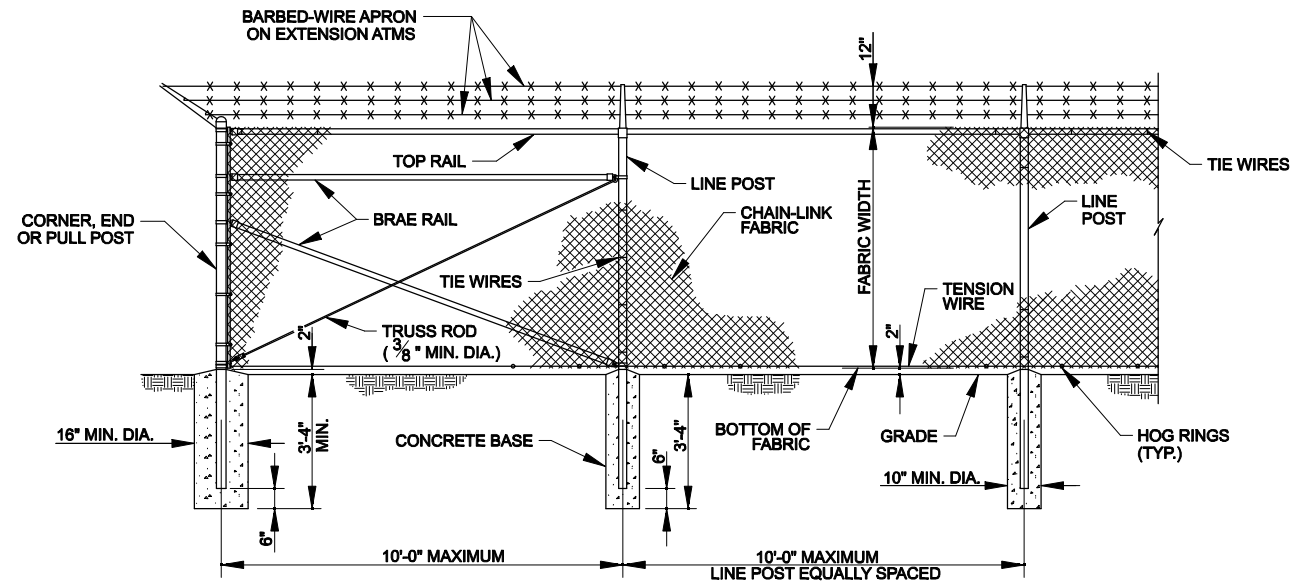


D

C

B

A

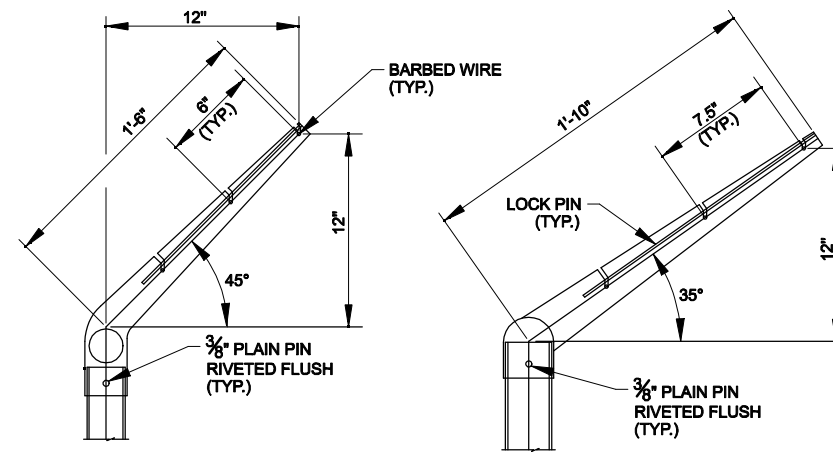


CHAIN - LINK SECURITY FENCE DETAIL

NTS

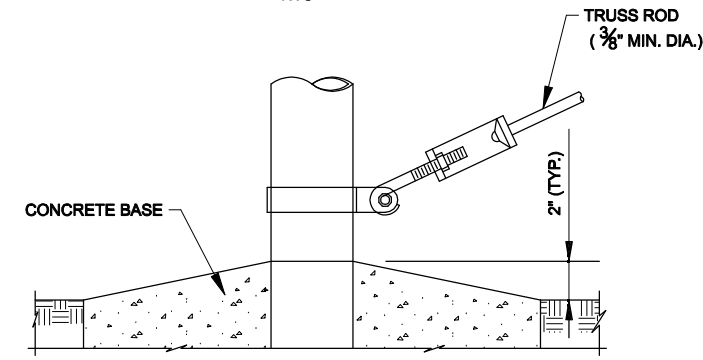
FENCE NOTES

- FENCE HEIGHT = 8'-0" W/ BARBED WIRES.
- DOUBLE SWING GATE = 8'-0" HIGH W/ BARBED WIRES.
- FENCE FABRIC SHALL BE 2" HOT-DIP GALVANIZED STEEL MESH, HEIGHT OF 96", 34-1/2 DIAMOND COUNT WITH TWISTED EDGES. FABRIC SHALL COMPLY WITH THE CHAIN LINK FENCE MANUFACTURER'S INSTITUTE (CLFMI) "STANDARD GUIDE FOR METALLIC-COATED STEEL CHAIN LINK FENCE AND FABRIC". TOP SELVAGE SHALL BE TWISTED AND BOTTOM SELVAGE SHALL BE KNUCKLED.
- FENCE FABRIC TO BE CONNECTED TO POST END, CORNER AND GATE WITH 1/4" X 3/4" GALVANIZED STEEL TENSION BARS AND #14 GAGE (MIN.) X 1 GALVANIZED STEEL TENSION BANDS SPACED 15" O.C. SPACED 15" O.C. (MAX.). TOP AND BOTTOM EDGE TO BE TIED (MAX) TO THE CONTINUOUS #6 GAGE TENSION WIRE WITH #9 GAGE ALUMINUM HOG RINGS SPACED 24" O.C. (MAX.). FABRIC TO BE ATTACHED TO LINE POST WITH #9 GAGE ALUMINUM TIE WIRES SPACED 15" O.C. (MAX.).
- STEEL FENCE POST:
 - LINE POSTS: TYPE I, ROUND 2.375 INCH O.D. (3.65 LBS. PER FT.) HOT-DIP GALVANIZED INSIDE AND OUT, SPACED AS SHOWN ON DRAWINGS.
 - END CORNER OR PULL POSTS: TYPE I, ROUND 2.375 INCH O.D. (3.65 LBS. PER FT.) HOT-DIP GALVANIZED INSIDE AND OUT. GATE POSTS SHALL HAVE DOME STYLE POST CAPS.
 - TOP RAILS: 1.625 INCH O.D. (2.27 LBS. PER FT.) HOT-DIP GALVANIZED INSIDE AND OUT.
- BRACING FOR END, CORNER AND GATE POSTS SHALL BE 1 1/4" STEEL PIPE (SCH. 40) (1.66" O.D.) HOT-DIP GALVANIZED INSIDE AND OUT. BRACING PIPE TO EXTEND FROM END, CORNER AND GATE POSTS TO FIRST LINE POST. PROVIDE 3/8" Ø GALVANIZED ADJUSTABLE TRUSS ROD FROM THE END OF THE BRACE AND FASTENED TO THE END OF THE BRACE AND FASTENED TO EACH POST WITH GALVANIZED PRESSED STEEL FITTINGS.
- BOTTOM TENSION WIRE SHALL BE CONTINUOUS #6 GAGE GALVANIZED COIL SPRING TENSION WIRE.
- BARBED WIRE SHALL BE THREE STRANDS, FOUR POINT PATTERN, EACH STRAND COMPOSED OF TWO TWISTED 12 1/2 GAGE STEEL LINE WIRES, GALVANIZED AFTER TWISTING.
- BARBED WIRE ARMS SHALL BE PRESSED STEEL OR MALLEABLE IRON, AND HOT-DIP GALVANIZED. EACH ARM SHALL CARRY THREE (3) BARBED WIRES SECURELY FASTENED. ARMS SHALL BE SECURELY FASTENED TO ALL POST AND SET AT 45° ANGLE OUTSIDE OF THE FENCE LINE.
- GATE POST SHALL BE EXTENDED TO RECEIVE THREE (3) STRANDS OF BARBED WIRE, FASTENED BY TENSION BANDS AND SHALL BE CAPPED.
- ALL FITTINGS SHALL BE MALLEABLE IRON OR HEAVY PRESSED STEEL CONSTRUCTION AND HOT-DIP GALVANIZED.
- GATES SHALL HAVE WELDED FRAMES USING TYPE I, ROUND 2.375 INCH O.D. (3.65 LBS. PER FT.) 1 HOT-DIP GALVANIZED INSIDE AND OUT (AFTER FABRICATION). PROVIDE HORIZ. BRACE USING 1 1/2" STEEL PIPE (SCH. 40) (1.90" O.D.) HOT-DIP GALVANIZED INSIDE AND OUT AND SPACED MIDWAY BETWEEN THE TOP RAIL AND BOTTOM RAIL. VERTICAL MEMBERS SHALL BE EXTENDED TO RECEIVE THREE (3) STRANDS OF BARBED WIRE AND SHALL BE CAPPED.
- GATE FABRIC SHALL BE THE SAME AS FENCE FABRIC. PROVIDE TENSION BARS AND TENSION BANDS. ALSO #9 GAGE ALUMINUM TIE WIRES AT TOP AND BOTTOM EDGES, SPACED 12" O.C. (MAX.).
- ALL GATES SHALL BE FURNISHED COMPLETE WITH HEAVY DUTY HINGES CAPABLE OF SWING 90° IN AND OUT, CENTER GATE STOP AND DOUBLE GATE LATCH WITH PROVISIONS FOR A PADLOCK AND A DROP ROD OR PLUNGER BAR ARRANGED TO ENGAGE THE GATE STOP. LOCKING DEVICES SHALL BE CONSTRUCTED SO THAT THE CENTER DROP ROD OR PLUNGER BAR CANNOT BE RAISED WHEN THE GATE IS LOCKED.
- CONTRACTOR SHALL NOT BEGIN INSTALLATION AND ERECTION BEFORE FINAL GRADING IS COMPLETED, UNLESS OTHERWISE APPROVED BY THE CONTRACTING OFFICER.
- CONTRACTOR SHALL SUBMIT FOR APPROVAL THE PROPOSED SECURITY FENCE LAYOUT SHOWING ALL GATE HARDWARE.

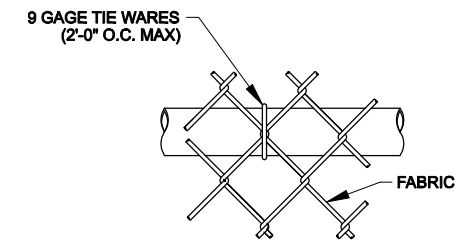


EXTENSION ARM DETAILS

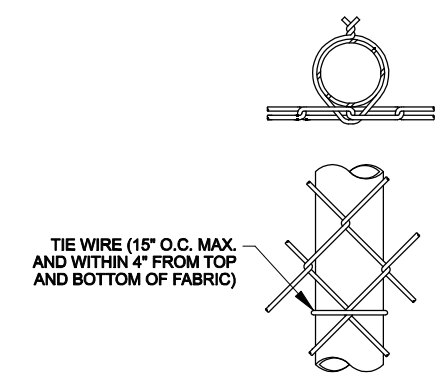
NTS



TRUSS ROD AND BAND

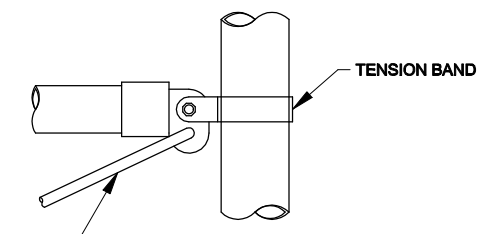


TOP OR BRACE RAIL ATTACHMENT



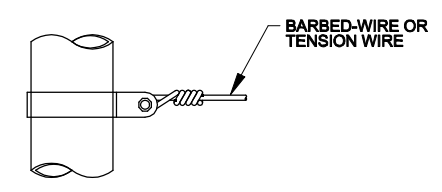
ROUND POST LINE POST ATTACHMENTS

- NOTES:**
- DETAILS SHOWN ARE TO CLARIFY REQUIREMENTS AND ARE NOT INTENDED TO LIMIT OTHER TYPES OF FENCE SECTIONS AND METHODS OF INSTALLATION.
 - WIRE TIES, RAILS, POSTS, AND BRACES SHALL BE CONSTRUCTED ON THE SECURE SIDE OF THE FENCE ALIGNMENT. CHAIN-LINK FABRIC SHALL BE PLACED ON THE OPPOSITE SIDE OF THE SECURE AREA.
 - FENCE FRAMEWORK AND ACCESSORIES SHALL COMPLY WITH CLFMI "INDUSTRIAL STEEL GUIDE FOR FENCE RAILS, POSTS, GATES AND ACCESSORIES", AND SHALL BE AS SPECIFIED BELOW AND CONFORM TO THE LATEST REQUIREMENTS OF ASTM F 626.

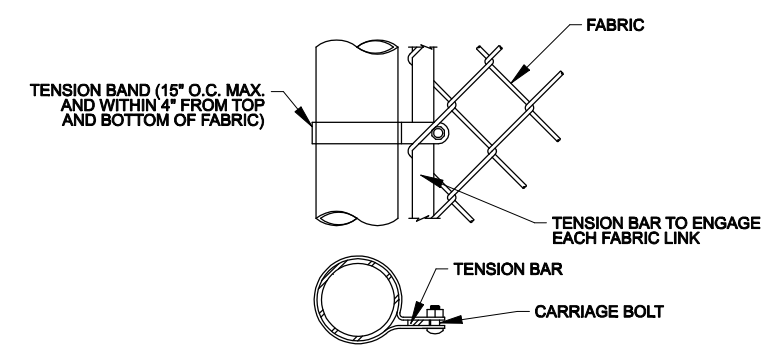


ROUND POST

BRACE RAIL CLAMP DETAILS



TENSION BAND DETAIL



END OR GATE POST DETAIL

FASTENING DETAILS

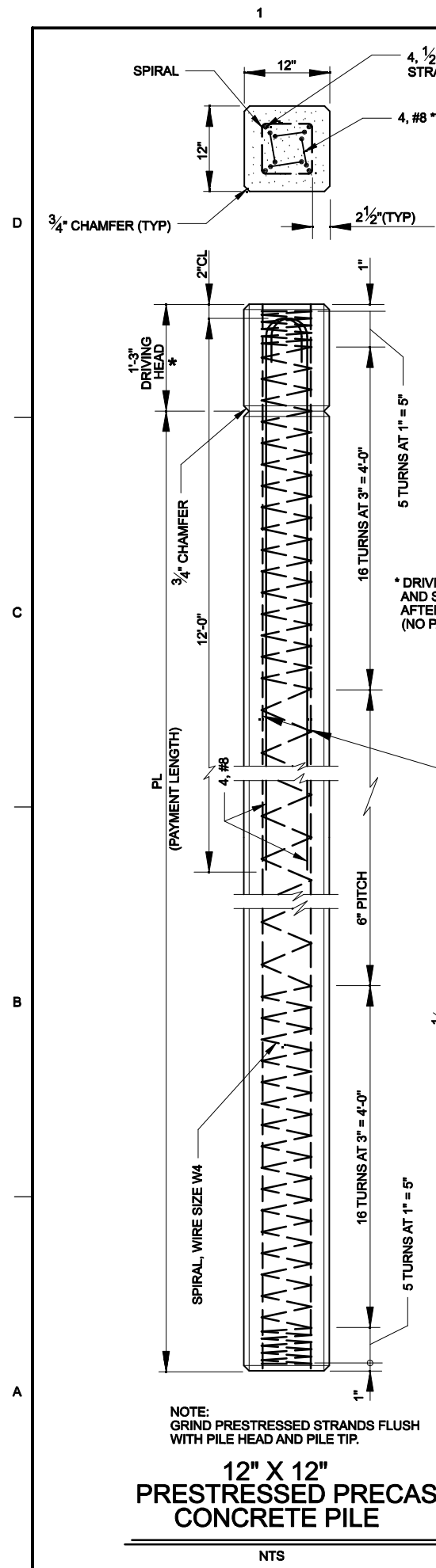


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DRAWN BY: NEW ORLEANS	FILE NUMBER: A/E TYPICALS
DATE: 12/11/11	SCALE: AS SHOWN
PROJECT: HURRICANE DESIGN GUIDELINES	DATE: 12/11/11
PROJECT: HURRICANE DESIGN GUIDELINES	DATE: 12/11/11

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
A/E TYPICAL DRAWINGS
GENERAL DRAWINGS
FENCING DETAILS

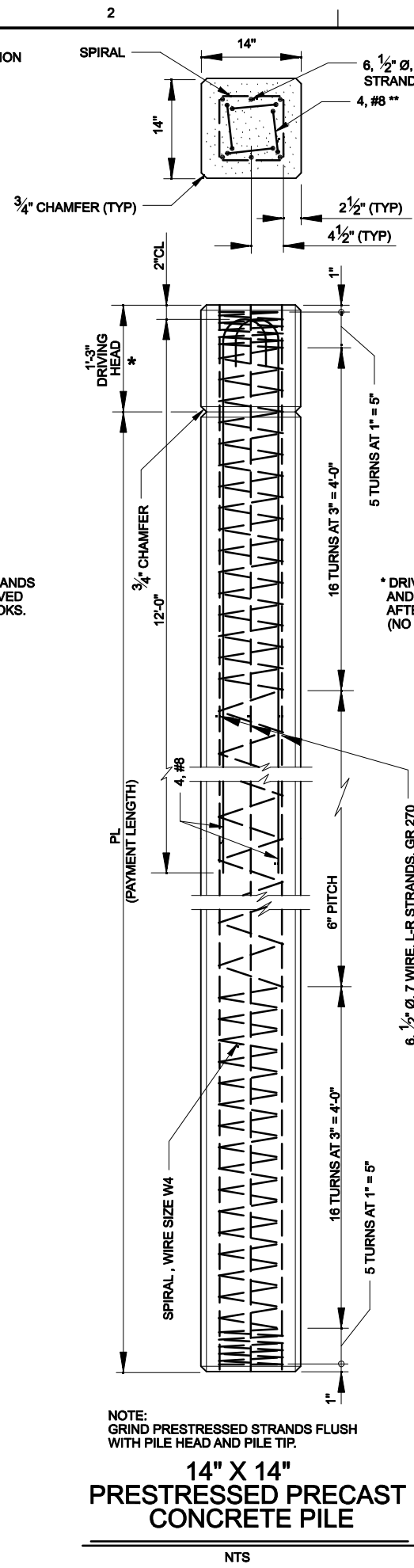
SHEET IDENTIFICATION
X-00



NOTE:
GRIND PRESTRESSED STRANDS FLUSH WITH PILE HEAD AND PILE TIP.

**12" X 12"
PRESTRESSED PRECAST
CONCRETE PILE**

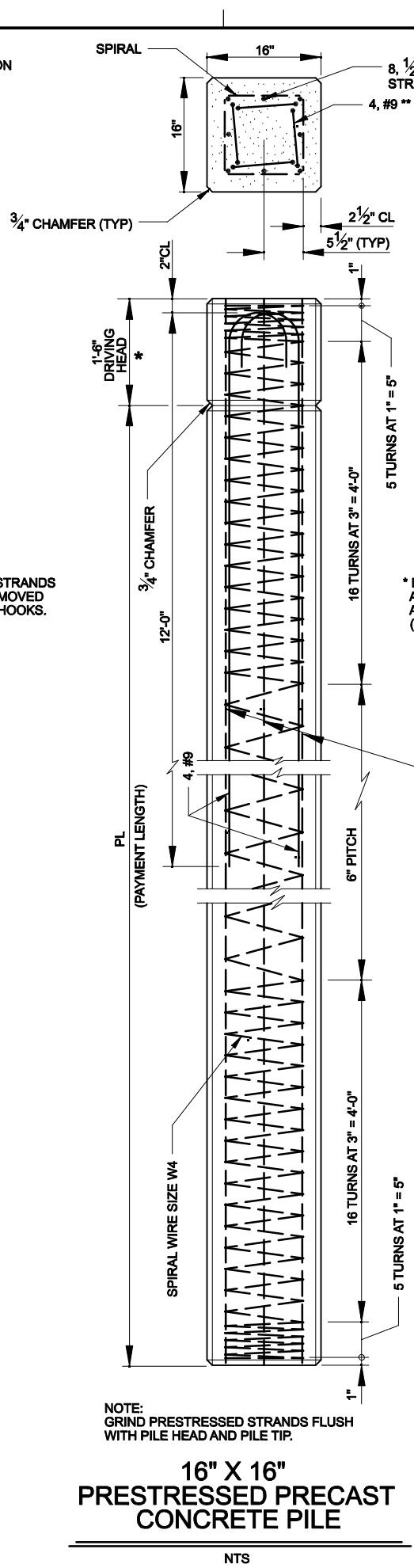
NTS



NOTE:
GRIND PRESTRESSED STRANDS FLUSH WITH PILE HEAD AND PILE TIP.

**14" X 14"
PRESTRESSED PRECAST
CONCRETE PILE**

NTS

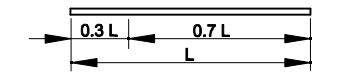


NOTE:
GRIND PRESTRESSED STRANDS FLUSH WITH PILE HEAD AND PILE TIP.

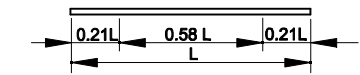
**16" X 16"
PRESTRESSED PRECAST
CONCRETE PILE**

NTS

** STANDARD 180° HOOK ON REINFORCING FOR ALL PILES. TO ALLOW FOR PROPER PLACEMENT OF CONCRETE, HOOKS SHOULD BE PLACED SO THAT BEND OF HOOK IS APPROXIMATELY PARALLEL TO ADJACENT FACE OF PILE AS SHOWN.



1 POINT PICKUP (L ≤ 53') 12" X 12" PILE
 1 POINT PICKUP (L ≤ 59') 14" X 14" PILE
 1 POINT PICKUP (L ≤ 61') 16" X 16" PILE



2 POINT PICKUP (L ≤ 75') 12" X 12" PILE
 2 POINT PICKUP (L ≤ 84') 14" X 14" PILE
 2 POINT PICKUP (L ≤ 87') 16" X 16" PILE

- NOTES:
 1. PICKUP POINTS TO BE PLAINLY MARKED ON PILES
 2. PICKUP POINTS SHOWN FOR 5,000 PSI CONCRETE ONLY

PILE SCHEDULE				PAYMENT LENGTH		
W/L STATIONS	PILE SIZE	NUMBER OF PILES	PILE BATTER	PILE TIP ELEV.	FLOOD SIDE	PROTECT SIDE

EXACT LENGTHS OF PRESTRESSED CONCRETE PILING SHALL BE DETERMINED AFTER PILE TEST ARE CONDUCTED. LENGTHS SHOWN ARE FOR ESTIMATING PURPOSES ONLY.

- NOTES
 1. ONLY 5,000 OR 6,000 PSI CONCRETE SHALL BE USED FOR PRESTRESSED CONCRETE PILES.



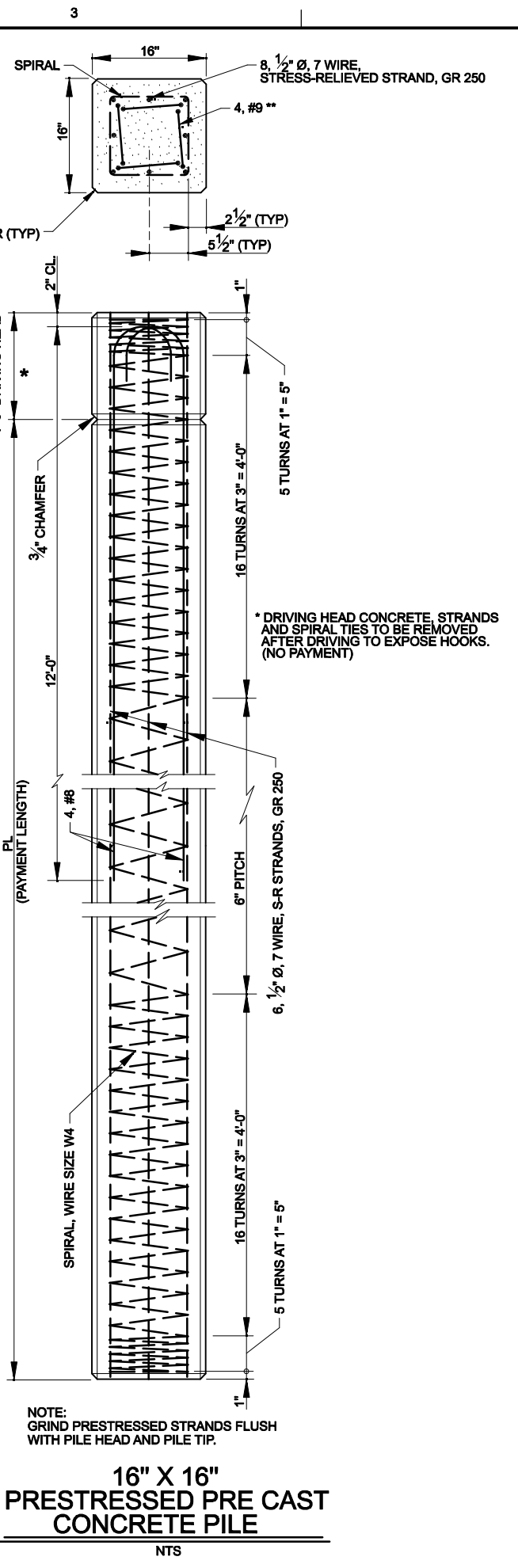
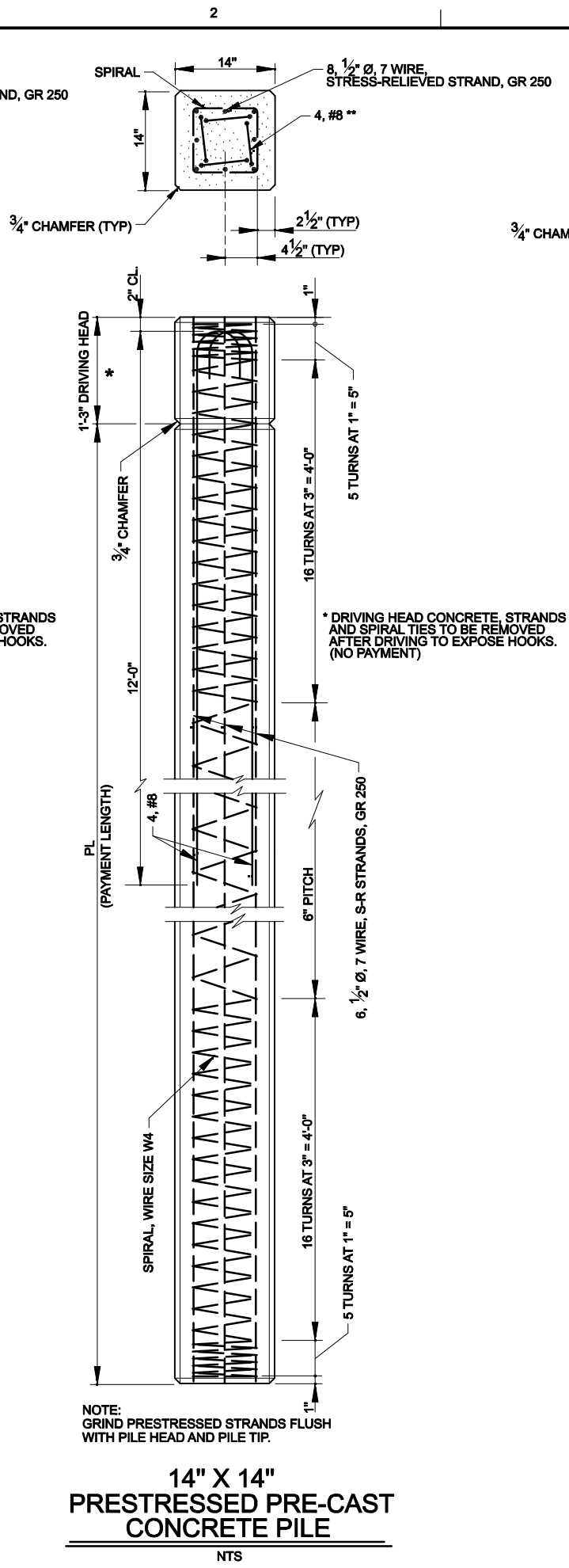
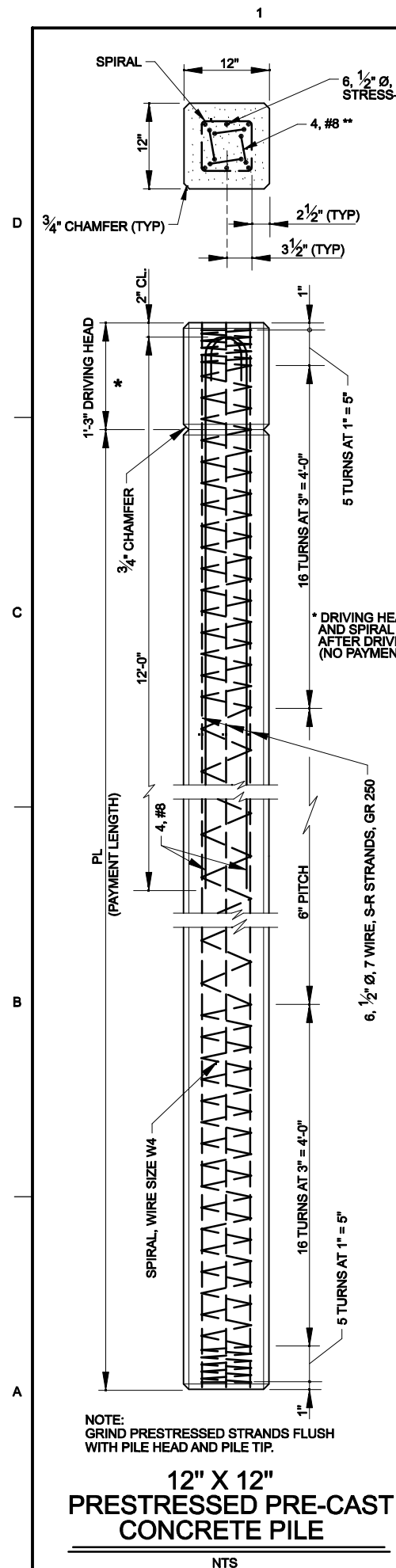
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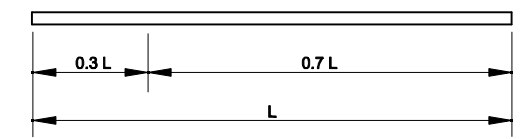
USACE - NEW ORLEANS
 HURRICANE DESIGN GUIDELINES
 AE TYPICAL DRAWINGS

PILING DETAILS
 LOW-LAXATION STRANDS

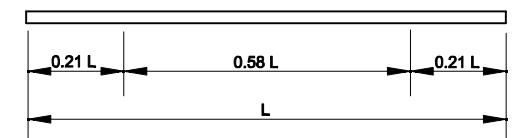
SHEET IDENTIFICATION
X-00



** STANDARD 180° HOOK ON REINFORCING FOR ALL PILES. TO ALLOW FOR PROPER PLACEMENT OF CONCRETE, HOOKS SHOULD BE PLACED SO THAT BEND OF HOOK IS APPROXIMATELY PARALLEL TO ADJACENT FACE OF PILE AS SHOWN.



- 1 POINT PICKUP (L ≤ 54') 12" X 12" PILE
- 1 POINT PICKUP (L ≤ 58') 14" X 14" PILE
- 1 POINT PICKUP (L ≤ 60') 16" X 16" PILE



- 2 POINT PICKUP (L ≤ 77') 12" X 12" PILE
- 2 POINT PICKUP (L ≤ 83') 14" X 14" PILE
- 2 POINT PICKUP (L ≤ 86') 16" X 16" PILE

- NOTES:
- PICKUP POINTS TO BE PLAINLY MARKED ON PILES
 - PICKUP POINTS SHOWN FOR 5,000 PSI CONCRETE ONLY

W/L STATIONS	PILE SIZE	NUMBER OF PILES	PILE BATTER	PILE TIP ELEVATION	PAYMENT LENGTH	
					FLOOD SIDE	PROTECTED SIDE

NOTE:
EXACT LENGTHS OF PRESTRESSED CONCRETE SHALL BE DETERMINED AFTER PILE TEST ARE CONDUCTED. LENGTHS SHOWN ARE FOR ESTIMATING PURPOSES ONLY.

- NOTES
- ONLY 5,000 OR 6,000 PSI CONCRETE SHALL BE USED FOR PRESTRESSED CONCRETE PILES.

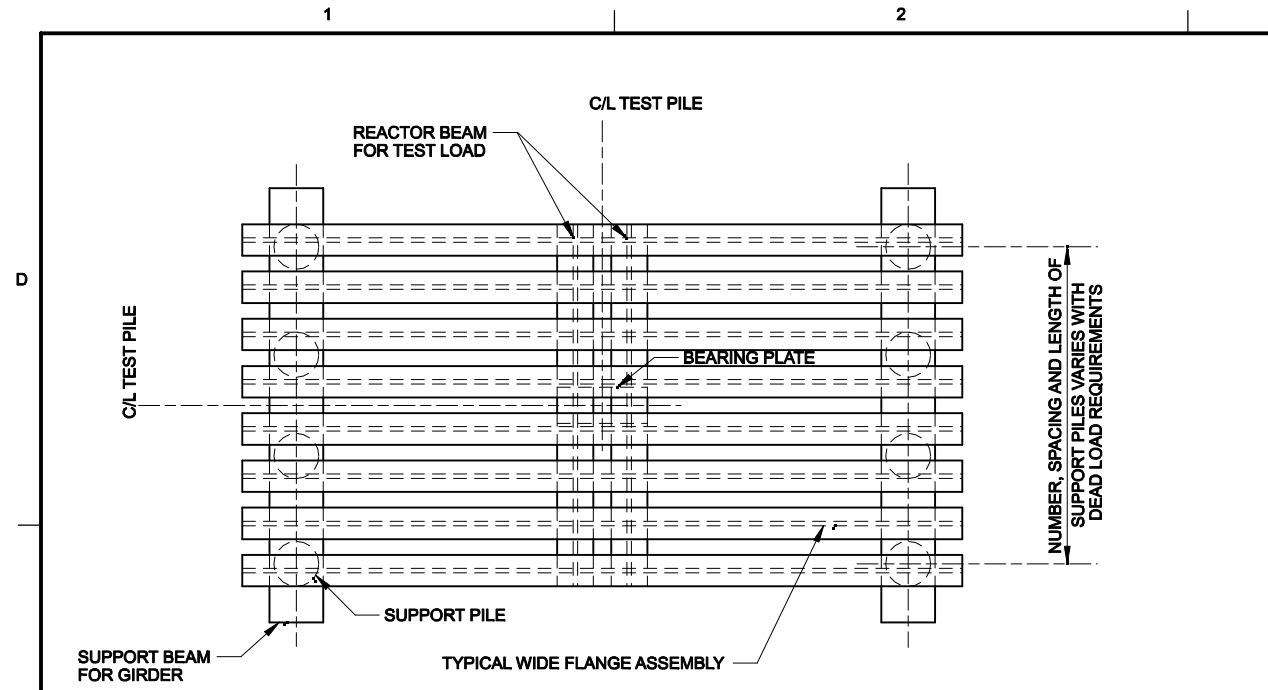


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USACE - NEW ORLEANS HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS
PILING DETAILS
STRESS-RELIEVED STRANDS

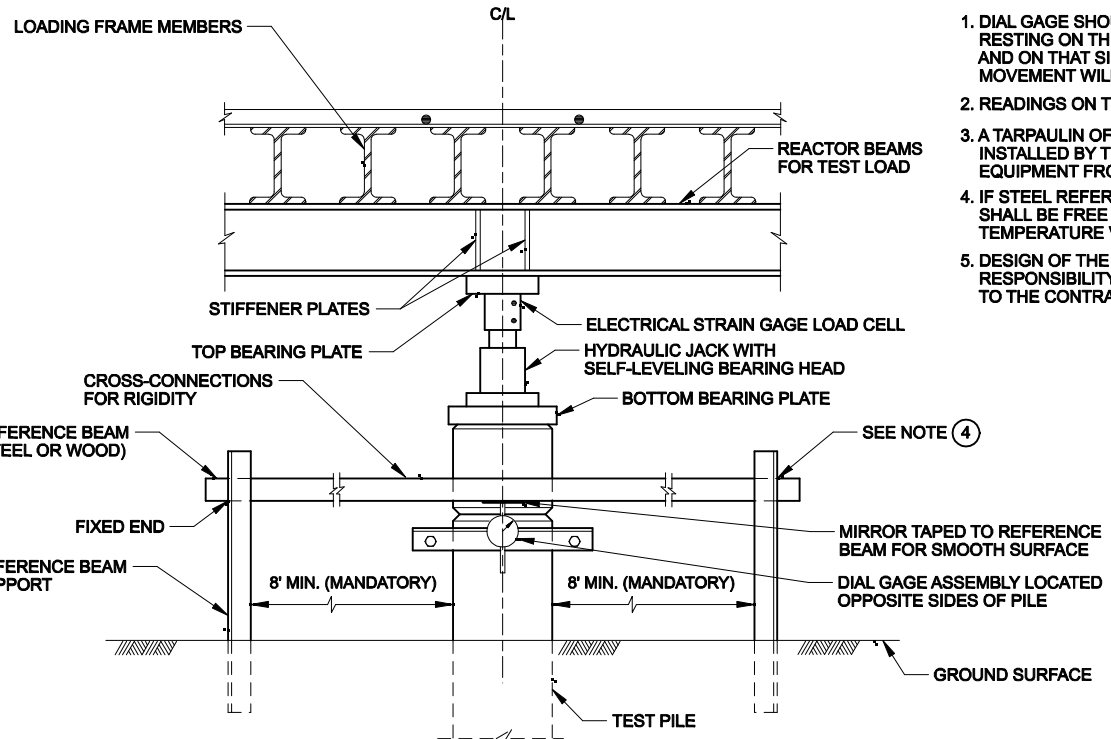
SHEET IDENTIFICATION
X-00



PLAN

MANDATORY LOADING FRAME NOTES:

- LOADING FRAME SHOWN WITHOUT DEAD LOAD.
- CONTRACTOR TO PROVIDE PILE LAYOUT FOR EACH PARTICULAR DEAD LOAD TEST.
- SECURE DEAD WEIGHT LOAD TO LOADING FRAME WITH CHAINS AND BINDERS.
- DESIGN OF THE LOADING FRAME IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL.

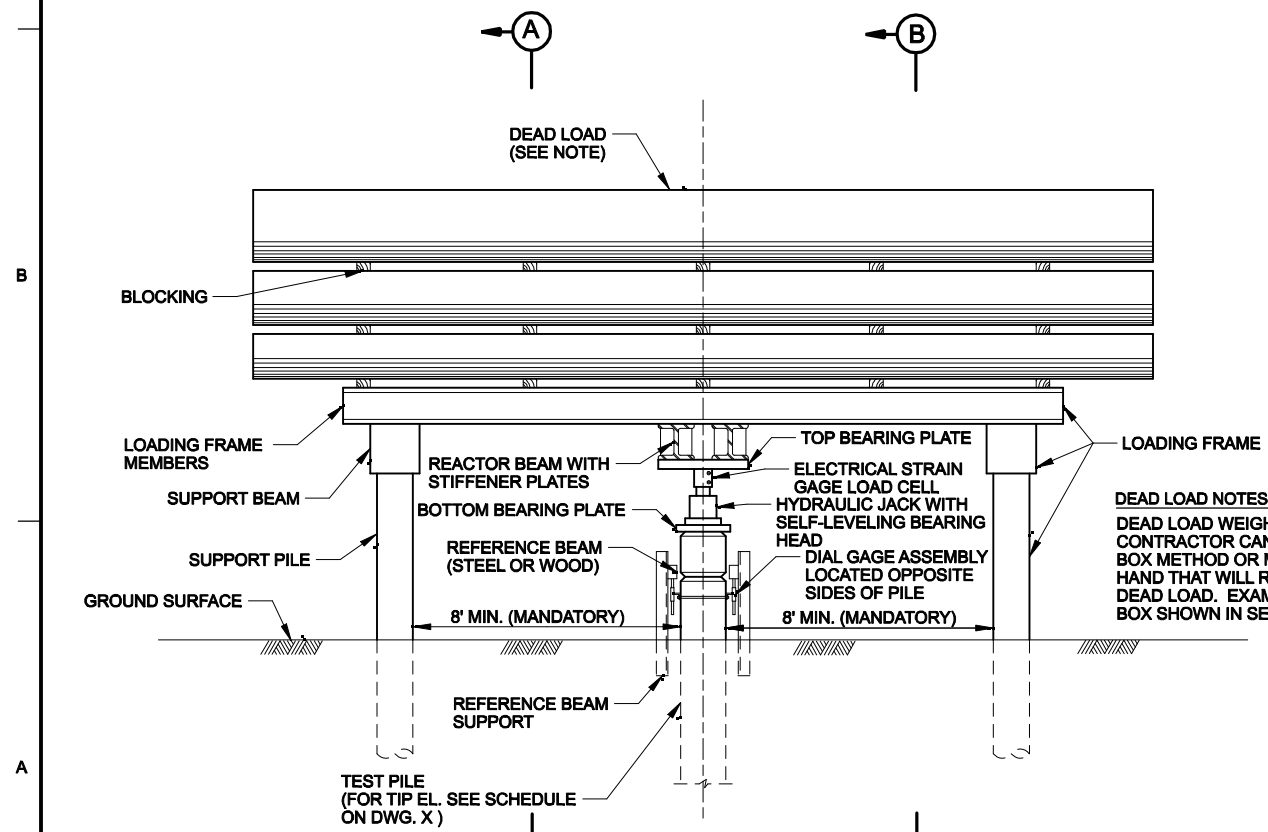


**SECTION B
TEST APPARATUS**

NOTE:
THE CONTRACTOR HAS THE OPTION OF USING REACTION PILES IN LIEU OF THE LOADING FRAME. (SEE SPECIFICATIONS)

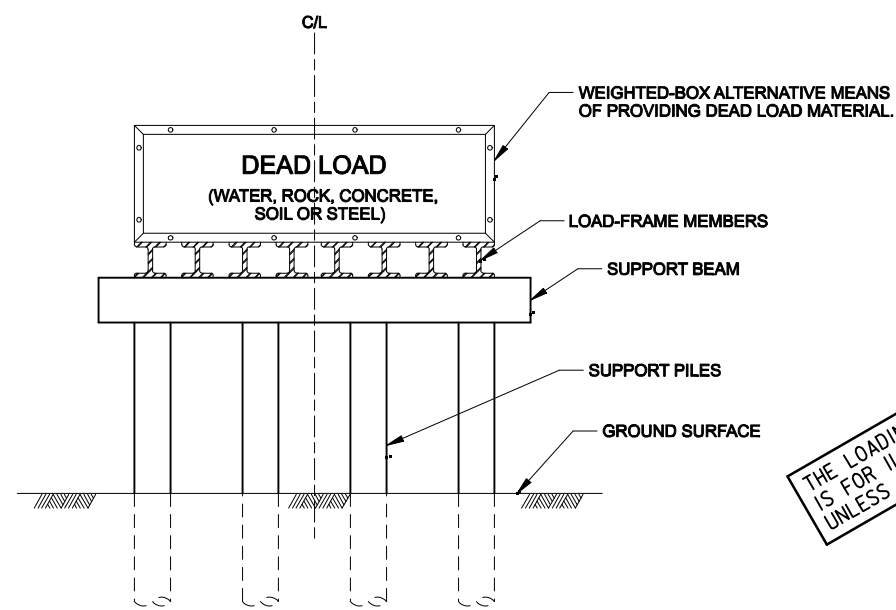
MANDATORY TEST APPARATUS NOTES:

- DIAL GAGE SHOULD BE ATTACHED TO THE PILE WITH THE STEM RESTING ON THE REFERENCE BEAM IN THE COMPRESSED POSITION AND ON THAT SIDE OF THE REFERENCE BEAM WHERE THE MOVEMENT WILL BE AWAY FROM THE BEAM.
- READINGS ON THE OPPOSITE SIDES OF THE PILE ARE NECESSARY.
- A TARPULIN OF MINIMUM DIMENSION 12' X 12' SHALL BE INSTALLED BY THE CONTRACTOR TO PROTECT THE MEASURING EQUIPMENT FROM THE DIRECT EFFECTS OF THE WEATHER.
- IF STEEL REFERENCE BEAMS ARE USED, ONE END OF EACH BEAM SHALL BE FREE TO MOVE AS THE LENGTH OF THE BEAMS CHANGE WITH TEMPERATURE VARIATIONS.
- DESIGN OF THE TEST APPARATUS PILE SET-UP IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL.



**ELEVATION
LOADING FRAME**

DEAD LOAD NOTES
DEAD LOAD WEIGHT OPTIONAL, CONTRACTOR CAN USE WEIGHTED-BOX METHOD OR MATERIAL ON HAND THAT WILL RESULT IN REQUIRED DEAD LOAD. EXAMPLE OF WEIGHTED-BOX SHOWN IN SECTION (A)



SECTION A

THE LOADING FRAME AND TEST APPARATUS IS FOR ILLUSTRATION PURPOSES ONLY, UNLESS NOTED MANDATORY.

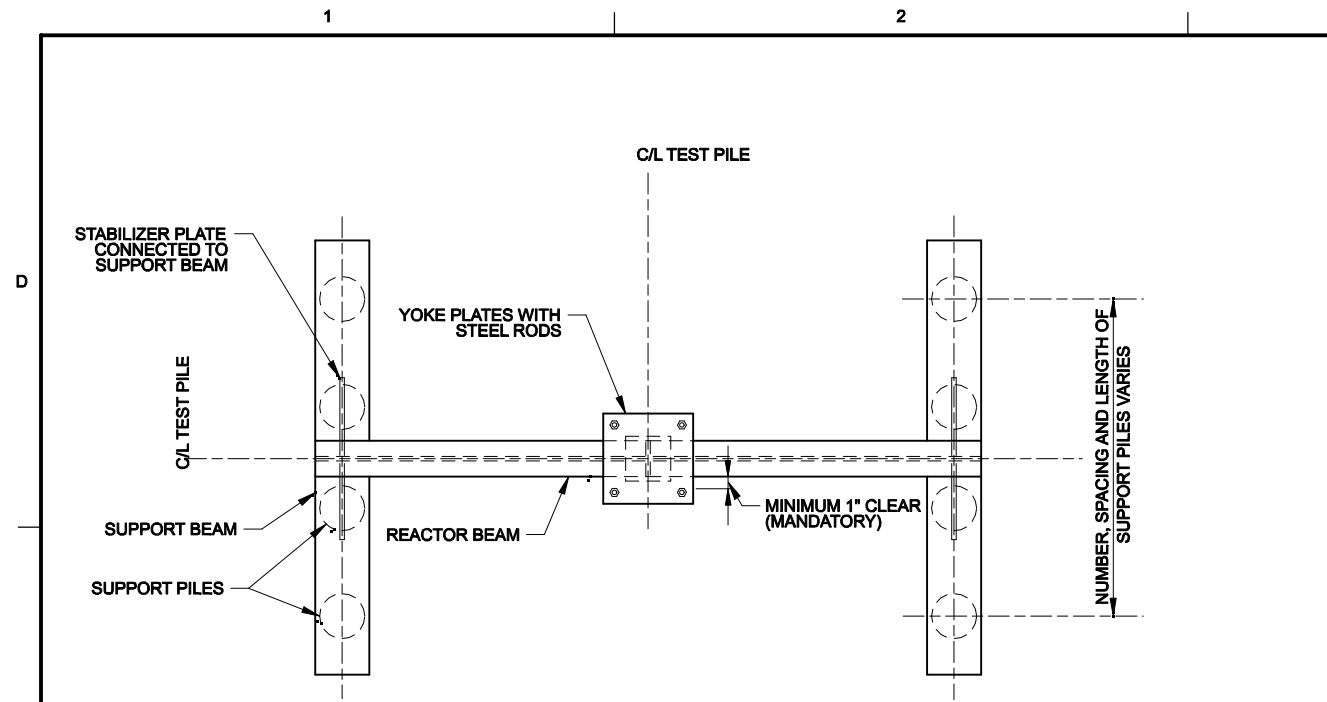


DATE	DESCRIPTION	APPR

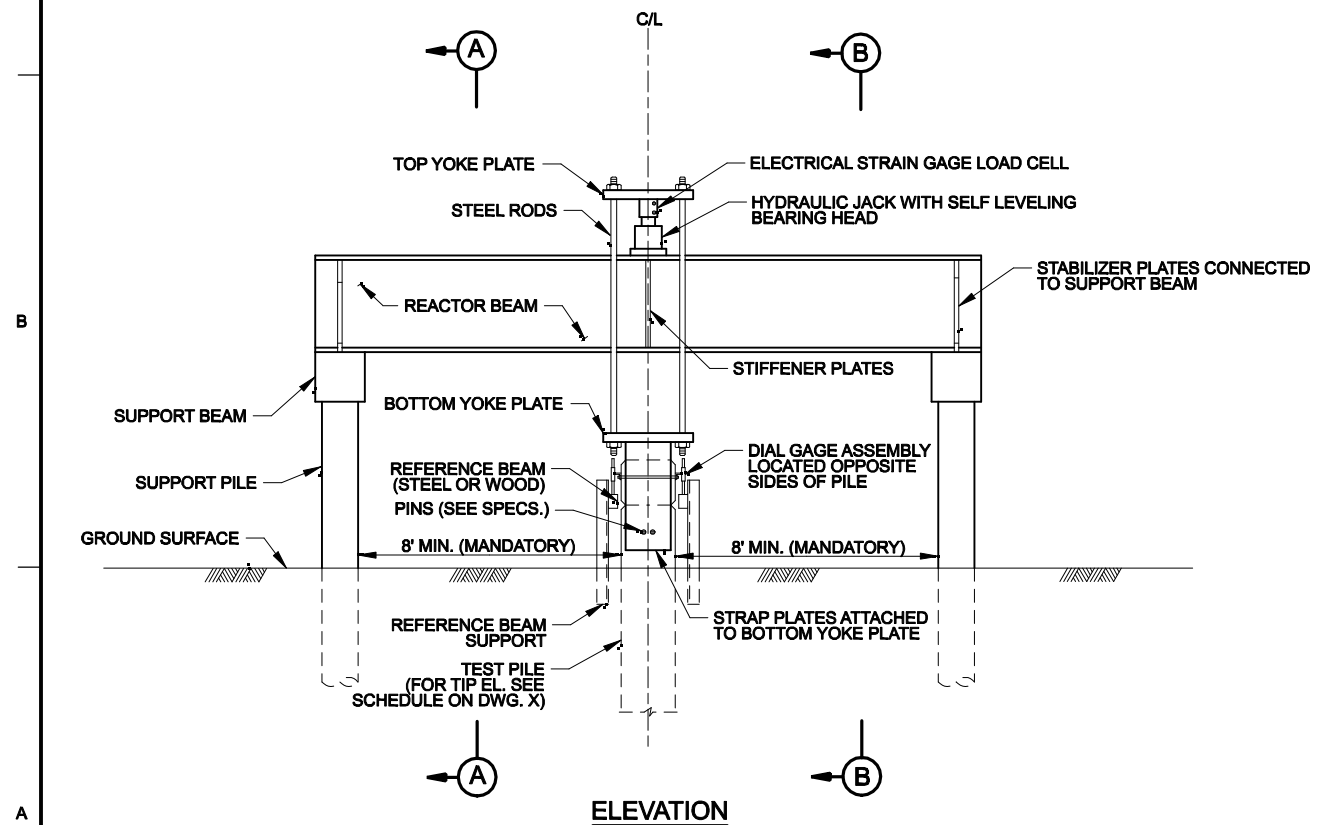
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DRAWN BY: [REDACTED]	CONTRACT NO.:
DATE: MAY 2008	FILE NUMBER: [REDACTED]
USACE - NEW ORLEANS DISTRICT	FILE NAME: [REDACTED]
NEW ORLEANS DISTRICT	ANSI D
NEW ORLEANS, LOUISIANA	AE-TYP12.DGN

USACE - NEW ORLEANS DISTRICT
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS
PILING DETAILS
COMPRESSION PILE TEST

SHEET IDENTIFICATION
X-00



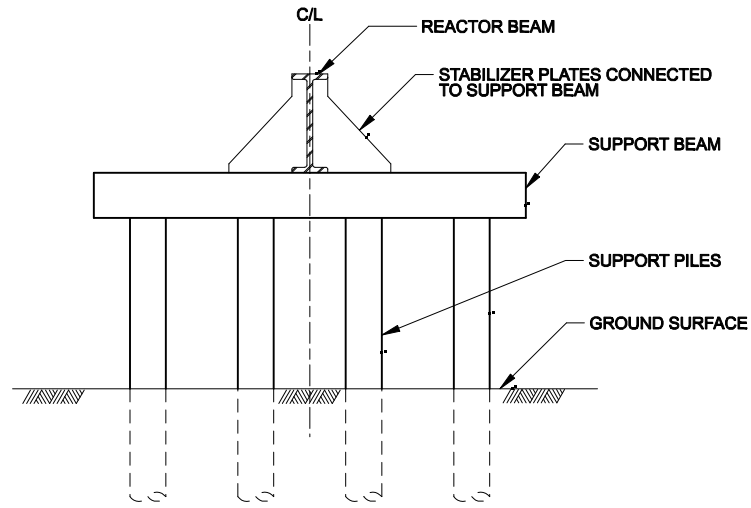
MANDATORY LOADING FRAME NOTE:
 1. DESIGN OF THE LOADING FRAME IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL.



LOADING FRAME

MANDATORY TEST APPARATUS NOTES:

1. DIAL GAGE SHOULD BE ATTACHED TO THE PILE WITH THE STEM RESTING ON THE REFERENCE BEAM IN THE COMPRESSED POSITION AND ON THAT SIDE OF THE REFERENCE BEAM WHERE THE MOVEMENT WILL BE AWAY FROM THE BEAM.
2. READINGS ON THE OPPOSITE SIDES OF THE PILE ARE NECESSARY.
3. A TARPULIN OF MINIMUM DIMENSION 12' X 12' SHALL BE INSTALLED BY THE CONTRACTOR TO PROTECT THE MEASURING EQUIPMENT FROM THE DIRECT EFFECTS OF THE WEATHER.
4. IF STEEL REFERENCE BEAMS ARE USED, ONE END OF EACH BEAM SHALL BE FREE TO MOVE AS THE LENGTH OF BEAMS CHANGE WITH TEMPERATURE VARIATIONS.
5. DESIGN OF THE TEST APPARATUS PILE SET-UP IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL.



SECTION A

THE LOADING FRAME AND TEST APPARATUS IS FOR ILLUSTRATION PURPOSES ONLY, UNLESS NOTED MANDATORY.



DATE	DESCRIPTION	APPR.

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DWN BY: NEW ORLEANS	FILE NUMBER: A/E TYPICALS
SUBMITTED BY: NEW ORLEANS	FILE NAME: AE-TYP13.DGN
PLOT SCALE: 1/8" = 1'	

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

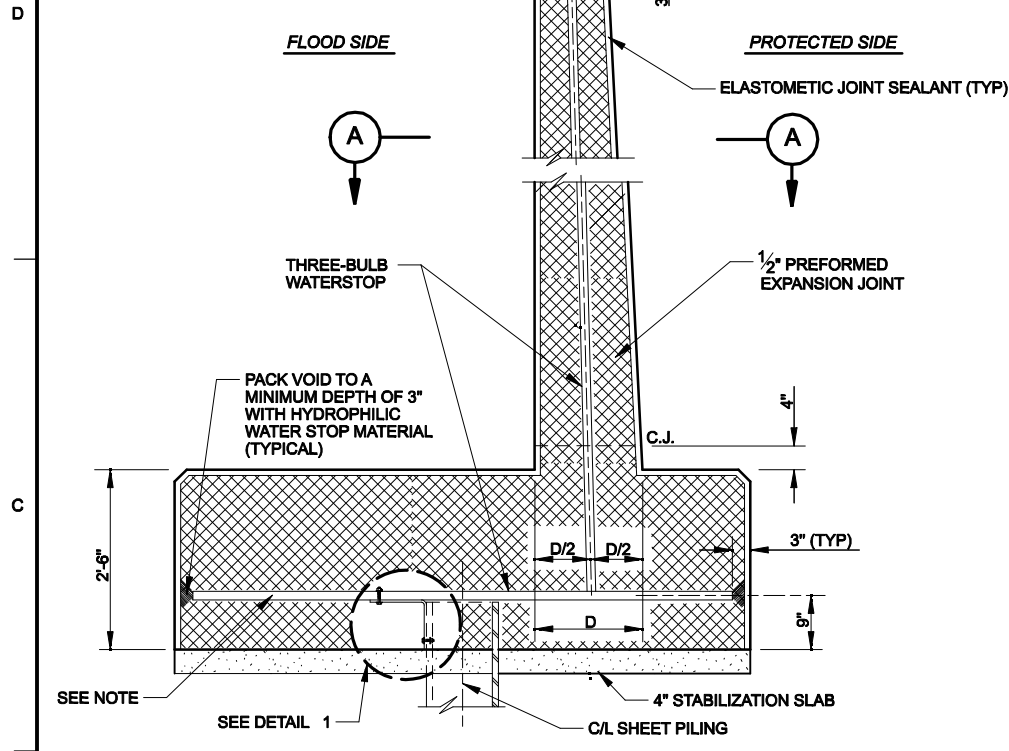
USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
A/E TYPICAL DRAWINGS

PILING DETAILS
TENSION PILE TEST

SHEET IDENTIFICATION
X-00

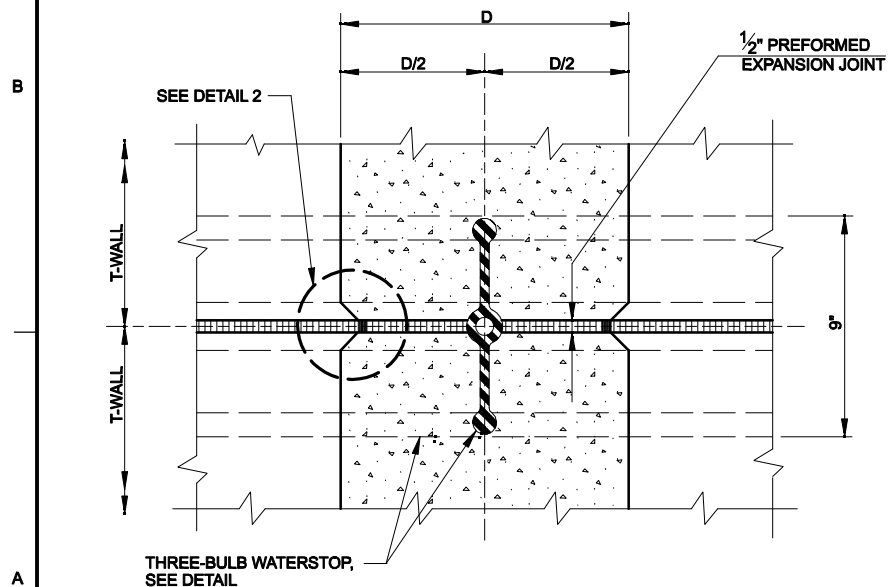
NOTE:

DESIGNER MAY REMOVE THE HORIZONTAL WATERSTOP IF THE VERTICAL WATERSTOP IS CURVED WITH A 6" MINIMUM RADIUS TO CONNECT TO THE SHEET PILE AS SHOWN ON THIS DRAWING.



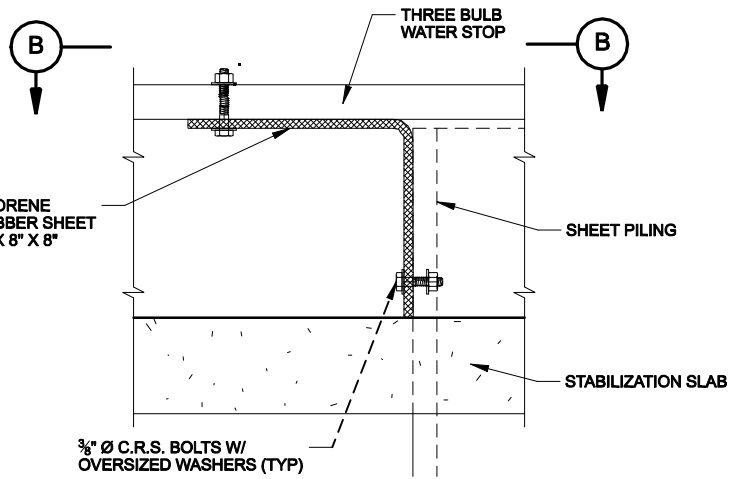
TYPICAL T-WALL JOINT

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

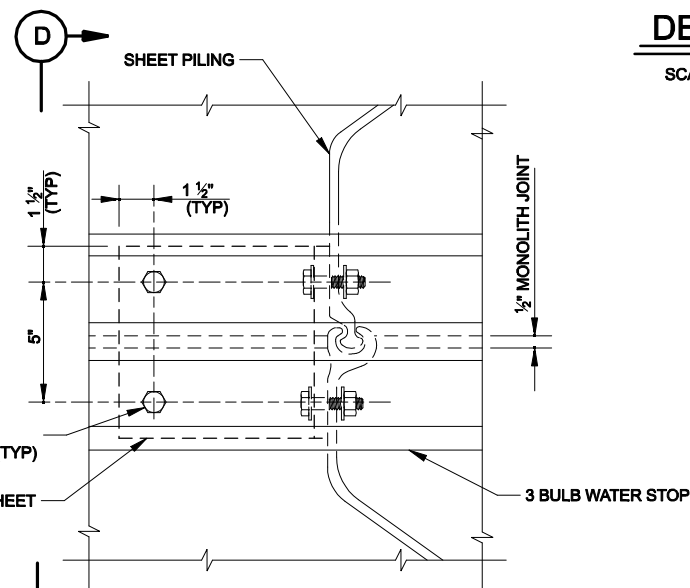


SECTION A

SCALE: 3" = 1'-0"

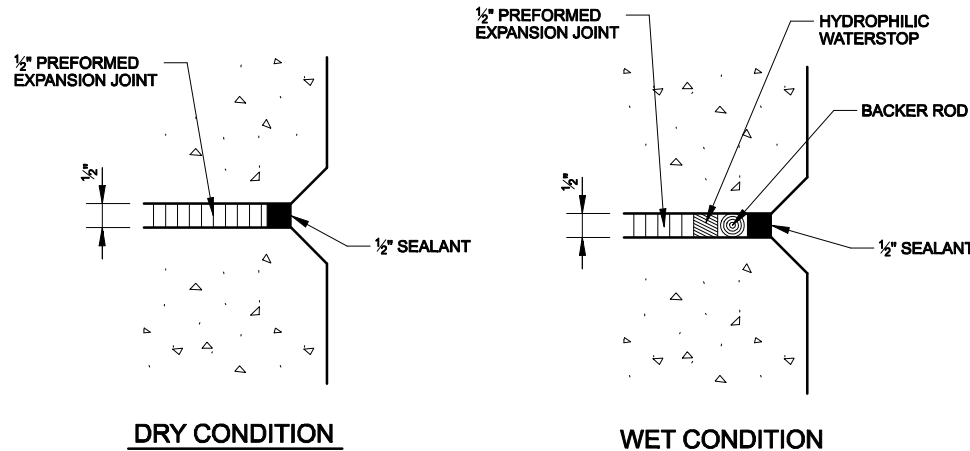


**SHEETPILE INTERLOCK
ALIGNED WITH THE WALL JOINT**



SECTION B

SCALE: 3" = 1'-0"

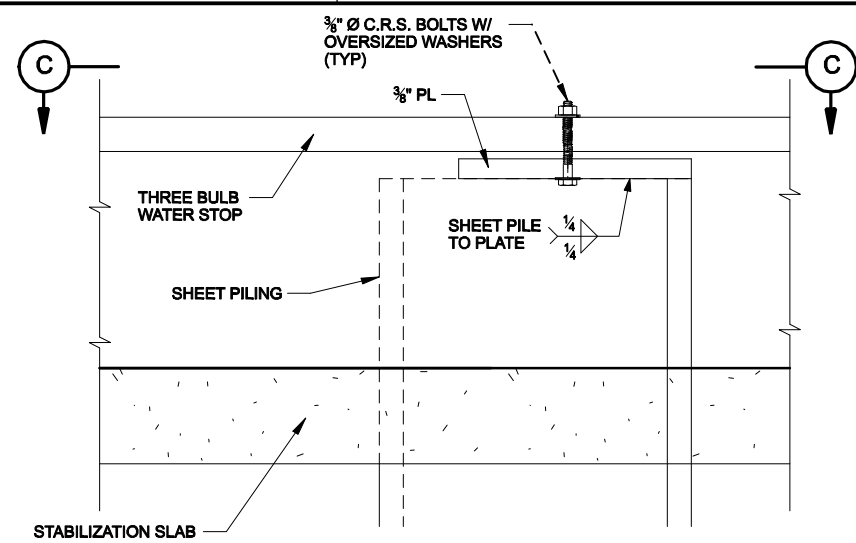


DRY CONDITION

WET CONDITION

DETAIL 2

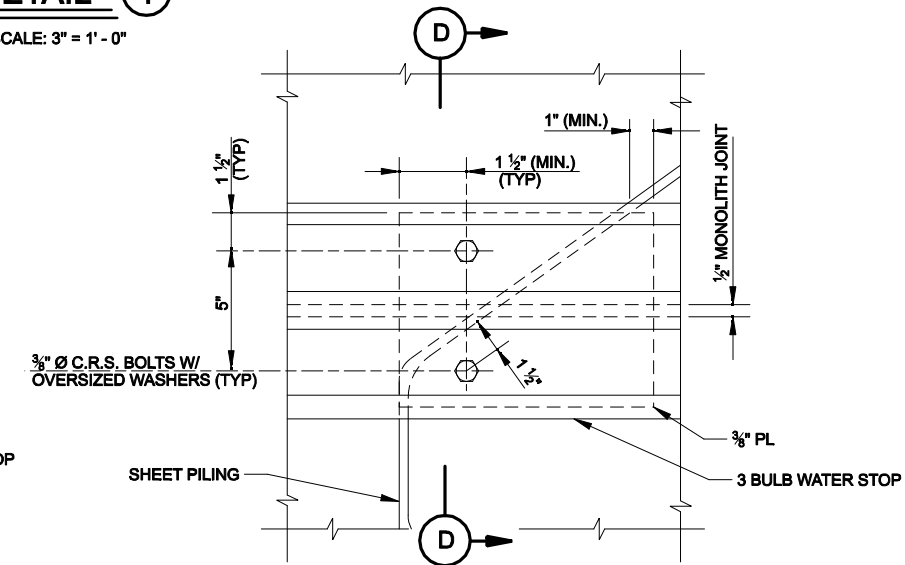
SCALE: 3" = 1'-0"



**SHEETPILE INTERLOCK
UNALIGNED WITH THE WALL JOINT**

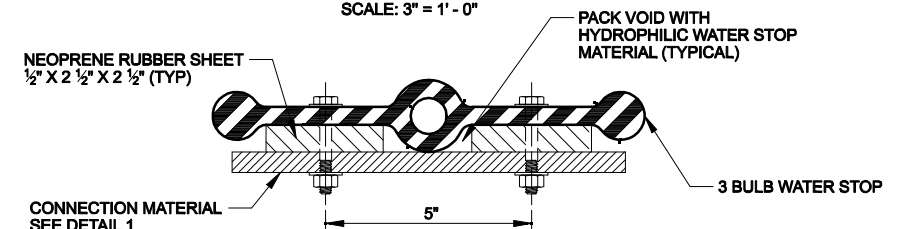
DETAIL 1

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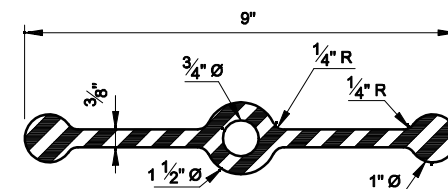
SECTION C

SCALE: 3" = 1'-0"



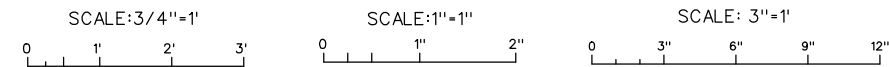
SECTION D

N.T.S.



THREE-BULB WATERSTOP

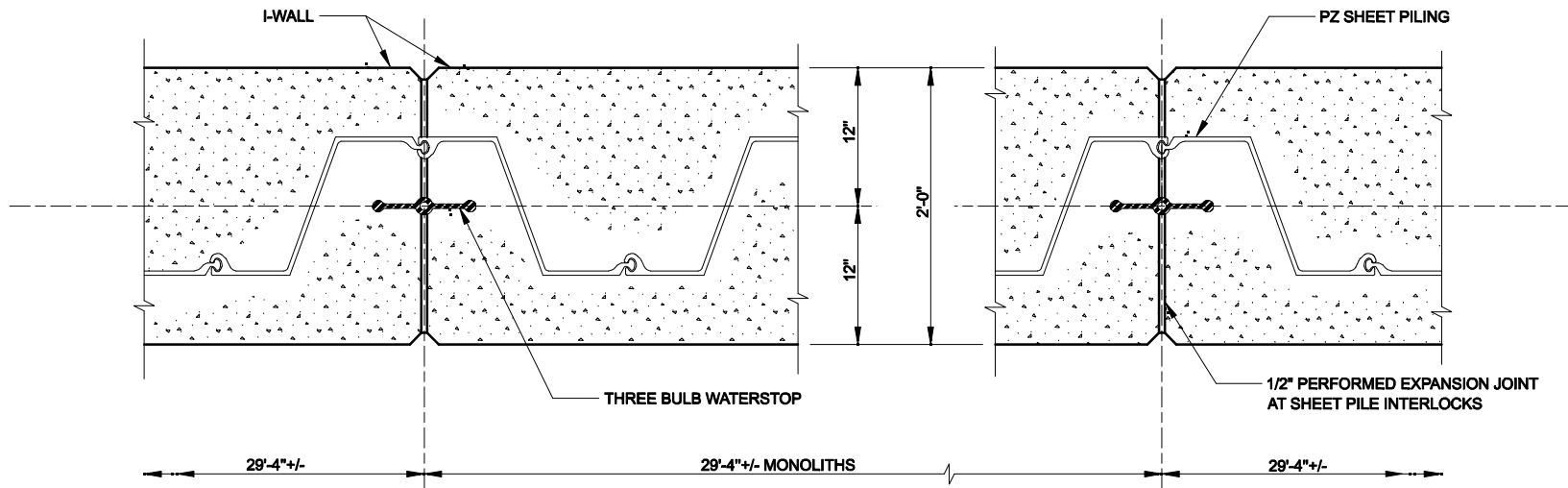
SCALE: 1" = 1'-0"



DATE	APPR.
DATE	DESCRIPTION
DATE	MARK

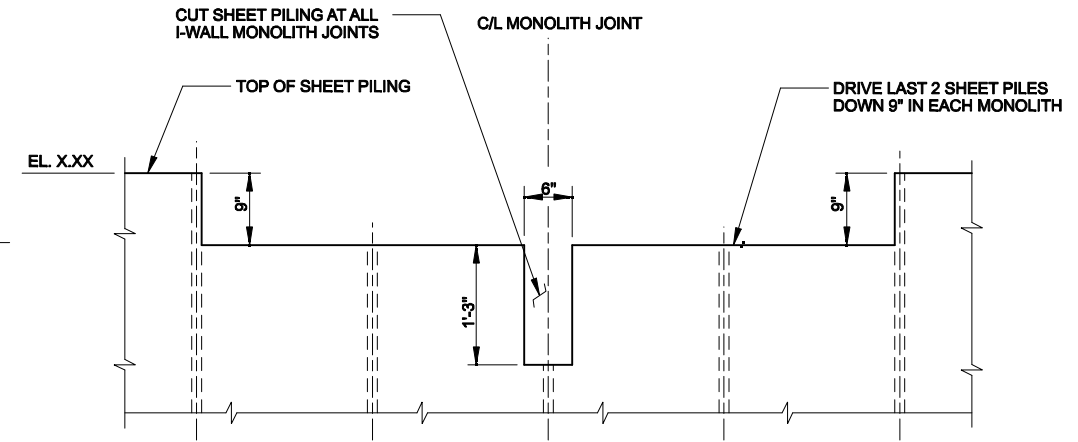
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DATE: 12/1/11	SIZE: ANSI D

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS
WALL JOINTS & POSITIVE CUT-OFF



TYPICAL I-WALL MONOLITH SHEET PILE INTERLOCKS

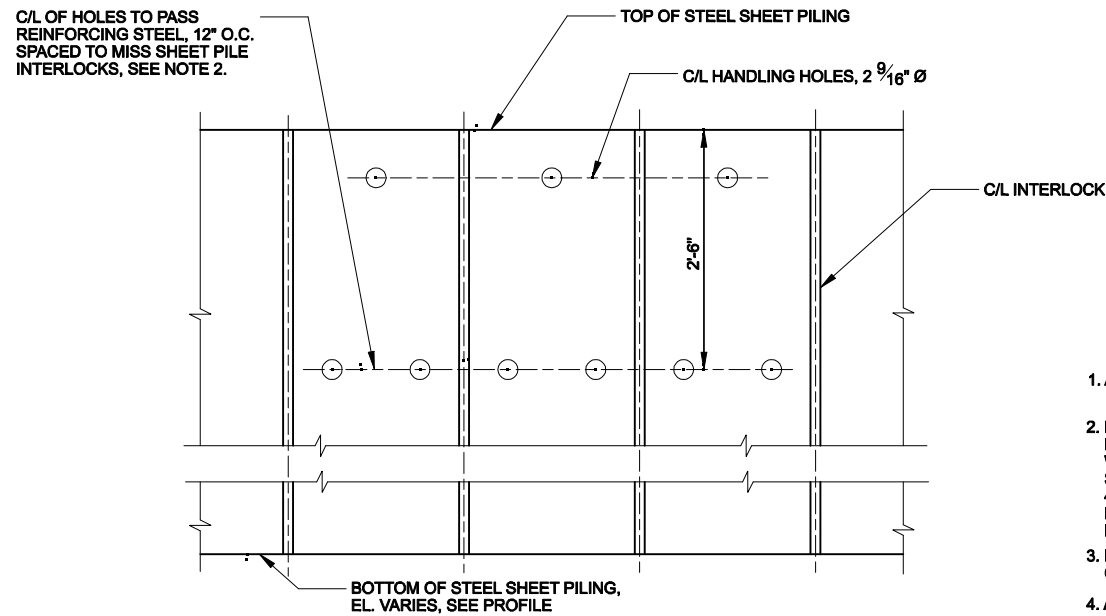
SCALE: 1 1/2" = 1' - 0"



**SHEET PILING DETAILS
I-WALL MONOLITH JOINTS**

SCALE: 1" = 1' - 0"

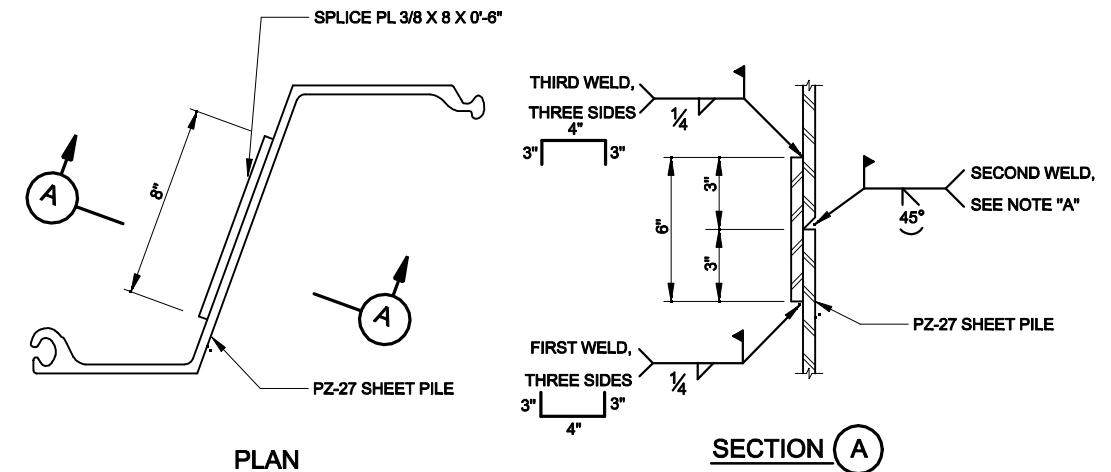
NOTE:
I-WALL MONOLITHS SHALL BE 29'-4" +/- UNLESS OTHERWISE INDICATED ON THE PROFILE. EACH MONOLITH SHALL END AT THE CENTER OF THE NEAREST SHEET PILE INTERLOCK.



**ELEVATION
DETAILS OF HOLES IN SHEET PILING**

SHEET PILE NOTES

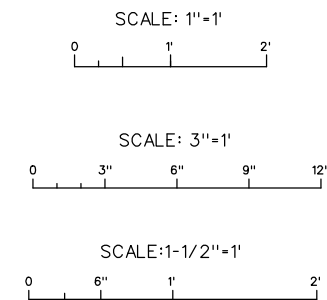
1. A MINIMUM OF 6 INCHES OF CONCRETE COVER SHALL BE PROVIDED OVER SHEET PILING AT ALL POINTS.
2. HOLES CUT INTO STEEL PILING FOR PASSING REINFORCING BARS SHALL NOT EXCEED 2" Ø WHERE HOLES FALL WITHIN THE WEB OF THE STEEL SHEET PILE, THE HOLE SHALL BE SLOTTED 4" HORIZONTALLY TO ACCOMMODATE PASSING THE REINFORCING BARS. REINFORCING BARS SHALL BE MOVED TO MISS SHEET PILE INTERLOCKS.
3. MONOLITH JOINTS SHALL BE LOCATED A MINIMUM OF 5 FEET FROM POINTS OF INTERSECTION.
4. ANY SUBSTITUTIONS SHALL BE SUBMITTED TO THE CONTRACTING OFFICER REPRESENTATIVE FOR APPROVAL.
5. STEEL SHEET PILE SURFACE PREPARATION AND PAINTING SHALL BE IN ACCORDANCE WITH SECTION 09940 OF THE SPECIFICATIONS.
6. STATIONS FOR SPECIAL Z-PILE TEES ARE APPROXIMATE.



**SECTION A
SHEET PILE SPLICE DETAIL**

NOTE "A":
GROOVE WELD SHALL EXTEND THE FULL LENGTH OF THE SHEET PILE WEB AND FLANGES EXCLUDING THE INTERLOCKS.

SCALE: 3" = 1' - 0"



DATE	DESCRIPTION	APPR

DESIGNED BY: NEW ORLEANS	CONTRACT NO.:
DRAWN BY: NEW ORLEANS	FILE NUMBER: AE-TYPICALS
DATE: MAY 2008	DATE: AE-TYPE.DGN
U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS
WALL JOINTS
SHEET PILE DETAILS
(1 OF 2)

SHEET IDENTIFICATION
X-00

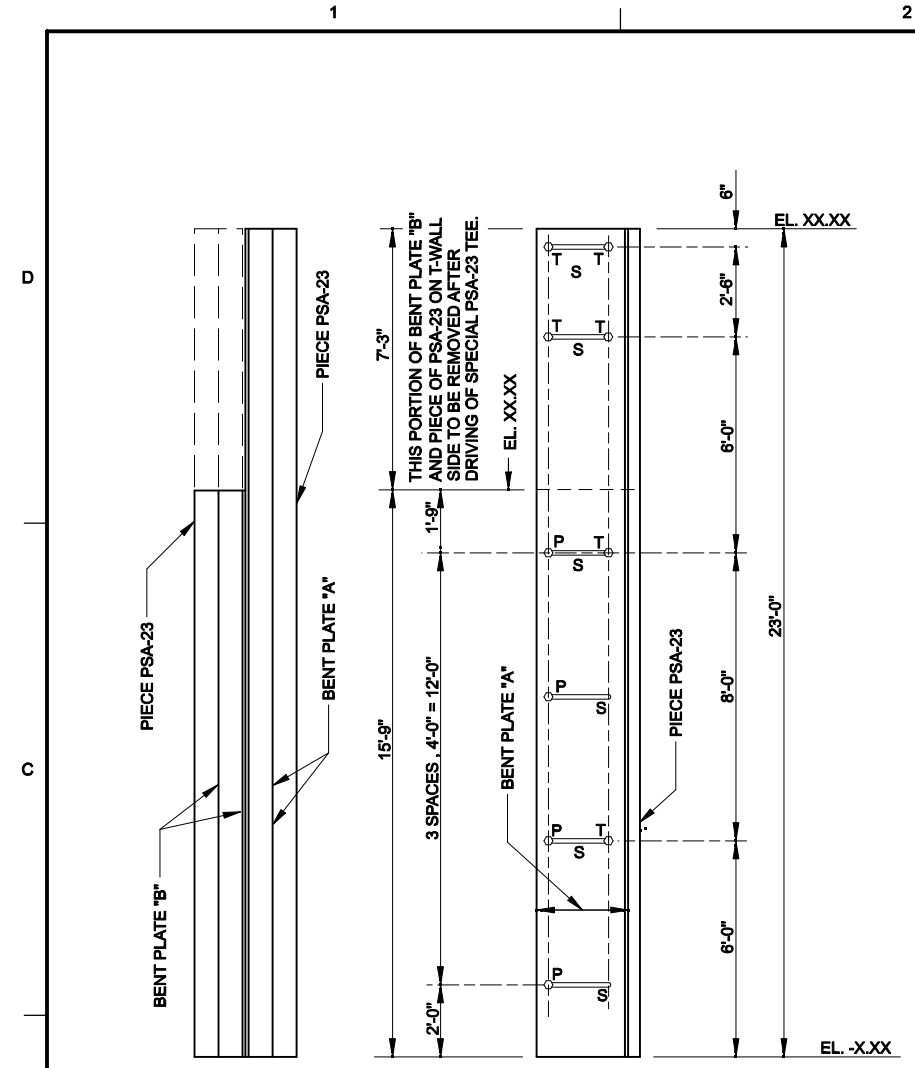
MARK	DESCRIPTION	DATE	APPR

DESIGNED BY: NEW ORLEANS DWN BY: []	ISSUED BY: NEW ORLEANS MAY 2008	CONTRACT NO.:	FILE NUMBER: AE TYPICALS
U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA	SUBMITTED BY:	FLIGHT DATE:	FILE NAME: AE-TYPE1.DGN

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS

WALL JOINTS
SHEET PILE DETAILS
(2 OF 2)

SHEET IDENTIFICATION
X-00



PROTECTED SIDE ELEVATION **I-WALL SIDE ELEVATION**

STA. XXX+XX.XX W/L

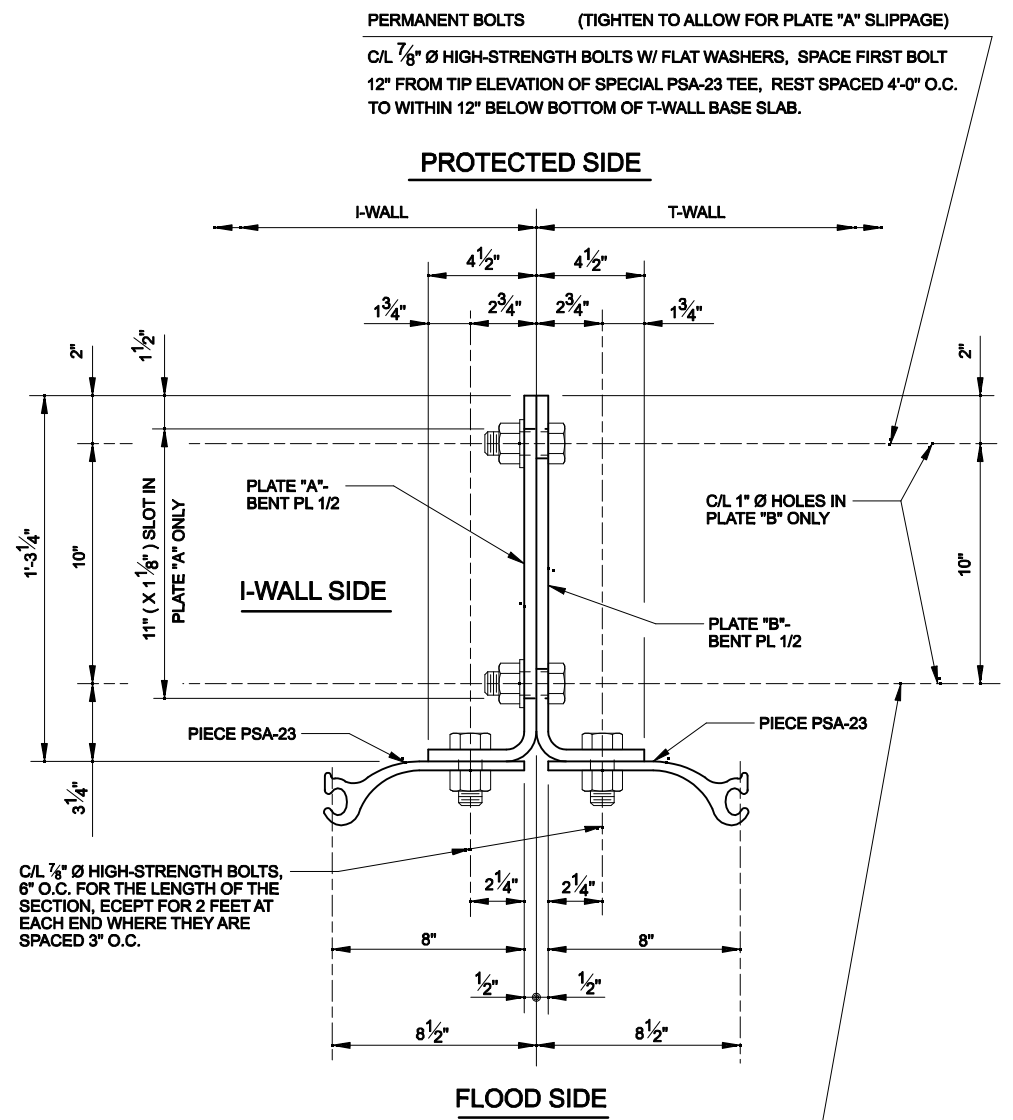
ELEVATION OF SPECIAL PSA-23 TEE

SHOWING BENT PLATES BOLT SPACING

SCALE: HORIZ. $\frac{3}{4}$ " = 1'-0"
VERT. $\frac{3}{8}$ " = 1'-0"

LEGEND

P = PERMANENT BOLT
T = TEMPORARY BOLT
S = SLOTTED HOLE
(PLATE "A" ONLY)



TEMPORARY DRIVING BOLTS

C/L $\frac{7}{8}$ " Ø HIGH-STRENGTH BOLTS W/ FLAT WASHERS, SPACE FIRST BOLT 5'-0" FROM TIP ELEVATION OF SPECIAL PSA-23 TEE, REST SPACED 8'-0" TO WITHIN 12" BELOW BOTTOM OF T-WALL BASE SLAB. THESE BOLTS ARE TO BE REMOVED WHEN EACH BOLT IS APPROXIMATELY 6" ABOVE GROUND LINE AS SPECIAL PSA-23 TEE IS DRIVEN, SO THAT UPON COMPLETION OF DRIVING NO TEMPORARY BOLTS REMAIN.

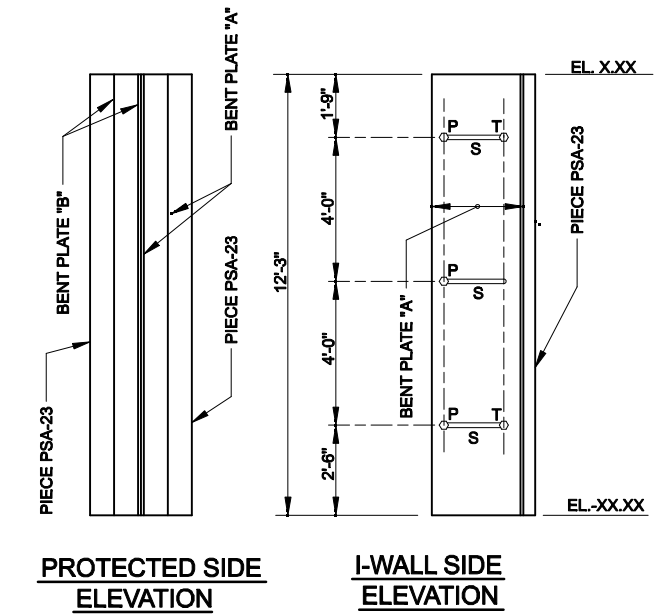
DETAIL ①

SPECIAL PSA-23 TEE

SCALE: 3" = 1'-0"

NOTE:

$\frac{7}{8}$ " Ø HIGH-STRENGTH BOLTS SHALL BE HEAVY HEX BOLTS, ASTM A325M, TYPE 3 W/ HEAVY HEX NUTS, ASTM A563, GRADE C3, PLAIN, WEATHERING STEEL AND HARDENED STEEL WASHERS (WHERE REQUIRED), ASTM F436, PLAIN, TYPE 3 (WEATHERING STEEL).



PROTECTED SIDE ELEVATION **I-WALL SIDE ELEVATION**

STA. XXX+XX.XX W/L - SHOWN

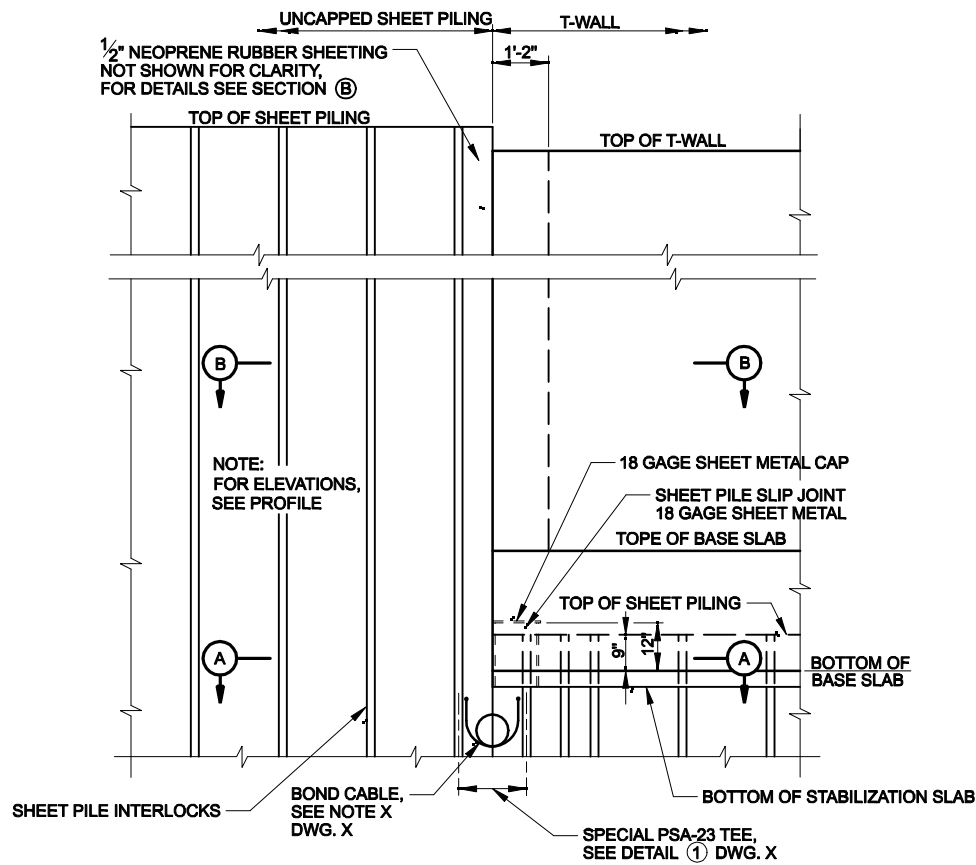
STA. XXX+XX.XX W/L - OPPOSITE HAND

ELEVATION OF SPECIAL PSA-23 TEE

SHOWING BENT PLATES BOLT SPACING

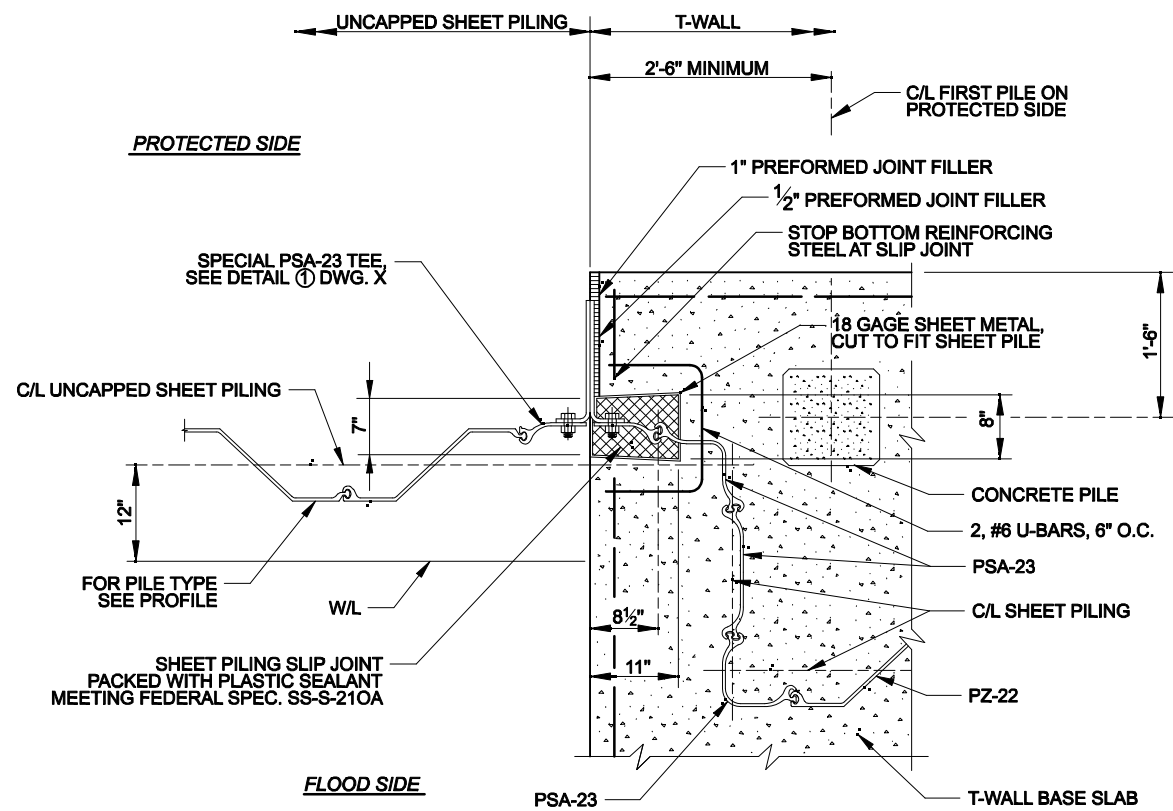
SCALE: HORIZ. $\frac{3}{4}$ " = 1'-0"
VERT. $\frac{3}{8}$ " = 1'-0"

SCALE: 3" = 1'-0"



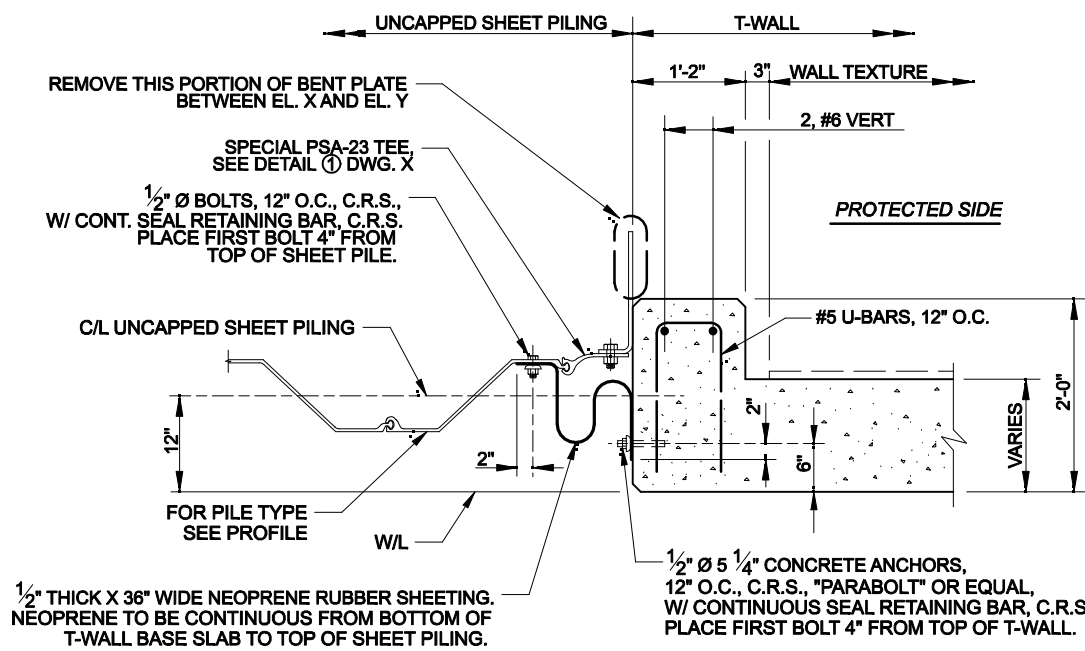
**FLOOD SIDE ELEVATION
I-WALL TO T-WALL**

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



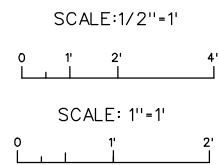
SECTION (A)

SCALE: 1" = 1'-0"



SECTION (B)

SCALE: 1" = 1'-0"



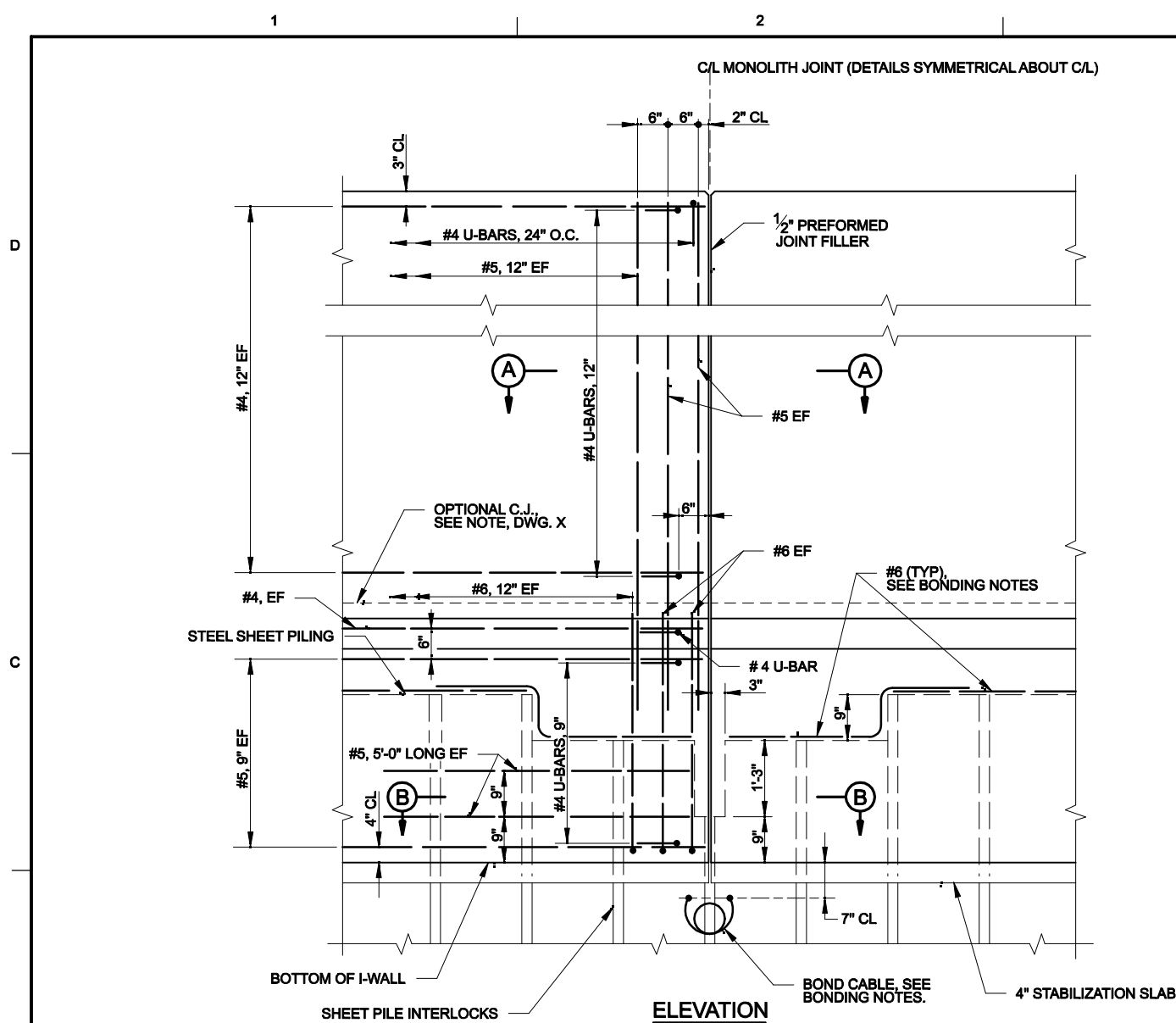
US Army Corps
of Engineers
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR

DESIGNED BY: NEW ORLEANS DISTRICT	DESIGNED BY: NEW ORLEANS DISTRICT	DESIGNED BY: NEW ORLEANS DISTRICT	DESIGNED BY: NEW ORLEANS DISTRICT
DWN BY: NEW ORLEANS DISTRICT	DWN BY: NEW ORLEANS DISTRICT	DWN BY: NEW ORLEANS DISTRICT	DWN BY: NEW ORLEANS DISTRICT
SUBMITTED BY: NEW ORLEANS DISTRICT	SUBMITTED BY: NEW ORLEANS DISTRICT	SUBMITTED BY: NEW ORLEANS DISTRICT	SUBMITTED BY: NEW ORLEANS DISTRICT
SCALE: 1/2" = 1'	SCALE: 1/2" = 1'	SCALE: 1/2" = 1'	SCALE: 1/2" = 1'
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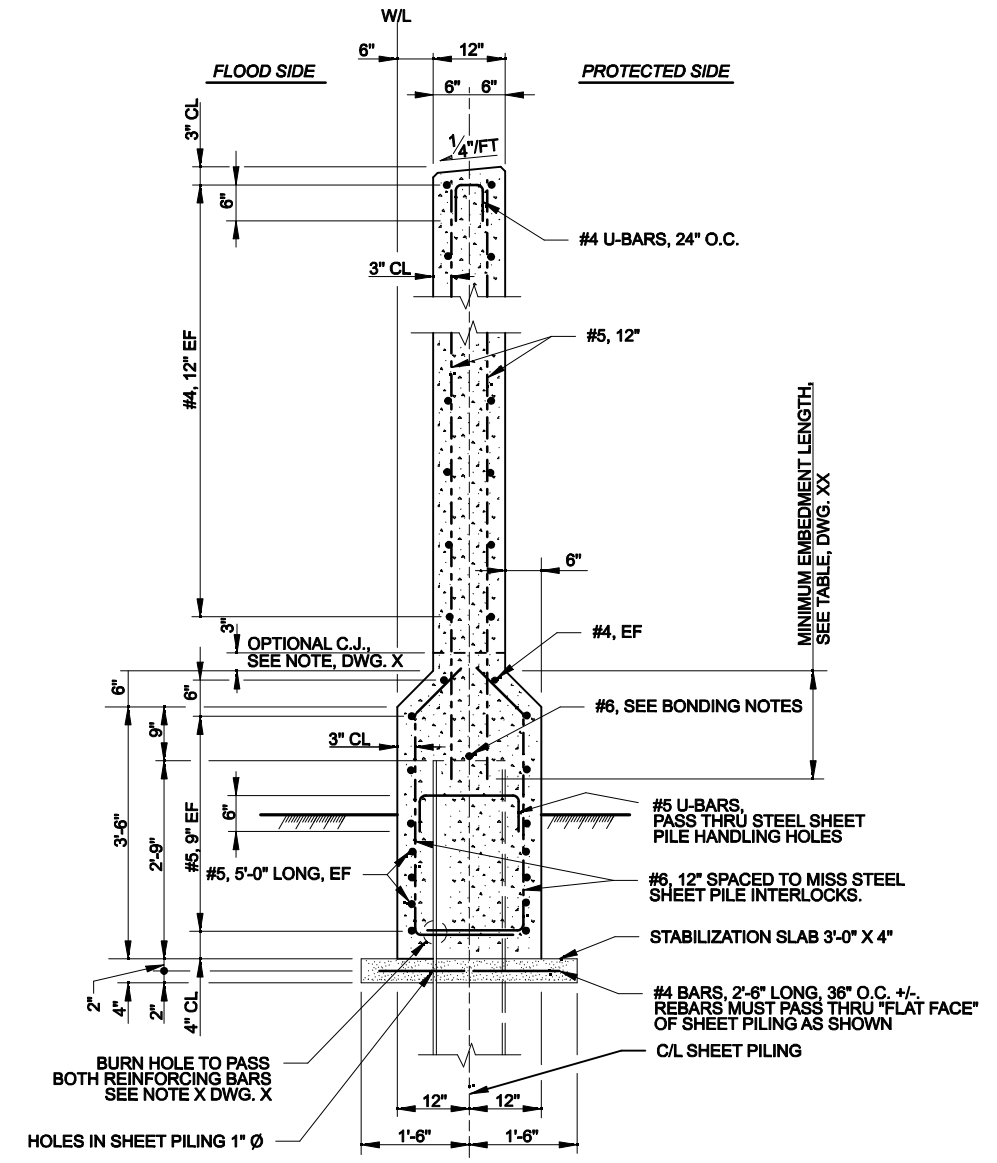
USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS
WALL JOINTS
SHEET PILE TO T-WALL

SHEET IDENTIFICATION
X-00



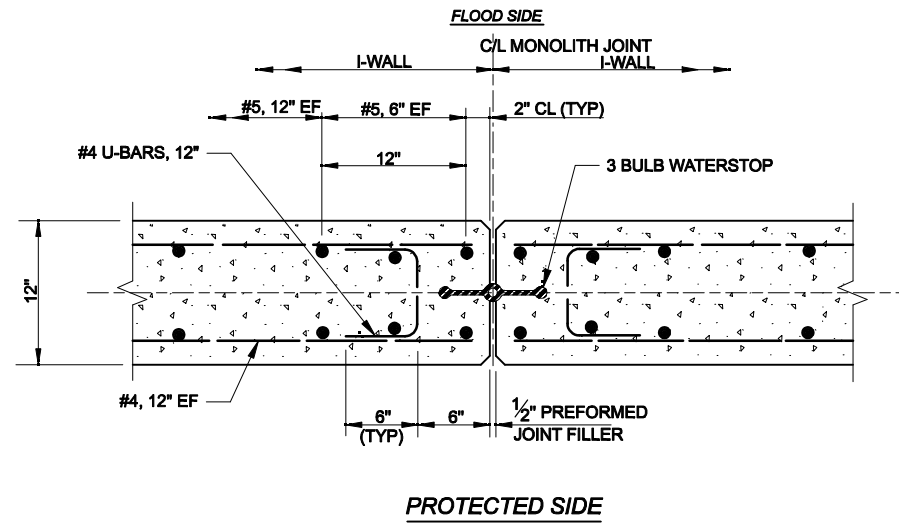
DETAIL OF I-WALL MONOLITH JOINTS

SCALE: 1" = 3/4" - 0"

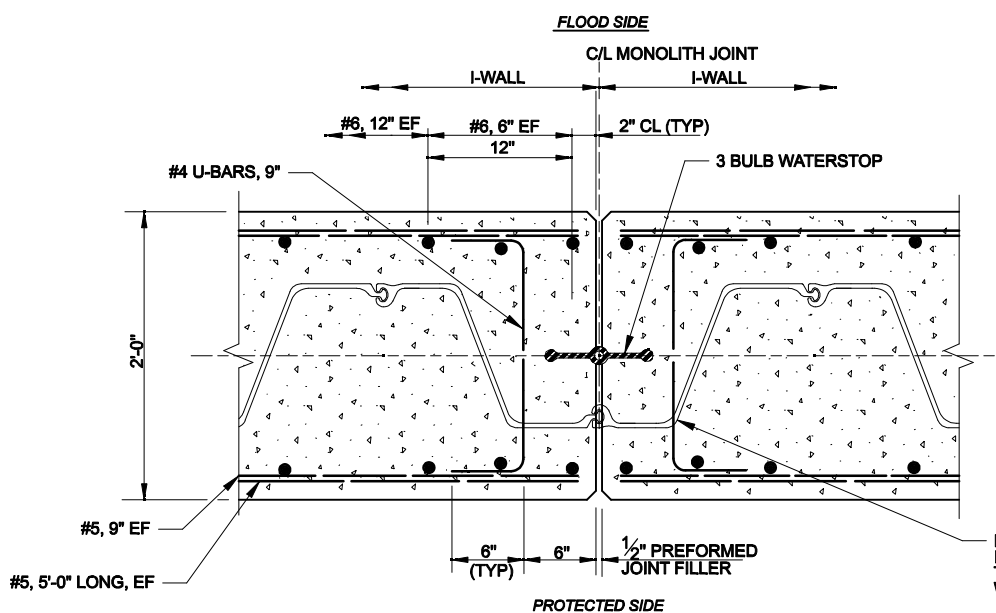


TYPICAL I-WALL SECTION

SCALE: 1" = 3/4" - 0"



SECTION A



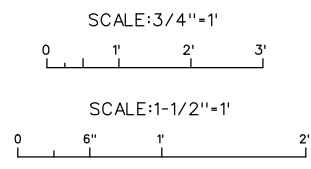
SECTION B

TYPICAL REINFORCEMENT AT MONOLITH JOINTS

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

BONDING NOTES:

- #6 REINFORCING BAR TO BE WELDED TO THE TOP OF EACH STEEL SHEET PILE. #6 REINFORCING BAR SHALL NOT EXTEND ACROSS THE MONOLITH JOINT.
- INSTALL BOND CABLE AT ALL I-WALL JOINTS AND AT ALL TRANSITIONS FROM T-WALL TO I-WALL JOINTS.
- BOND CABLE SHALL HAVE AN 8" DIAMETER LOOP TO ALLOW FOR STRESSES.
- BOND CABLES SHALL BE WELDED AS SPECIFIED TO ADJACENT STEEL PILES 7" BELOW BOTTOM OF CONCRETE CAP FOR I-WALL JOINTS AND AT TRANSITION FROM T-WALL TO I-WALL JOINTS.
- WELDED CONNECTIONS SHALL BE COATED WITH SPLICING EPOXY TO OBTAIN MOISTURE PROOF JOINT. SEE SPECIFICATIONS.
- #6 REINFORCING BARS SHALL BE WELDED TO THE LAST THREE SHEET PILING AT EACH END OF THE MONOLITH AS SHOWN FOR CONTINUITY.
- SPLICING OF #6 REINFORCING BAR WILL NOT BE ALLOWED.



US Army Corps of Engineers
NEW ORLEANS DISTRICT

DESCRIPTION	DATE	APPR. MARK	APPR. DATE

DESIGNED BY: NEW ORLEANS DISTRICT	DRAWN BY: NEW ORLEANS DISTRICT	CHECKED BY: NEW ORLEANS DISTRICT	SUBMITTED BY: NEW ORLEANS DISTRICT	APPROVED BY: NEW ORLEANS DISTRICT	DATE: MAY 2008
SOLICITATION NO.: NEW ORLEANS DISTRICT		CONTRACT NO.: NEW ORLEANS DISTRICT		FILE NUMBER: AE-TYP22LOGN	
PLOT SCALE: 3/4" = 1'		PLOT DATE: AE-TYP22LOGN		FILE NAME: AE-TYP22LOGN	
SIZE: 11" x 17"		ANSI D		AE-TYP22LOGN	

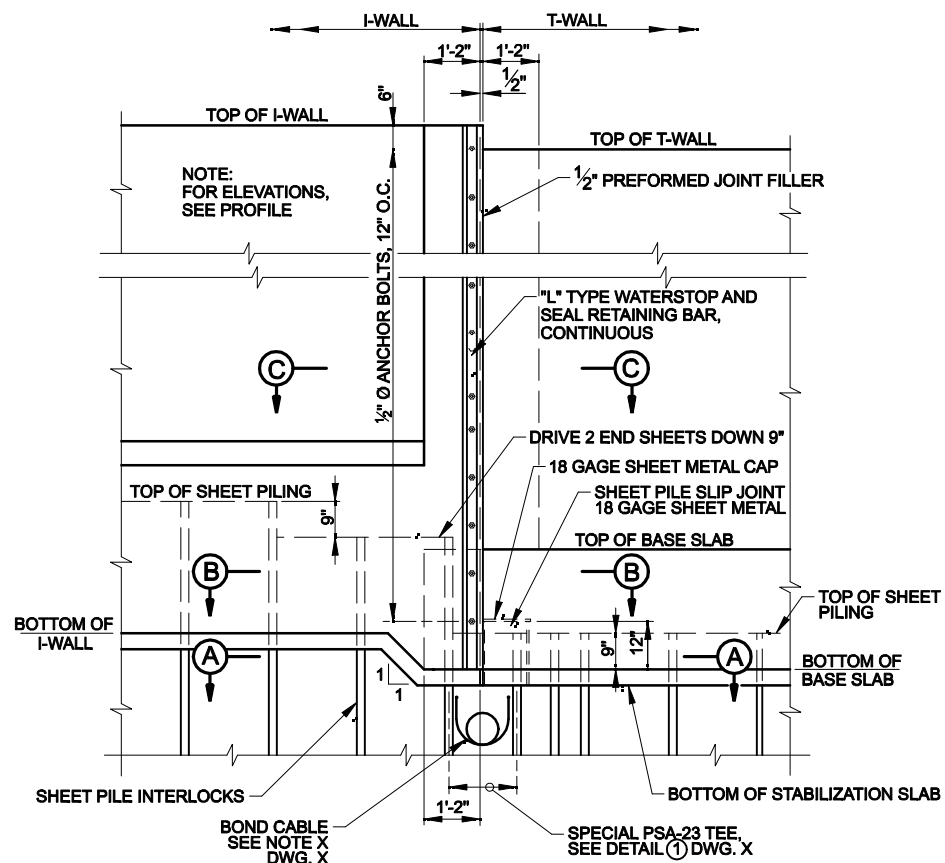
USACE - NEW ORLEANS DISTRICT
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS

**WALL JOINTS
I-WALL TO I-WALL**

**SHEET IDENTIFICATION
X-00**

D

C

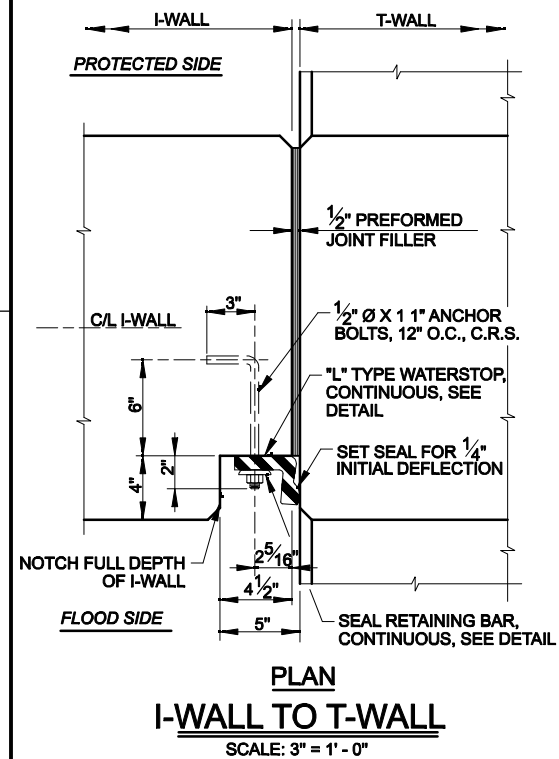


**FLOOD SIDE ELEVATION
I-WALL TO T-WALL**

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

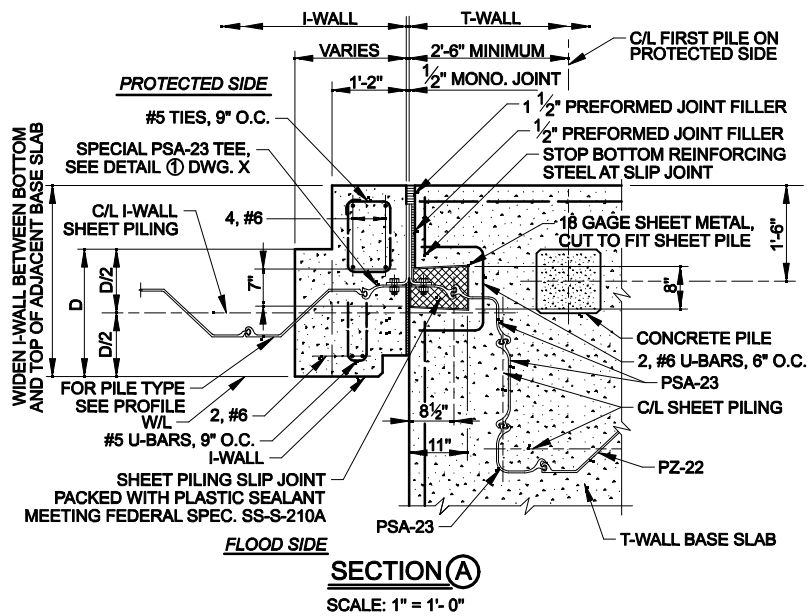
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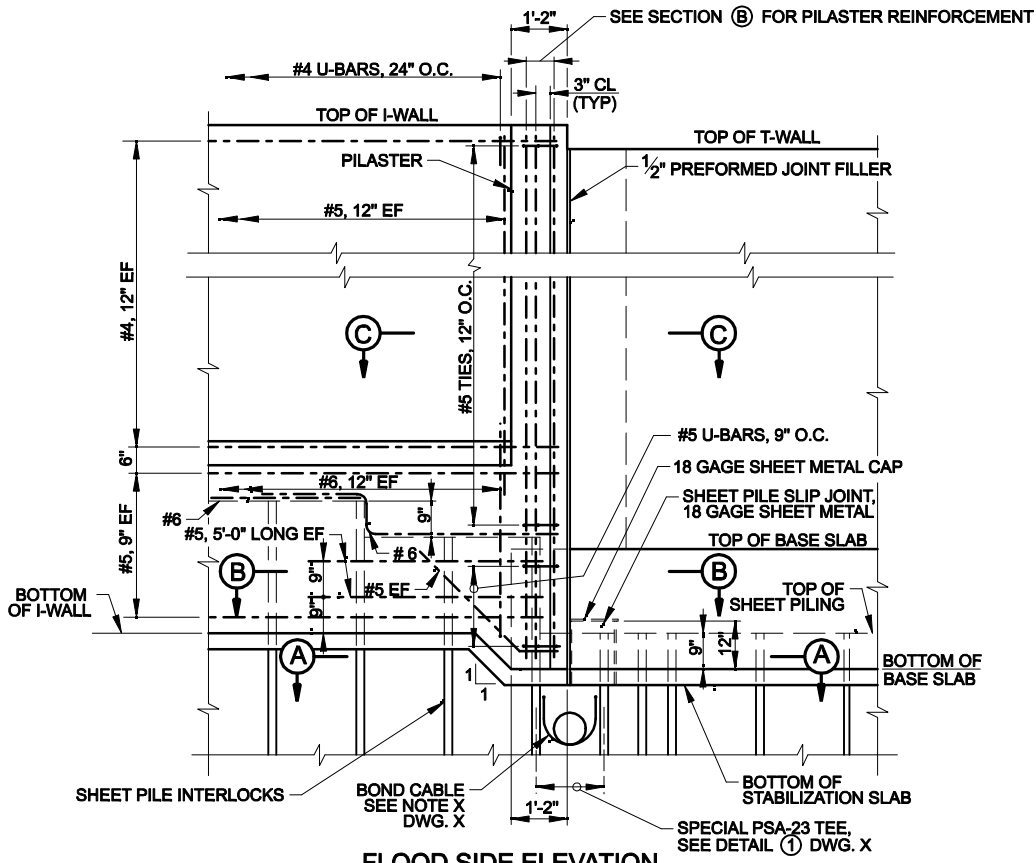


**PLAN
I-WALL TO T-WALL**

SCALE: 3" = 1'-0"

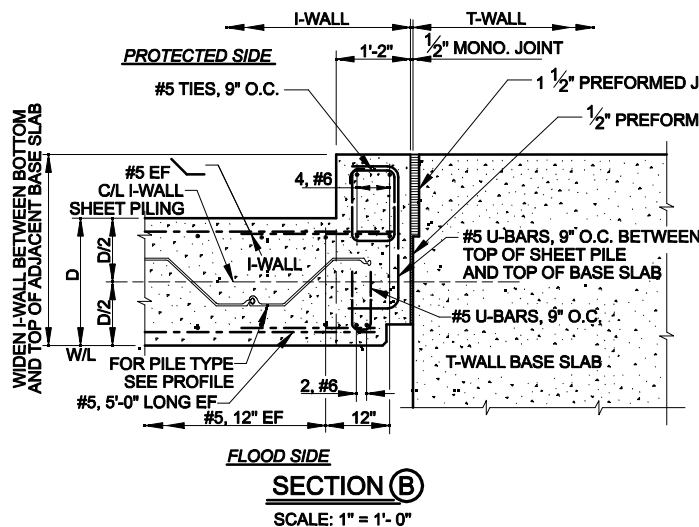


**SECTION (A)
SCALE: 1" = 1'-0"**

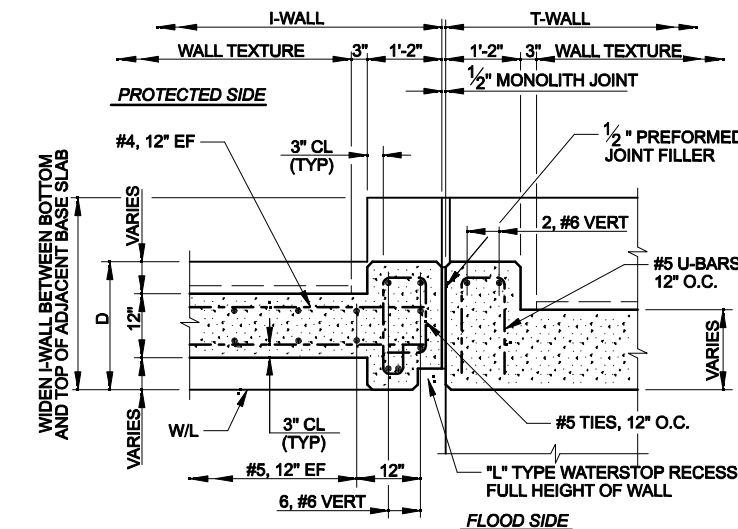


**FLOOD SIDE ELEVATION
REINFORCEMENT
I-WALL TO T-WALL**

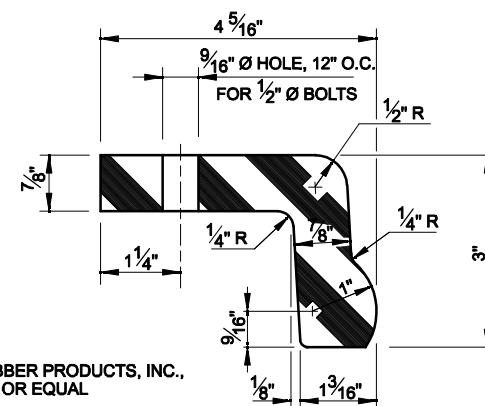
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**SECTION (B)
SCALE: 1" = 1'-0"**

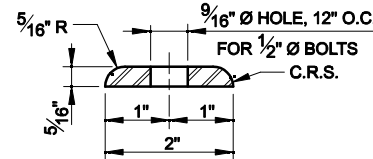


**SECTION (C)
SCALE: 1" = 1'-0"**



" L " TYPE WATERSTOP

SCALE: 1" = 1'-0"



SEAL RETAINING BAR

SCALE: 1" = 1'-0"

BUCKHORN RUBBER PRODUCTS, INC.,
MOLD NO. 3545, OR EQUAL

SCALE: 1/2" = 1'

SCALE: 3" = 1'

SCALE: 1" = 1"



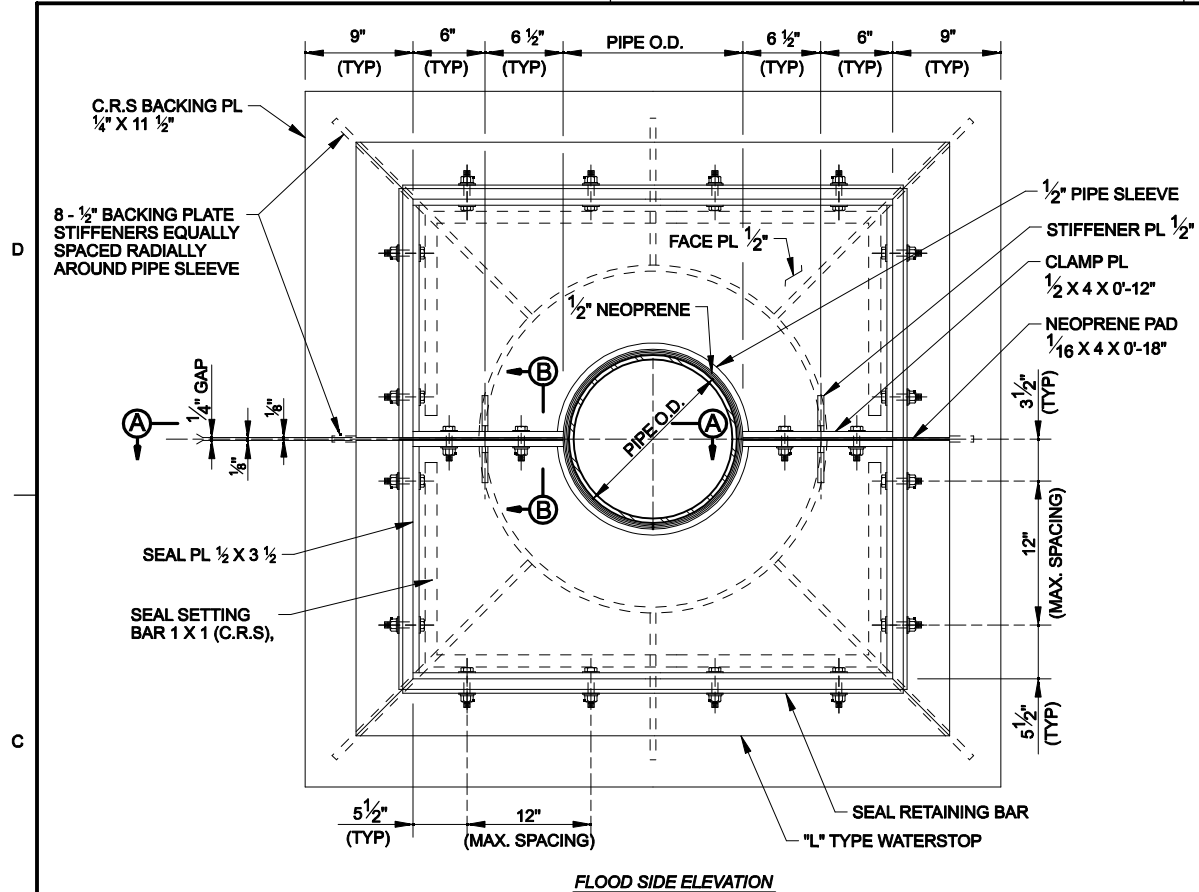
US Army Corps of Engineers
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR

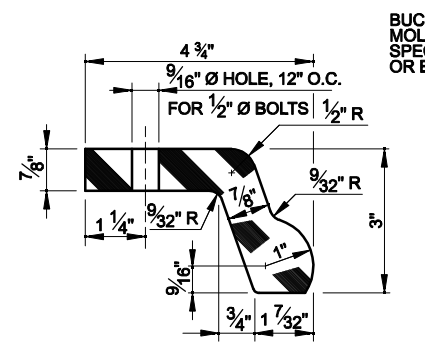
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DRAWN BY: AETYPICALS	FILE NUMBER:
SUBMITTED BY: AETYPICALS	DATE: 1/2/11
SCALE: 1/2" = 1'	ANSI D

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
AETYPICALS

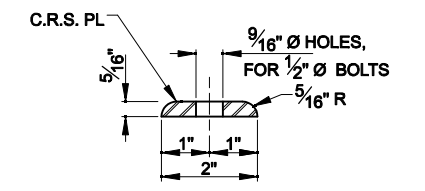
WALL JOINTS
I-WALL TO T-WALL
SHEET IDENTIFICATION
X-00



FRONTING PROTECTION UTILITY DETAIL
SCALE: 1 1/2" = 1' - 0"

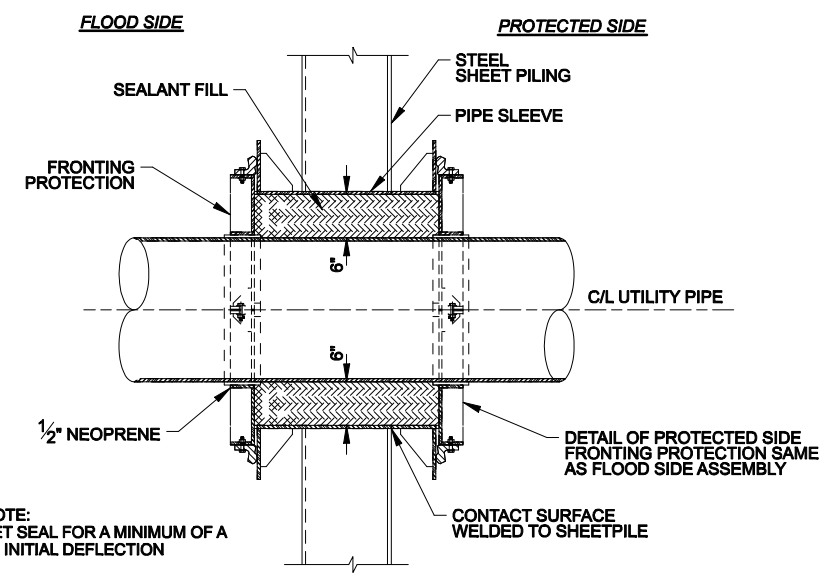


"L" TYPE WATERSTOP
SCALE: 6" = 1' - 0"



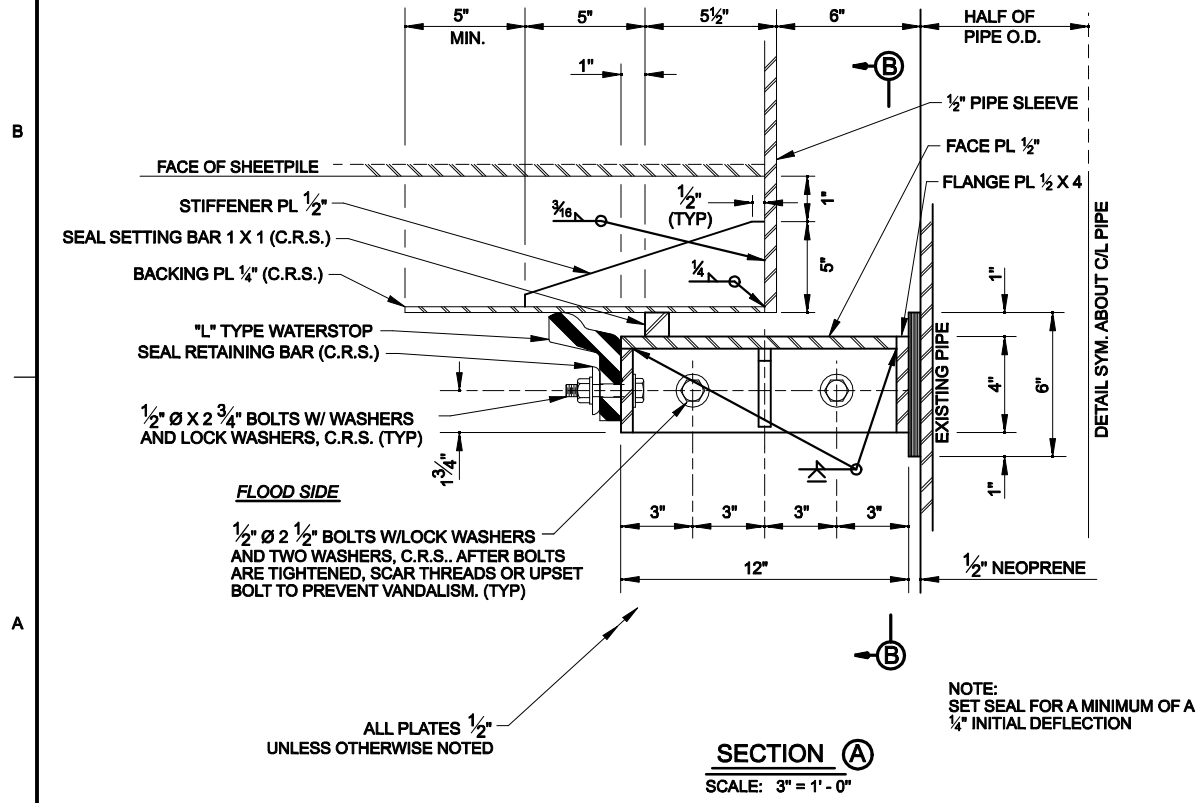
SEAL RETAINING BAR
SCALE: 6" = 1' - 0"

BUCKHORN RUBBER PRODUCTS, INC.
MOLD NO. 6404
SPECIFICATION: NATURAL-177
OR EQUAL

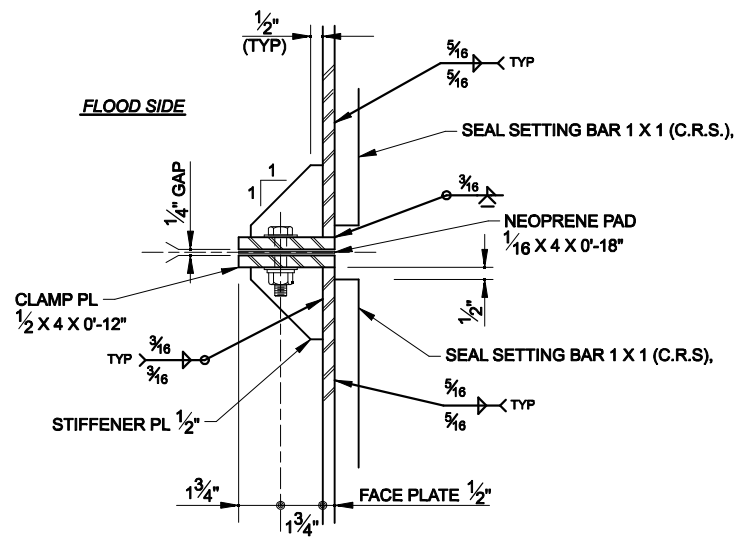


SECTION THRU SHEETPILE WALL
NTS

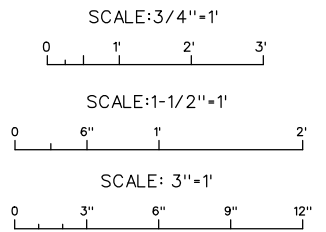
- NOTES:
1. THIS DETAIL IS BASED ON THE NEW WALL FACE BEING PERPENDICULAR TO THE PIPE.
 2. GAS AND PETROLEUM PIPELINES MAY REQUIRE THAT A 1.5" MINIMUM CONCRETE COATING BE APPLIED BEFORE THE SLEEVE IS INSTALLED.
 3. ALL FLANGE MATERIAL ATTACHED TO THE SHEETPILE SHALL BE STEEL.
 4. ALL MATERIAL FOR FRONTING PROTECTION SHALL BE ALUMINUM, UNLESS OTHERWISE NOTED.
 5. ALL STRUCTURAL ALUMINUM PLATES SHALL BE ASTM B 209, TYPE 6061-T6
 6. ALL CORROSION-RESISTANT STEEL (C.R.S.) SHALL BE TYPE 316.
 7. WELDS SHOWN ARE TYPICAL FOR SIMILAR JOINTS AND ALL WELDS ON WALL SIDE OF FACE PLATE SHALL BE FLUSH WITH BASE METAL.
 8. AFTER THE TWO FRAMES ARE LOOSELY CLAMPED ON THE PIPE, THE TOTAL ASSEMBLY SHALL BE PUSHED AGAINST THE WALL, SETTING THE SEALS, THEN TIGHTEN CLAMP PLATES TO CLOSE THE 1/4 GAP
 9. UPON COMPLETION OF THE ASSEMBLY, APPLY ANAEROBIC ADHESIVE (LOCTITE THREADLOCKER 290 OR EQUAL) TO ALL NUT AND BOLT JUNCTURES.



SECTION (A)
SCALE: 3" = 1' - 0"



SECTION (B)
SCALE: 3" = 1' - 0"



MARK	DESCRIPTION	DATE	APPR

DESIGNED BY: NEW ORLEANS DISTRICT	CHKD BY:	SOLICITATION NO.:
DWN BY:	SUBMITTED BY:	CONTRACT NO.:
FILE NUMBER: AE-TYPICALS	FILE NAME: AE-TYPICALS	FILE NUMBER: AE-TYPICALS
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USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS

UTILITY DETAILS
SHEET PILE PENETRATION

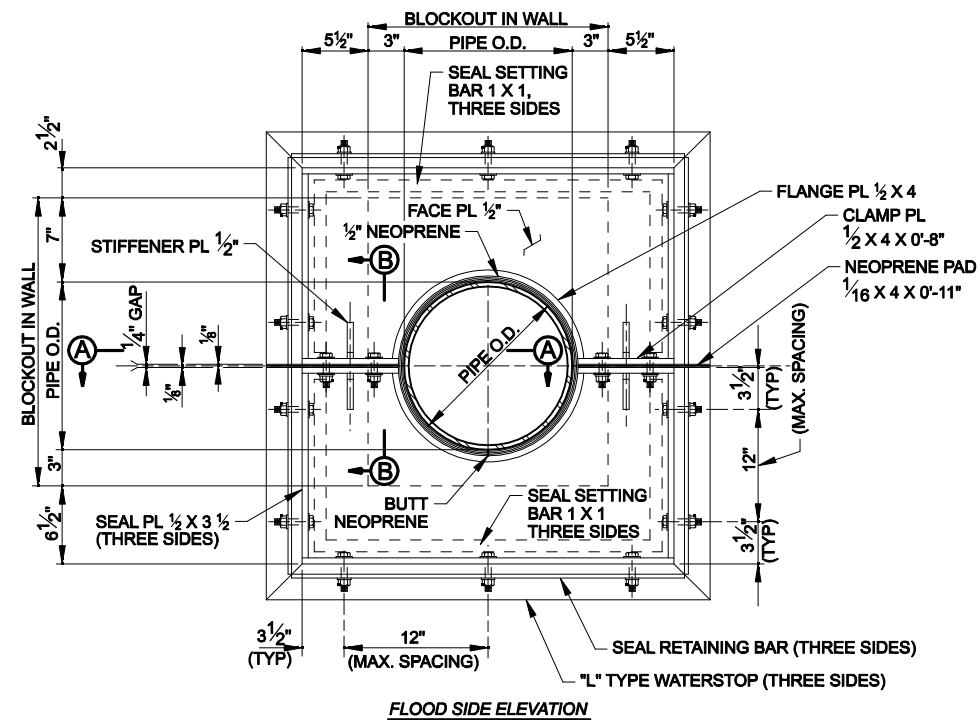
SHEET IDENTIFICATION
X-00

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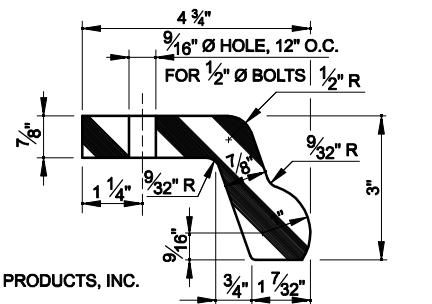
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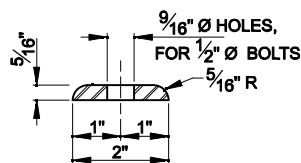
FRONTING PROTECTION UTILITY DETAIL

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



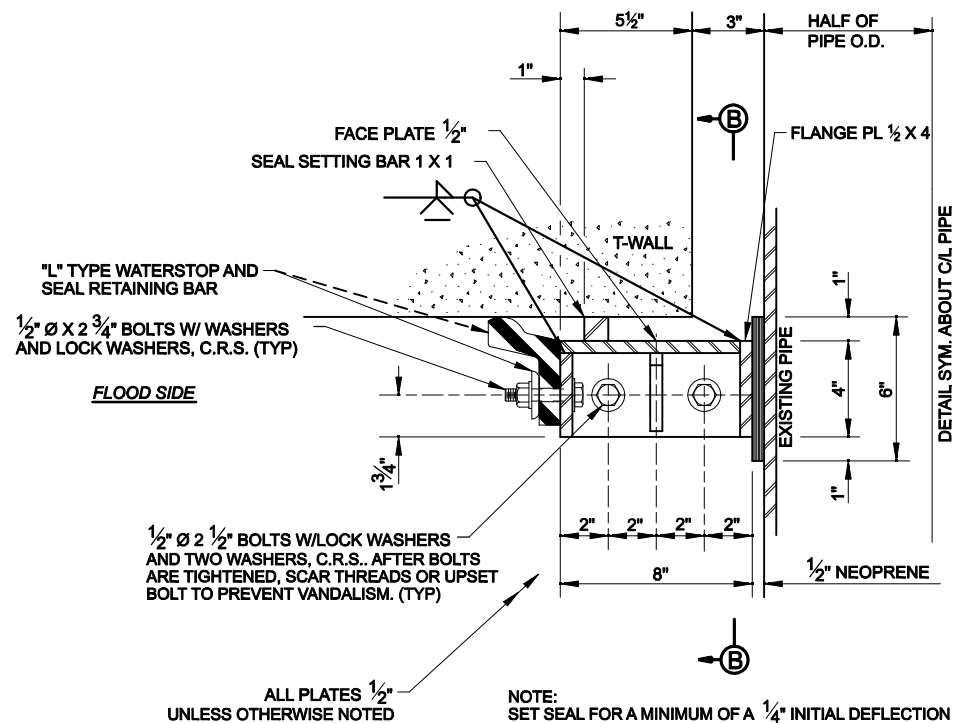
L TYPE WATERSTOP

SCALE: 6" = 1' - 0"



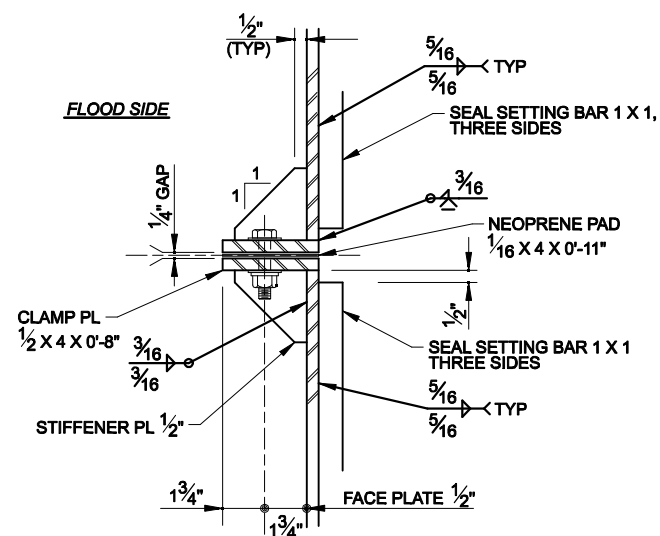
SEAL RETAINING BAR

SCALE: 6" = 1' - 0"



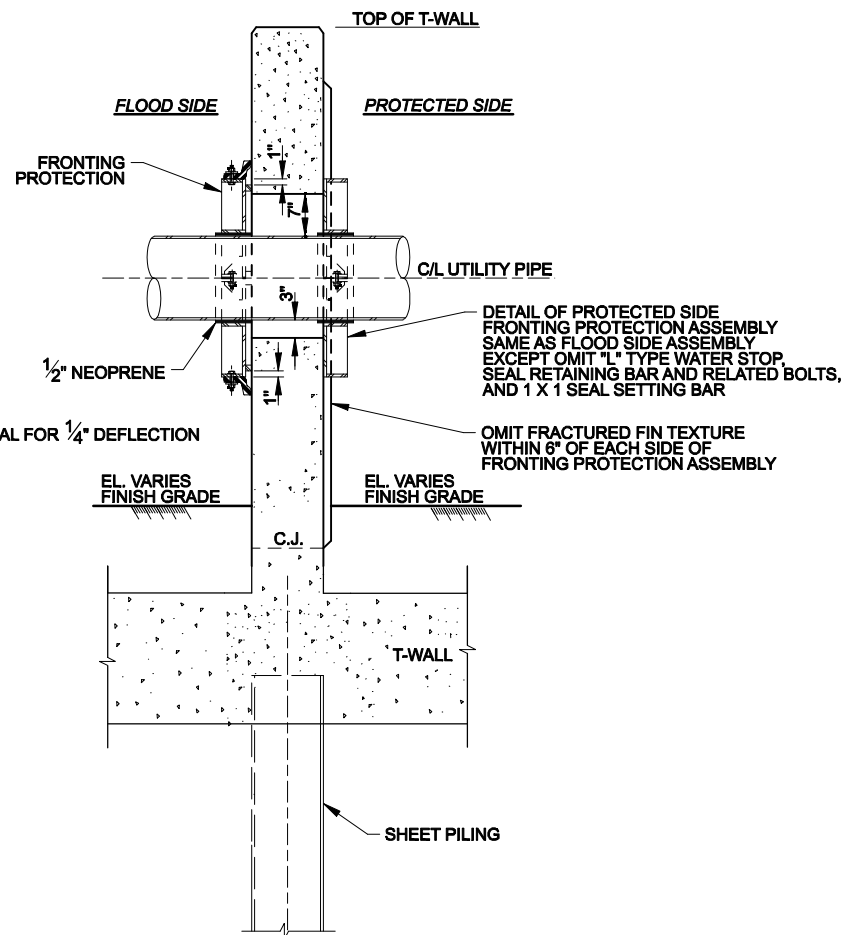
SECTION A

SCALE: 6" = 1' - 0"



SECTION B

SCALE: 6" = 1' - 0"



SECTION THRU FLOODWALL

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

NOTES:

1. THIS DETAIL WAS DRAWN FOR A 14" O.D. PIPE.
2. THIS DETAIL IS BASED ON THE NEW WALL FACE BEING PERPENDICULAR TO THE PIPE.
3. GAS AND PETROLEUM PIPELINES MAY REQUIRE THAT A 1.5" MINIMUM CONCRETE COATING BE APPLIED BEFORE THE SLEEVE IS INSTALLED.
4. ALL MATERIAL FOR FRONTING PROTECTION SHALL BE ALUMINUM, UNLESS OTHERWISE NOTED.
5. ALL STRUCTURAL ALUMINUM PLATES SHALL BE ASTM B 209, TYPE 6061-T6
6. ALL CORROSION-RESISTANT STEEL (C.R.S.) SHALL BE TYPE 316.
7. WELDS SHOWN ARE TYPICAL FOR SIMILAR JOINTS AND ALL WELDS ON WALL SIDE OF FACE PLATE SHALL BE FLUSH WITH BASE METAL.
8. AFTER THE TWO FRAMES ARE LOOSELY CLAMPED ON THE PIPE, THE TOTAL ASSEMBLY SHALL BE PUSHED AGAINST THE WALL, SETTING THE SEALS, THEN TIGHTEN CLAMP PLATES TO CLOSE THE 1/4" GAP
9. UPON COMPLETION OF THE ASSEMBLY, APPLY AN ANAEROBIC ADHESIVE (LOCTITE THREADLOCKER 290 OR EQUAL) TO ALL NUT AND BOLT JUNCTURES.

SCALE: 3/4" = 1'

0 1' 2' 3'

SCALE: 1-1/2" = 1'

0 6" 1' 2'

SCALE: 6" = 1'

0 3" 6" 9" 12"



US Army Corps of Engineers
NEW ORLEANS DISTRICT

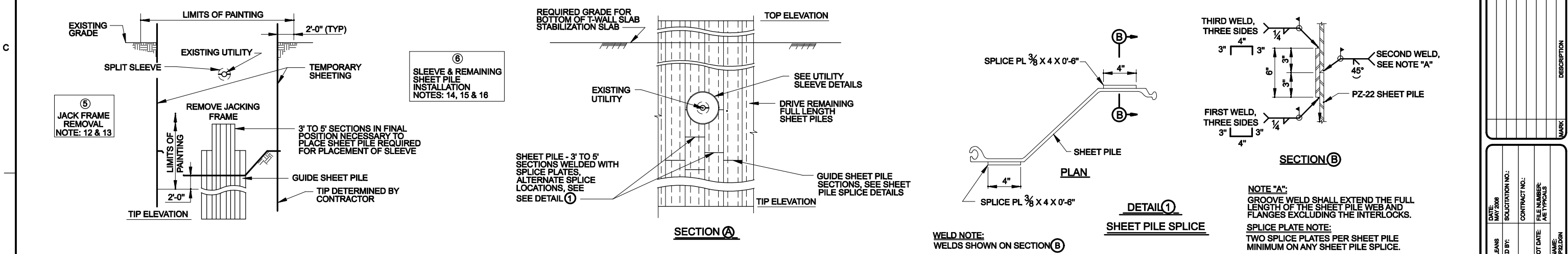
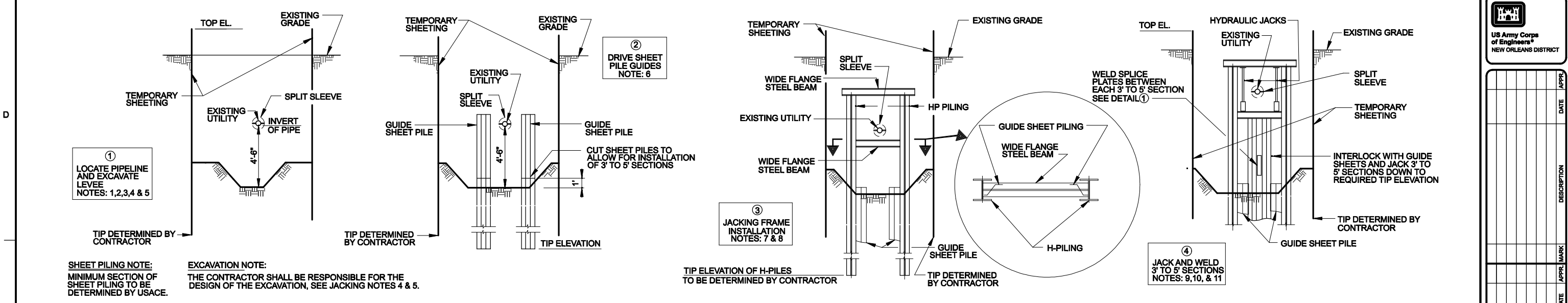
DATE	DESCRIPTION	APPROVAL

DESIGNED BY: NEW ORLEANS	CONTRACT NO.:
DRAWN BY: NEW ORLEANS	FILE NUMBER:
SUBMITTED BY: NEW ORLEANS	AE TYPICALS
DATE: 11/20/08	SCALE: 1/2" = 1'
PROJECT: UTILITY PENETRATION	DATE: 11/20/08
FILE NAME: AE-TYP1.DGN	ANSI D

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS

UTILITY PENETRATION
T-WALL DETAIL

SHEET IDENTIFICATION
X-00



GENERAL NOTES:

1. ANY PIPELINE PENETRATION THRU THE FLOOD PROTECTION SHALL CONFORM TO USACE PERMIT STANDARDS DRAWINGS 5A THRU 5C, FILE NUMBER H-8-29027, DATED OCTOBER 2002, AS SHOWN ON DRAWING 13.
2. STEEL PIPE SLEEVES SHALL BE ASTM A53, TYPE S, GRADE B, PLAIN END. FOR OUTER EDGES WITH DIAMETER LESS THAN OR EQUAL TO 24 INCHES.

SLEEVE SCHEDULE	
SHEET PILE DEPTH "D"	SLEEVE LENGTH
12" OR LESS	3'-0"
GREATER THAN 12"	3'-4"

JACKING NOTES:

1. RESERVED
2. CONTRACTOR FOR THE UTILITY SHALL LOCATE, MARK, EXCAVATE AND EXPOSE THE UTILITY AS NECESSARY FOR PLACEMENT OF THE SPLIT SLEEVE CARRIER. MARKERS PLACED FOR THE UTILITY SHALL BE CLEARLY VISIBLE. SO THE CONTRACTOR CAN CLEARLY LOCATE THE UTILITY DURING CONSTRUCTION. PERMANENT MARKERS SHALL BE PLACED BY THE CONTRACTOR FOR THE UTILITY AFTER COMPLETION OF THE CONSTRUCTION PROJECT.
3. CONTRACTOR FOR THE UTILITY SHALL PLACE THE UTILITY IN THE SPLIT-SLEEVE CARRIER PRIOR TO ANY WORK BY THE CONTRACTOR. THE CONTRACTOR MAY BE REQUIRED BY THE UTILITY OWNER TO SUPPORT THE UTILITY WITHIN THE EXCAVATION.
4. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION ACTIVITIES REGARDING EXCAVATING FOR AND DRIVING OF THE SHEET PILE AND PLACING THE RELOCATION/UTILITY THROUGH THE SHEET PILE WALL.
5. THE CONTRACTOR SHALL EXCAVATE THE EXISTING GROUND TO AN ELEVATION 4'-6" BELOW OF THE INVERT OF THE PIPELINE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE EXCAVATION. THE DESIGN SHALL BE STAMPED BY A REGISTERED ENGINEER, LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED.
6. THE CONTRACTOR SHALL DRIVE TWO (2) SHEET PILE GUIDES AS SHOWN IN SEQUENCE ② ABOVE.
7. THE CONTRACTOR SHALL DRIVE H-PILES TO A DEPTH DETERMINED BY DESIGN CALCULATIONS.
8. THE CONTRACTOR SHALL WELD A WIDE FLANGE (WF) CROSS BEAM TO THE TOP OF THE H-PILES AND INSTALL WIDE FLANGE (WF) JACKING BEAM WITH HYDRAULIC JACKS SUPPORTED BY THE CROSS BEAM.
9. THE CONTRACTOR SHALL INTERLOCK 3' TO 5' LENGTH SHEET PILES AND JACK BETWEEN SHEET PILE GUIDES AS SHOWN IN SEQUENCE ④.
10. AFTER THE FIRST 3' TO 5' PANEL HAS BEEN DRIVEN, RAILROAD GATE CONTRACTOR SHALL WELD THE NEXT 3' TO 5' PANEL TO THE PREVIOUS PANEL USING SPLICE PLATES (SEE DETAIL ①).
11. RAILROAD GATE CONTRACTOR SHALL REPEAT STEPS IN NOTES 9 AND 10 UNTIL THE SHEET PILING BELOW THE PIPELINE IS DRIVEN TO AN ELEVATION REQUIRED FOR PLACEMENT OF SHEET PILES WHICH ARE NECESSARY FOR PLACEMENT OF OUTER SLEEVE.
12. THE CONTRACTOR SHALL REMOVE JACKING FRAME.
13. ALL SHEET PILE ABOVE AN ELEVATION TWO (2) FEET BELOW THE EXCAVATION SHALL BE PAINTED IN ACCORDANCE WITH SPECIFICATION 09940. THE HORIZONTAL LIMITS OF PAINTING SHALL BE TWO (2) FEET BEYOND THE EDGE OF THE EXCAVATION.
14. THE CONTRACTOR SHALL INSTALL SHEET PILING NECESSARY TO PLACE SLEEVE, AND AFTER SLEEVE PLACEMENT IS COMPLETE, PLACE THE REMAINING SHEET PILE.
15. THE CONTRACTOR SHALL INSTALL SHEET PILING TO GRADE AS REQUIRED BY USACE. NOTE: IF PILING BELOW THE UTILITY IS DRAGGED DOWNWARD DURING DRIVING OF ADJACENT PILING, CONTRACTOR SHALL ADD LENGTH BY WELDING NEW PILING TO REQUIRED GRADE. DO NOT PULL SHEET PILE UP TO GRADE.
16. THE CONTRACTOR SHALL BACKFILL THE EXCAVATION WITH THE SAME MATERIAL EXCAVATED TO THE REQUIRED GRADE. THE MATERIAL SHALL BE REPLACED WITHOUT COMPACTION AND AS CLOSE TO ITS IN-SITU STATE AS POSSIBLE. AT NO TIME SHALL THE SHEET PILE BE PULLED TO GRADE IF IT HAS MOVED.



DATE	DESCRIPTION	APPR. MARK

DESIGNED BY: NEW ORLEANS	ISSUED BY: MAY 2008	SOLICITATION NO.:	CONTRACT NO.:
DWN BY: NEW ORLEANS	CHK BY:	FILE NUMBER:	AE TYPICALS
USACE - NEW ORLEANS DISTRICT	NEW ORLEANS, LOUISIANA	PLAT SCALE:	FILE NAME:
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USACE - NEW ORLEANS DISTRICT
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS

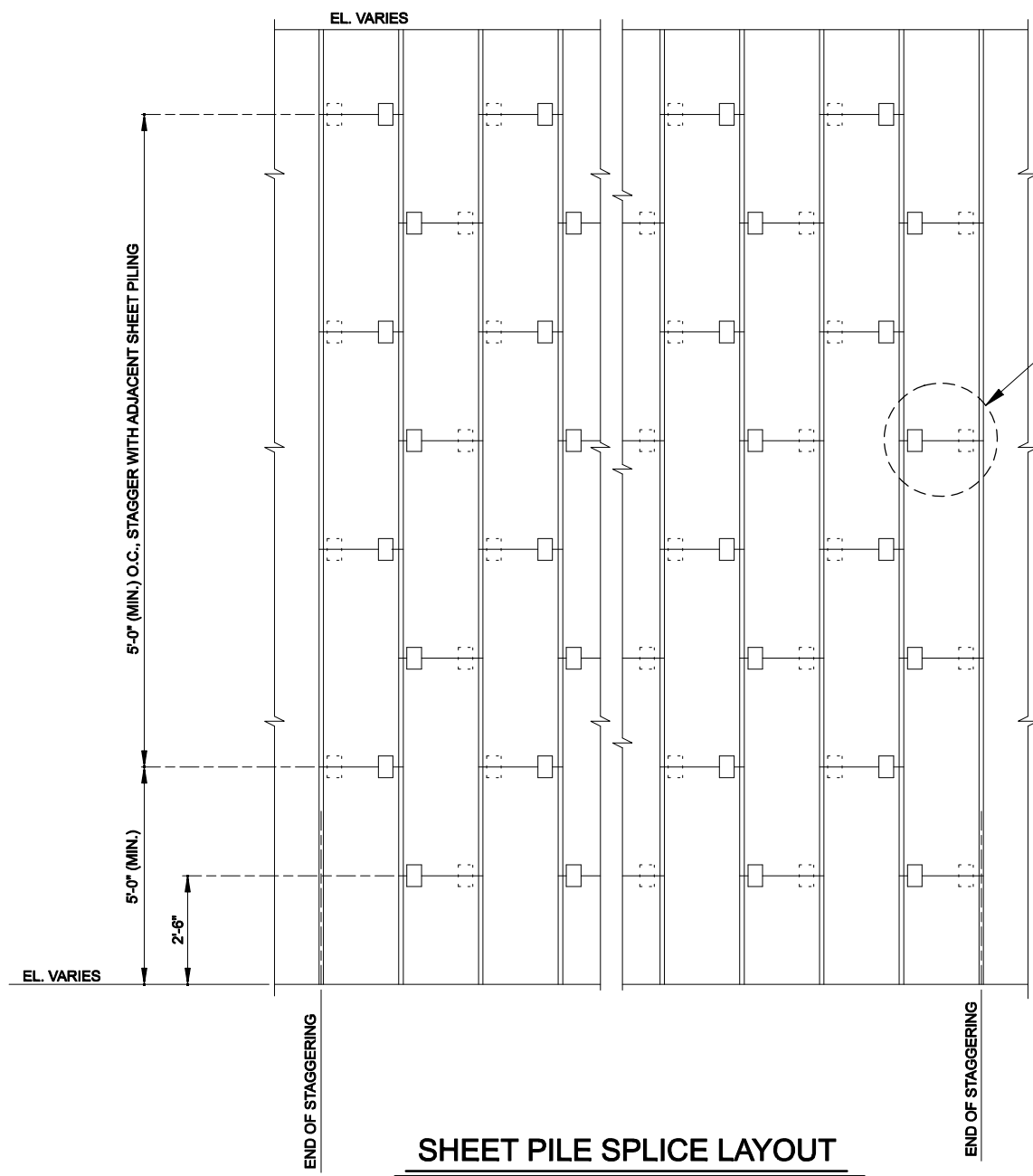
UTILITY DETAILS
JACKING SHEET PILE UNDER UTILITIES

MARK	DESCRIPTION	DATE	APPR. MARK

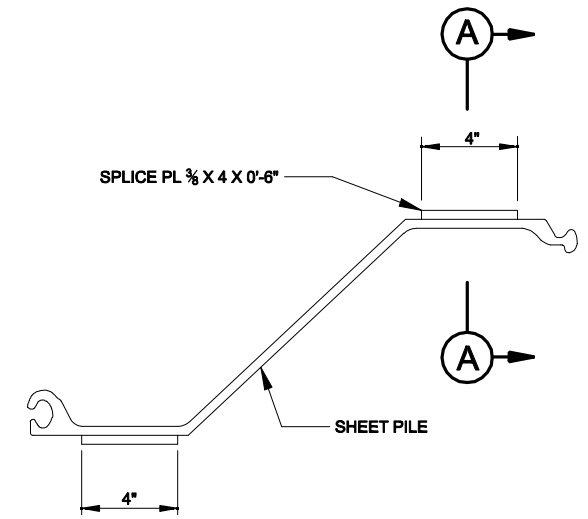
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CHECKED BY: DAVID B. BROWN	CONTRACT NO.:
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SUBMITTED BY:	PLOT SCALE: 3" = 1'
U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA	DATE:
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AE TYPICAL DRAWINGS
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SEE DETAIL 2 (TYP)

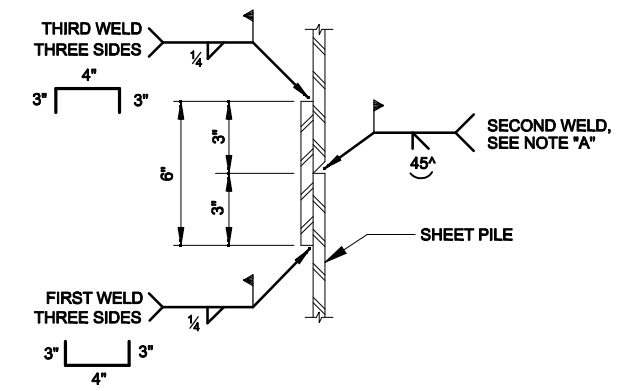


PLAN

DETAIL 2

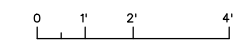
SCALE: 3" = 1'-0"

NOTE "A"
GROOVE WELD SHALL EXTEND THE FULL LENGTH OF THE SHEET PILE WEB AND FLANGES EXCLUDING THE INTERLOCKS.

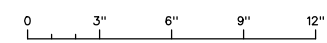


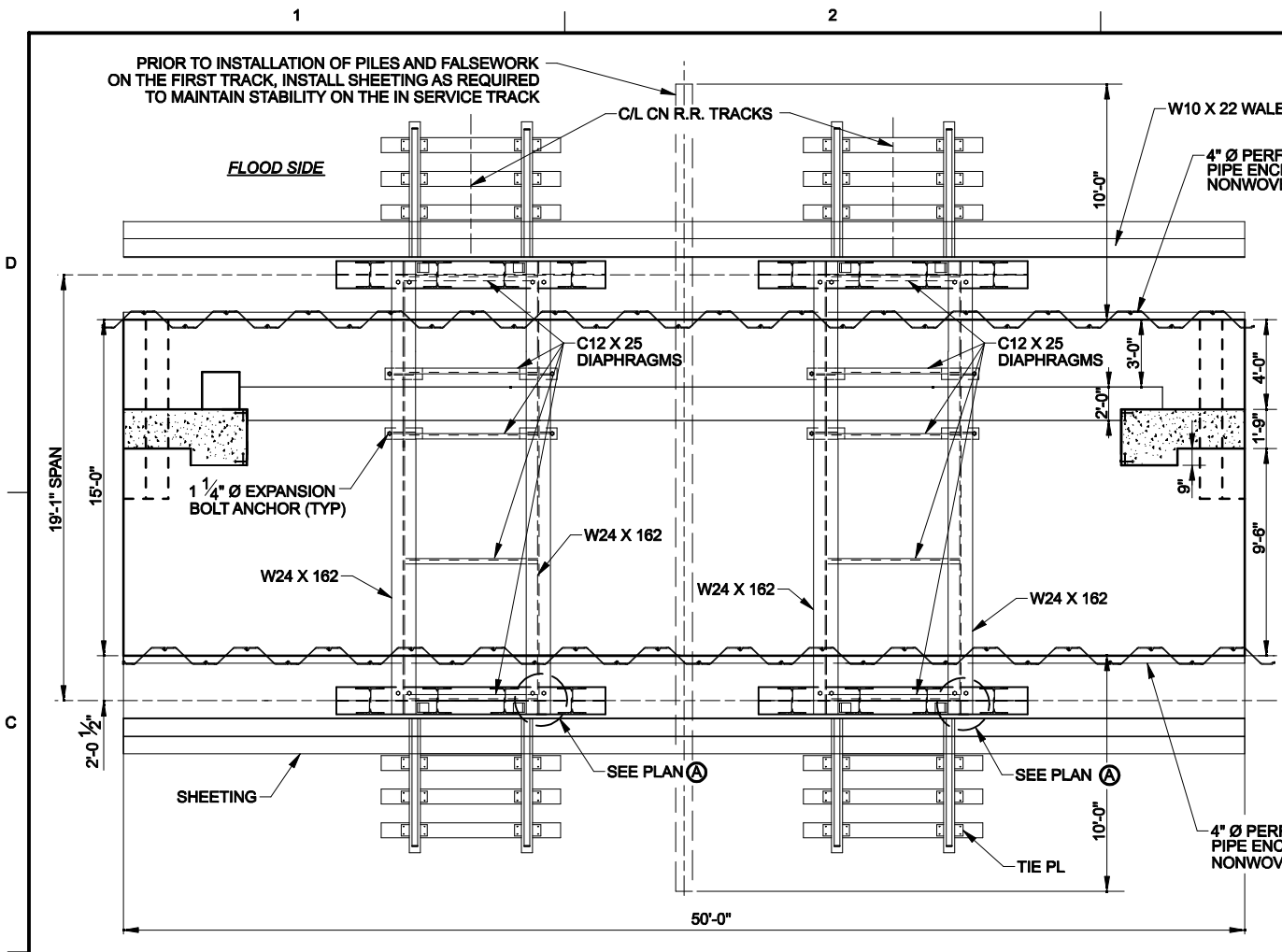
SECTION A

SCALE: 1/2" = 1'



SCALE: 3" = 1'





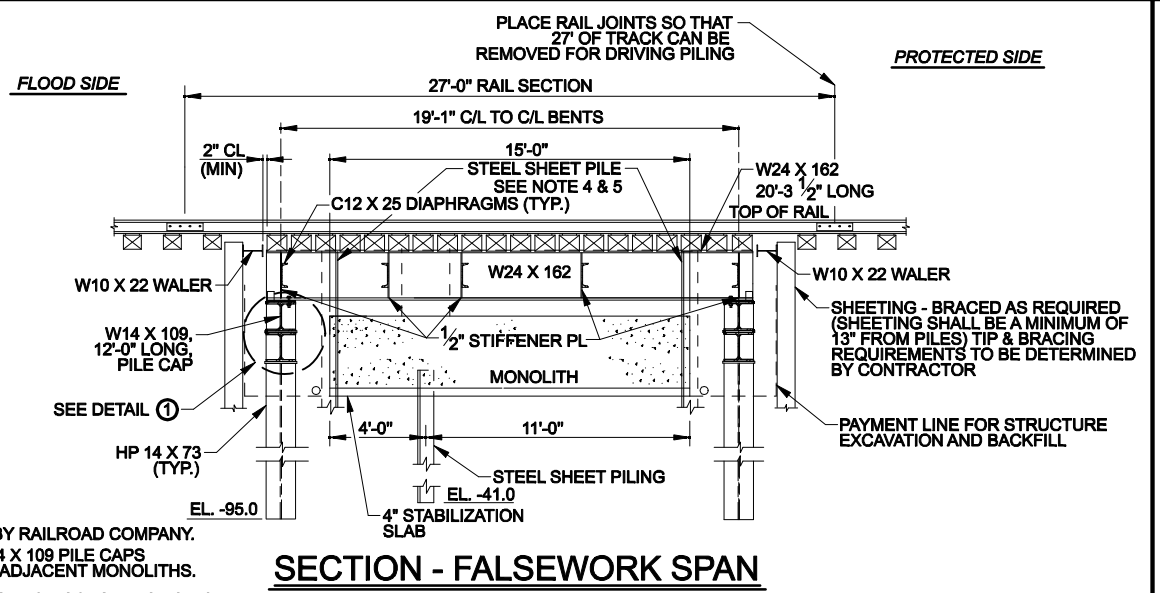
PLAN - FALSEWORK

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

NOTE: RAILS AND CROSS TIES NOT SHOWN FOR CLARITY

NOTES:

- CROSS TIE SPACING TO BE DETERMINED BY RAILROAD COMPANY.
- HP 14 X 73 PILES DRIVEN TO SUPPORT W14 X 109 PILE CAPS ARE ACTUAL FOUNDATION PILES FOR THE ADJACENT MONOLITHS.
- SHEETPILE DRIVEN TO RETAIN THE BALLAST FOR CONSTRUCTION OF MONOLITH R-2 SHALL BE CUT OFF BELOW THE BOTTOM OF THE BASE SLAB PRIOR TO THE POURING OF THE SLAB. SEE DRAWING 18-20 FOR MORE DETAILS.
- SHEET PILE DRIVEN NEXT TO SLAB SHALL BE USED FOR BRACING IN THE CONSTRUCTION OF ADJACENT MONOLITHS AND DRIVEN TO THE APPROPRIATE DEPTHS (DETERMINED BY CONTRACTOR) TO HANDLE THE SAME LOADS AS THE SHEET PILE BEING USED FOR BRACING IN THE CONSTRUCTION OF MONOLITH.
- SHEET PILE DRIVEN NEXT TO SLAB SHALL BE NOTCHED TO PASS W24 X 162
- CONCRETE IN BASE SLAB SHALL BE COMPOSED OF HIGH EARLY STRENGTH PORTLAND CEMENT IN LIEU OF REGULAR PORTLAND CEMENT



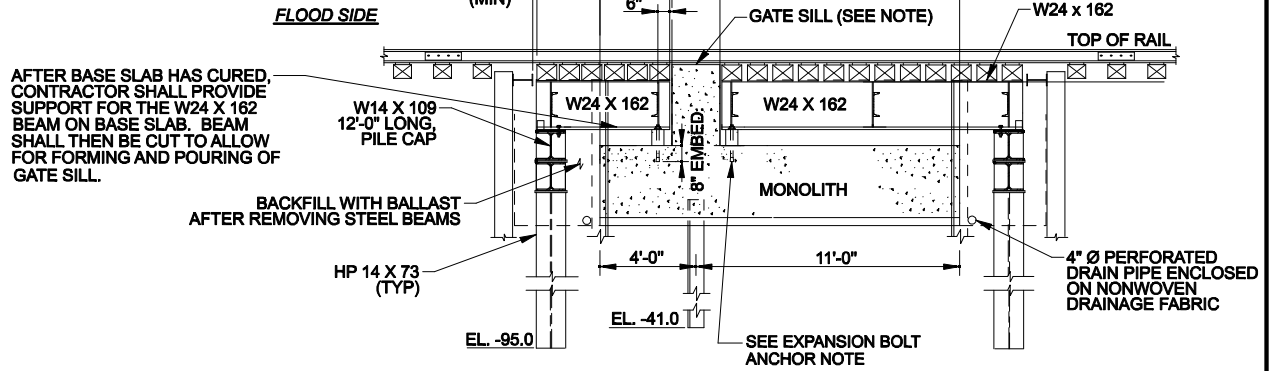
SECTION - FALSEWORK SPAN

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

EXPANSION BOLT ANCHOR NOTE:

1 1/4" Ø X 18" LONG TRUBOLT WEDGE ANCHOR W/ NUT AND WASHER AS MFD. BY ITW RAMSET/REDHEAD, WOOD DALE, ILLINOIS OR EQUAL. ONE SIDE OF W24 X 162, SEE PLAN

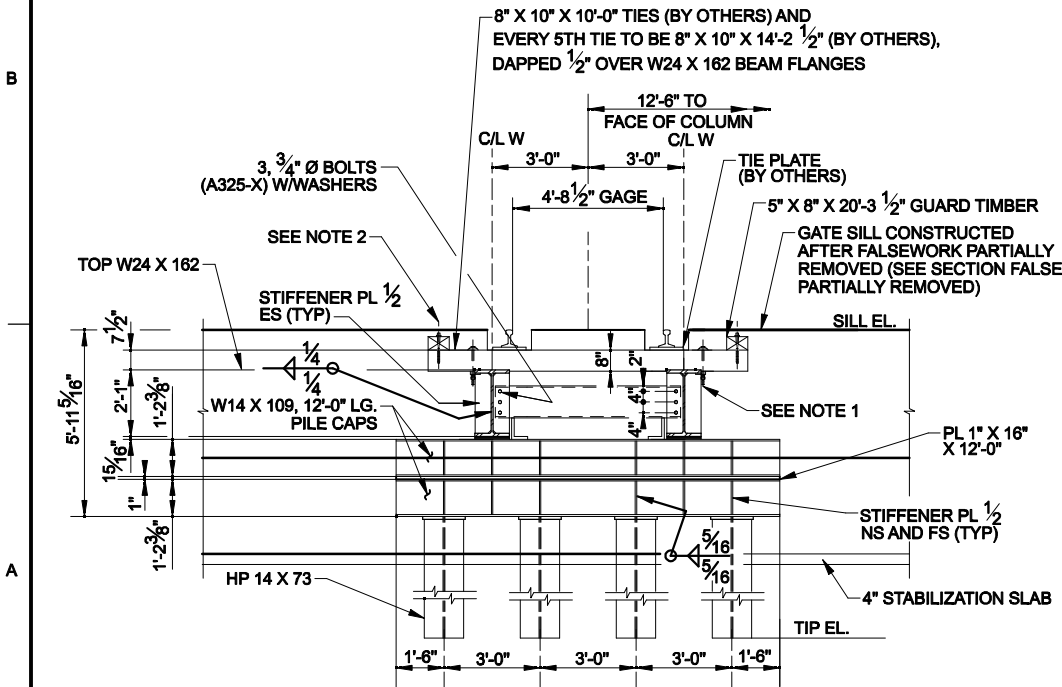
AFTER BASE SLAB HAS CURED, CONTRACTOR SHALL PROVIDE SUPPORT FOR THE W24 X 162 BEAM ON BASE SLAB. BEAM SHALL THEN BE CUT TO ALLOW FOR FORMING AND POURING OF GATE SILL.



SECTION - FALSEWORK PARTIALLY REMOVED

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

NOTE: CONCRETE IN GATE SILL SHALL BE HIGH EARLY STRENGTH PORTLAND CEMENT IN LIEU OF REGULAR PORTLAND CEMENT

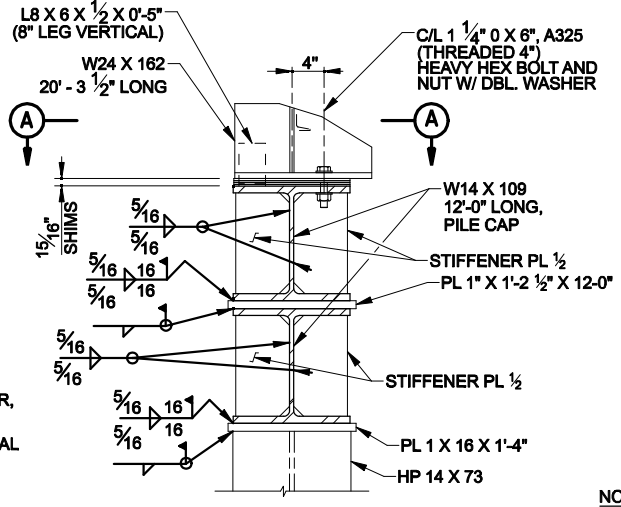


ELEVATION - FALSEWORK BENTS

SCALE: 3/8" = 1'-0"

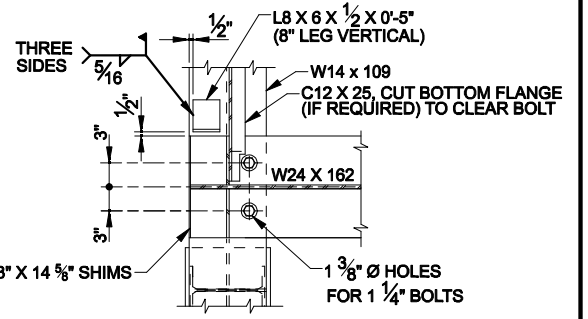
NOTES:

- 3/4" Ø x 13" HEX BOLT (THREADED 4") AND NUT W/ EVER TIGHT WASHER, EVER TIGHT SPRING AND OFFSET SHOE TYPE A (X=2", Y= 1/2"), AS MFD. BY LEWIS BOLT AND NUT CO., WAYZATA, MINNESOTA OR EQUAL
- 5/8" Ø x 10" WASHER HEAD TIMBER DRIVE SPIKE AS MFD. BY LEWIS BOLT AND NUT CO., WAYZATA, MINNESOTA OR EQUAL
- H-PILES MAY BE SPLICE, SEE DWG. XX FOR DETAILS.
- SEE DRAWING XX FOR ALL SWING GATE MONOLITH DIMENSIONS



DETAIL 1

SCALE: 1" = 1'-0"



PLAN (A)

SCALE: 1" = 1'-0"

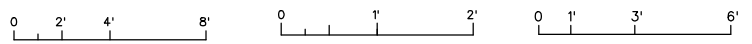
NOTES:

- FOR GENERAL NOTES, SEE DWG. 2.
- EXTENDED DRAINAGE PIPE TO FACE OF EMBANKMENT SLOPE, PROTECT WITH 12" SOIL BLANKET.

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

SCALE: 1" = 1'-0"

SCALE: 3/8" = 1'-0"



US Army Corps of Engineers
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APPROVED: _____ DATE: _____
 CHECKED: _____ DATE: _____
 DESIGNED: _____ DATE: _____
 DRAWN: _____ DATE: _____

CONTRACT NO.: _____
 FILE NUMBER: _____
 PLOT SCALE: _____
 PLOT DATE: _____

USACE - NEW ORLEANS
 HURRICANE DESIGN GUIDELINES
 AE TYPICAL DRAWINGS

RAILROAD DETAILS
 CONSTRUCTION FALSEWORK DETAILS

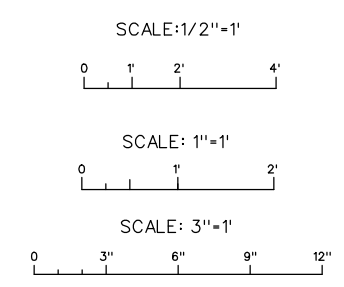
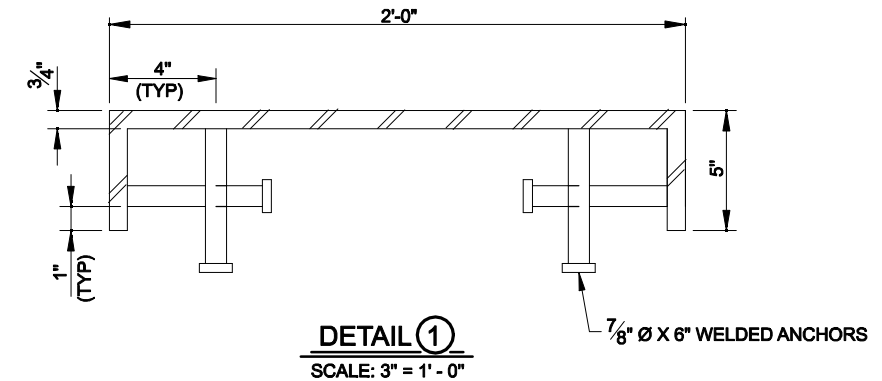
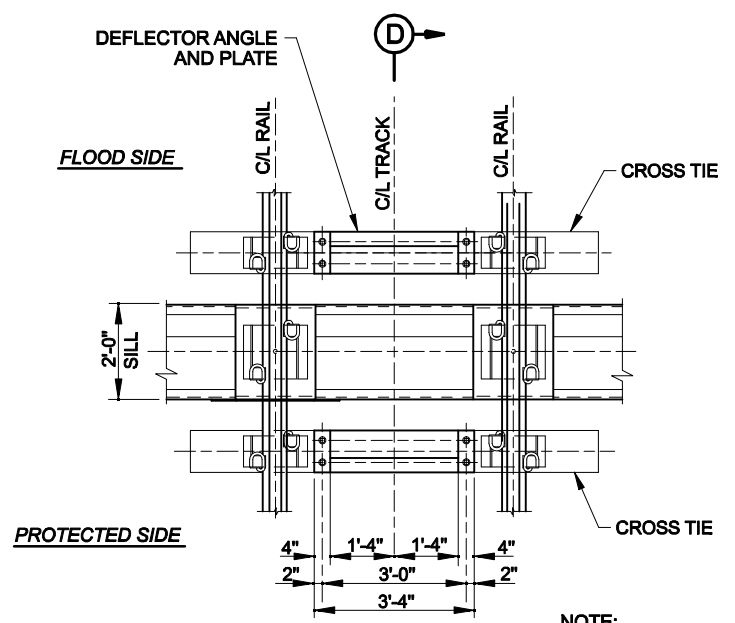
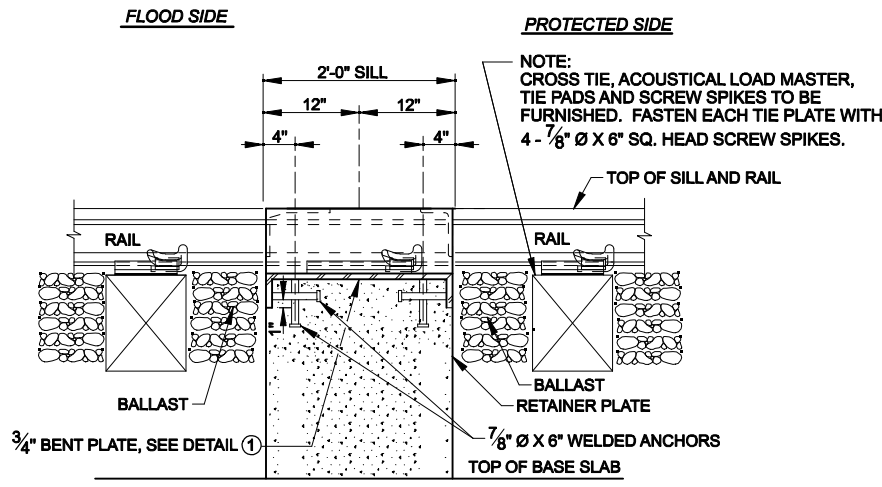
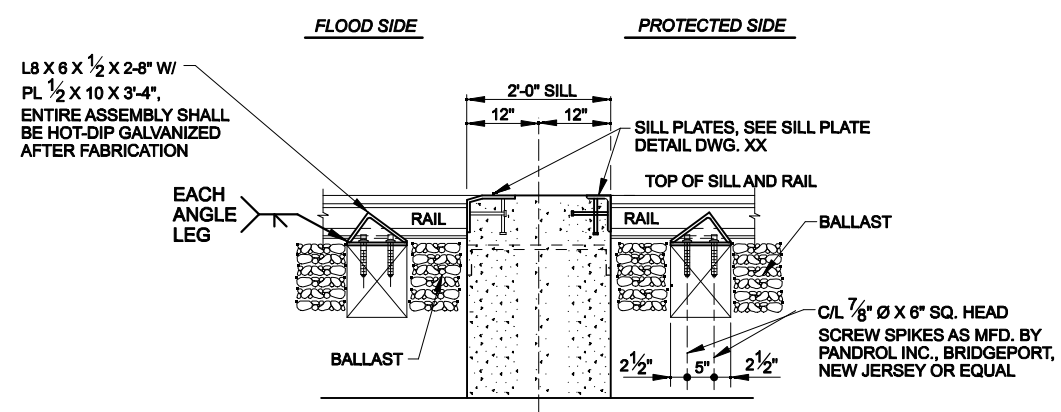
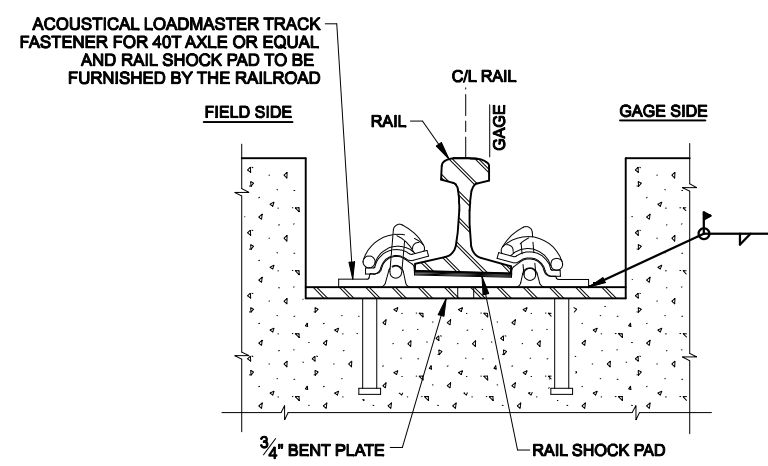
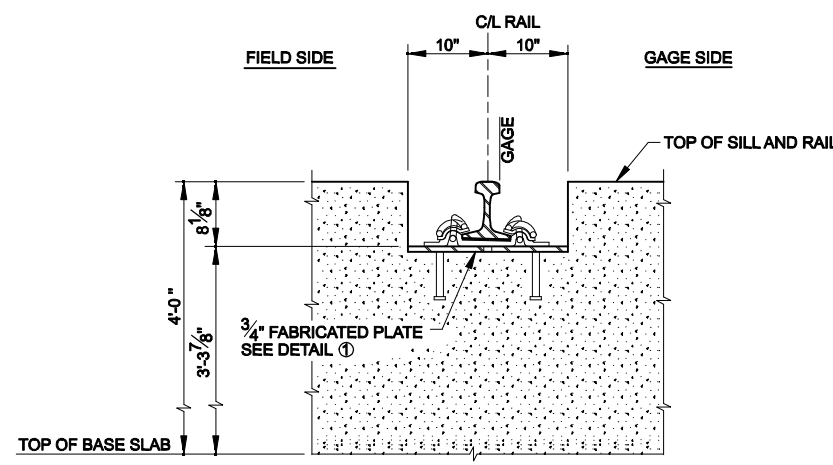
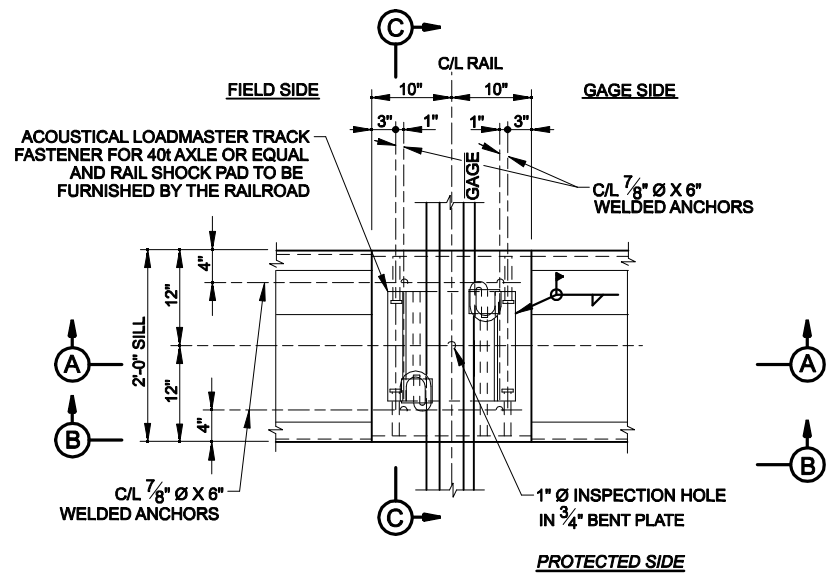
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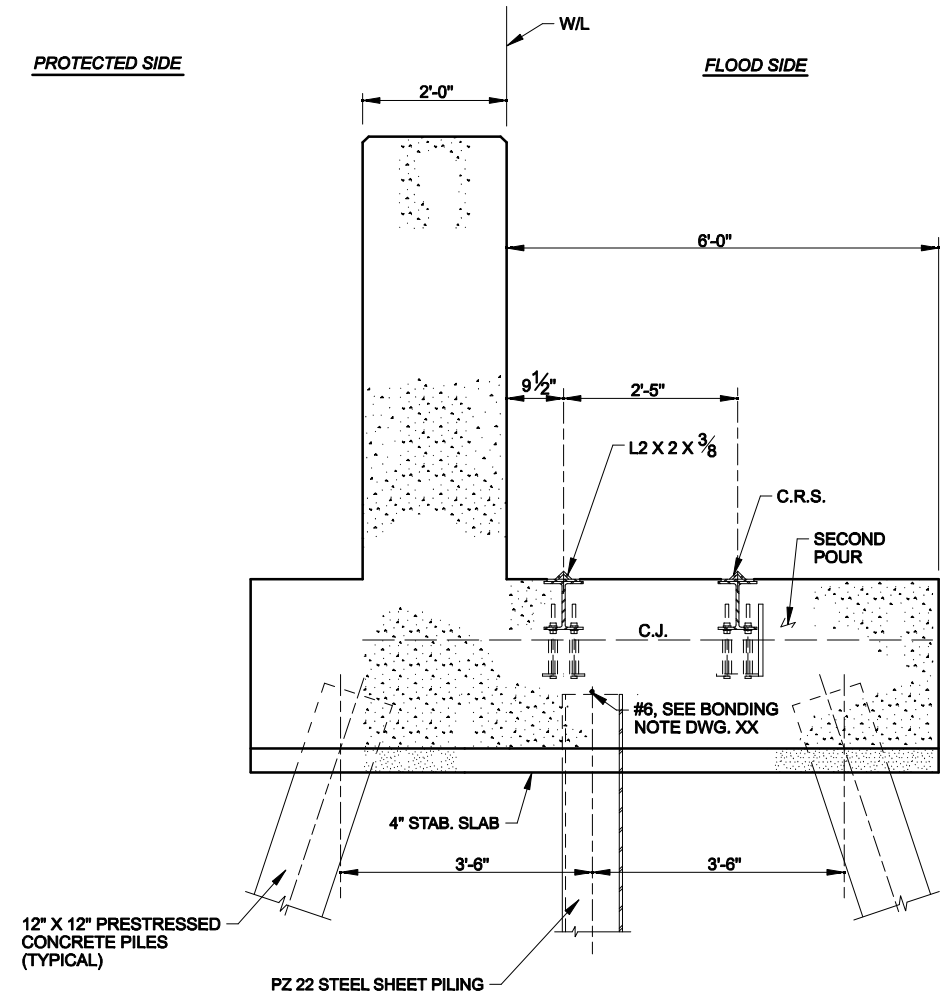


DATE	DESCRIPTION	APPR

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DWN BY: NEW ORLEANS	FILE NUMBER:
CAD BY: NEW ORLEANS	AE TYPICALS
SUBMITTED BY: NEW ORLEANS	AE TYPICALS
DATE: MAY 2008	FILE NAME:
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SIZE: 11x17	ANSI D

PROTECTED SIDE

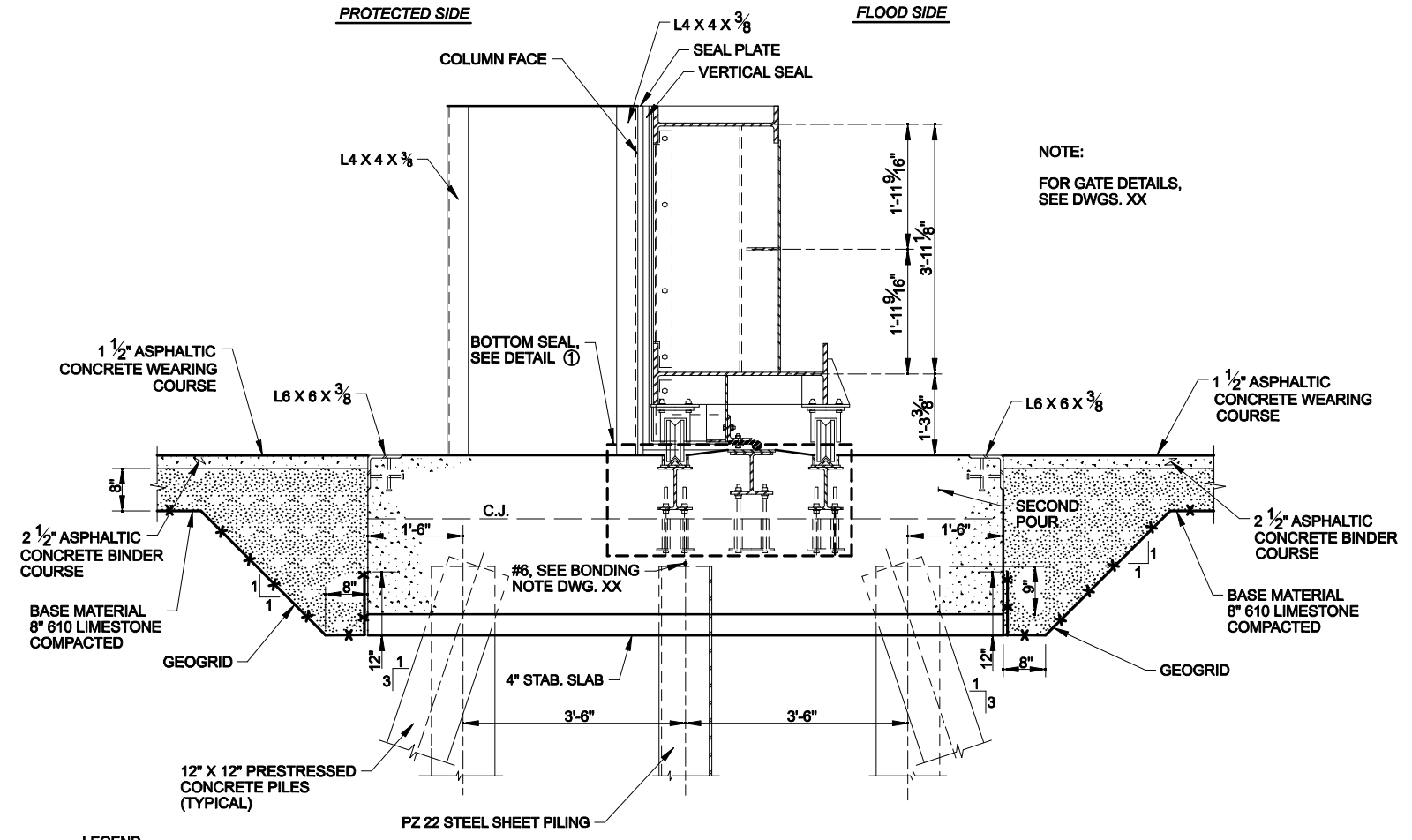
FLOOD SIDE



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

PROTECTED SIDE

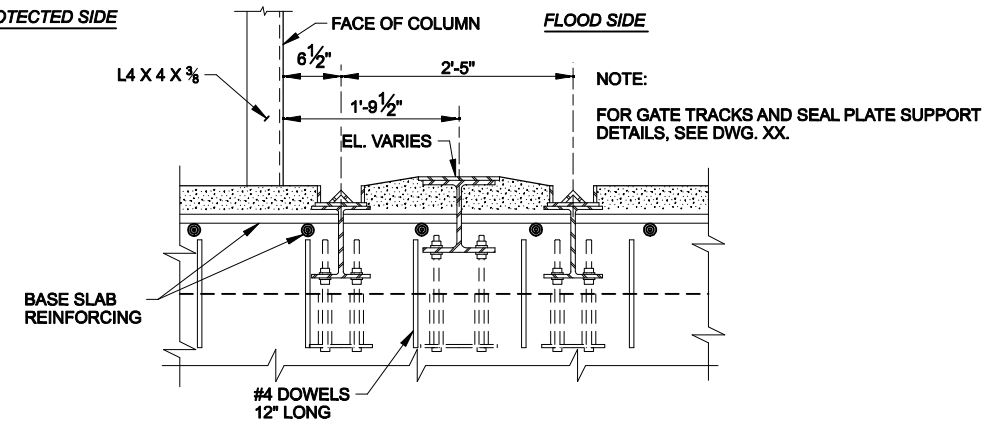
FLOOD SIDE



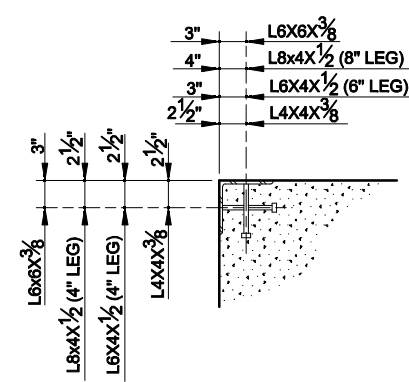
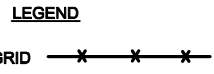
SECTION B
GATE MONOLITH
SCALE: 3/4" = 1'-0"

PROTECTED SIDE

FLOOD SIDE



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



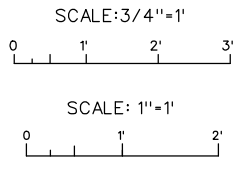
ANGLE DETAIL
N.T.S.

AT COLUMNS:
L4X4X3/8 W/1/2"x8" WELDED ANCHORS, 12" O.C. STAGGERED
L6X4X1/2 W/1/2"x8" WELDED ANCHORS, 12" O.C. STAGGERED
L8X4X1/2 W/1/2"x8" WELDED ANCHORS, 12" O.C. STAGGERED

AT TOP OF SILL:
L6X6X3/8 W/1/2"x8" WELDED ANCHORS, 12" O.C. STAGGERED

NOTE:
ENTIRE ANGLE ASSEMBLY TO BE HOT-DIP GALVANIZED AFTER FABRICATION.

NOTE:
FOR GATE DETAILS, SEE DWGS. XX



DATE	DESCRIPTION	APPR.

DESIGNED BY: NEW ORLEANS	CONTRACT NO.:
DWN BY: NEW ORLEANS	FILE NUMBER: AE TYPICALS
SUBMITTED BY: NEW ORLEANS	FILE NAME: AE-TYP010.DGN
DATE: MAY 2008	ANSI D:
U.S. ARMY CORPS OF ENGINEERS	U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT	NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA	NEW ORLEANS, LOUISIANA

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS
ROLLER GATES
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SHEET IDENTIFICATION
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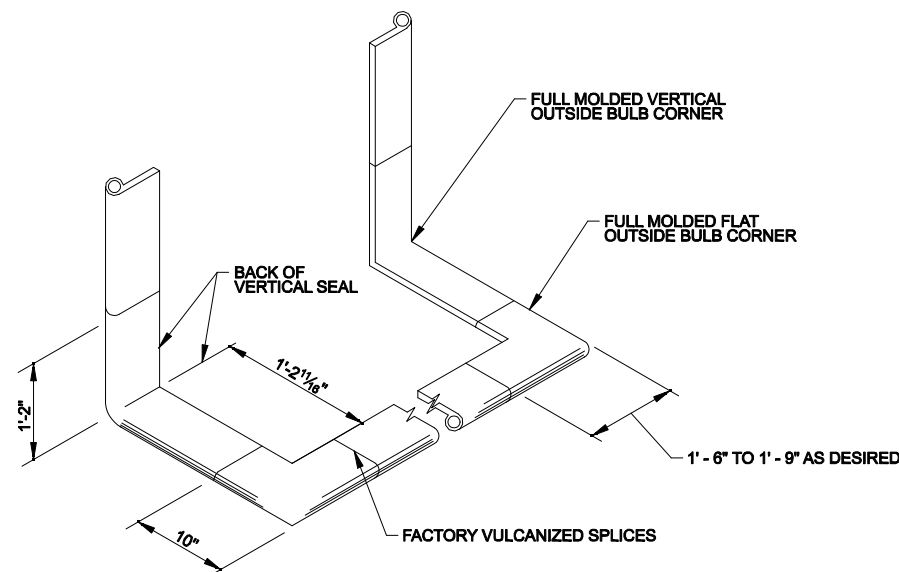
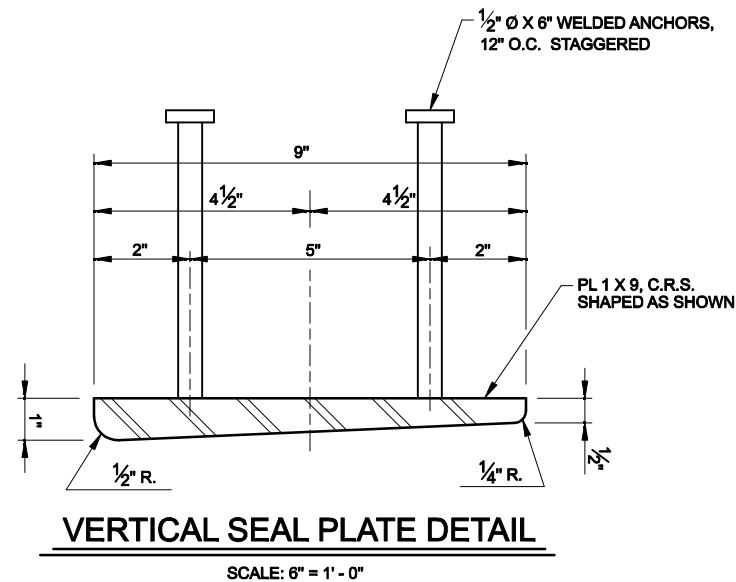
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TYPICAL GATE SEAL

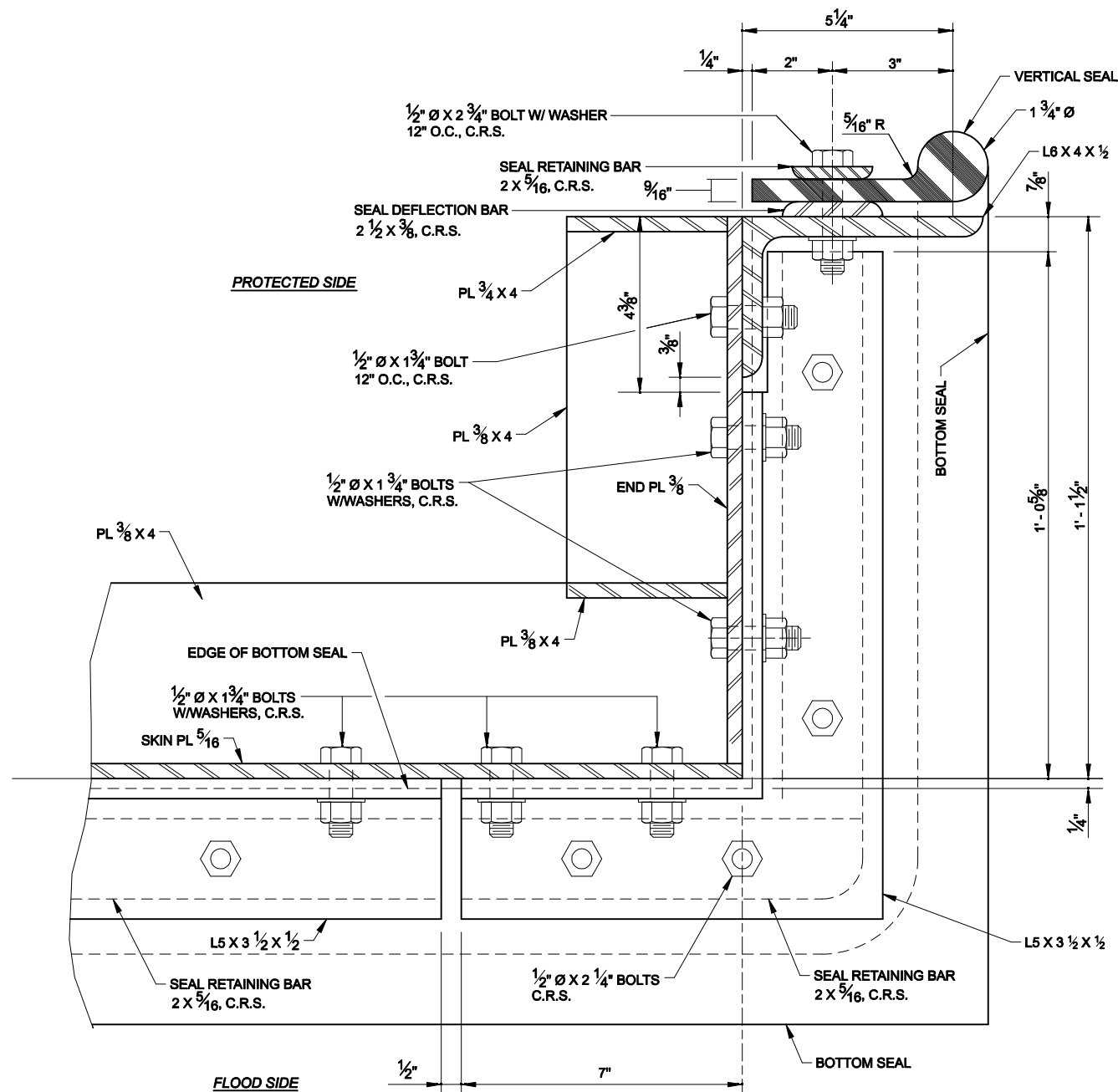
NOT TO SCALE

NOTE:

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.

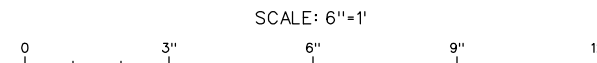
REFERENCE DRAWINGS

FOR BOTTOM ROLLER GATE SEAL SUPPORT DETAILS, SEE DWG. XX



VERTICAL SEAL
PLAN AT END OF GATE BELOW W33X118

SCALE: 6" = 1' - 0"



US Army Corps of Engineers
NEW ORLEANS DISTRICT

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DWN BY:	CHK BY:	FILE NUMBER: A/E TYPICALS	PLotted DATE:	FILE NAME:
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A/E TYPICAL DRAWINGS

ROLLER GATES
SEAL DETAILS
(2 OF 2)

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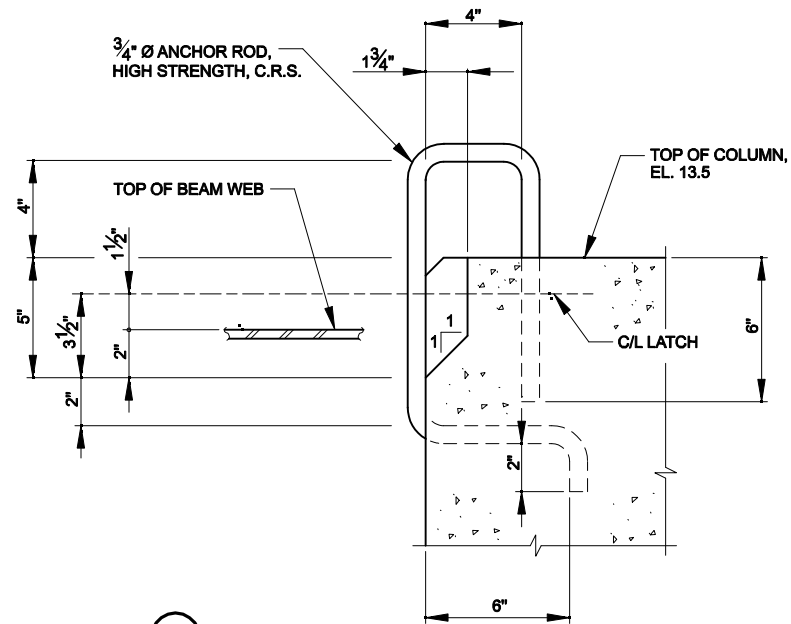
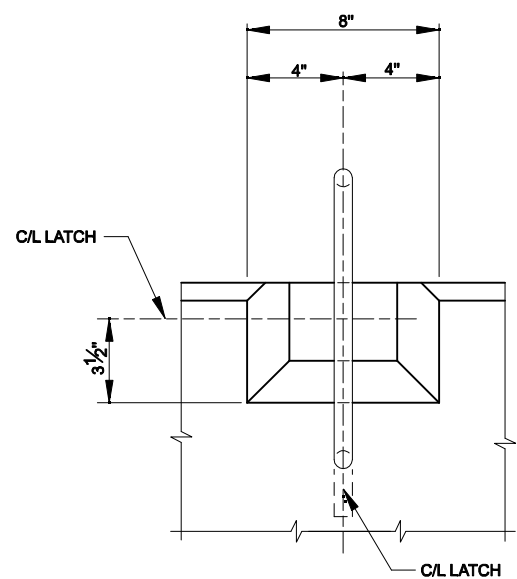
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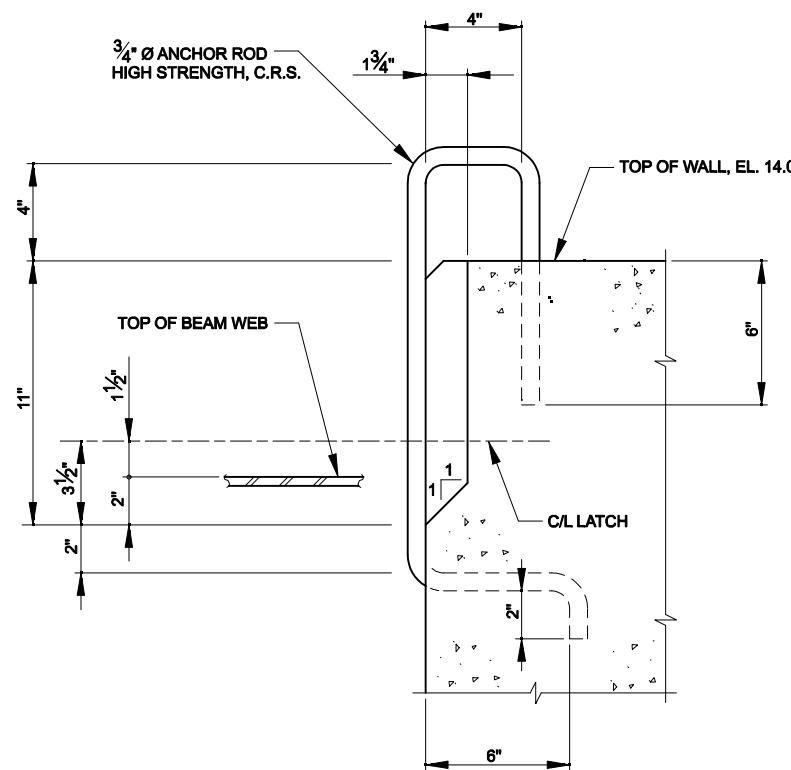
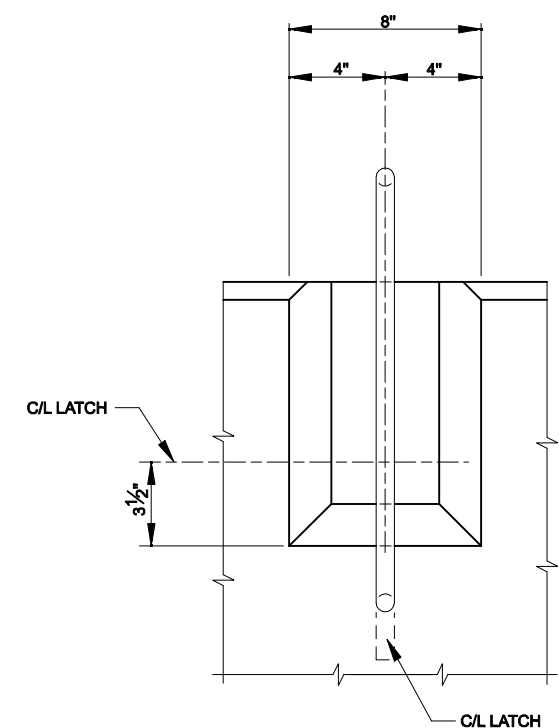
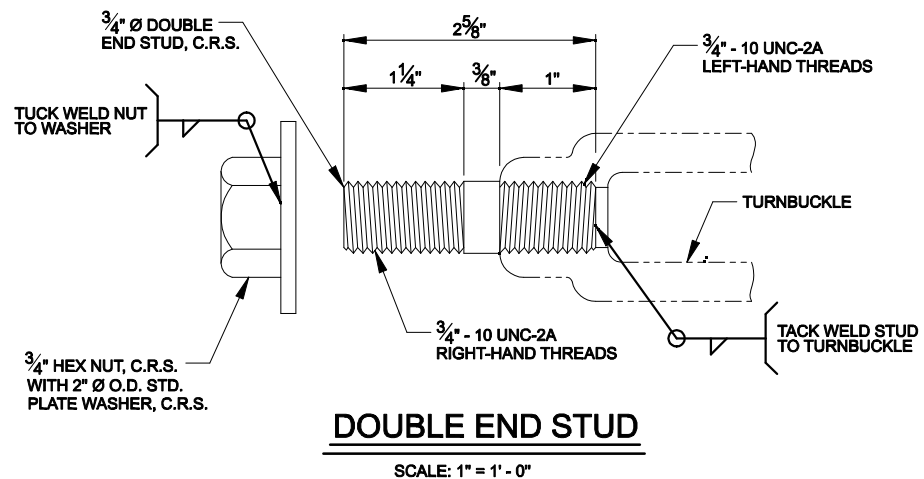
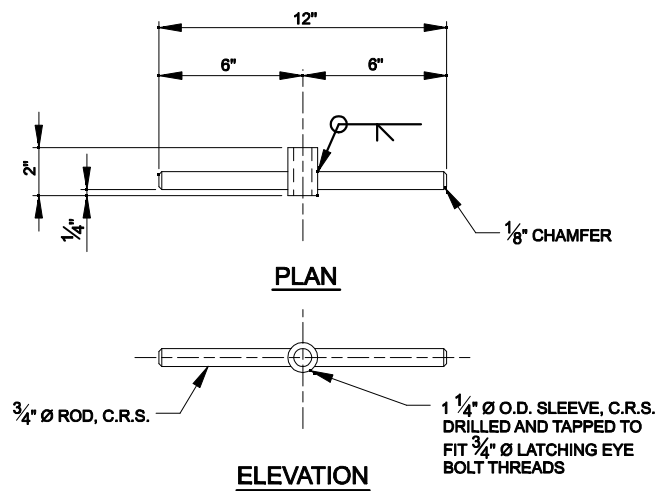
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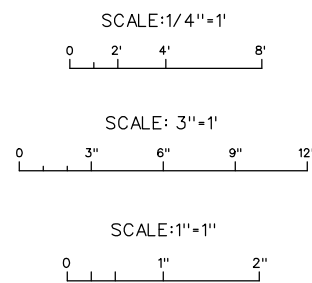
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DETAIL 2
SCALE: 3" = 1' - 0"



DETAIL 3
SCALE: 3" = 1' - 0"



US Army Corps of Engineers NEW ORLEANS DISTRICT	APPR
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	DATE
	DESCRIPTION
	MARK

DESIGNED BY: NEW ORLEANS	CONTRACT NO.:
DRAWN BY: NEW ORLEANS	FILE NUMBER: A/E TYPICALS
SUBMITTED BY: NEW ORLEANS, LOUISIANA	FILE NAME: AE-TYPICALS.DGN
DATE: MAY 2008	ANSI D

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HURRICANE DESIGN GUIDELINES
A/E TYPICAL DRAWINGS

ROLLER GATES
LATCHING DETAILS
(2 OF 2)

SHEET IDENTIFICATION
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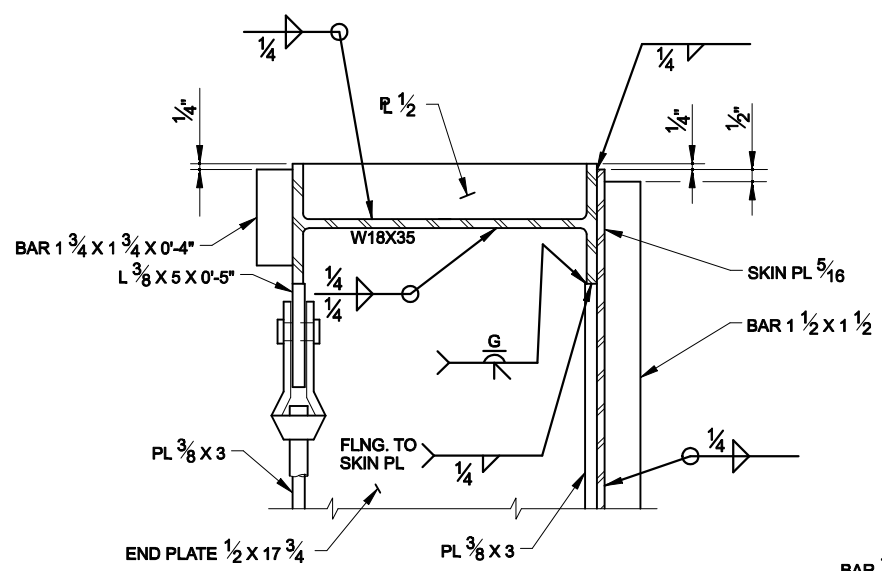
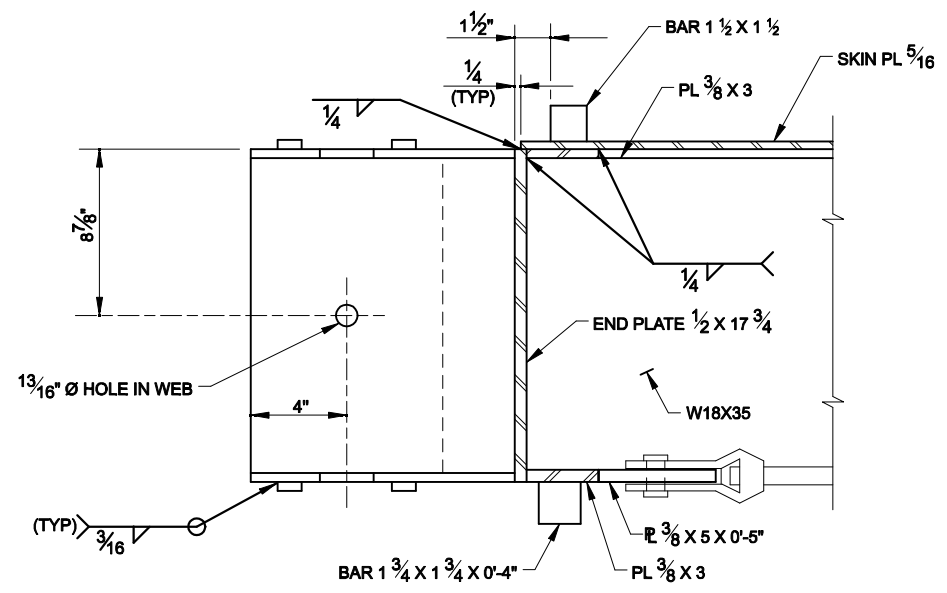
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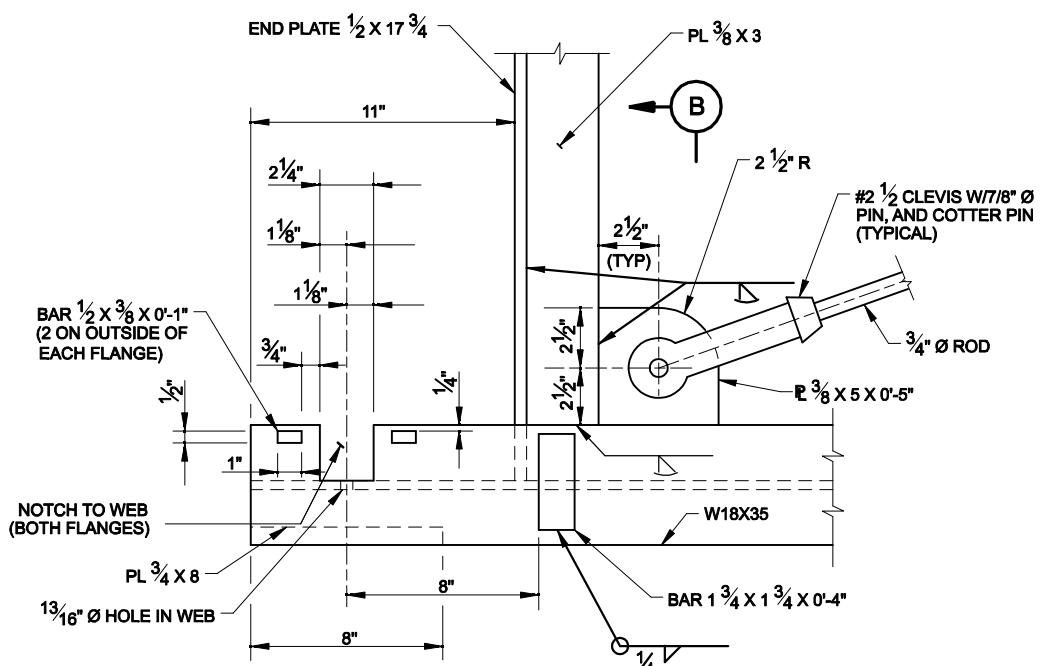
ROLLER GATES
CORNER DETAILS

SHEET IDENTIFICATION
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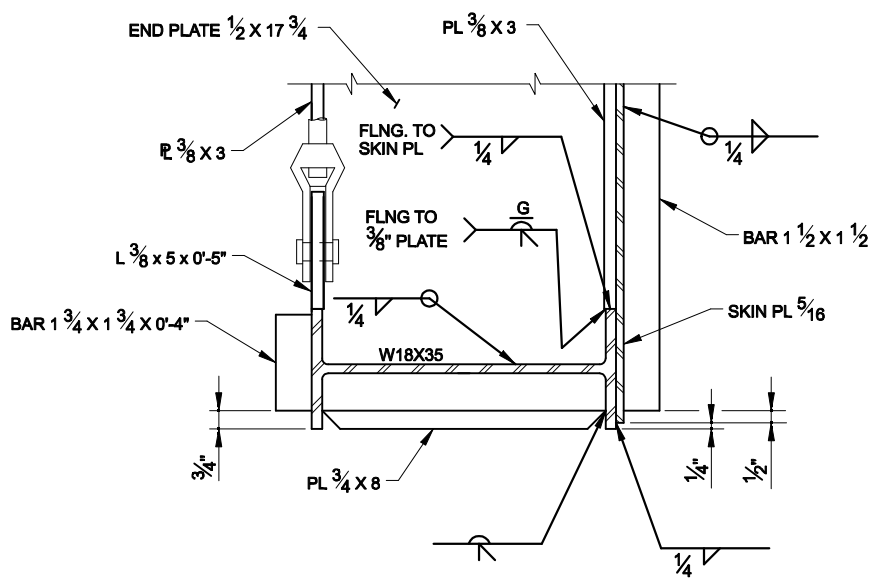


SECTION A

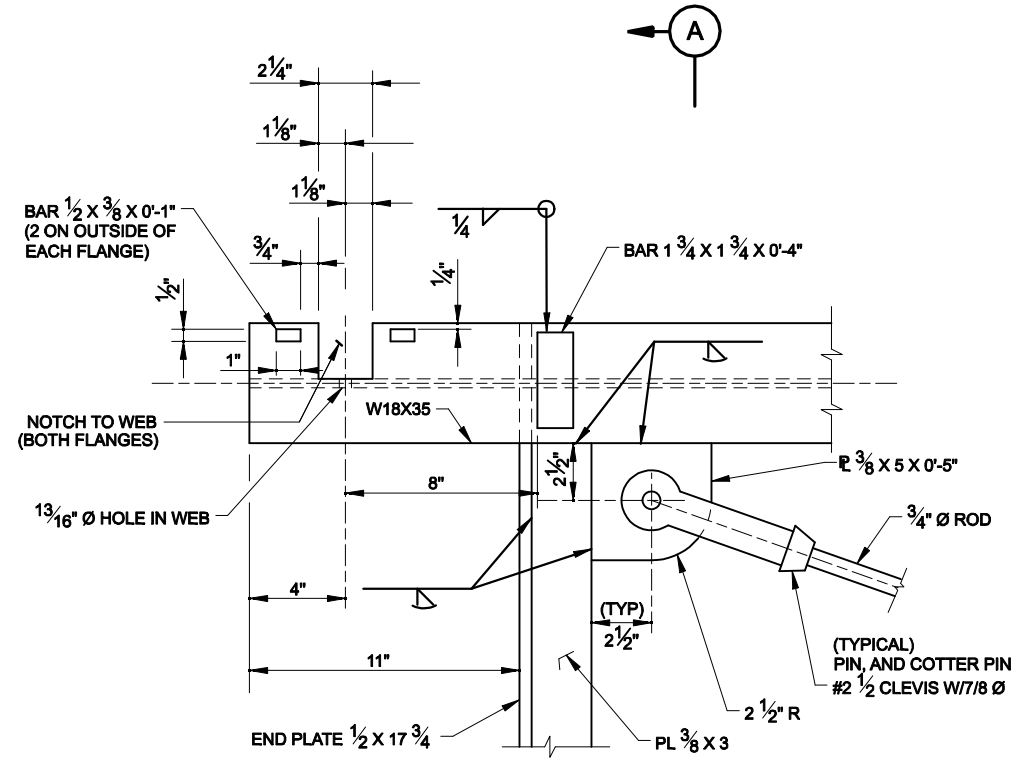
NOTE: WELDS SHOWN ARE TYPICAL FOR SIMILAR JOINTS.



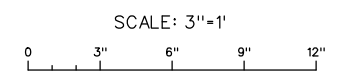
DETAIL 5
13 15



SECTION B



DETAIL 6
13 15



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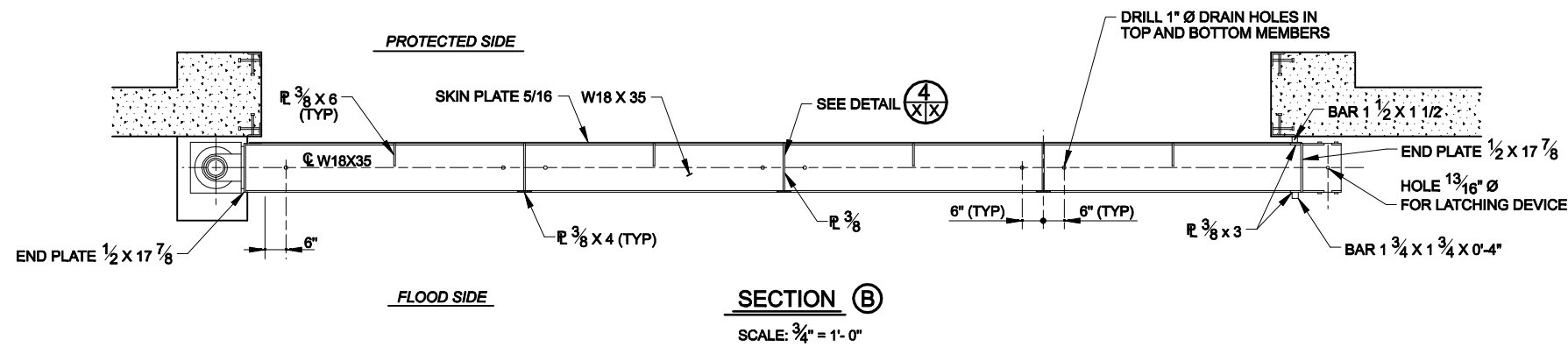
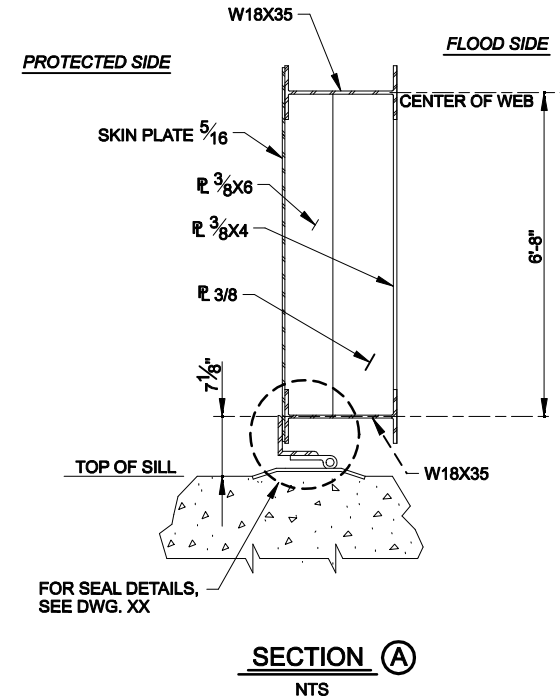
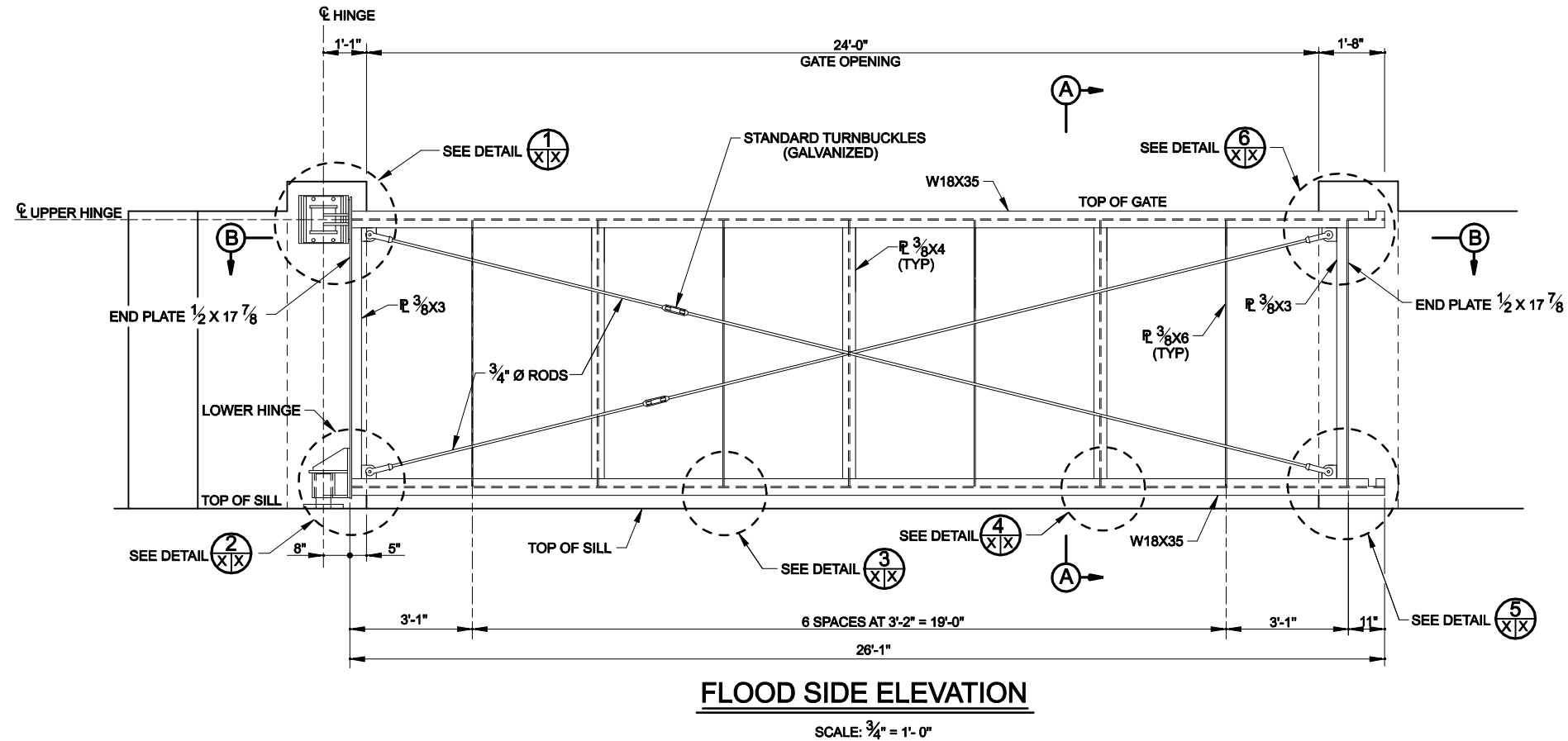
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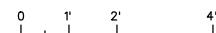
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SCALE: 1/2" = 1'



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DATE	DESCRIPTION	DATE	APPR. MARK

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DWN BY: NEW ORLEANS DISTRICT	FILE NUMBER: AE-TYPICALS
DATE: 08/15/08	FILE NAME: AE-TYP1.DGN
SCALE: 1/2" = 1'	ANSI D

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HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS
SWING GATES
SWING GATE ELEVATION

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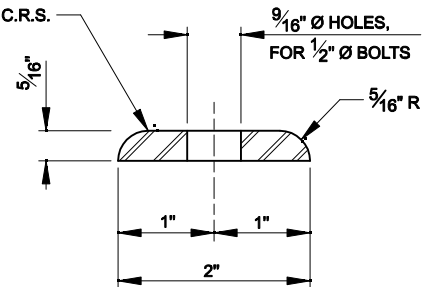
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DRAWN BY: NEW ORLEANS	FILE NUMBER: AE-TYPICALS
DATE: MAY 2008	ANSI D: AE-TYPICALS
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USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS

SWING GATES
SEAL DETAILS
(1 OF 2)

SCHEDULE		
GATE	DIMENSIONS	
	"A"	"B"

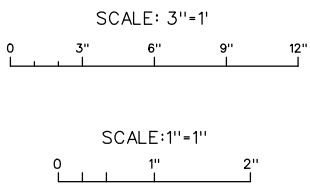
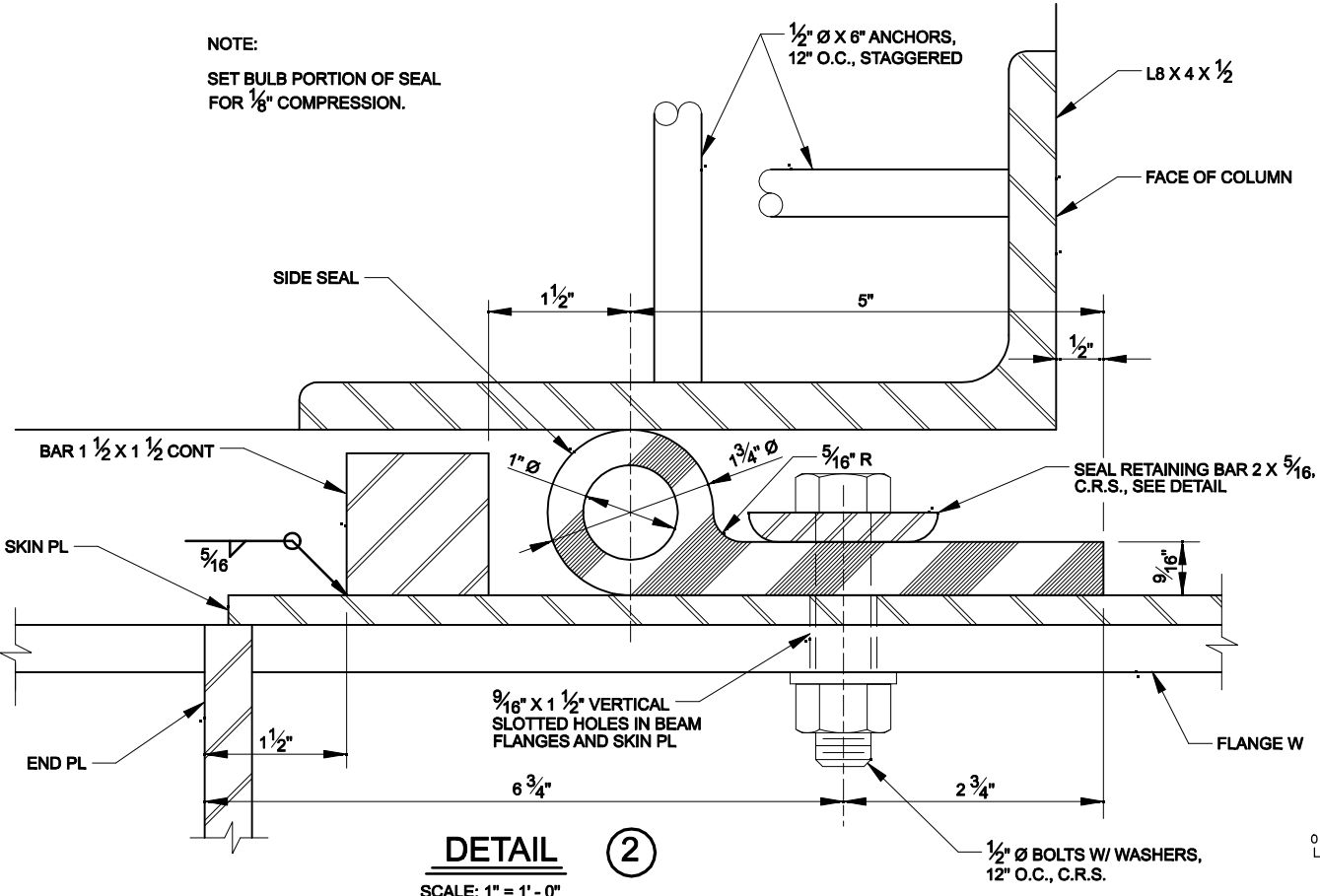
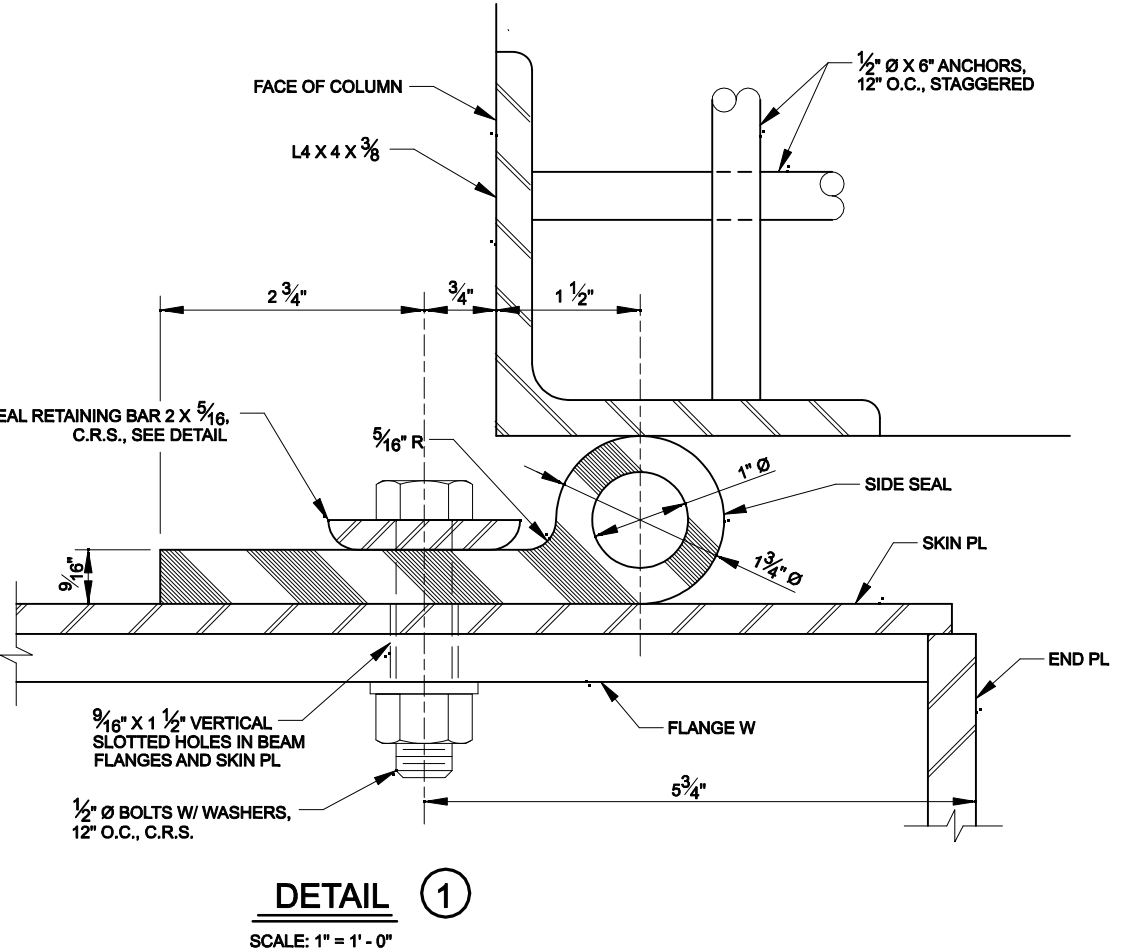
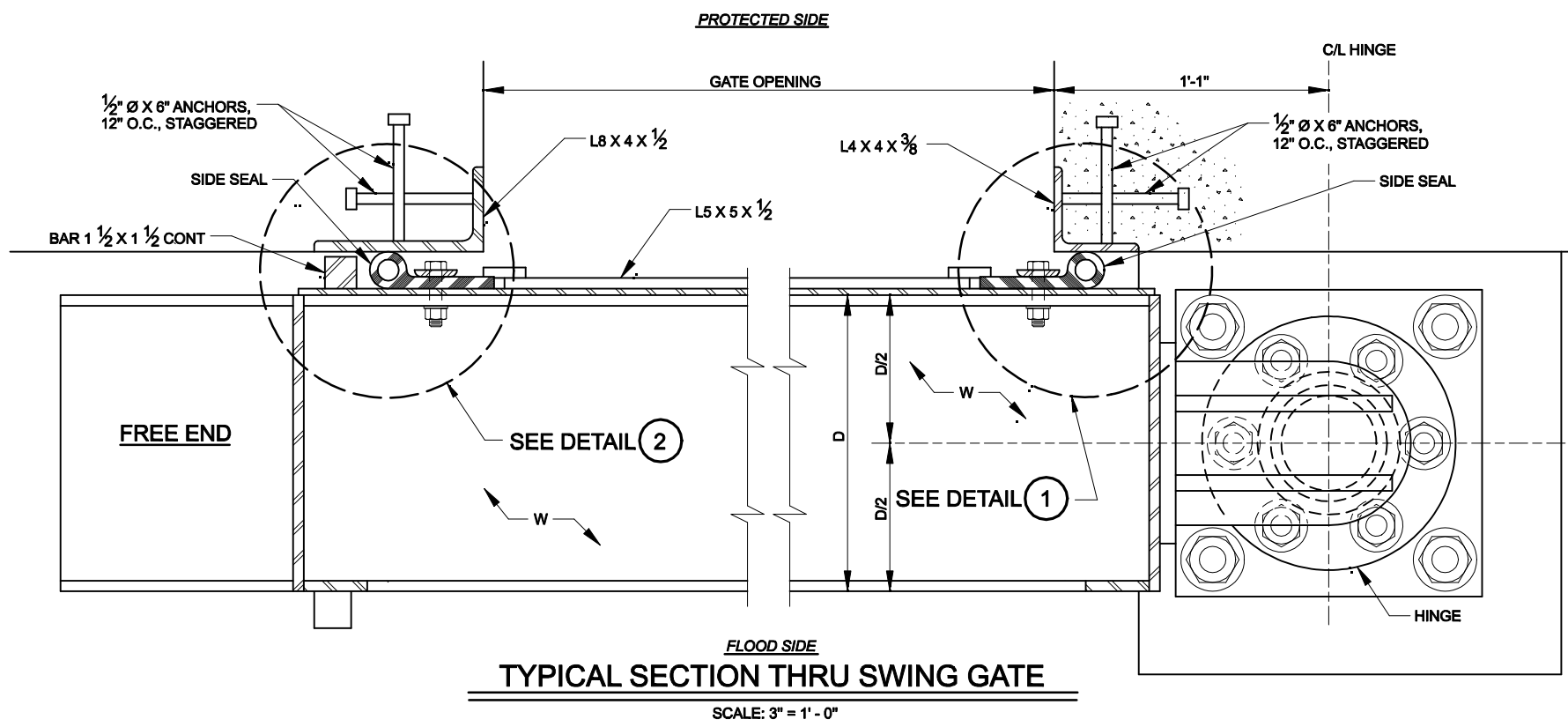


SEAL RETAINING BAR
SCALE: 1" = 1' - 0"

HINGE END

FORMULA:
ADD
1 5/8" (SEAL SET FOR 1/8" COMPRESSION)
SKIN PL THICKNESS
D/2 (HALF OF BEAM DEPTH)

= DIMENSION "A"



1

2

3

4

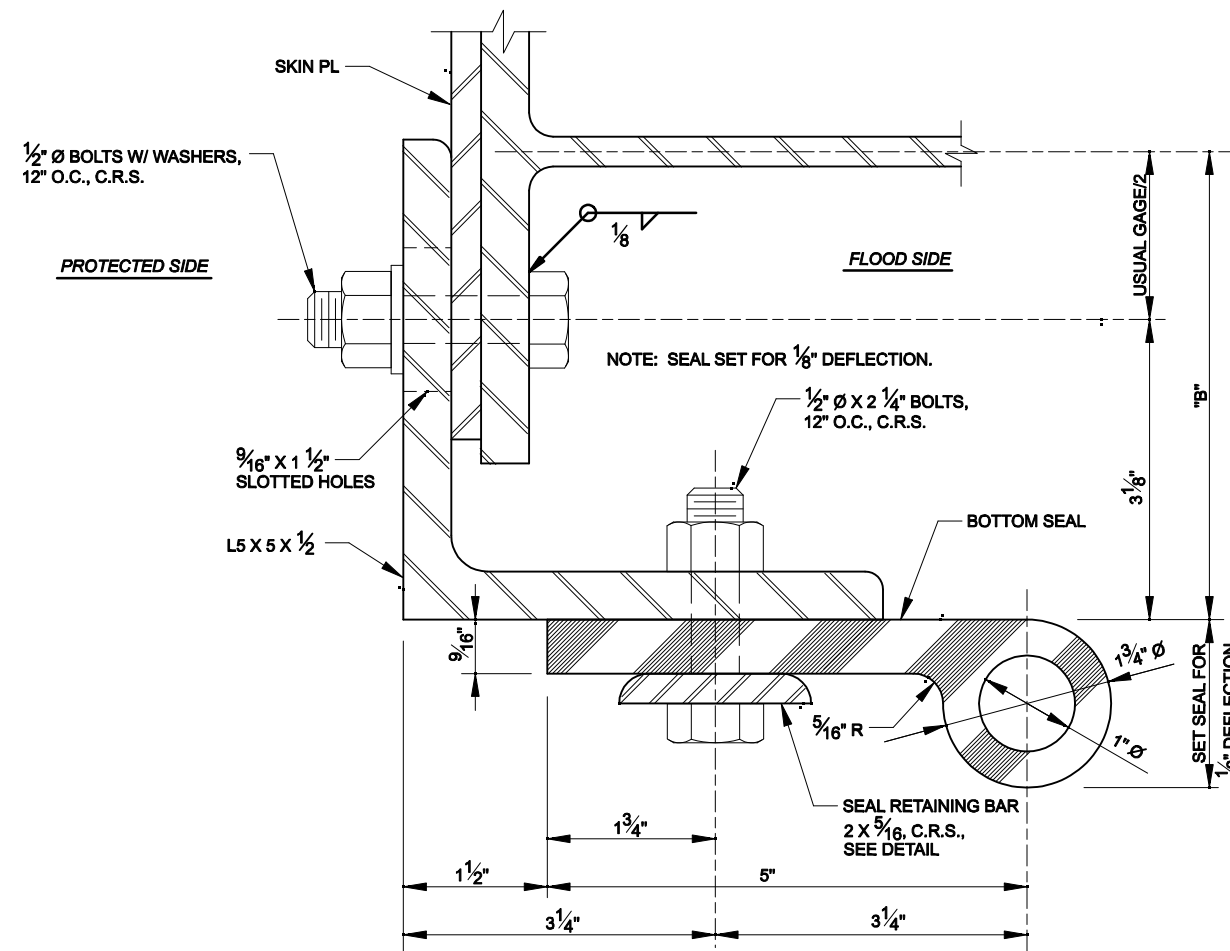
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D

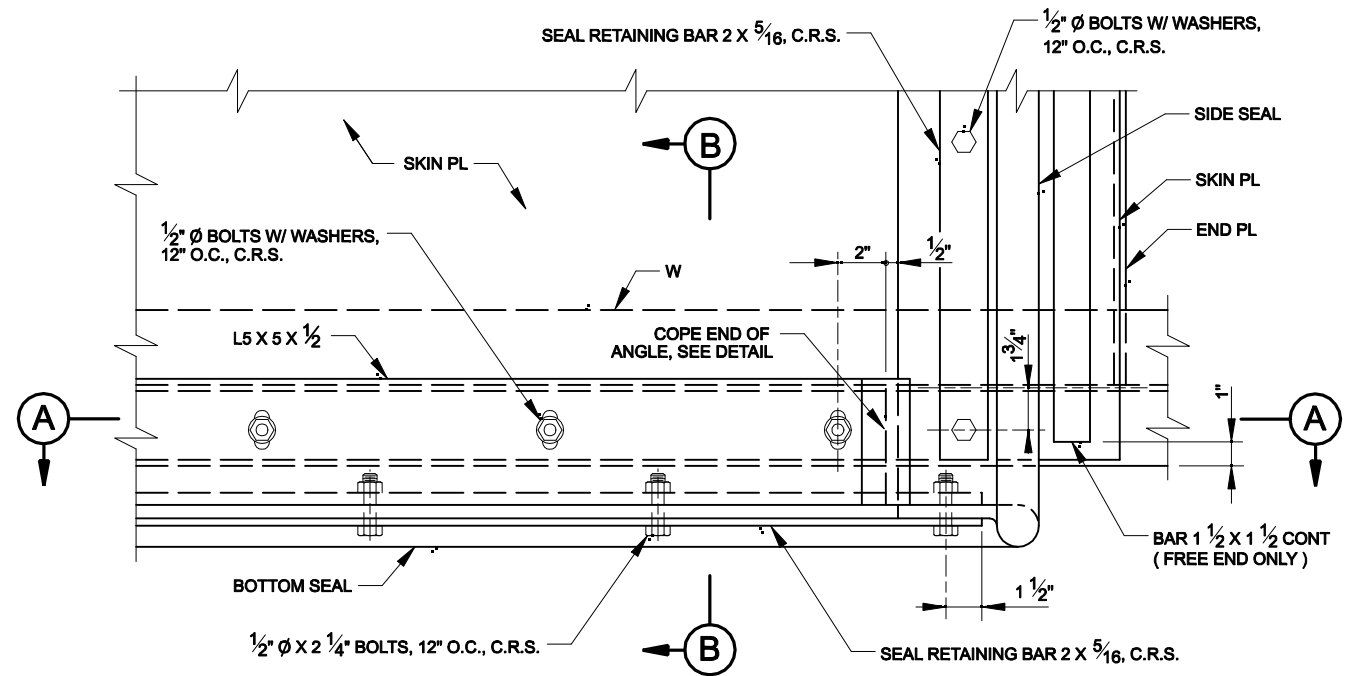
C

B

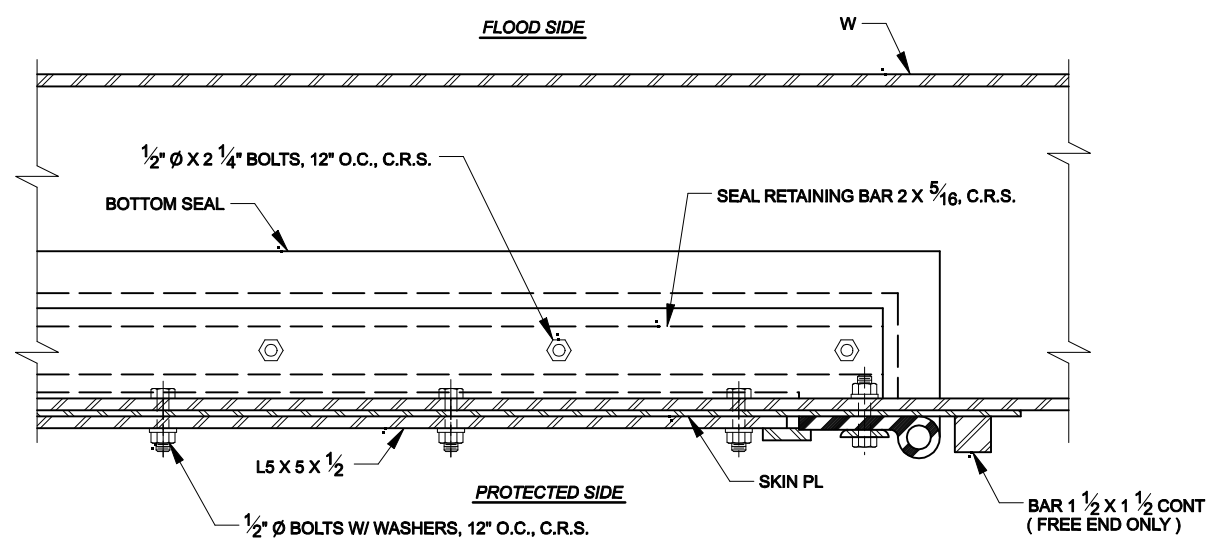
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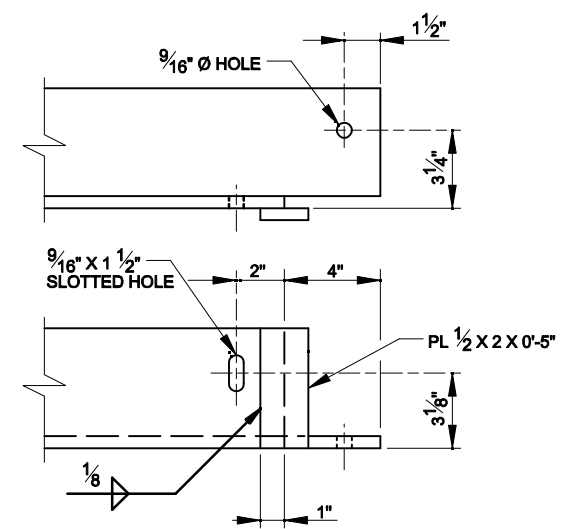
SECTION (B)
SCALE: 1" = 1'-0"



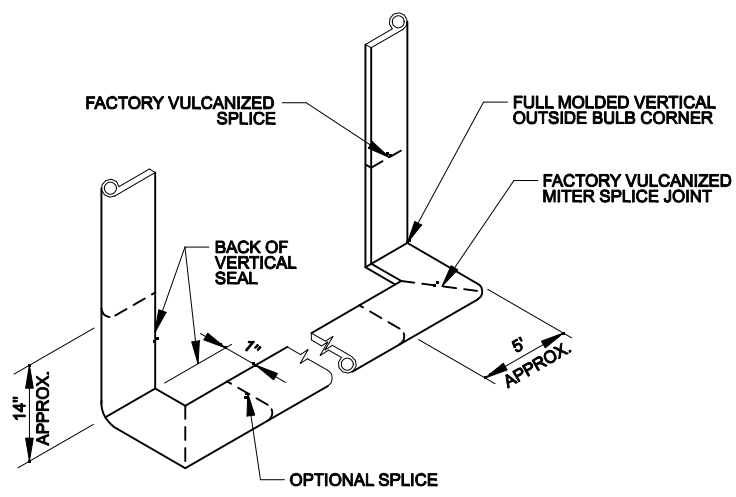
END ELEVATION - PROTECTED SIDE
SCALE: 3" = 1'-0"



SECTION (A)

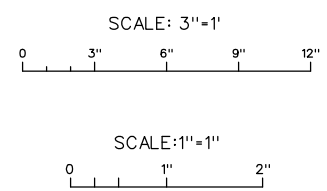


END OF L5 X 5 X 1/2
SCALE: 3" = 1'-0"



CORNER DETAIL, TYPICAL BOTH SIDES
TYPICAL GATE SEAL
NTS

- NOTES:
1. FOR GENERAL NOTES, SEE DWG. X.
 2. ALL SPLICES WILL BE FACTORY MADE IN HEAVY STEEL PRESS TYPE MOLDS UNDER PRESSURE AD HEAT.
 3. ALL SPLICE JOINTS MUST DEVELOP STRENGTH OF AT LEAST 50% OF THE MINIMUM TENSILE STRENGTH REQUIRED OF THE RUBBER.
 4. SEAL CLAMP ANGLES SHALL BE PAINTED ON ALL SIDES PRIOR TO ASSEMBLY.
 5. AFTER ASSEMBLY AND SEAL ADJUSTMENTS ARE MADE, ALL GAPS IN SEALS AND SEAL SUPPORTS SHALL BE SEALED WITH A SILICONE RUBBER SEALANT TO PROVIDE WATERTIGHT JOINTS.



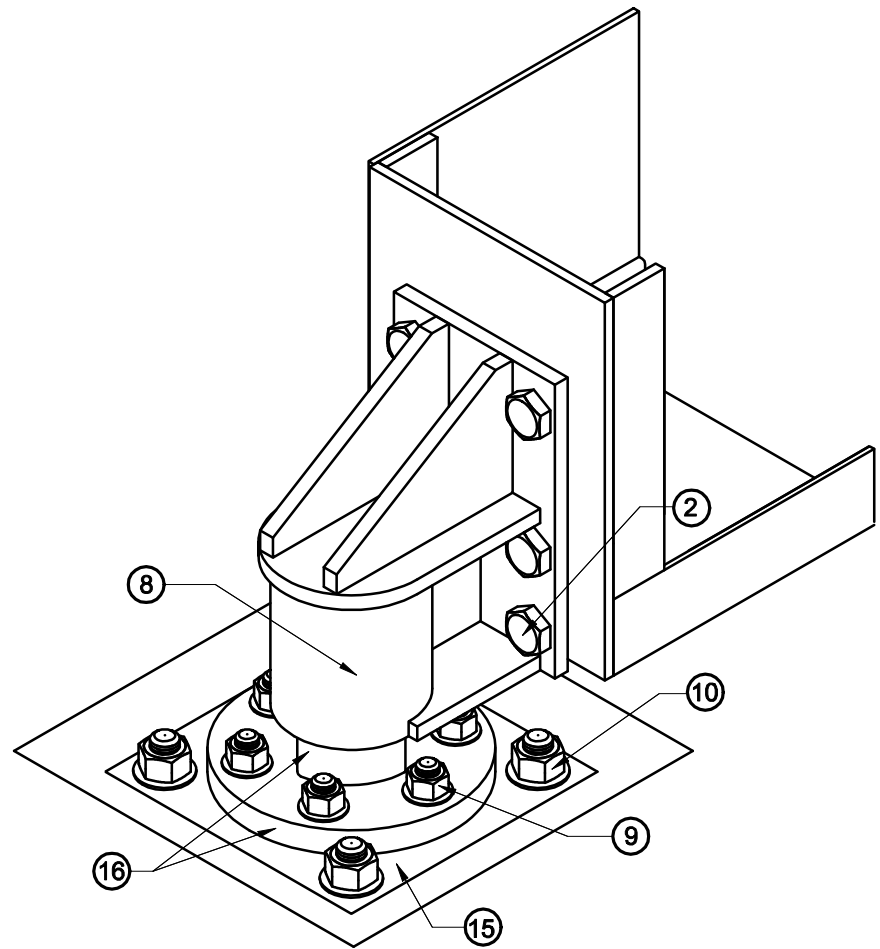
MARK	DESCRIPTION	DATE	APPR

DESIGNED BY: NEW ORLEANS	CONTRACT NO.:
DWN BY: NEW ORLEANS	FILE NUMBER: AE-TYPICALS
SUBMITTED BY: NEW ORLEANS	FILE NAME: AE-TYP21020N
DATE: MAY 2008	SIZE: 12" x 1"

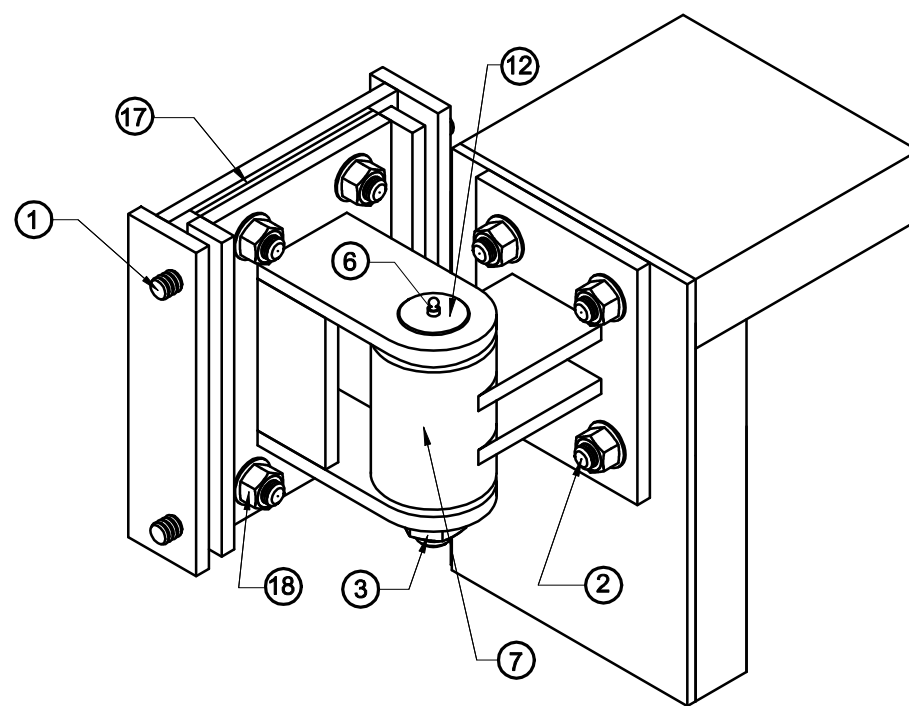
USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS

SWING GATES
SEAL DETAILS
(2 OF 2)

SHEET IDENTIFICATION
X-00



STANDARD LOWER HINGE
SCALE: 3" = 1' - 0"



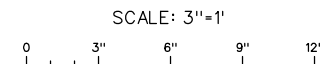
STANDARD UPPER HINGE
SCALE: 3" = 1' - 0"

REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. 2
FOR PLAN AND PROFILE, SEE DWGS.
FOR SWING GATE MONOLITH DETAILS, SEE DWG.
FOR SWING GATE DETAILS, SEE DWGS.
FOR SWING GATE HINGE DETAILS, SEE DWGS.

MARK NO.	QUANTITY	DESCRIPTION	MATERIAL	MARK NO.	QUANTITY	DESCRIPTION	MATERIAL
PARTS NOT DETAILED				-PARTS DETAILED-			
1	4	SET SCREW - HEX SOCKET, 1" Ø X 2 1/2" LONG, CLASS 3A, FLAT POINT	FED. SPEC. FF-S-200A(2) C.R.S., ALLOY 304	10	4	1 1/4" Ø X 2'-0" LONG HEX BOLT WITH DBL. NUT AND FLAT WASHERS	SAME AS MARK NO. 2
2	10	1" Ø X 3" LONG HEX BOLT WITH NUT AND FLAT WASHER 1 1/16" I.D. X 2 1/2" O.D. X 5/32" THK.	ASTM F593, GROUP 2, ALLOY 316, CONDITION CW	11	1	BUSHING, 4" O.D. X 3" I.D. X 6" LONG	B-22, NO.937
3	1	NUT, HEAVY HEX 1 1/2"-6 UNC-2B, W/ FLAT WASHER 1 5/8" I.D. X 3 1/2" O.D. X 3/16" THK.	ASTM F594, GROUP 2, ALLOY 316, CONDITION CW	12	1	UPPER HINGE SHAFT, 2.99" O.D. X 11 1/2" LONG	A-276, TYPE 431
4	2	GREASE SEAL, GARLOCK KLOZURE NO. 63 - 2176 OR EQUAL	COMMERCIAL GRADE	13	1	THRUST WASHER, 5 7/16" Ø WITH 1/2" HOLE	B-22, NO.937
5	1	GREASE SEAL, GARLOCK KLOZURE NO. 53 - 2753 OR EQUAL	COMMERCIAL GRADE	14	1	BUSHING, 5 1/2" O.D. X 4 1/2" I.D. X 6" LONG	B-22, NO.937
6	2	GREASE FITTING, 1/8" N.P.T. TYPE	COMMERCIAL GRADE	15	1	BASE PLATE 1 1/4" X 14 1/2" X 1'-2 1/2"	STEEL A-36
7	1	MECHANICAL TUBING, 5 1/4" O.D. X 4" I.D. X 7" LONG MACHINED FOR CLASS 6 FIT BETWEEN I.D. OF TUBING AND O.D. OF MK-11 BUSHING	A-513, TYPE 6	16	1	BEARING PLATE 1 1/4 X 12" Ø	A-276, TYPE 304
8	1	MECHANICAL TUBING, 6 3/4" O.D. X 5 1/2" I.D. X 7 1/2" LONG MACHINED FOR CLASS 6 FIT BETWEEN I.D. OF TUBING AND O.D. OF MK-14 BUSHING	A-513, TYPE 6			PEDESTAL SHAFT 4 1/2" Ø X 10 1/2" LONG	A 276, TYPE 431
9	6	1" Ø X 4" LONG HEX BOLT WITH NUT AND FLAT WASHER 1 1/16" I.D. X 2 1/2" O.D. X 5/32" THK.	SAME AS MARK NO. 2	17	AS REQ'D	SHIM PLATE 1/8 X 5 X 0'-12"	STEEL A-36
				18	4	1" Ø X 12" LONG HEX BOLT WITH NUT & WASHER	SAME AS MARK NO. 2
				19	2	PLATE 3/8 X 3 X 0'-9"	STEEL A-36
				20	4	PLATE 3/8 X 4 X 0'-4"	STEEL A-36

NOTE: QUANTITIES SHOWN ARE FOR ONE COMPLETE SWING GATE.

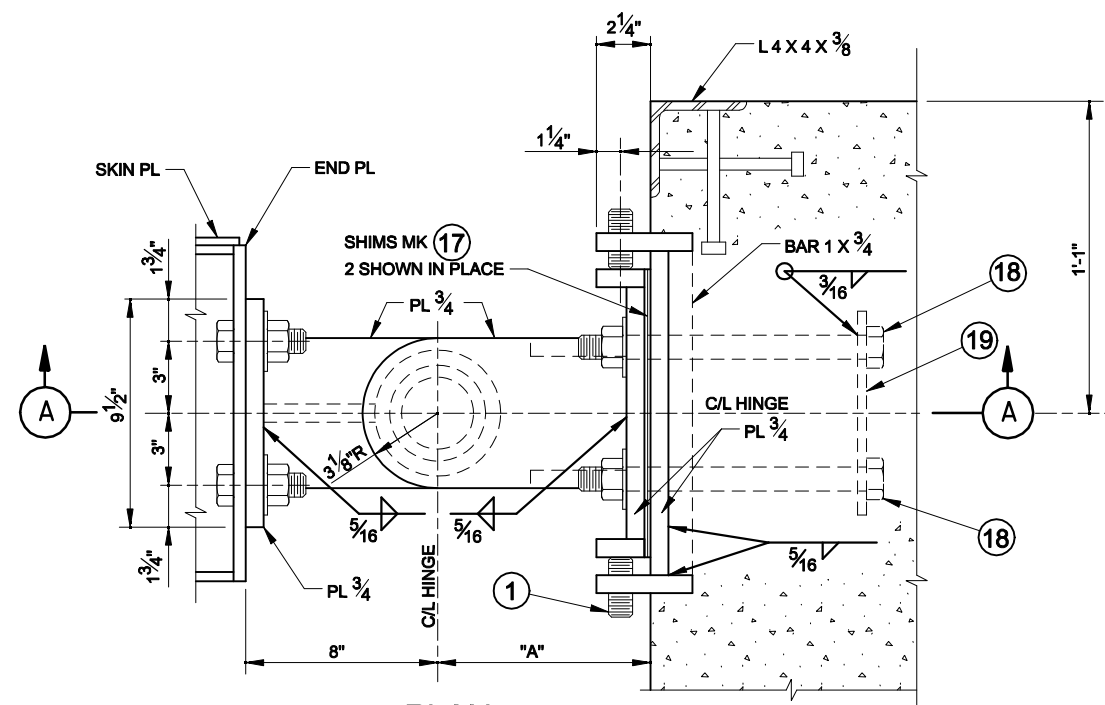


DATE	DATE	DATE	DATE
APPROVAL	APPROVAL	APPROVAL	APPROVAL
DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION
MARK	MARK	MARK	MARK

DESIGNED BY: NEW ORLEANS DISTRICT	DATE: 10/08	SUBMITTED BY:	CONTRACT NO.:
DWN BY:	CHK BY:	FILE NUMBER:	AE TYPICALS
U.S. ARMY CORPS OF ENGINEERS	U.S. ARMY CORPS OF ENGINEERS	U.S. ARMY CORPS OF ENGINEERS	U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT	NEW ORLEANS DISTRICT	NEW ORLEANS DISTRICT	NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA	NEW ORLEANS, LOUISIANA	NEW ORLEANS, LOUISIANA	NEW ORLEANS, LOUISIANA

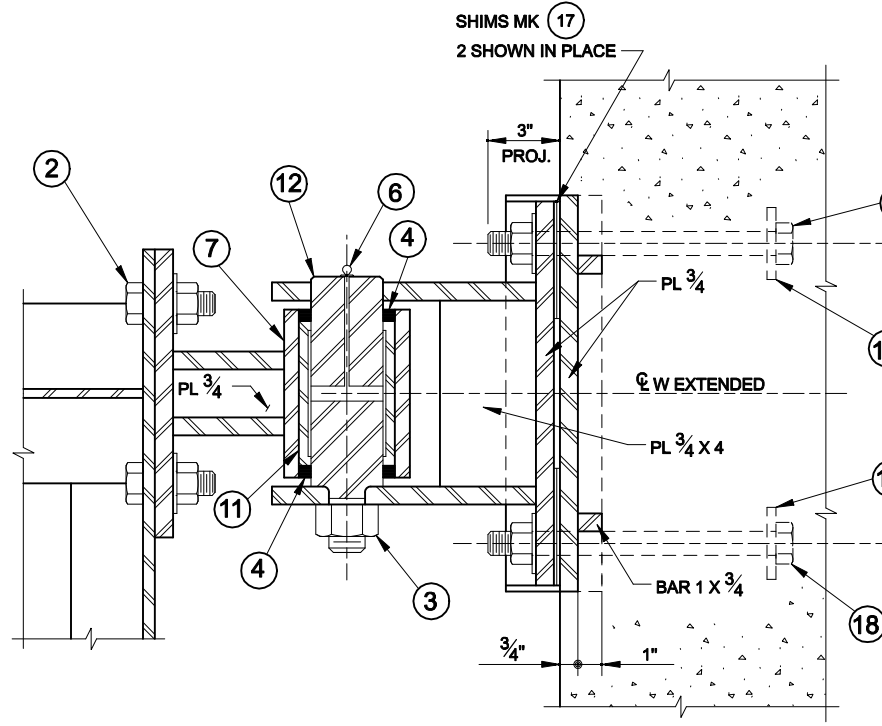
USACE - NEW ORLEANS DISTRICT
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS
SWING GATES
STANDARD HINGES (ISOMETRIC)

SHEET IDENTIFICATION
X-00

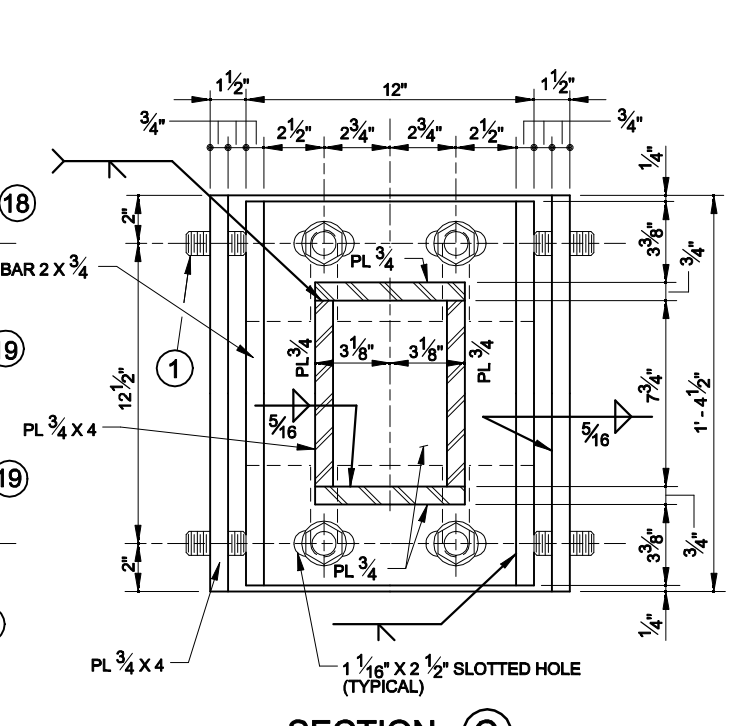


PLAN

DIMENSION "A"
SEE SWING GATE SEAL DETAILS
DWGS. AETYP03.DGN AND
AETYP03R.DGN.



SECTION A



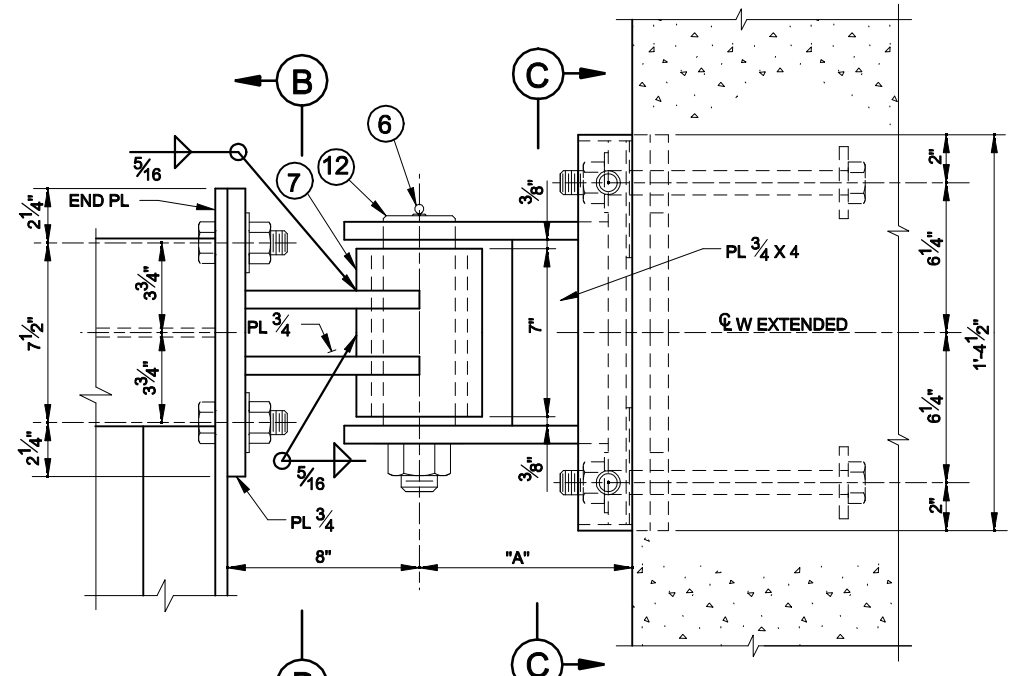
SECTION C

UPPER HINGE

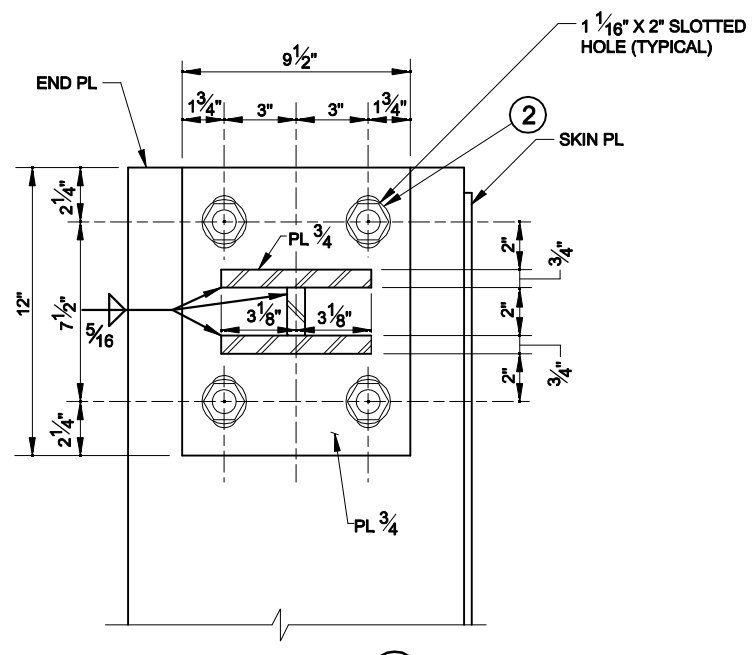
SCALE: 3" = 1'-0"

NOTE:
WELDS SHOWN ARE TYPICAL FOR
SIMILAR JOINTS WHERE NOT SHOWN.

NOTE:
10 DENOTES MARK NUMBERS, SEE PLATE



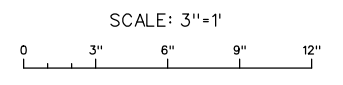
ELEVATION



SECTION B

REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. XX
FOR PLAN AND PROFILE, SEE DWGS. XX
FOR SWING GATE MONOLITH DETAILS, SEE DWG. XX
FOR SWING GATE SEAL DETAILS, SEE DWG. XX
FOR MISCELLANEOUS DETAILS, SEE DWG. XX

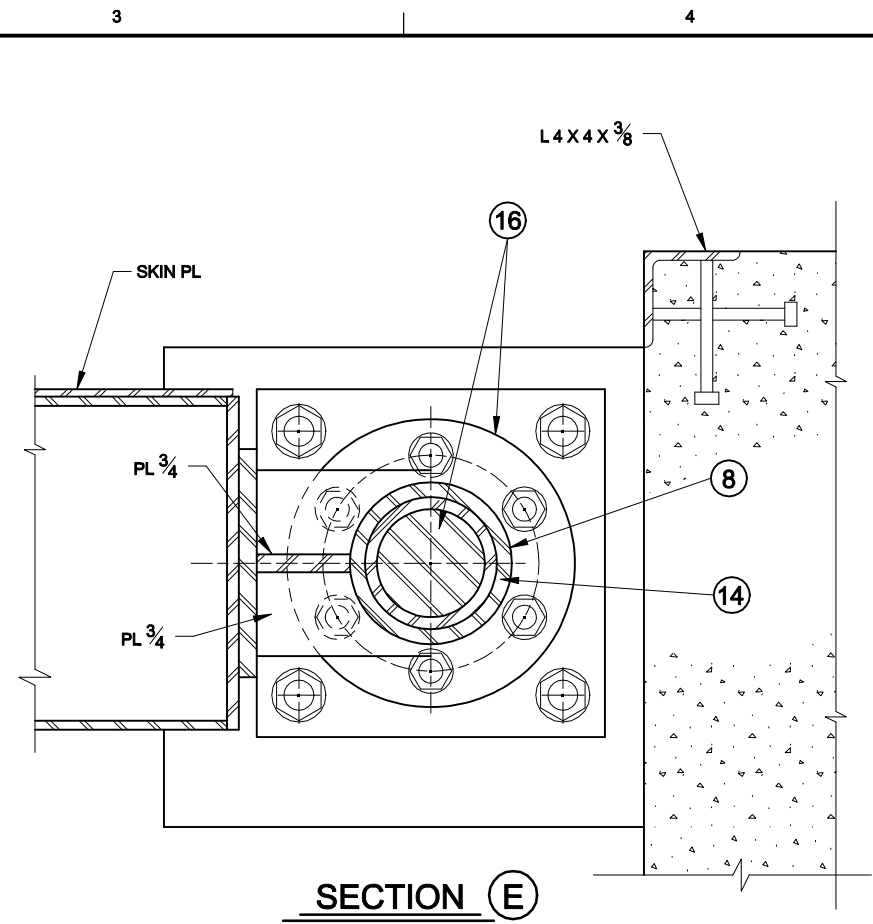
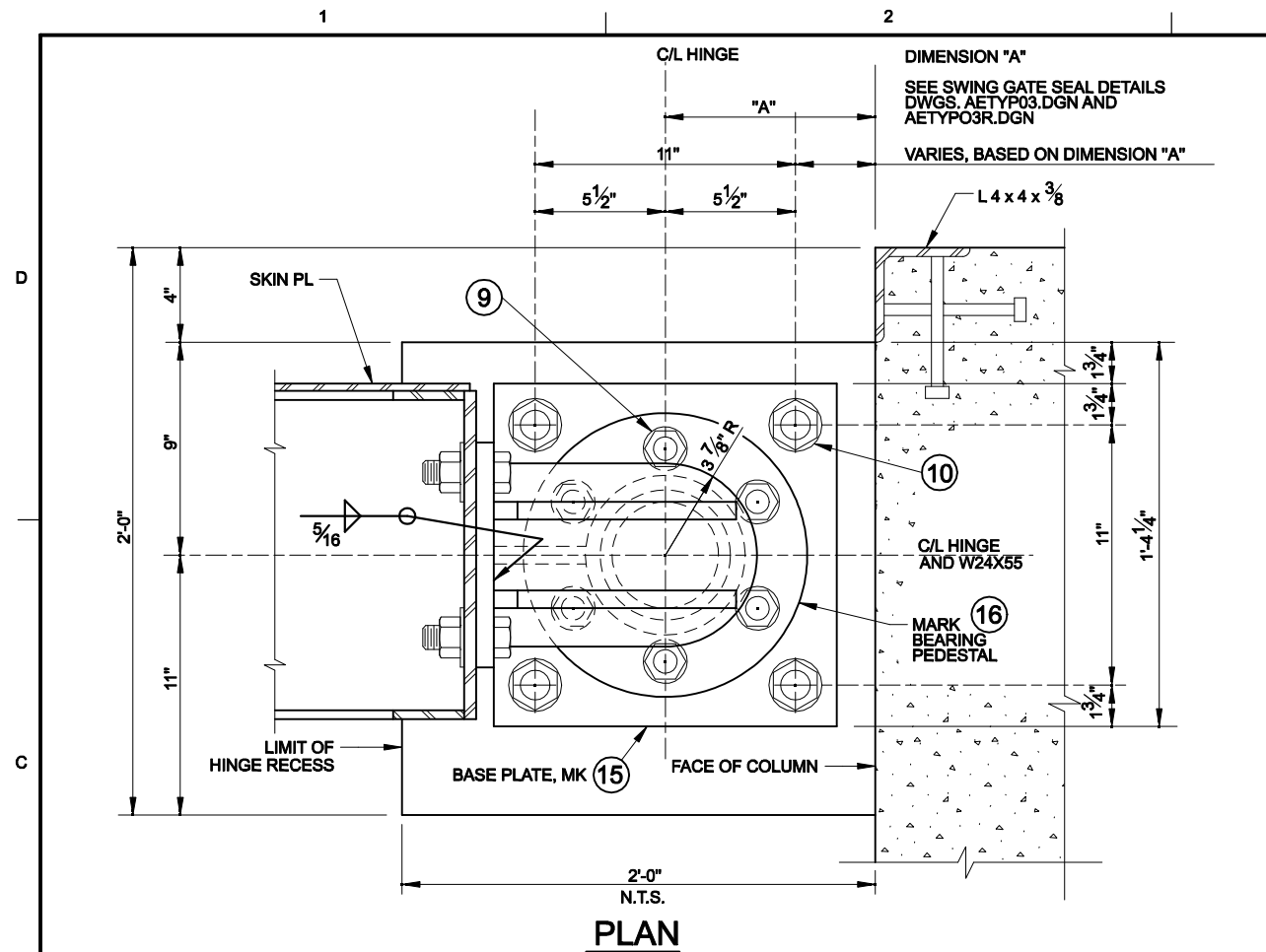


MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: NEW ORLEANS	SUBMITTED BY:	DATE: MAY 2008	CONTRACT NO.:
DWN BY: NEW ORLEANS	FILE NUMBER: AETYP03	FILE NAME: AETYP03.DGN	ANSI D:
U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA	FOR GENERAL NOTES, SEE DWG. XX FOR PLAN AND PROFILE, SEE DWGS. XX FOR SWING GATE MONOLITH DETAILS, SEE DWG. XX FOR SWING GATE SEAL DETAILS, SEE DWG. XX FOR MISCELLANEOUS DETAILS, SEE DWG. XX	SCALE: 3" = 1'-0"	

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS

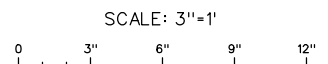
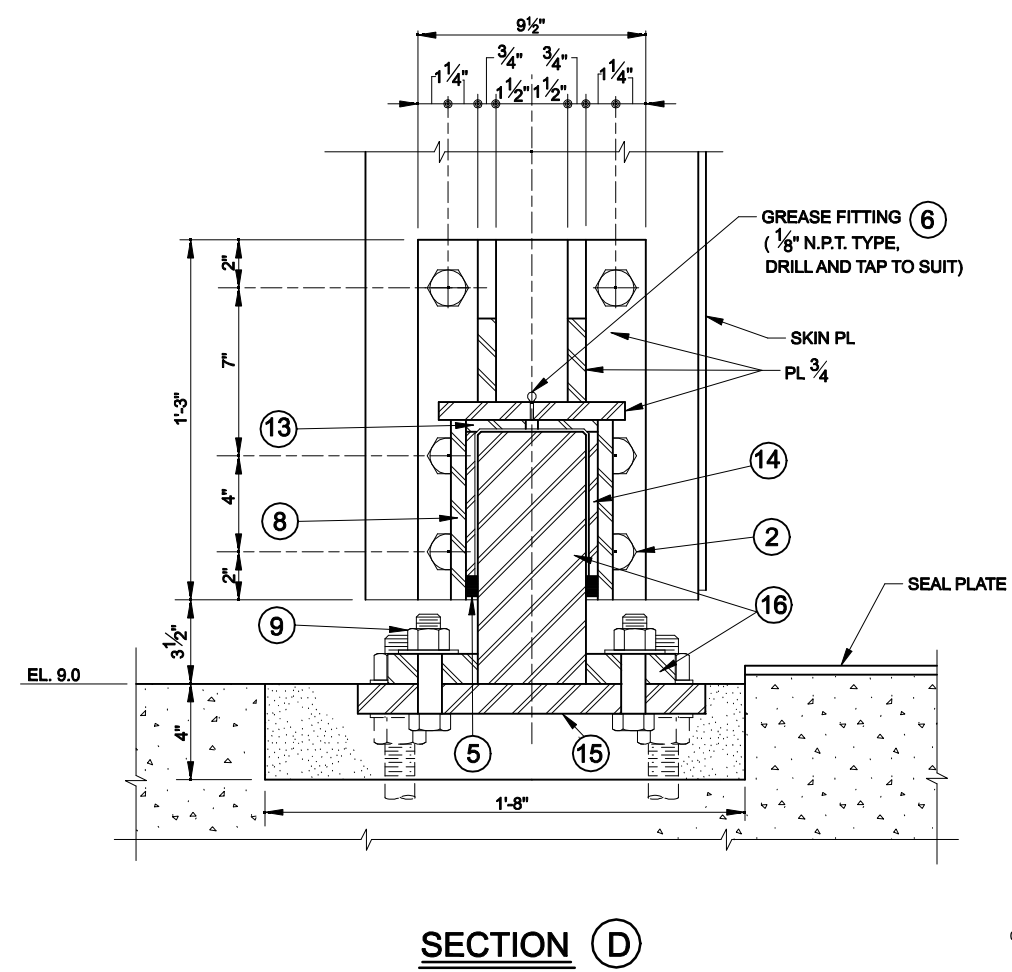
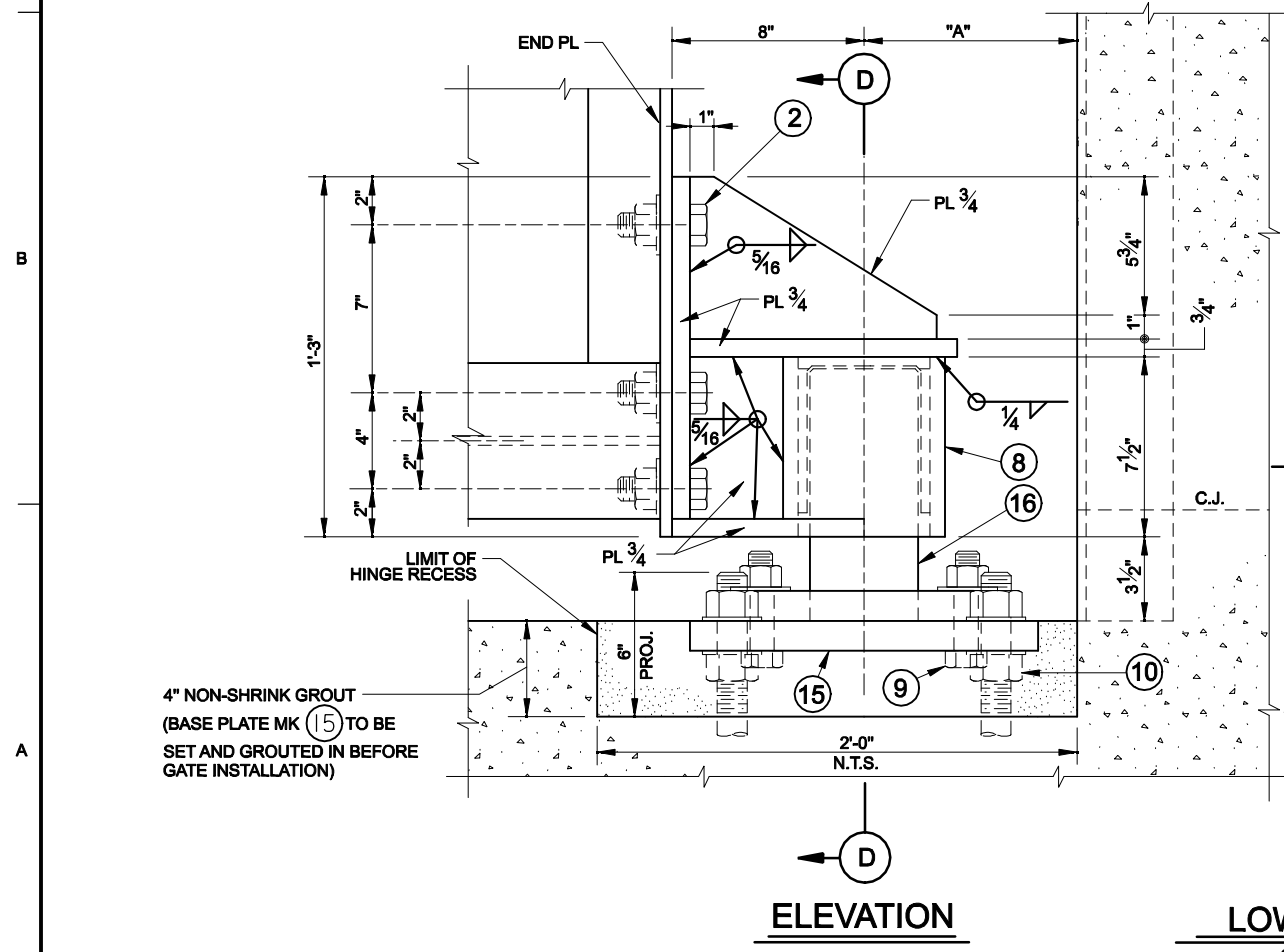
SWING GATES
HINGE SECTIONS
(1 OF 2)



NOTE:
(10) DENOTES MARK NUMBERS, SEE PLATE XX

REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. XX
FOR PLAN AND PROFILE, SEE DWGS. XX
FOR SWING GATE MONOLITH DETAILS, SEE DWG. XX
FOR SWING GATE SEAL DETAILS, SEE DWG. XX
FOR MISCELLANEOUS DETAILS, SEE DWG. XX



MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: NEW ORLEANS DISTRICT	DATE: JAN 2008	SOLICITATION NO.:
DRAWN BY: AETYP03	CONTRACT NO.:	FILE NUMBER: AETYP03R
U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA	SUBMITTED BY:	FILE NAME: AETYP03R.DGN
	PLOT SCALE: 3" = 1"	ANSI D

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
A/E TYPICAL DRAWINGS

SWING GATES
HINGE SECTIONS
(2 OF 2)

SHEET IDENTIFICATION
X-00

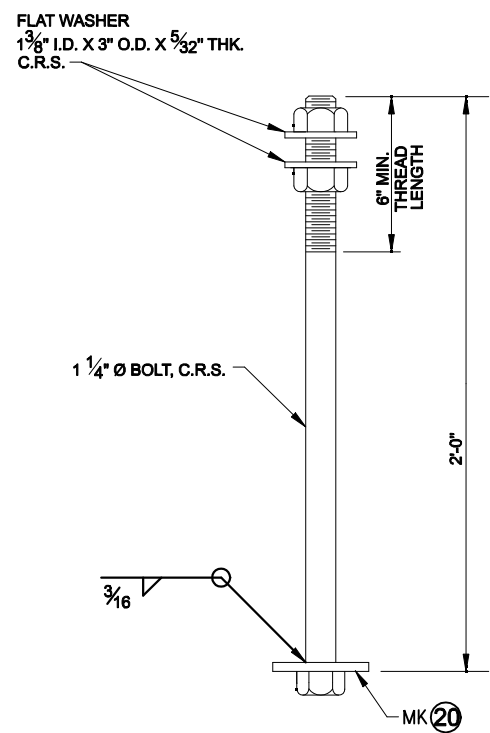
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2

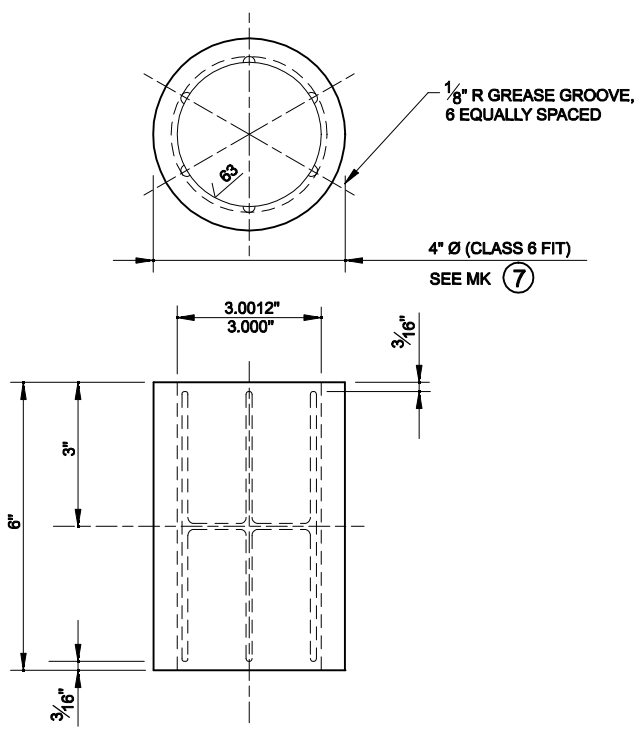
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4

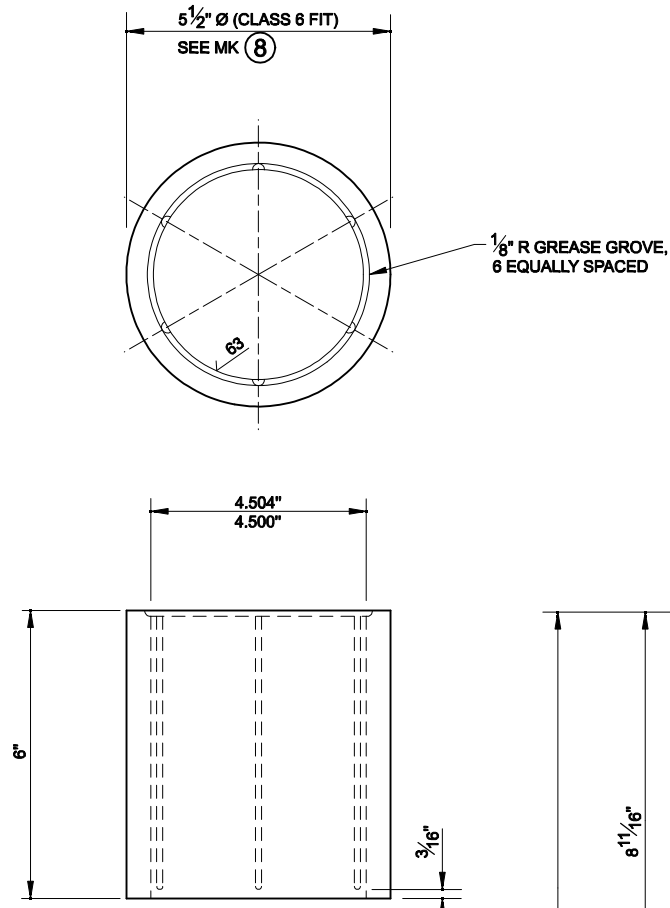
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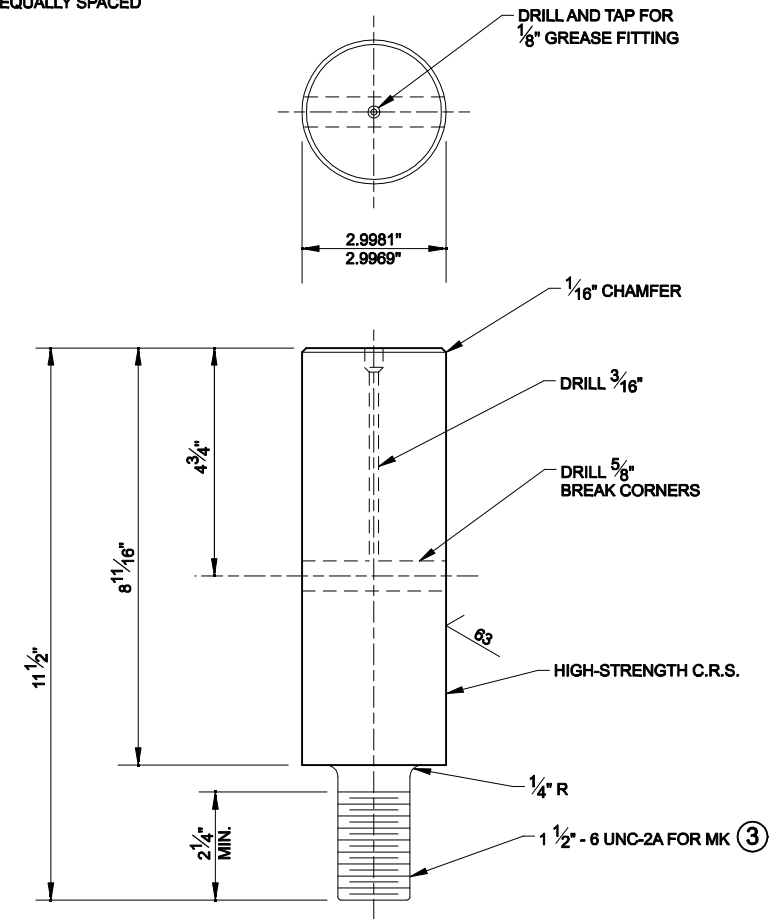
MK-10
ANCHOR BOLT
SCALE: 3" = 1'-0"



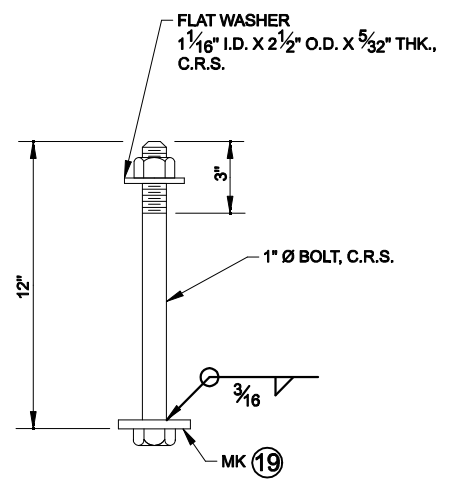
MK-11
BUSHING
SCALE: 6" = 1'-0"



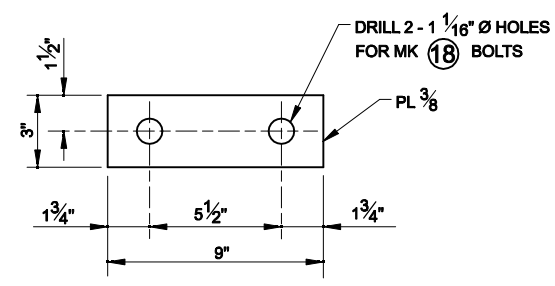
MK-14
BUSHING
SCALE: 6" = 1'-0"



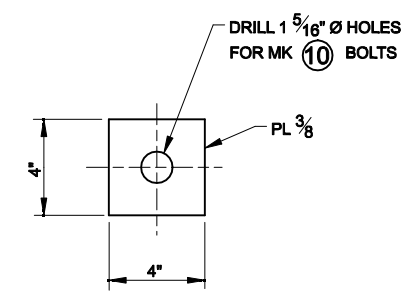
MK-12
UPPER HINGE SHAFT
SCALE: 6" = 1'-0"



MK-18
ANCHOR BOLT
SCALE: 3" = 1'-0"



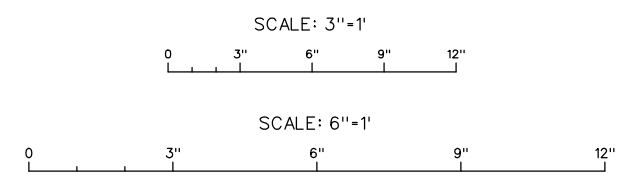
MK-19
PLATE
SCALE: 3" = 1'-0"



MK-20
PLATE
SCALE: 3" = 1'-0"

REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. XX
FOR PLAN AND PROFILE, SEE DWGS. XX
FOR SWING GATE MONOLITH DETAILS, SEE DWGS. XX
FOR SWING GATE DETAILS, SEE DWGS. XX
FOR MARK NUMBERS, SEE DWG. XX



MARK	DESCRIPTION	DATE	APPR.

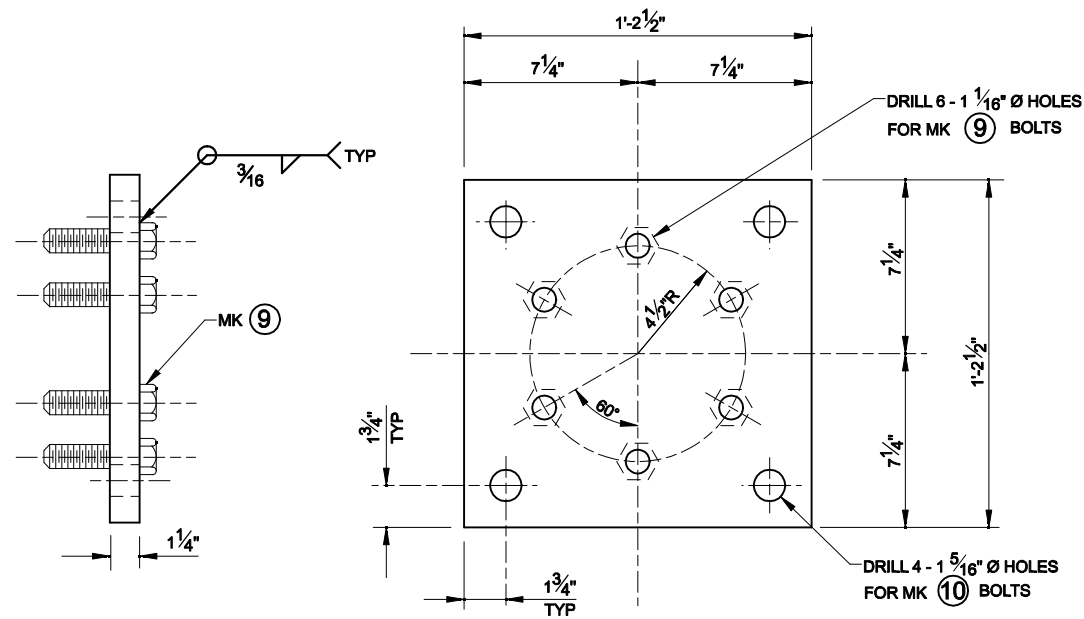
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DWN BY: NEW ORLEANS	CONTRACT NO.:
SUBMITTED BY:	FILE NUMBER: A/E TYPICALS
PLOT SCALE: 3" = 1'	FILE NAME: AE-TYPBOLDGN
SIZE: 3" x 11"	ANSI D

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
A/E TYPICAL DRAWINGS

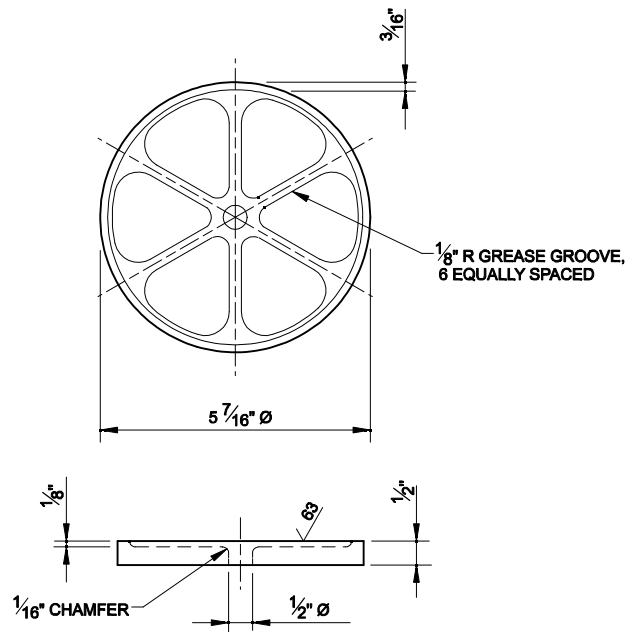
SWING GATES
HINGE DETAILS
(1 OF 2)

SHEET IDENTIFICATION
X-00

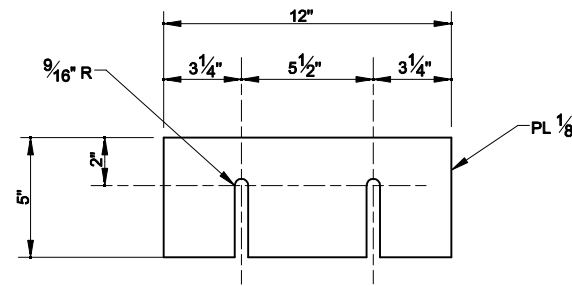
D



MK-15
BASE PLATE
SCALE: 3" = 1'-0"

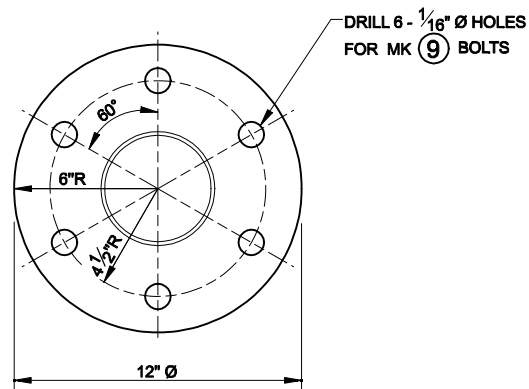


MK-13
THRUST WASHER
SCALE: 6" = 1'-0"



MK-17
SHIM
SCALE: 3" = 1'-0"

C

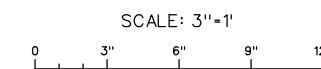


MK-16
BEARING PEDESTAL
SCALE: 3" = 1'-0"

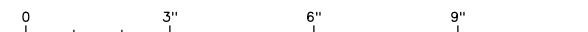
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REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. XX
FOR PLAN AND PROFILE, SEE DWGS. XX
FOR SWING GATE MONOLITH DETAILS, SEE DWG XX
FOR SWING GATE DETAILS, SEE DWGS. XXX
FOR MARK NUMBERS, SEE DWG. XXX



SCALE: 6" = 1'



A



MARK	DESCRIPTION	DATE	APPR

DESIGNED BY: NEW ORLEANS	DESIGNED BY: NEW ORLEANS	DESIGNED BY: NEW ORLEANS	DESIGNED BY: NEW ORLEANS
DWN BY: NEW ORLEANS	DWN BY: NEW ORLEANS	DWN BY: NEW ORLEANS	DWN BY: NEW ORLEANS
SUBMITTED BY: NEW ORLEANS	SUBMITTED BY: NEW ORLEANS	SUBMITTED BY: NEW ORLEANS	SUBMITTED BY: NEW ORLEANS
DATE: MAY 2008	DATE: MAY 2008	DATE: MAY 2008	DATE: MAY 2008
SOLICITATION NO.:	SOLICITATION NO.:	SOLICITATION NO.:	SOLICITATION NO.:
CONTRACT NO.:	CONTRACT NO.:	CONTRACT NO.:	CONTRACT NO.:
FILE NUMBER: A/E TYPICALS	FILE NUMBER: A/E TYPICALS	FILE NUMBER: A/E TYPICALS	FILE NUMBER: A/E TYPICALS
FILE NAME: A/E-TYPICALS	FILE NAME: A/E-TYPICALS	FILE NAME: A/E-TYPICALS	FILE NAME: A/E-TYPICALS
ANSI D	ANSI D	ANSI D	ANSI D

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
A/E TYPICAL DRAWINGS

SWING GATES
HINGE DETAILS
(2 OF 2)

SHEET IDENTIFICATION
X-00

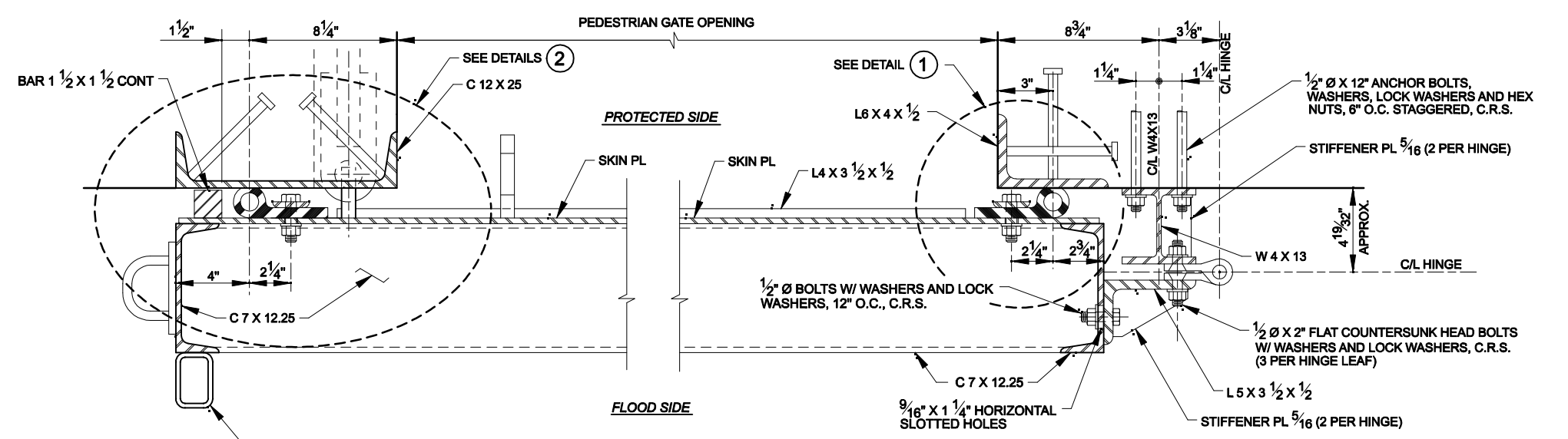
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2

3

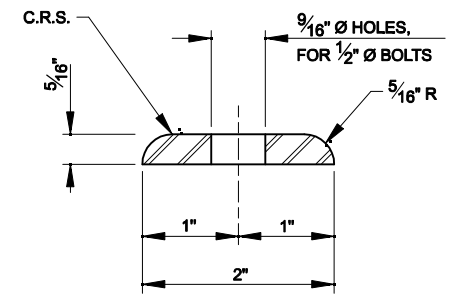
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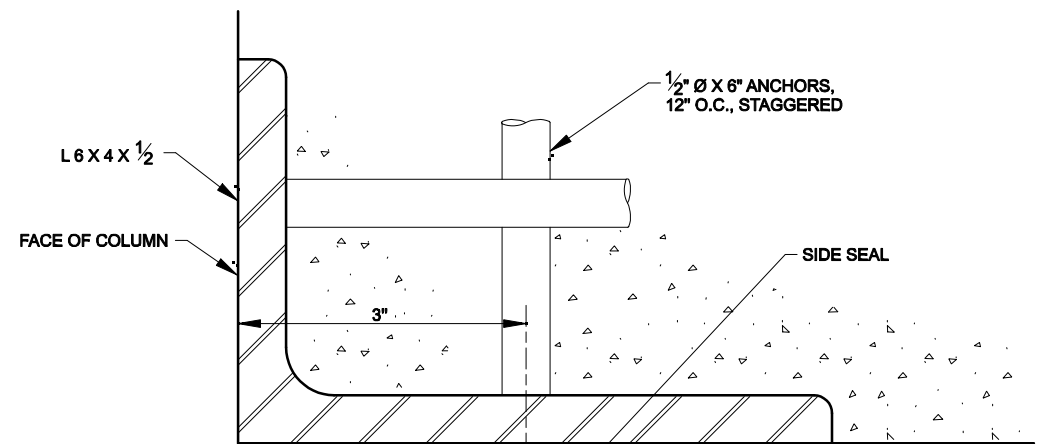
SECTION THRU PEDESTRIAN GATE
SCALE: 3" = 1' - 0"

GATE HINGE:
PRISON TYPE, FULL MORTISE, SWAGED STEEL WITH STEEL PIN, ITEM NO. BB852 AS MFD. BY STANLEY OR EQUAL (3 EACH)

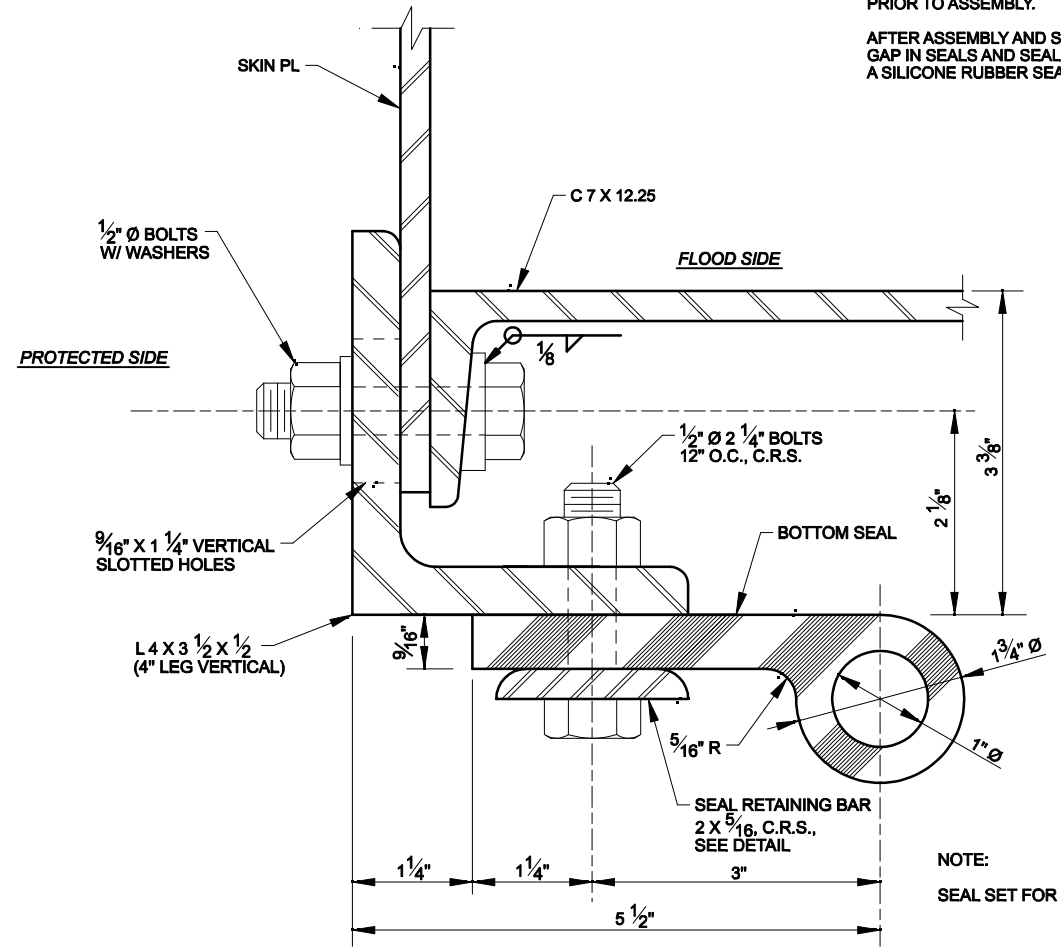


SEAL RETAINING BAR
SCALE: 1" = 1' - 0"

- NOTES:**
- FOR GENERAL NOTES, SEE DWG. X.
 - ALL SPLICES WILL BE FACTORY MADE IN HEAVY STEEL PRESS TYPE MOLDS UNDER PRESSURE AND HEAT.
 - ALL SPLICE JOINTS MUST DEVELOP STRENGTH OF AT LEAST 50% OF THE MINIMUM TENSILE STRENGTH REQUIRED OF THE RUBBER.
 - SEAL CLAMP ANGLES SHALL BE PAINTED ON ALL SIDES PRIOR TO ASSEMBLY.
 - AFTER ASSEMBLY AND SEAL ADJUSTMENTS ARE MADE, ALL GAP IN SEALS AND SEAL SUPPORTS SHALL BE SEALED WITH A SILICONE RUBBER SEALANT TO PROVIDE WATERTIGHT JOINTS.

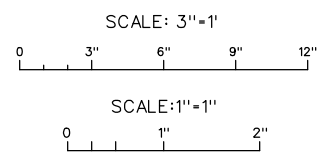


DETAIL 1
SCALE: 1" = 1' - 0"



SECTION (B)
SCALE: 1" = 1' - 0"

NOTE:
SEAL SET FOR 1/8" DEFLECTION



DATE	DESCRIPTION	APPROVAL

DESIGNED BY: [blank]	DESIGNED BY: [blank]	DESIGNED BY: [blank]	DESIGNED BY: [blank]
DRAWN BY: [blank]	DRAWN BY: [blank]	DRAWN BY: [blank]	DRAWN BY: [blank]
SUBMITTED BY: [blank]	SUBMITTED BY: [blank]	SUBMITTED BY: [blank]	SUBMITTED BY: [blank]
FILE NUMBER: [blank]	FILE NUMBER: [blank]	FILE NUMBER: [blank]	FILE NUMBER: [blank]
FILE NAME: [blank]	FILE NAME: [blank]	FILE NAME: [blank]	FILE NAME: [blank]

USACE - NEW ORLEANS HURRICANE DESIGN GUIDELINES AE TYPICAL DRAWINGS
PEDESTRIAN GATES SEAL DETAILS PROTECTED SIDE OPTION (1 OF 2)

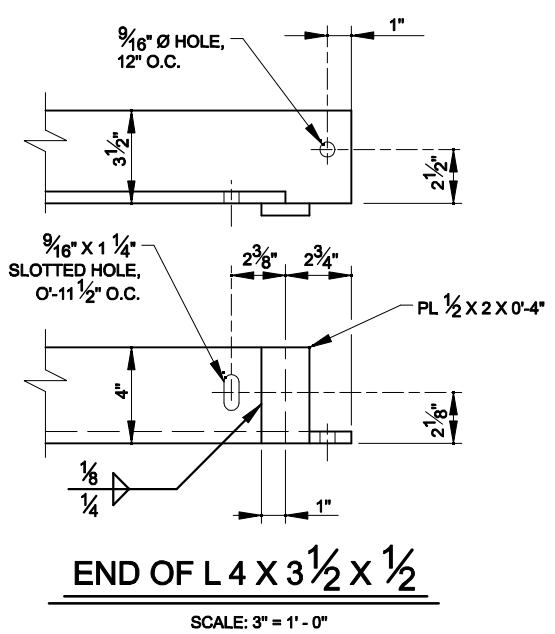
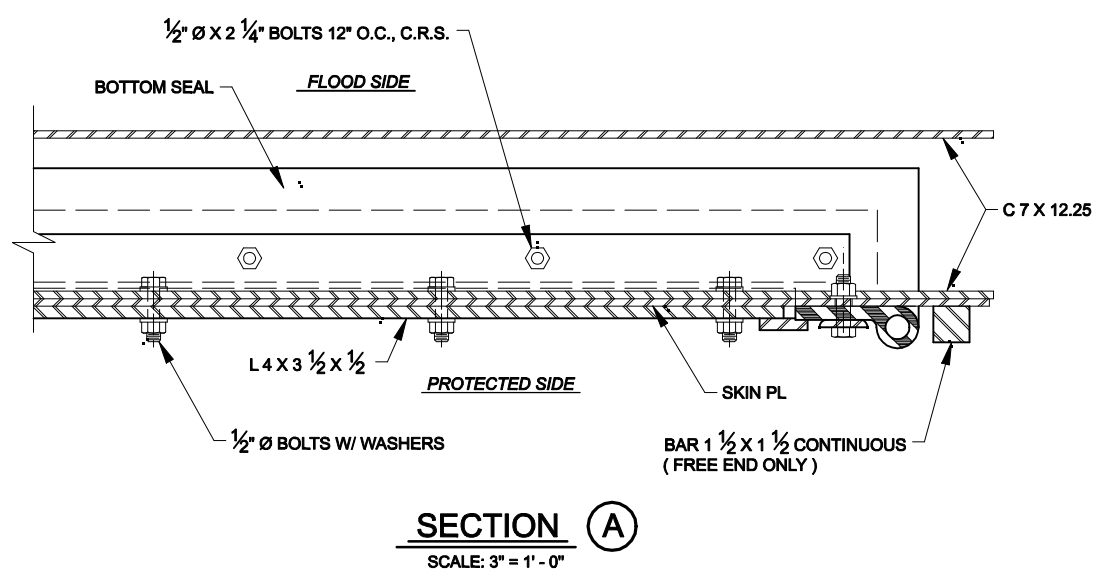
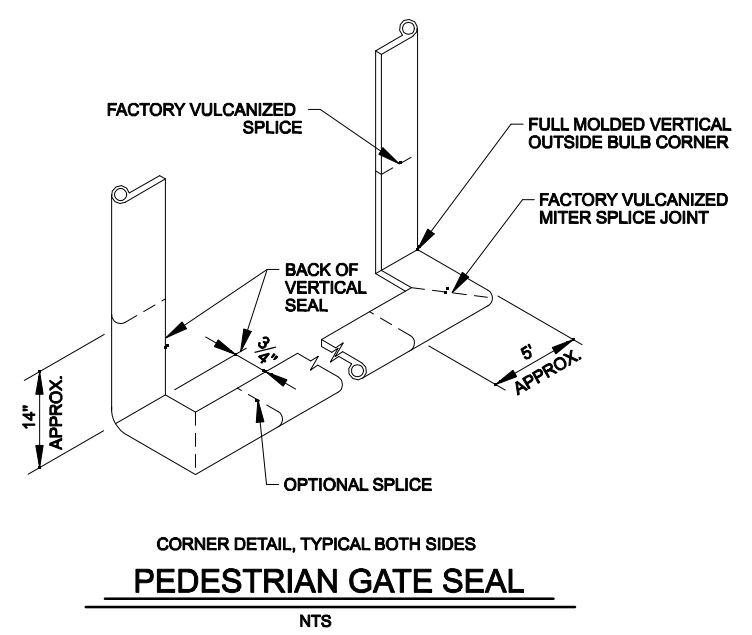
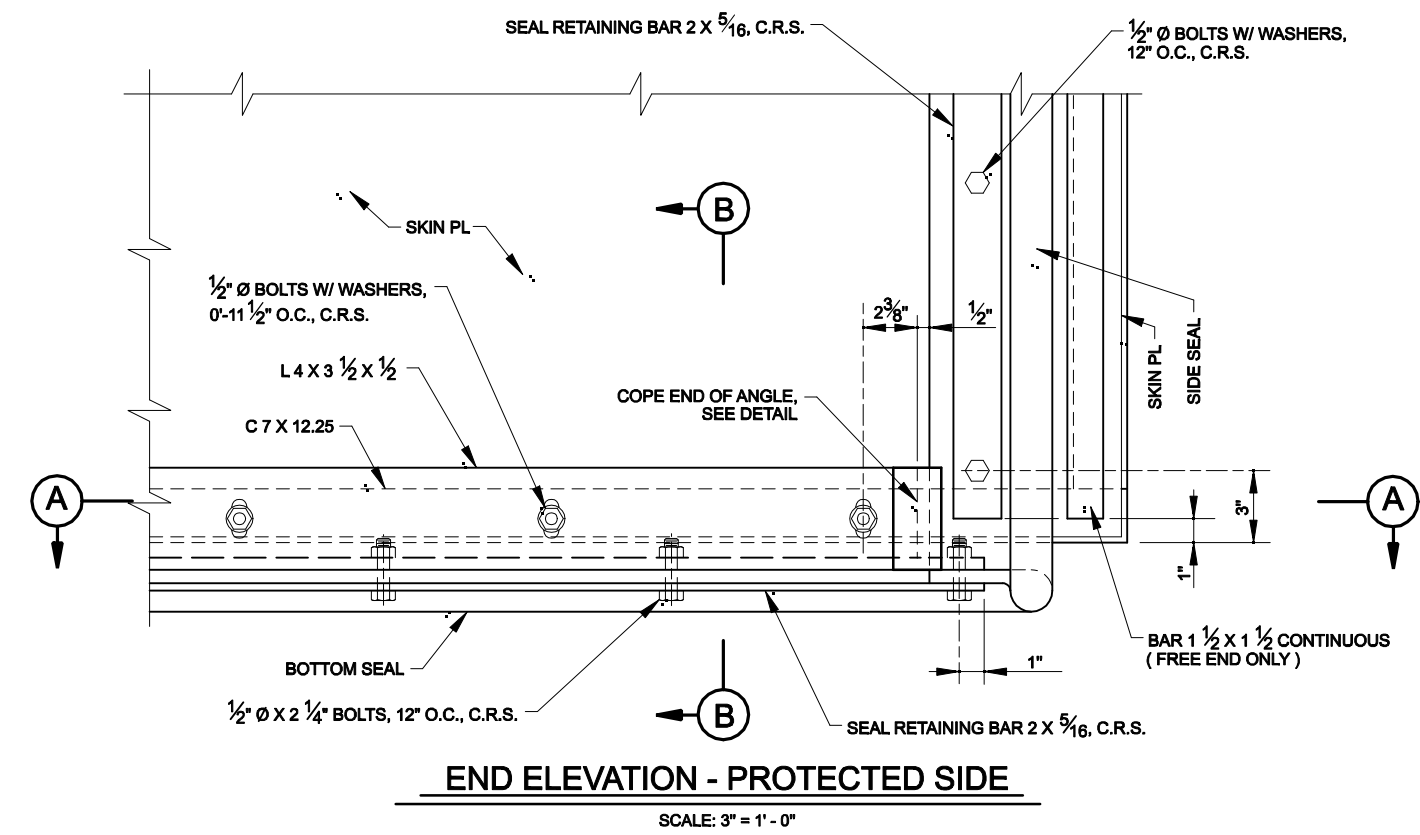
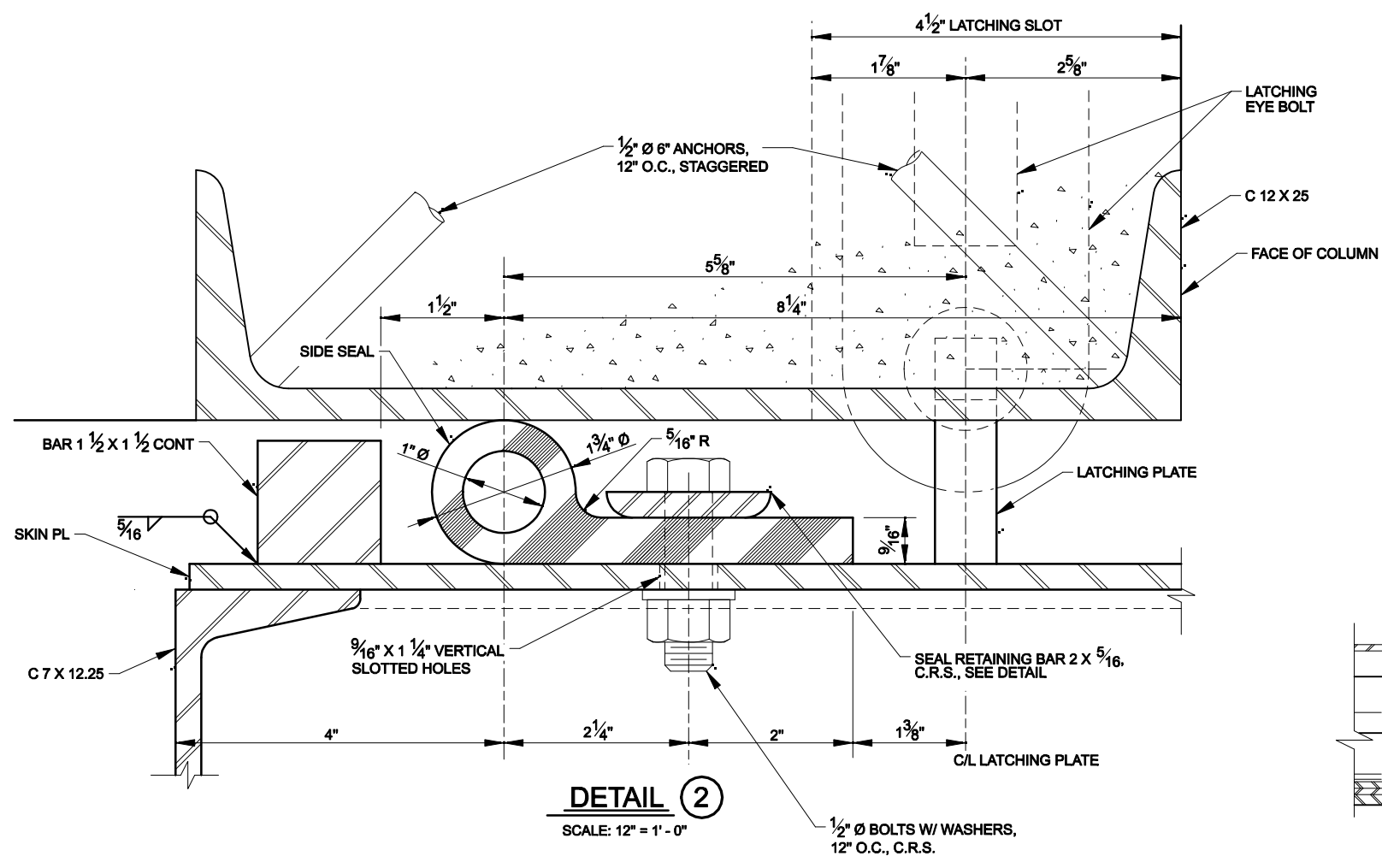
SHEET IDENTIFICATION X-00

MARK	DESCRIPTION	DATE	APPR

DESIGNED BY: NEW ORLEANS	SOLICITATION NO.:
DWN BY: NEW ORLEANS	CONTRACT NO.:
SUBMITTED BY: NEW ORLEANS, LOUISIANA	FILE NUMBER: A/E TYPICALS
PLOT SCALE: 12" = 1'	FILE NAME: AE-TYP1.DGN
SIZE: ANSI D	

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
A/E TYPICAL DRAWINGS

PEDESTRIAN GATES
SEAL DETAILS
PROTECTED SIDE OPTION (2 OF 2)



NOTES:

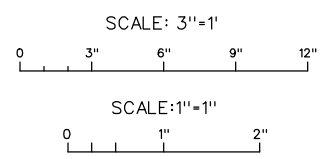
FOR GENERAL NOTES, SEE DWG. X.

ALL SPLICES WILL BE FACTORY MADE IN HEAVY STEEL PRESS TYPE MOLDS UNDER PRESSURE AND HEAT.

ALL SPLICE JOINTS MUST DEVELOP STRENGTH OF AT LEAST 50% OF THE MINIMUM TENSILE STRENGTH REQUIRED OF THE RUBBER.

SEAL CLAMP ANGLES SHALL BE PAINTED ON ALL SIDES PRIOR TO ASSEMBLY.

AFTER ASSEMBLY AND SEAL ADJUSTMENTS ARE MADE, ALL GAP IN SEALS AND SEAL SUPPORTS SHALL BE SEALED WITH A SILICONE RUBBER SEALANT TO PROVIDE WATERTIGHT JOINTS.



1

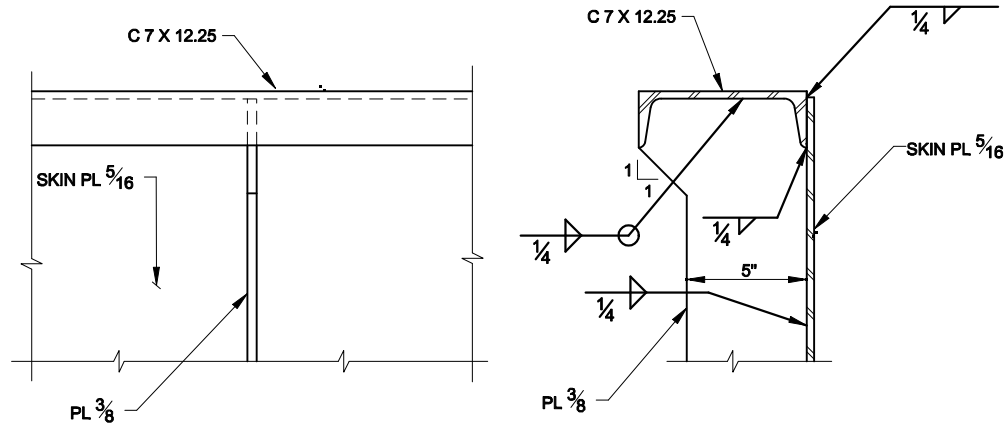
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3

4

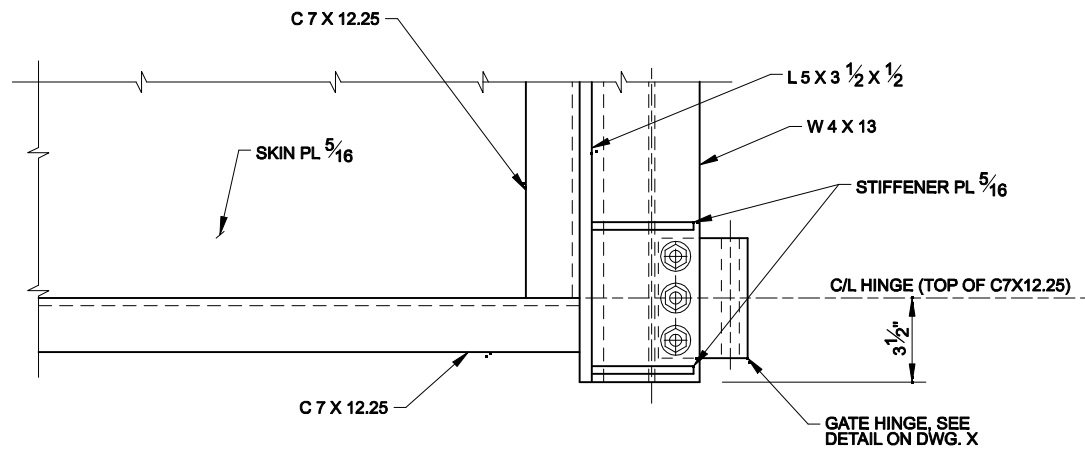
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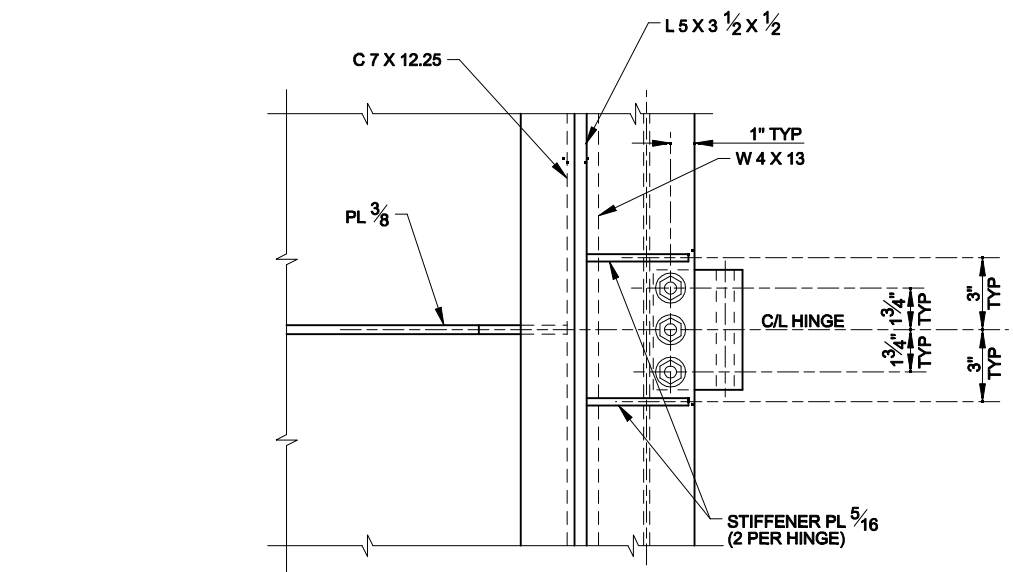


DETAIL 1 X X

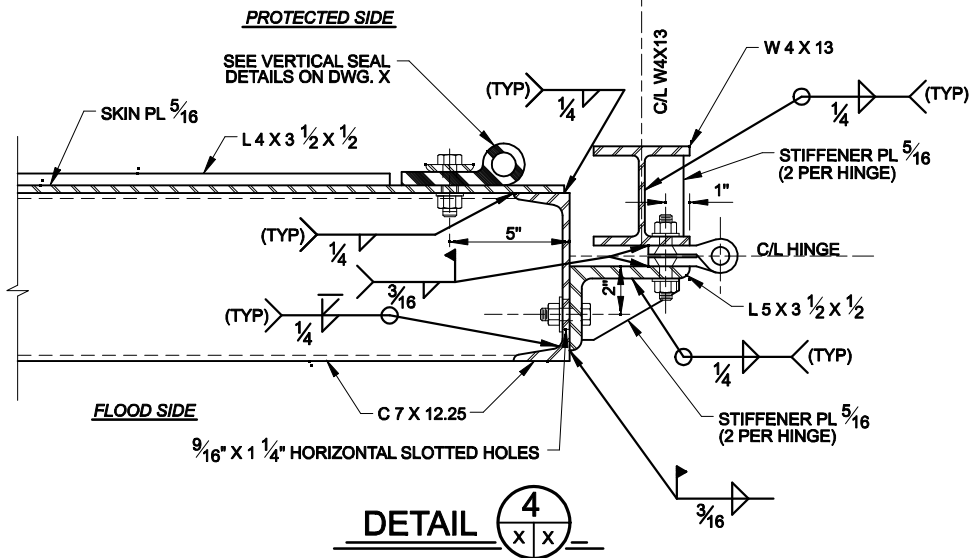
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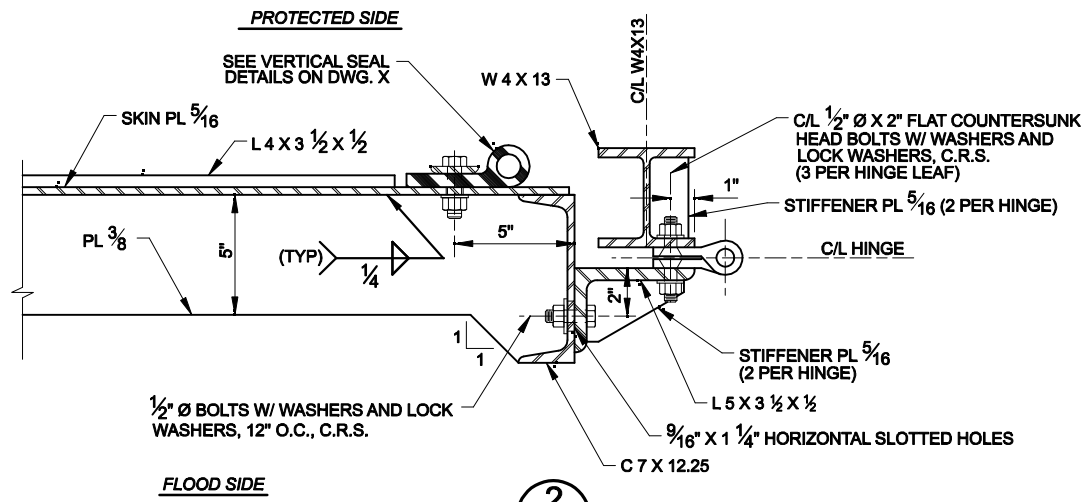
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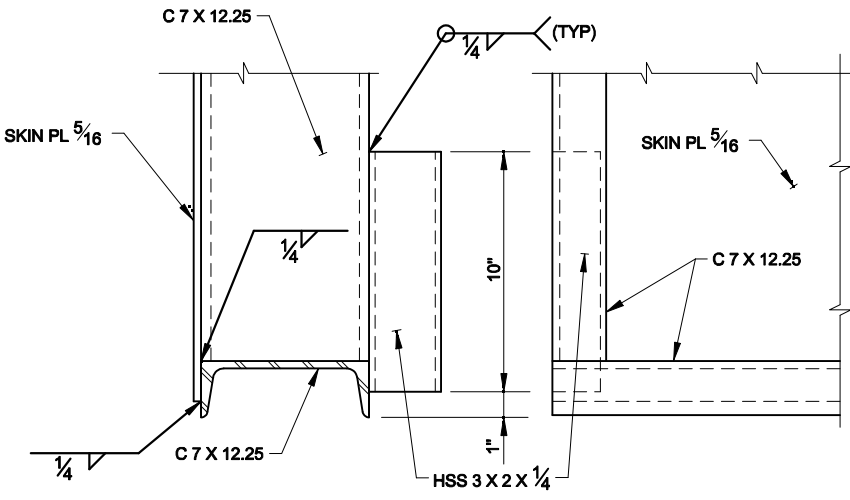
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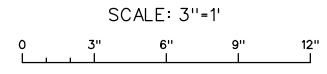
DETAIL 2 X X



DETAIL 5 X X



DETAIL 4 X X



DATE	DESCRIPTION	APPR. MARK

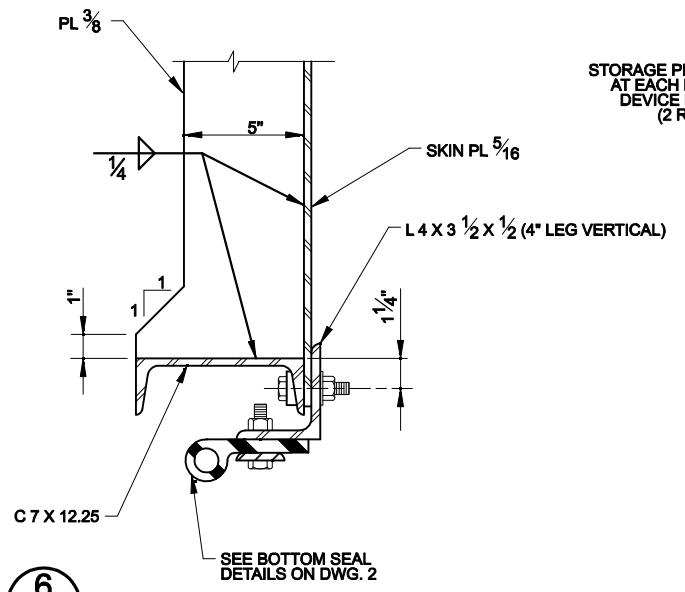
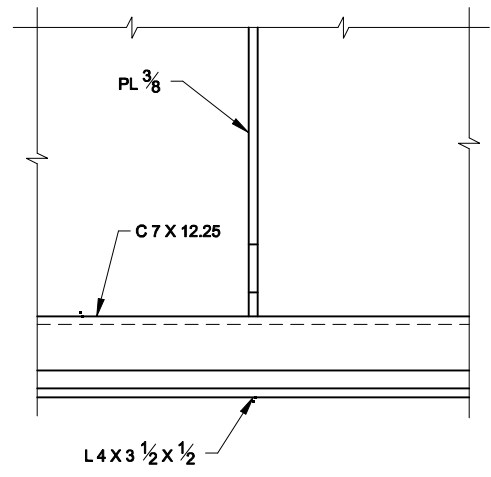
DESIGNED BY: NEW ORLEANS	CONTRACT NO.:
DWN BY: NEW ORLEANS	FILE NUMBER: AE-TYPICALS
ISSUED BY: NEW ORLEANS	FILE NAME: AE-TYP2.DGN
DATE: MAY 2008	SIZE: 8" x 11"

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
AE TYPICAL DRAWINGS

PEDESTRIAN GATES
HINGE DETAILS
PROTECTED SIDE OPTION (1 OF 2)

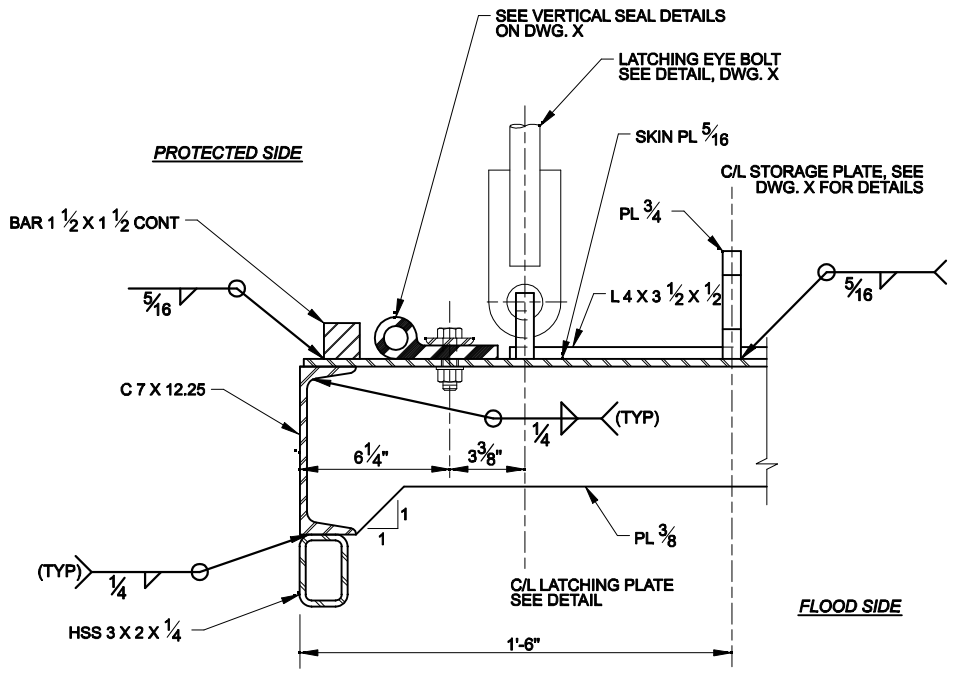
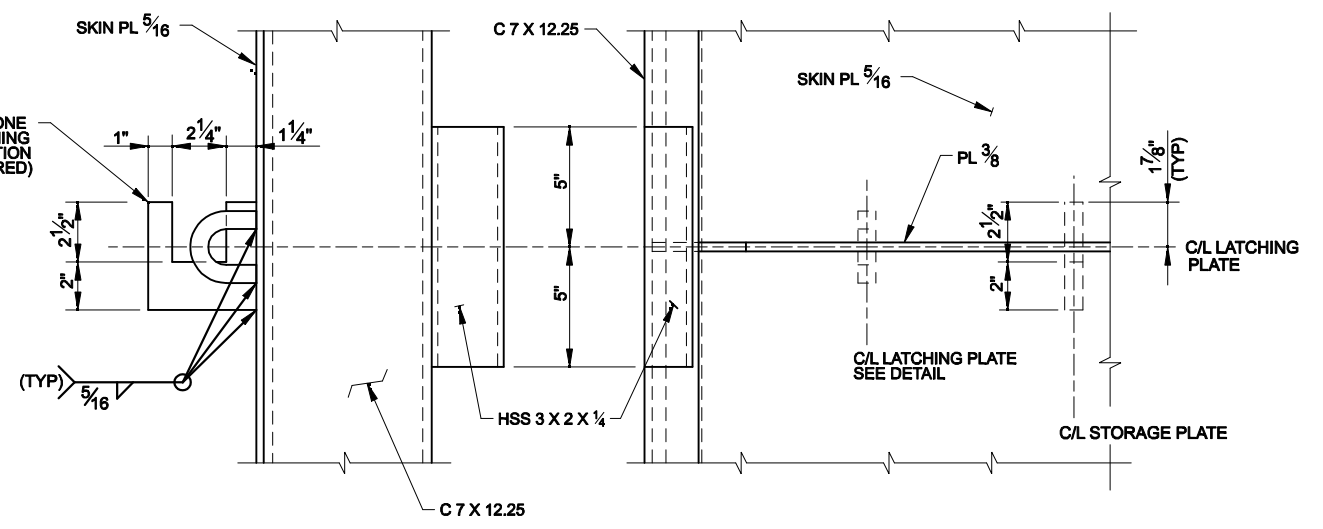
SHEET IDENTIFICATION
X-00

1 2 3 4 5

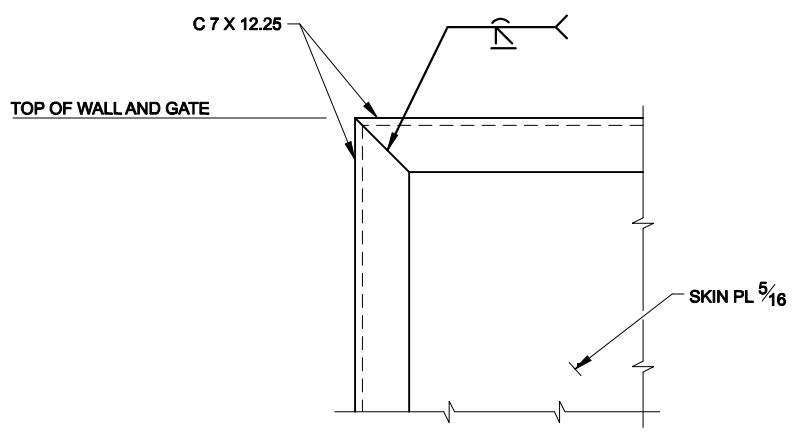


NOTE:
SEAL ASSEMBLY SHOWN IN SOME
VIEWS FOR ORIENTATION ONLY.

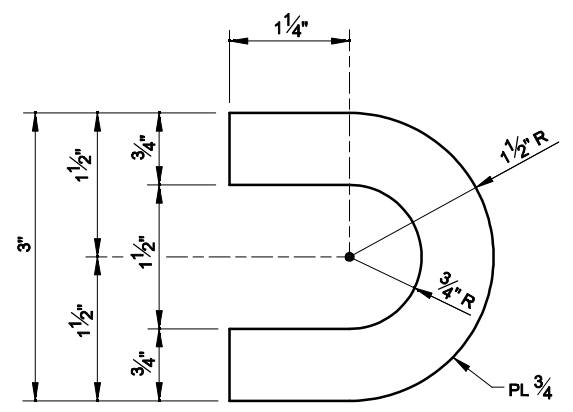
DETAIL 6
X X
SCALE: 3" = 1' - 0"



DETAIL 3
X X
SCALE: 3" = 1' - 0"



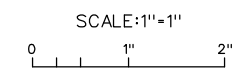
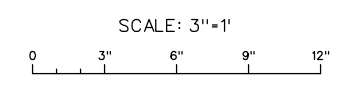
DETAIL 7
X X
SCALE: 3" = 1' - 0"



LATCHING PLATE
SCALE: 1" = 1' - 0"

REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. X
FOR GATE PLAN AND PROFILE, SEE DWG. X
FOR GATE MONOLITHS MASONRY DETAILS, SEE DWGS X AND X.
FOR SEAL DETAILS, SEE DWG. X.



DATE	DESCRIPTION	DATE	DESCRIPTION

DESIGNED BY: NEW ORLEANS DISTRICT	DATE: JAN 2008	SOLICITATION NO.:
DRAWN BY: NEW ORLEANS DISTRICT	CONTRACT NO.:	FILE NUMBER: A/E TYPICALS
SUBMITTED BY: NEW ORLEANS, LOUISIANA	PLOT SCALE: 3" = 1'	FILE NAME: AE-TYP2.DGN
U.S. ARMY CORPS OF ENGINEERS	ANSI D	

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
A/E TYPICAL DRAWINGS

PEDESTRIAN GATES
HINGE DETAILS
PROTECTED SIDE OPTION (2 OF 2)

SHEET IDENTIFICATION
X-00

1

2

3

4

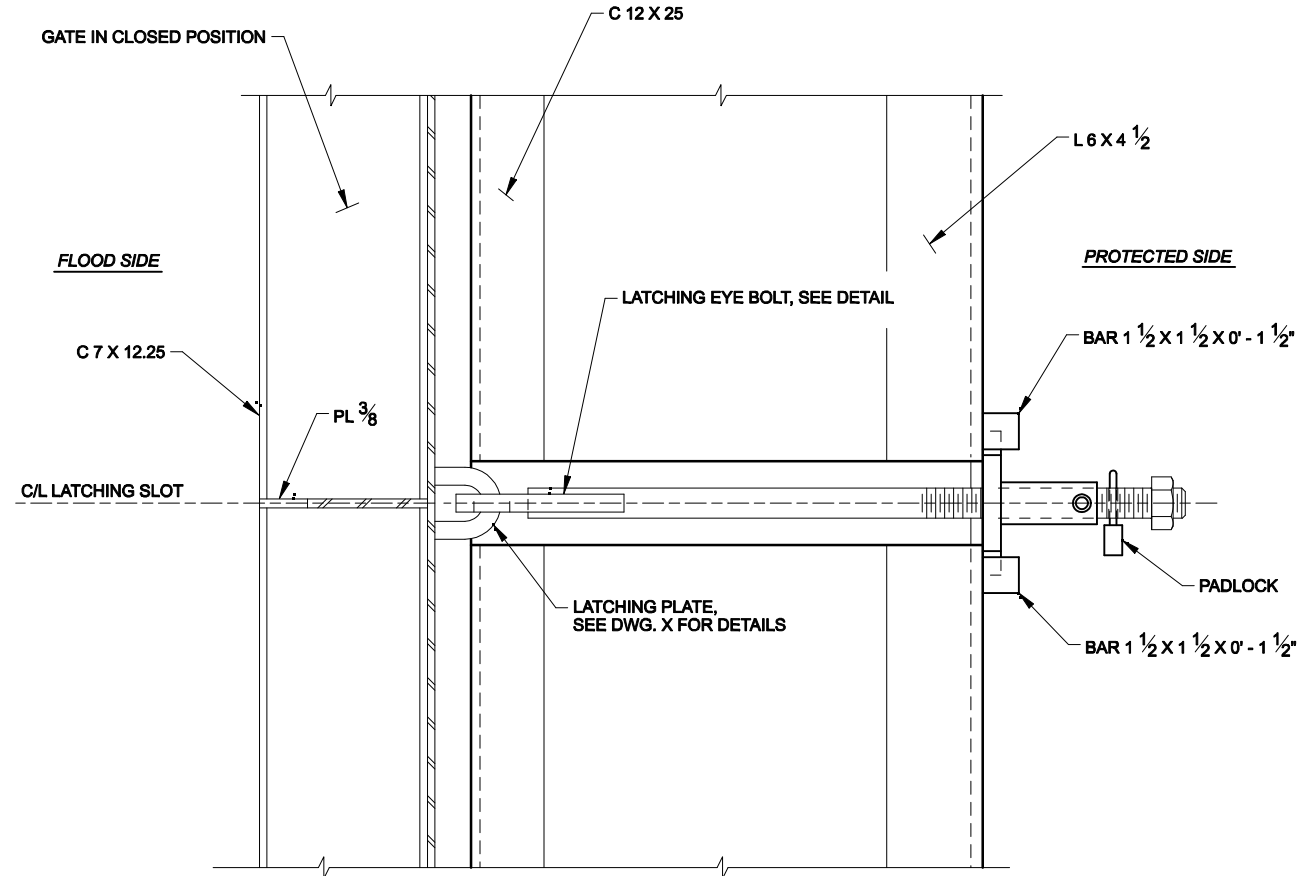
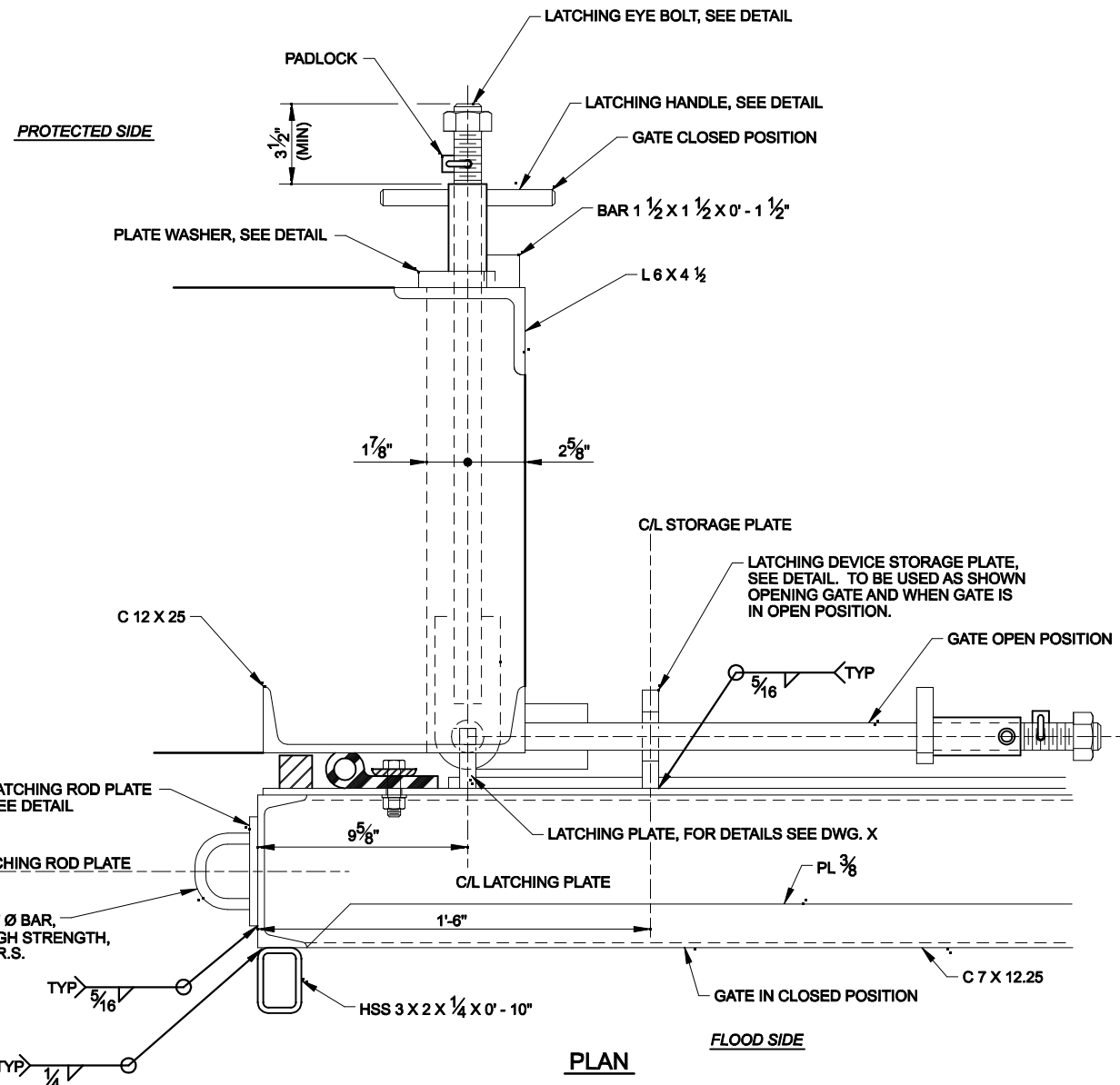
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C

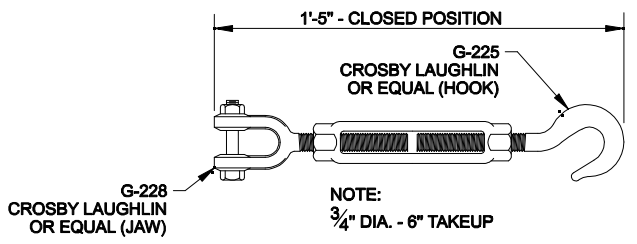
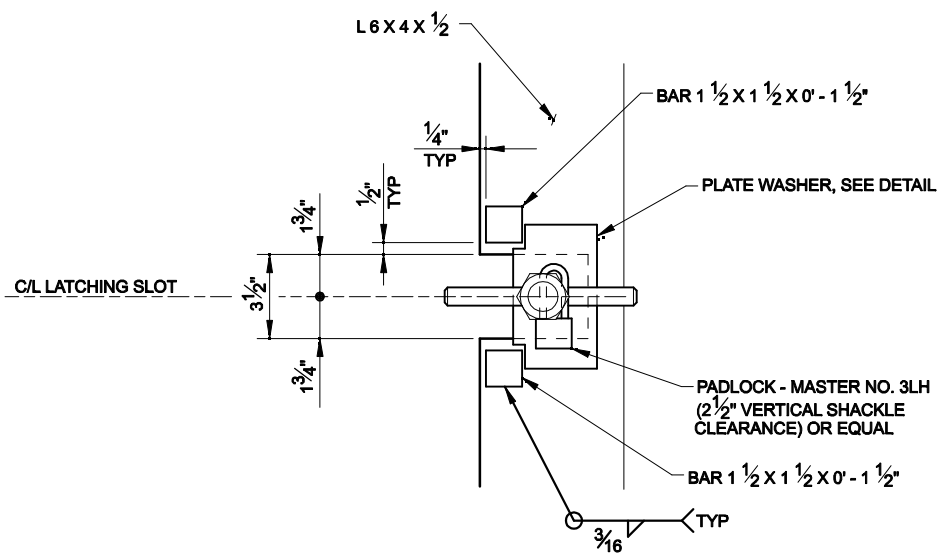
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A



SECTION AT C/L LATCHING DEVICE

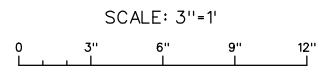
LATCHING DEVICE



STORAGE LATCHING DEVICE

REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. X.
 FOR GATE PLAN AND PROFILE, SEE DWG. X.
 FOR GATE MONOLITHS MASONRY DETAILS, SEE DWG. X AND X.
 FOR GATE DETAILS, SEE DWG. X.



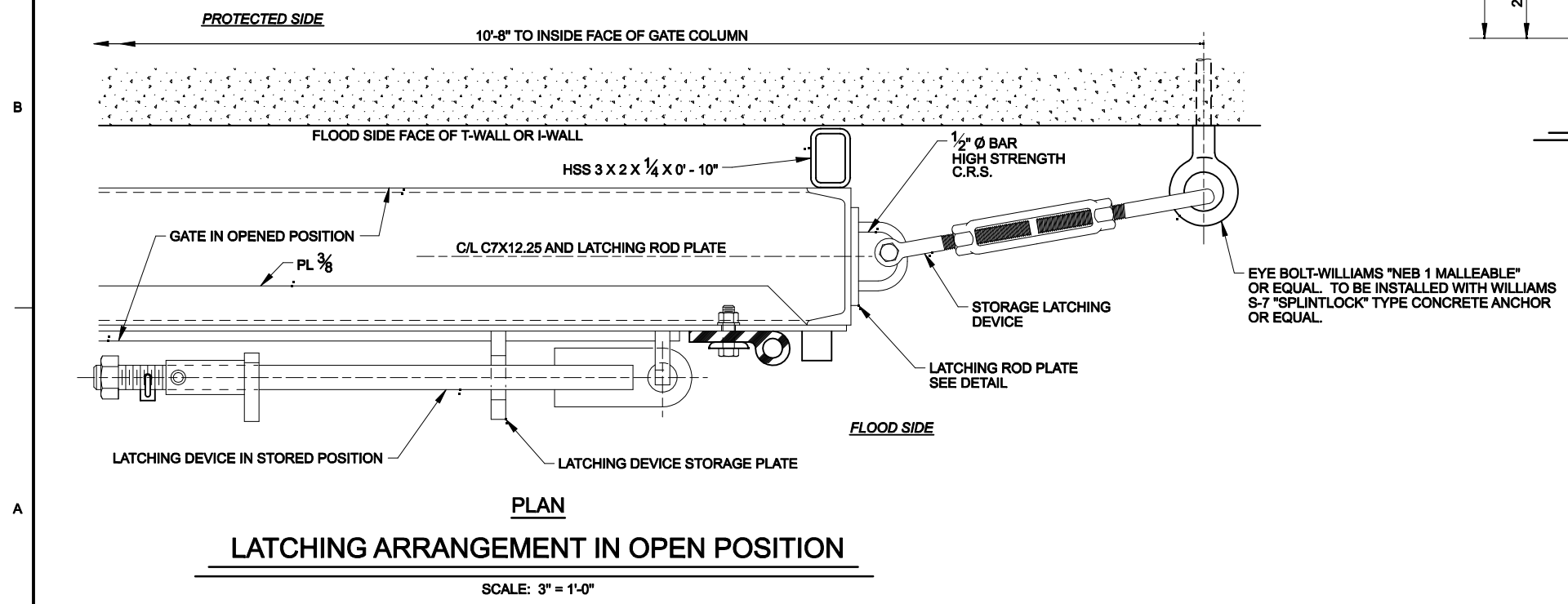
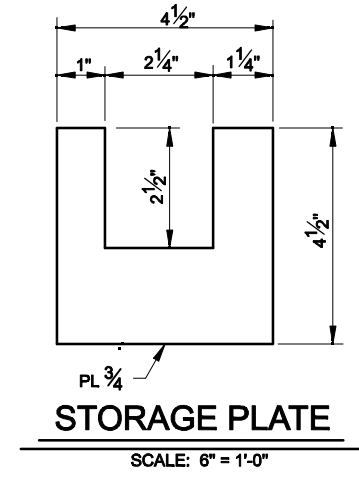
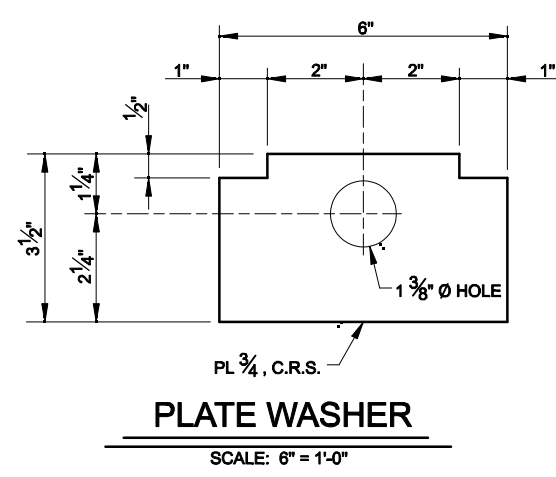
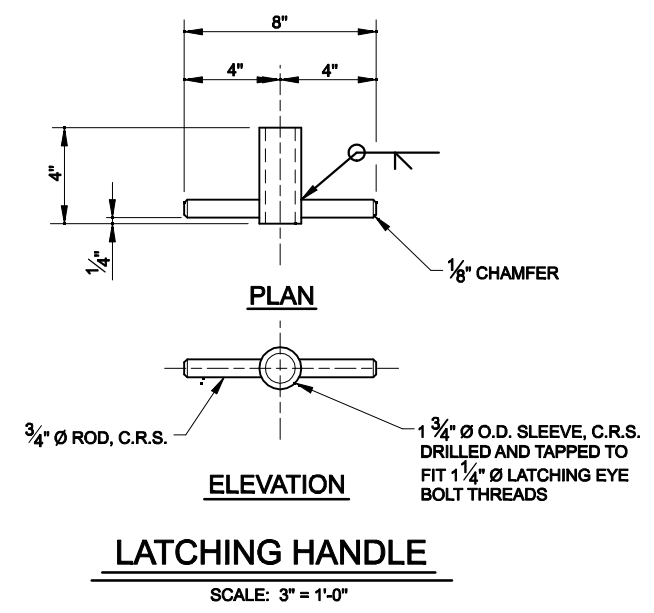
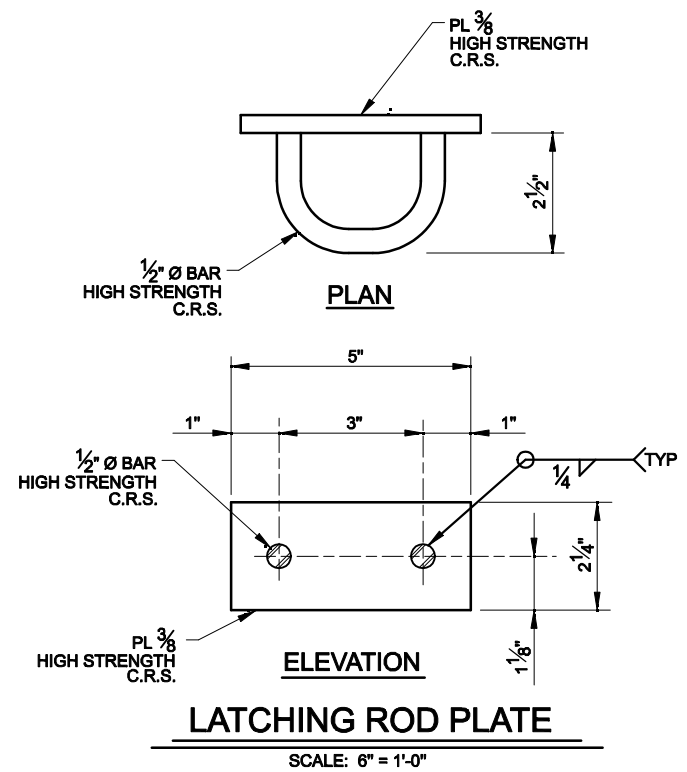
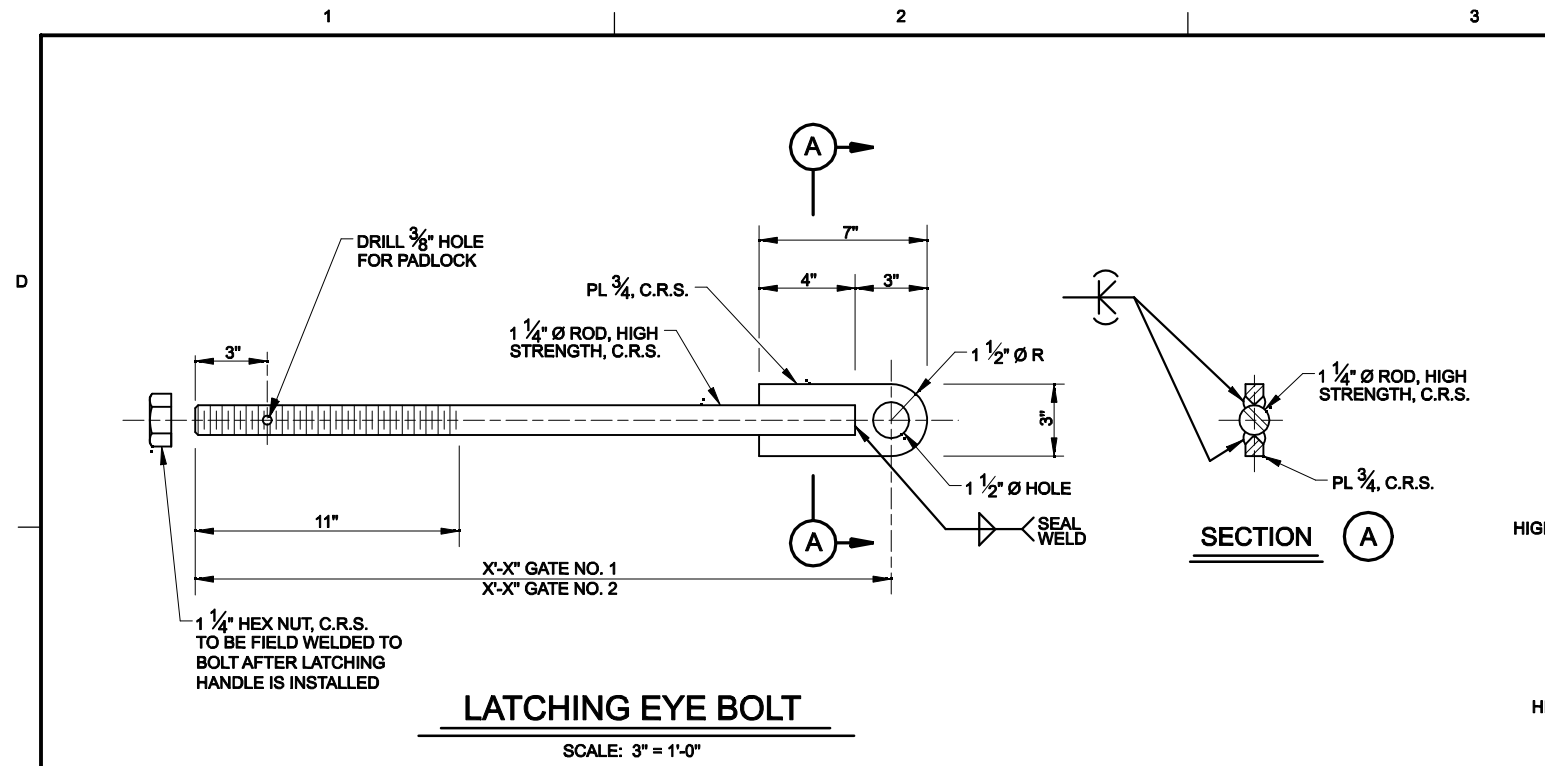
DATE	DESCRIPTION	DATE	APPR.

DESIGNED BY: NEW ORLEANS DISTRICT	DATE: 08/08/08	SUBMITTED BY:	CONTRACT NO.:
DRAWN BY:	FILE NUMBER: AE-TYPICALS	PLotted SCALE: 3"=1"	FILE NAME: AE-TYP3.DGN
ANSI D			

USACE - NEW ORLEANS DISTRICT
 HURRICANE DESIGN GUIDELINES
 AE TYPICAL DRAWINGS

PEDESTRIAN GATES
 LATCHING DETAILS
 PROTECTED SIDE OPTION (1 OF 2)

SHEET IDENTIFICATION
X-00



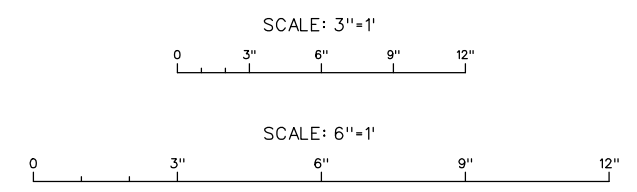
REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. X.

FOR GATE PLAN AND PROFILE, SEE DWG. X.

FOR GATE MONOLITHS MASONRY DETAILS, SEE DWG. X AND X.

FOR GATE DETAILS, SEE DWG. X.



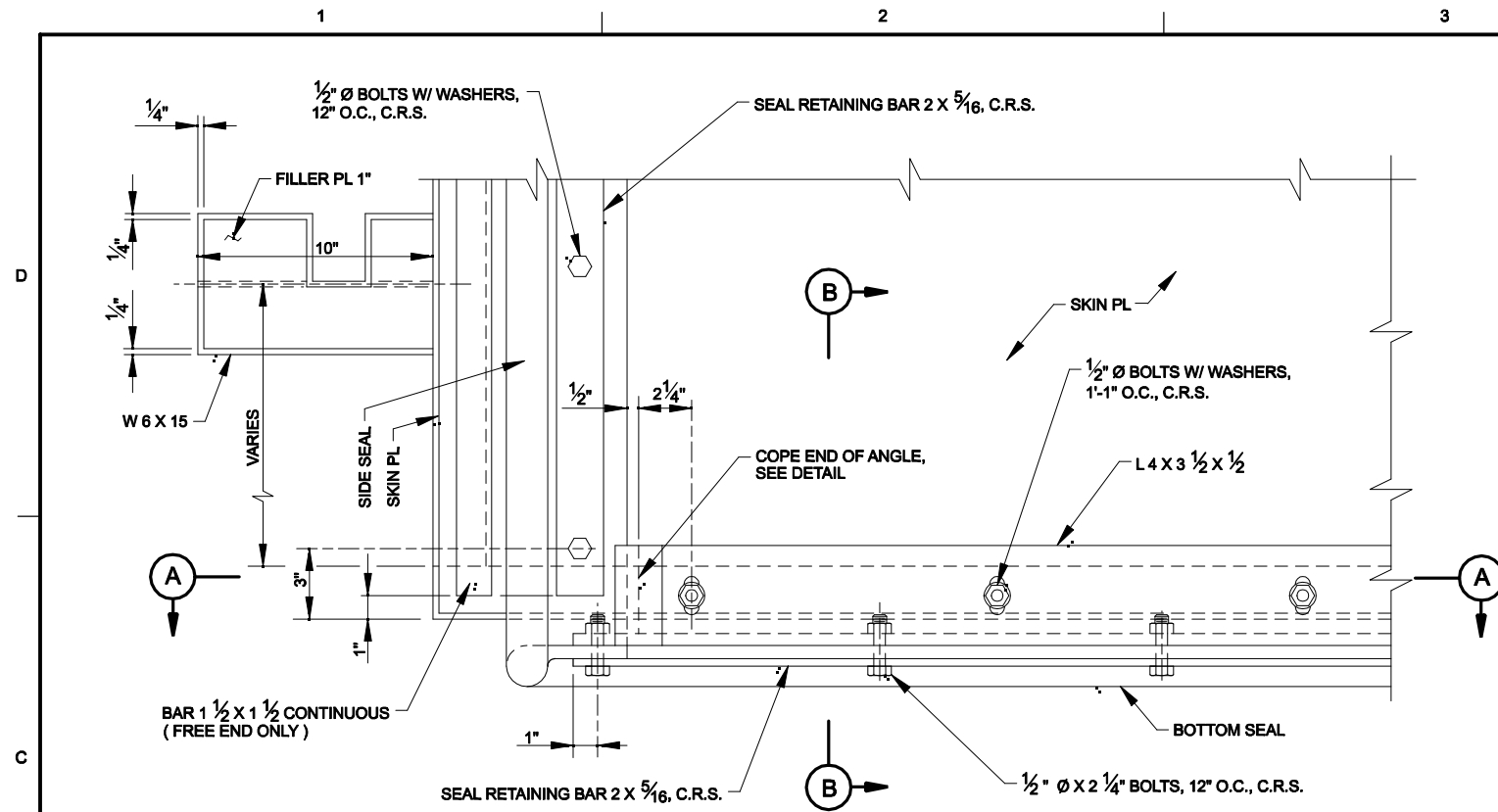
MARK	DESCRIPTION	DATE	APPR

DESIGNED BY: NEW ORLEANS	CONTRACT NO.:
DRAWN BY: NEW ORLEANS	FILE NUMBER: A/E TYPICALS
SUBMITTED BY: NEW ORLEANS, LOUISIANA	FILE NAME: AE-TYP3.DGN
DATE: MAY 2008	SIZE: 3" x 1"
ANSI D	AE-TYP3.DGN

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
A/E TYPICAL DRAWINGS

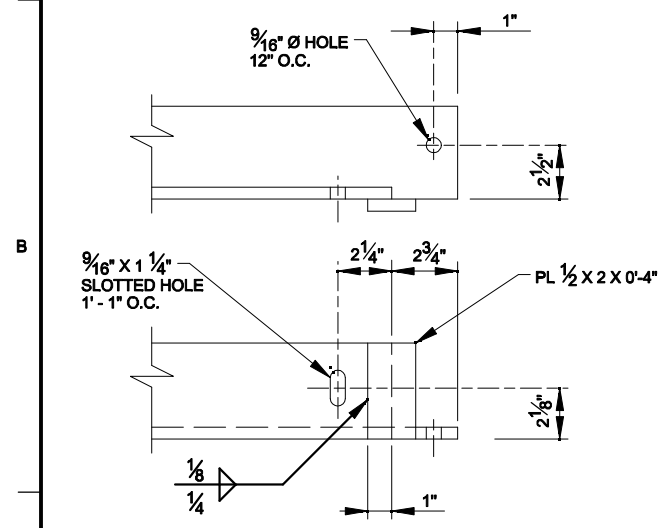
PEDESTRIAN GATES
LATCHING DETAILS
PROTECTED SIDE OPTION (2 OF 2)

SHEET IDENTIFICATION
X-00



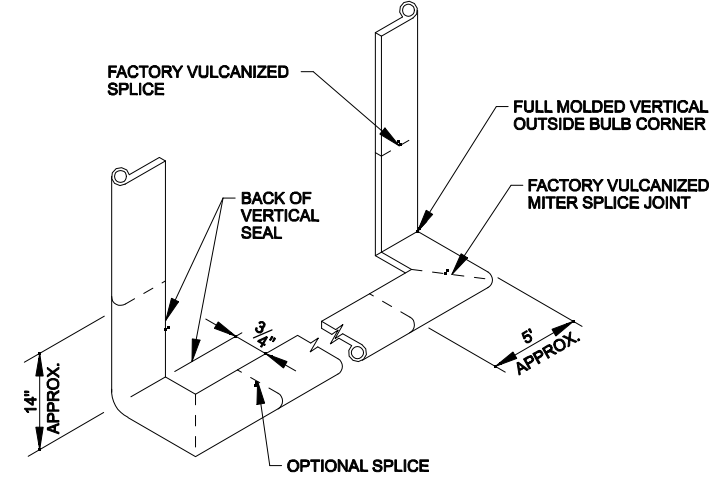
END ELEVATION - PROTECTED SIDE

SCALE: 3" = 1' - 0"



END OF L 4 X 3 1/2 X 1/2

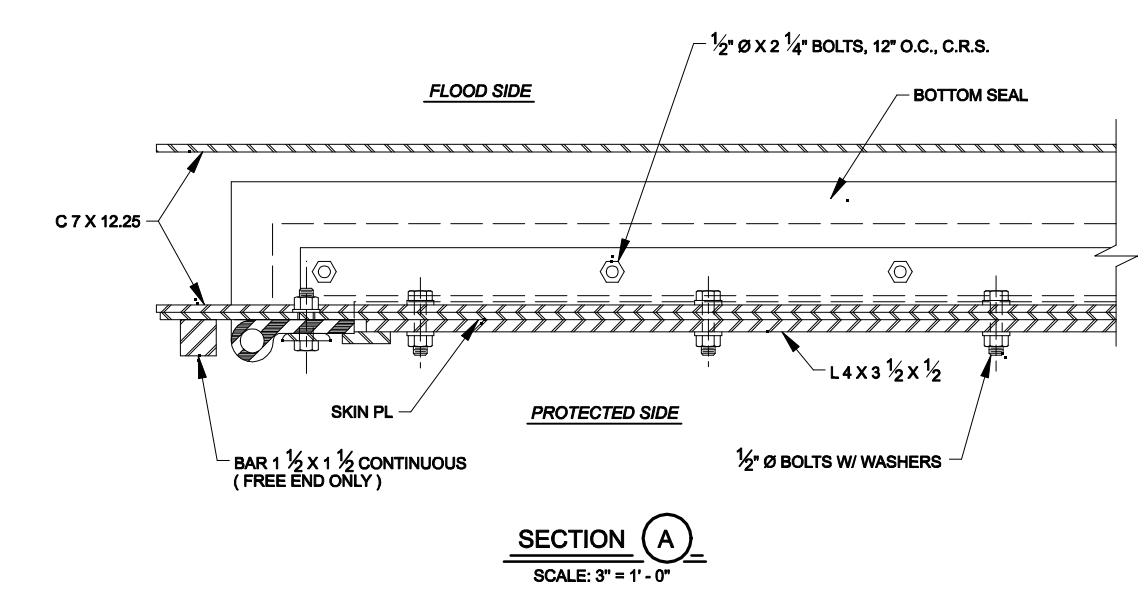
SCALE: 3" = 1' - 0"



**CORNER DETAIL, TYPICAL BOTH SIDES
PEDESTRIAN GATE SEAL**

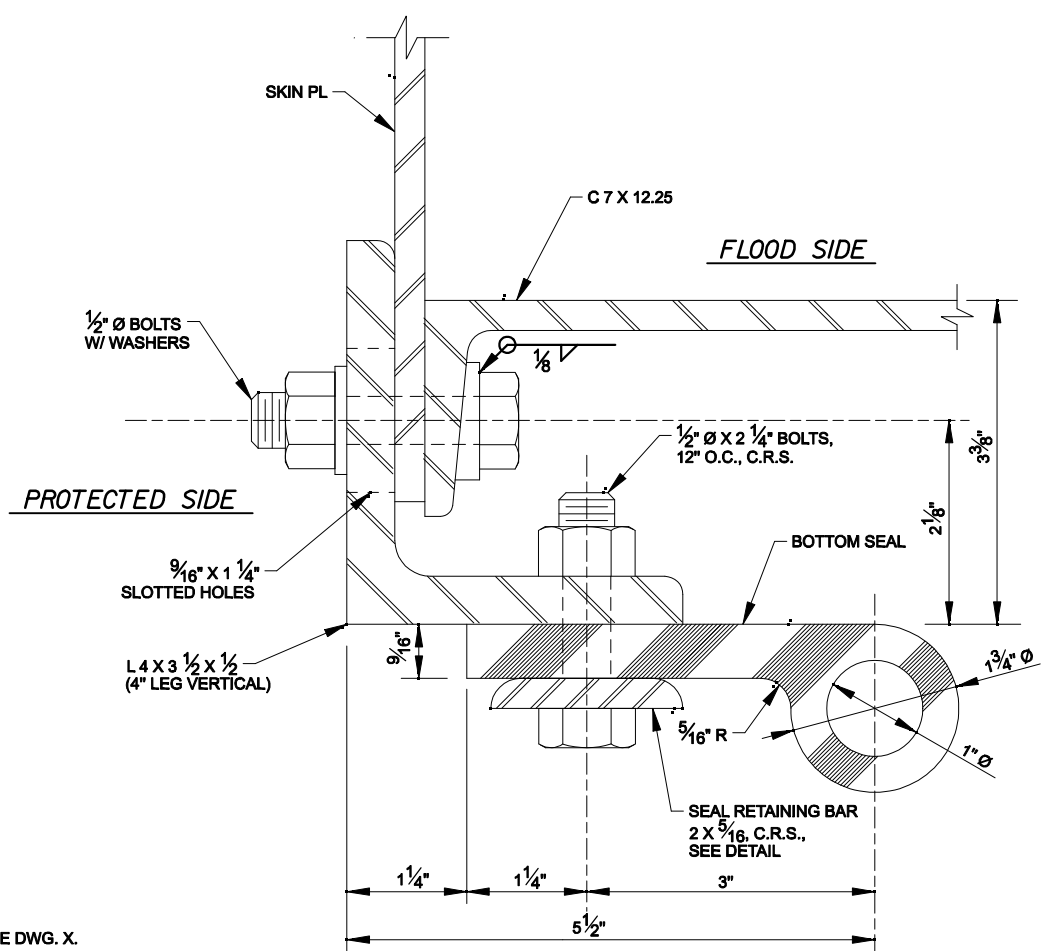
NOT TO SCALE

NOTES:
 FOR GENERAL NOTES, SEE DWG. X.
 ALL SPLICES WILL BE FACTORY MADE IN HEAVY STEEL PRESS TYPE MOLDS UNDER PRESSURE AND HEAT.
 ALL SPLICE JOINTS MUST DEVELOP STRENGTH OF AT LEAST 50% ON THE MINIMUM TENSILE STRENGTH REQUIRED OF THE RUBBER.
 SEAL CLAMP ANGLES SHALL BE PAINTED ON ALL SIDES PRIOR TO ASSEMBLY.
 AFTER ASSEMBLY AND SEAL ADJUSTMENTS ARE MADE, ALL GAPS IN SEALS AND SEAL SUPPORTS SHALL BE SEALED WITH A SILICONE RUBBER SEALANT TO PROVIDE WATERTIGHT JOINTS.



SECTION A

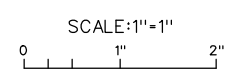
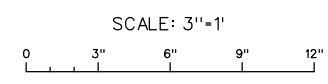
SCALE: 3" = 1' - 0"



SECTION B

SCALE: 1" = 1' - 0"

NOTE: SEAL SET FOR 1/8" DEFLECTION.

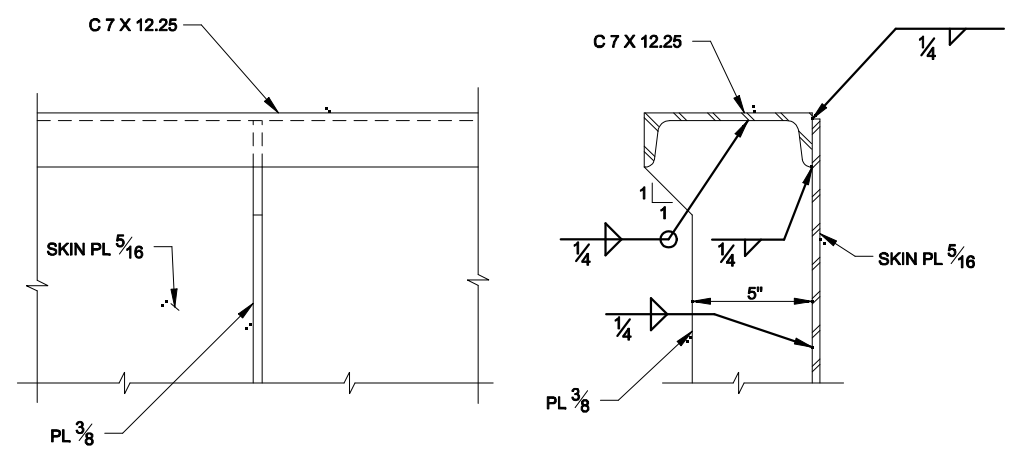


MARK	DESCRIPTION	DATE	APPR

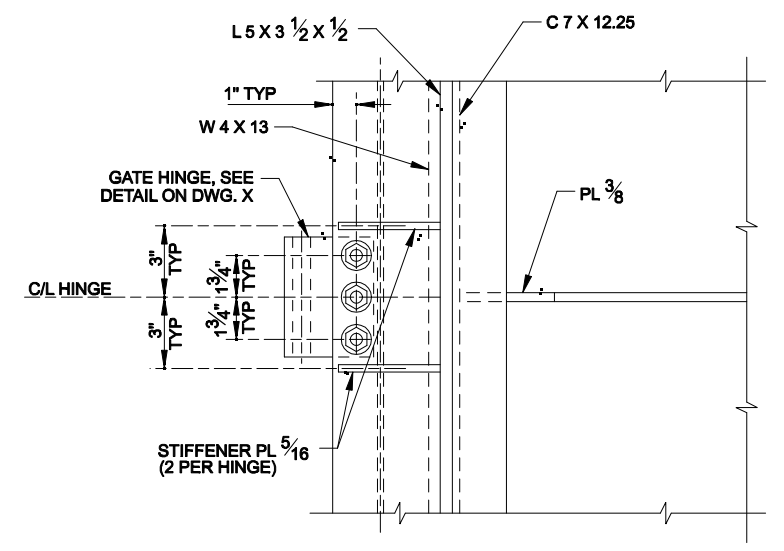
DESIGNED BY: NEW ORLEANS DISTRICT	ISSUED BY: NEW ORLEANS DISTRICT	DATE: MAY 2008
DRAWN BY:	CHECKED BY:	SUBMITTED BY:
FILE NUMBER: AE-TYPICALS	CONTRACT NO.:	PLANT NO.:
FILE NAME: AE-TYP14.DGN	FILE DATE:	FILE TIME:
ANSI D	ANSI E	ANSI F

USACE - NEW ORLEANS HURRICANE DESIGN GUIDELINES AE TYPICAL DRAWINGS
 PEDESTRIAN GATES SEAL DETAILS FLOODSIDE OPTION (2 OF 2)

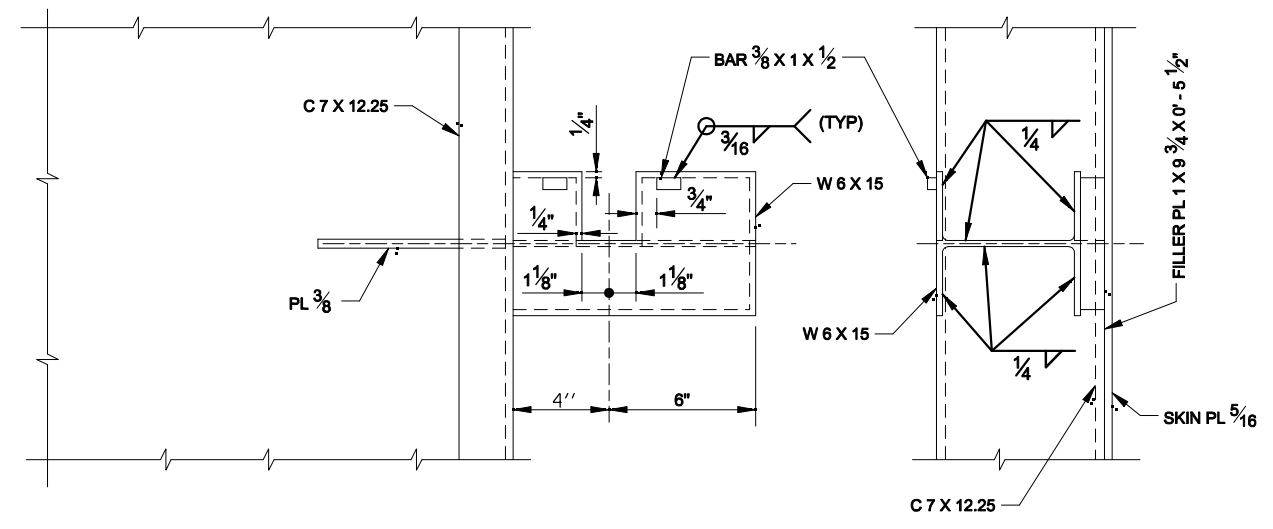
SHEET IDENTIFICATION X-00



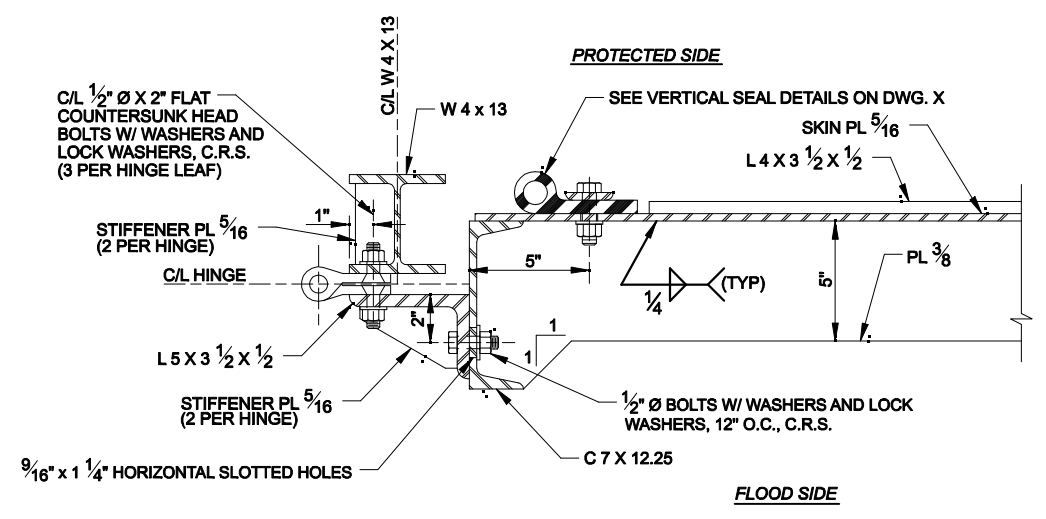
DETAIL 1
X|X



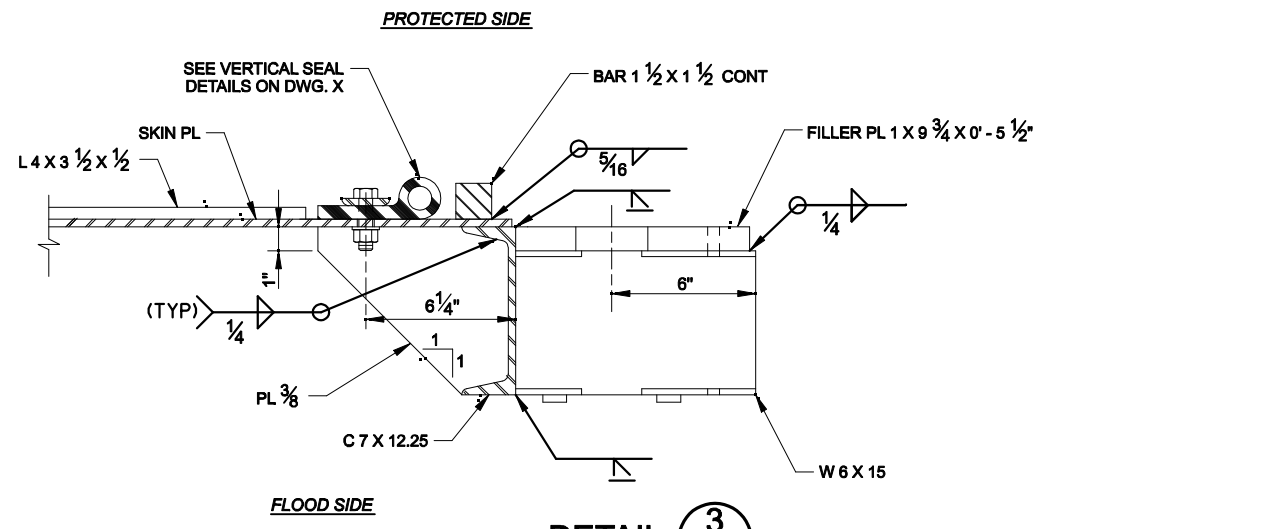
DETAIL 2
X|X



DETAIL 3
X|X



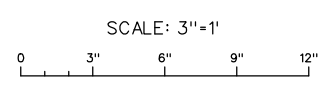
DETAIL 4
X|X



DETAIL 5
X|X

REFERENCE DRAWINGS

- FOR GENERAL NOTES, SEE DWG. X.
- FOR PLAN AND PROFILE, SEE DWGS. X, X, AND X.
- FOR TYPICAL WALL SECTIONS, SEE DWG. X.
- FOR GATE MONOLITH MASONRY DETAILS, SEE DWG. X.
- FOR SEAL DETAILS, SEE DWG. X.
- FOR MISCELLANEOUS DETAILS, SEE DWG. X.



DATE	DESCRIPTION	APPR.

DESIGNED BY: NEW ORLEANS	CONTRACT NO.:
DRAWN BY: NEW ORLEANS	FILE NUMBER: A/E TYPICALS
SUBMITTED BY: NEW ORLEANS, LOUISIANA	FILE NAME: AE-TYPFD02GN
DATE: MAY 2008	SIZE: 3" = 1"
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USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
A/E TYPICAL DRAWINGS

PEDESTRIAN GATES
HINGE DETAILS
FLOODSIDE OPTION (1 OF 2)

SHEET IDENTIFICATION
X-00

1

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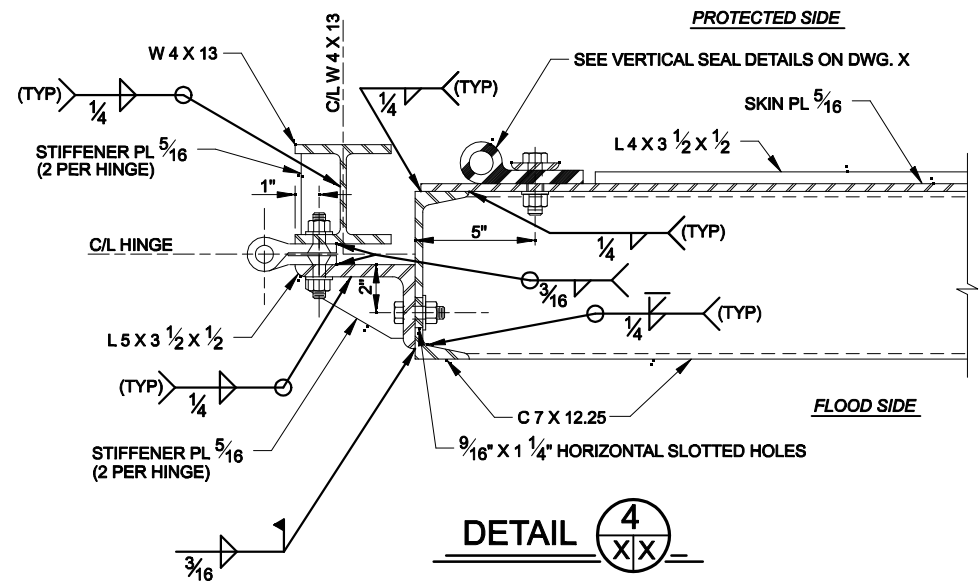
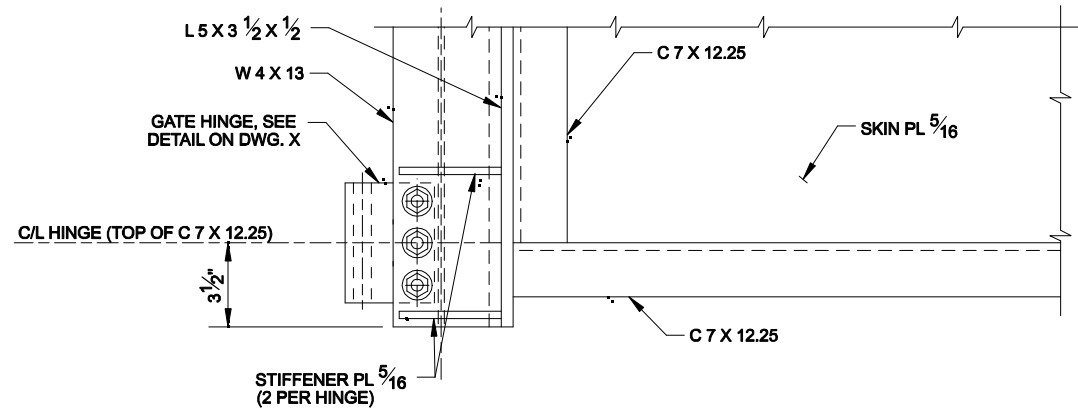
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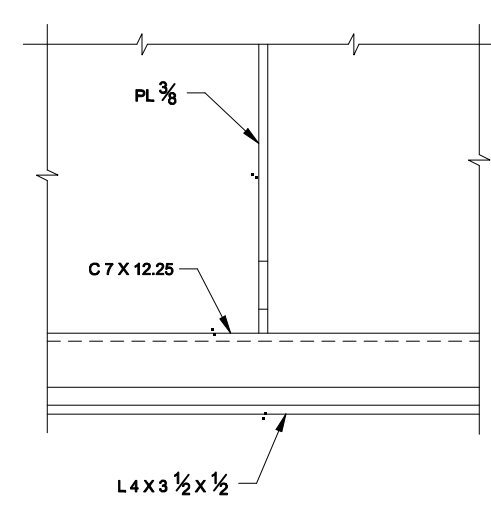
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A

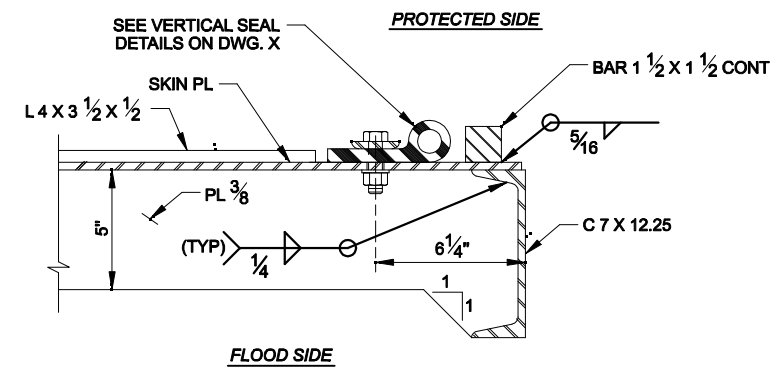
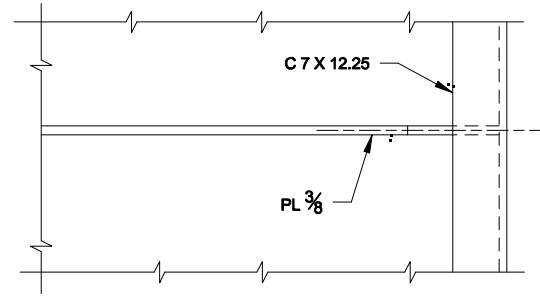
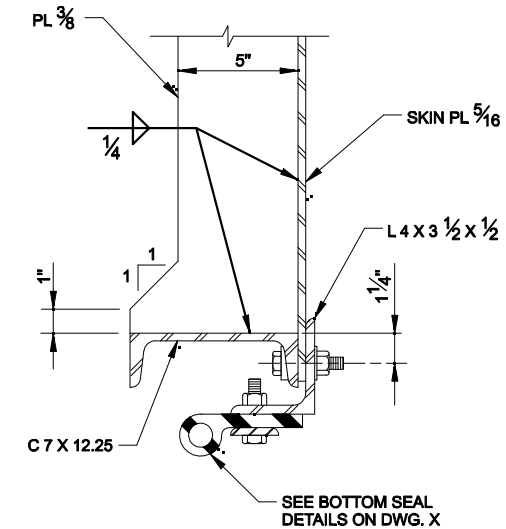


DETAIL 4 X X

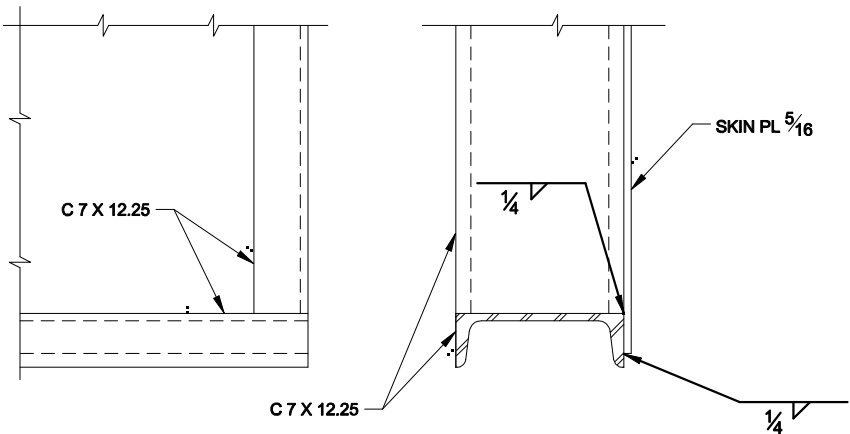
NOTE:
SEAL ASSEMBLY SHOWN IN SOME
VIEWS FOR ORIENTATION ONLY.



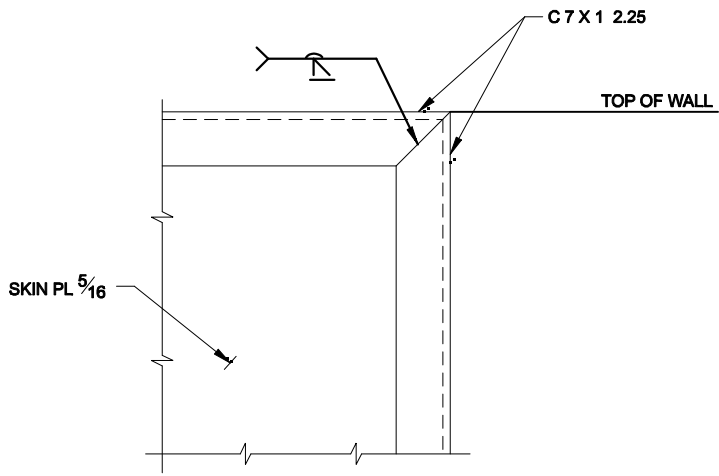
DETAIL 6 X X



DETAIL X X X



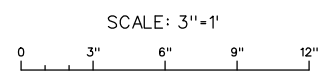
DETAIL 5 X X



DETAIL 7 X X

REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. X.
 FOR PLAN AND PROFILE, SEE DWGS. X, X, AND X.
 FOR TYPICAL WALL SECTIONS, SEE DWG. X.
 FOR GATE MONOLITH MASONRY DETAILS, SEE DWG. X.
 FOR SEAL DETAILS, SEE DWG. X.
 FOR MISCELLANEOUS DETAILS, SEE DWG. X.



DATE	DESCRIPTION	APPR.

DESIGNED BY: NEW ORLEANS DISTRICT	CONTRACT NO.:
DRAWN BY: A/E TYPICALS	FILE NUMBER:
SUBMITTED BY: A/E TYPICALS	DATE: 3/1/11
FILE NAME: A/E-TYPICALS	ANSI D

USACE - NEW ORLEANS DISTRICT
 HURRICANE DESIGN GUIDELINES
 A/E TYPICAL DRAWINGS

PEDESTRIAN GATES
 HINGE DETAILS
 FLOODSIDE OPTION (2 OF 2)

SHEET IDENTIFICATION
X-00

1

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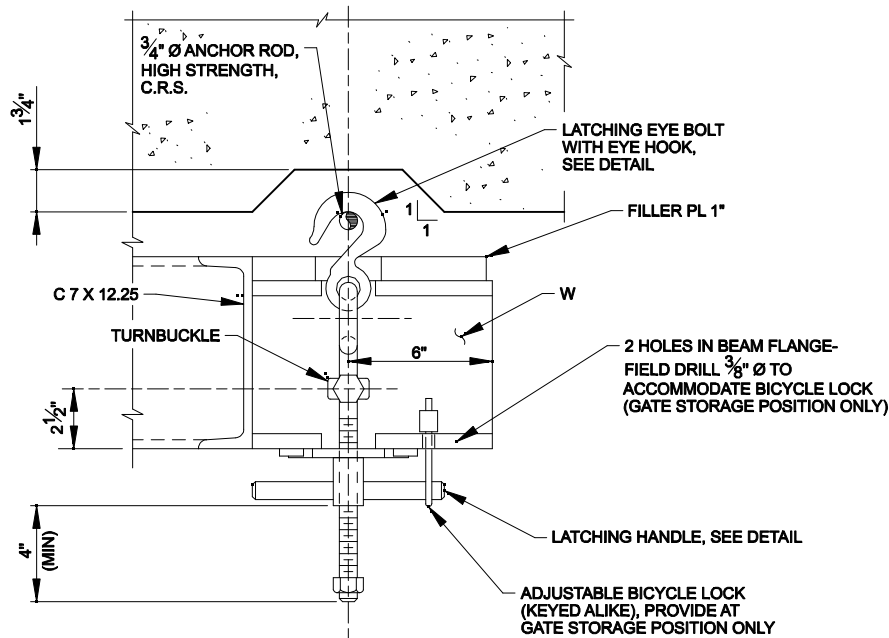
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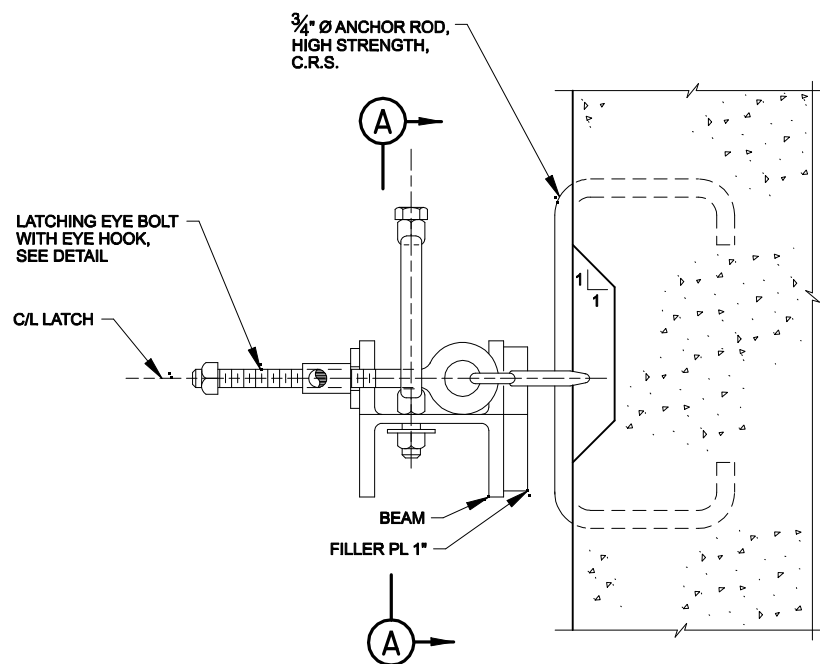
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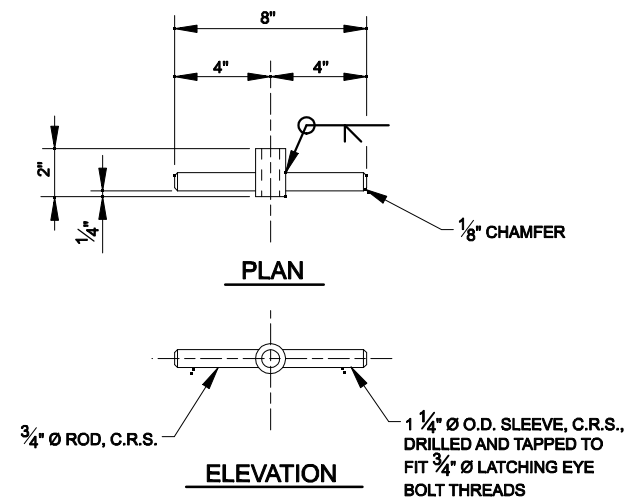
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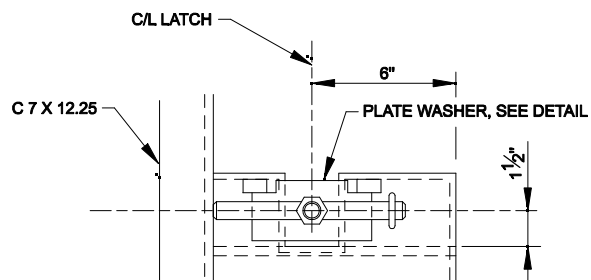
PLAN
SCALE: 3" = 1' - 0"



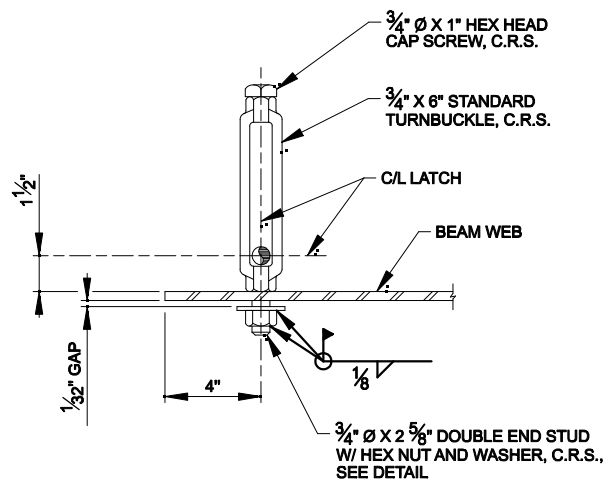
SECTION AT C/L OF LATCHING DEVICE



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



ELEVATION
SCALE: 6" = 1' - 0"



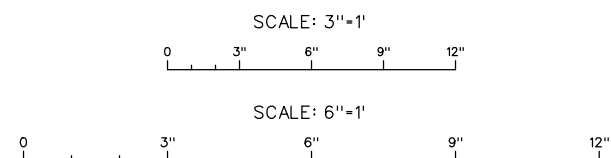
DETAIL 1

SECTION (A)
SCALE: 3" = 1' - 0"

LATCHING DEVICE

REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. X.
 FOR PLAN AND PROFILE, SEE DWGS. X, X, AND X.
 FOR TYPICAL WALL SECTIONS, SEE DWG. X.
 FOR GATE MONOLITH MASONRY DETAILS, SEE DWG. X.
 FOR MISCELLANEOUS DETAILS, SEE DWG. X.



MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: NEW ORLEANS DISTRICT	DATE: MAY 2008	SOLICITATION NO.:
	DWN BY:	CONTRACT NO.:
SUBMITTED BY:	FILE NUMBER: AE TYPICALS	FILE NAME: AE-TYP10LGN
PLOT SCALE: 12" = 1'	ANSI D	

USACE - NEW ORLEANS
 HURRICANE DESIGN GUIDELINES
 AE TYPICAL DRAWINGS

PEDESTRIAN GATES
 LATCHING DETAILS
 FLOODSIDE OPTION (1 OF 2)

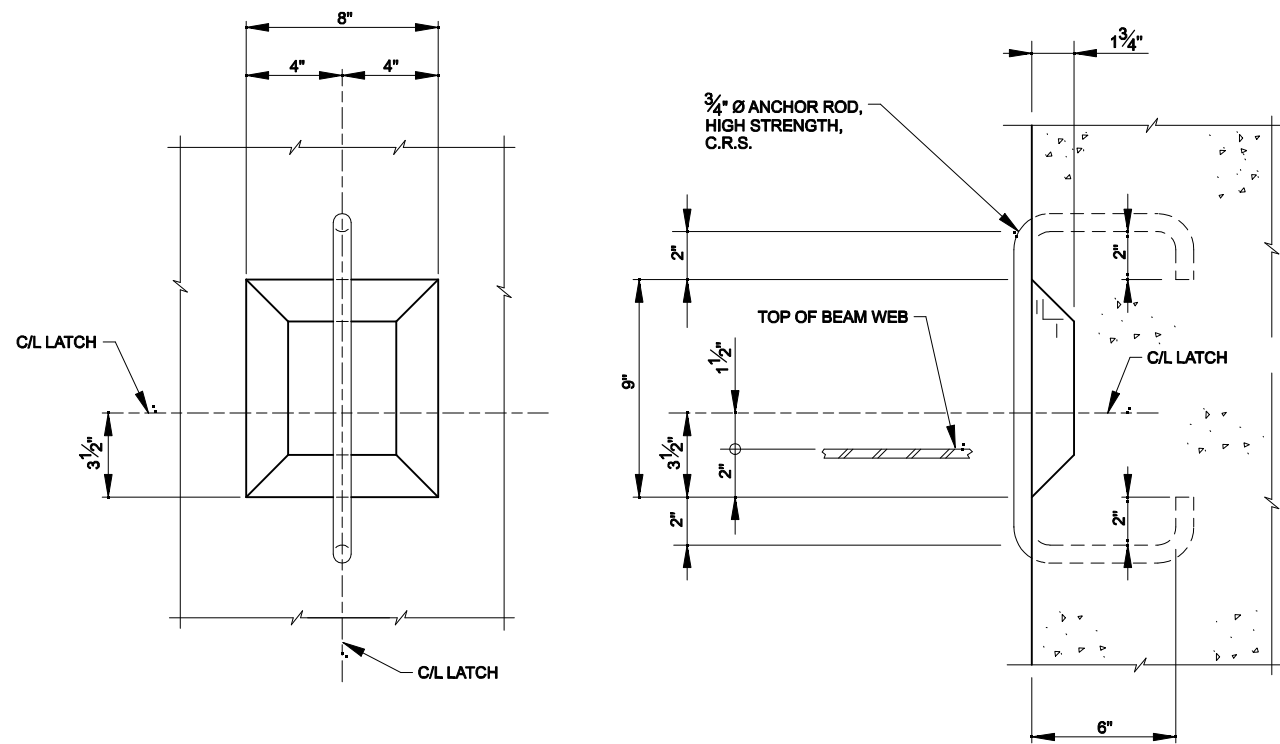
SHEET IDENTIFICATION
X-00

D

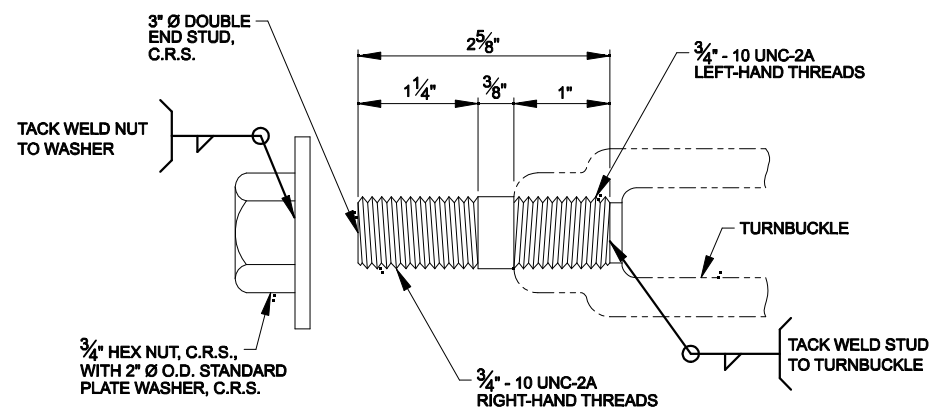
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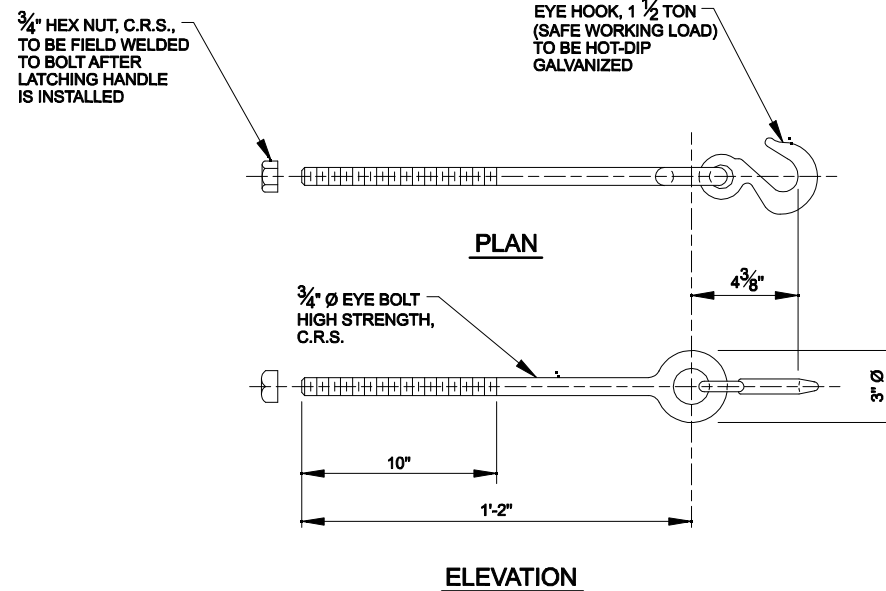
A



DETAIL ②
SCALE: 3" = 1' - 0"



DOUBLE END STUD
SCALE: 12" = 1' - 0"



LATCHING EYE BOLT WITH EYE HOOK

SCALE: 3" = 1' - 0"

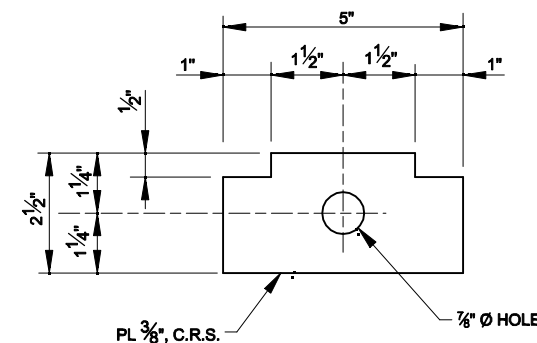
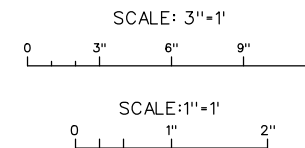


PLATE WASHER

SCALE: 6" = 1' - 0"

REFERENCE DRAWINGS

- FOR GENERAL NOTES, SEE DWG. X.
- FOR PLAN AND PROFILE, SEE DWGS. X, X, AND X.
- FOR TYPICAL WALL SECTIONS, SEE DWG. X.
- FOR GATE MONOLITH MASONRY DETAILS, SEE DWG. X.
- FOR MISCELLANEOUS DETAILS, SEE DWG. X.



US Army Corps of Engineers
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: NEW ORLEANS	DATE: MAY 2008
DWN BY: NEW ORLEANS	SOLICITATION NO.:
SUBMITTED BY: NEW ORLEANS, LOUISIANA	CONTRACT NO.:
PLOT SCALE: 1/2" = 1'	FILE NUMBER: A/E TYPICALS
SIZE: ANSI D	FILE NAME: AE-TYPFDLGN

USACE - NEW ORLEANS
HURRICANE DESIGN GUIDELINES
A/E TYPICAL DRAWINGS

PEDESTRIAN GATES
LATCHING DETAILS
FLOODSIDE OPTION (2 OF 2)

SHEET IDENTIFICATION
X-00