

SIGN BRACKETS	
SIGN HT. (IN.)	MAX. LIN. FT. OF SIGN WIDTH PER BRACKET
42	16
48	13
60	8
72	5
84	3

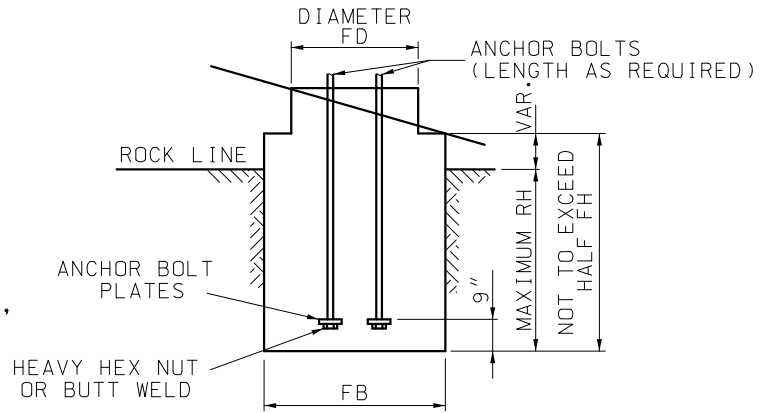
ARM = 35 000 PSI

TYPE NUMBER	ARM DIMENSIONS		POST		MAX SIGN AREA SQ. FT.	MAX. B WITH MAX. SIGN AREA
	LENGTH	DIA. / THK	GA	DIA.		
C-1710-12	12'	6" STD	7	10"	41	8'-0"
C-1710-18	18'	0.280" THK	7	10"	41	8'-0"
C-1310-12	12'	6" EX HVY	3	10"	59	8'-9"
C-1310-18	18'	0.432" THK	3	10"	59	8'-9"

* FOR SIGNS WITH SIGN AREAS LESS THAN THE MAXIMUM LISTED IN THE TABLE ABOVE, B CAN BE RECALCULATED USING THE FOLLOWING EQUATION:

$$\left(\frac{\text{MAX. B FOR TRUE SIGN AREA}}{\text{TRUE SIGN AREA}} \right) \leq \left(\frac{\text{MAX SIGN AREA} \times \left(\frac{\text{MAX. B WITH MAX. SIGN AREA}}{\text{TRUE SIGN AREA}} \right)}{\text{TRUE SIGN AREA}} \right)$$

** THE CALCULATED VALUE OF B CANNOT RESULT IN A DISTANCE GREATER THAN 1/4 OF THE SIGN WIDTH

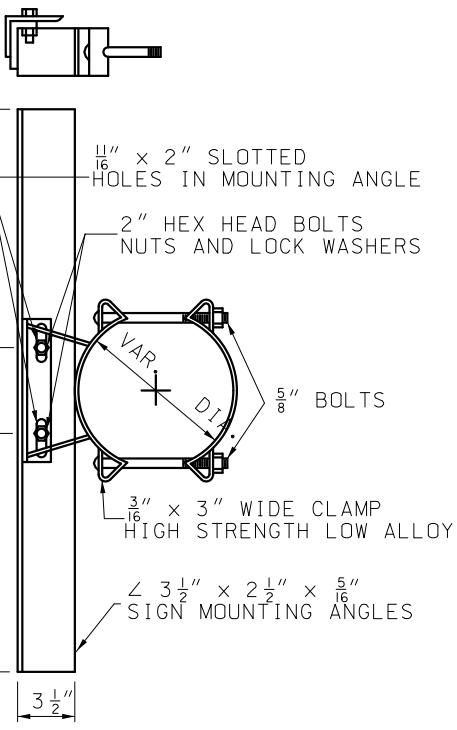


MODIFIED FOOTING IN SOLID ROCK

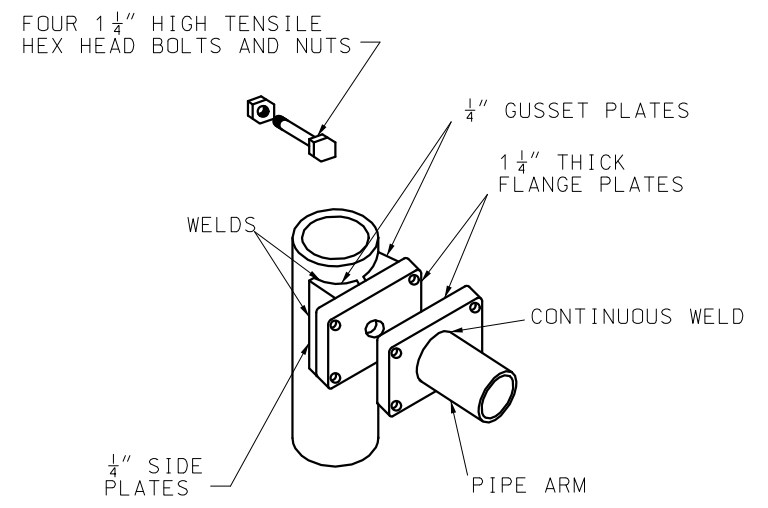
TYPE NUMBER	DIAMETER	ESTIMATED QUANTITIES				REINFORCING STEEL							
		CU YD CLASS B CONCRETE FOOTING				#5	#4 (1)	TOTAL LBS					
		FD SECTION		FB SECTION									
C-1710	2'	4'	1' DEPTH	1" DEPTH	0.11635	0.0097	0.2645	0.0220	6	7'-6"	9	5'-7"	81
C-1310	2'	4'	1' DEPTH	1" DEPTH	0.11635	0.0097	0.2645	0.0220	6	7'-6"	9	5'-7"	81

(1) ESTIMATED QUANTITY FOR REINFORCING STEEL IS BASED ON A 2:1 (H:V) SLOPE.

TYPE NUMBER	ANCHOR BOLT DIA.	ANCHOR BOLT PLATE	MODIFIED FOOTING IN SOLID ROCK			CLASS B CONCRETE FOOTING FB SECTION CU. YD.	
			RH	FD	FB	1' DEPTH	1" DEPTH
C-1710 & C-1310	1 1/2"	3 1/2" x 3 1/2" x 3/4"	2'-6"	2'-0"	3'-0"	1904	0159
C-2315	2"	3 1/2" x 3 1/2" x 3/4"	3'-0"	3'-0"	3'-6"	3173	0264
C-2318	2"	3 1/2" x 3 1/2" x 3/4"	3'-6"	3'-6"	3'-6"	3563	0297
C-2018	2 1/4"	4 1/2" x 4 1/2" x 3/4"	3'-6"	3'-6"	3'-6"	3563	0297



GALVANIZED SIGN BRACKET ASSEMBLY



FOR POLE DIAMETER UNDER 12" ARM ATTACHMENT

GENERAL NOTE:
 ALL SIGNS SHALL BE CENTERED VERTICALLY ABOUT THE HORIZONTAL CL OF THE ARM.
 ALL ANCHOR BOLTS SHALL BE FULLY GALVANIZED HIGH STRENGTH ANCHOR BOLTS.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HIGHWAY SIGNING
TUBULAR SUPPORT STEEL
TYPE C

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

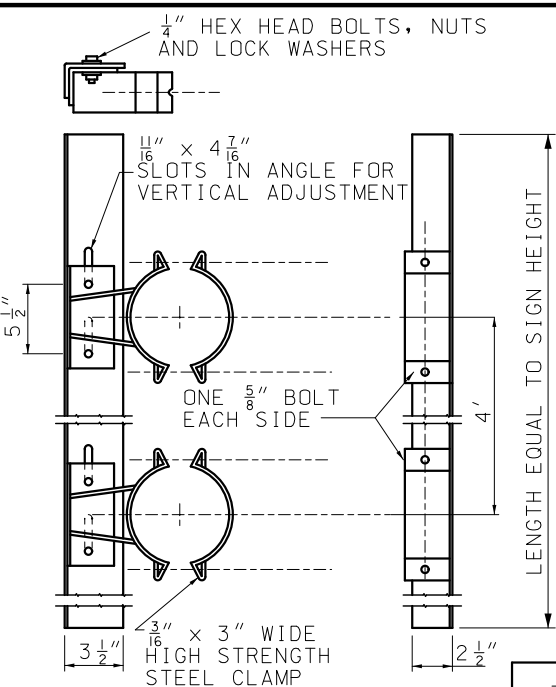
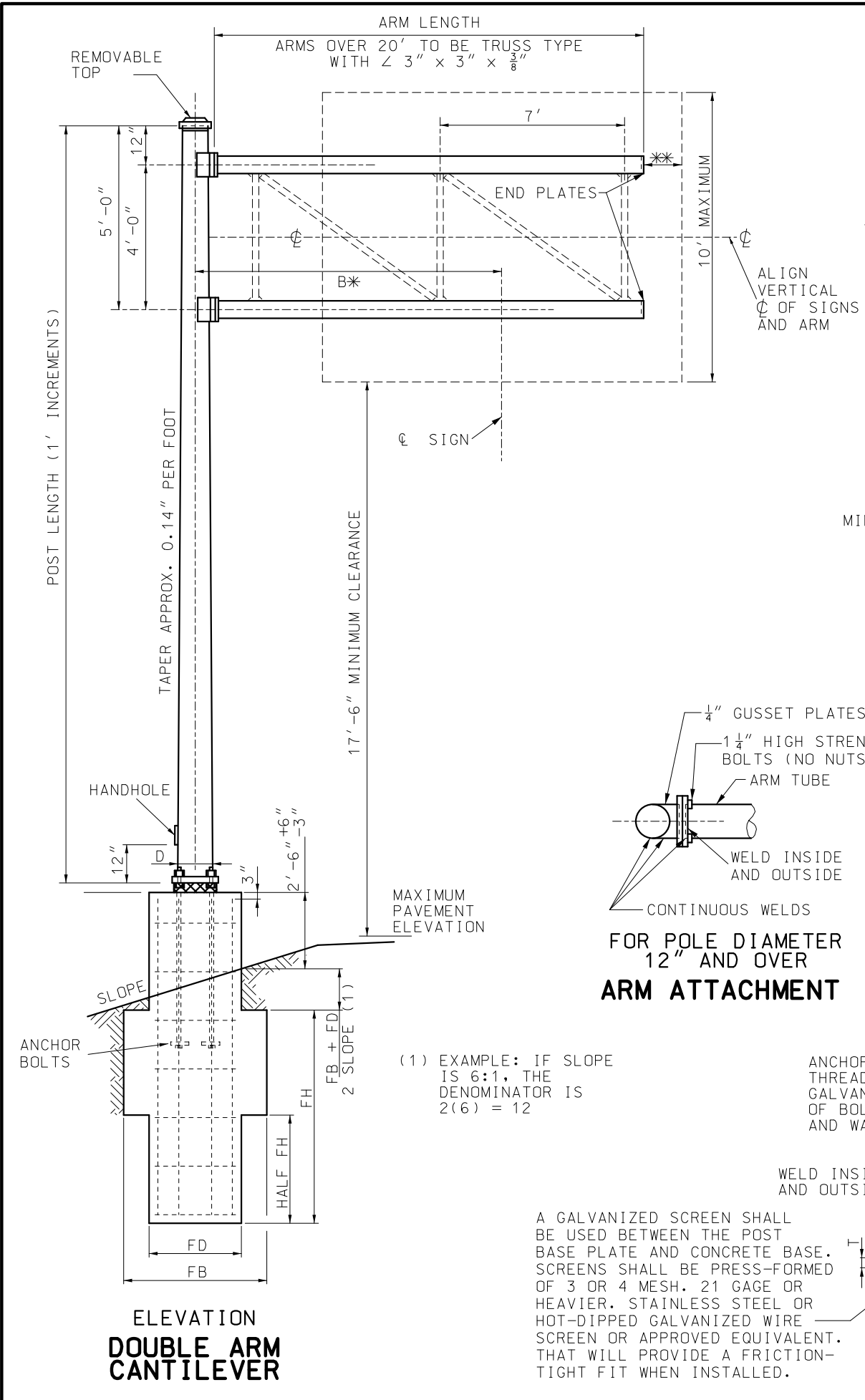
DATE EFFECTIVE: 01/01/2021
DATE PREPARED: 10/14/2020

903.07K

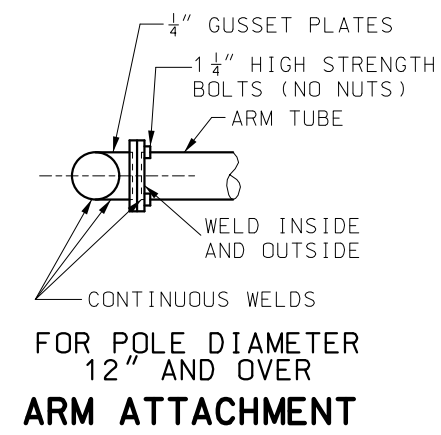
SHEET NO.
1 OF 2

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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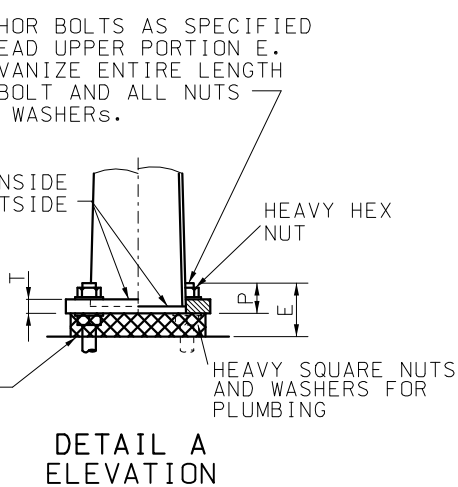


MINIMUM OF TWO BRACKETS REQUIRED ON SIGNS OVER 42" IN LENGTH
GALVANIZED SIGN BRACKET ASSEMBLY



FOR POLE DIAMETER 12" AND OVER
ARM ATTACHMENT

A GALVANIZED SCREEN SHALL BE USED BETWEEN THE POST BASE PLATE AND CONCRETE BASE. SCREENS SHALL BE PRESS-FORMED OF 3 OR 4 MESH, 21 GAGE OR HEAVIER, STAINLESS STEEL OR HOT-DIPPED GALVANIZED WIRE SCREEN OR APPROVED EQUIVALENT. THAT WILL PROVIDE A FRICTION-TIGHT FIT WHEN INSTALLED.



DETAIL A ELEVATION

TYPE NUMBER	DIAMETER		CU. YD. CLASS B CONCRETE FOOTING				REINFORCING STEEL				
	FD	FB	FD SECTION		FB SECTION		#5		#4 (2)		TOTAL LBS.
			1' DEPTH	1" DEPTH	1' DEPTH	1" DEPTH	NO.	FT-IN	NO.	FT-IN	
C-2315	3'	4'	0.2618	0.0218	0.3729	0.0311	6	11'-3"	13	8'-9"	146
C-2318	3'-6"	5'	0.3563	0.0297	0.5507	0.0459	6	12'-2"	13	10'-4"	166
C-2018	3'-6"	5'	0.3563	0.0297	0.5507	0.0459	6	12'-8"	14	10'-4"	176

(2) ESTIMATED QUANTITY FOR REINFORCING STEEL IS BASED ON A 2:1 (H:V) SLOPE.

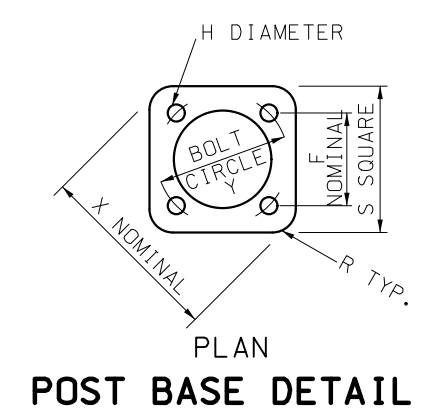
TYPE NUMBER	POST		ARM			B *	MAX. AREA SQ FT
	GA	DIA.	GA	DIMENSIONS			
C-2315-12	3	15"	7	7.5" x 5.82" x 12'		8'	130
C-2315-16	3	15"	7	9.0" x 6.76" x 16'		12'	120
C-2315-20	3	15"	3	10" x 7.2" x 20'		16'	115
C-2315-24	3	15"	3	11" x 7.64" x 24'		20'	100
C-2318-18	3	18"	7	9.0" x 6.48" x 18'		10'	145
C-2318-22	3	18"	7	11" x 7.92" x 22'		14'	150
C-2318-26	3	18"	7	12.5" x 8.86" x 26'		18'	150
C-2018-24	0	18"	7	12.5" x 9.14" x 24'		14'	205
C-2018-28	0	18"	3	12.5" x 8.58" x 28'		18'	215
C-2018-34	0	18"	0	13" x 8.24" x 34'		24'	190

SIGN HT. (IN.)	MAX. LIN. FT. OF SIGN WIDTH PER BRACKET
42	16
48	16
60	16
72	15
84	11
96	6
108	4
120	3

* FOR SIGNS WITH SIGN AREAS LESS THAN THE MAXIMUM LISTED IN THE TABLE ABOVE, B CAN BE RECALCULATED USING THE FOLLOWING EQUATION:
 ** THE CALCULATED VALUE OF B CANNOT RESULT IN A DISTANCE GREATER THAN 1/4 OF THE SIGN WIDTH

$$\left(\frac{\text{MAX. B FOR TRUE SIGN AREA}}{\text{TRUE SIGN AREA}} \right) \leq \left(\frac{\text{MAX. SIGN AREA}}{\text{MAX. B WITH MAX. SIGN AREA}} \right)$$

TYPE NUMBER	POST BASE DIMENSIONS										FOOTING		
	Y	X	E	F	H	P	R	S	T	ANCHOR BOLTS	FH	FD	FB
C-1710 & C-1310	13 1/2"	17 1/2"	7"	9 9/16"	1"	3 3/4"	3 1/8"	14 1/8"	1 1/2"	1 1/2" x 60"	5'	2'	4'
C-2315	22"	28 3/8"	8 1/2"	15 1/2"	2"	4 3/4"	4 3/8"	23"	2"	2" x 96"	7'	3'	4'
C-2318	25 1/2"	33"	8 1/2"	18"	2"	4 3/4"	5 1/2"	26 1/2"	2"	2" x 96"	7'-6"	3'-6"	5'
C-2018	25 1/2"	33"	9 1/2"	18"	2"	5 1/2"	5 1/2"	26 1/2"	2 1/2"	2 1/4" x 96"	8'	3'-6"	5'



PLAN POST BASE DETAIL

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STATE OF MISSOURI
NICOLE A. KOLB HOOD
NUMBER PE-2001018754
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

HIGHWAY SIGNING TUBULAR SUPPORT STEEL TYPE C

DATE EFFECTIVE: 01/01/2021
DATE PREPARED: 10/14/2020

903.07K

SHEET NO.
2 OF 2