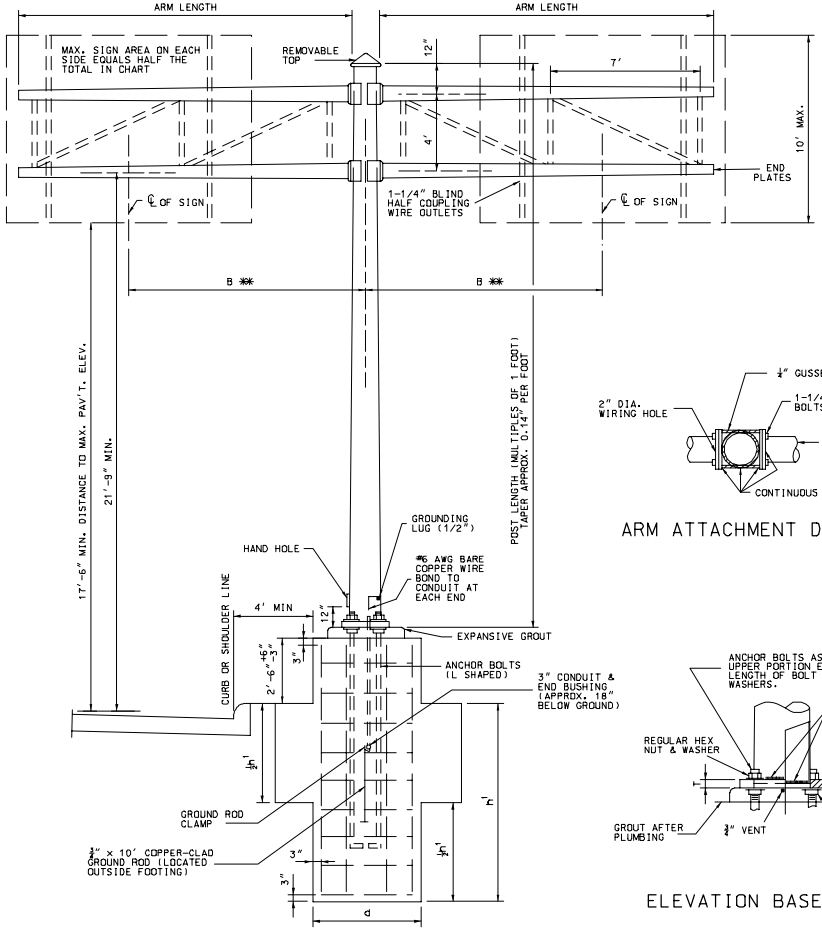
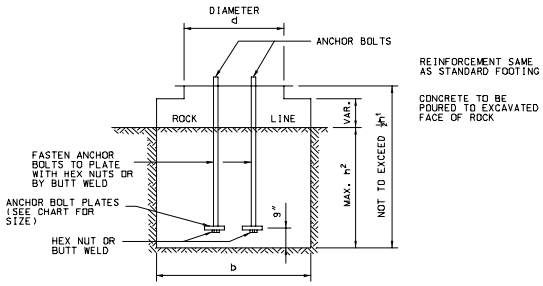


PLAN FOOTING



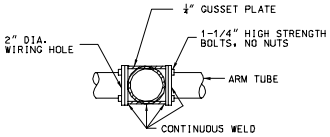
MODIFIED FOOTINGS IN SOLID ROCK

TYPE NUMBER	POST			ARM		MAX. AREA SQ. FT.
	GA.	"B"✱✱	DIA.	GA.	DIMENSIONS	
B-2018	0	8'	18"	7	7.5" x 5.82" x 12'	260
	0	12'	18"	7	9.0" x 6.76" x 16'	240
	0	16'	18"	3	10.0" x 7.2" x 20'	230
	0	20'	18"	3	11.0" x 7.64" x 24' ✱	200
B-23318	3+3	10'	18"	7	9" x 6.48" x 18'	290
	3+3	14'	18"	7	11" x 7.92" x 22' ✱	300
	3+3	18'	18"	7	12.5" x 8.86" x 26' ✱	300
B-20018	0+0	14'	18"	7	12.5" x 9.14" x 24' ✱	410
	0+0	18'	18"	3	12.5" x 8.58" x 28' ✱	430
	0+0	24'	18"	0	13" x 24" x 34' ✱	430

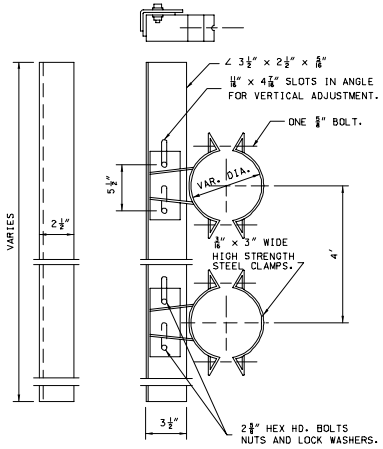
NOTES: ✱ ARMS OVER 20' TO BE TRUSS TYPE WITH ∠ 3" x 3" x ⅜" ANGLES.
✱✱"B" MAY BE EXCEEDED PROVIDED THE PRODUCT OF ACTUAL SIGN AREA TIMES THE DISTANCE FROM CENTERLINE OF SHAFT TO CENTERLINE OF SIGN DOES NOT EXCEED HALF THE TOTAL AREA IN CHART TIMES "B".
W = 40# PER SQUARE FOOT .
DESIGN FOR 10' SIGN HEIGHT.

ESTIMATED QUANTITIES											
TYPE NUMBER	DIA. "d"	DIA. "b"	CLASS B CONCRETE FOOTING (C.Y.)				REINFORCING STEEL				TOTAL LBS.
			"d" SECTION		"b" SECTION		#5		#4 ✱		
			1' DEPTH	1" DEPTH	1' DEPTH	1" DEPTH	NO.	FT.-IN.	NO.	FT.-IN.	
B-2018	3'-6"	6'-0"	0.3563	0.0297	0.8800	0.0567	6	10'-0"	11	10'-4"	139
B-23318	3'-6"	7'-0"	0.3563	0.0297	0.8100	0.0675	6	10'-6"	12	10'-4"	149
B-20018	3'-6"	7'-0"	0.3563	0.0297	0.8100	0.0675	6	12'-0"	13	10'-4"	165

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



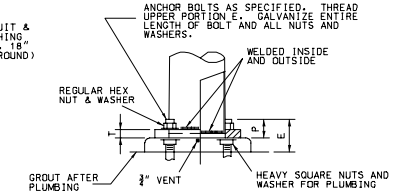
ARM ATTACHMENT DETAIL



SIGN BRACKET ASSEMBLY ✱
(GALVANIZED)

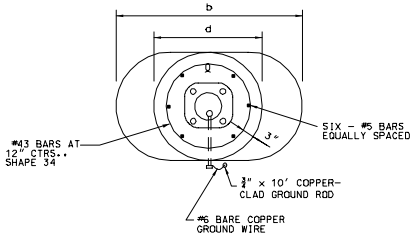
MODIFIED FOOTING IN SOLID ROCK						CLASS B CONCRETE FOOTING CU. YD.	
TYPE NUMBER	ANCHOR BOLT ✱ (DIA.)	ANCHOR BOLT PLATE	FOOTING			"b" SECTION	
			"h"✱	"d"	"b"	1' DEPTH	1" DEPTH
B-2018	2¼"	4½" x 4½" x ¾"	3'-6"	3'-6"	3'-6"	0.3563	0.0297
B-23318	3"	5½" x 5½" x 1"	4'-0"	3'-6"	4'-6"	0.4860	0.0405
B-20018	3"	5½" x 5½" x 1"	5'-0"	3'-6"	4'-6"	0.4860	0.0405

✱ ANCHOR BOLT LENGTH AS REQUIRED

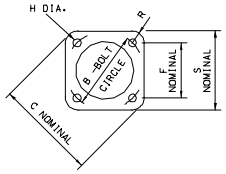


ELEVATION BASE DETAIL

POST BASE DIMENSIONS													
TYPE NUMBER	B	C	F	H	S	R	P	T	E	ANCHOR BOLTS	FOOTING		
											"h"	"d"	"b"
B-2018	25½"	33"	18"	2⅞"	26½"	5½"	5½"	2½"	9½"	2¼" x 96"	7'-6"	3'-6"	6'-0"
B-23318	25½"	33"	18"	3⅜"	26½"	5½"	7"	3"	12"	3" x 120"	8'-0"	3'-6"	7'-0"
B-20018	25½"	33"	18"	3⅜"	26½"	5½"	7"	3"	12"	3" x 120"	9'-6"	3'-6"	7'-0"



PLAN FOOTING



PLAN POST BASE DETAIL

SIGN HEIGHT INCHES	MAX. LIN. FT. OF SIGN WIDTH PER BRACKET
48 & UNDER	16
60	16
72	15
84	11
96	6
108	4
120	3

✱ MINIMUM OF TWO BRACKETS REQUIRED ON SIGNS OVER 42" IN LENGTH

GENERAL NOTES:

SEE STD. PLAN 903.09 FOR LIGHTING DETAILS IF LIGHTING THE SIGN IS NECESSARY.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

HIGHWAY SIGNING
TUBULAR SUPPORT
STEEL-TYPE B

DATE: _____ | EFFECTIVE: 01-01-2003 | 903.08F | 1/1