POLE SELECTION TABLE – SINGLE ARM – WITH & WITHOUT LUMINAIRE					
ARM TYPE	D1	D3	D5	D6	D7
POLE TYPE	S1 & S21 Lum	S2 & S22 Lum	S3 & S23 Lum	S4 & S24 Lum	S6

POLE SELECTION TABLE – DOUBLE ARM – WITHOUT LUMINAIRE										
ARM TYPE	D1 - D1	D3 - D1	D5 - D2	D6 - D2	D4 - D4	D5 - D4	D6 - D4	D5 - D5	D6 - D5	D6 - D6
POLE TYPE	S1	S2	S3	S4	S3	S4	S4	S4	S4	S5

Arm 1 is listed first

ARM DESIGN TABLE – ALL CASES												
ARM TYPE	ARM LENGTH	MAST ARM				ARM EXTENSION				ARM CONNECTION & WELDS		
		FA/SA (ft)	FB/SB (in)	FC/SC (in)	FD/SD (in)	FE/SE (ft)	FF/SF (in)	FG/SG (in)	FH/SH (in)	HT (in)	FJ/SJ (in)	FK/SK (in)
D1	36'-0"	36	8.99	14	0.1793					20	25	2.5
D2	36'-0"	36	9.00	14	0.1793					30	36	3
D3	46'-0"	36.1	8.95	14	0.1793	11.9	13.36	15	0.313	20	25	2.5
D4	46'-0"	36.1	8.95	14	0.1793	11.9	13.37	15	0.313	30	36	3
D5	60'-0"	35.8	7.99	13	0.1793	26.2	12.37	16	0.375	30	36	3
D6	70'-6"	39.1	9.52	15	0.1793	33.4	14.36	19	0.375	30	36	3
D7	78'-0"	40	8.47	14.07	0.1793	40	13.44	19	0.375	30	34	3

Arm Camber Angle = 2 degrees

POLE, CONNECTION AND SHAFT DESIGN TABLE – SINGLE & DOUBLE ARM																						
POLE TYPE	UA (ft)	UC (in)	UD (in)	UE (in)	UG (ft)	UPRIGHT BASE CONNECTION					CONNECTION PLATE DATA									DRILLED SHAFT DATA					
						No. Bolts	BA (in)	BB (in)	BC (in)	BF (in)	HT (in)	FJ/SJ (in)	FL/SL (in)	FN/SN (in)	FO/SO (in)	FP/SP (in)	FR/SR (in)	FS/SS (in)	FT/ST (in)	DA (ft)	DB (ft)	RA	RB	RC	RD (in)
S1	25	12.53	16	0.375		6	30	2.5	1.75	36	20	25	0.75	0.438	15.5	1	2	8	0.438	12	4	11	14	9	12
S2	25	14.53	18	0.375		6	32	2.5	1.75	36	20	25	0.75	0.438	15.5	1	2	8	0.438	12	4.5	11	16	9	12
S3	25	17.53	21	0.375		6	37	2.5	2	40	30	36	0.75	0.438	22	1.25	2.5	12.5	0.438	15	4.5	11	16	10	8
S4	25	22.53	26	0.375		6	42	2.5	2	40	30	36	0.75	0.438	22	1.25	2	12.5	0.438	17	5	11	18	10	8
S5	25	23.53	27	0.375		6	45	2.5	2.25	45	30	36	0.75	0.438	22	1.25	2	12.5	0.438	18	5	11	18	10	8
S6	25	21.53	25	0.375		6	41	2.5	2	40	30	34	0.75	0.5	16.5	1.25	2	12.5	0.5	15	5	11	18	10	8
S21 Lum	39	10.57	16	0.375	37.5	6	30	2.5	1.75	40	20	25	0.75	0.438	11.5	1	2	8	0.438	12	4	11	14	9	12
S22 Lum	39	12.57	18	0.375	37.5	6	32	2.5	1.75	40	20	25	0.75	0.438	12.5	1	2	8	0.438	12	4.5	11	16	9	12
S23 Lum	39	15.57	21	0.375	37.5	6	37	2.5	2	40	30	36	0.75	0.438	15	1.25	2.5	12.5	0.438	14	4.5	11	16	10	8
S24 Lum	39	20.57	26	0.375	37.5	6	42	2.5	2	40	30	36	0.75	0.438	17	1.25	2	12.5	0.438	15	5	11	18	10	8

LUMINAIRE AND LUMINAIRE CONNECTION											
LA (ft)	LB (ft)	LC (in)	LD (in)	LE	LF (ft)	LG (in)	LH (in)	LJ (in)	LK (in)	LL (deg)	UG (ft)
40	10	3	0.125	0.5	8	0.5	0.75	0.25	0.25	0	37.5

Notes:
1. Work this Index with Index No. 17745.
2. Design Wind Speed = 150 mph with Signal Backplates.

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"D" MAST ARMS

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/14			FDOT 2016 DESIGN STANDARDS	STANDARD MAST ARM ASSEMBLIES	17743	1 of 2

POLE SELECTION TABLE – SINGLE ARM – WITH & WITHOUT LUMINAIRE					
ARM TYPE	E1	E3	E5	E6	E7
POLE TYPE	T1 & T21 Lum	T2 & T22 Lum	T3 & T23 Lum	T4 & T24 Lum	T6

POLE SELECTION TABLE – DOUBLE ARM – WITHOUT LUMINAIRE										
ARM TYPE	E1 - E1	E3 - E1	E5 - E2	E6 - E2	E4 - E4	E5 - E4	E6 - E4	E5 - E5	E6 - E5	E6 - E6
POLE TYPE	T1	T2	T3	T4	T3	T4	T4	T4	T4	T5

Arm 1 is listed first

ARM DESIGN TABLE – ALL CASES												
ARM TYPE	ARM LENGTH	MAST ARM				ARM EXTENSION				ARM CONNECTION & WELDS		
		FA/SA (ft)	FB/SB (in)	FC/SC (in)	FD/SD (in)	FE/SE (ft)	FF/SF (in)	FG/SG (in)	FH/SH (in)	HT (in)	FJ/SJ (in)	FK/SK (in)
E1	36'-0"	36.0	5.98	11	0.25					22	23	2
E2	36'-0"	36.0	5.99	11	0.25					30	32	2.75
E3	46'-0"	35.1	7.09	12	0.25	12.9	11.22	13	0.313	22	23	2
E4	46'-0"	35.1	7.09	12	0.25	12.9	11.23	13	0.313	30	32	2.75
E5	60'-0"	34.8	6.13	11	0.25	27.2	10.22	14	0.375	30	32	2.75
E6	70'-6"	38.1	6.66	12	0.25	34.4	11.22	16	0.375	30	32	2.75
E7	78'-0"	40.0	7.47	13.07	0.1793	40	12.43	18	0.375	30	32	2.5

Arm Camber Angle = 2 degrees

POLE, CONNECTION AND SHAFT DESIGN TABLE – SINGLE & DOUBLE ARM																							
POLE TYPE	UA (ft)	UC (in)	UD (in)	UE (in)	UG (ft)	UPRIGHT BASE CONNECTION					CONNECTION PLATE DATA									DRILLED SHAFT DATA					
						No. Bolts	BA (in)	BB (in)	BC (in)	BF (in)	HT (in)	FJ/SJ (in)	FL/SL (in)	FN/SN (in)	FO/SO (in)	FP/SP (in)	FR/SR (in)	FS/SS (in)	FT/ST (in)	DA (ft)	DB (ft)	RA	RB	RC	RD (in)
T1	25	10.53	14	0.375		6	26	2.5	1.5	36	22	23	0.5	0.375	14	1	2.0	9	0.375	11	4	11	14	8	12
T2	25	12.53	16	0.375		6	28	2.5	1.5	36	22	23	0.5	0.375	14	1	2.0	9	0.375	12	4	11	14	9	12
T3	25	15.53	19	0.375		6	35	2.5	2	40	30	32	0.75	0.375	19.5	1.25	2.25	12.5	0.375	12	4.5	11	16	9	12
T4	25	18.53	22	0.5		6	38	2.5	2	40	30	32	0.75	0.375	19.5	1.25	2.0	12.5	0.375	15	4.5	11	16	10	8
T5	25	18.53	22	0.5		6	38	2.5	2	40	30	32	0.75	0.375	19.5	1.25	2.0	12.5	0.375	16	4.5	11	16	10	8
T6	25	18.53	22	0.375		6	38	2.5	2	40	30	32	0.75	0.438	15	1.25	2.0	12.5	0.438	14	4.5	11	16	10	8
T21 Lum	39	8.57	14	0.375	37.5	6	26	2.5	1.5	40	22	23	0.5	0.375	10	1	2.0	9	0.375	11	4	11	14	8	12
T22 Lum	39	10.57	16	0.375	37.5	6	30	2.5	1.75	40	22	23	0.5	0.375	11	1	2.0	9	0.375	12	4	11	14	9	12
T23 Lum	39	13.57	19	0.375	37.5	6	35	2.5	2	40	30	32	0.75	0.375	13	1.25	2.25	12.5	0.375	12	4.5	11	16	9	12
T24 Lum	39	16.57	22	0.375	37.5	6	38	2.5	2	40	30	32	0.75	0.375	15	1.25	2.0	12.5	0.375	14	4.5	11	16	10	12

LUMINAIRE AND LUMINAIRE CONNECTION											
LA (ft)	LB (ft)	LC (in)	LD (in)	LE	LF (ft)	LG (in)	LH (in)	LJ (in)	LK (in)	LL (deg)	UG (ft)
40	10	3	0.125	0.5	8	0.5	0.75	0.25	0.25	0	37.5

Notes:
1. Work this Index with Index No. 17745.
2. Design Wind Speed = 150 mph without Signal Backplates.
   130 mph with or without Signal Backplates.
   110 mph with or without Signal Backplates.

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"E" MAST ARMS