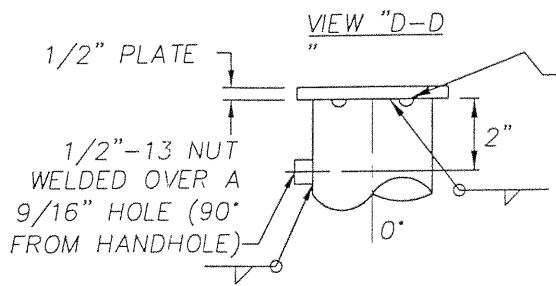
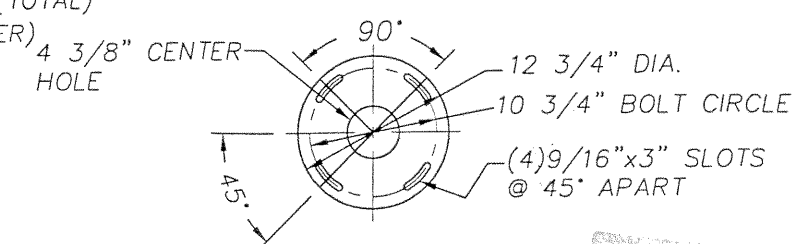
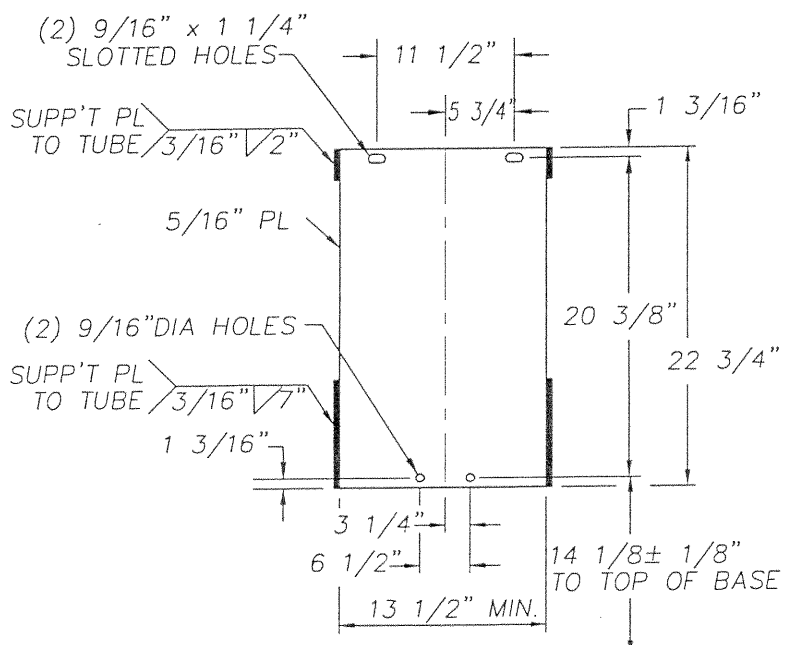
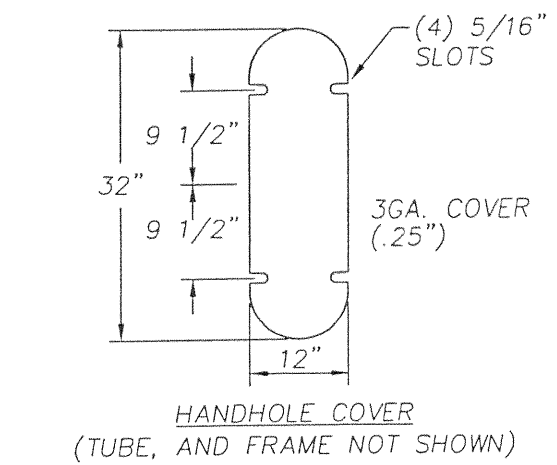
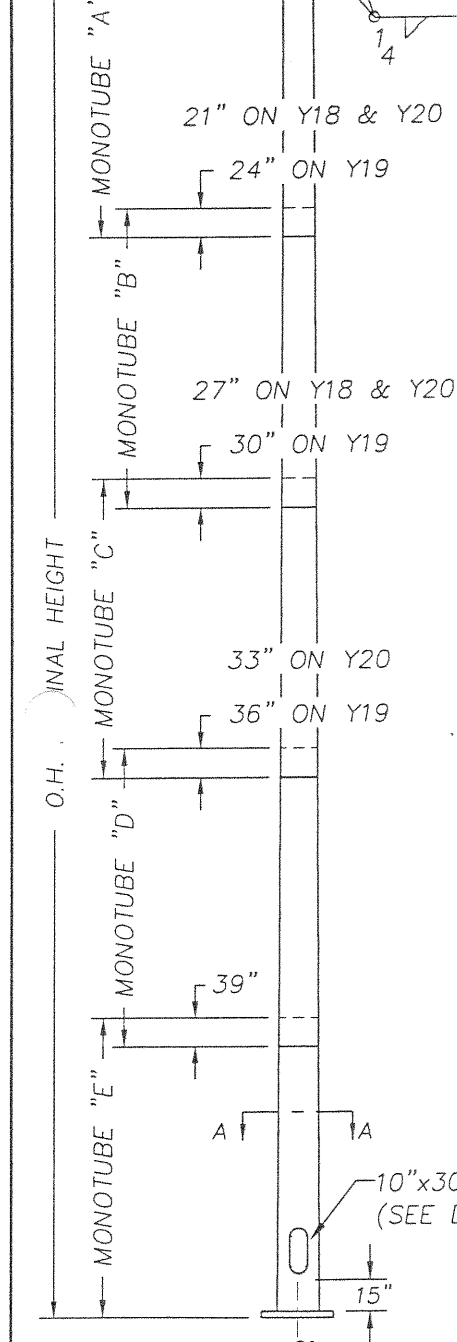
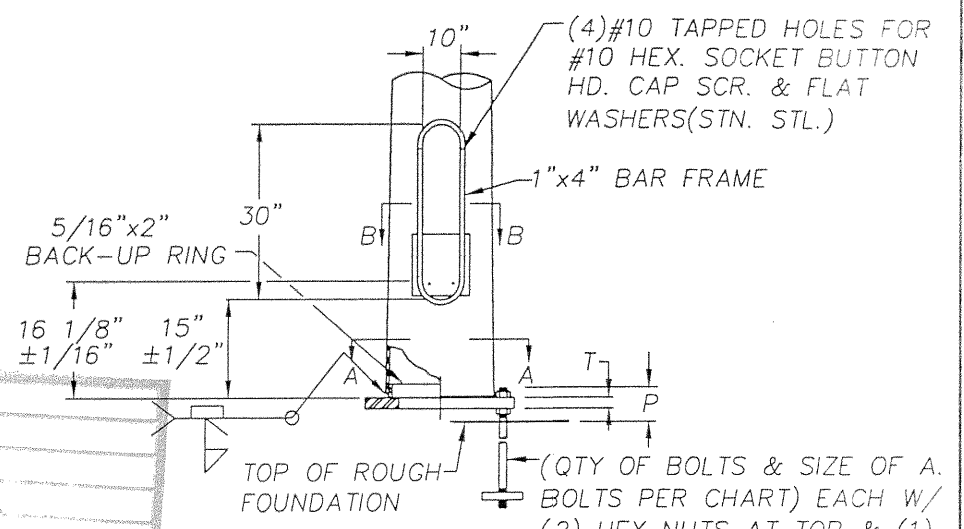
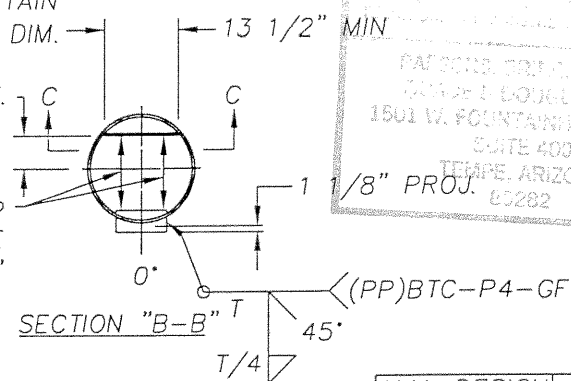


U.M. DESIGN NUMBER	Q.H. HEIGHT	MONOTUBE "A"	MONOTUBE "B"	MONOTUBE "C"	MONOTUBE "D"	MONOTUBE "E"
72138-Y18	100'	3E-9.60x5.51x29'-3"	3E-13.86x8.85x35'-9"	3E-18.50x13.04x39'-0"	-----	-----
72138-Y19	120'	7E-11.22x7.06x29'-9"	3E-15.90x10.58x38'-0"	3E-18.94x15.06x27'-9"	3E-22.50x18.02x32'-0"	-----
72138-Y20	150'	3E-9.73x5.60x29'-6"	0E-14.02x8.98x36'-0"	0E-18.12x13.08x36'-0"	3+3E-21.20x17.11x29'-3"	3+3E-23.84x19.75x29'-3"

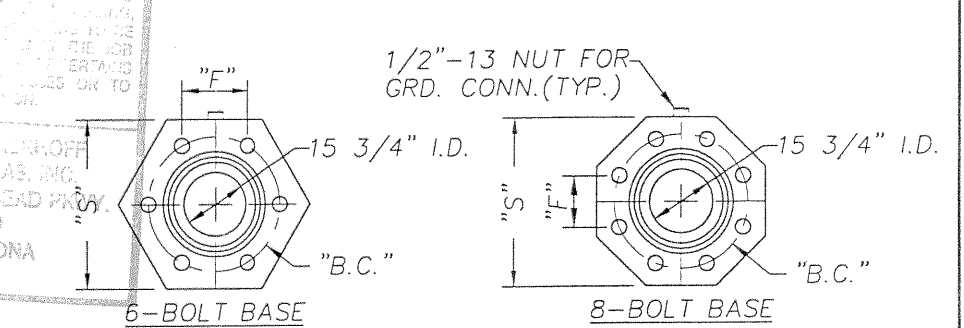


INCREASED AS REQ'D ON LARGER DIA. POLES TO MAINTAIN 6 1/4" MAX. DIM.

THESE DIMS. AT TOP OF PLATE TO BE EQUAL WITHIN 1/8"



(QTY OF BOLTS & SIZE OF A. BOLTS PER CHART) EACH W/ (2) HEX NUTS AT TOP & (1) BEARING PL AT BOTTOM (SIZE PER CHART)



- GENERAL NOTES**
- THESE STRUCTURES ARE DESIGNED IN ACCORDANCE WITH THE 1994 AASHTO STANDARD SPECIFICATION FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS FOR A 80 M.P.H. WIND ZONE TO SUPPORT LUMINAIRES AND HEAD WITH A TOTAL EPA OF 36 S.F. AND BOTTOM LATCHED LOWERING DEVICE WITH A MAXIMUM CABLE LOAD OF 1000 LBS.
  - DEFLECTION OF TOP OF POLE SHALL NOT EXCEED 15% OF POLE HEIGHT
  - MINIMUM SLIP JOINT LENGTH EQUALS 1.5 TIMES THE INSIDE DIAMETER OF THE BOTTOM END OF THE FEMALE SECTIONS. THE MIN. SLIP JOINT LENGTH PLUS 6" OF FEMALE SECTIONS REQUIRE FULL PENETRATION SEAM WELD. ALSO FULL PENETRATION WITHIN 6" OF BASE PLATE, ALL OTHER SEAM WELDS 60% PENETRATION. THE TUBE MANUFACTURING DIMENSIONS WILL HAVE AN ADDITIONAL LENGTH TO ALLOW FOR NEGATIVE TOLERANCES AT FIT-UP. THE ADDITIONAL LENGTH IS INCLUDED IN THE DESIGN DRAWING FIELD JOINT LENGTH.
  - THE EXPOSED LENGTH OF THE ANCHOR BOLT BETWEEN THE TOP OF THE FOUNDATION AND THE BOTTOM OF THE LEVELING NUT SHOULD NOT EXCEED ONE BOLT DIAMETER.

**MATERIAL SPECIFICATION**

MONOTUBES	ASTM-A595 GR.A(55 K.S.I.)MIN.Y.S.
PLATE	ASTM-A36 (36 K.S.I.)MIN. Y.S.
ANCHOR BOLTS	ASTM-A687
A. BOLT NUTS	ASTM-A563 GR. DH
STRUCTURE FINISH	H.D. GALV. TO ASTM-A123
HARDWARE FINISH	H.D. GALV. TO ASTM-A153

U.M. DESIGN NUMBER	QTY BOLTS	ANCHOR BOLTS	B.C.	F	S	P	T	BEARING PLATE
72138-Y18	6	1 1/2"x38"	26	13	29	6 1/4	1 1/2	1 3/4"x6 3/4"
72138-Y19	6	1 1/2"x38"	30	15	33 1/4	6 1/4	1 1/2	1 3/4"x6 3/4"
72138-Y20	8	1 1/2"x38"	30	11 1/2	33	6 1/2	1 3/4	1 3/4"x6 3/4"

STEEL AREA LIGHTING POLE FOR USE WITH CAROLINA LOWERING DEVICE  
ARIZONA DEPARTMENT OF TRANSPORTATION

LOF \_\_\_\_\_ ENG. REF.# \_\_\_\_\_  
REQ.# 0557-13-98 S.O.# \_\_\_\_\_ CAD# 0557B98

**Union Metal CORPORATION**

R1 0974 0798 TUBE SIZE CHANGED TO MEET ARIZONA METHOD OF DEFL. CALC. 1/22/99 RLW

DRAWN EJJ DATE 8/20/98 CHECKED *smc* DRAWING NO. 72138-B9

REVISIONS

**ORIGINAL**