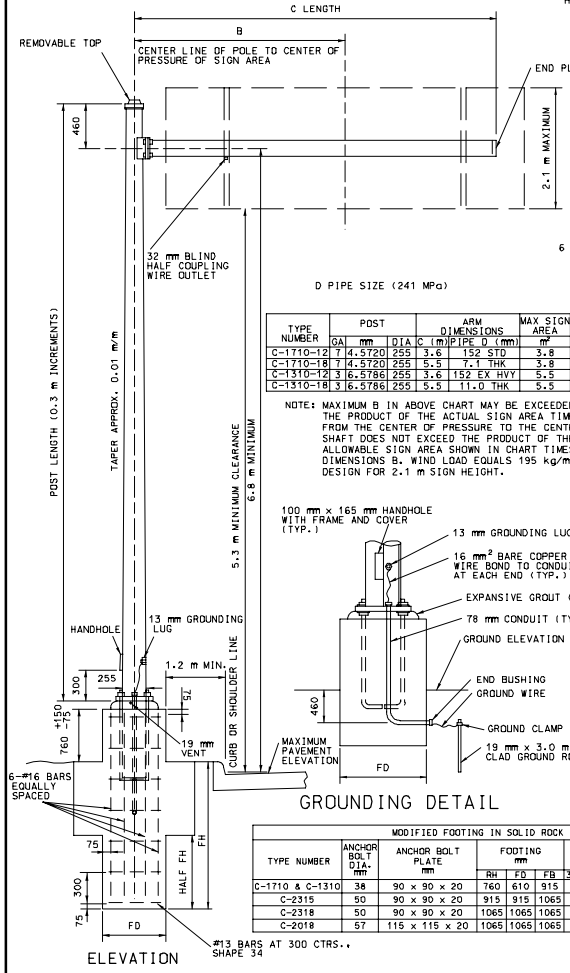
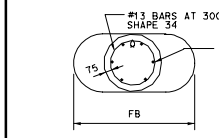
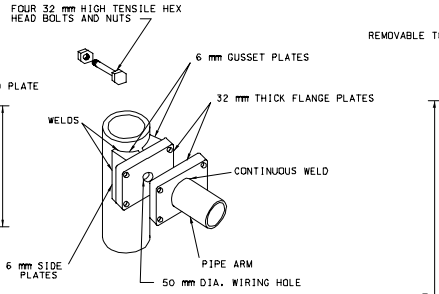


ELEVATION



PLAN

SINGLE ARM CANTILEVER

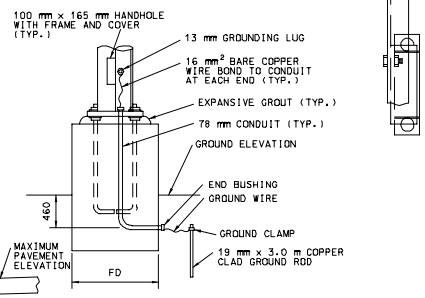


FOR POLE DIAMETER UNDER 300 mm ARM ATTACHMENT

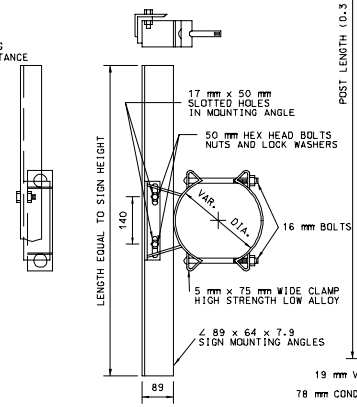
D PIPE SIZE (241 MPa)

TYPE NUMBER	POST GA	POST mm	POST DIA	ARM DIMENSIONS C (m)	ARM DIMENSIONS PIPE D (mm)	MAX SIGN AREA m²	MAX. B WITH MAX. SIGN AREA
C-1710-12	7	4.5720	255	3.6	152 STD	3.8	2.4
C-1710-18	7	4.5720	255	5.5	7.1 THK	3.8	2.4
C-1310-12	3	6.5786	255	3.6	152 EX HVY	5.5	2.6
C-1310-18	3	6.5786	255	5.5	11.0 THK	5.5	2.6

NOTE: MAXIMUM B IN ABOVE CHART MAY BE EXCEEDED PROVIDING THE PRODUCT OF THE ACTUAL SIGN AREA TIMES THE DISTANCE FROM THE CENTER OF PRESSURE TO THE CENTERLINE OF SHAFT DOES NOT EXCEED THE PRODUCT OF THE MAXIMUM ALLOWABLE SIGN AREA SHOWN IN CHART TIMES MAXIMUM DIMENSIONS B. WIND LOAD EQUALS 195 kg/m². DESIGN FOR 2.1 m SIGN HEIGHT.



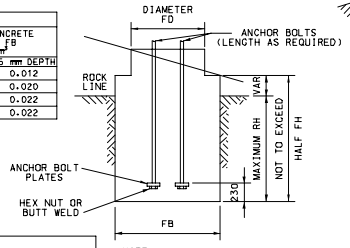
GROUNDING DETAIL



GALVANIZED SIGN BRACKET ASSEMBLY

TYPE NUMBER	ANCHOR BOLT DIA. mm	ANCHOR BOLT PLATE mm	FOOTING mm RH	FOOTING mm FD	FOOTING mm FB	CLASS B CONCRETE FOOTING FB SECTION m³ 300 mm DEPTH	CLASS B CONCRETE FOOTING FB SECTION m³ 25 mm DEPTH
C-1710 & C-1310	38	90 x 90 x 20	760	610	915	0.143	0.012
C-2315	50	90 x 90 x 20	915	915	1065	0.238	0.020
C-2318	50	90 x 90 x 20	1065	1065	1065	0.267	0.022
C-2018	57	115 x 115 x 20	1065	1065	1065	0.267	0.022

MODIFIED FOOTING IN SOLID ROCK

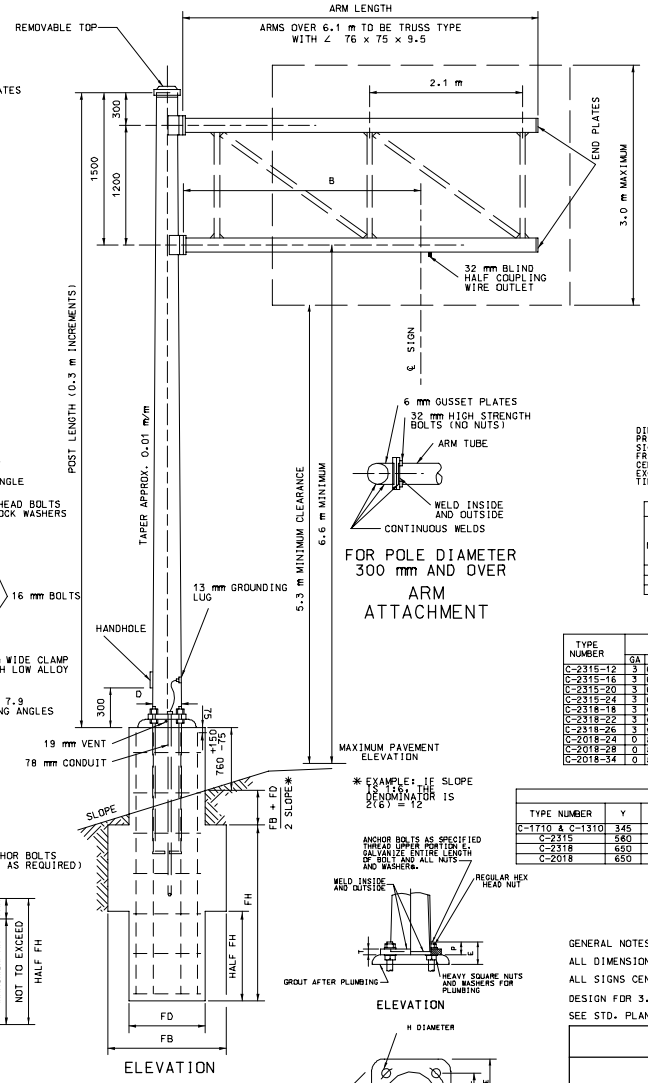


NOTE: REINFORCEMENT PLACED SAME AS STANDARD FOOTING. CONCRETE TO BE POURED TO EXCAVATED FACE OF ROCK.

MODIFIED FOOTING IN SOLID ROCK

TYPE NUMBER	DIAMETER mm FD	DIAMETER mm FB	m³ CLASS B CONCRETE FOOTING FD SECTION 300 mm DEPTH	FD SECTION 25 mm DEPTH	FB SECTION 300 mm DEPTH	FB SECTION 25 mm DEPTH	REINFORCING STEEL #16 NO.	#16 mm	#13 * NO.	#13 * mm	TOTAL kg
C-1710	610	1220	0.088	0.077	0.199	0.017	6	2285	9	1710	36
C-1310	610	1220	0.088	0.077	0.199	0.017	6	2285	9	1710	36

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

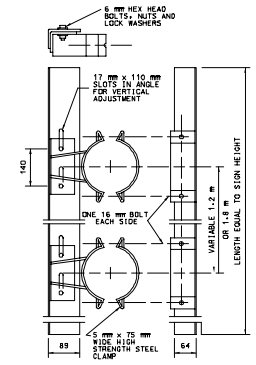


ELEVATION

DOUBLE ARM CANTILEVER

FOR POLE DIAMETER 300 mm AND OVER ARM ATTACHMENT

* EXAMPLE: IF SLOPE IS 1:6, THE DENOMINATOR IS 2(6) = 12



MINIMUM OF TWO BRACKETS REQUIRED ON SIGNS OVER 1050 mm IN LENGTH

GALVANIZED SIGN BRACKET ASSEMBLY

DIMENSION B MAY BE EXCEEDED PROVIDED THE PRODUCT OF ACTUAL SIGN AREA TIMES THE DISTANCE FROM CENTERLINE OF POST TO CENTERLINE OF SIGN DOES NOT EXCEED MAXIMUM SIGN AREA TIMES B.

TYPE NUMBER	DIAMETER mm FD	DIAMETER mm FB	m³ CLASS B CONCRETE FOOTING FD SECTION 300 mm DEPTH	FD SECTION 25 mm DEPTH	FB SECTION 300 mm DEPTH	FB SECTION 25 mm DEPTH	REINFORCING STEEL #16 NO.	#16 mm	#13 * NO.	#13 * mm	TOTAL kg
C-2315	1220	915	0.197	0.016	0.351	0.029	6	3430	13	2670	67
C-2318	1525	1065	0.267	0.022	0.548	0.046	6	3690	13	3140	75
C-2018	1525	1065	0.267	0.022	0.548	0.046	6	3845	14	3140	80

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

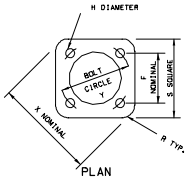
TYPE NUMBER	POST GA	POST mm	POST DIA.	ARM GA	ARM mm	ARM DIMENSIONS	B m	MAX. AREA m²
C-2315-12	3	6.5786	380	7	4.572	190 x 150 x 3.6 m	2.4	12
C-2315-16	3	6.5786	380	7	4.572	230 x 170 x 4.9 m	3.6	11
C-2315-20	3	6.5786	380	3	6.5786	255 x 185 x 6.1 m	4.9	11
C-2315-24	3	6.5786	380	3	6.5786	280 x 195 x 7.3 m	6.1	9
C-2318-18	3	6.5786	495	7	4.572	230 x 165 x 5.5 m	3.0	13
C-2318-22	3	6.5786	495	7	4.572	280 x 200 x 6.7 m	4.3	14
C-2318-26	3	6.5786	495	7	4.572	320 x 225 x 7.9 m	5.5	14
C-2018-24	0	8.636	495	7	4.572	320 x 230 x 7.3 m	4.3	19
C-2018-28	0	8.636	495	3	6.5786	320 x 220 x 8.5 m	5.5	20
C-2018-34	0	8.636	495	0	8.636	330 x 210 x 10.4 m	7.3	18

SIGN HT. (mm)	MAX METERS OF SIGN WIDTH PER BRACKET 1 CLAMP TYPE	2 CLAMP TYPE
1050	4.9	4.9
1200	4.0	4.9
1500	2.4	4.9
1800	1.5	4.6
2100	0.9	3.4
2400	0.9	1.8
2700	0.9	1.2
3000	0.9	0.9

TYPE NUMBER	Y	X	E	F	H	P	R	S	T	ANCHOR BOLTS	FOOTING FH	FOOTING FD	FOOTING FB
C-1710 & C-1310	345	445	180	245	45	95	80	360	40	38 x 1525	1525	610	1220
C-2315	580	730	215	395	80	120	115	585	50	50 x 2440	2135	915	1220
C-2318	650	840	215	460	60	120	140	675	50	50 x 2440	2285	1065	1525
C-2018	650	840	240	460	65	140	140	675	65	57 x 2440	2440	1065	1525

POST BASE DIMENSIONS (mm)

ELEVATION



PLAN

POST BASE DETAIL

GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

ALL SIGNS CENTERED VERTICALLY ON ARM.

DESIGN FOR 3.0 m SIGN HEIGHT.

SEE STD. PLAN M903.09 FOR LIGHTING DETAILS IF LIGHTING THE SIGN IS NECESSARY.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

HIGHWAY SIGNING

TUBULAR SUPPORT

STEEL-TYPE C

DATE:_____ EFFECTIVE: 01-01-2003 M903.07G 1/1