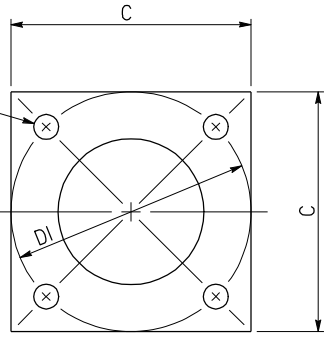
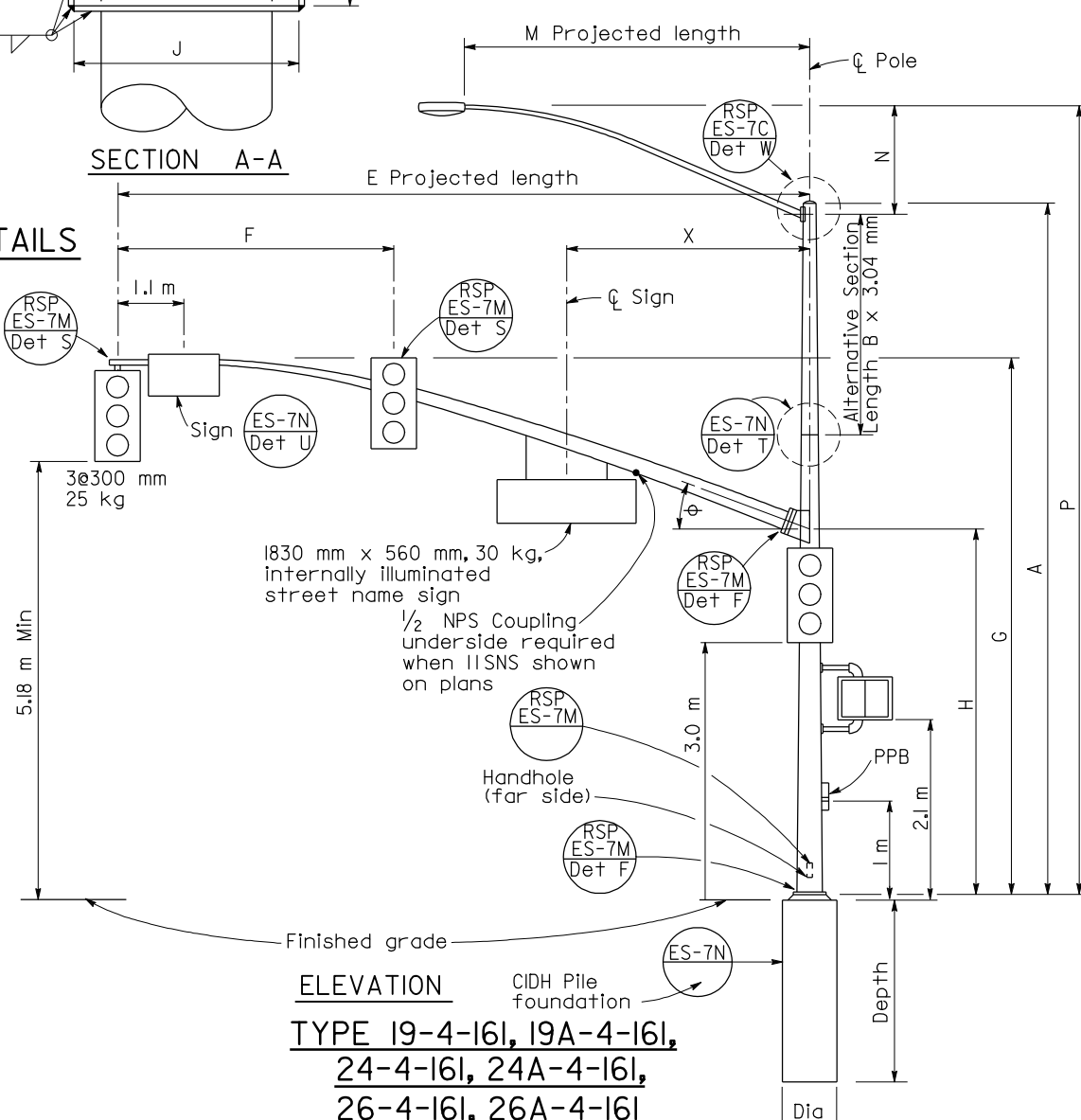


SIGNAL ARM CONNECTION DETAILS



HIGH STRENGTH CAP SCREWS
 16 - IINC - 45
 Length (mm)
 Threads (per inch)
 Size (mm)

SIGNAL ARM DATA												
E Projected Length	F Min Spacing	G Mounting Height	H	Min OD at Pole	Thickness	I Bolt Circle	HS Cap Screws	J Plate Size	K Arm ϕ Thickness	L Pole ϕ Thickness	X Max	
m			mm									m
7.6	3.1	6.9 \pm	4.9	186	6.07	305	32-7NC-76	305	32	38	23 $^\circ$	3.2
9.1	3.7	7.0 \pm		203							21 $^\circ$	
10.7	4.3	7.2 \pm		221							15 $^\circ$	
12.2	4.6			238								
13.7				260								

LUMINAIRE ARM DATA					
M Projected Length	N Rise	Min OD at Pole	Thickness	P Mounting Height	
m	mm	mm	mm	9.1 Pole	10.7 Pole
1.8	610 \pm	83	3.04	9.5 \pm	11.1 \pm
2.4	760 \pm	89		9.7 \pm	11.3 \pm
3.1	990 \pm	98		9.9 \pm	11.5 \pm
3.7	1290 \pm			10.2 \pm	11.8 \pm
4.6	1450 \pm	108		10.4 \pm	12.0 \pm

Pole Type	Load Case	Wind Velocity km/h	POLE DATA					BASE PLATE DATA					Luminaire Arm	Signal Arm	CIDH PILE FOUNDATION					
			A Height	Min OD		Thickness	Alternative Section			C	DI Bolt Circle	Thickness			Anchor Bolts Size	Diameter	Depth	Reinforced		
				Base	Top		B Length	Bottom	Top										mm	mm
18-4-16I	4	161	5.2	305	229	6.07	None	457	457	38	51 ϕ x 1067 x 152	None	None	mm	m	Yes				
19-4-16I			9.1		203		3.1										238	203	1.8-4.6 [3.7]	7.6, [9.1]
19A-4-16I			10.7		186		4.6										186	1.8-4.6 [4.6]		
23-4-16I			5.2		229		None											None		
24-4-16I			9.1		203		3.1										238	203	1.8-4.6 [3.7]	10.7
24A-4-16I			10.7	186	4.6	186	1.8-4.6 [4.6]													
26-4-16I			9.1	203	3.1	238	213	1.8-4.6 [3.7]												
26A-4-16I			10.7	186	4.6	248	196	1.8-4.6 [4.6]	12.2, [13.7]											
27-4-16I			5.2	248	None		None													

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD
CASE 4 ARM LOADING
WIND VELOCITY=161 km/h
ARM LENGTHS 7.6 m TO 13.7 m)
 NO SCALE
 ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN
 RSP ES-7F DATED OCTOBER 5, 2007 SUPERSEDES RSP ES-7F DATED JANUARY 24, 2005 AND STANDARD PLAN ES-7F DATED JULY 1, 2004-PAGE 456 OF THE STANDARD PLANS BOOK DATED JULY 2004.

Indicates arm length to be used unless otherwise noted on plans.