

STATE OF NEW JERSEY

TABLE 1: POLE, BASEPLATE, AND ANCHOR BOLTS

ITEM	QTY.	POLE TUBE				POLE BASE				ANCHOR BOLT			
		BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GAUGE OR THICK (IN)	SQUARE "S" (IN)	BOLT CIRCLE "Y" (IN)	THK. "M" (IN)	BOLT SLOT "Z" (IN)	DIA. "K" (IN)	LENGTH (IN)	HOOK "H" (IN)	THREAD LENGTH "U" (IN)
S1		12.50	9.56	21.00	0.3125	17.50	17.25	1.75	2.00 X 2.25	1.75	84.00	6.00	8.00

NOTES:

- STRUCTURES ARE TO BE DESIGNED IN ACCORDANCE WITH THE 1994 AASHTO (STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS) FOR 90 M.P.H. WIND ZONE TO SUPPORT THE FOLLOWING.
- ARMS WILL SUPPORT ALL OF THE FOLLOWING:
 FIXED SIGNALS AT THE END OF ARM-WT.=100# PROJ. AREA=8.4 S.F.
 FIXED SIGNALS 1/3 OF LENGTH FROM END-WT.100# PROJ. AREA=8.4 S.F.
 FIXED SIGN MIDWAY BETWEEN SIG'S-WT.=70# PROJ. AREA=12 S.F.
- POLE TYPE S1 WILL SUPPORT ONE 45' AND ONE 30' MAST ARM WITH ABOVE LOADING AND A MINIMUM ARM SEPARATION OF 45', OR ONE 65' ARM WITH ABOVE LOADING.
- CLAMP FOR ALL MAST ARMS MUST BE CAPABLE OF ACCOMMODATING VARIOUS POLE DIAMETERS (9.7' TO 10.2') WITHOUT AFFECTING LOAD CHARACTERISTICS OF ASSEMBLED UNIT. ALL CLAMPS MUST BE DESIGNED FOR ATTACHMENT TO ROUND OR MULTISIDED POLES. CLAMP MUST BE CAPABLE OF ROTATIONAL ADJUSTMENT RIGHT AND LEFT FROM VERTICAL PLANE AND 360° ROTATIONAL ADJUSTMENT ABOUT MAST ARMS.

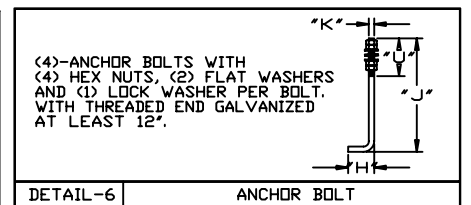
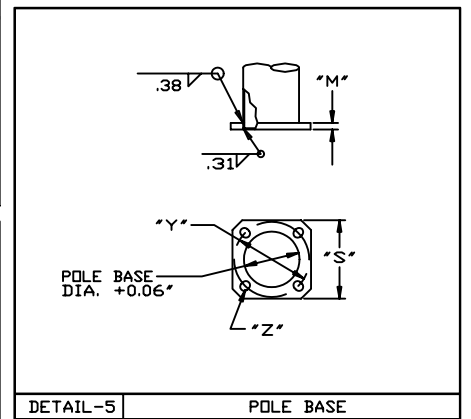
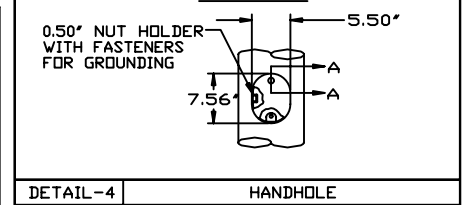
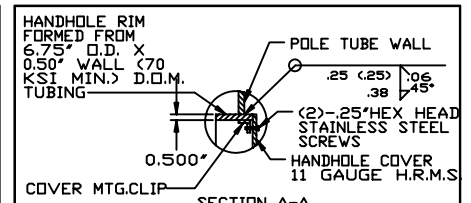
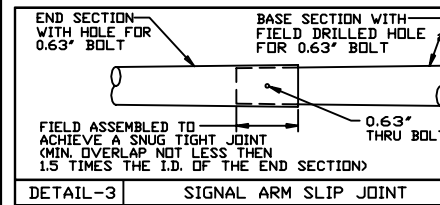
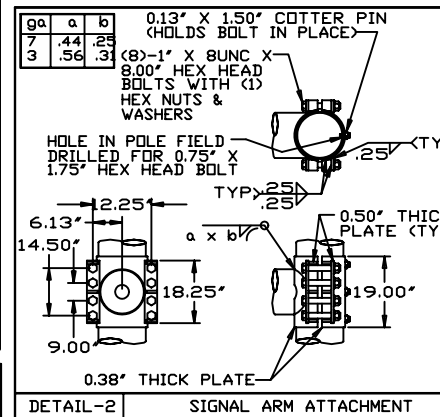
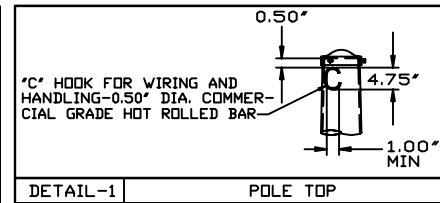
TABLE 2: MAST ARMS


ARM TYPE	SIGNAL ARM TUBE				SPAN (FT)	RISE ANGLE (DEGREES)
	FIXED END DIA. (IN)	FREE END DIA. (IN)	GAUGE OR THICK (IN)	SPAN (FT)		
30S	9.00	4.80	7	30.00	1.50	
35S	9.00	4.10	7	35.00	2.50	
40S	10.00	4.40	7	40.00	2.50	
45S	10.50	4.20	7	45.00	3.50	
50S	11.00	4.00	7	50.00	4.00	
55S	10.14	3.81	3	45.25	6.00	
	4.27	2.68	11	11.37		
60S	11.00	4.00	3	50.00	6.50	
	4.47	2.84	11	11.64		
65S	11.75	5.50	3	44.64	6.50	
	6.12	3.01	7	22.19		

TABLE 3: MATERIAL DATA

COMPONENT	ASTM DESIGNATION	MIN YIELD (KSI)
POLE TUBE	A572 GR.65	65
BASE PLATE	A36	36
ARM TUBE	A595 GR.A	55
CLAMP	A36	36
BOLTS	A325 ¹	92
ANCHOR BOLTS	F1554 GR.55	55
GALVANIZING (TUBES)	A123	NA
GALVANIZING (ACCESSORIES)	A153	NA

- LUBRICATE IN FIELD IF NECESSARY IN LIEU OF THE REQUIREMENT IN A325.
- RISE ANGLE IS FOR MAXIMUM DESIGN LOADS ONLY.



REV. DATE	REVISION	 VALMONT INDUSTRIES, INC. VALLEY, NEBRASKA 68064 (402) 359-2201
A	10-02-99 REVISED PER 1995 NJ SPECS SH	
B	14-04-99 RADIUS RISE ANGLE TABLE 2 RH	
JOB NAME		ORDER NO.:
SOLD TO		
SHIP TO		
P.O. NO.		
AGENT		
DATE: 10-04-94	DRWN: DLE	SHEET 1 OF 1
TITLE: NEW JERSEY TRAFFIC SIGNAL STRUCTURES	DRAWING NO. DB00376	REV: B