

ROUND TAPERED STEEL MAST ARM								
MAST ARM LENGTH	* MAST ARM DIMENSIONS	MTG HT SINGLE	MTG HT TWIN					
20'-0"	0.2500"-8.50" x 5.70" x 20'-0"		18'-6"					
25′-0″	0.2500"-9.50" x 6.00" x 25'-0"							
30'-0"	0.2500"-10.50" x 6.30" x 30'-0"							
35′-0″	0.4290"-12.00" x 10.60" x 10'-0"							
	0.1793"- ** x 7.50" x **							
40′-0″	0.5000"-12.00" x 10.60" x 10'-0"	19'-0"	& 21'-0"					
	0.1793"- ** x 6.80" x **		21'-0"					
45′-0″	0.5000"-12.00" x 9.90" x 15'-0"							
	0.1793"- ** × 6.10" × **							
50'-0"	0.7500"-12.0" x 9.20" x 20'-0"							
	0.1793"- ** x 5.36" x **							

ROUND TAPERED STEEL MAST ARM POLE MAST ARM LUMINAIRE * POLE DIMENSIONS ARM LENGTH (FT 0.313"-14.00" x 10.92" x 22'-0" NO 20. 25 0.313"-14.00" x 9.94" x 29'-0" 30, 35 YES 0.358"-14.00" x 10.92" x 22'-0" NO 40, 45 $0.358"-14.00" \times 9.94" \times 29'-0"$ YES 0.478"-14.00" x 10.92" x 22'-0" NΩ 50 0.478"-14.00" x 9.94" x 29'-0" YES

POLE TUBE TAPER IS 0.140 IN/FT

* DIAMETERS GIVEN ARE O.D.

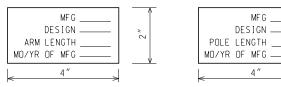
NOTE: ONLY USE THE MAST ARM LENGTHS WITH POLE SIZES AS INDICATED IN TABLE ABOVE

MAST ARM TUBE TAPER IS 0.140 IN/FT

- * DIAMETERS GIVEN ARE O.D.
- ** TO BE DETERMINED BY CONTRACTOR BASED ON REQUIRED MAST ARM LENGTH AND TELESCOPIC SPLICE LENGTH.

NOTES:

- . THE DESIGN OF THIS STRUCTURE IS BASED ON THE 2001 AASHTO STANDARD SPECIFICATONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS FOR 90 MPH WIND LOAD AND CATEGORY II WITH GALLOPING, NATURAL WIND GUSTS, AND TRUCK INDUCED FATIGUE LOADS.
- 2. WELD THE LONGITUDINAL ARM SEAM ON THE INBOARD AND OUTBOARD SECTIONS OF THE TELESCOPIC FIELD SPLICE WITH A COMPLETE JOINT PENETRATION (CJP) WELD A MINIMUM OF 36 INCHES LONG. IN ADDITION, LONGITUDINAL SEAM WELDS MUST BE CJP FOR A MINIMUM OF 6 INCHES FROM TUBE TO PLATE CJP WELDS.
- 3. SEAM WELDS MUST BE 90° \pm FROM HAND HOLE AT BASE.
- 4. LUMINAIRE ARM IS 11 GAUGE ROUND STEEL WITH 0.140 INCH PER FOOT TAPER.
- 5. BACKING BAR FOR PIPE TO BASE PLATE (R) AND MAST ARM TO MAST ARM PLATE MUST BE MINIMUM 5/16 INCH X 2 INCH PLATE.
- 6. 1/2 INCH DIAMETER (Ø) ROUND STOCK C-HOOK ATTACHED TO ALL POLE SIZES. 3/4 INCH SCHEDULE (SCH.)
 40 PIPE ATTACHED TO ALL POLE SIZES AND INBOARD AND OUTBOARD ARM.
- 7. S.S. DENOTES STAINLESS STEEL, GA. DENOTES GAUGE. D.D. DENOTES OUTSIDE DIAMETER, I.D. DENOTES INSIDE DIAMETER, H.S. DENOTES HIGH STRENGTH.



MDOT NO. _____ POLE TYPE _____

ARM/POLE S.S. ID TAG DETAIL

TO BE ATTACHED TO POLE OR MAST ARM AT LOCATIONS SHOWN 4" FROM BASE OF TUBE BELOW HANDHOLE WITH (4) #8 X 3 /8" S.S. TYPE U DRIVE SCREWS. (LETTERS STAMPED IN 3/8" CHARACTERS)

BASE S.S. ID TAG DETAIL

WELD TAG TO EDGE OF BASE R (LETTERS STAMPED IN 3/8" CHARACTERS)

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN FHWA APPROVAL DATE

File:RefDoc/TR/Signals/Web/Sp Det/Fin/SI0031B.dgn Rev. 11/05/18 PLAN DATE

SHEET 2 of 6

AS-LET PLAN REVISIONS NO DATE AUTH DESCRIPTION NO DATE AUTH DESCRIPTION	* *** * *** * ****	DATE:	CS:	DRAWING	SHEET
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	munigan Department or transportation	FILE: TSC:	514.		

