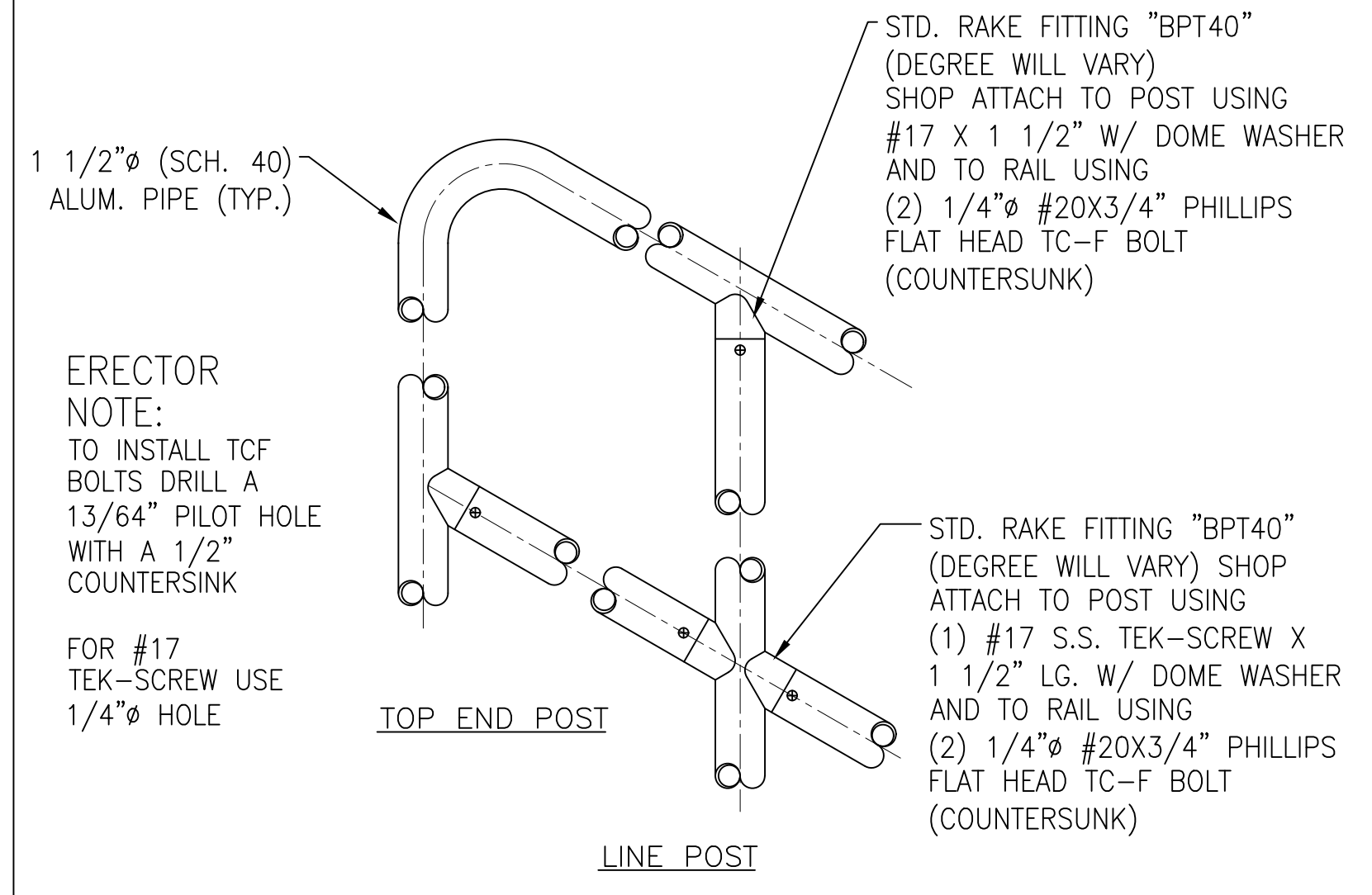
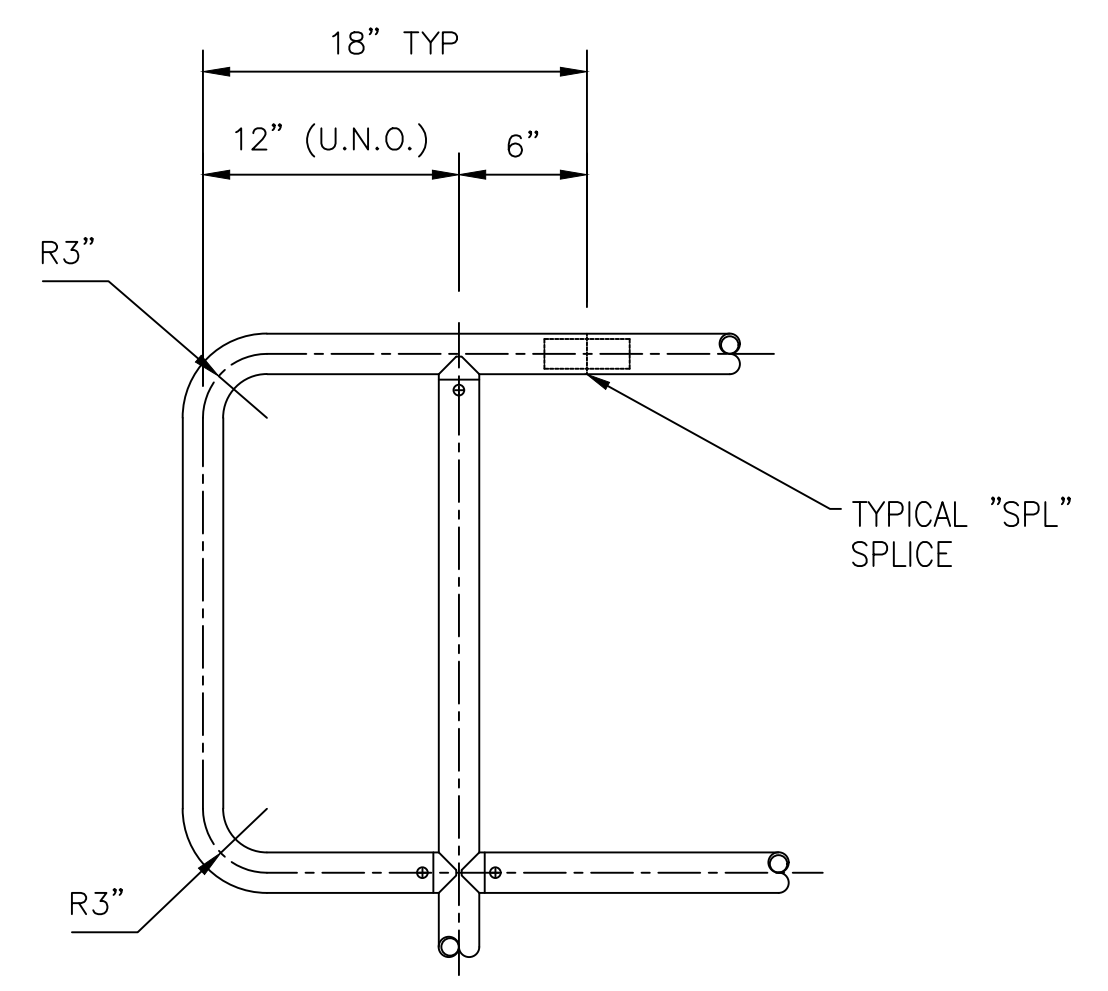


TYPICAL LEVEL RAIL CONNECTIONS



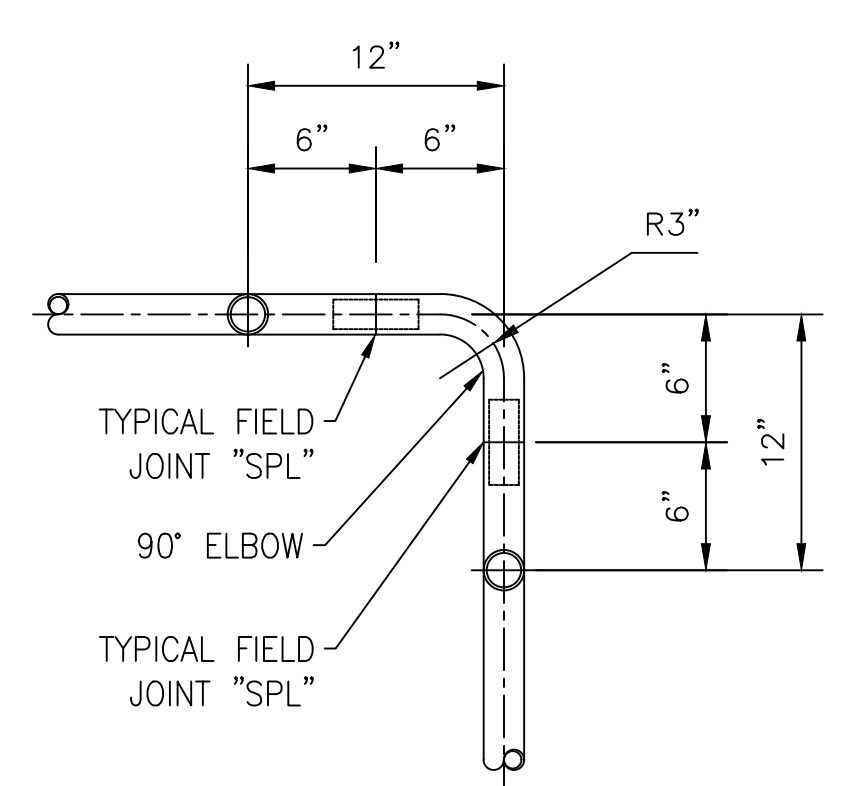
TYPICAL SLOPED RAIL CONNECTIONS



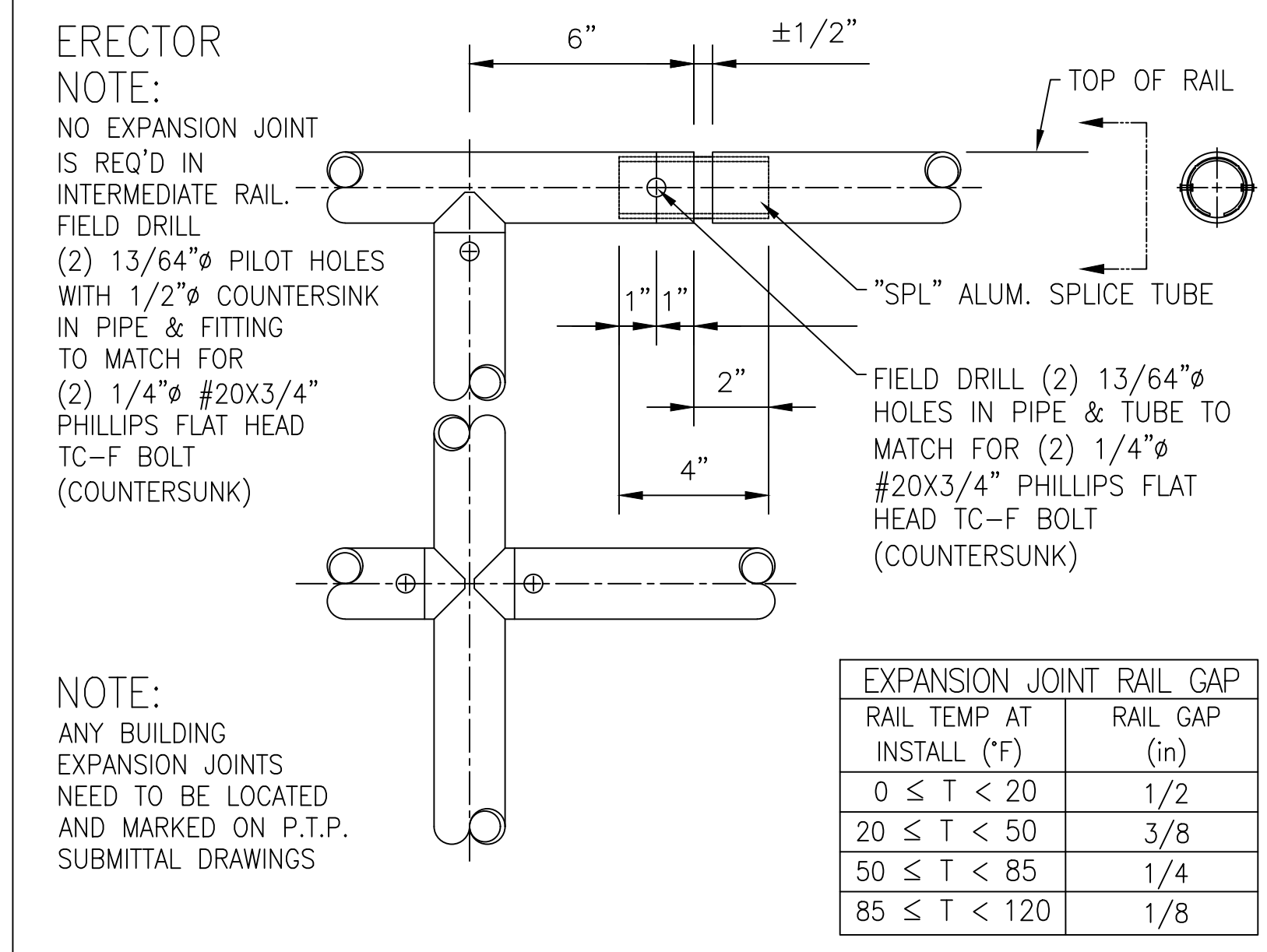
LEVEL P-END SHOP ASSEMBLE

GENERAL NOTES

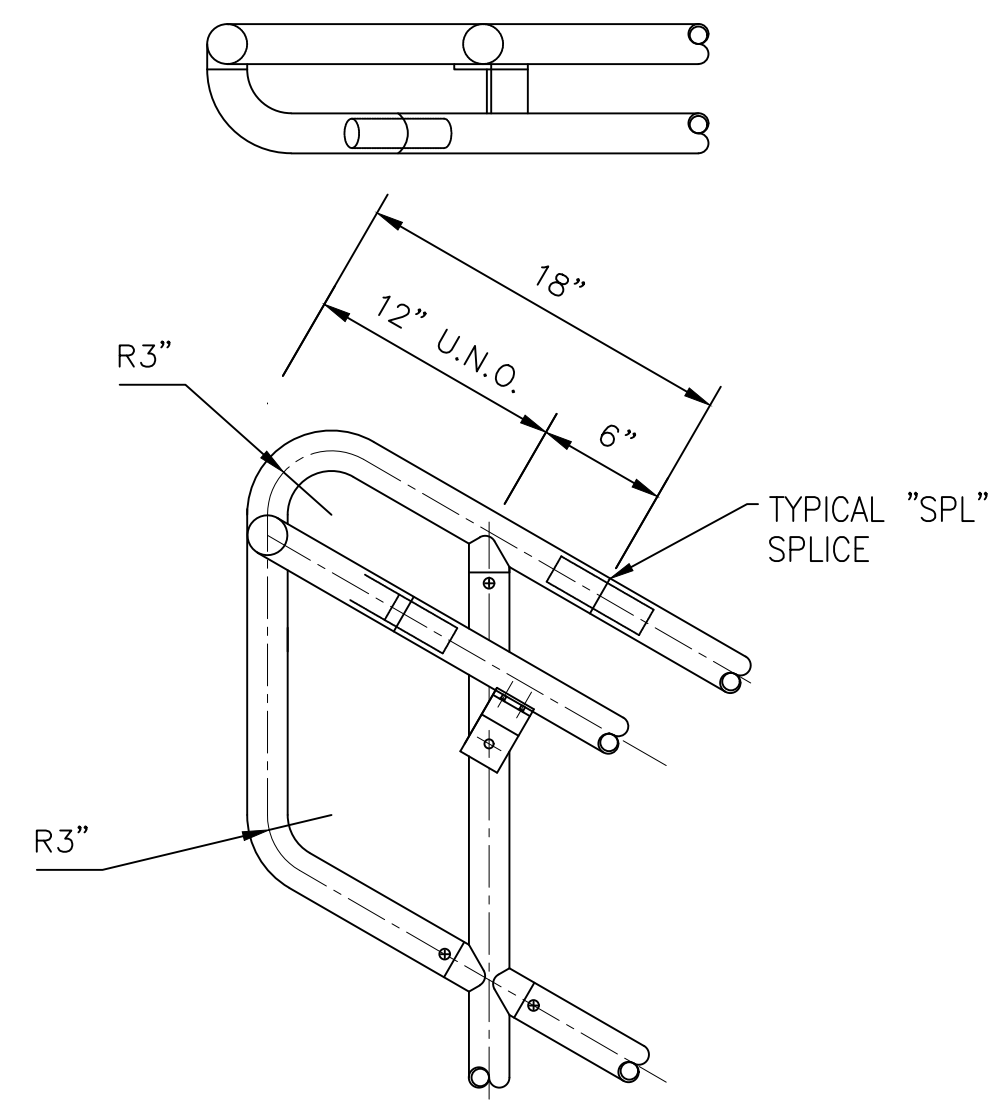
- ALL RAIL IS TO BE OF MECHANICAL CONSTRUCTION U.N.O.
- ALL RAILS ARE TO BE FABRICATED FROM 1 1/2" (SCH. 40) ALUMINUM PIPE (6005A-T61 ALLOY) (U.N.O.)
- ALL POSTS ARE TO BE FABRICATED FROM 1 1/2" (SCH. 40) ALUMINUM PIPE (6005A-T61 ALLOY) (U.N.O.)
- ALL EXTRUDED COMPONENTS ARE 6005A-T61 ALLOY, CAST COMPONENTS ARE 535 ALLOY
- ALL FASTENERS (SELF TAPPING SCREWS, MACHINE BOLTS, ADHESIVE ANCHORS, ETC.) TO BE 304 STAINLESS STEEL
- ALL RAILING SURFACES IN CONTACT WITH CONCRETE OR DISSIMILAR METALS SHALL RECEIVE ONE 1/16" THICK NEOPRENE GASKET (SHIPPED LOOSE FOR FIELD ATTACHMENT)
- ALL BOLTS, NUTS, AND FLAT WASHERS USED TO MOUNT RAILINGS TO FLOORS, WALLS, STEEL, ETC. ARE BY PTP ENGINEERED RAILINGS
- ALL KICK PLATES ("FKP" OR "SKP") SHALL BE SHIPPED LOOSE IN 24'-0" LG. STOCK LENGTHS OR SMALLER FOR FIELD CUTTING & DRILLING AS NEEDED
- ALL PANELS ARE FURNISHED IN ASSEMBLED SECTIONS UP TO 24'-0" LG. (MAX.)
- PIPE FOR CURVED RAIL IS FURNISHED SUB-ASSEMBLED IN 21'-0" (MAX). ROLLED LENGTHS FOR FIELD CUTTING & DRILLING AS NEEDED
** ALL RADII MUST BE VERIFIED PRIOR TO FABRICATION **
- ALL CURVED RAIL SHALL BE FABRICATED USING CURVED TOP AND INTERMEDIATE RAILS
- PIPE FOR SINGLE LINE RAIL IS FURNISHED & SHIPPED SUB-ASSEMBLED.
- BENDS WITH A 3" C/L RADIUS ARE FURNISHED AS NEEDED & MUST BE FIELD CUT FOR FIELD CONDITIONS
- ALL RAIL WHEN PROPERLY INSTALLED SHALL MEET OR EXCEED OSHA REQUIREMENTS
- MAX. POST SPACING TO BE 6'-0" C/C
- ALL RAIL IS TO BE FINISHED IN ACCORDANCE WITH THE ALUMINUM ASSOCIATION'S DESIGNATION M10C22A41 OR M12C22A4
- PIPE FOR CANTILEVER RAILING WILL SHIP LOOSE IN UP TO 24'-0" STOCK LENGTHS FOR FIELD CUTTING AND DRILLING AS NEEDED
- ENSURE ALL FIELD CUTS AND FIELD DRILLED HOLES ARE CLEANED UP, FREE OF SHARP EDGES AND BURRS.
- CONCRETE ANCHOR TYPE IS HILTI HIT-RE 500 V3 ADHESIVE ANCHORS. CONCRETE STRENGTH IS ASSUMED TO BE 4000 PSI, NORMAL WEIGHT CRACKED CONCRETE.
- ALL DIMENSIONS SHOWN THROUGHOUT THIS SET ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BEFORE FABRICATION AND INSTALLATION
%% = SEE ERECTION DRAWINGS FOR PART NUMBER



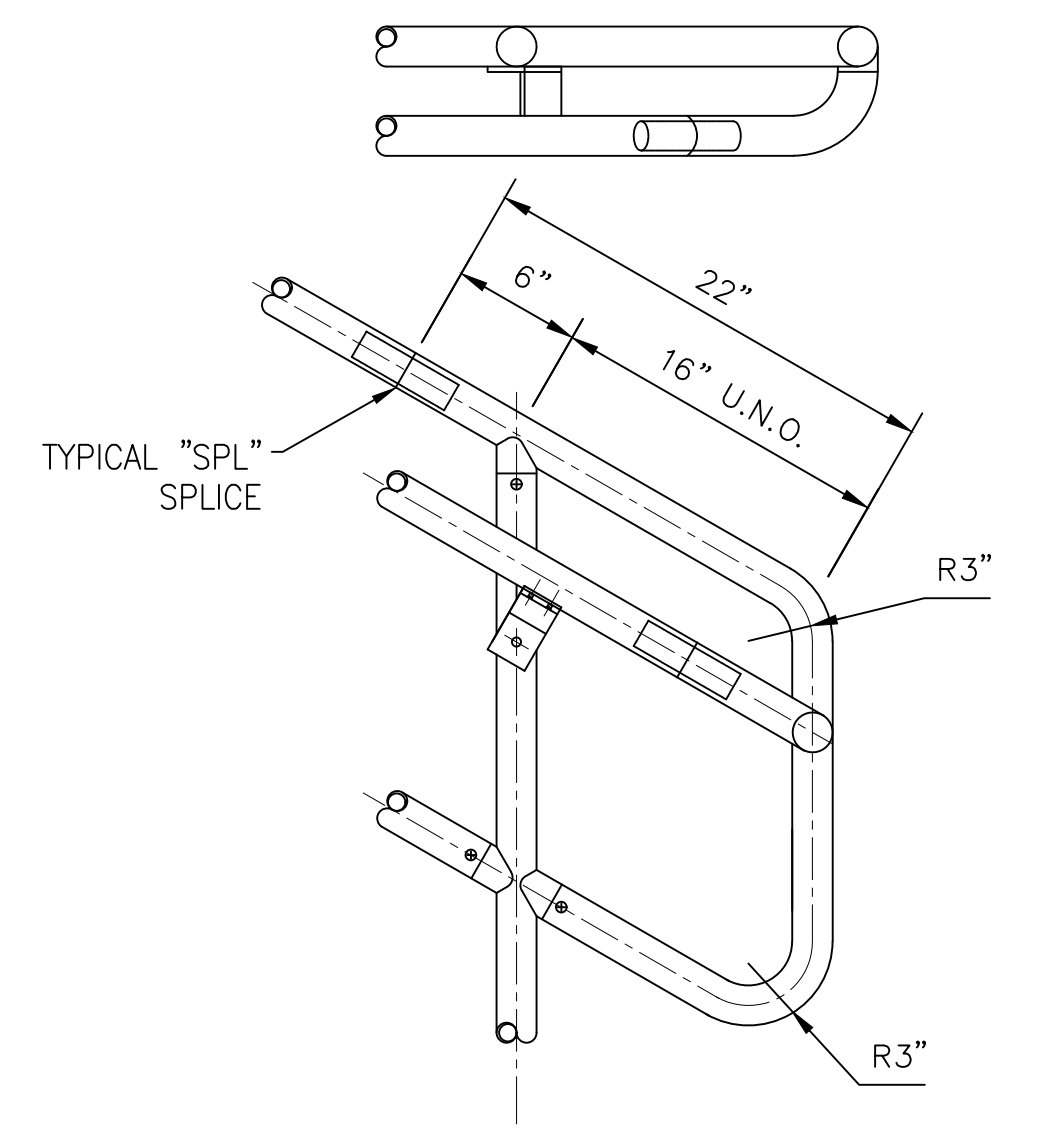
TYPICAL CORNER SHOP ASSEMBLE



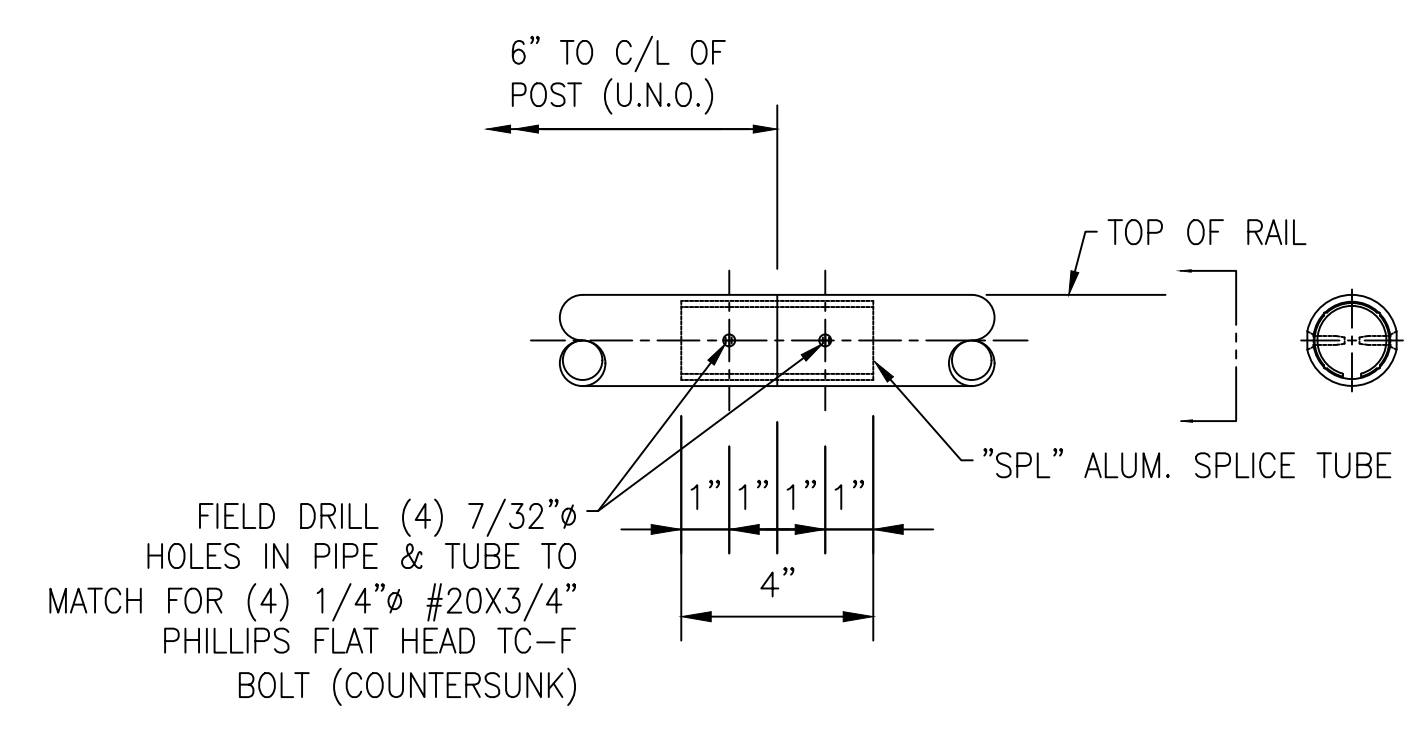
TYPICAL EXPANSION JOINT
(LOCATED AT BUILDING EXPANSION JOINT & AT 24'-0" MAX. O/C)



TOP RAKE P-END SHOP ASSEMBLE

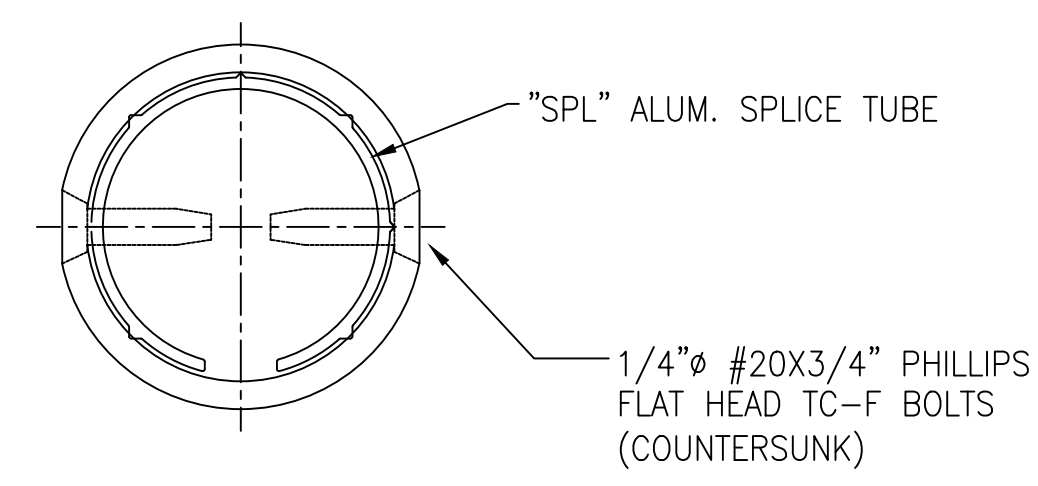


BOTTOM RAKE P-END SHOP ASSEMBLE



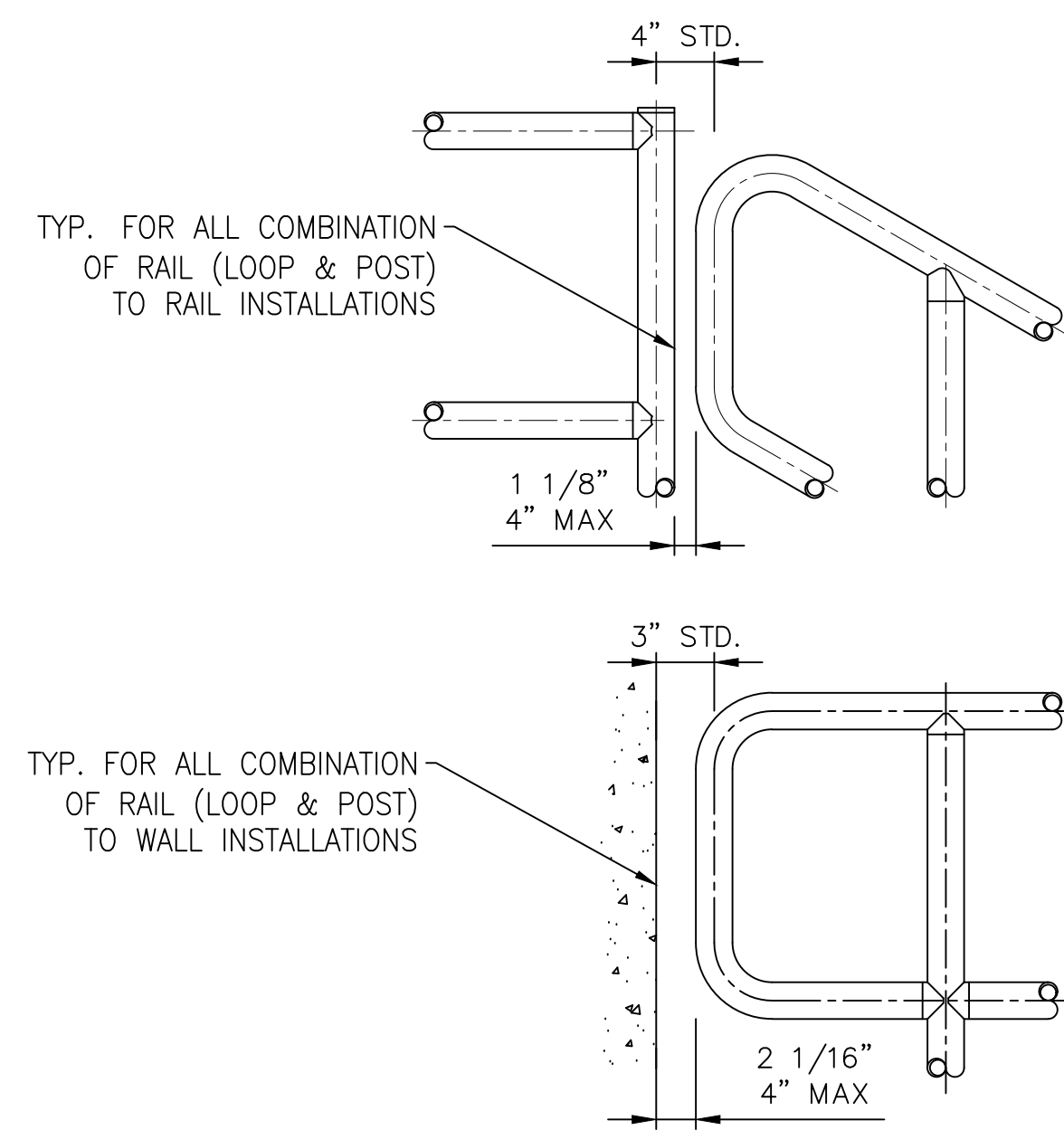
TYPICAL FIELD JOINT
(LOCATED AS NEEDED FOR STRUCTURAL STABILITY)

ERECTOR NOTE:
FIELD JOINT AT INTERMEDIATE RAIL IS LOCATED IN THE FITTING. FIELD DRILL (2) 13/64" PILOT HOLES WITH 1/2" COUNTERSINK IN PIPE AND FITTING TO MATCH FOR (2) 1/4" #20X3/4" PHILLIPS FLAT HEAD TC-F BOLT (COUNTERSUNK)

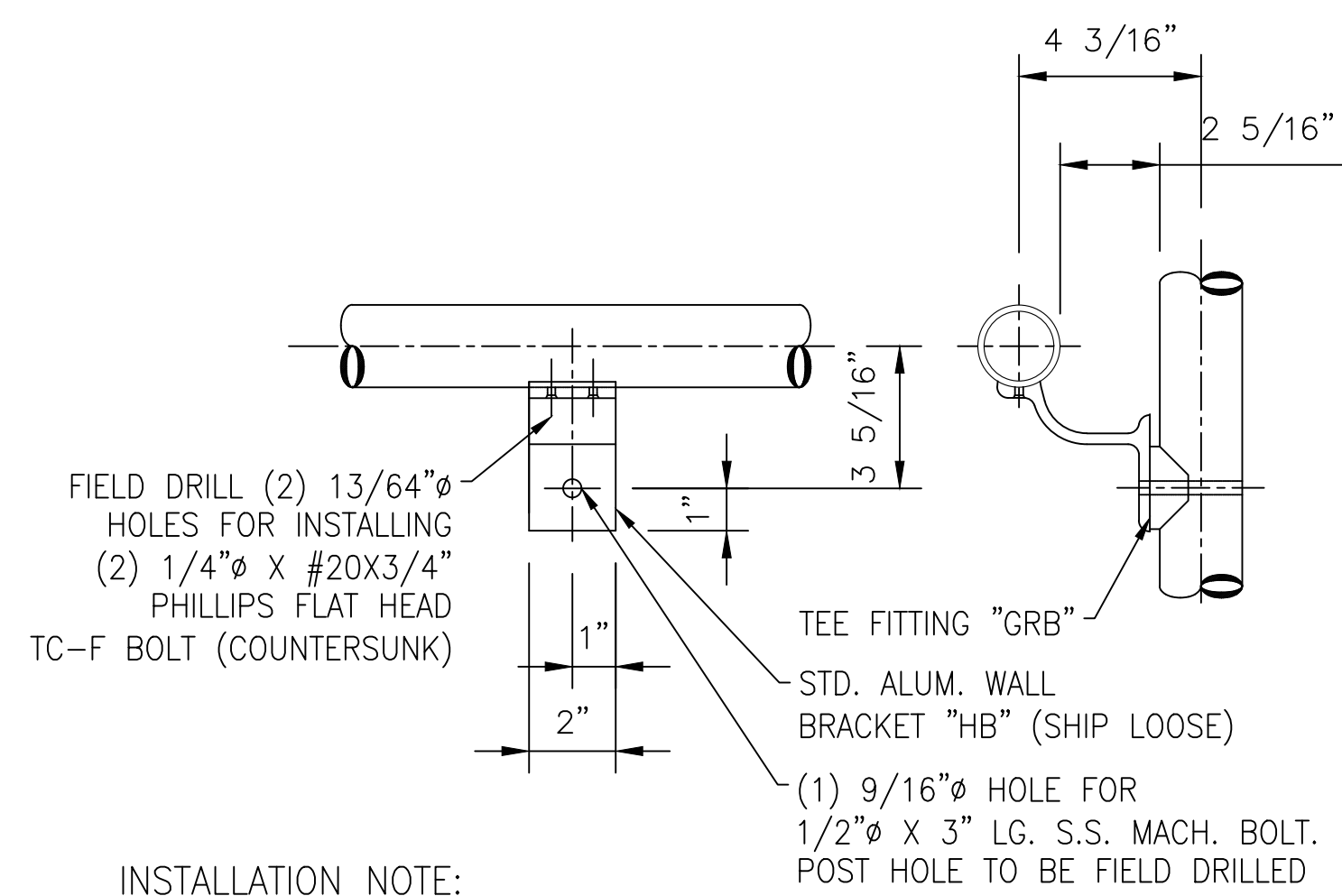


EXPANSION JOINT & FIELD SPLICE

1	SUBMITTAL	9/19/2017			
REV	DESCRIPTION	DATE			
<p>3000 YOUNGFIELD ST. SUITE 275 WHEAT RIDGE, CO 80215 Ph. (720)508-3819 FAX (720)409-3843</p>		<p>NOTICE TO CONTRACTOR AND ERECTOR: BACK CHARGES FOR CORRECTIVE WORK OR REPLACEMENT MATERIALS WILL NOT BE ACCEPTED UNLESS AUTHORIZED BY PEAK TO PEAK ENGINEERED RAILINGS, INC. BEFORE SUCH COSTS ARE INCURRED</p>			
			<p>STANDARD DETAILS CITY, ST ALUMINUM HANDRAIL - TCF SYSTEM - SHOP ASSEMBLED</p>		
DESIGNER	DESIGNER	CUSTOMER	CUSTOMER	DWG TITLE	STANDARD DETAILS
CUSTOMER JOB #	XXXX-XX	PRINT DATE	3/13/2020	ISSUE DATE	3/13/2020
DETAILED BY	INT	CHECKER	INT	SCALE	NTS
				CONTRACT NO	DRAWING NO.
				XXX-XXX	SD-1



STD. RAILING OFFSETS



FIELD DRILL (2) 13/64" Ø HOLES FOR INSTALLING (2) 1/4" Ø X #20X3/4" PHILLIPS FLAT HEAD TC-F BOLT (COUNTERSUNK)

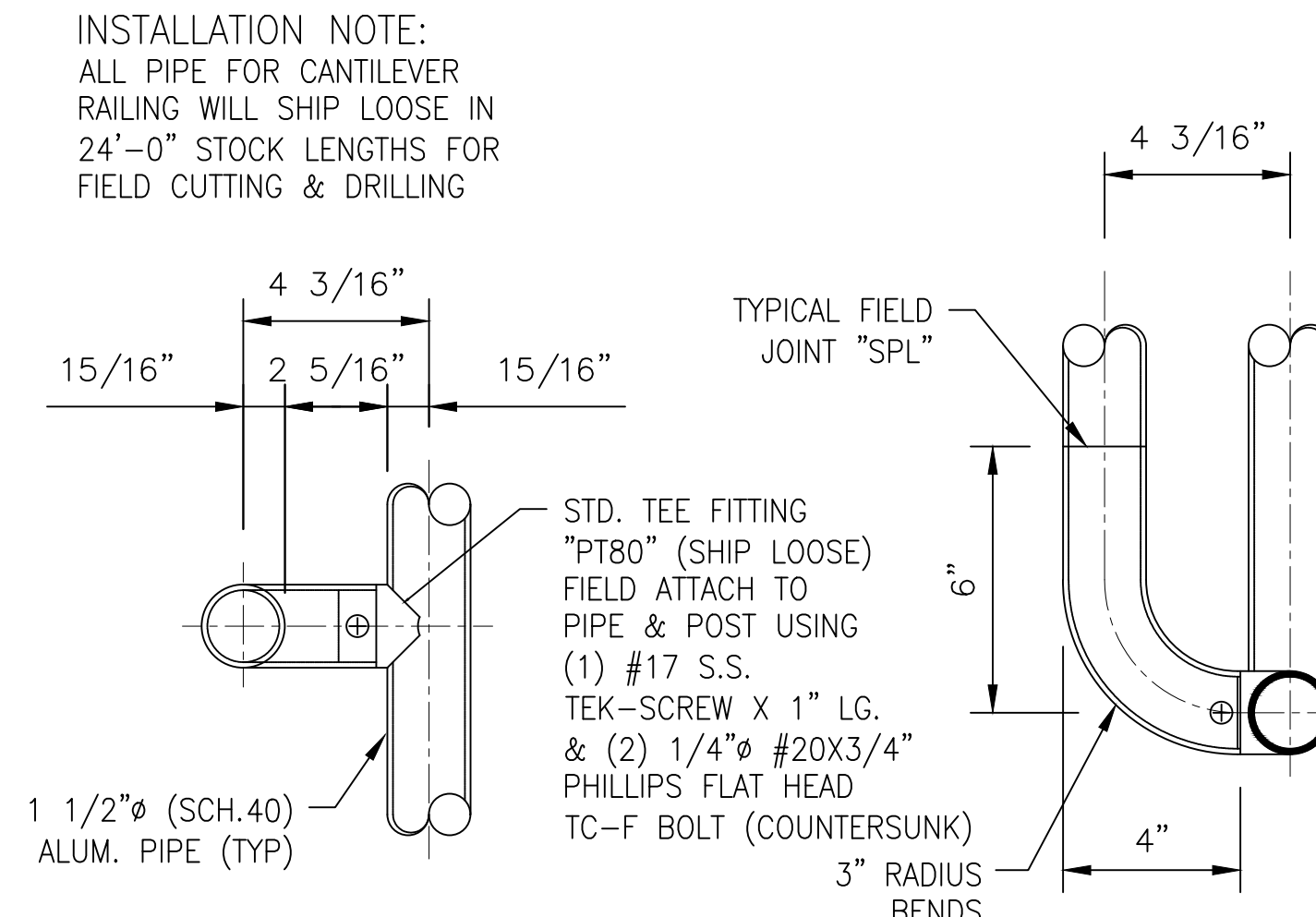
TEE FITTING "GRB"

STD. ALUM. WALL BRACKET "HB" (SHIP LOOSE)

(1) 9/16" Ø HOLE FOR 1/2" Ø X 3" LG. S.S. MACH. BOLT. POST HOLE TO BE FIELD DRILLED

INSTALLATION NOTE:
ALL PIPE FOR CANTILEVER RAILING WILL SHIP LOOSE IN 24'-0" STOCK LENGTHS FOR FIELD CUTTING & DRILLING

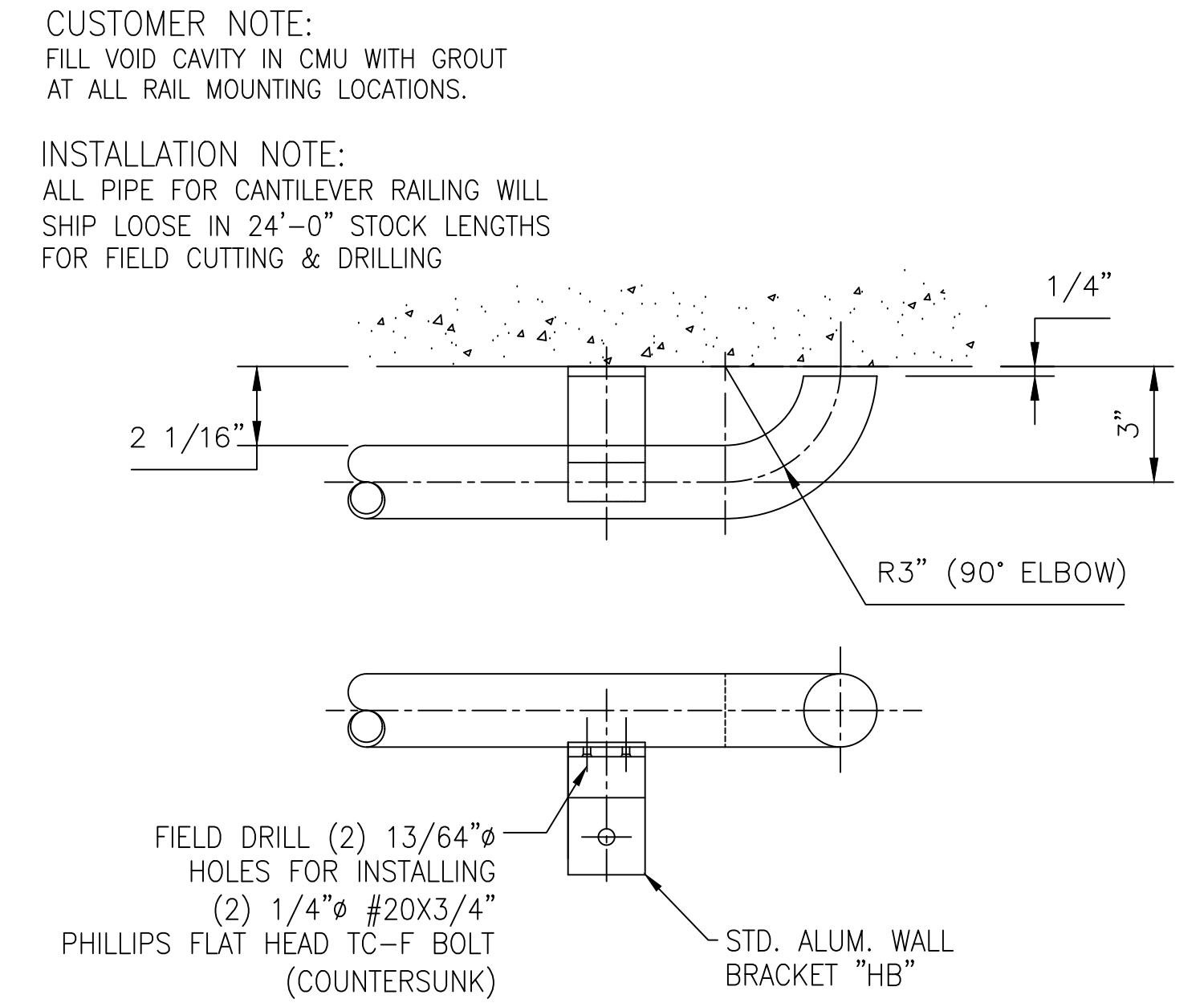
CANTILEVER RAIL BRACKET GRB



INSTALLATION NOTE:
ALL PIPE FOR CANTILEVER RAILING WILL SHIP LOOSE IN 24'-0" STOCK LENGTHS FOR FIELD CUTTING & DRILLING

NOTE:
FIELD DRILLED HOLES:
#17 TEK-SCREW - 1/4" Ø
TC-F BOLT - 13/64" Ø

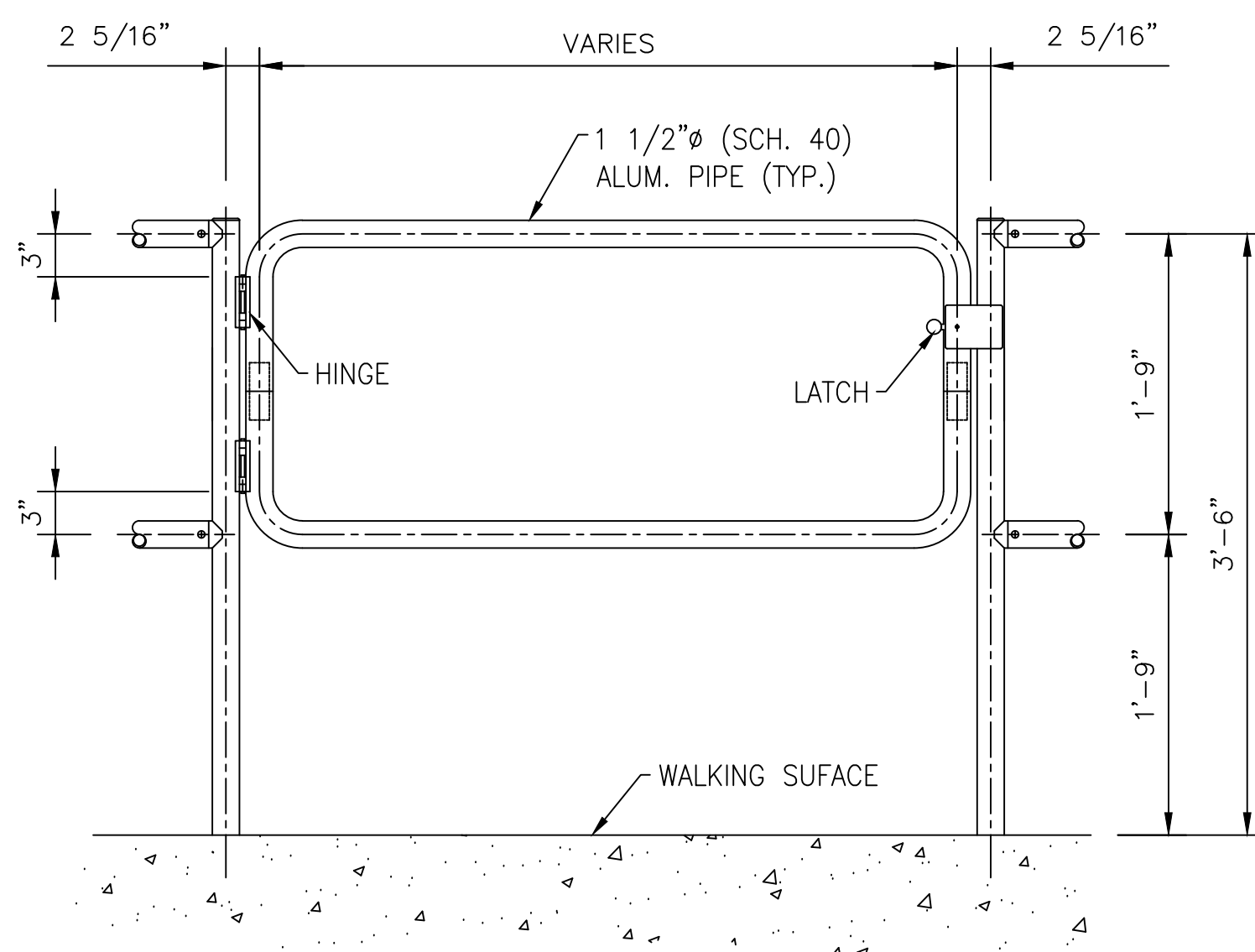
SPECIAL OFFSET RAIL CONNECTOR



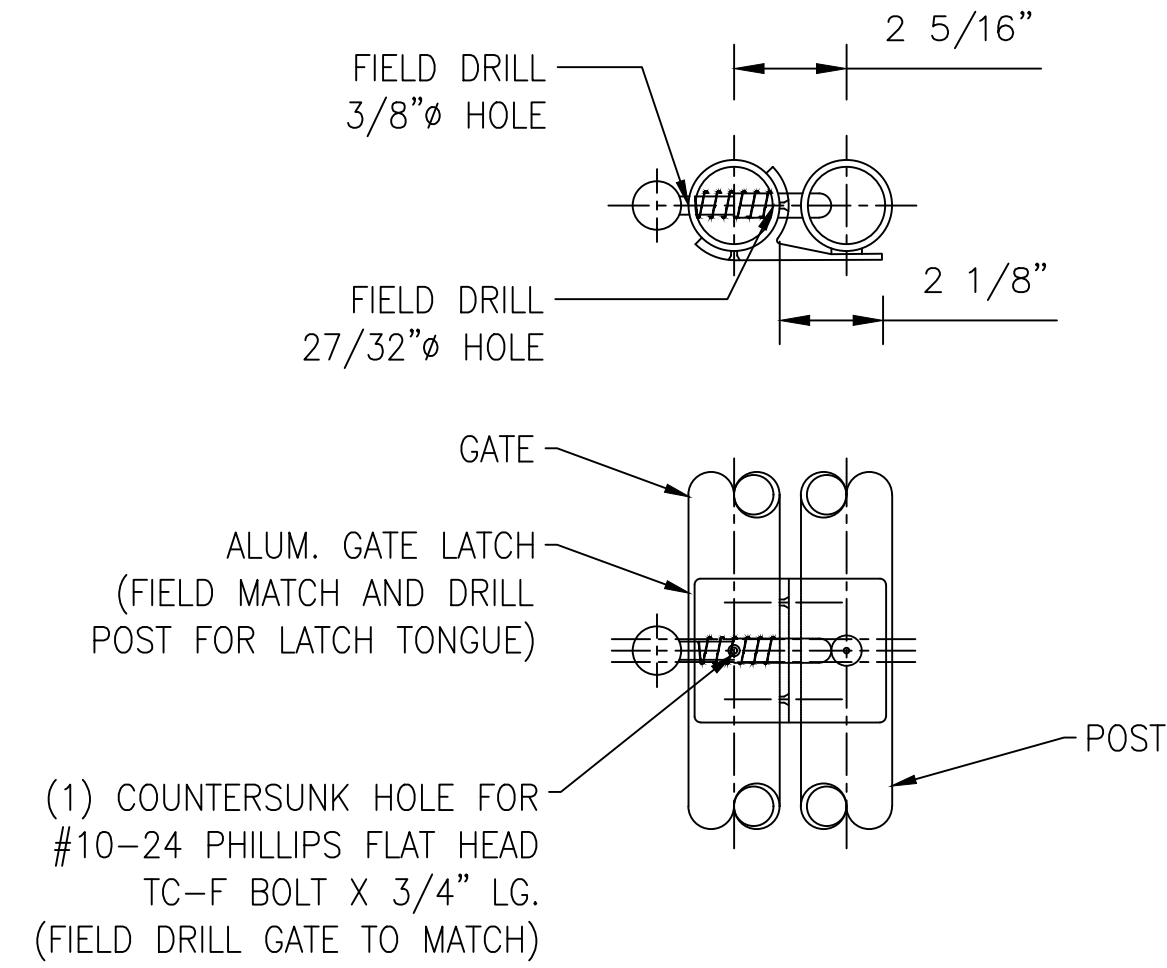
FIELD DRILL (2) 13/64" Ø HOLES FOR INSTALLING (2) 1/4" Ø #20X3/4" PHILLIPS FLAT HEAD TC-F BOLT (COUNTERSUNK)

STD. ALUM. WALL BRACKET "HB"

WALL RAIL END RETURN

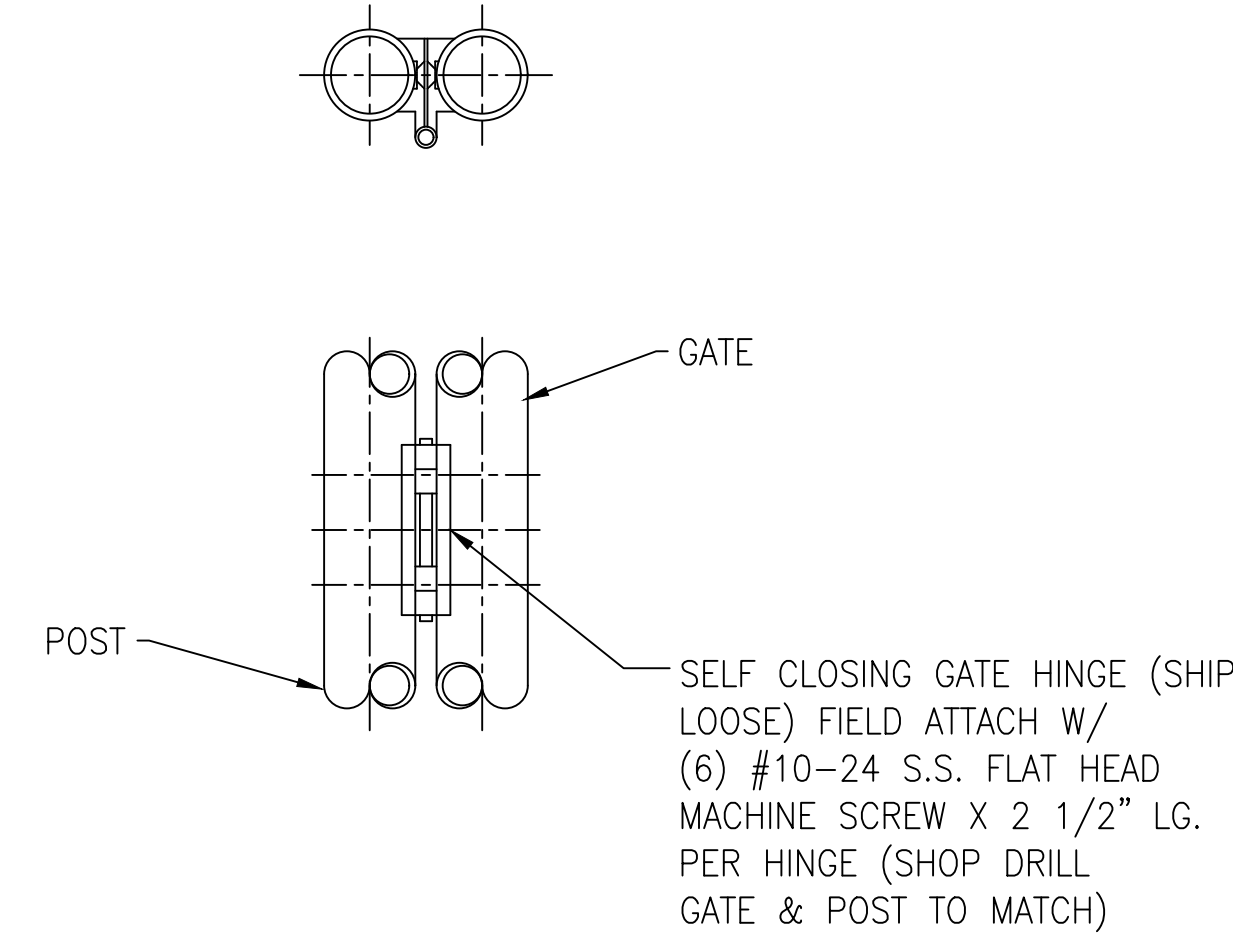


GATE

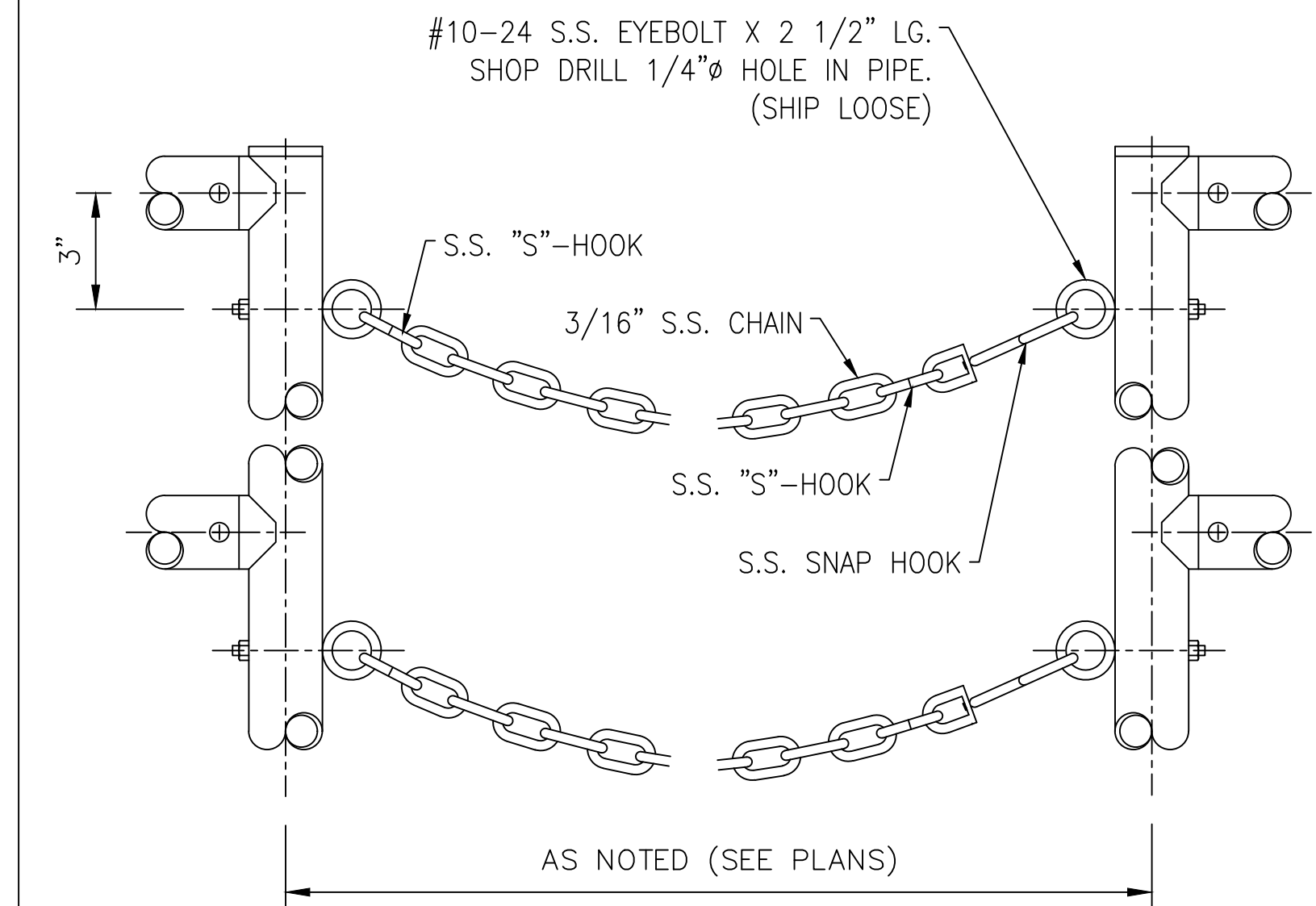


(1) COUNTERSUNK HOLE FOR #10-24 PHILLIPS FLAT HEAD TC-F BOLT X 3/4" LG. (FIELD DRILL GATE TO MATCH)

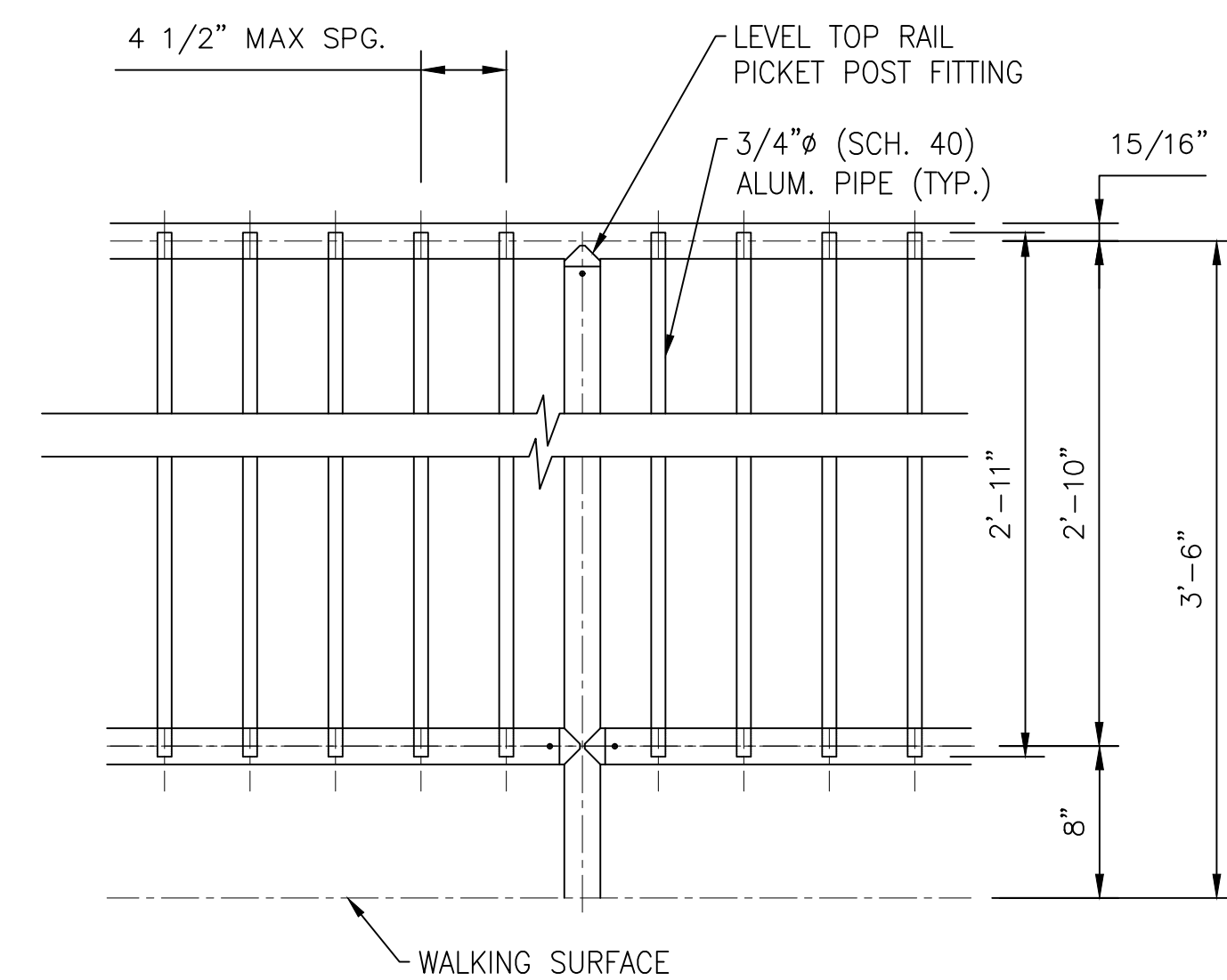
LATCH



HINGE

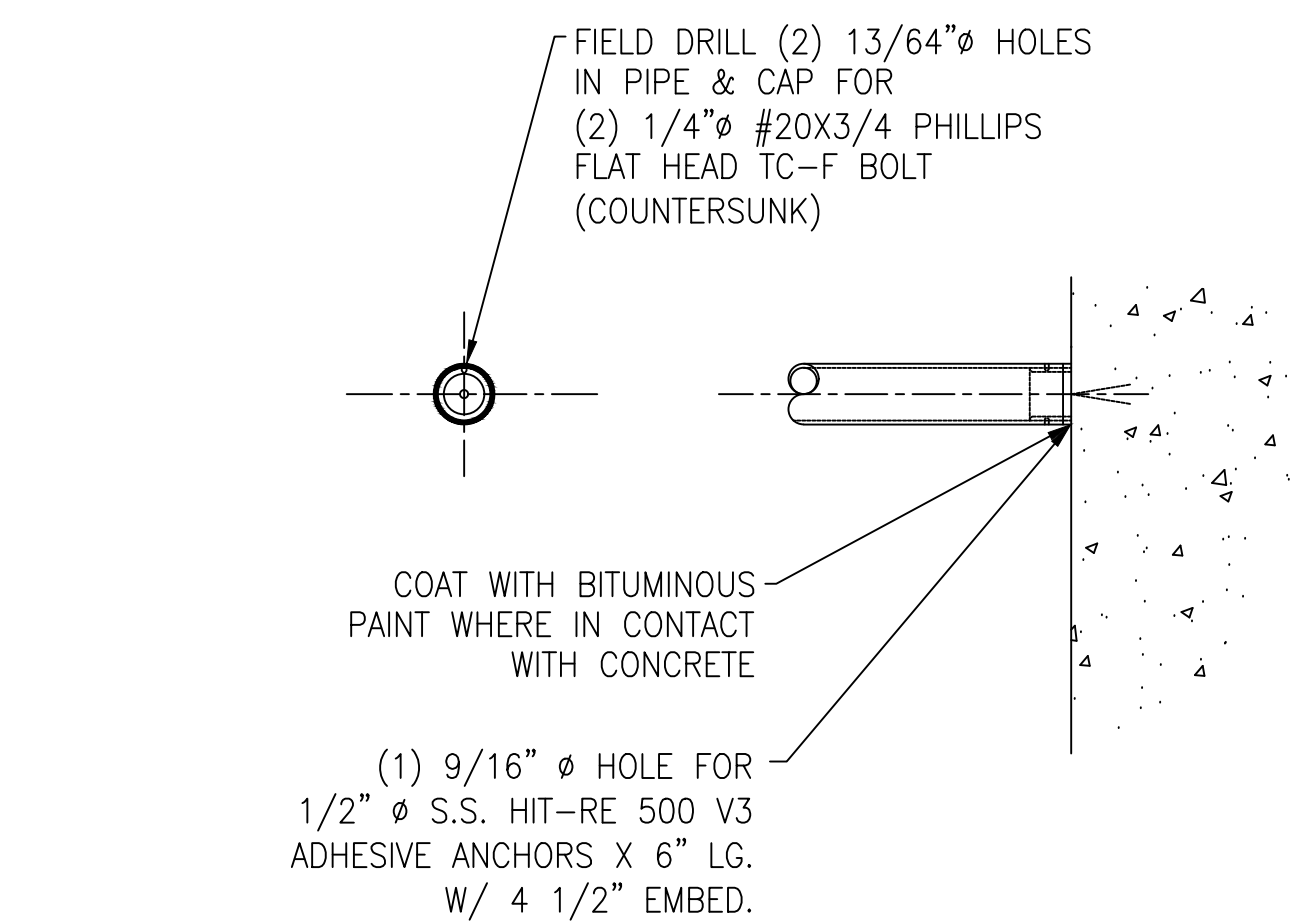


CHAIN OPENING



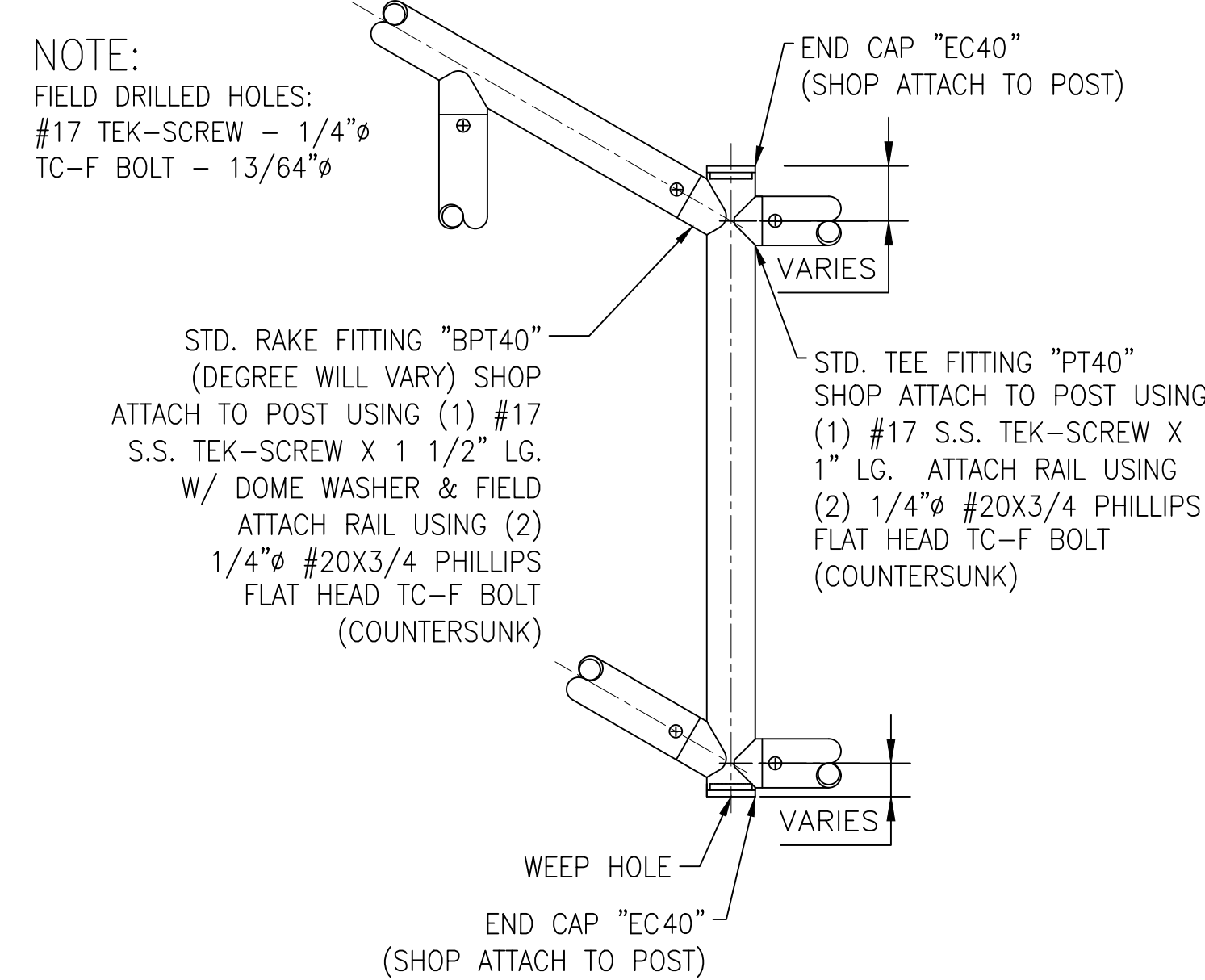
PICKET RAIL HORIZONTAL PANEL

INSTALLATION NOTE:
PANELS WITH PICKETS SHALL BE SHIPPED TO SITE WITH PICKETS STRAPPED TOGETHER WITH TOP AND BOTTOM HORIZONTAL RAILS, TO BE FIELD TRIMMED AND INSTALLED



CUSTOMER NOTE:
FILL VOID CAVITY IN CMU WITH GROUT AT ALL RAIL MOUNTING LOCATIONS.

WALL MOUNTED T-FITTING WT40



MINIPOST

NOTE:
FIELD DRILLED HOLES:
#17 TEK-SCREW - 1/4" Ø
TC-F BOLT - 13/64" Ø

STD. RAKE FITTING "BPT40" (DEGREE WILL VARY) SHOP ATTACH TO POST USING (1) #17 S.S. TEK-SCREW X 1 1/2" LG. W/ DOME WASHER & FIELD ATTACH RAIL USING (2) 1/4" Ø #20X3/4 PHILLIPS FLAT HEAD TC-F BOLT (COUNTERSUNK)

STD. TEE FITTING "PT40" SHOP ATTACH TO POST USING (1) #17 S.S. TEK-SCREW X 1" LG. ATTACH RAIL USING (2) 1/4" Ø #20X3/4 PHILLIPS FLAT HEAD TC-F BOLT (COUNTERSUNK)

REV	DESCRIPTION	DATE
STANDARD DETAILS CITY, ST ALUMINUM HANDRAIL - TCF SYSTEM - SHOP ASSEMBLED		
DESIGNER	DESIGNER	CUSTOMER
CUSTOMER JOB #	XXXX-XX	PRINT DATE
DATE	3/13/2020	ISSUE DATE
SCALE	NTS	CONTRACT NO
CHECKER	INT	XXX-XXX
DRAWING NO.	SD-2	

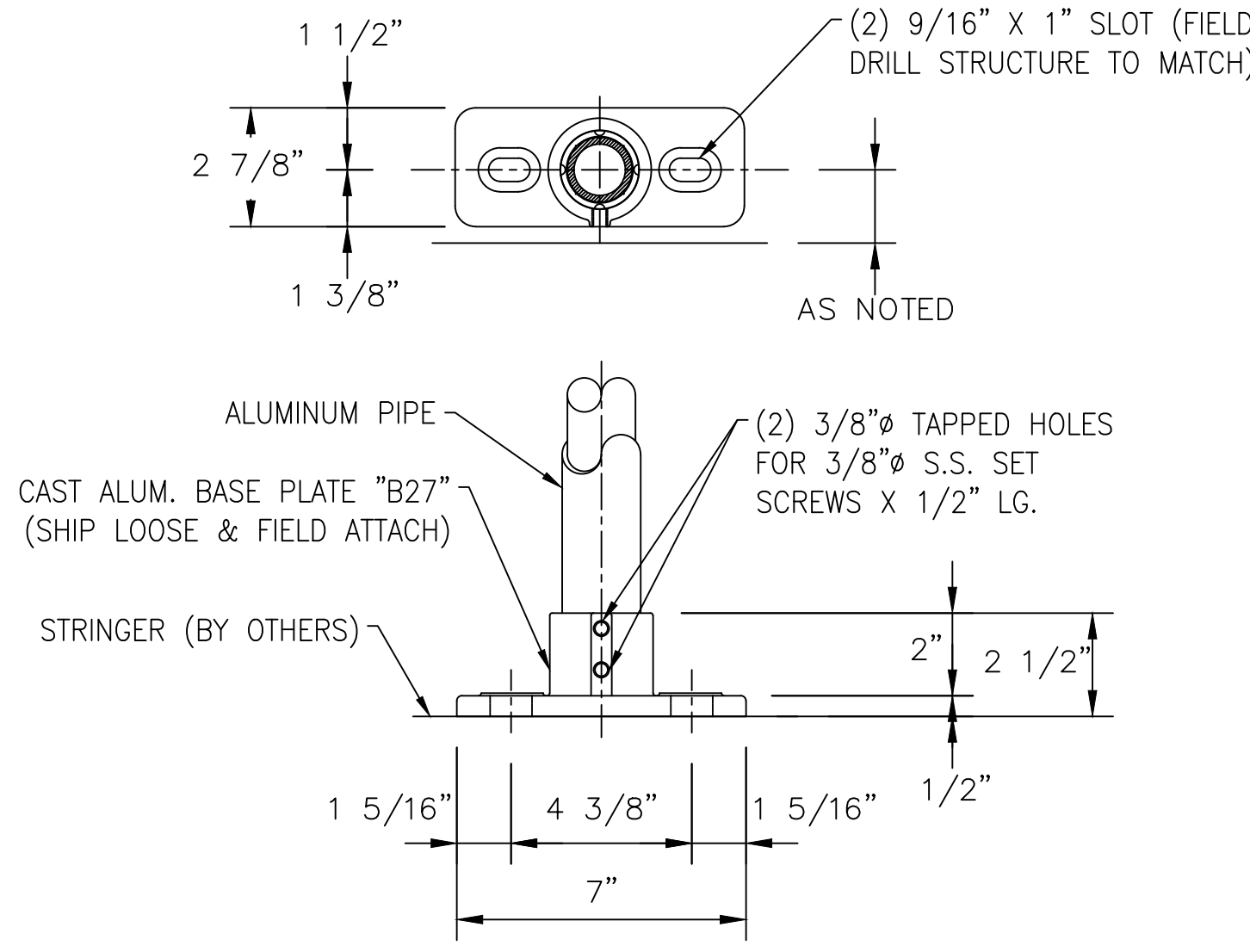
NOTICE TO CONTRACTOR AND ERECTOR:
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MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	N/A	-	-	-

MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MECHANICAL BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHORS	1/2"	6"	4 1/2"

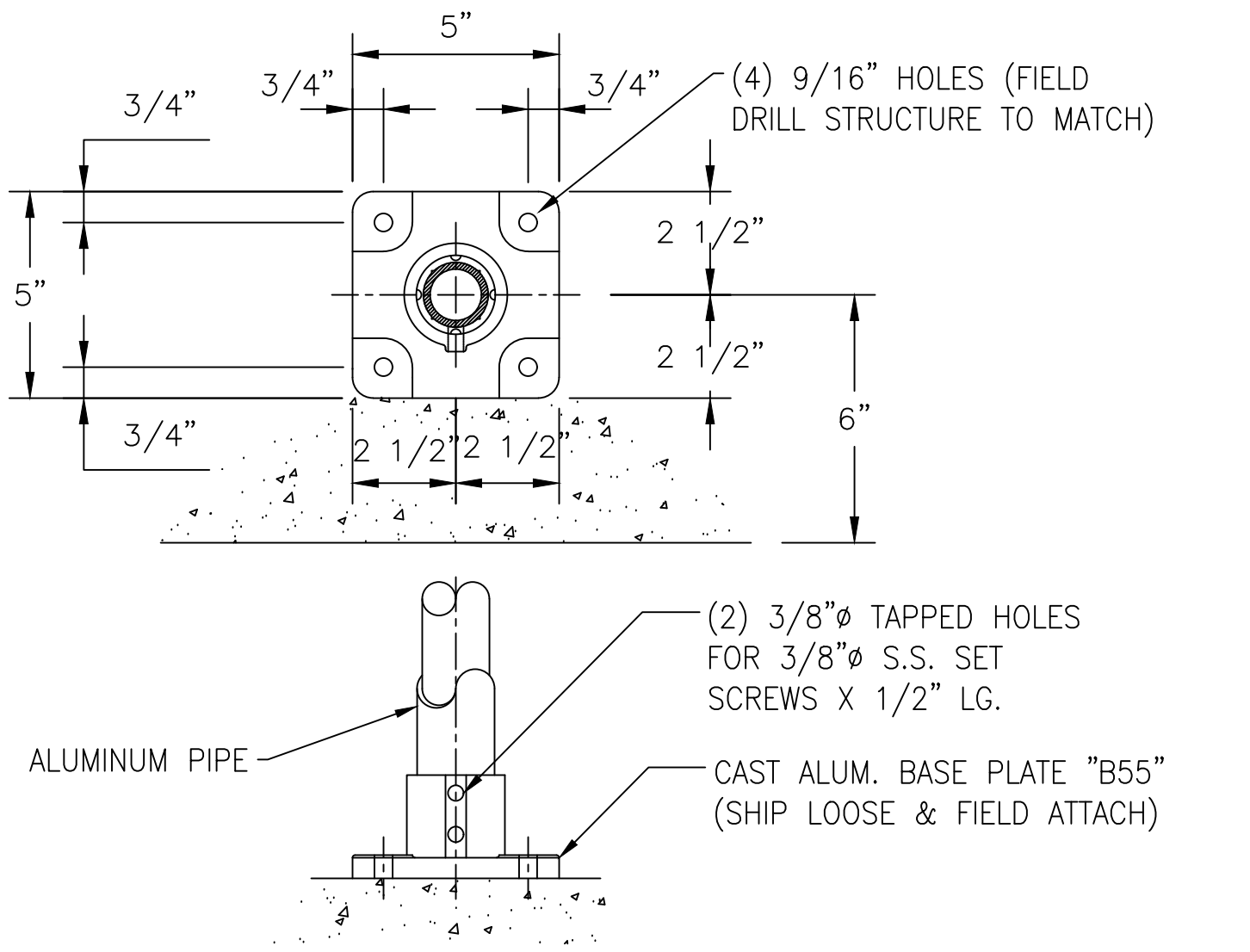
MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHORS	1/2"	6"	4 1/2"

MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHORS	1/2"	6"	4 1/2"



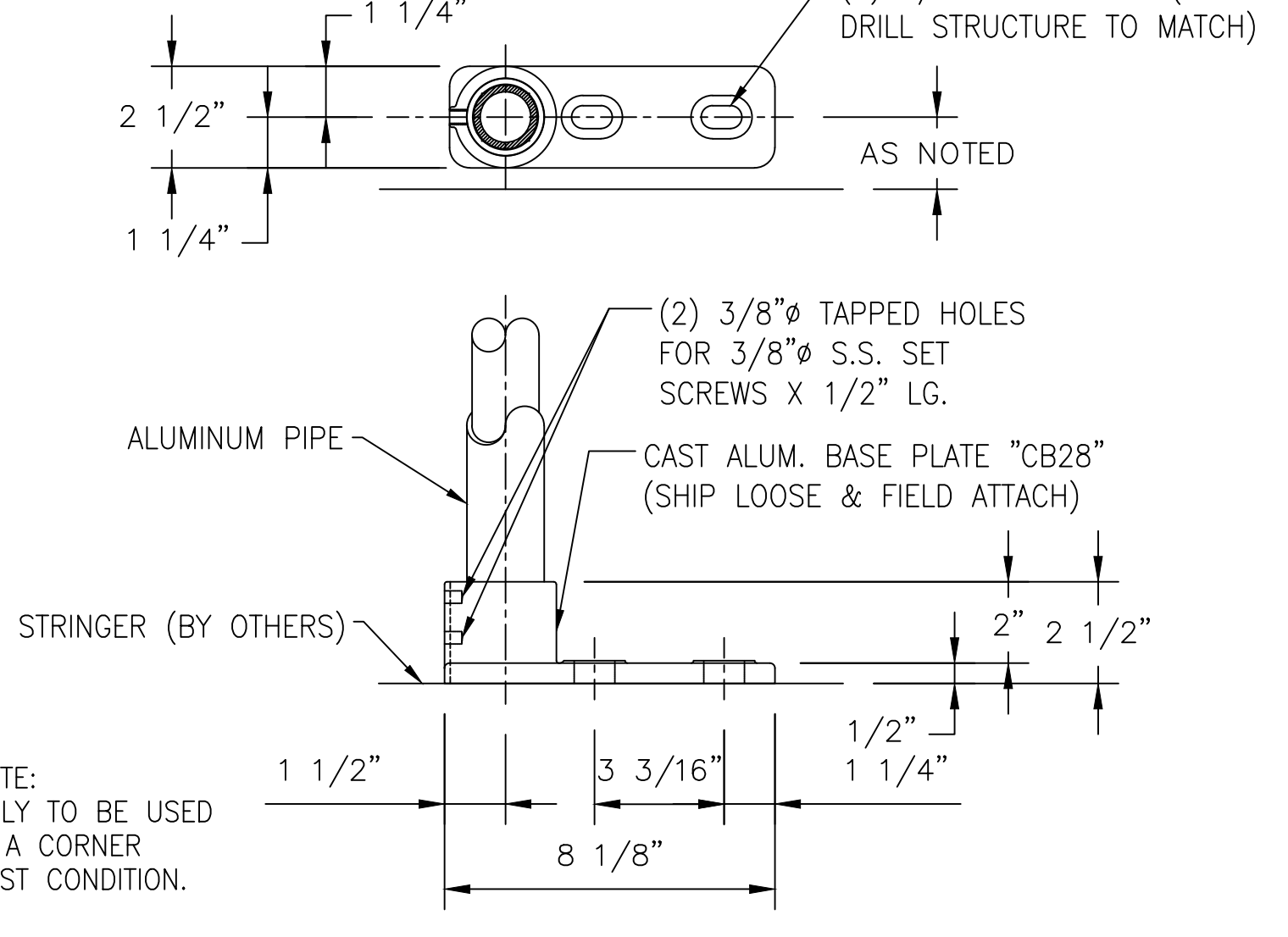
LEVEL STL. LINE POST

B27



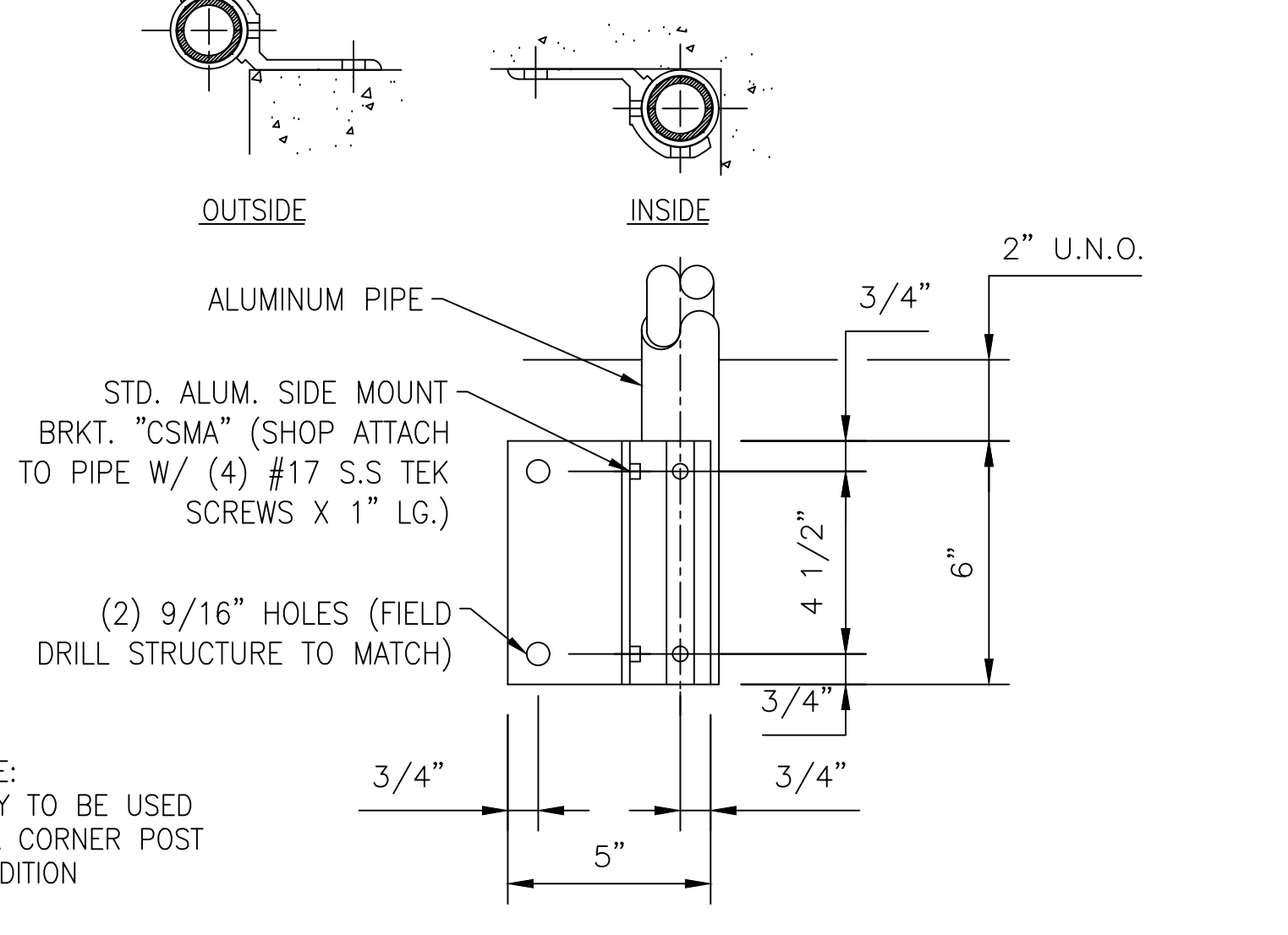
LEVEL CONC. LINE POST

B55



LEVEL CORNER POST

CB28



CONC. CORNER SIDE MOUNT

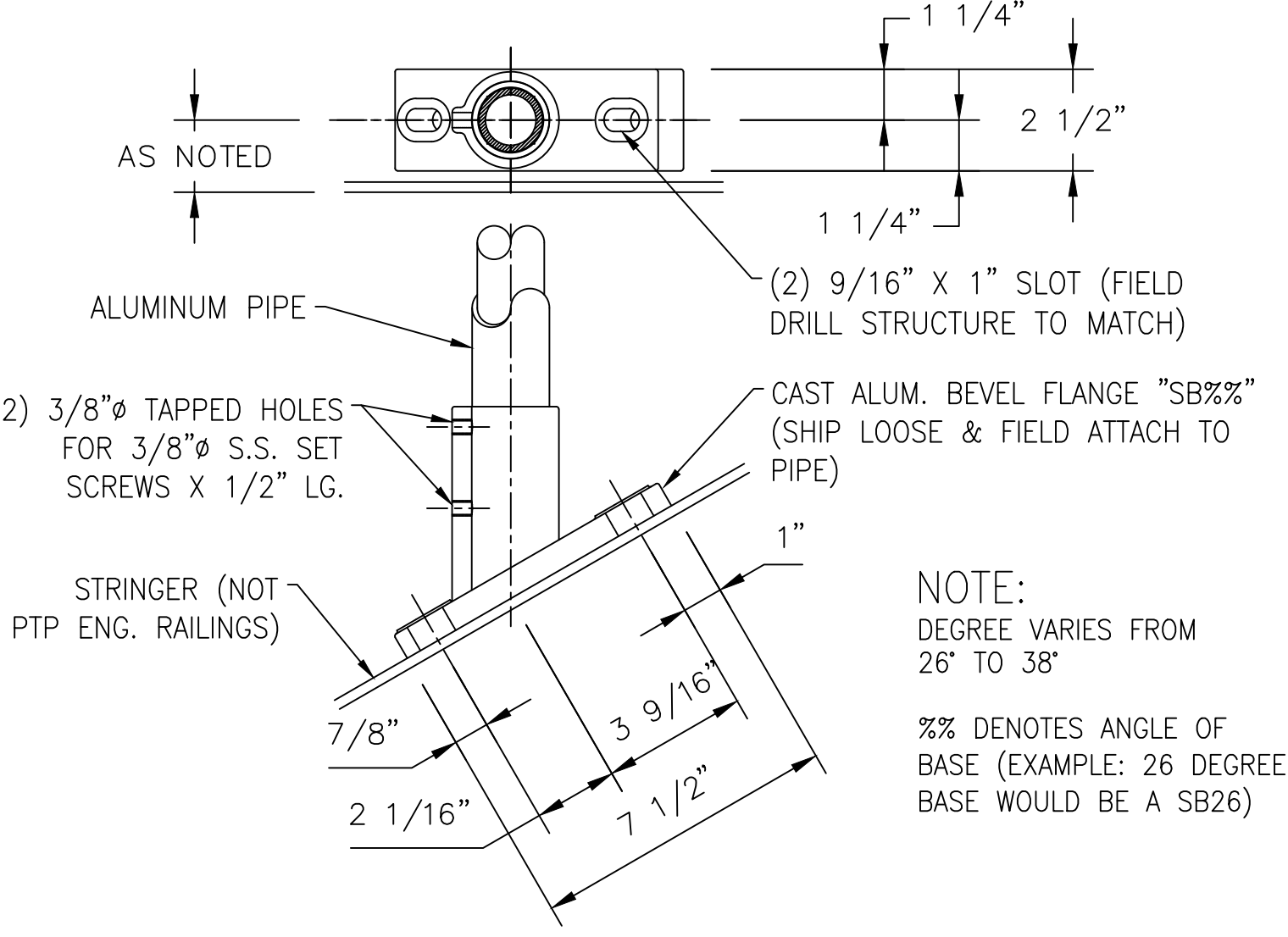
CSMA

MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2 1/2"	N/A
CONCRETE	N/A	-	-	-

MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	N/A	-	-	-
CONCRETE	N/A	-	-	-

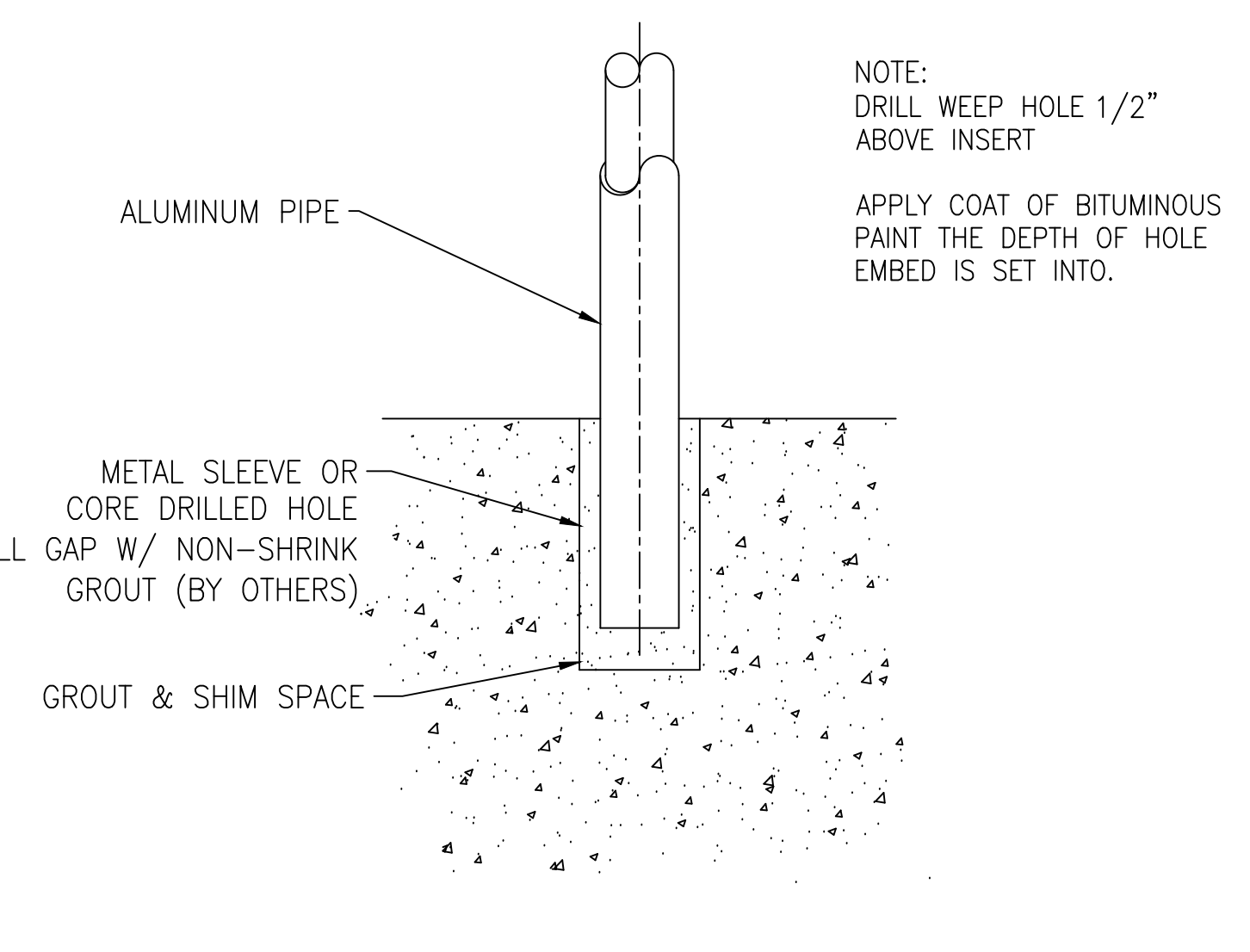
MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHORS	1/2"	6"	4 1/2"

MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHORS	1/2"	6"	4 1/2"

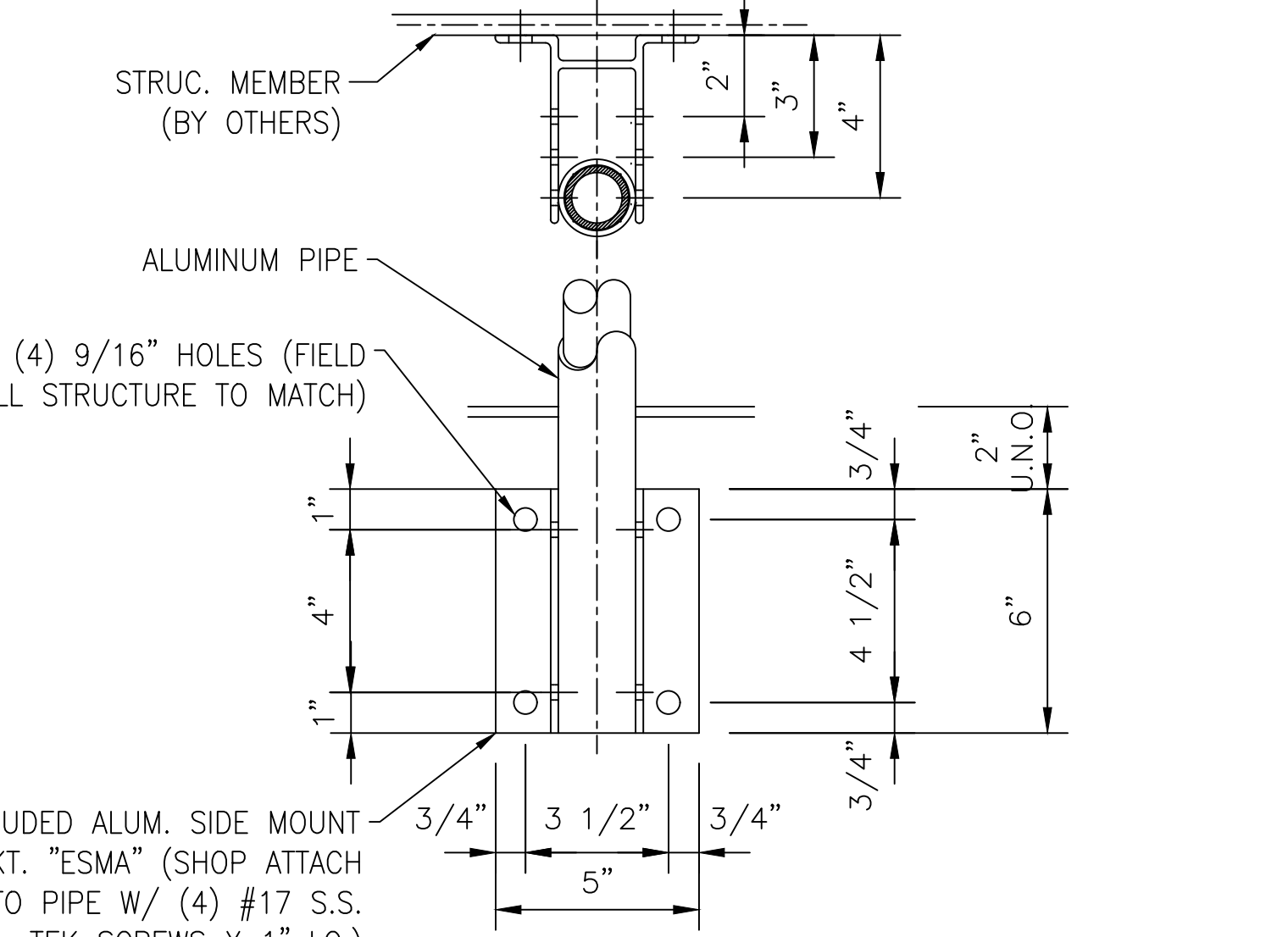


RAKE STL. LINE POST

SB%%

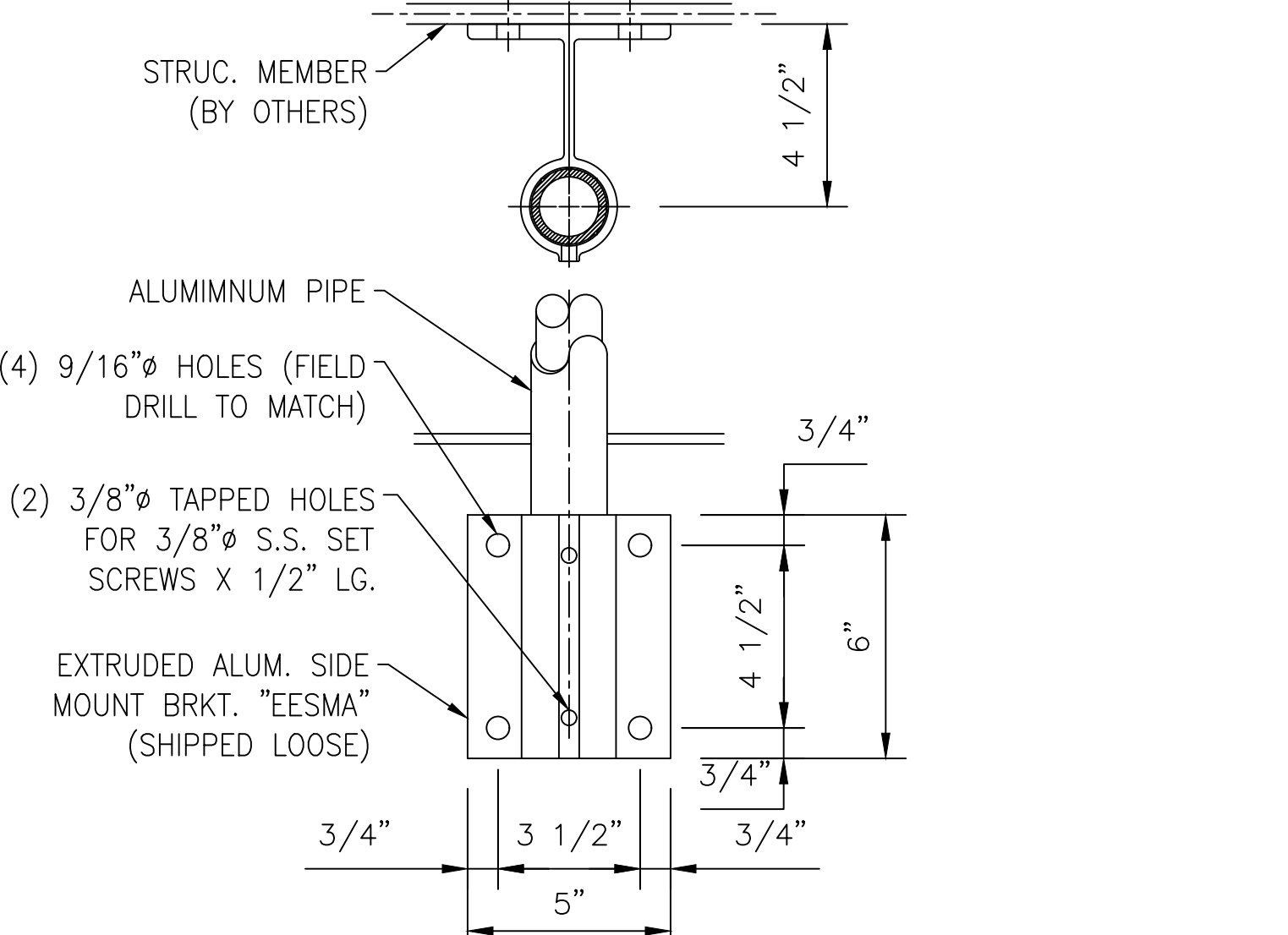


EMBED POST



SIDE MOUNT 4-HOLE

ESMA

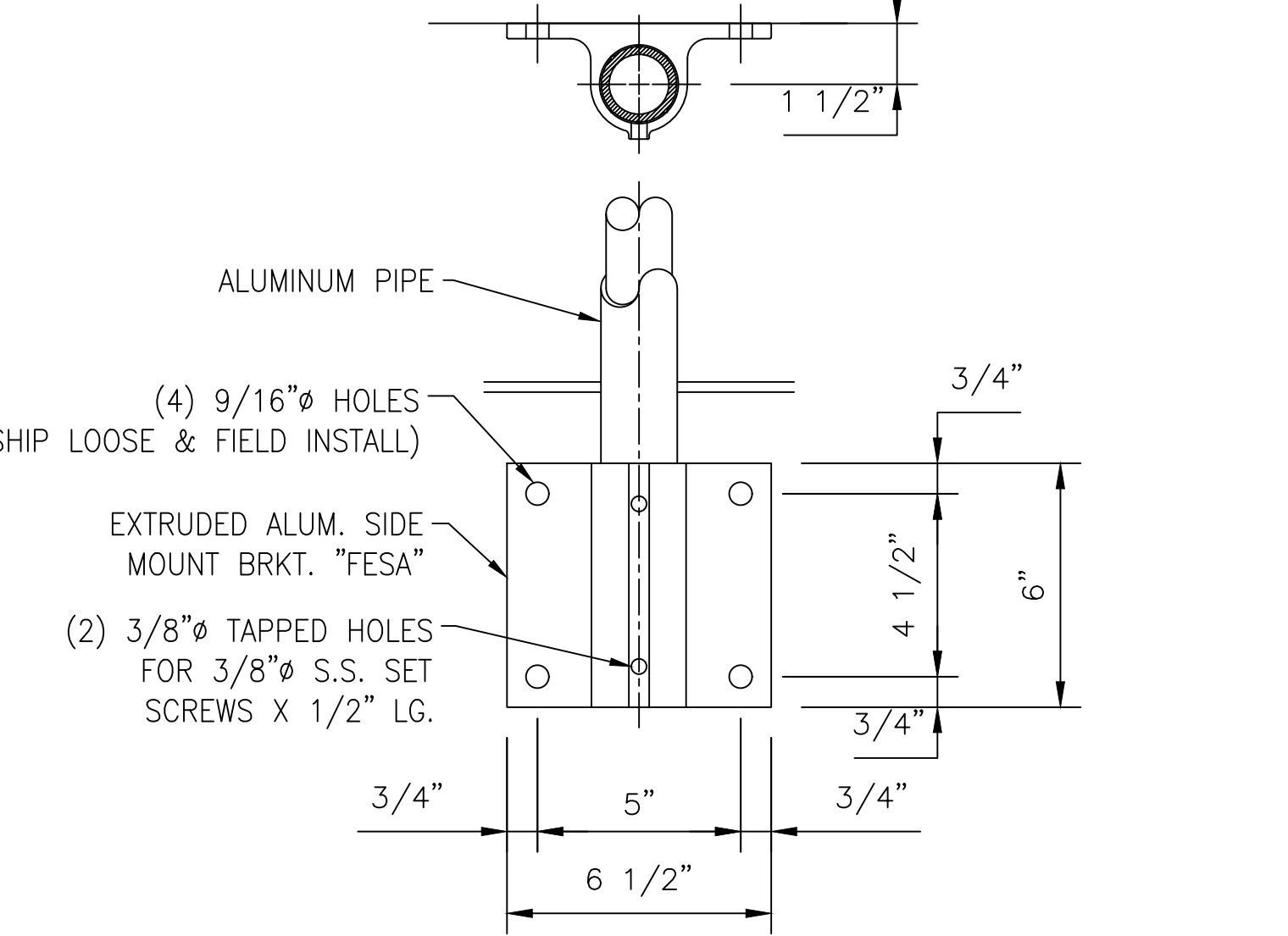


SIDE MOUNT 4-HOLE

EESMA

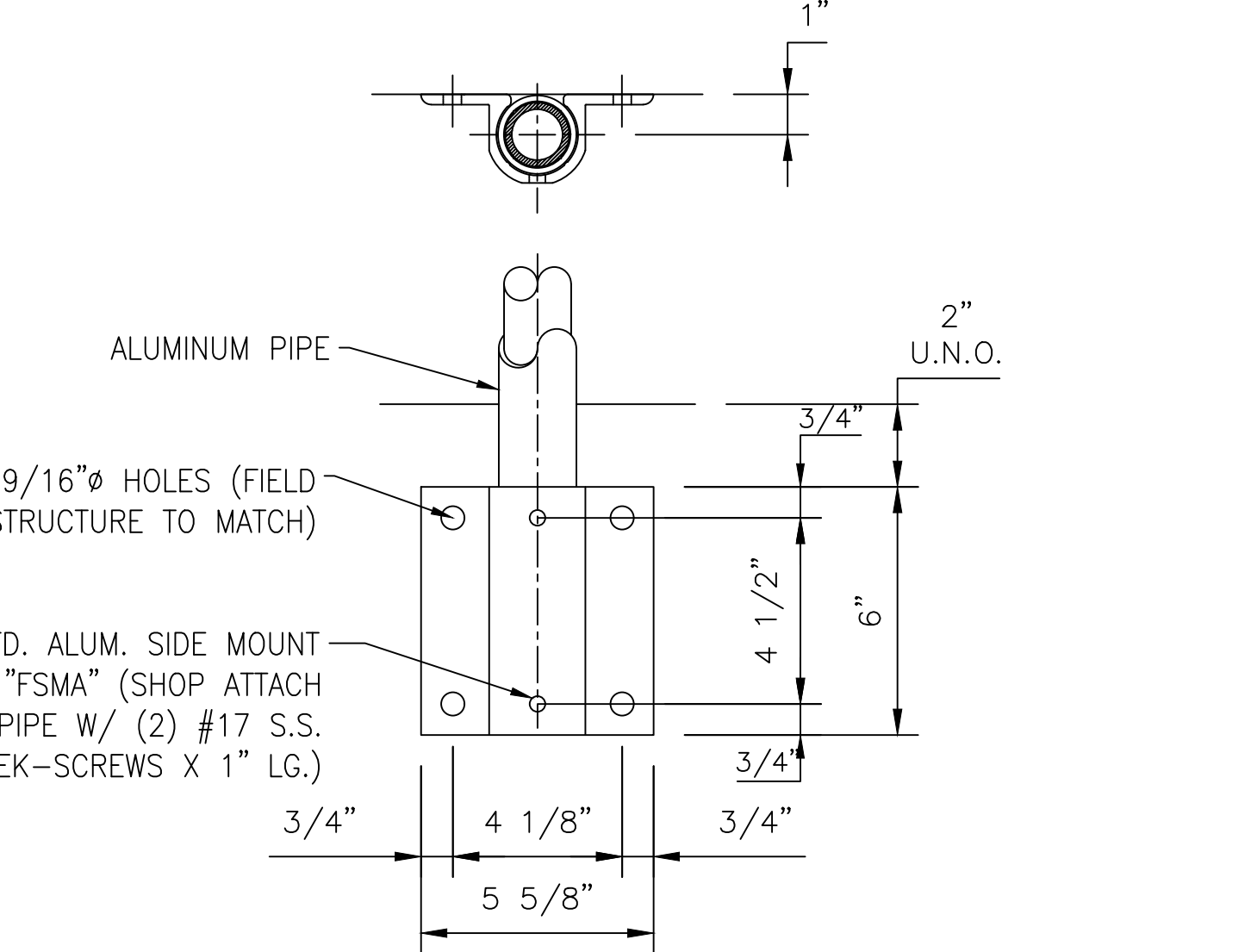
MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHOR	1/2"	6"	4 1/2"

MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHOR	1/2"	6"	4 1/2"



FLUSHED ENCLOSED SIDE

FESA



SIDE MOUNT 4-HOLE

FSMA

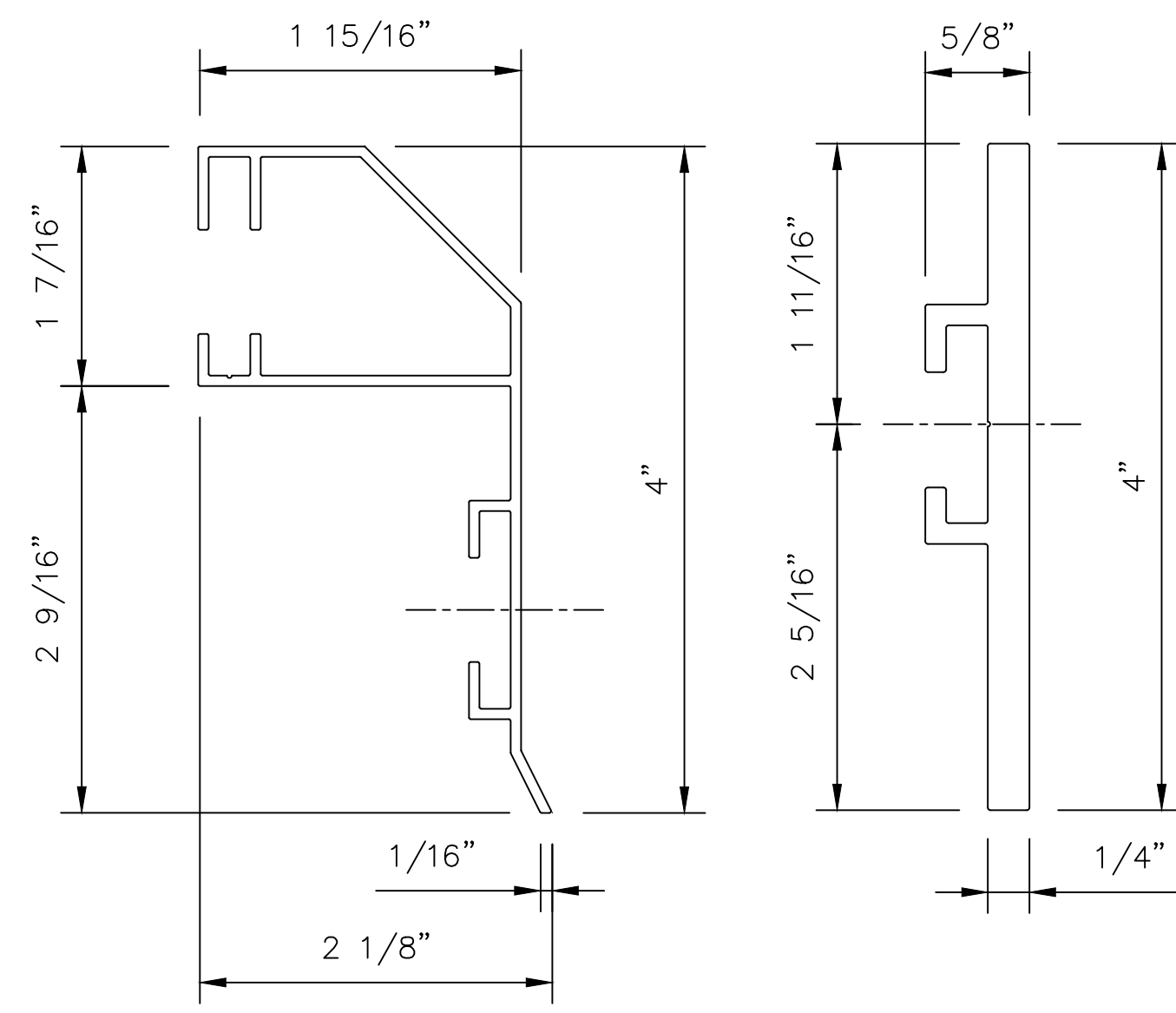
REV	DESCRIPTION	DATE

PEAK-PEAK
ENGINEERED RAILINGS
3000 YOUNGFIELD ST. SUITE 275 WHEAT RIDGE, CO 80215
Ph. (720)568-3819 FAX (720)409-3843

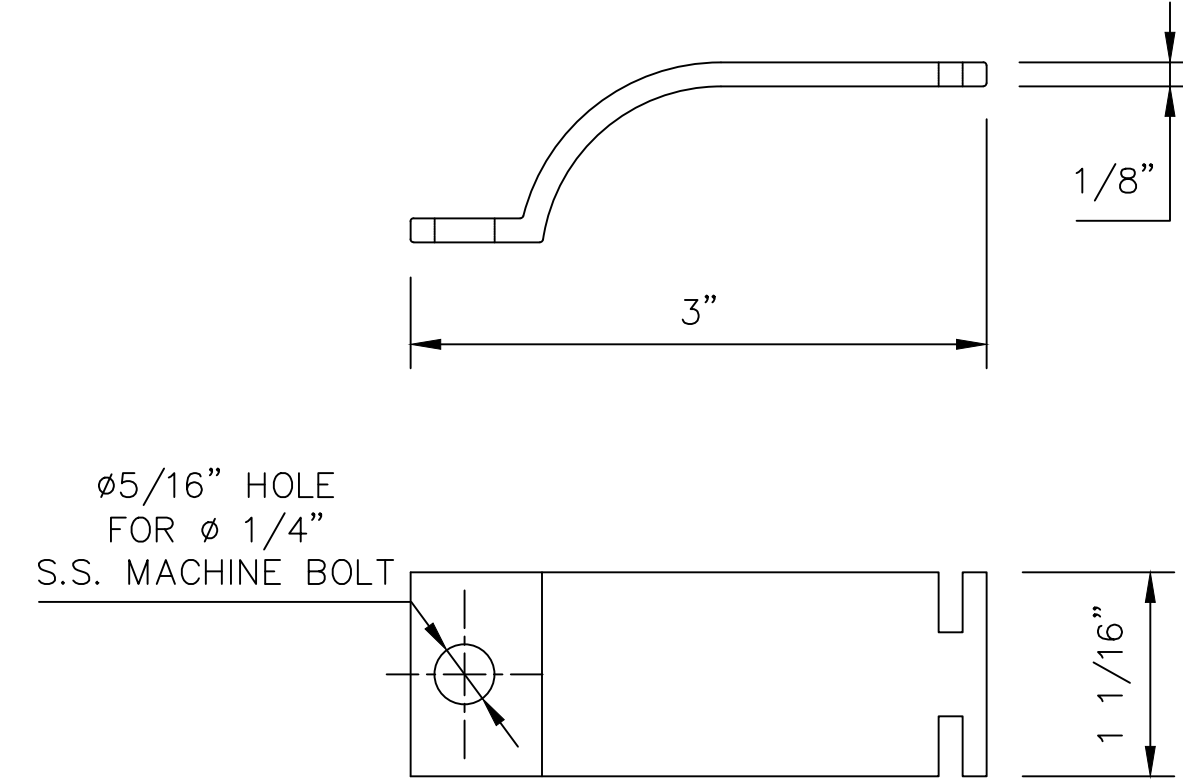
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STANDARD DETAILS
CITY, ST
ALUMINUM HANDRAIL - TCF SYSTEM - SHOP ASSEMBLED

DESIGNER	DESIGNER	CUSTOMER	CUSTOMER	DWG TITLE	HANDRAIL DETAILS	
CUSTOMER JOB #	XXXX-XX	PRINT DATE	3/13/2020	ISSUE DATE	3/13/2020	
DETAILED BY	INT	CHECKER	INT	SCALE	NTS	
					CONTRACT NO	XXX-XXX
					DRAWING NO.	SD-3



"FKP" "SKP"
"FKP" KICK PLATE SECTION



"KB" BRACKET

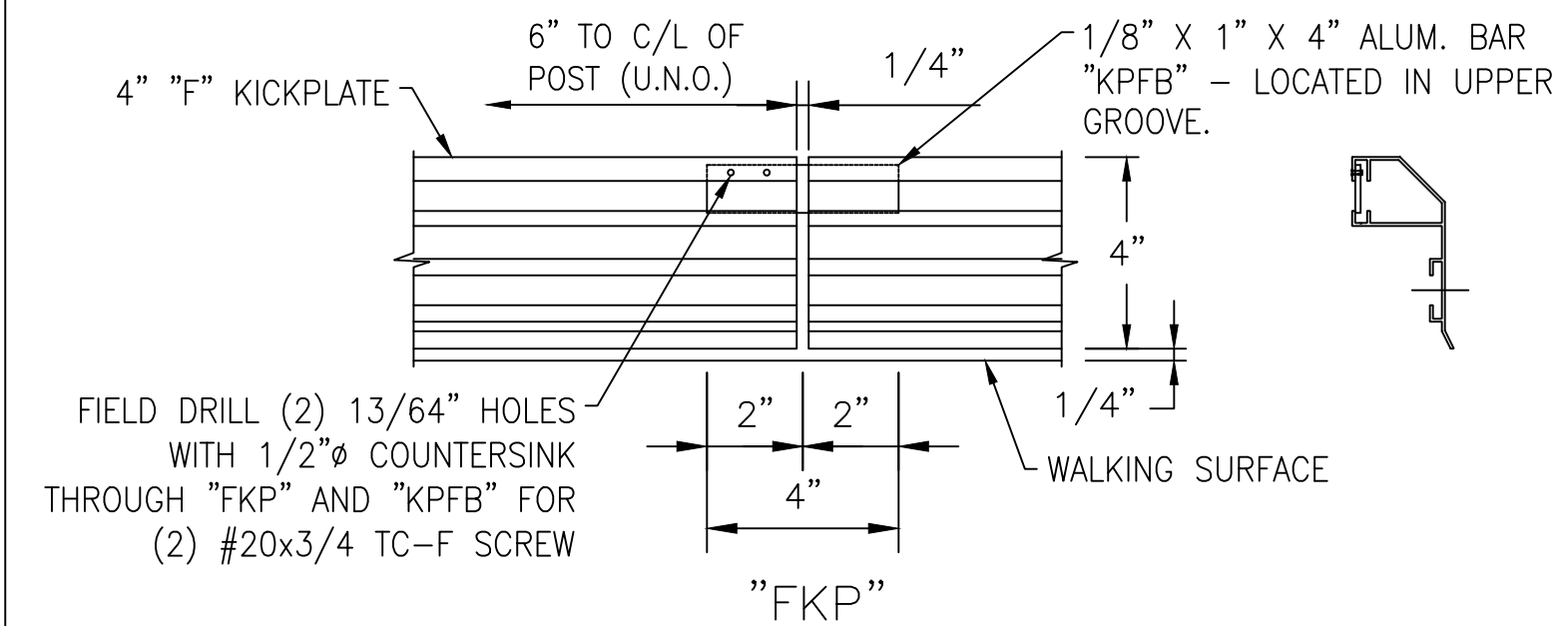
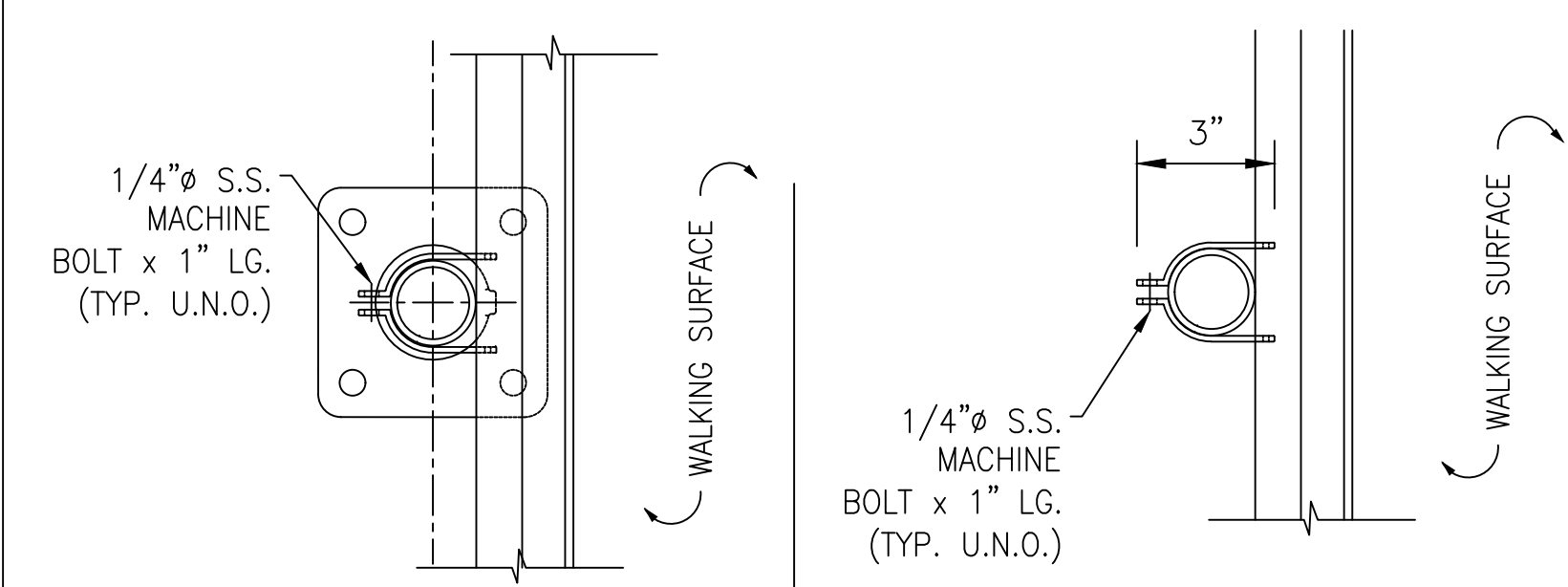
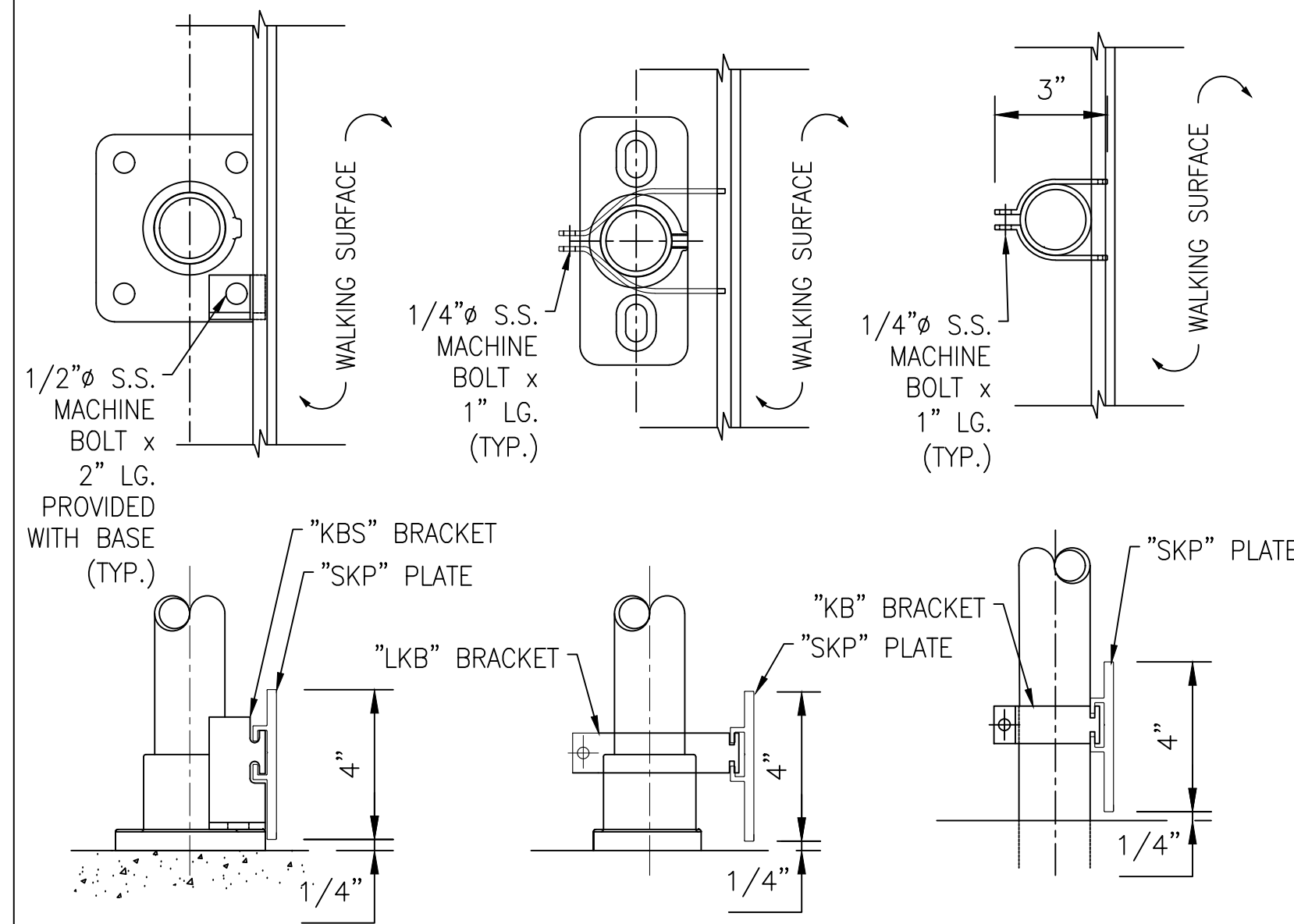


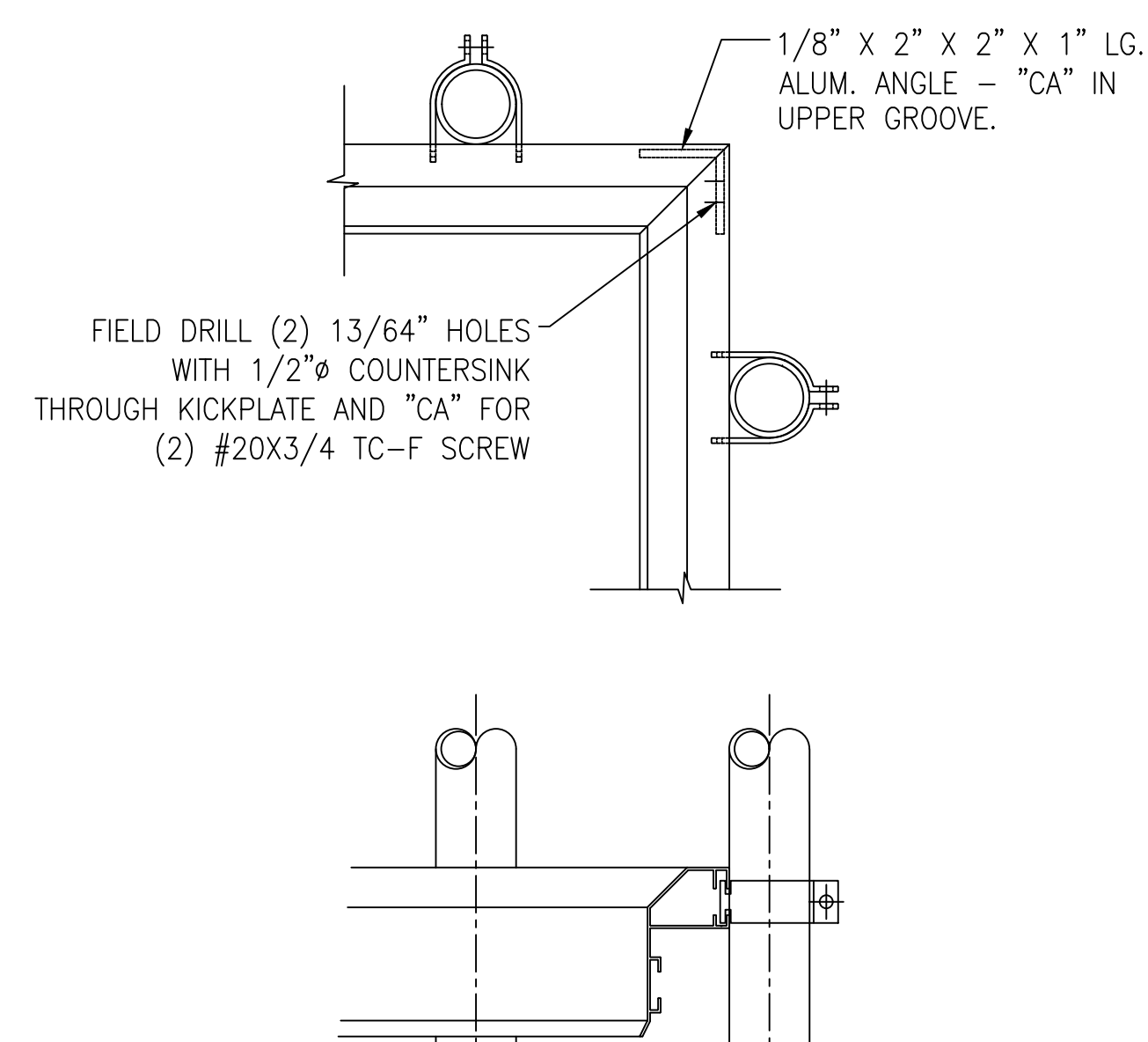
PLATE EXPANSION JOINT



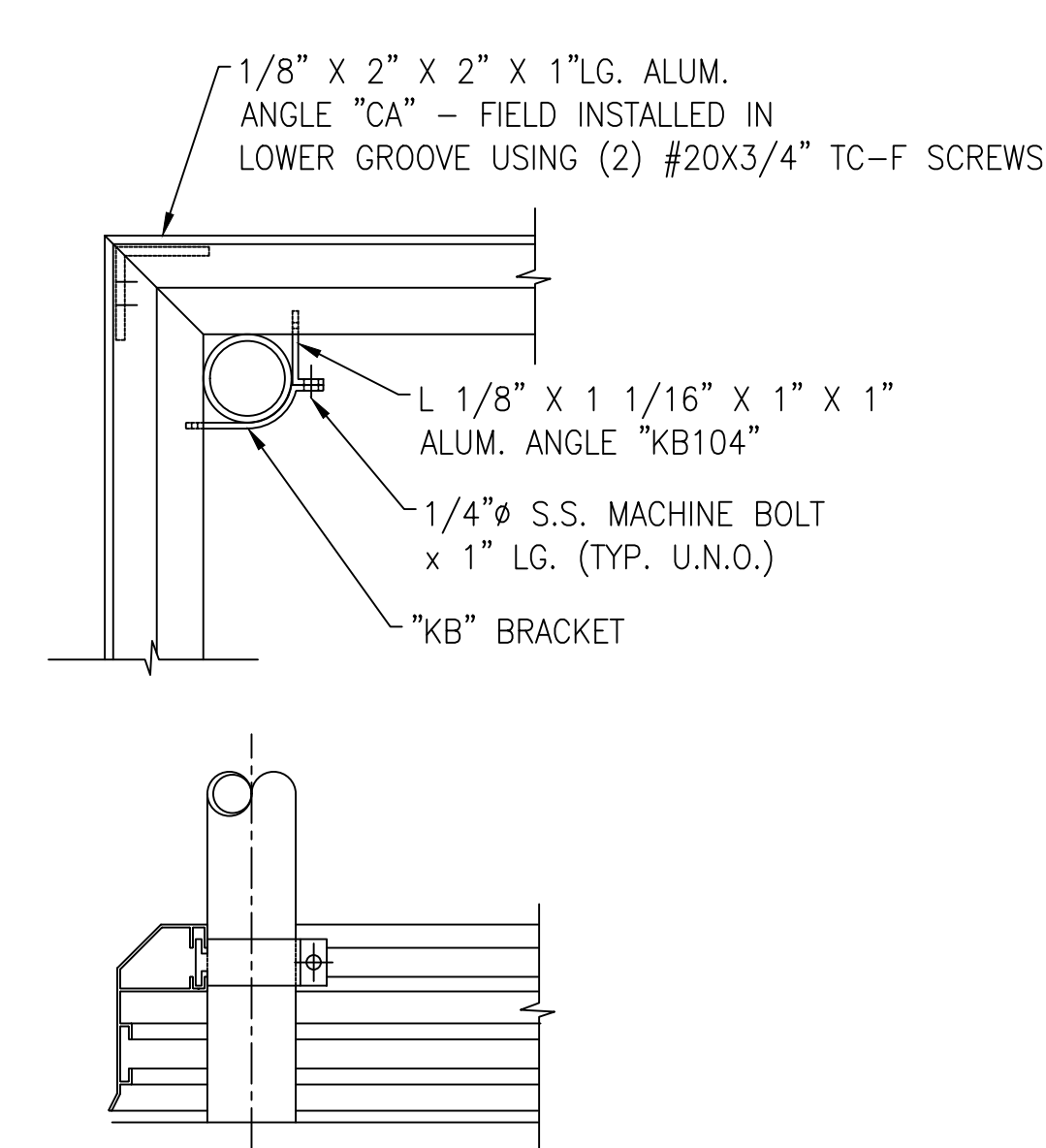
"FKP" INSTALLATION DETAIL



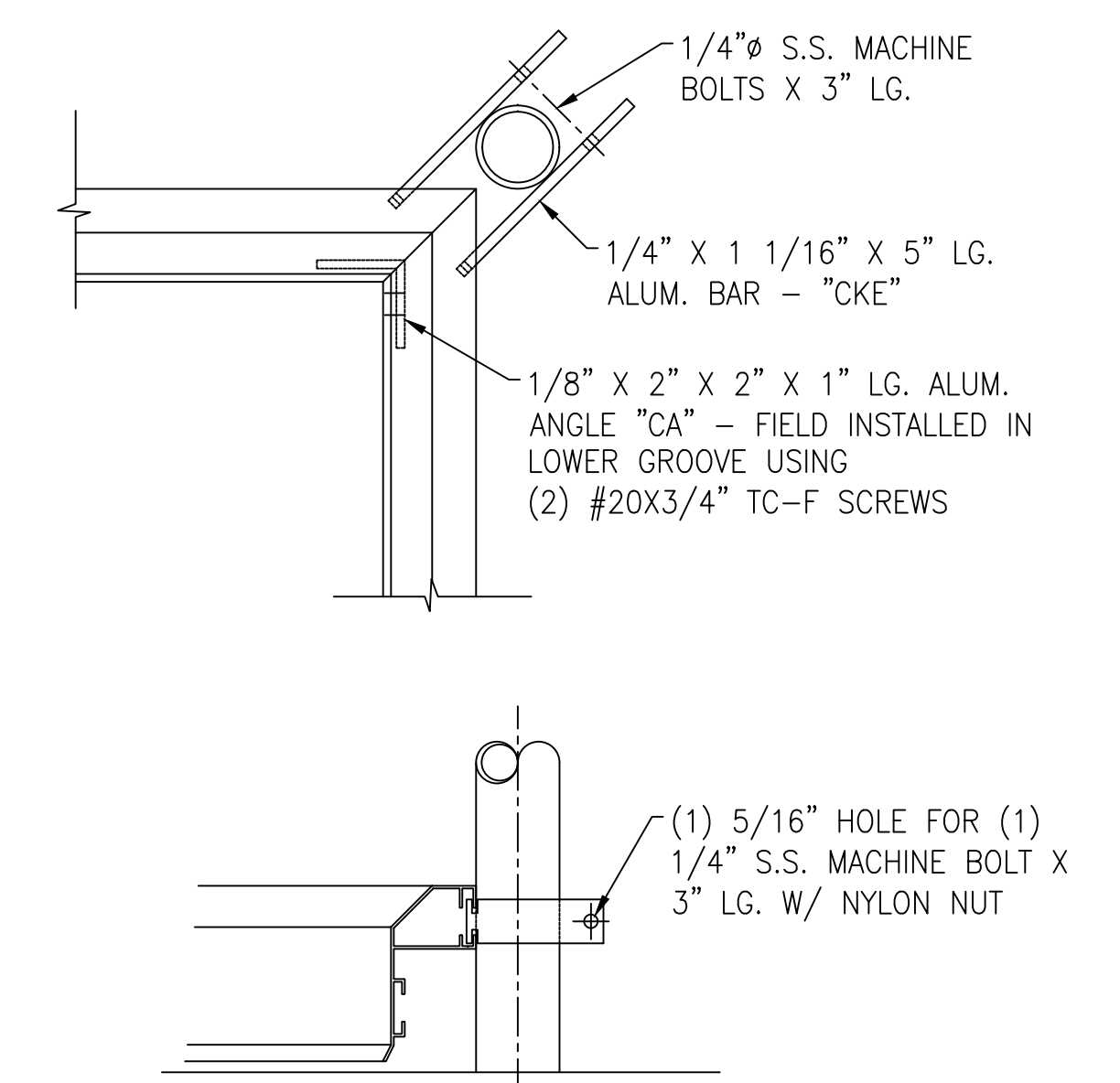
"SKP" INSTALLATION DETAIL



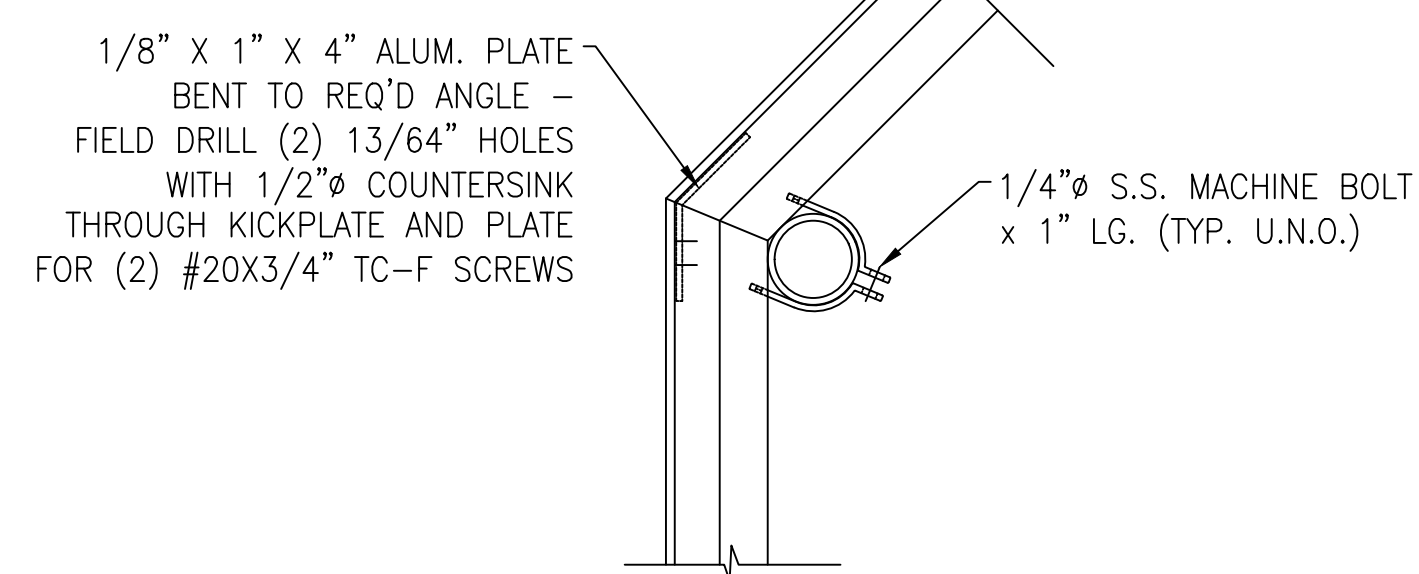
INSIDE 90 CORNER DETAIL



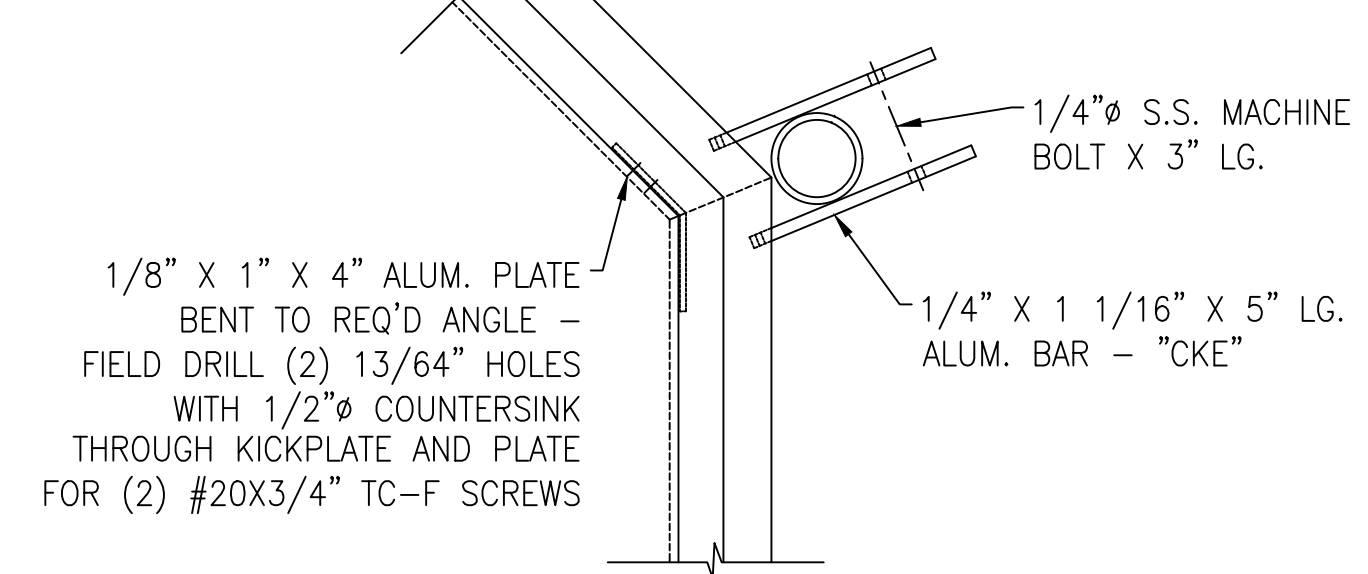
OUTSIDE 90 CORNER ENDPOST DETAIL



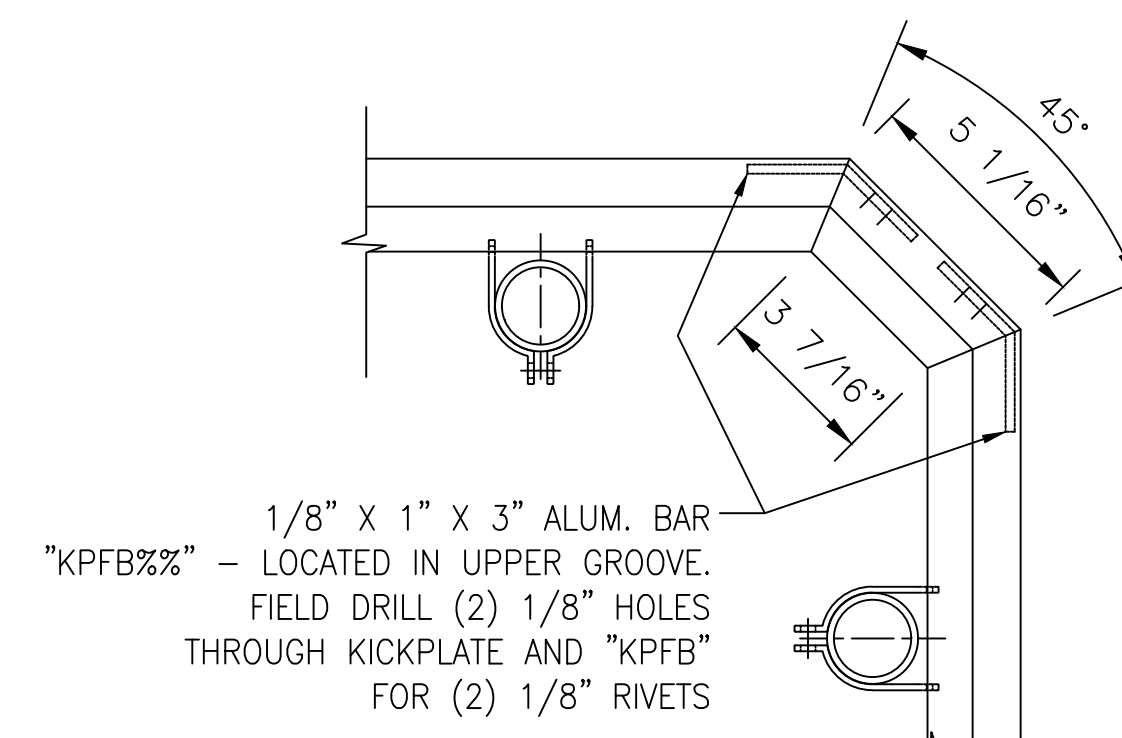
INSIDE 90 CORNER ENDPOST DETAIL



OUTSIDE BEND CORNER DETAIL



INSIDE BEND CORNER DETAIL



OUTSIDE 90 CORNER DETAIL

TYPICAL NOTES:

- 1.) ALL KICK PLATE SHALL BE:
 - a) 4" EXTRUDED ALUMINUM "FKP" OR "SKP" PLATE.
 - b) SHIPPED LOOSE IN 24'-0" STOCK LENGTHS FOR FIELD CUTTING AND DRILLING AS REQ'D.
 - c) FIELD ATTACHED TO POSTS.

2.) INSTALL USING 1/4" S.S. BOLT (U.N.O.)

ERECTOR NOTE:

TO INSTALL TCF BOLTS - DRILL A 13/64" PILOT HOLE WITH A 1/2" COUNTERSINK AND TIGHTEN TO FIT.

REV	DESCRIPTION	DATE
<p>3000 YOUNGFIELD ST. SUITE 275 WHEAT RIDGE, CO 80215 Ph. (720)568-3819 FAX. (720)409-3843</p>		
<p>STANDARD DETAILS CITY, ST ALUMINUM HANDRAIL - TCF SYSTEM - SHOP ASSEMBLED</p>		
DESIGNER	DESIGNER	CUSTOMER
CUSTOMER JOB #	XXXX-XX	PRINT DATE
DATE	3/13/2020	ISSUE DATE
SCALE	NTS	CONTRACT NO
DRAWING NO.	XXX-XXX	DRAWING NO.
Detailed by	INT	CHECKER
INT	INT	SCALE
NTS	NTS	CONTRACT NO
XXX-XXX	XXX-XXX	DRAWING NO.
KP-1	KP-1	DRAWING NO.

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