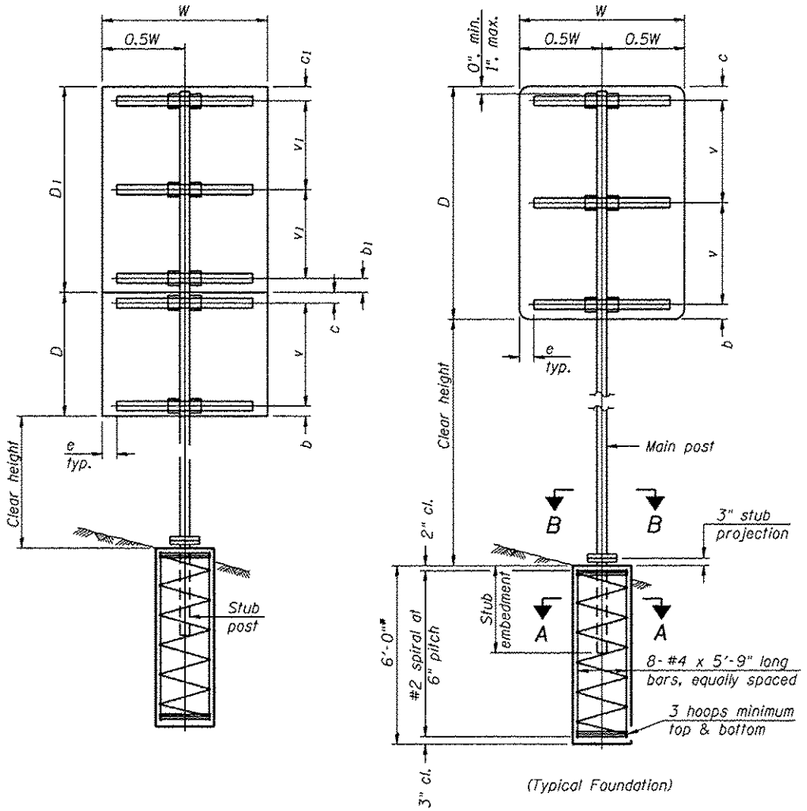
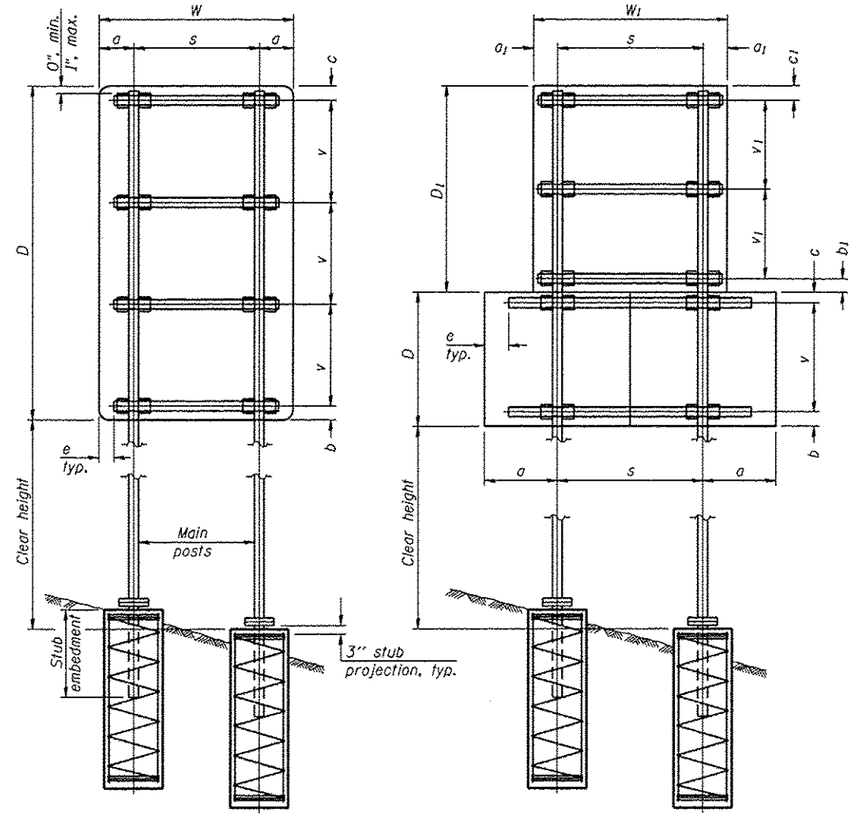


(Typical Foundation)

SINGLE POST ASSEMBLY EXAMPLES

* Dimensional changes required for varying site conditions shall be approved by the Engineer.



DUAL POST ASSEMBLY EXAMPLES

a or a_1 = 6" min. to 2'-0" max. (Approximately 0.2W or $0.2W_1$)
b or b_1 = 3" min. to 4" max
c or c_1 = 3" min. to 4" max
e = 0" min. to 6" max
s = 3'-0" min. to 6'-0" max. (Approximately 0.6W or $0.6W_1$)
v or v_1 = 2'-0" min. to 2'-11" max.

MAIN POST STEEL TUBING	WEIGHT PER FOOT (POUND)	STUB POST TABLE		MAIN POST TABLE				
		Stub Embedment	Stub Post Length	Bolt Size	A	t	R	Bolt Circle
3" x 2" x 1/4"	7.11	2'-0"	2'-3"	1/2" x 2 3/4"	8 1/4"	5/8"	9/32"	6 1/2"
4" x 2" x 1/4"	8.81	2'-0"	2'-3"	1/2" x 2 3/4"	8 1/4"	5/8"	9/32"	6 1/2"
4" x 3" x 1/4"	10.51	2'-3"	2'-6"	5/8" x 3 1/4"	10"	3/4"	11/32"	8"
5" x 3" x 1/4"	12.21	2'-3"	2'-6"	5/8" x 3 1/4"	10"	3/4"	11/32"	8"
6" x 3" x 1/4"	13.91	2'-3"	2'-6"	5/8" x 3 1/4"	11 1/2"	3/4"	11/32"	9 1/2"
6" x 4" x 1/4"	15.62	2'-3"	2'-6"	3/4" x 3 1/2"	11 1/2"	3/4"	13/32"	9 1/2"
6" x 4" x 5/16"	19.08	2'-3"	2'-6"	3/4" x 3 1/2"	11 1/2"	3/4"	13/32"	9 1/2"
7" x 5" x 1/4"	19.02	2'-6"	2'-9"	3/4" x 3 1/2"	1'-2"	3/4"	13/32"	1'-0"
8" x 4" x 1/4"	19.02	2'-6"	2'-9"	3/4" x 3 1/2"	1'-2"	3/4"	13/32"	1'-0"
8" x 6" x 1/4"	22.42	2'-6"	2'-9"	7/8" x 3 1/2"	1'-2"	3/4"	15/32"	1'-0"

GENERAL NOTES

Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article 727.05 and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

One foundation requires 0.7 cubic yards of concrete and 46 pounds of reinforcement bars and spiral hoops.

LOADING: 80 mph wind with 30% gust factor, normal to sign.

DESIGN STRESSES:
Structural steel - 20,000 psi
Reinforcing steel - 20,000 psi
Concrete - 1,400 psi
Footing soil pressure - 2,000 psf

After fabrication, the post, fuse plate, base plate and upper 6", min. of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.

For Sections A-A and B-B, see Base Sheet BAT-A-2.

FOUNDATIONS:
All necessary excavation or drilling (except in rock); backfilling with excavated material; disposal of unsuitable or surplus material; formwork; and furnishing and placing the Class SI Concrete and reinforcement bars, shall be included in the pay item used for foundations.

The measurement of the tubular steel shall be computed on the basis of the weight per foot of the support, multiplied by the combined length of the main posts and stub posts.

BAT-A-1 6-1-12

(Sheet 1 of 2)

STRAND ASSOCIATES® 1170 SOUTH HOUBOLT ROAD JOLIET, ILLINOIS 60431 (815) 744-4200

USER NAME = dennisw	DESIGNED - JLB	REVISED -	
MODEL NAME = Default	DRAWN - DJW	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - BMA	REVISED -	
PLOT DATE = 12/18/2013	DATE - 12/17/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BREAK-AWAY TUBULAR STEEL
SIGN POSTS AND FOUNDATIONS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
575	14-N	WILL	163	56
		CONTRACT NO. 60W13		
		ILLINOIS FED. AID PROJECT		

FILE NAME = S:\JD.16328--6299\6346\855\Microsx\CADD Sheets\60W13-sht-sign-detl.dgn