

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

ROADWAY DESIGN DIVISION

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JOHN C. SCHROER COMMISSIONER BILL HASLAM GOVERNOR

INSTRUCTIONAL BULLETIN NO. 14-23

Regarding Mast Arm Poles & Intersection Pole Design Software

Effective for the March 27, 2015 letting (Turn-in Date January 14, 2015), sections 4-730.12 and 4-730.13 are added to the Guidelines.

PURPOSE: This Instructional Bulletin is to provide additional guidance for traffic signal pole design using mast arms.

4-730.12 MAST ARM POLES

All drilled shaft foundations used for traffic signal poles with a mast arm greater than or equal to 65 feet in length must be 4'-0" in diameter.

4-730.13 INTERSECTION POLE DESIGNER SOFTWARE

TDOT's Intersection Pole Designer Software should be run using the table values below instead of the program default values:

Mast Arm Length	Mast Arm Diameter	Mast Arm Weight
(feet)	(inch)	(lbs./ft.)
30 or less	8.25	17.90
31 thru 35	8.50	20.25
36 thru 40	9.00	21.80
41 thru 45	9.50	23.00
46 thru 50	10.00	27.50
51 thru 55	10.50	31.50
56 thru 60	11.00	38.10
61 thru 65	11.30	41.00
66 thru 70	11.60	43.95
71 thru 75	12.70	50.85
76 thru 80	13.80	57.75
81 thru 85	14.90	64.65
86 thru 90	16.00	71.55

Mast arms shall be limited to 90 feet in length.

Jennifer Lloyd, PE Civil Engineering Director Roadway Design Division

JL:ARH:MWC 12/1/2014