



NOTE:
Handhole shall be located on the downstream side of traffic.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Stanley P. Johnson
 REGISTERED CIVIL ENGINEER
 No. C57193
 Exp. 3-31-16
 CIVIL
 STATE OF CALIFORNIA

October 30, 2015
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**TYPE 18-4-100,
23-4-100,
27-4-100
ELEVATION A**

**TYPE 19-4-100, 19A-4-100,
24-4-100, 24A-4-100,
26-4-100, 26A-4-100
ELEVATION B**

SIGNAL MAST ARM DATA											LUMINAIRE MAST 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 MAST ARM ϕ THICKNESS	L POLE ϕ THICKNESS	θ	X Max	M PROJECTED LENGTH	N RISE	Min OD AT POLE	THICKNESS	P MOUNTING HEIGHT		
																	30'-0" POLE	35'-0" POLE	
25'-0"	10'-0"	22'-8"±		7 3/8"	0.2391"	12"	1 1/4"-7NC-3"	1'-0"	1 1/4"	1 1/2"	23°	10'-6"	6'-0"	2'-0"±	3 1/4"	0.1196"	31'-6"±	36'-6"±	
30'-0"	12'-0"		8"	12"		1'-0"		1 1/4"	1 1/2"	21°	10'-0"	3'-3"±	37'-0"±	8'-0"	2'-6"±		3 1/2"	32'-0"±	37'-0"±
35'-0"	14'-0"		8 1/2"	13 1/2"		1'-1 1/2"		1 1/2"	1 3/4"	15°	10'-0"	4'-3"±	37'-9"±	10'-0"	3'-3"±		3 3/8"	32'-9"±	38'-9"±
40'-0"	15'-0"		9 3/8"	13 1/2"		1'-1 1/2"		1 1/2"	1 3/4"	15°	13'-0"	4'-3"±	38'-9"±	12'-0"	4'-3"±		4 1/4"	33'-9"±	38'-9"±
45'-0"				10 1/4"									15'-0"	4'-9"±	4 1/4"	34'-3"±	39'-3"±		

POLE TYPE	LOAD CASE	WIND VELOCITY (mph)	POLE DATA					BASE PLATE DATA					LUMINAIRE MAST ARM			SIGNAL MAST ARM			CIDH PILE FOUNDATION	
			A HEIGHT	Min OD		THICKNESS	ALTERNATIVE SECTION			C	BC = BOLT CIRCLE	THICKNESS	ANCHOR BOLT SIZE	LUMINAIRE MAST ARM	SIGNAL MAST ARM	Dia	DEPTH	REINFORCED		
				BASE	TOP		B LENGTH	BOTTOM	TOP											
18-4-100	4	100	17'-0"		9 3/8"	NONE							NONE	25'-0"						
19-4-100			30'-0"		7 1/8"	10'-0"	9/8"	7 1/8"					6'-15'	12'-0"	30'-0"					
19A-4-100			35'-0"	12 1/8"	6 5/8"	15'-0"		6 5/8"	1'-7"	1'-5 1/2"				6'-15'	15'-0"	30'-0"				
23-4-100			17'-0"		9 3/8"	NONE								NONE						
24-4-100			30'-0"		7 1/8"	10'-0"		7 1/8"						6'-15'	12'-0"	35'-0"				
24A-4-100			35'-0"	12 1/8"	6 5/8"	15'-0"	9/8"	6 5/8"						6'-15'	15'-0"	35'-0"				
26-4-100			30'-0"		8 3/8"	10'-0"		8 3/8"						6'-15'	12'-0"					
26A-4-100			35'-0"	14"	7 1/8"	15'-0"	9/8"	7 1/8"	23"	21"				6'-15'	15'-0"	40'-0"				
27-4-100			17'-0"		10 1/8"	NONE								NONE		45'-0"				

□ INDICATES MAST ARM LENGTH TO BE USED UNLESS OTHERWISE NOTED ON PLANS.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SIGNAL AND LIGHTING STANDARD,
 CASE 4 SIGNAL MAST ARM LOADING,
 WIND VELOCITY=100 MPH AND SIGNAL
 MAST ARM LENGTHS 25' TO 45')**
 NO SCALE
 RSP ES-7F DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-7F DATED JULY 19, 2013 AND
 ES-7F DATED MAY 20, 2011 - PAGE 467 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-7F

2010 REVISED STANDARD PLAN RSP ES-7F