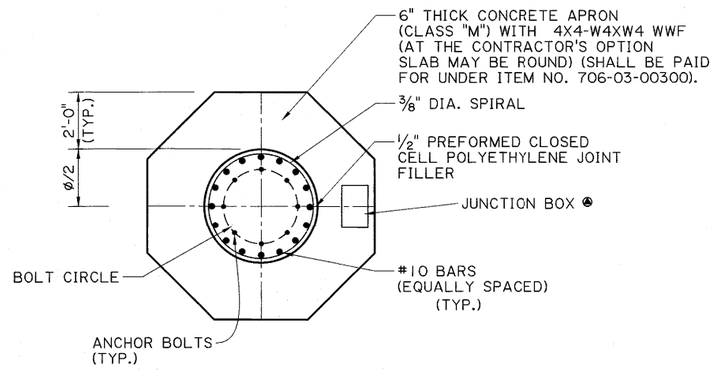
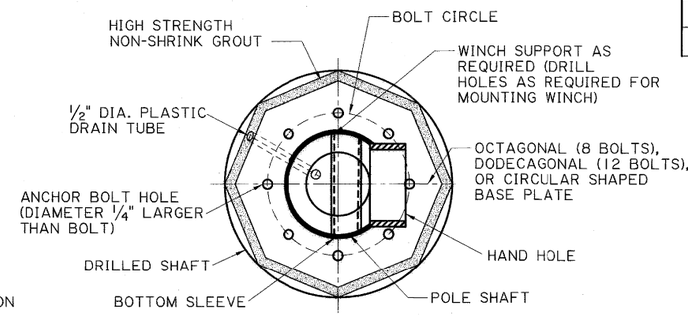
13:27
1/4/2018
IP_PWP:d0695341\BD.2.7.4.0.02 - High-Mast Lighting-2.dgn




A TYPICAL SECTION AT B-B

(NOT TO SCALE)

| MAXIMUM DESIGN LOADS FROM LUMINAIRE & LOWERING DEVICE | | |
|---|---|---|
| NO. OF LUMINAIRES | EFFECTIVE PROJECTED AREA (EPA) | WEIGHT |
| 6 | 20 SQUARE FEET | 800 POUNDS |
| 8 | 25 SQUARE FEET | 900 POUNDS |
| 12 | 35 SQUARE FEET | 1000 POUNDS |



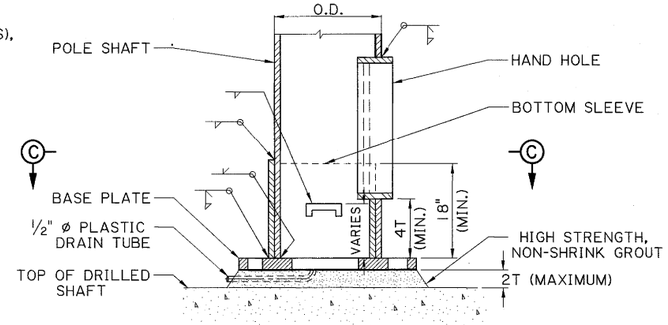

A TYPICAL SECTION AT C-C

(NOT TO SCALE)

| MINIMUM FOOTING SIZE FOR DIFFERENT WIND SPEEDS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| POLE HEIGHT (FEET) | 90 MPH POLE SHAPE | | | | 100 TO 110 MPH POLE SHAPE | | | | 120 TO 130 MPH POLE SHAPE |
| | 8• | 12△ | 16⊕ | ROUND | 8• | 12△ | 16⊕ | ROUND | ROUND |
| 100 | A | A | A | A | A | A | A | A | A |
| 110 | A | A | A | A | A | A | A | A | A |
| 120 | A | A | A | A | - | A | A | A | A |
| 130 | A | A | A | A | - | A | A | A | A |
| 140 | - | A | A | A | - | - | A | A | - |
| 150 | - | A | A | A | - | - | A | A | - |

• - EIGHT SIDED △ - TWELVE SIDED ⊕ SIXTEEN SIDED

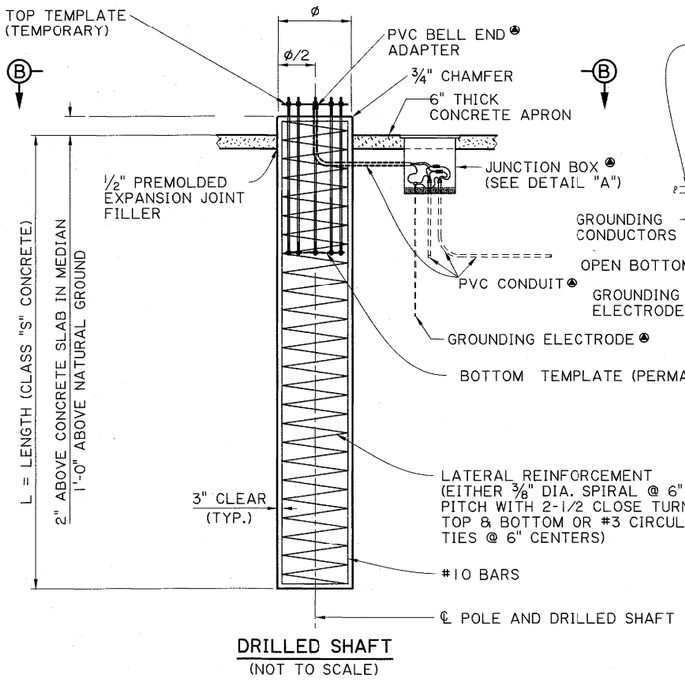
A = 4'-6" DIAMETER DRILLED SHAFT (REQUIRED AT LEAST 4 CSL TUBES)




A TYPICAL SECTION AT POLE BASE

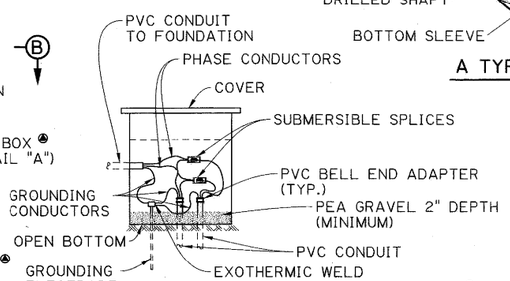
(NOT TO SCALE)

T = THICKNESS OF HEX NUT



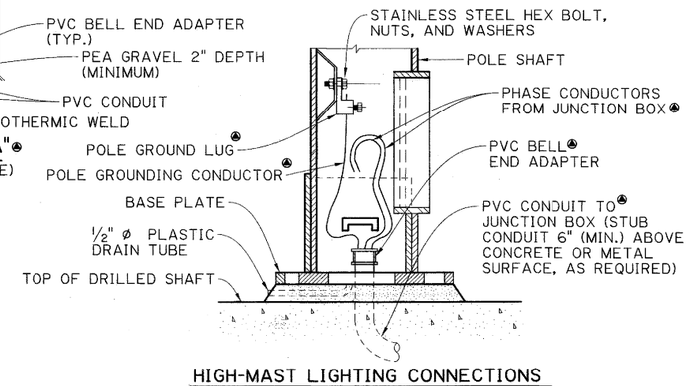

DRILLED SHAFT

(NOT TO SCALE)




DETAIL "A" ♣

(NOT TO SCALE)




HIGH-MAST LIGHTING CONNECTIONS

(NOT TO SCALE)

NOTES :

SPIRAL BARS MAY BE SPLICED 1 1/2 TURNS MINIMUM, AS REQUIRED.

THE SPLICE LOCATIONS FOR BOTH SPIRAL BARS AND #3 CIRCULAR TIES SHALL BE ALTERNATED.

CROSSHOLE SONIC LOGGING (CSL) TESTING FOR DRILLED SHAFTS SHALL BE PAID FOR UNDER ITEM NO. 803-08-00700, CROSSHOLE SONIC LOGGING (54" DIA.).

DRILLED SHAFT SHALL BE PAID FOR UNDER ITEM NO. 803-01-00700, DRILLED SHAFT (54" DIAMETER).

CONCRETE APRON SHALL BE PAID FOR UNDER ITEM NO. 706-03-00300, INCIDENTAL CONCRETE PAVING (6" THICK). ⊖

♣ ALL ELECTRICAL EQUIPMENT, GROUNDING MATERIAL, JUNCTION BOXES, CONDUIT, WIRING, ETC. SHALL BE AS PER ELECTRICAL PLANS AND PAID FOR UNDER APPLICABLE ELECTRICAL PAY ITEMS.

| ESTIMATED QUANTITIES PAID FOR UNDER ITEM 803-01-00700 | | |
|---|---|---|
| FOOTING TYPE | | A |
| DRILLED SHAFT | Ø (SHAFT DIAMETER) (FEET) | 4.5 |
| | NO. OF #10 BARS | 18 |
| | LENGTH, L (FEET) — WIND 90 MPH | 30 |
| | LENGTH, L (FEET) — WIND 100 TO 110 MPH | 35 |
| | LENGTH, L (FEET) — WIND 120 TO 130 MPH | 40 |
| | WIND 90 TO 110 MPH: REINFORCING STEEL (LB) | 2672 |
| | WIND 120 TO 130 MPH: REINFORCING STEEL (LB) | 3541 |
| | WIND 90 TO 110 MPH: CLASS S CONCRETE (CU.YD.) | 18.26 |
| | WIND 120 TO 130 MPH: CLASS S CONCRETE (CU.YD.) | 24.19 |
| | CLASS M CONCRETE (CU.YD.) ⊖ | 0.76 |

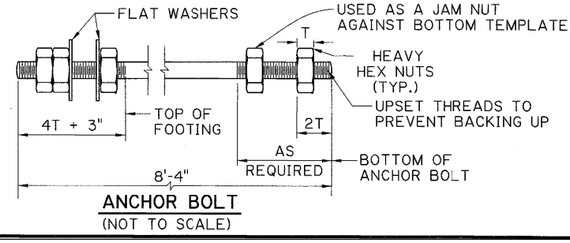
| MINIMUM ANCHOR BOLT NUMBER & DIAMETER (INCHES) | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| POLE HEIGHT (FEET) | WIND 90 MPH POLE SHAPE | | | | | | | | WIND 100 TO 110 MPH POLE SHAPE | | | | | | | | WIND 120 TO 130 MPH POLE SHAPE | |
| | 8• | | 12△ | | 16⊕ | | ROUND | | 8• | | 12△ | | 16⊕ | | ROUND | | ROUND | |
| | NO. | DIA. | NO. | DIA. | NO. | DIA. | NO. | NO. | NO. | DIA. | NO. | DIA. | NO. | DIA. | NO. | DIA. | NO. | DIA. |
| 100 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 |
| 110 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 |
| 120 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | - | - | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 |
| 130 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | - | - | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 |
| 140 | - | - | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | - | - | - | - | 8 | 1 3/4 | 8 | 1 3/4 | - | - |
| 150 | - | - | 8 | 1 3/4 | 8 | 1 3/4 | 8 | 1 3/4 | - | - | - | - | 8 | 1 3/4 | 8 | 1 3/4 | - | - |

NOTE: DIA.- DIAMETER , NO.- NUMBER

•- EIGHT SIDED △ - TWELVE SIDED ⊕ - SIXTEEN SIDED

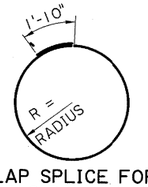
STATE OF LOUISIANA
JAMES M. MELTON
License No. 36787
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/14/17

STATE OF LOUISIANA
ANANDA H. HERATH
License No. 29042
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
02/14/2017




ANCHOR BOLT

(NOT TO SCALE)




LAP SPLICE FOR # 3 CIRCULAR TIES

( NOT TO SCALE )

SHEET NUMBER

| PARISH | CONTROL SECTION | STATE PROJECT |
|---|---|---|
| | | |

DESIGNED A. HERATH
CHECKED V. TOURRES
DETAILED J. KOEMPEL
CHECKED A. HERATH
REVIEWED K. BRAUNER
SERIES # 2 OF 2

| NO. | DATE | BY | REVISION OR CHANGE ORDER DESCRIPTION |
|---|---|---|---|

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

ANCHOR BOLTS, FOOTING, AND JUNCTION BOX

BD.2.7.4.0.02 - HIGH-MAST LIGHTING

DOTD BRIDGE DESIGN