

| POLE SELECTION TABLE - SINGLE ARM - WITH & WITHOUT LUMINAIRE | | | | | |
|--|-------------|--------------|--------------|--------------|----|
| Arm Type | B1 | B3 | B5 | B6 | B7 |
| Pole Type | Q1 & Q2 Lum | Q2 & Q22 Lum | Q3 & Q23 Lum | Q4 & Q24 Lum | Q6 |

| POLE SELECTION TABLE - DOUBLE ARM - WITHOUT LUMINAIRE | | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Arm Type | B1 - B1 | B3 - B1 | B5 - B2 | B6 - B2 | B4 - B4 | B5 - B4 | B6 - B4 | B5 - B5 | B6 - B5 | B6 - B6 |
| Pole Type | Q1 | Q2 | Q3 | Q4 | Q3 | Q4 | Q4 | Q4 | Q4 | Q5 |

Arm 1 is listed first

| ARM DESIGN TABLE - ALL CASES | | | | | | | | | | | | | | |
|------------------------------|------------|----------|--------|--------|--------|---------------|--------|--------|--------|------------------------|-----------|-----------|-----------|-----------|
| ARM TYPE | ARM LENGTH | MAST ARM | | | | ARM EXTENSION | | | | ARM CONNECTION & WELDS | | | | |
| | | FA(ft) | FB(In) | FC(In) | FD(In) | FE(ft) | FF(In) | FG(In) | FH(In) | HT(In) | FJ/SJ(In) | FK/SK(In) | FM/SM(In) | FQ/SQ(In) |
| B1 | 36'-0" | 36 | 7.96 | 13 | 0.793 | - | - | - | - | 20 | 25 | 2.25 | 0.25 | 0.313 |
| B2 | 36'-0" | 36 | 7.96 | 13 | 0.793 | - | - | - | - | 30 | 36 | 3 | 0.25 | 0.313 |
| B3 | 46'-0" | 36.3 | 7.92 | 13 | 0.793 | 11.7 | 12.36 | 14 | 0.25 | 20 | 25 | 2.25 | 0.88 | 0.438 |
| B4 | 46'-0" | 36.3 | 7.92 | 13 | 0.793 | 11.7 | 12.36 | 14 | 0.25 | 30 | 36 | 3 | 0.88 | 0.438 |
| B5 | 60'-0" | 36 | 7.96 | 13 | 0.793 | 26 | 12.36 | 16 | 0.313 | 30 | 36 | 3 | 0.25 | 0.5 |
| B6 | 70'-6" | 39.4 | 9.49 | 15 | 0.793 | 33.1 | 14.36 | 19 | 0.313 | 30 | 36 | 3 | 0.25 | 0.5 |
| B7 | 78'-0" | 40 | 8.44 | 14 | 0.793 | 40 | 13.40 | 19 | 0.313 | 30 | 36 | 3 | 0.25 | 0.563 |

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) | BD (In) | BE (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 |
| Q1 | 24 | 12.64 | 16 | 0.313 | - | 6 | 30 | 1.5 | 1.75 | 0.313 | 0.25 | 36 | 20 | 25 | 0.75 | 0.438 | 15.5 | 1 | 2 | 8 | 0.438 | 13 | 3.5 | 9 | 14 |
| Q2 | 24 | 14.64 | 18 | 0.313 | - | 6 | 32 | 1.5 | 1.75 | 0.313 | 0.25 | 36 | 20 | 25 | 0.75 | 0.438 | 15.5 | 1 | 2 | 8 | 0.438 | 13 | 4 | 9 | 19 |
| Q3 | 24 | 18.64 | 22 | 0.313 | - | 6 | 38 | 1.5 | 2 | 0.313 | 0.25 | 42 | 30 | 36 | 0.75 | 0.438 | 21.5 | 1.25 | 2.25 | 12.5 | 0.438 | 13 | 4.5 | 9 | 23 |
| Q4 | 24 | 21.64 | 25 | 0.313 | - | 6 | 41 | 1.5 | 2 | 0.313 | 0.25 | 42 | 30 | 36 | 0.75 | 0.438 | 21.5 | 1.25 | 2.25 | 12.5 | 0.438 | 18 | 4.5 | 9 | 23 |
| Q5 | 24 | 23.64 | 27 | 0.313 | - | 6 | 43 | 1.5 | 2 | 0.313 | 0.25 | 42 | 30 | 36 | 0.75 | 0.438 | 21.5 | 1.25 | 2.25 | 12.5 | 0.438 | 19 | 4.5 | 9 | 23 |
| Q6 | 24 | 21.64 | 25 | 0.313 | - | 6 | 41 | 1.5 | 2 | 0.313 | 0.25 | 42 | 30 | 36 | 0.75 | 0.438 | 16 | 1.25 | 2.25 | 12.5 | 0.438 | 16 | 4.5 | 9 | 23 |
| Q21 Lum | 39 | 10.54 | 16 | 0.313 | 37.5 | 6 | 30 | 1.75 | 1.75 | 0.313 | 0.25 | 36 | 20 | 25 | 0.75 | 0.438 | 11.5 | 1 | 2 | 8 | 0.438 | 12 | 3.5 | 9 | 14 |
| Q22 Lum | 39 | 12.54 | 18 | 0.313 | 37.5 | 6 | 32 | 1.75 | 1.75 | 0.313 | 0.25 | 36 | 20 | 25 | 0.75 | 0.438 | 12.5 | 1 | 2 | 8 | 0.438 | 12 | 4 | 9 | 19 |
| Q23 Lum | 39 | 16.54 | 22 | 0.313 | 37.5 | 6 | 38 | 1.75 | 2 | 0.313 | 0.25 | 42 | 30 | 36 | 0.75 | 0.438 | 14.5 | 1.25 | 2.25 | 12.5 | 0.438 | 13 | 4.5 | 9 | 23 |
| Q24 Lum | 39 | 19.54 | 25 | 0.313 | 37.5 | 6 | 41 | 1.75 | 2 | 0.313 | 0.25 | 42 | 30 | 36 | 0.75 | 0.438 | 16 | 1.25 | 2.25 | 12.5 | 0.438 | 16 | 4.5 | 9 | 23 |

| 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) | |
| 40.0 | 10.0 | 3.0 | 0.25 | 0.50 | 8.0 | 0.5 | 0.75 | 0.25 | 0.88 | 0 | 37.5 | |

NOTES:

1. Work this Index with Index No. 17745.
2. Standard Mast Arm "B" Assemblies are designed as indicated in the Plans Preparation Manual.



2006 FDOT Design Standards

STANDARD MAST ARM "B" ASSEMBLIES

| | |
|---------------|-----------|
| Last Revision | Sheet No. |
| 07/01/05 | 1 of 2 |
| Index No. | |
| 17743 | |

| POLE SELECTION TABLE - SINGLE ARM - WITH & WITHOUT LUMINAIRE | | | | | |
|--|-------------|--------------|--------------|--------------|----|
| Arm Type | C1 | C3 | C5 | C6 | C7 |
| Pole Type | R1 & R2 Lum | R2 & R22 Lum | R3 & R23 Lum | R4 & R24 Lum | R6 |

| POLE SELECTION TABLE - DOUBLE ARM - WITHOUT LUMINAIRE | | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Arm Type | C1 - C1 | C3 - C1 | C5 - C2 | C6 - C2 | C4 - C4 | C5 - C4 | C6 - C4 | C5 - C5 | C6 - C5 | C6 - C6 |
| Pole Type | R1 | R2 | R3 | R4 | R3 | R4 | R4 | R4 | R4 | R5 |

Arm 1 is listed first

| ARM DESIGN TABLE - ALL CASES | | | | | | | | | | | | | | |
|------------------------------|------------|----------|--------|--------|--------|---------------|--------|--------|--------|------------------------|-----------|-----------|-----------|-----------|
| ARM TYPE | ARM LENGTH | MAST ARM | | | | ARM EXTENSION | | | | ARM CONNECTION & WELDS | | | | |
| | | FA(ft) | FB(In) | FC(In) | FD(In) | FE(ft) | FF(In) | FG(In) | FH(In) | HT(In) | FJ/SJ(In) | FK/SK(In) | FM/SM(In) | FQ/SQ(In) |
| C1 | 36'-0" | 36 | 5.96 | 11 | 0.793 | - | - | - | - | 20 | 20 | 2 | 0.125 | 0.25 |
| C2 | 36'-0" | 36 | 5.96 | 11 | 0.793 | - | - | - | - | 29 | 29 | 2.25 | 0.125 | 0.25 |
| C3 | 46'-0" | 36.3 | 5.92 | 11 | 0.793 | 11.7 | 10.36 | 12 | 0.25 | 20 | 20 | 2 | 0.188 | 0.375 |
| C4 | 46'-0" | 36.3 | 5.92 | 11 | 0.793 | 11.7 | 10.36 | 12 | 0.25 | 29 | 29 | 2.25 | 0.188 | 0.375 |
| C5 | 60'-0" | 36 | 5.96 | 11 | 0.793 | 26 | 10.36 | 14 | 0.313 | 29 | 29 | 2.25 | 0.25 | 0.438 |
| C6 | 70'-6" | 39.4 | 5.49 | 11 | 0.793 | 33.1 | 10.36 | 15 | 0.313 | 29 | 29 | 2.25 | 0.25 | 0.5 |
| C7 | 78'-0" | 40 | 6.44 | 12 | 0.793 | 40 | 11.40 | 17 | 0.313 | 30 | 30 | 2.25 | 0.25 | 0.5 |

Arm Camber Angle = 2 degrees

*See Note 3

| 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) | BD (In) | BE (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) | *DA(D6) (ft) | DB (ft) | RA | RB |
| R1 | 24 | 9.64 | 13 | 0.313 | - | 6 | 25 | 1.5 | 1.5 | 0.313 | 0.25 | 36 | 20 | 20 | 0.5 | 0.313 | 13 | 0.75 | 1.75 | 8.5 | 0.313 | 12 | 10 | 3.5 | 9 | 14 |
| R2 | 24 | 11.64 | 15 | 0.313 | - | 6 | 27 | 1.5 | 1.5 | 0.313 | 0.25 | 36 | 20 | 20 | 0.5 | 0.313 | 13 | 0.75 | 1.75 | 8.5 | 0.313 | 15 | 12 | 3.5 | 9 | 14 |
| R3 | 24 | 14.64 | 18 | 0.313 | - | 6 | 32 | 1.5 | 1.75 | 0.313 | 0.25 | 36 | 29 | 29 | 0.5 | 0.313 | 17.5 | 1 | 1.75 | 12.5 | 0.313 | 15 | 12 | 4 | 9 | 19 |
| R4 | 24 | 17.64 | 21 | 0.313 | - | 6 | 35 | 1.5 | 1.75 | 0.313 | 0.25 | 36 | 29 | 29 | 0.5 | 0.313 | 17.5 | 1 | 1.75 | 12.5 | 0.313 | 20 | 16 | 4 | 9 | 19 |
| R5 | 24 | 18.64 | 22 | 0.313 | - | 6 | 36 | 1.5 | 1.75 | 0.313 | 0.25 | 36 | 29 | 29 | 0.5 | 0.313 | 17.5 | 1 | 1.75 | 12.5 | 0.313 | 21 | 17 | 4 | 9 | 19 |
| R6 | 24 | 17.64 | 21 | 0.313 | - | 6 | 35 | 1.5 | 1.75 | 0.313 | 0.25 | 36 | 30 | 30 | 0.5 | 0.375 | 14 | 1.25 | 1.75 | 12.5 | 0.375 | 18 | 15 | 4 | 9 | 19 |
| R21 Lum | 39 | 7.54 | 13 | 0.313 | 37.5 | 6 | 25 | 1.75 | 1.5 | 0.313 | 0.25 | 36 | 20 | 20 | 0.5 | 0.313 | 10 | 0.75 | 1.75 | 8.5 | 0.313 | 11 | 11 | 3.5 | 9 | 14 |
| R22 Lum | 39 | 9.54 | 15 | 0.313 | 37.5 | 6 | 27 | 1.75 | 1.5 | 0.313 | 0.25 | 36 | 20 | 20 | 0.5 | 0.313 | 11 | 0.75 | 1.75 | 8.5 | 0.313 | 14 | 12 | 3.5 | 9 | 14 |
| R23 Lum | 39 | 12.54 | 18 | 0.313 | 37.5 | 6 | 32 | 1.75 | 1.75 | 0.313 | 0.25 | 36 | 29 | 29 | 0.5 | 0.313 | 12.5 | 1 | 1.75 | 12.5 | 0.313 | 15 | 12 | 4 | 9 | 19 |
| R24 Lum | 39 | 15.54 | 21 | 0.313 | 37.5 | 6 | 35 | 1.75 | 1.75 | 0.313 | 0.25 | 36 | 29 | 29 | 0.5 | 0.313 | 14 | 1 | 1.75 | 12.5 | 0.313 | 17 | 14 | 4 | 9 | 19 |

| 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) |
| 40.0 | 10.0 | 3.0 | 0.125 | 0.50 | 8.0 | 0.5 | 0.75 | 0.25 | 0.188 | 0 | 37.5 |

NOTES:

1. Work this Index with Index No. 17745.
2. Standard Mast Arm "C" Assemblies are designed as indicated in the Plans Preparation Manual.
3. DA(D6) indicates shaft depth for District 6.



2006 FDOT Design Standards

STANDARD MAST ARM "C" ASSEMBLIES

| | |
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