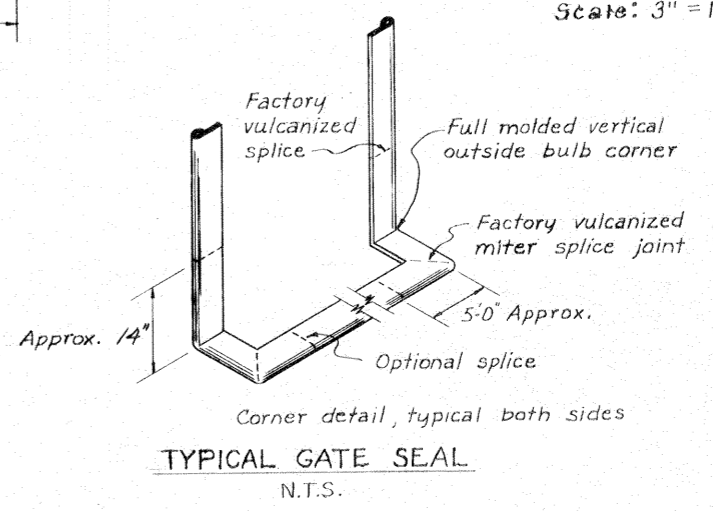
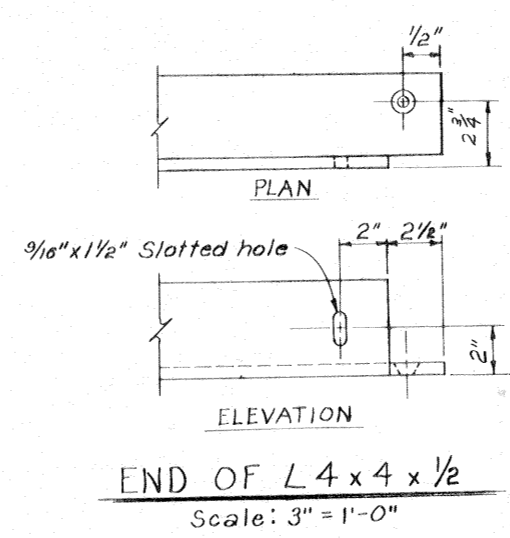
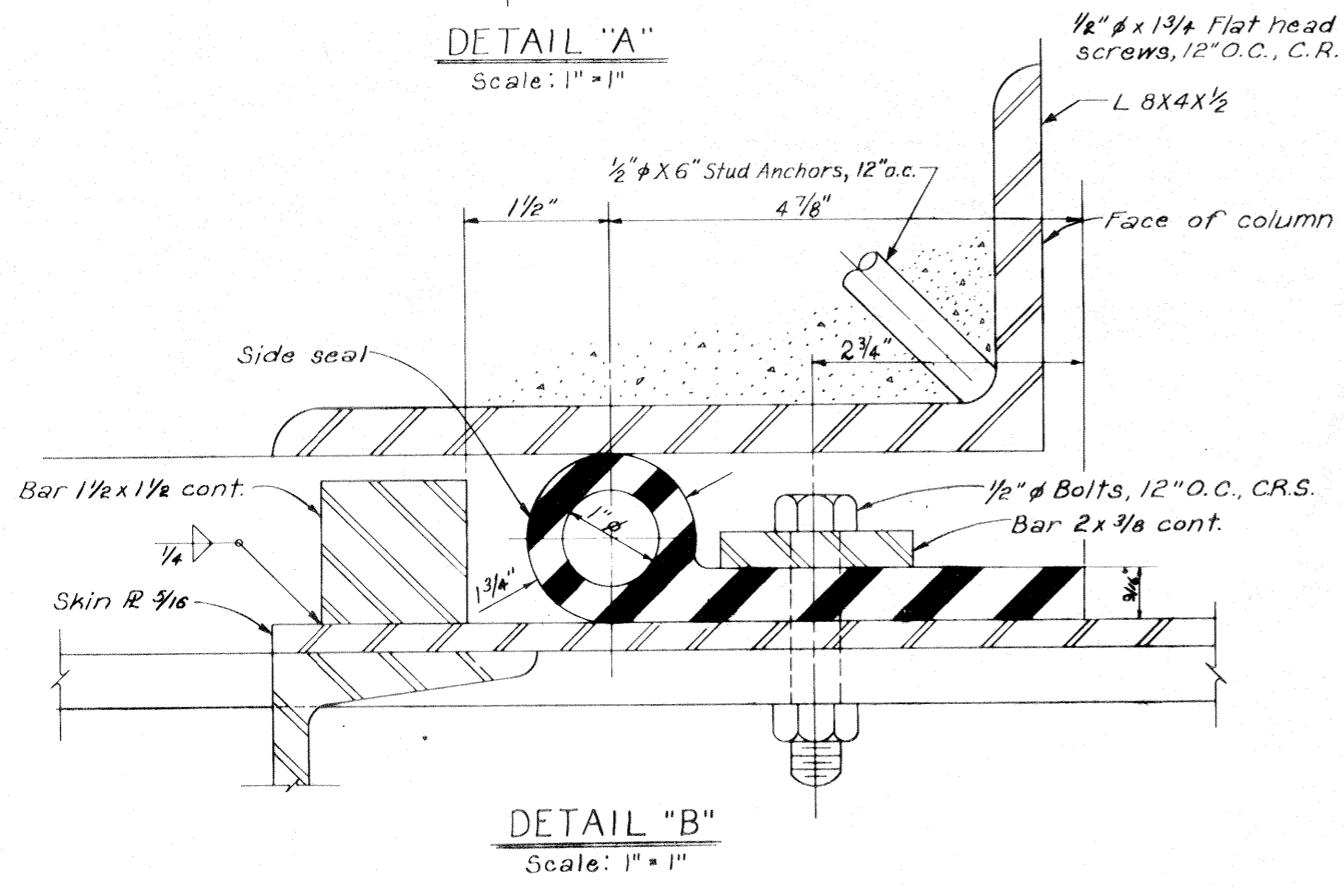
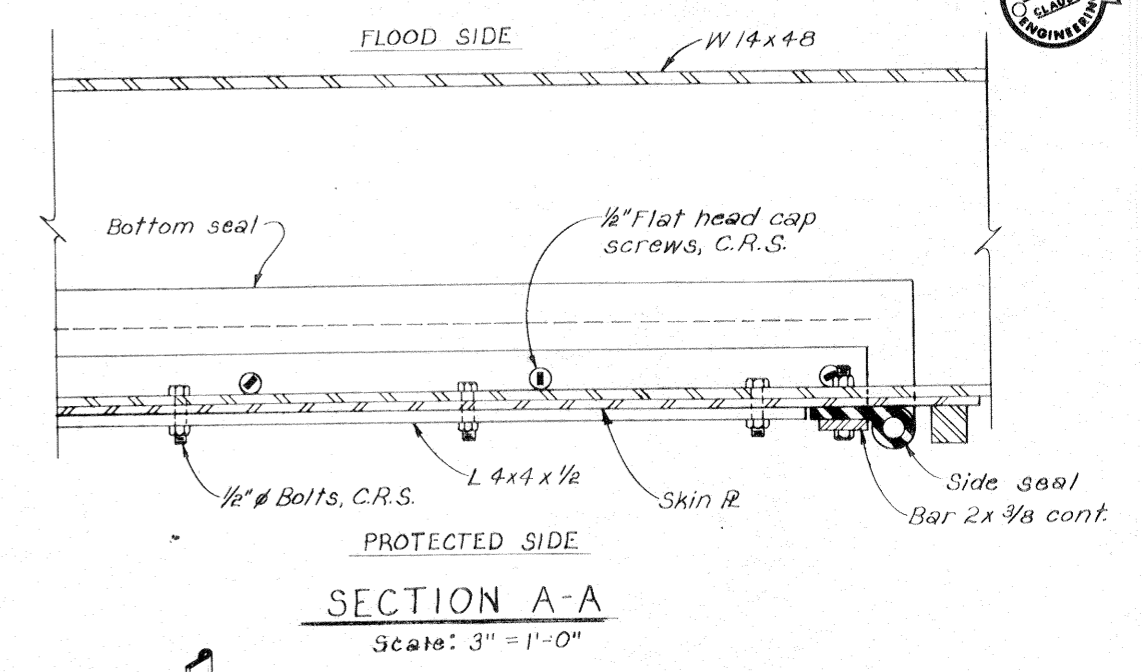
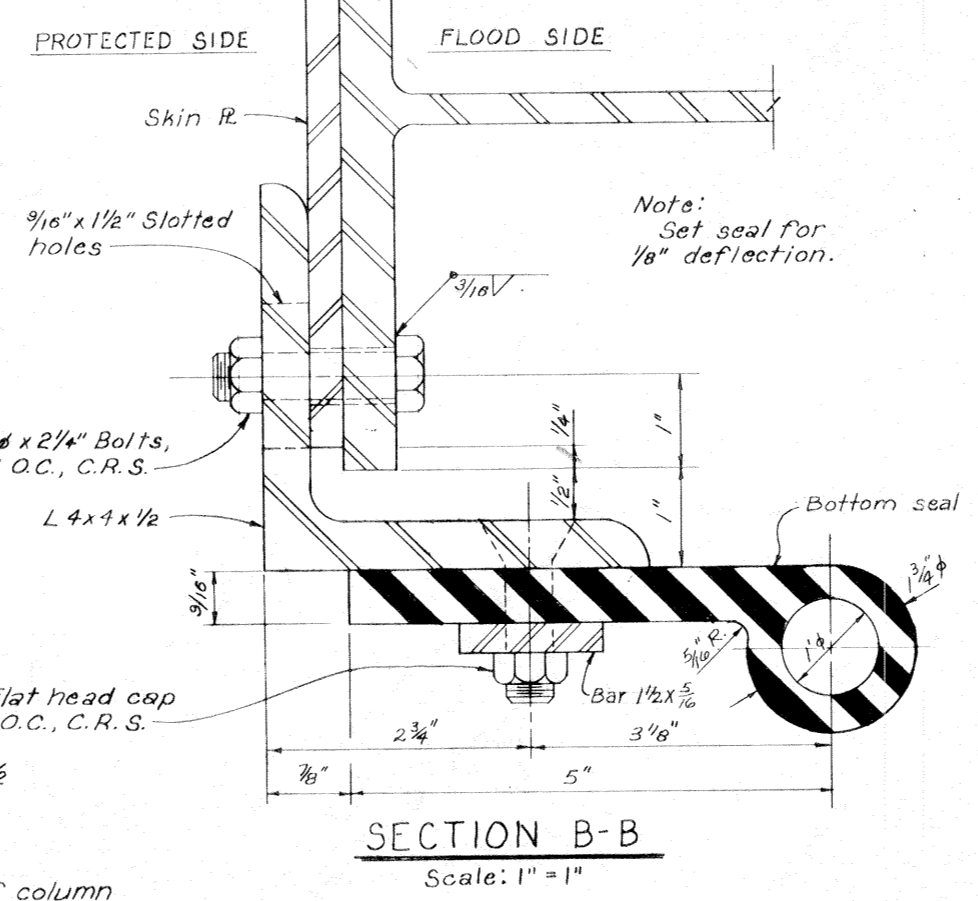
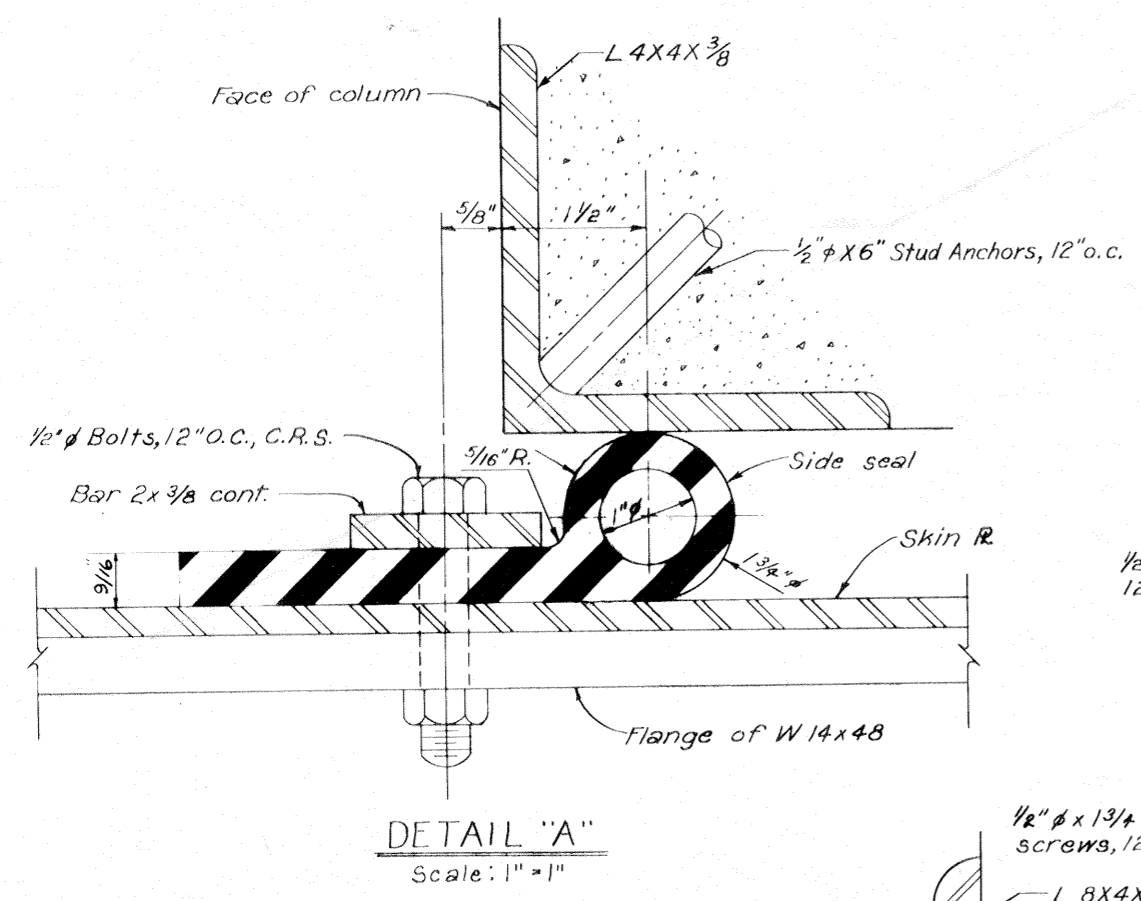
Note: For general notes, see dwg. 1.

REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA. LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA ROLLER GATES 11-W AND 12-W			
DESIGNED:	DRAWN:	CHECKED:	DATE:
T.F.P.	C.L.R.	D.A.M.	JULY 1972
SCALE:	FILE NO.:		
AS SHOWN	H-4-25958		
SUBMITTED:	SPEC. NO.:		
W. A. M. M. M.	DACW29-73-B-0009	DWG. 18 OF 26	



Safety is a Part of Your Contract

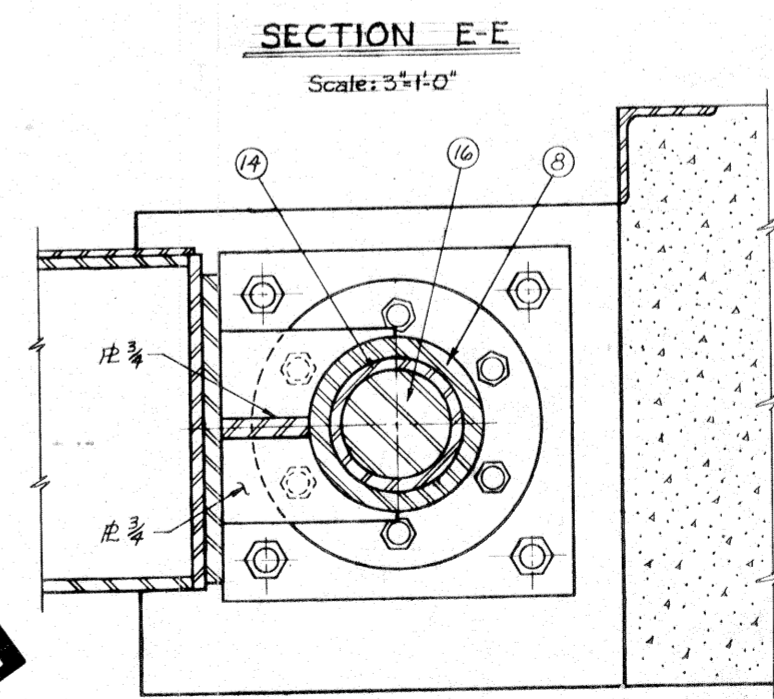
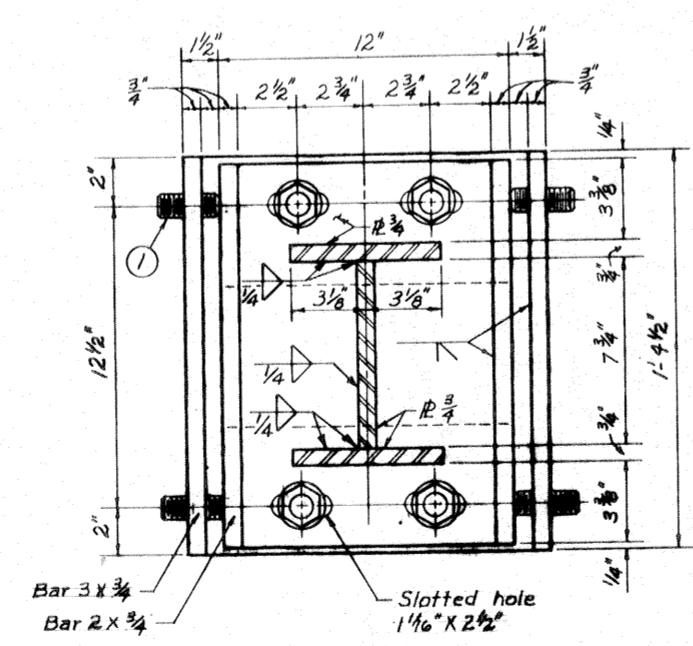
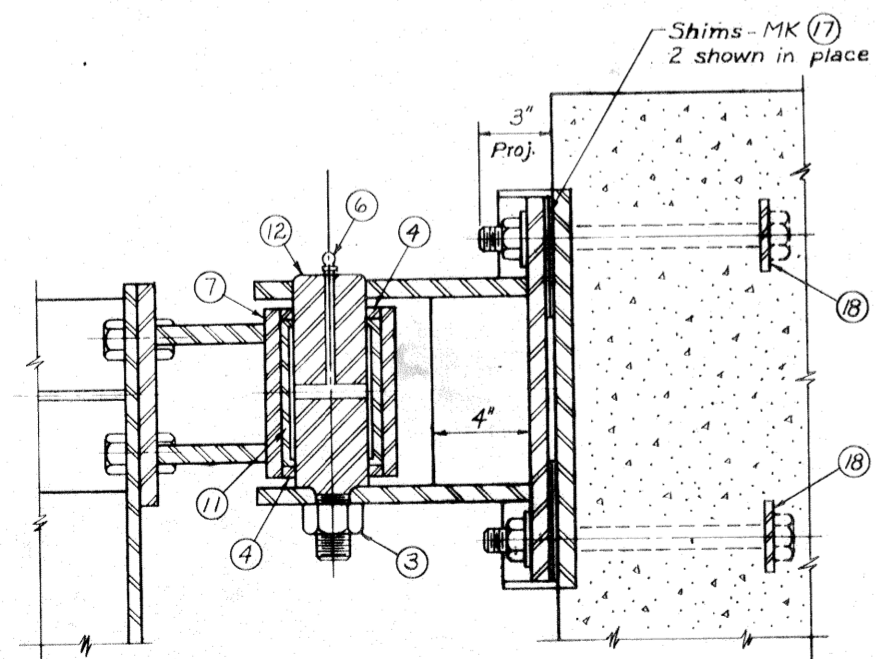
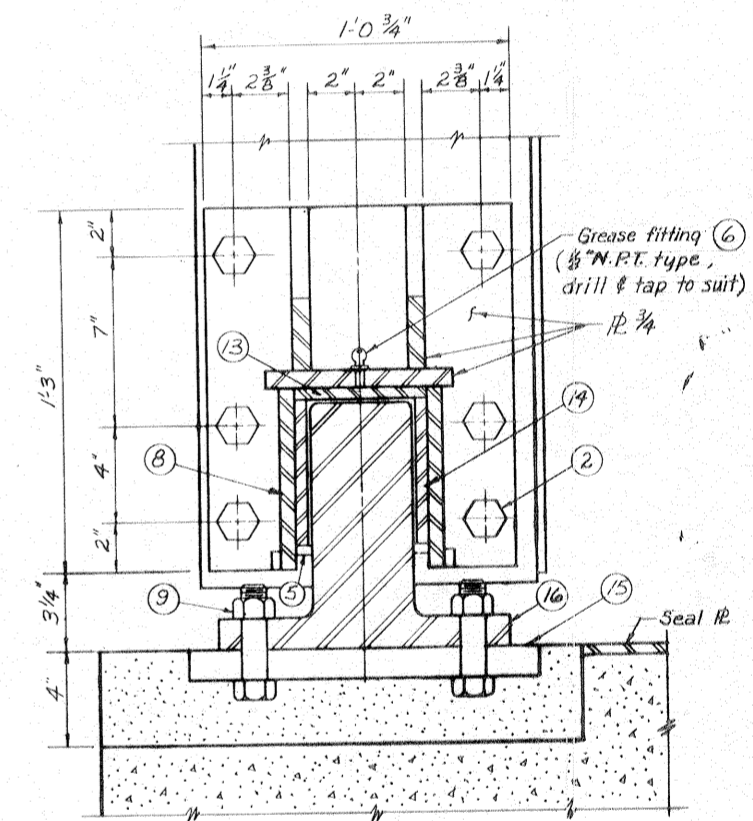
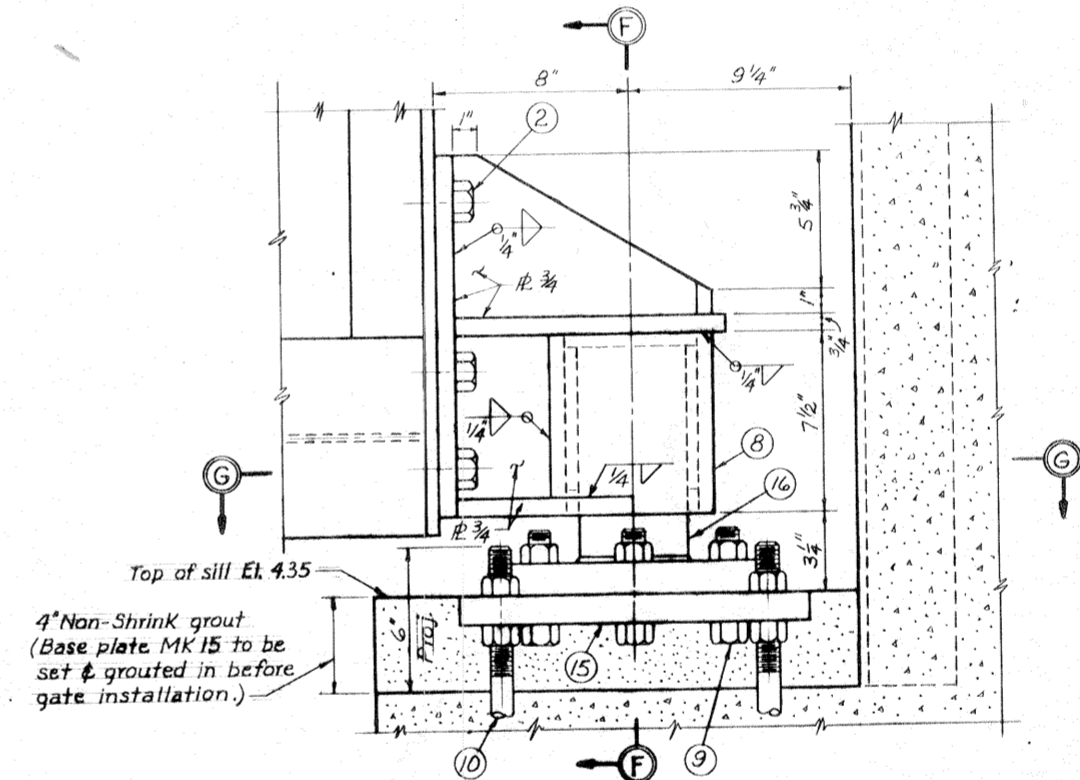
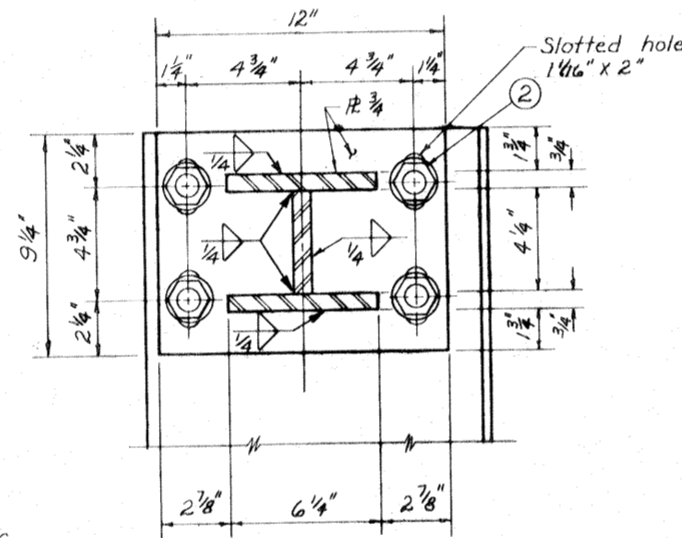
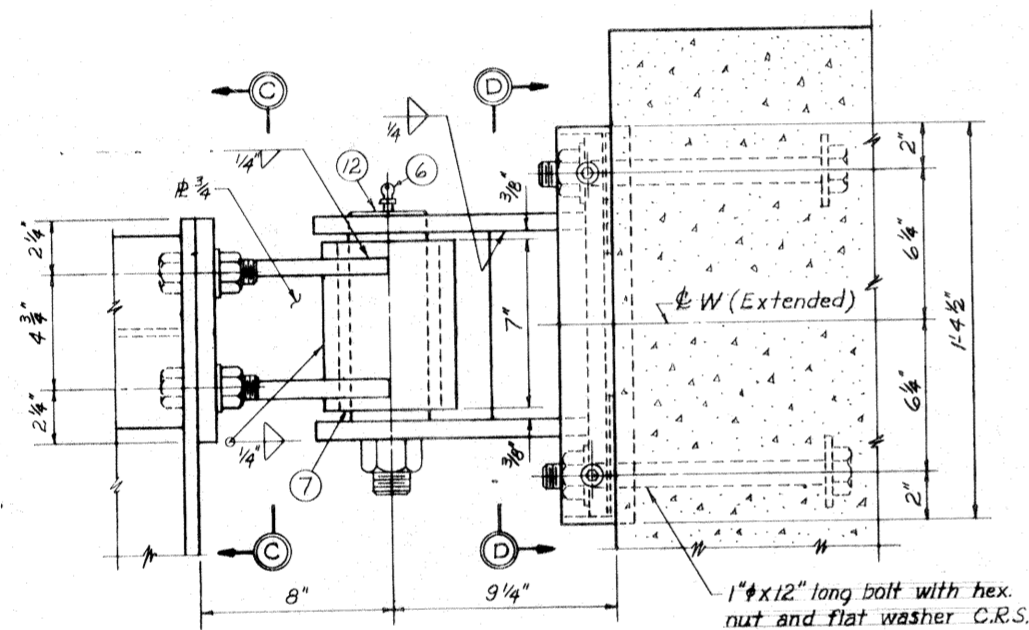
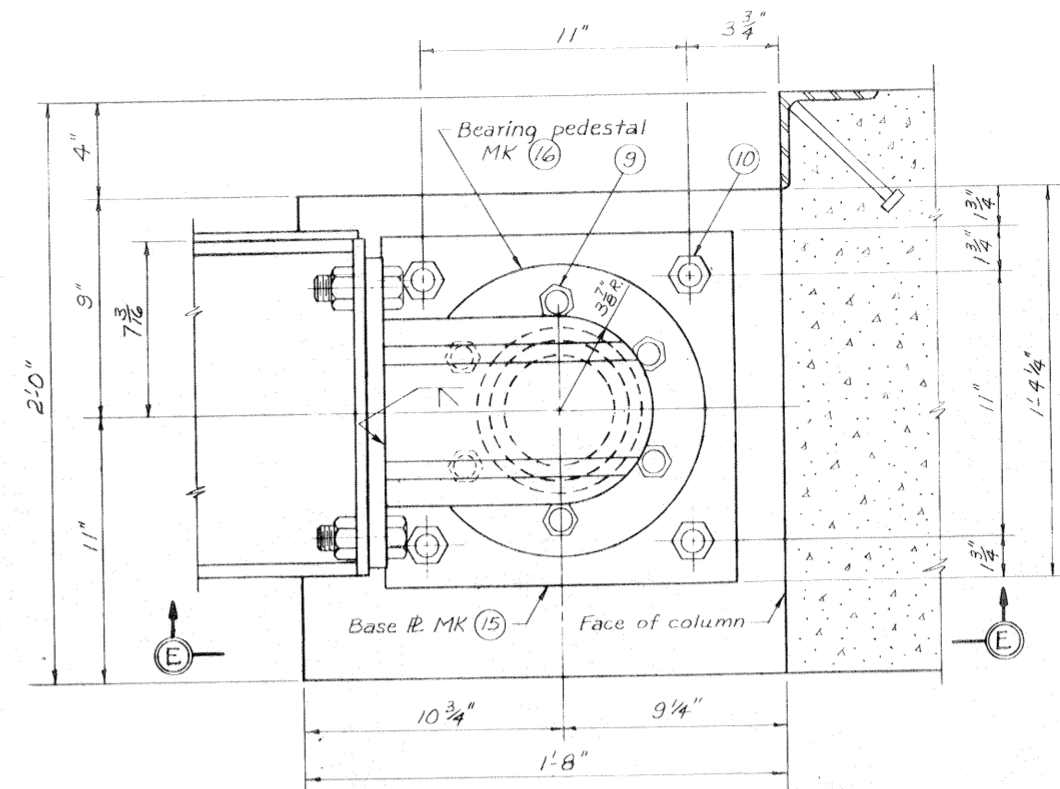
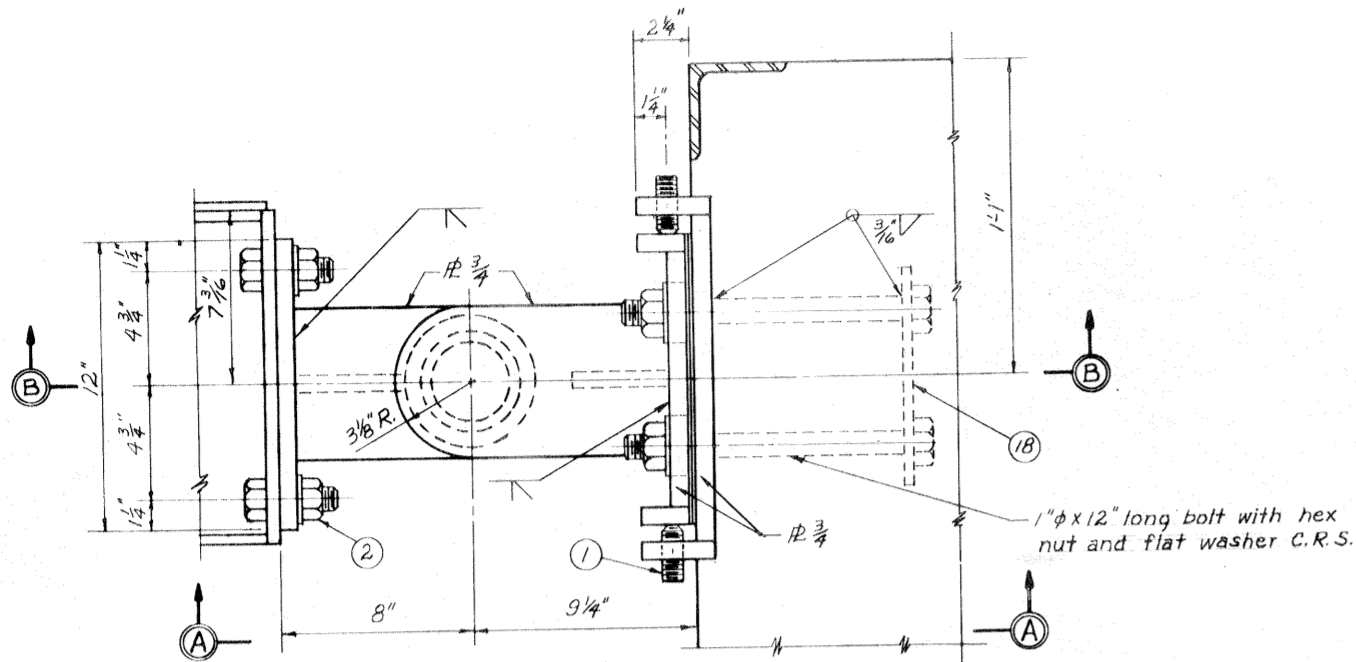
YOUR KEY TO INSURANCE CLAIMS & HIGHER PROFITS ENGINEERS



Notes:
 1. All splices will be factory made in heavy steel press type molds under pressure and heat.
 2. All splice joints must develop a strength of at least 50% of the minimum tensile strength required of the rubber.

Note:
 For general notes, see dwg. 1.

REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA. LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA SWING GATE - SEALS			
DESIGNED: T.F.P.	DRAWN: L.R.M.	CHECKED: D.A.M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO. H-4-25958	
SUBMITTED: H. H. H. H.		SPEC. NO. DACW29-73-B-0009	
		Dwg. 19 of 26	

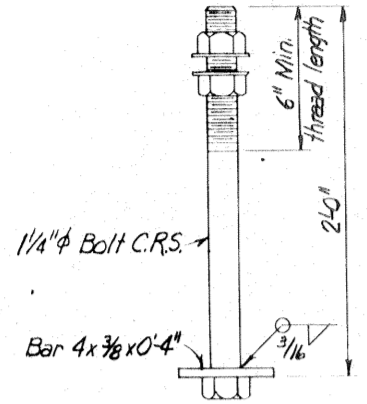


SAFETY IS YOUR KEY TO
HIGHER PROFITS

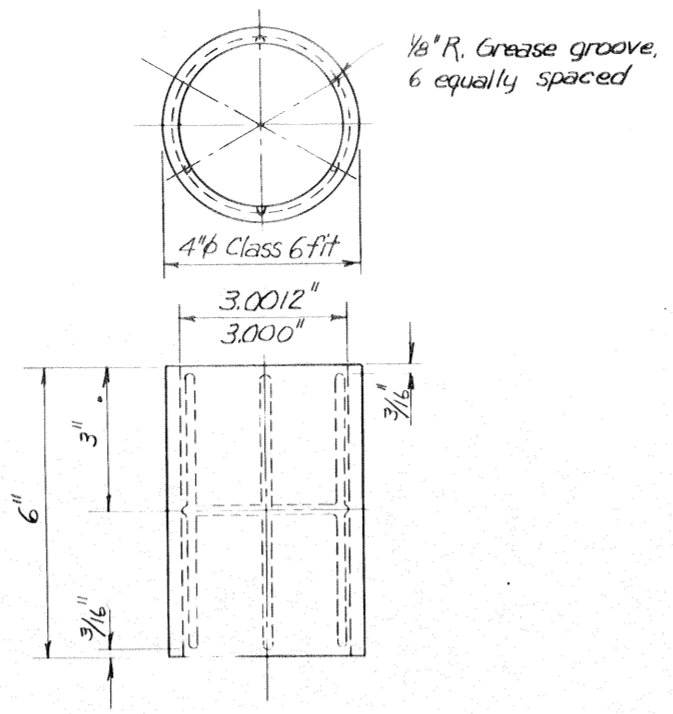
Safety is a Part of your Contract

Note: For general notes, see dwg. 1.

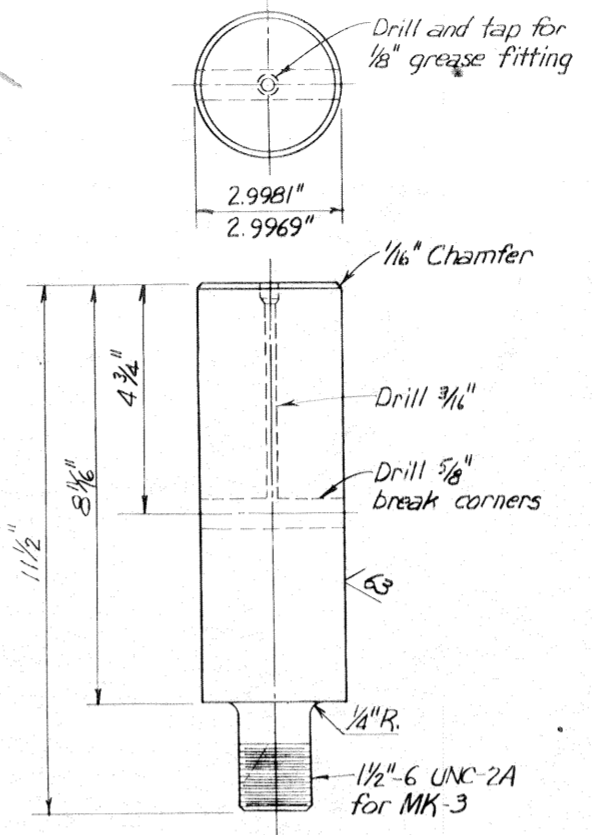
REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA.			
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY HURRICANE PROTECTION INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206 + 16.73 TO STA. 26 + 55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA			
SWING GATE - HINGE DETAILS			
DESIGNED: J. G.	DRAWN: C. L. R.	CHECKED: D. A. M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO.: H-4-25958	
SUBMITTED: <i>W. A. H. H. H.</i>		SPEC. NO.: DACW29-73-B-0009	
		Dwg. 20 of 26	



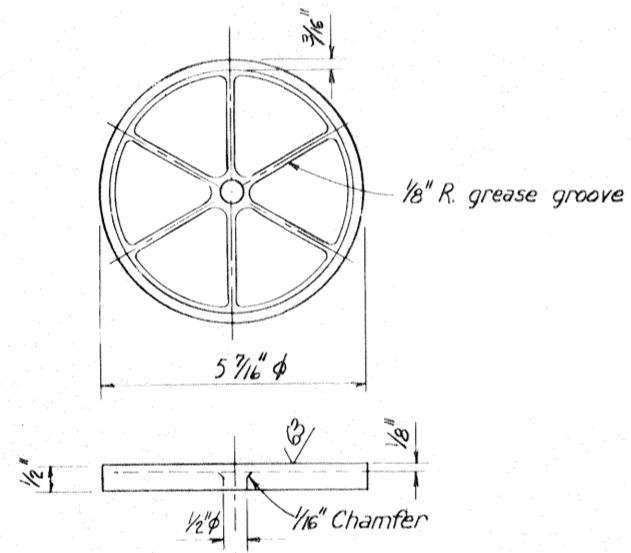
MK-10
ANCHOR BOLT
MAT'L - C.R.S., 4 REQ'D.
Scale: 3" = 1'-0"



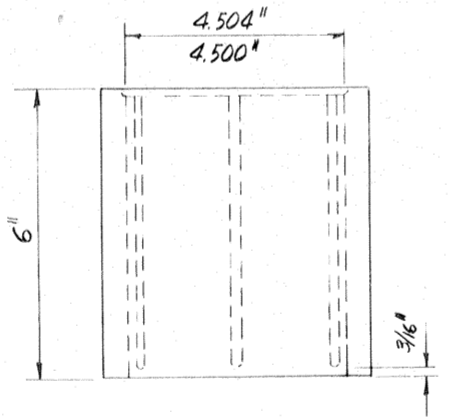
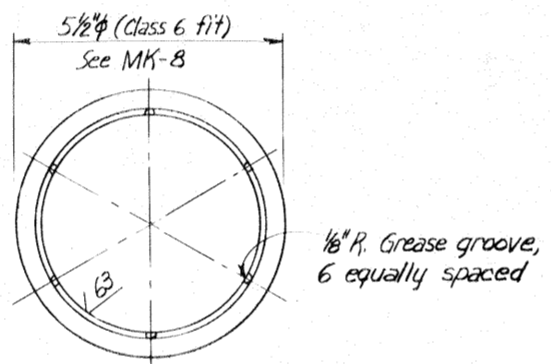
MK-11
BUSHING
MAT'L - ASTM B-22-61
ALLOY C - ONE REQ'D
Scale: 6" = 1'-0"



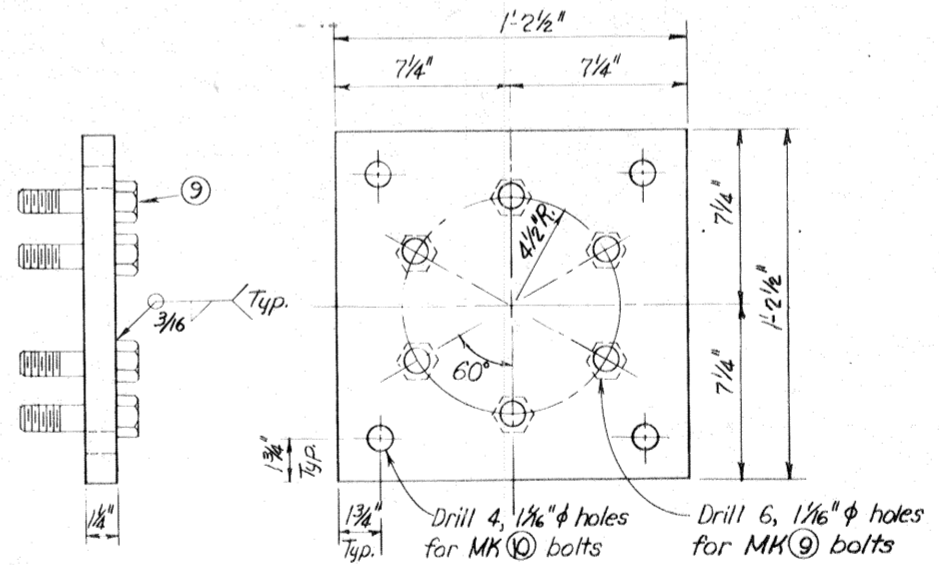
MK-12
BUSHING SHAFT
MAT'L - HIGH STRENGTH C.R.S.
FED. SPEC. QQ-5-763, CL-431
Scale: 6" = 1'-0"



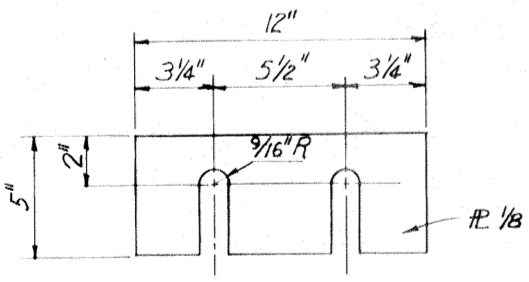
MK-13
THRUST WASHER
MAT'L - ASTM B-22-61, ALLOY C
Scale: 6" = 1'-0"



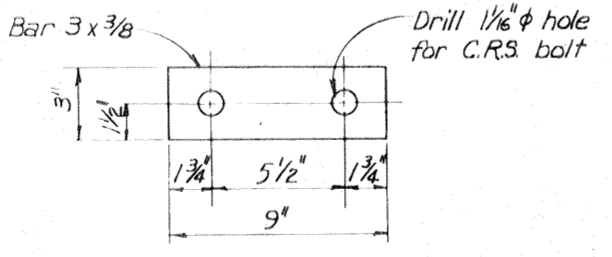
MK-14
BUSHING
MAT'L - ASTM B-22-61
ALLOY C - ONE REQ'D.
Scale: 6" = 1'-0"



MK-15
BASE PLATE
MAT'L - STRUCTURAL STEEL, A-36
Scale: 3" = 1'-0"

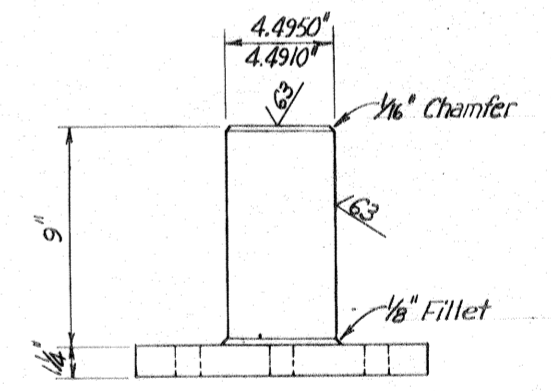
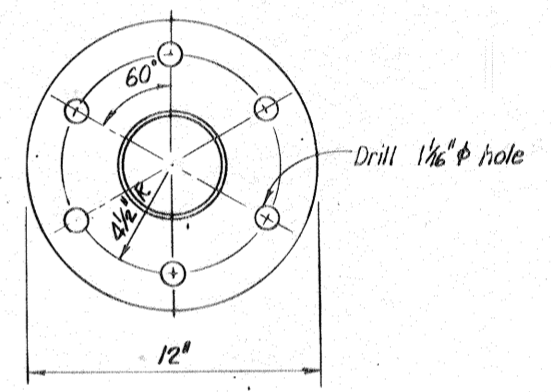


MK-17
SHIM
MAT'L - STRUCTURAL STEEL R - AS REQUIRED
Scale: 3" = 1'-0"



MK-18
BAR
MAT'L - STRUCTURAL STEEL - 2 REQ'D.
Scale: 3" = 1'-0"

PARTS NOT DETAILED			
MARK NO.	QUAN.	DESCRIPTION	MATERIAL
1	4	Set screw-hex socket, 1" x 2 1/2" Class 3A flat point	C.R.S.
2	10	1" phi x 3" long bolt with hex nut and flat washer	High Strength C.R.S.
3	1	Nut, hex head, 1 1/2"-6 UNC-2A type 2 style B with flat washer	C.R.S.
4	2	Grease seal, Garlock standard, Klosure No. 2176 or equal	Commercial grade
5	1	Grease seal, Garlock std, Klosure No. 2753	Commercial grade
6	2	Grease fitting, 1/8" N.P.T. type	Commercial grade
7	0'-7"	Mechanical tubing, 5 1/4" O.D. x 4" I.D. machined for Class 6 fit between I.D. of tubing and O.D. of MK (11) bushing	A151-C1015
8	0'-7 1/2"	Mechanical tubing, 6 3/4" O.D. x 5 1/2" I.D. machined for class 6 fit between I.D. of tubing and O.D. of MK (14) bushing	A151-C1015
9	6	1" phi x 4" long bolt with hex nut & flat washer	High Strength C.R.S.

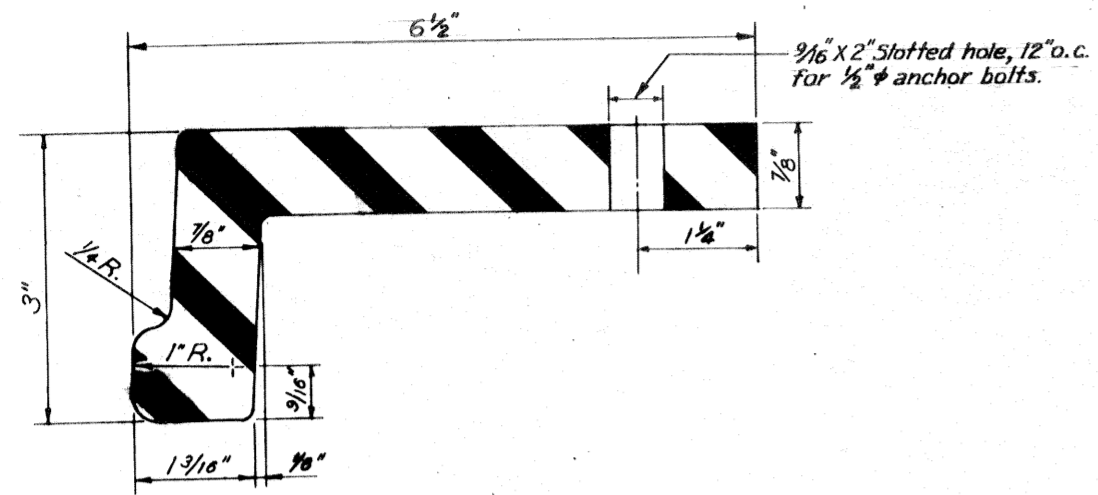


MK-16
BEARING PEDESTAL
MAT'L - HIGH STRENGTH C.R.S.
FED. SPEC. QQ-5-763, CL-431
Scale: 3" = 1'-0"

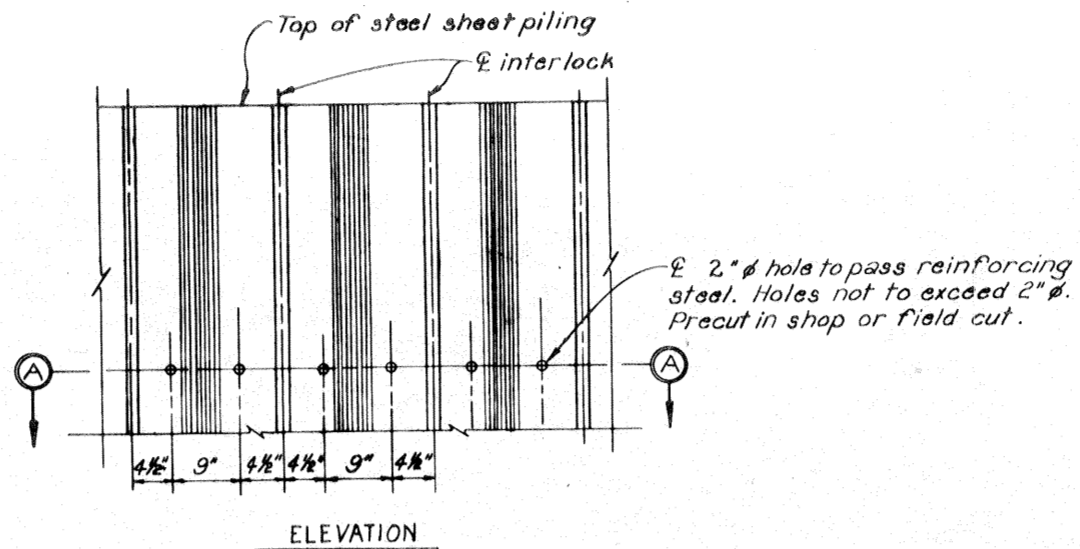


NOTES:
For general notes, see dwg. 1.

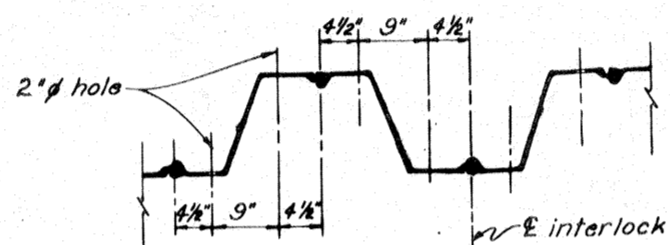
REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA. LAKE PONCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 206+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA SWING GATE - HINGE DETAILS			
DESIGNED:	DRAWN:	CHECKED:	DATE:
J. G.	D.K.G.	D.A.M.	JULY 1972
SCALE:	FILE NO.:		
AS SHOWN	H-4-25958		
SPEC. NO. DACW29-73-B-0009		Dwg 21 of 26	



"L" TYPE WATERSTOP
Full Size



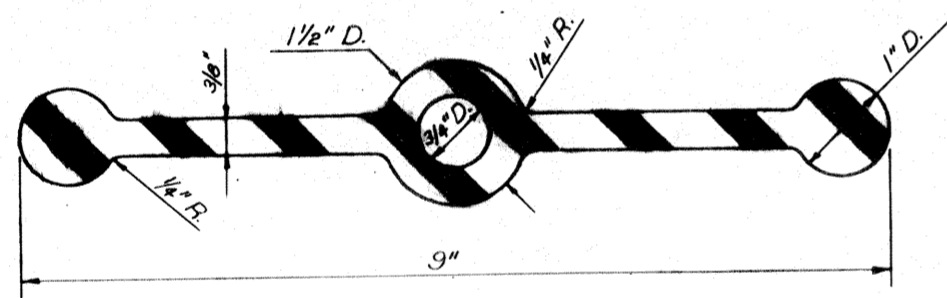
ELEVATION



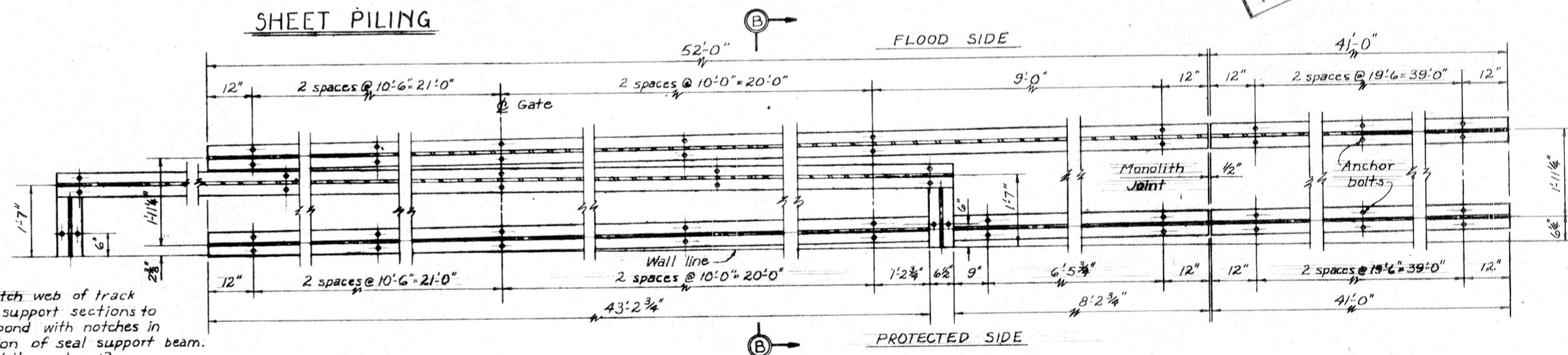
SECTION A-A

DETAIL OF HOLES IN PZ-27
SHEET PILING

THIS PLAN ACCOMPANIES
MODIFICATION P0002 TO
CONTRACT NO. DACW29-
73-C-0022



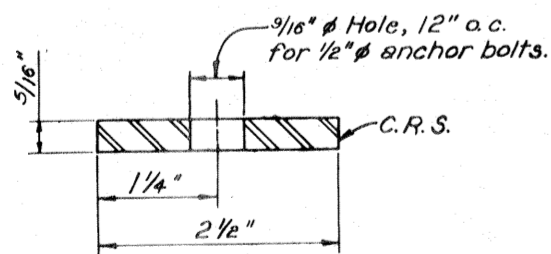
3 BULB WATERSTOP
Full Size



PLAN OF RAIL AND SEAL PLATE SUPPORTS WITH ANCHOR BOLTS
(SECTION THROUGH WEBS OF SUPPORT BEAMS)
Scale: 3/4" = 1'-0"

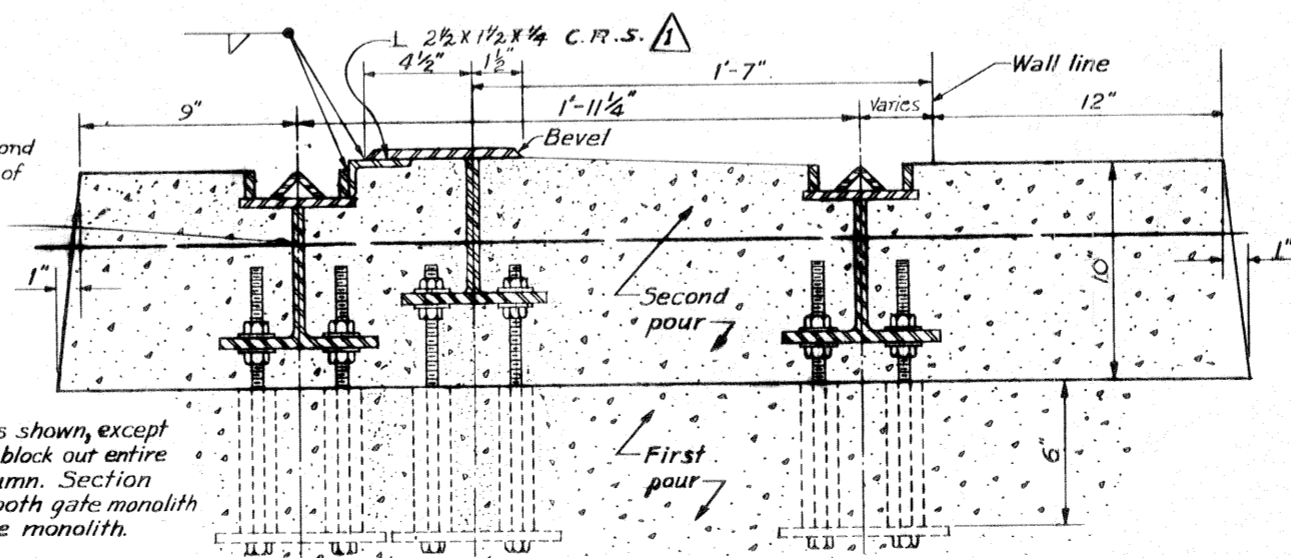
Note: Notch web of track track support sections to correspond with notches in elevation of seal support beam. For detail see dwg. 13.

Note: For general notes, see dwg. 1.



SEAL RETAINING BAR
Full Size

Note: Notch web of track support sections to correspond with notches in elevation of seal support beam. For detail see dwg. 13.

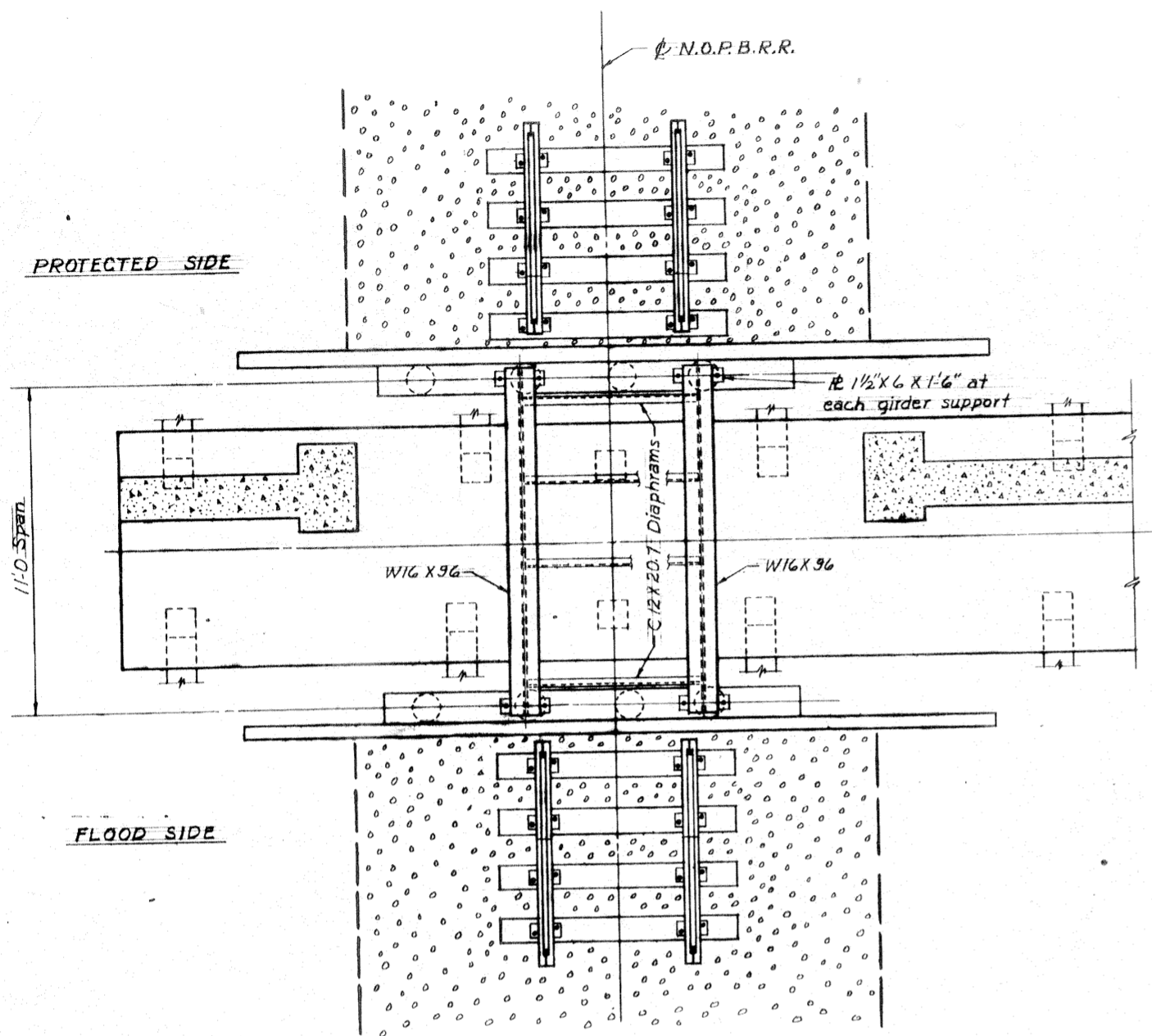


SECTION B-B
Scale: 3" = 1'-0"

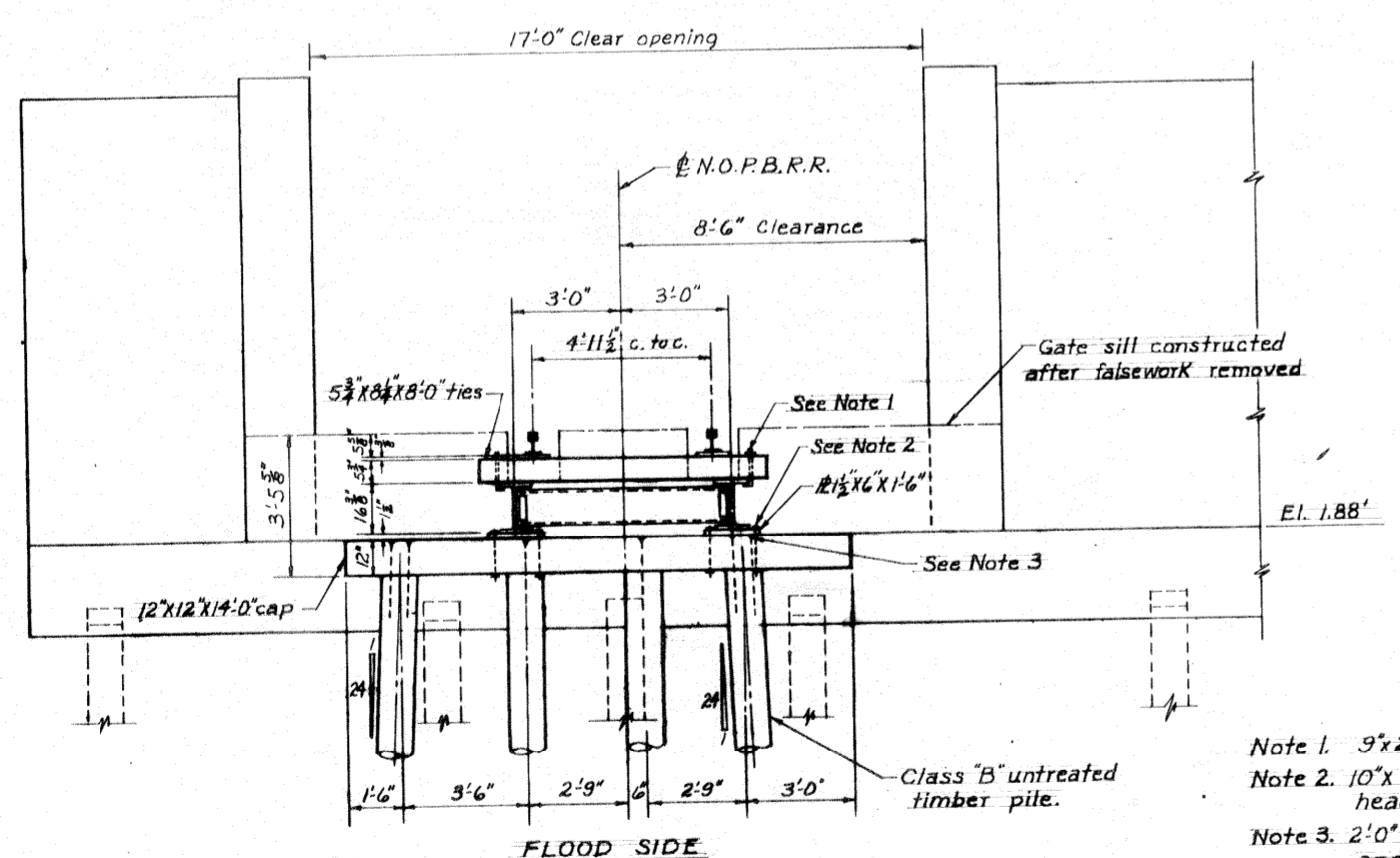
Note: Block out as shown, except at columns, block out entire area of column. Section applies to both gate monolith and storage monolith.

YOUR KEY TO
HIGHER PROFITS
SAFETY IS A PART
OF YOUR CONTRACT

REVISION	DATE	DESCRIPTION	BY
1	1-9-73	change angle to C.R.S. Mod #2	D.J.H.
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA.			
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA			
MISCELLANEOUS DETAILS			
DESIGNED: T.F.P.	DRAWN: L.R.M.	CHECKED: D.A.M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO. H-4-25958	
SUBMITTED: A. Hamilton		SPEC. NO. DACW29-73-B-0009	
		Dwg. 2.2 of 26	



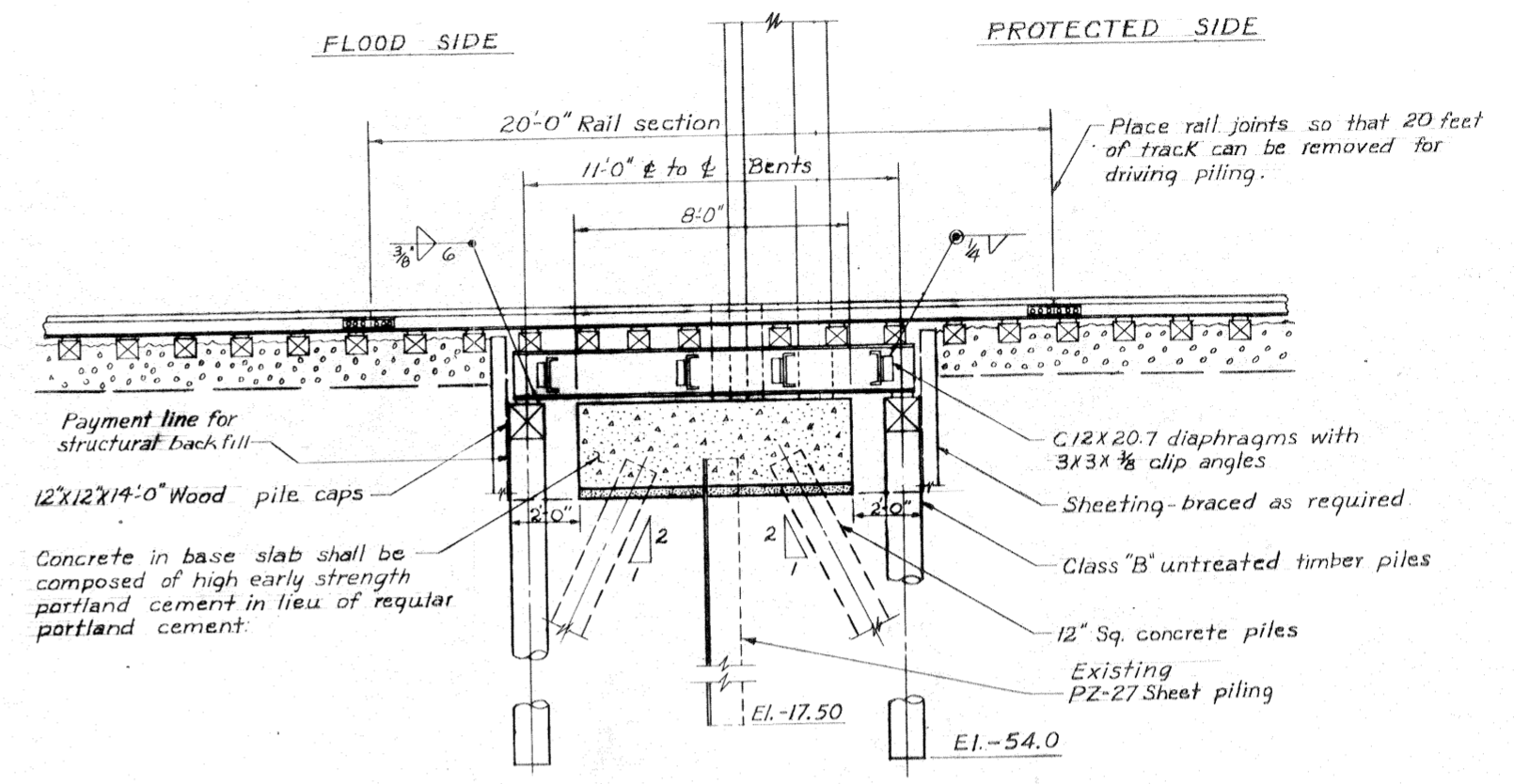
PLAN - FALSEWORK
Scale: 3/8" = 1'-0"



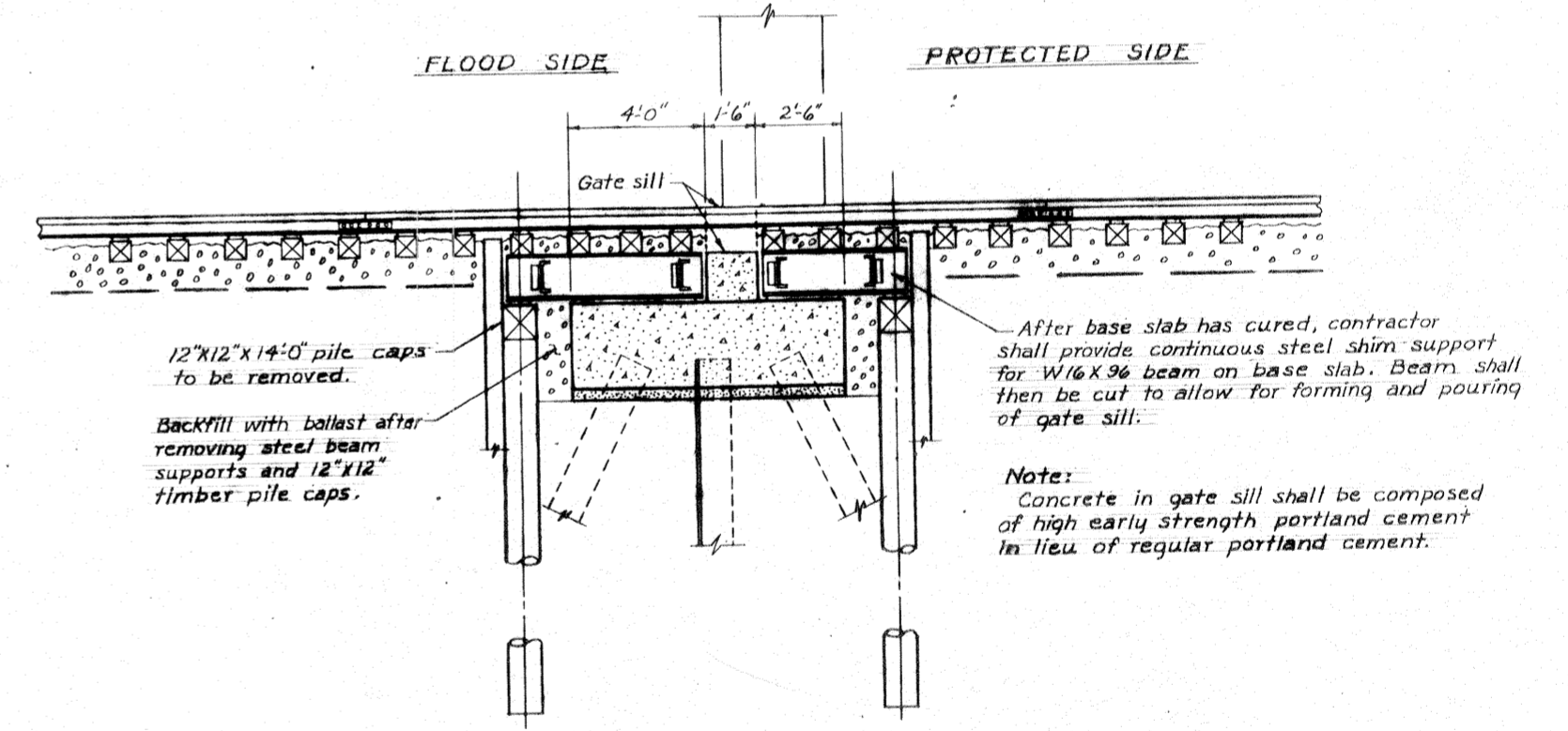
ELEVATION - FALSEWORK BENTS
Scale: 3/8" = 1'-0"

Note: Falsework bents on protected side are similar to those on flood side.

- Note 1. 3/4" x 2" x 3/4" dia. anchor bolts, threaded 2"
- Note 2. 10" x 3/4" dia. drift bolt w/oval countersunk head and wedge point
- Note 3. 2'-0" x 3/4" dia. round drift pin w/wedge point and countersunk head



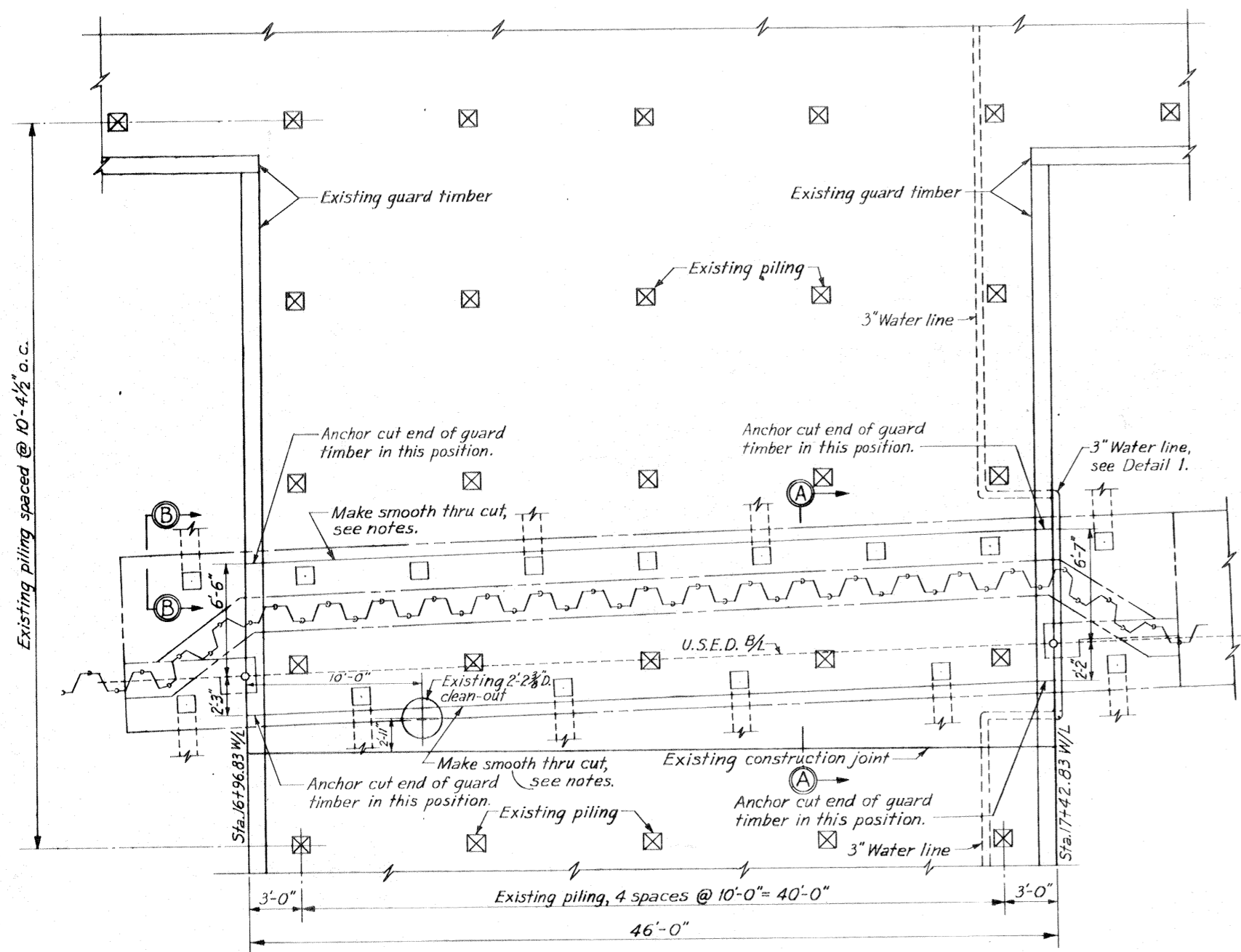
ELEVATION - FALSEWORK SPAN
Scale: 3/8" = 1'-0"



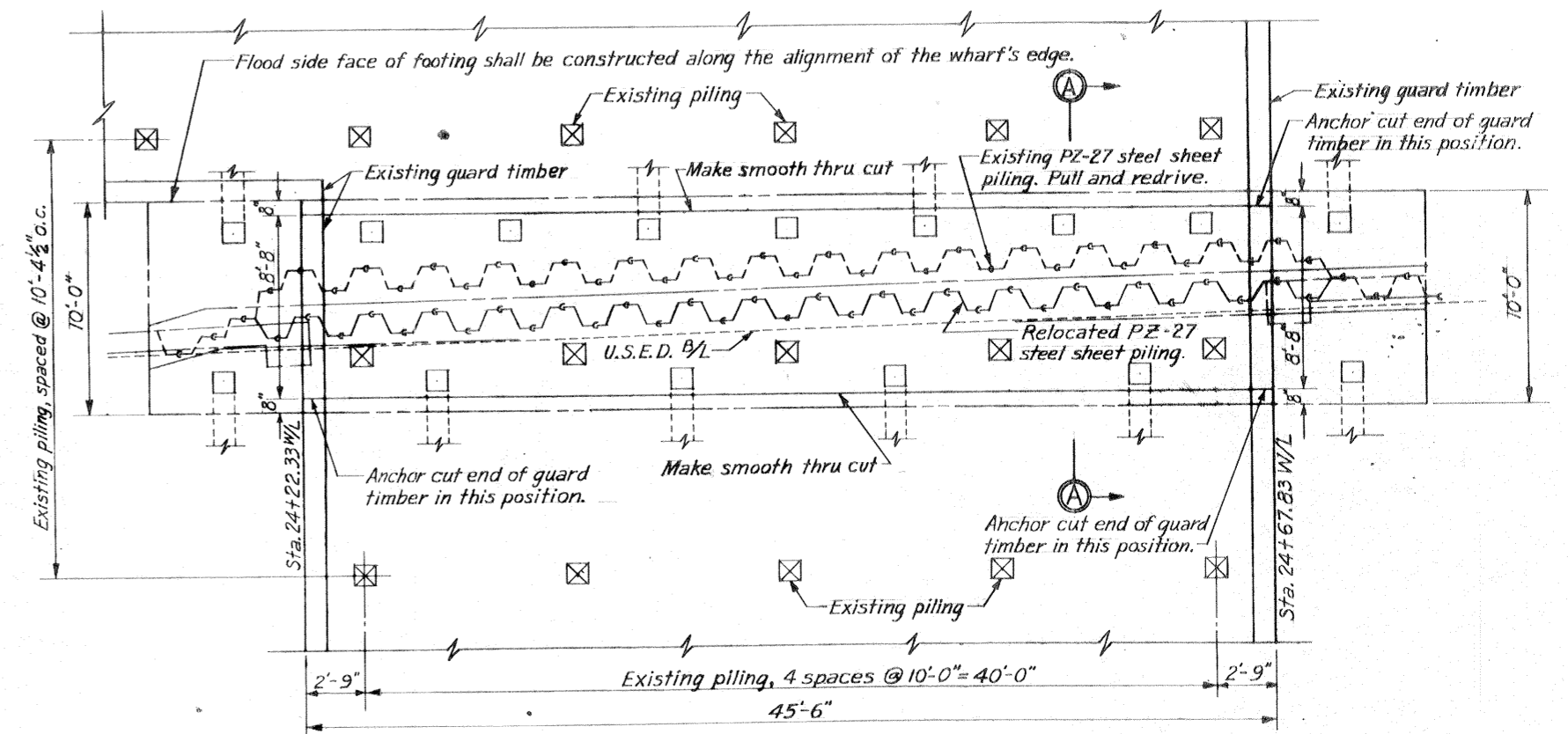
ELEVATION - FALSEWORK REMOVED
Scale: 3/8" = 1'-0"



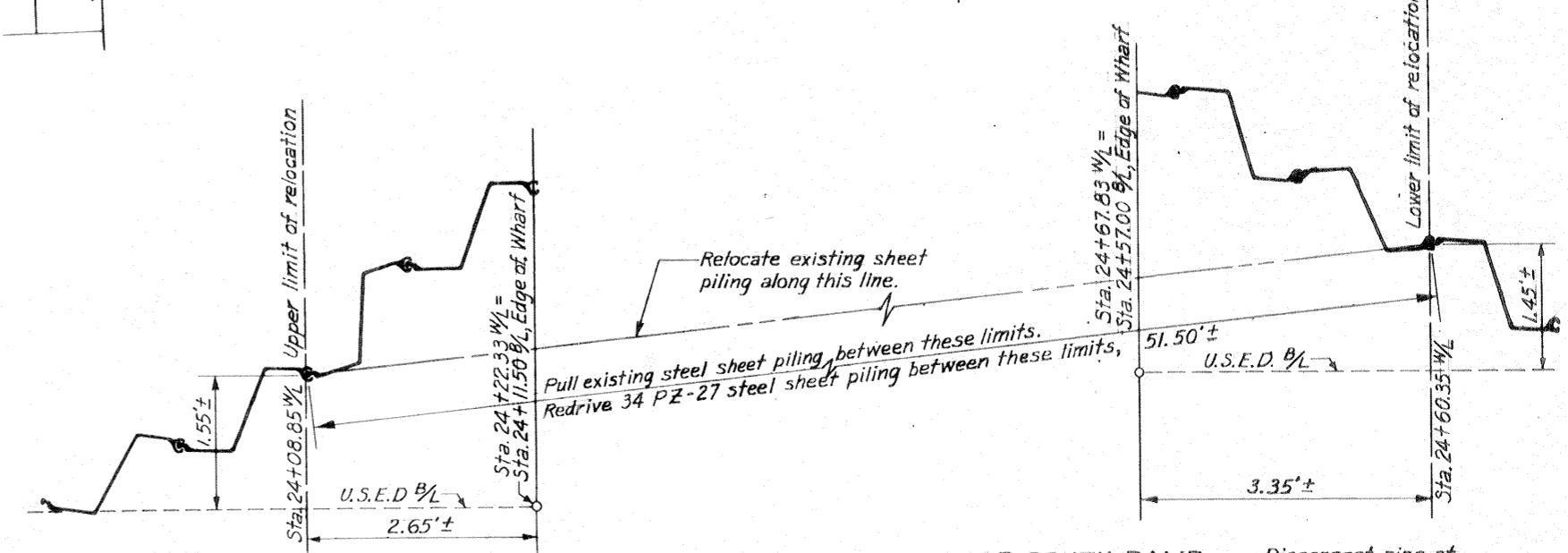
REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA.			
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA			
RAILROAD FALSEWORK - GATE 10-W			
DESIGNED: J.J.M.	DRAWN: C.L.R.	CHECKED: D.A.M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO. H-4-25958	
SUBMITTED: <i>[Signature]</i>		SPEC. NO. DACW29-73-B-0009	
		Dwg. 23 of 26	



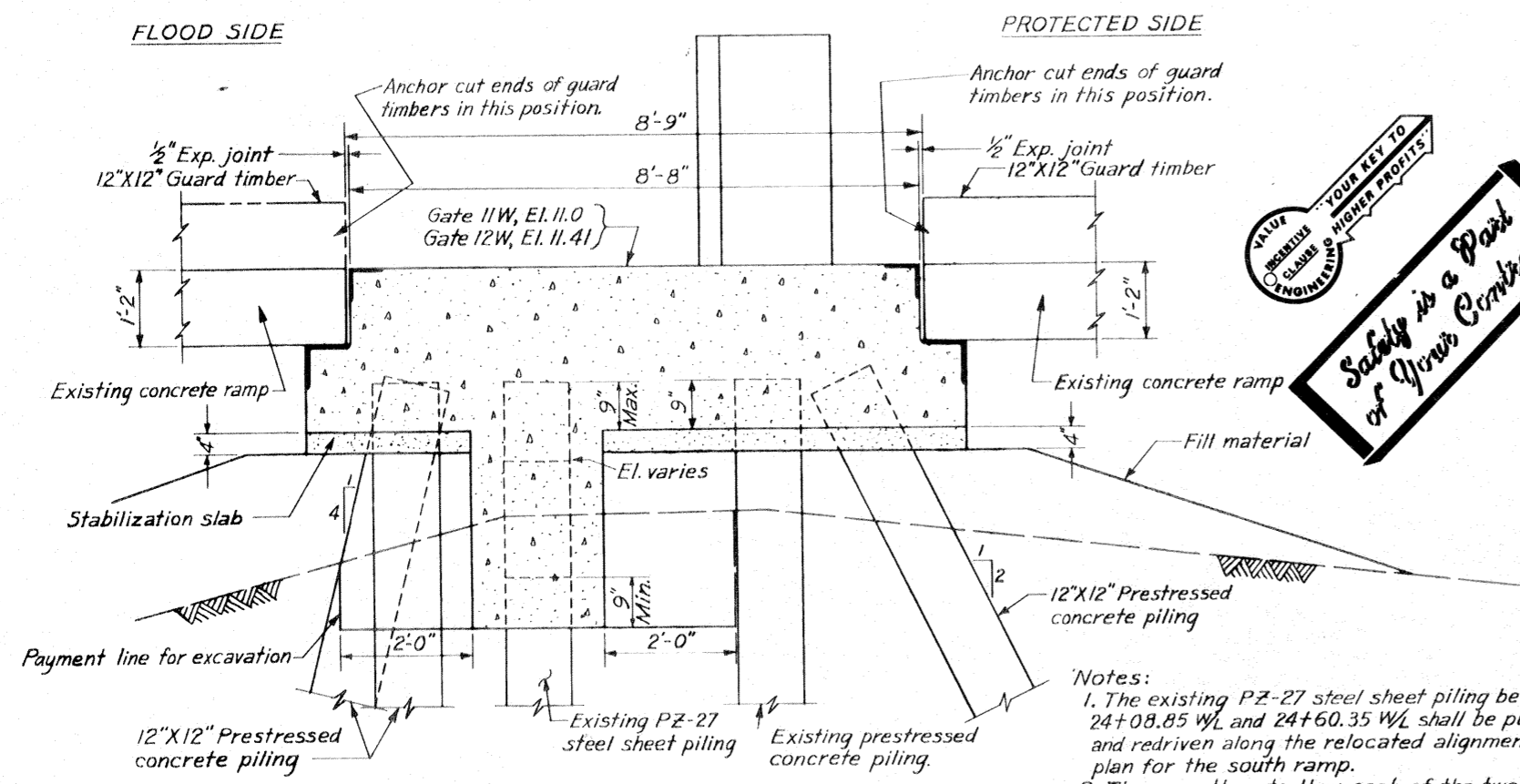
PLAN OF NORTH RAMP
Scale: 1/4" = 1'-0"



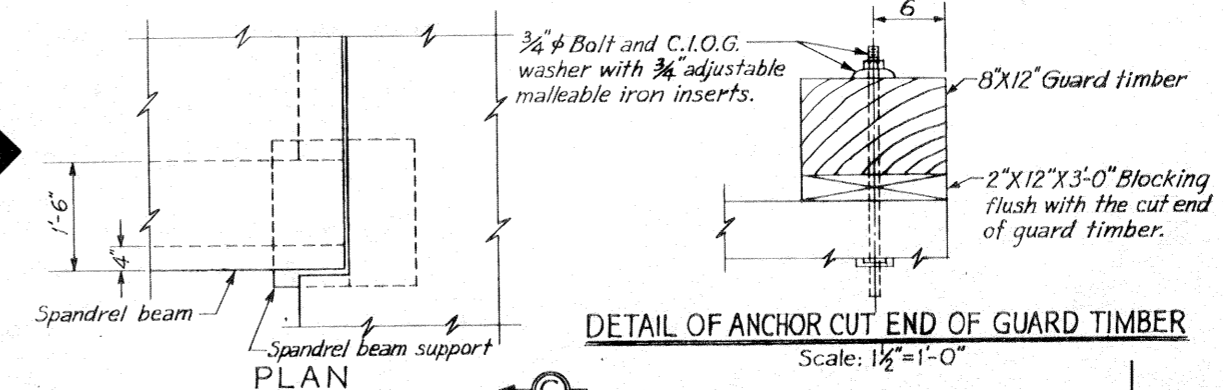
PLAN OF SOUTH RAMP
Scale: 1/4" = 1'-0"



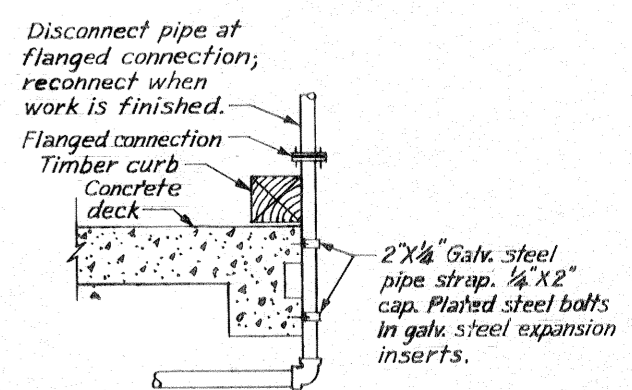
STEEL SHEET PILING LAYOUT FOR SOUTH RAMP
Scale: 1" = 1'-0"



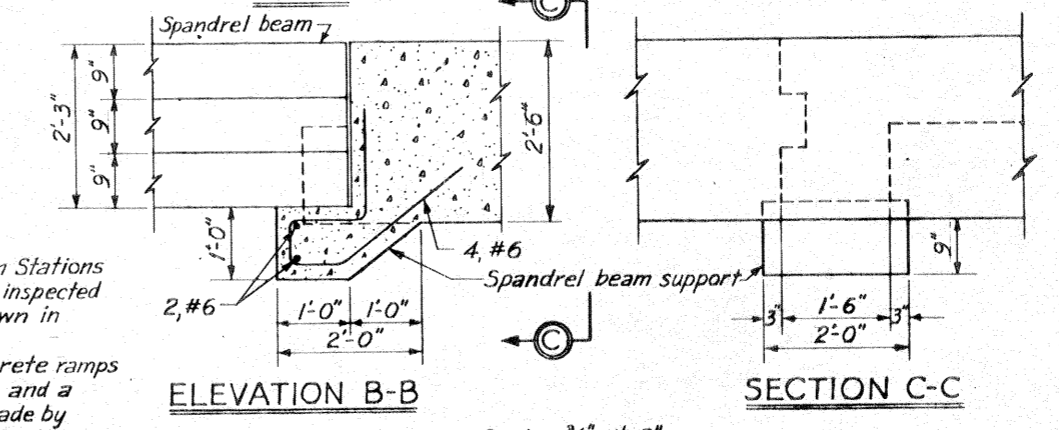
SECTION A-A
Scale: 3/4" = 1'-0"



DETAIL OF ANCHOR CUT END OF GUARD TIMBER
Scale: 1 1/2" = 1'-0"



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



ELEVATION B-B
Scale: 3/4" = 1'-0"

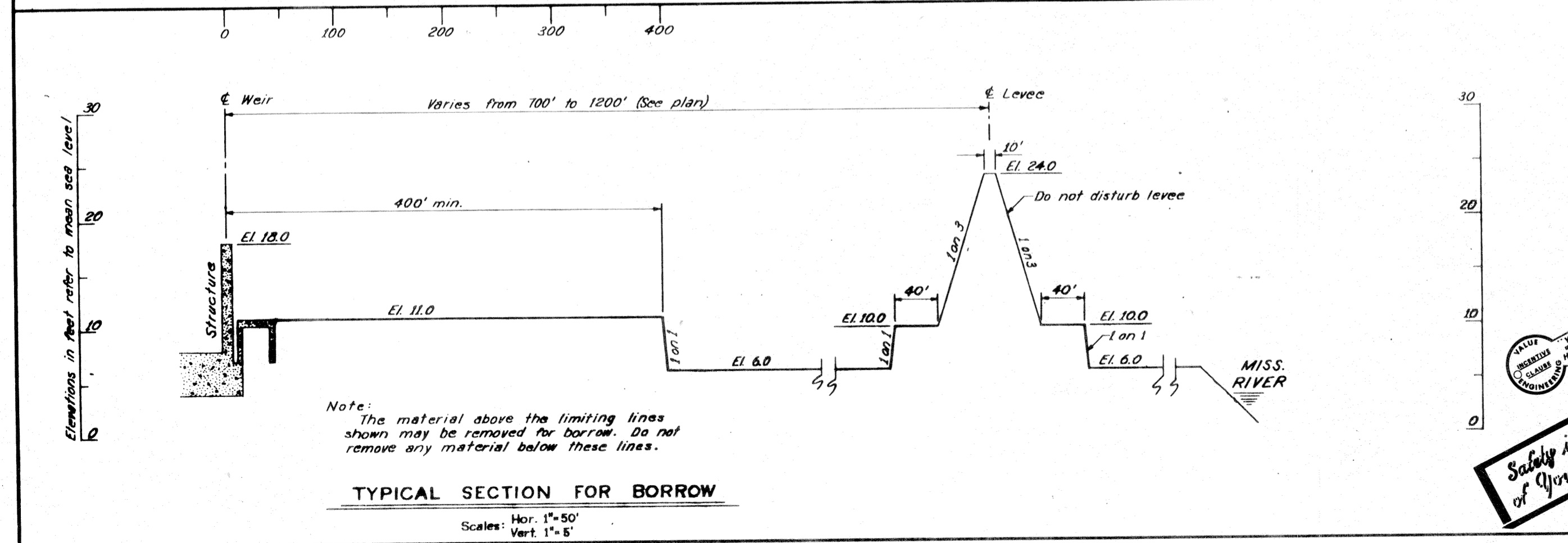
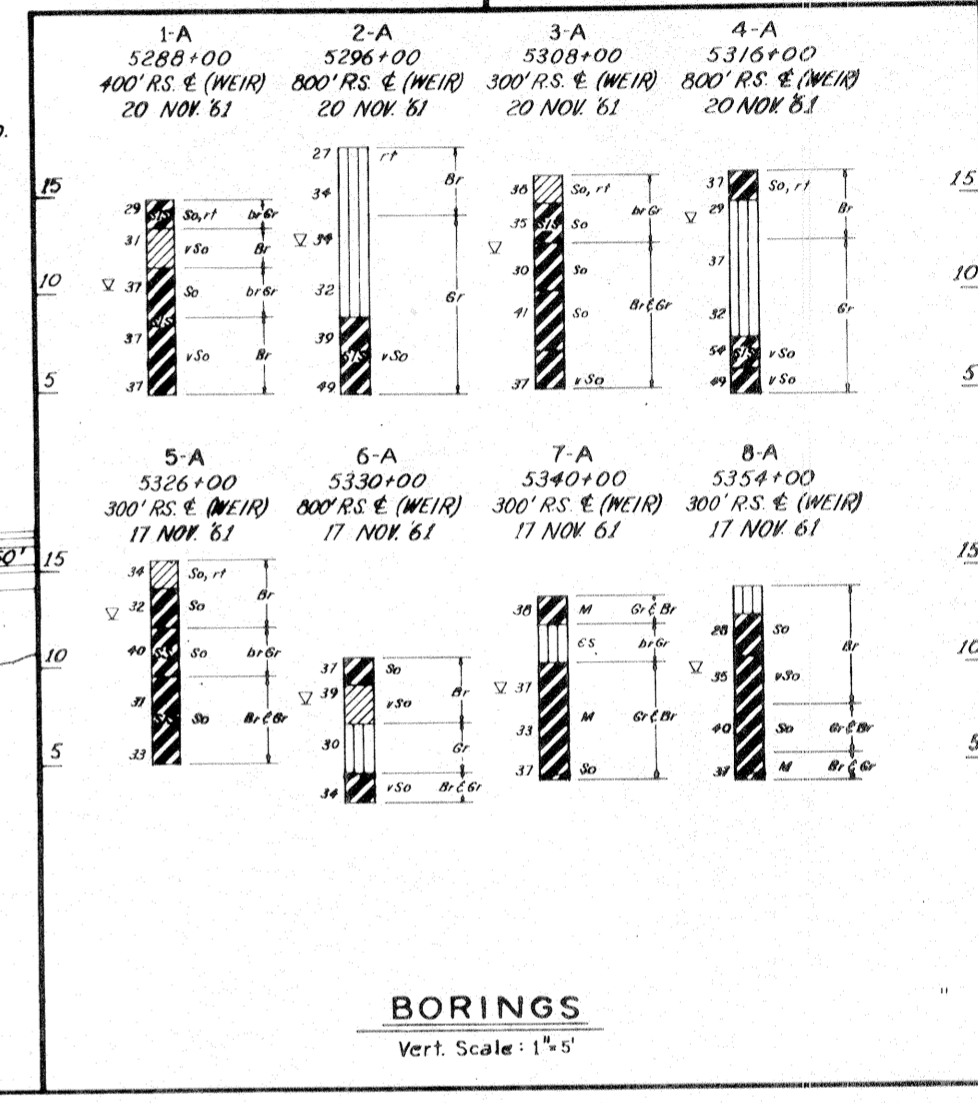
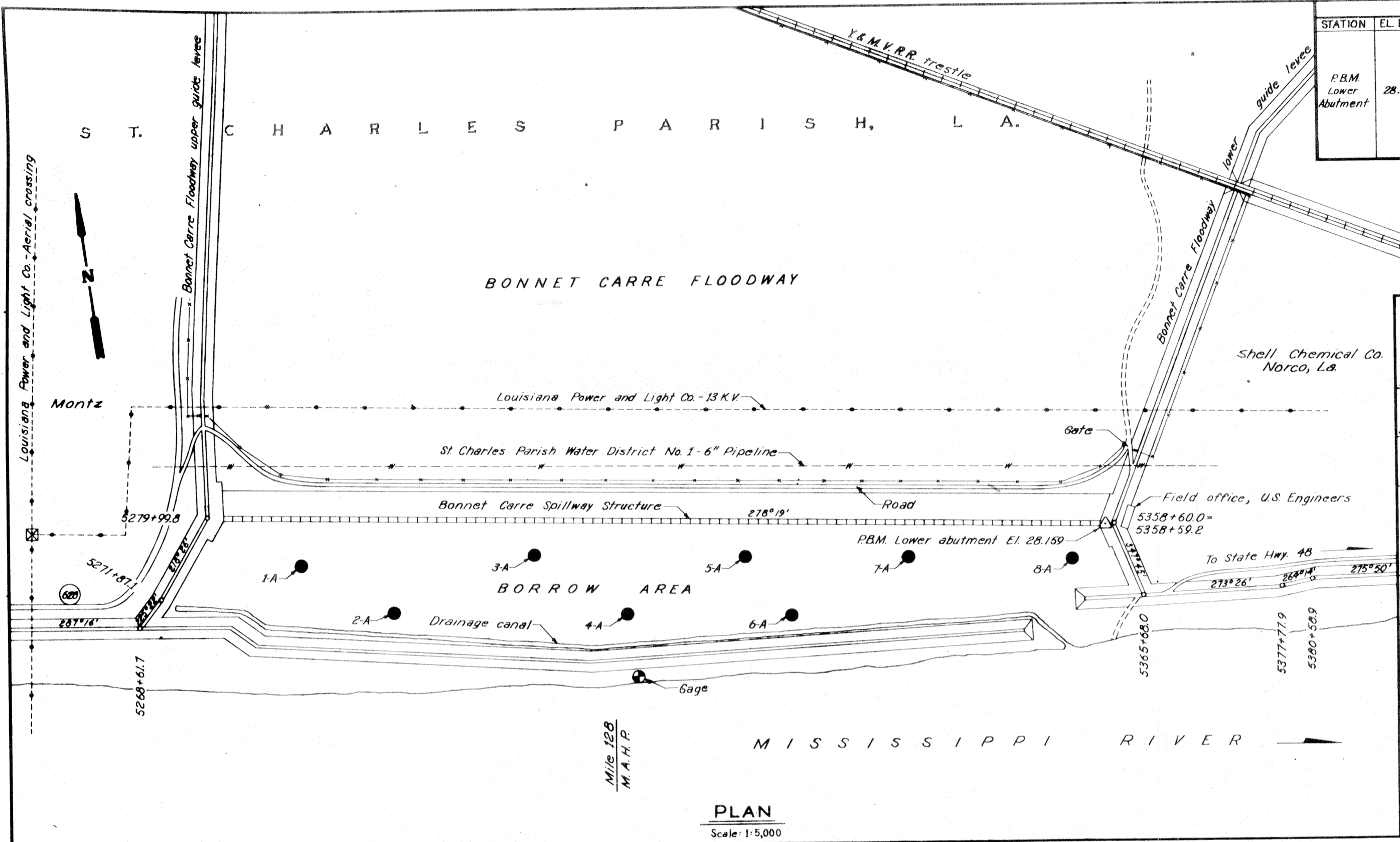
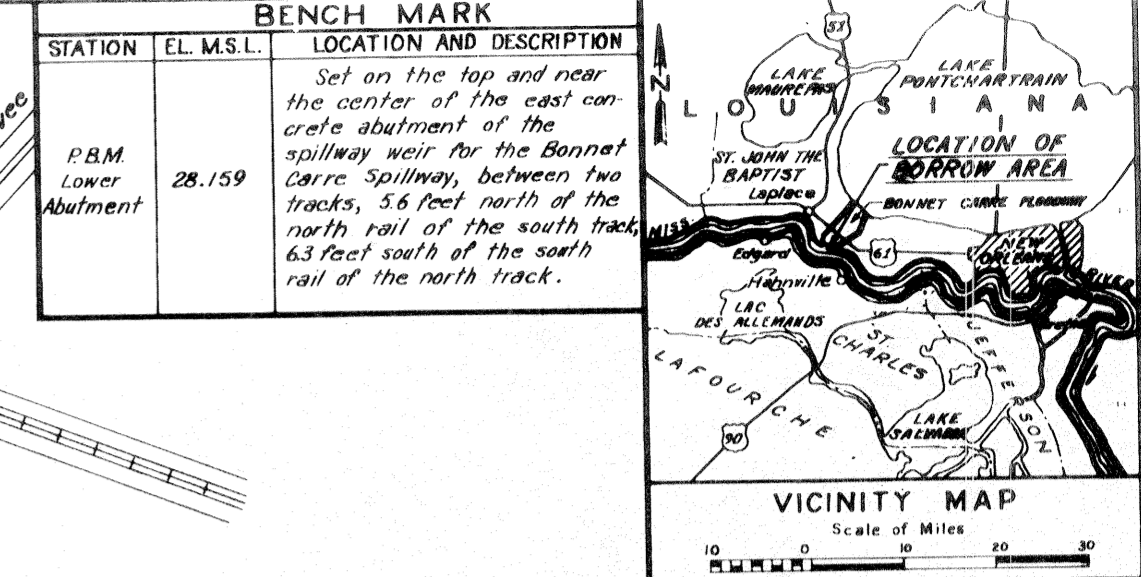
SECTION C-C
Scale: 3/4" = 1'-0"

AND YOUR KEY TO PROGRESS IS YOUR PROGRESS

Safety is a Part of Your Progress

- Notes:
1. The existing PZ-27 steel sheet piling between Stations 24+08.85 W/L and 24+60.35 W/L shall be pulled, inspected and redriven along the relocated alignment shown in plan for the south ramp.
 2. The smooth cuts thru each of the two concrete ramps shall have a tolerance of 1/4" ± along its length and a vertical tolerance of 1/4" ±. The cut shall be made by sawing thru the top 3 inches of the slabs and breaking the rest of the way thru.

REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA.			
LAKE PONCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION) INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA			
CONSTRUCTION DETAIL OF WHARF RAMPS			FILE NO. H-4-25958
DESIGNED T.F.P.	DRAWN R.G.S.	CHECKED D.A.M.	DATE JULY 1972
SCALE AS SHOWN		SPEC. NO. DACW29-73-B-0009	
DRAWN BY <i>Donald A. Hancher</i>		DWS 24 OF 26	



Notes:
For general notes, see dwg. 1.
Soil samples were taken with a 4" diameter post hole auger.
For soil boring legend, see dwg. 26.



REVISION	DATE	DESCRIPTION	BY

U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LA.

LAKE PONTCHARTRAIN LOUISIANA AND VICINITY (HURRICANE PROTECTION)
INNER HARBOR NAVIGATION CANAL - WEST LEVEE
FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE
STA. 206+16.73 TO STA. 26+85.0
LEVEE AND FLOODWALL
ORLEANS PARISH, LOUISIANA

**BORROW AREA LOCATION
BONNET CARRE SPILLWAY**

DESIGNED: T. F. P.	DRAWN: J. S.	CHECKED: D. A. M.	DATE: JULY 1972	SCALE: AS SHOWN	FILE NO. H-4-25958
SUBMITTED: <i>David A. Mendenhall</i>			SPEC. NO. DACW29-73-B-0009	DWG. 25	OF 26

UNIFIED SOIL CLASSIFICATION			
MAJOR DIVISION	TYPE	LETTER SYMBOL	TYPICAL NAMES
COARSE-GRAINED SOILS More than half of material is larger than No. 200 sieve size.	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size.	CLEAN GRAVEL (Little or No Fines)	GW GRAVEL, Well Graded, gravel-sand mixtures, little or no fines
		GRAVEL WITH FINES (Appreciable Amount of Fines)	GP GRAVEL, Poorly Graded, gravel-sand mixtures, little or no fines
	SANDS More than half of coarse fraction is smaller than No. 4 sieve size.	CLEAN SAND (Little or No Fines)	SW SAND, Well-Graded, gravelly sands
		SANDS WITH FINES (Appreciable Amount of Fines)	SP SAND, Poorly-Graded, gravelly sands
	FINE-GRAINED SOILS More than half the material is smaller than No. 200 sieve size.	SILTS AND CLAYS (Liquid Limit < 50)	ML SILT & very fine sand, silty or clayey fine sand or clayey silt with slight plasticity
			CL LEAN CLAY, Sandy Clay, Silty Clay, of low to medium plasticity
			OL ORGANIC SILTS and organic silty clays of low plasticity
		SILTS AND CLAYS (Liquid Limit > 50)	MH SILT, fine sandy or silty soil with high plasticity
			CH FAT CLAY, inorganic clay of high plasticity
			OH ORGANIC CLAYS of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS	Pt PEAT, and other highly organic soil		
WOOD	Wd WOOD		
SHELLS	SI SHELLS		
NO SAMPLE			

NOTE: Soils possessing characteristics of two groups are designated by combinations of group symbols

COLOR		CONSISTENCY FOR COHESIVE SOILS			MODIFICATIONS	
COLOR	SYMBOL	CONSISTENCY	COHESION IN LBS./SQ. FT. FROM UNCONFINED COMPRESSION TEST	SYMBOL	MODIFICATION	SYMBOL
TAN	T	VERY SOFT	< 250	vSo	Traces	Tr-
YELLOW	Y	SOFT	250-500	So	Fine	F
RED	R	MEDIUM	500-1000	M	Medium	M
BLACK	BK	STIFF	1000-2000	St	Coarse	C
GRAY	Gr	HARD	2000-4000	vSt	Concretions	cc
LIGHT GRAY	lGr		> 4000	H	Rootlets	rt
DARK GRAY	dGr				Lignite fragments	lg
BROWN	Br				Shale fragments	sh
LIGHT BROWN	lBr				Sandstone fragments	sds
DARK BROWN	dBr				Shell fragments	slf
BROWNISH-GRAY	br Gr				Organic matter	O
GRAYISH-BROWN	gy Br				Clay strata or lenses	CS
GREENISH-GRAY	gn Gr				Silt strata or lenses	SIS
GRAYISH-GREEN	gy Gn				Sand strata or lenses	SS
GREEN	Gn				Sandy	S
BLUE	Bl				Gravelly	G
BLUE-GREEN	Bl Gn				Boulders	B
WHITE	Wh				Slickensides	SL
MOTTLED	Mot				Wood	Wd
					Oxidized	Ox

PLASTICITY CHART
For classification of fine-grained soils

NOTES:

FIGURES TO LEFT OF BORING UNDER COLUMN "W OR D₁₀"

Are natural water contents in percent dry weight
When underlined denotes D₁₀ size in mm*

FIGURES TO LEFT OF BORING UNDER COLUMNS "LL" AND "PL"

Are liquid and plastic limits, respectively

SYMBOLS TO LEFT OF BORING

∇ Ground-water surface and date observed

⊙ Denotes location of consolidation test**

Ⓢ Denotes location of consolidated-drained direct shear test**

Ⓡ Denotes location of consolidated-undrained triaxial compression test**

Ⓚ Denotes location of unconsolidated-undrained triaxial compression test**

Ⓣ Denotes location of sample subjected to consolidation test and each of the above three types of shear tests**

FW Denotes free water encountered in boring or sample

FIGURES TO RIGHT OF BORING

Are values of cohesion in lbs./sq. ft. from unconfined compression tests

In parenthesis are driving resistances in blows per foot determined with a standard split spoon sampler (1 3/8" I.D., 2" O.D.) and a 140 lb. driving hammer with a 30" drop

Where underlined with a solid line denotes laboratory permeability in centimeters per second of undisturbed sample

Where underlined with a dashed line denotes laboratory permeability in centimeters per second of sample remoulded to the estimated natural void ratio

*The D₁₀ size of a soil is the grain diameter in millimeters of which 10% of the soil is finer, and 90% coarser than D₁₀

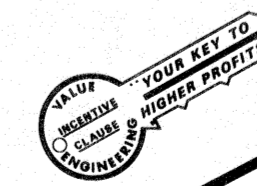
**Results of these tests are available for inspection in the U. S. Army Engineer District Office, if these symbols appear beside the boring logs on the drawings

TYPICAL NOTES:

While the borings are representative of subsurface conditions at their respective locations and for their respective vertical reaches, local variations characteristic of the subsurface materials of the region are anticipated and, if encountered, such variations will not be considered as differing materially within the purview of clause 4 of the contract.

Ground-water elevations shown on the boring logs represents ground-water surfaces encountered on the dates shown. Absence of water surface data on certain borings implies that no ground-water data is available, but does not necessarily mean that ground water will not be encountered at the locations or within the vertical reaches of these borings.

Consistency of cohesive soils shown on the boring logs is based on driller's log and visual examination and is approximate, except within those vertical reaches of the borings where shear strengths from unconfined compression tests are shown.



Safety is a Part of Your Contract

REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA.			
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY HURRICANE PROTECTION INNER HARBOR NAVIGATION CANAL - WEST LEVEE FRANCE ROAD RAMP TO FLORIDA AVE. BRIDGE STA. 206+16.73 TO STA. 26+55.0 LEVEE AND FLOODWALL ORLEANS PARISH, LOUISIANA			
SOIL BORING LEGEND			
DESIGNED: T. F. P.	DRAWN: E. M. M.	CHECKED: D. A. M.	DATE: JULY 1972
SCALE: AS SHOWN		FILE NO. H-4-25958	
SPEC. NO. DACW29-73-B-0009		DWS. 26 OF 26	