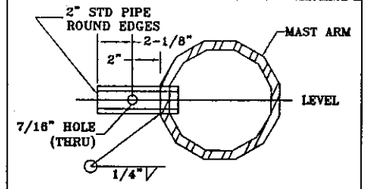
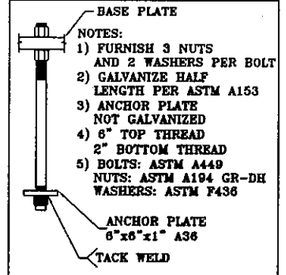
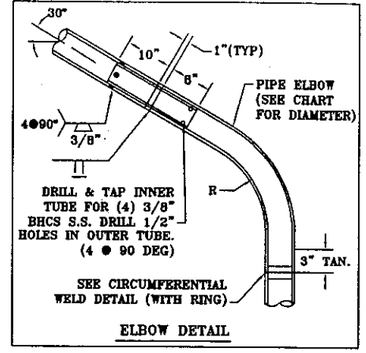


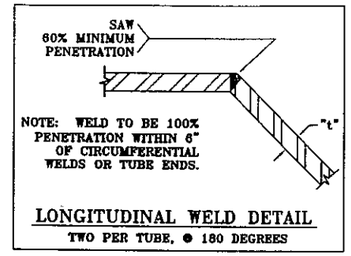
TENON DETAIL (TYPE "M" MOUNT)



ANCHOR BOLT DETAIL

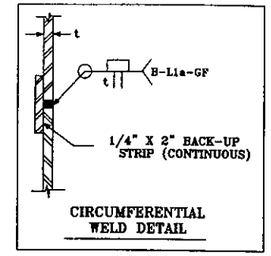


ELBOW DETAIL

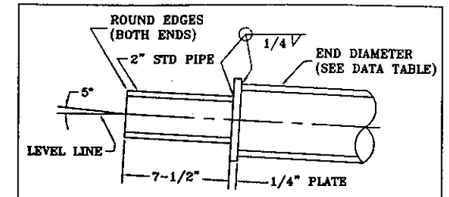


LONGITUDINAL WELD DETAIL

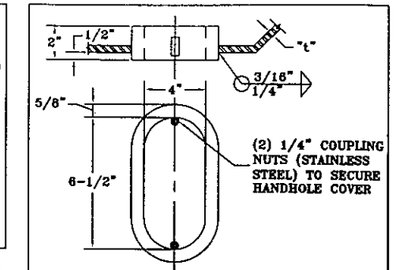
TWO PER TUBE, ● 180 DEGREES



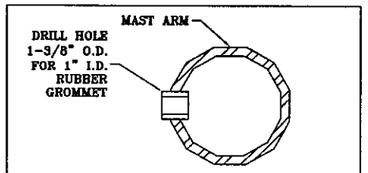
CIRCUMFERENTIAL WELD DETAIL



TENON DETAIL (LUMINAIRE ARM)

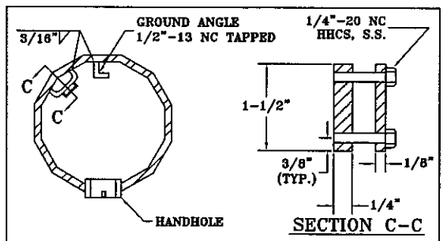


HANDHOLE DETAIL



HOLE DETAIL (TYPE "N" MOUNT)

(OPTIONAL)



CONDUCTOR ATTACHMENT BRACKET DETAIL

POLE SCHEDULE

INTERSECTION:

POLE #	POLE DESIGNATION	MAST ARM LENGTH (FT)	POLE HEIGHT (FT)	MAST ARM HEIGHT A1 (FT)	MOUNTING HEIGHT A2 (FT)	LUM. ARM LENGTH C (FT)	TENON LOCATIONS FROM POLE CENTERLINE (FT)					3/4" COUPLING FROM POLE CL (FT)		NOTES
							B1	B3	B6	B9			B5	

LUMINAIRE ARM DATA

ARM LENGTH (FT)	ELBOW DIAMETER (IN)(1)	R (IN)	THICKNESS (IN)	B (IN)
6	4	12	.188	24
8	4	12	.188	36
10	4	12	.188	51
12	4	12	.188	65
14	4	12	.188	79
16	4	12	.188	93

(1) ELBOWS TO BE MADE FROM STD PIPE

JON S. MEUSCH
STATE OF WASHINGTON
34207
REGISTERED
PROFESSIONAL ENGINEER

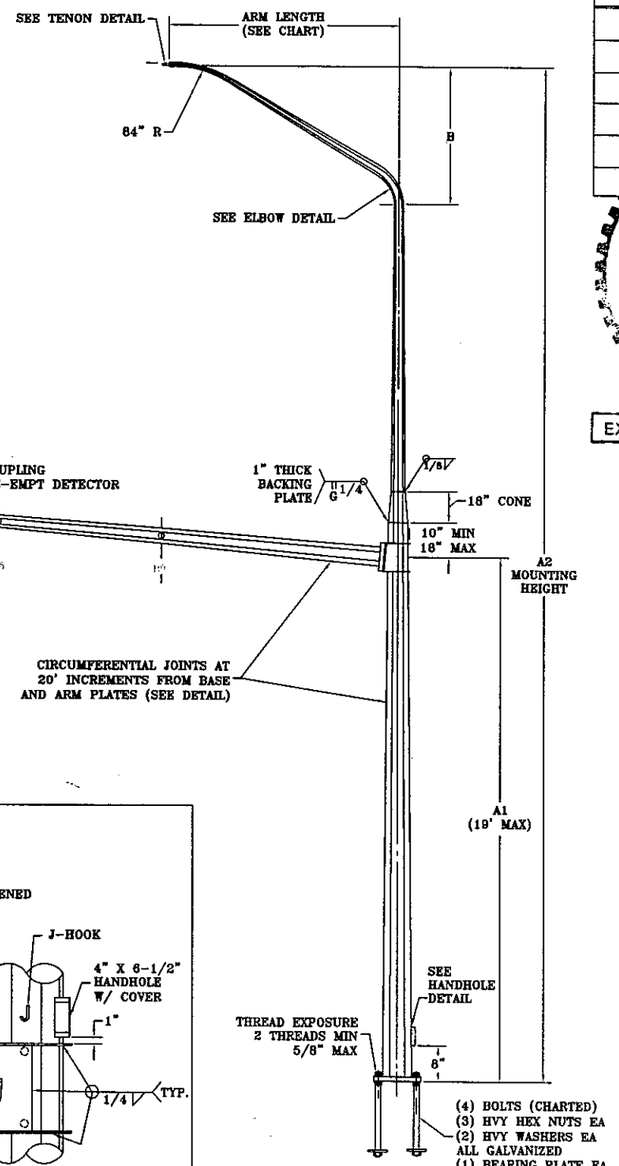
EXPIRES: 4/20/04

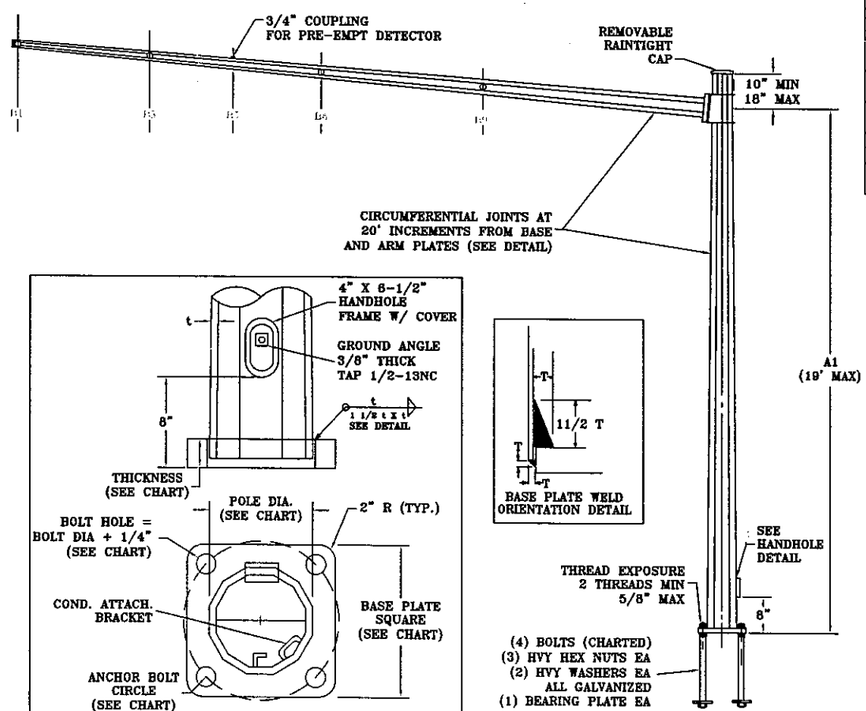
POLE DATA

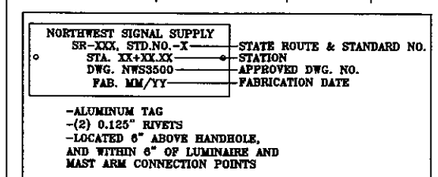
ARM LENGTH	TYPE II POLE		TYPE III POLE		BASE PLATE		ANCHOR BOLTS	
	DIA	THICK	DIA	THICK	SQUARE	THICK	BOLT CIRCLE	DIA X L X H
15-45	14	.25	14	.25	18	2	18	1.5 X 60 X PL.
>45-65	17	.3125	17	.3125	22	2.25	22	2 X 60 X PL.

MAST ARM DATA

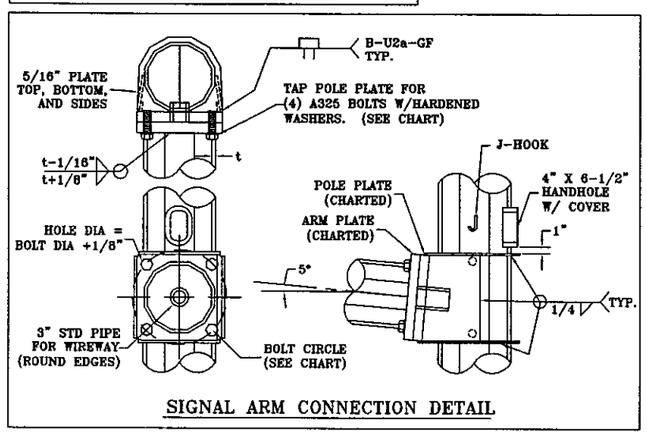
ARM			ARM & POLE PLATE					MAX LOAD
LENGTH	BASE DIA	THICK.	SQUARE	ARM PL THICK	BOLT SIZE	POLE PL THICK	BOLT CIRCLE	AREA X DIST. (FT^3)
15	6	.188	15 X 15	1.5	1.25 X 3	1.5	15	301
20	7	.188	15 X 15	1.5	1.25 X 3	1.5	15	433
25	8	.25	15 X 15	1.5	1.25 X 3	1.5	15	639
30	9	.25	15 X 15	1.75	1.25 X 3	1.5	15	849
35	10	.25	15 X 15	1.75	1.25 X 4	1.5	15	1059
40	11	.25	15 X 15	2	1.25 X 4	1.5	15	1269
45	11	.25	15 X 15	2	1.25 X 4	1.5	15	1479
50	12	.25	20 X 20	2.25	1.5 X 4	1.75	19.5	1789
55	13	.25	20 X 20	2.25	1.5 X 4	1.75	19.5	2119
60	14	.25	20 X 20	2.25	1.5 X 4.5	1.75	19.5	2464
65	15	.25	20 X 20	2.25	1.5 X 4.5	1.75	19.5	2802



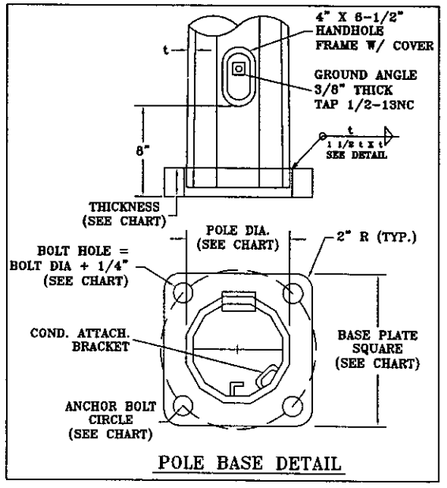




IDENTIFICATION TAG DETAIL



SIGNAL ARM CONNECTION DETAIL



POLE BASE DETAIL

BASE PLATE WELD ORIENTATION DETAIL

MATERIALS:
SHAFTS: ASTM A572 GR50
PLATES: ASTM A572 GR50
PIPE: ASTM A53 GRB
CONN. BOLTS: AASHTO M164
ANCHOR BOLTS: ASTM F1554 GR 105
GALVANIZING: AASHTO M111&M232

WELDING:
WELDING OF STEEL STRUCTURES SHALL BE IN ACCORDANCE WITH SECTION 5.15 OF THE "SPECIFICATIONS SUPPORTS OF HIGHWAY SIGNS, SIGNALS, LUMINAIRES AND TRAFFIC SIGNALS", AASHTO 2001

DESIGN CRITERIA
2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.
-25 YEAR DESIGN LIFE/RECURRENCE INTERVAL
-FATIGUE CATEGORY III
-GALLOPING & TRUCK-INDUCED FATIGUE INCLUDED

WIND VELOCITY
90 MPH ISOTACH

MAXIMUM TRUCK-INDUCED FATIGUE
65 MPH

CAFL AT CRITICAL CONNECTIONS
-POLE TO BASE PLATE CONNECTION = E
-ARM TO SIMPLEX PLATE CONNECTION = E
-SIMPLEX GUSSETS = E'
-POLE WALL AT SIMPLEX GUSSET = E'
-POLE CROSS SECTION AT SIMPLEX GUSSET = E
-POLE SHAFT = B'

DESIGNED BY D.S. KOZOL 9/18/02	NORTHWEST SIGNAL SUPPLY 12965 SW HERMAN RD, TUALATIN, OR 97062
DRAWN BY D.S. KOZOL 9/18/02	STATE OF WASHINGTON TYPE II & III MAST ARM POLE TYPE II LUMINAIRE ARM 12-SIDED CROSS SECTION
	REVISION
	JOB NO.:
	DRAWING NO.: NWS3505B