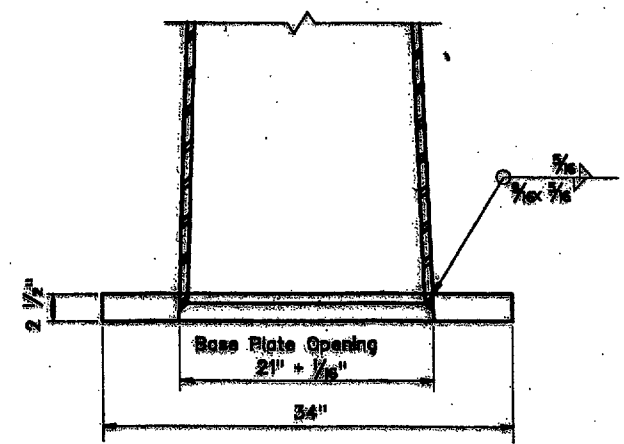
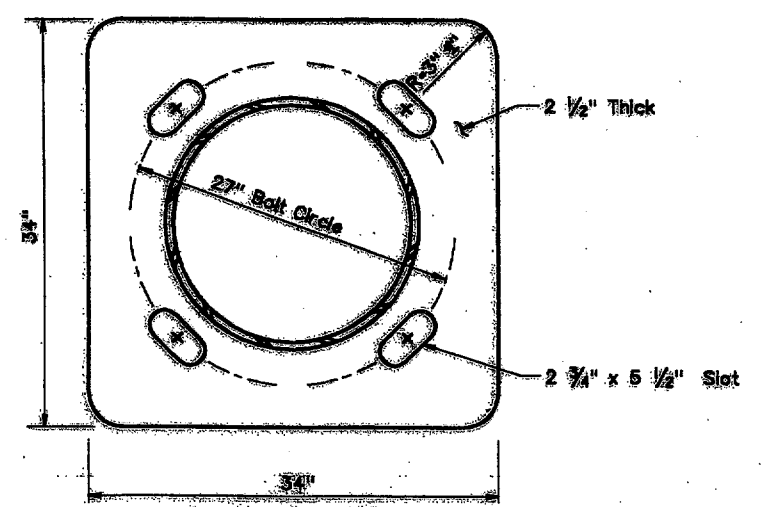


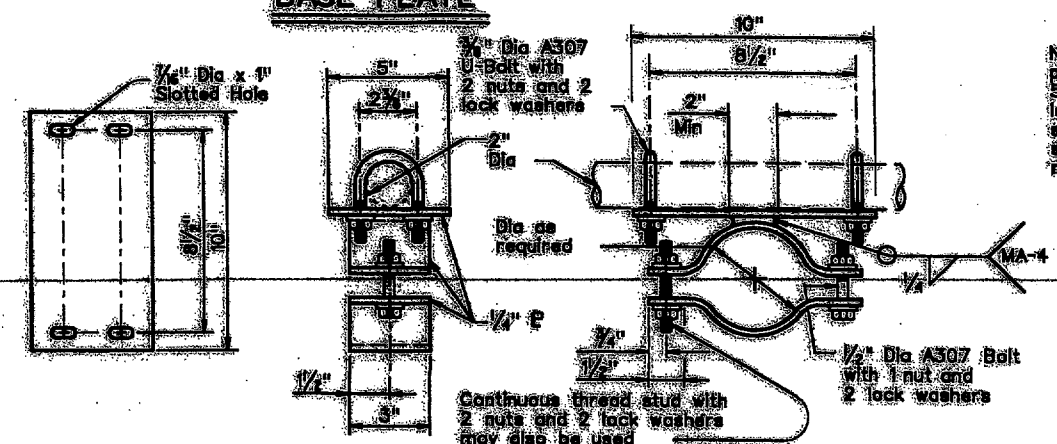
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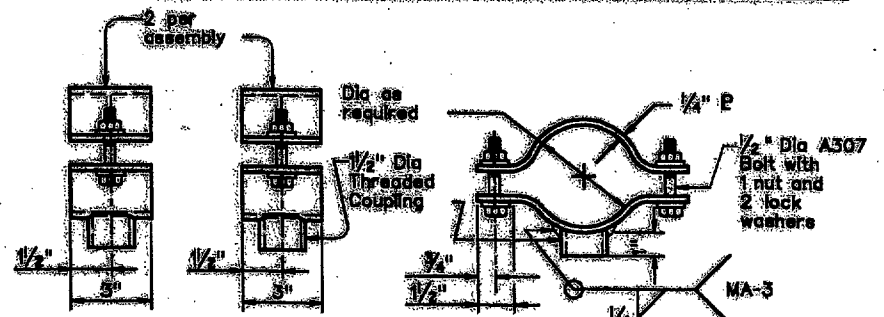
POLE CONNECTION TO BASE PLATE



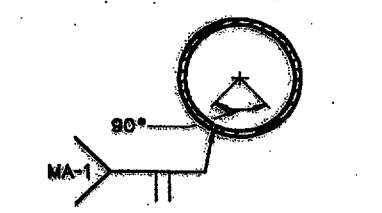
BASE PLATE



BRACKET ASSEMBLY DETAILS OPTION A

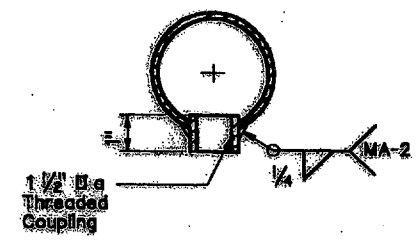


BRACKET ASSEMBLY DETAILS OPTION B

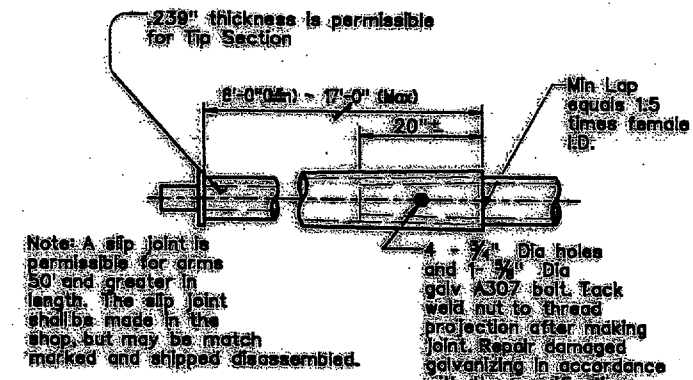


Longitudinal Seam Weld must be oriented within the lower 90° of the signal arm.

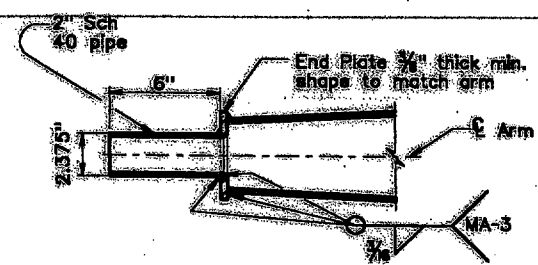
ARM WELD DETAIL



COUPLING DETAIL



SLIP JOINT DETAIL



TENON DETAIL

Stainless steel bands and cast bracket as in "Astro-Brac" with 1/2 inch diameter threaded coupling.

BRACKET ASSEMBLY OPTION C

Arm Length ft.	ROUND POLES					Foundation Type
	D ₀ in.	D ₂₀ in.	D ₂₄ in.	D ₃₀ in.	thk in.	
50'-55'	21.0	18.3	17.6	16.8	.3125	4B-A
60'-65'						

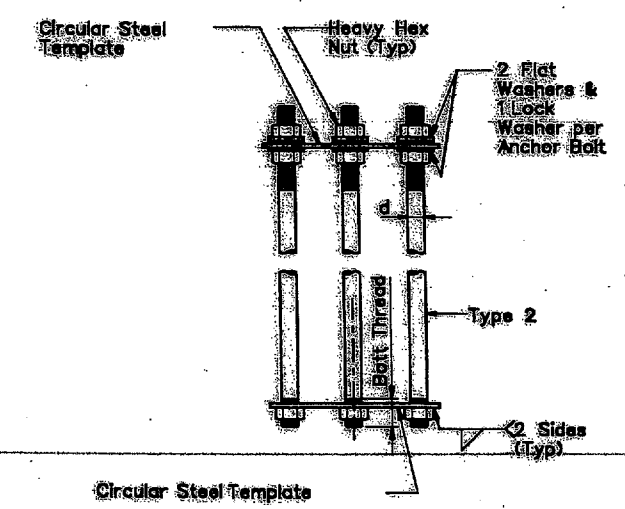
Arm Length ft.	ROUND ARMS				
	L ₁ ft.	D ₁ in.	D ₂ in.	thk in.	Rise (2") in.
50	49	18.5	11.7	.3125	3'-8"
55	54	18.5	11.0	.3125	3'-7"
60	59	18.5	10.3	.3125	3'-11"
65	64	18.5	9.6	.3125	4'-4"

D₀ = Pole Base O.D.
 D₂₀ = Pole Top O.D. with no Luminaire and no LSN
 D₂₄ = Pole Top O.D. with LSN w/out Luminaire
 D₃₀ = Pole Top O.D. with Luminaire
 D₁ = Arm Base O.D.
 D₂ = Arm End O.D.
 L₁ = Shaft Length
 L = Nominal Arm Length

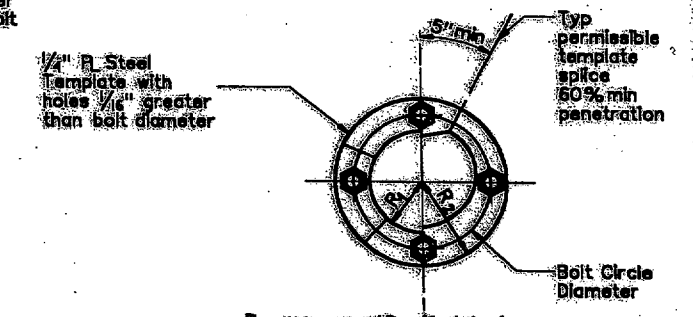
Thickness shown is minimum, thicker materials may be used.

FDN TYPE	DRILLED SHAFT DIA	REINFORCING STEEL		DRILLED SHAFT LENGTH-R			ANCHOR BOLT DESIGN				FOUNDATION DESIGN LOAD		TYPICAL APPLICATION
		VERT BARS	SPIRAL & FITCH	TEXAS CONE PENETROMETER			ANCHOR BOLT DIA	F _y (ksi)	BOLT CIR DIA	ANCHOR TYPE	MOMENT	SHEAR	
				10	15	40							
4B-A	48"	20 #9	*4 at 8"	21.9	19.5	14.7	2 1/2"	55	27"	2	490	10	Most arm assembly.

SEE SHEET "TS-FB" FOR ADDITIONAL DETAILS.



NUT ANCHOR (TYPE 2) ANCHOR BOLT ASSEMBLY



TEMPLATE DETAIL

STANDARD PLANS
 Texas Department of Transportation
 Traffic Operations Division
TRAFFIC SIGNAL SUPPORT STRUCTURES LONG MAST ARM ASSEMBLY (50 TO 65 FT) (80 AND 100 MPH WIND ZONE) LMA(2)-01
 Sheet 2 of 4

DATE	BY	CHKD	APP'D
4-20-01	DAL	DM	97 (87)
SCALE	DATE	BY	CHKD
DALLEAS	091845	344	ES