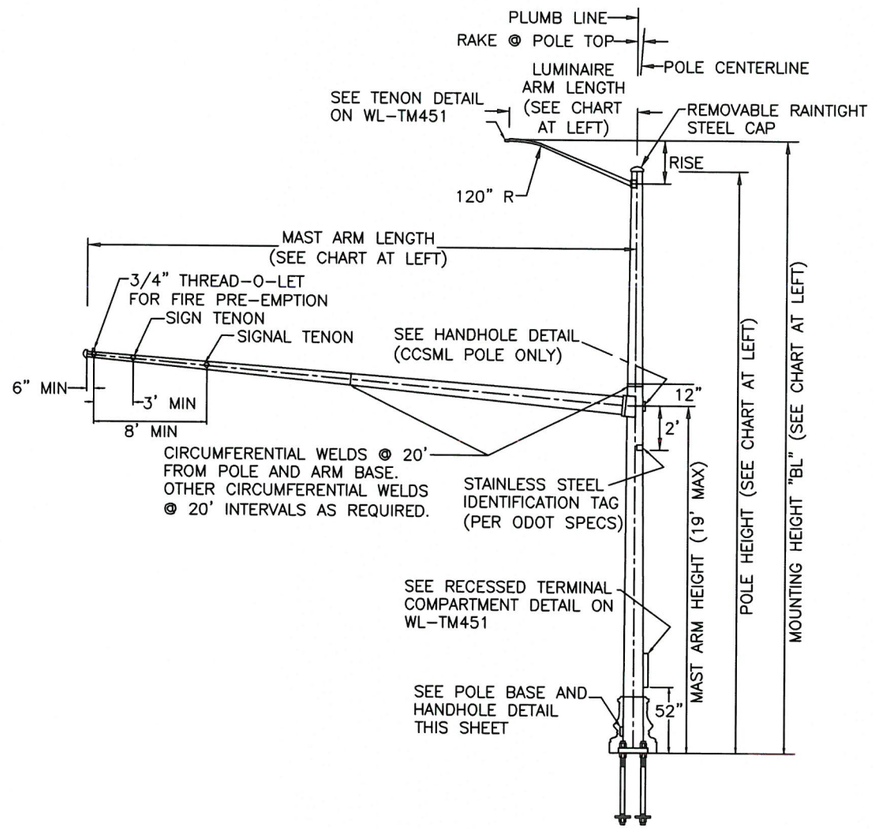
POLE DATA TABLE								
POLE DESIGNATION	ARM LENGTH (FT)	BASE DIA. (IN)	THICKNESS	SQUARE (IN)	BOLT CIRCLE (IN)	BASE PL THICKNESS (IN)	ANCHOR BOLT DIA x L (INxIN)	ANCHOR PL SQ x THK (INxIN)
CCSM1	<15	12	0.1875	18.5	18.0	2.0	2.0x48	5.75x1
CCSM2	16–25	13	0.1875	18.5	18.0	2.0	2.0x48	5.75x1
CCSM3	26–35	14	0.25	20.5	20.0	2.25	2.25x48	5.75x1
CCSM4	36–45	15	0.3125	20.5	20.0	2.25	2.25x48	5.75x1
CCSM5	46–60	17	0.375	24.0	23.0	2.5	2.75x48	7x1.13
CCSM1L	<15	12	0.25	18.5	18.0	2.0	2.0x48	5.75x1
CCSM2L	16–25	13	0.25	19.0	18.0	2.0	2.25x48	5.75x1
CCSM3L	26–35	14	0.3125(1)	20.5	20.0	2.25	2.25x48	5.75x1
CCSM4L	36–45	15	0.3125(1)	22.5	22.0	2.25	2.5x48	6.38x1.13
CCSM5L	46–60	17	0.375(1)	24.0	23.0	2.5	2.75x48	7x1.13
(1) REDUCE SHAFT THICKNESS TO 0.25" 20' FROM BASE								

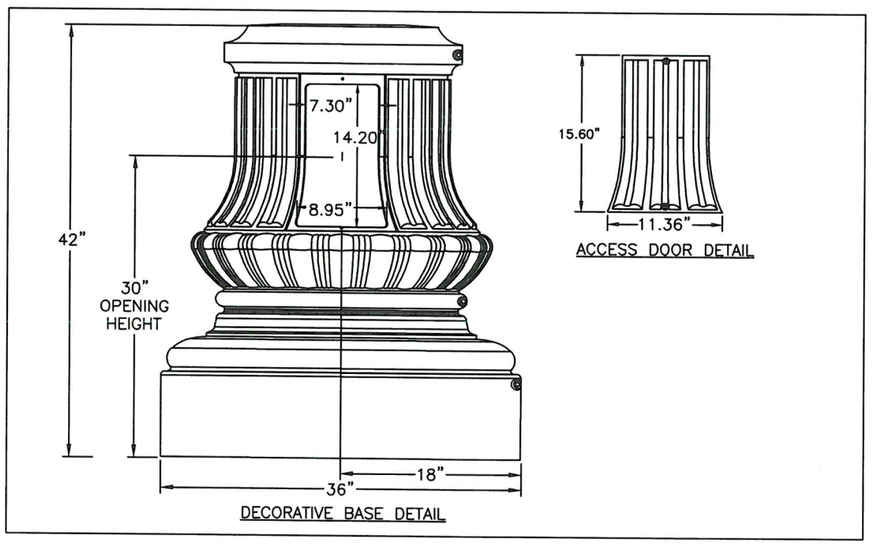
MAST ARM DATA TABLE							
ARM LENGTH (FT)	ROUND CROSS SECTION		SQUARE (IN)	BOLT CIRCLE (IN)	ARM PL THICKNES (IN)	POLE PL THICKNESS (IN)	BOLT DIAxL (INxIN)
	BASE DIA. (IN)	THICKN–ESS (IN)					
15.0	6.0	0.1875	12	12	1.5	1.25	1.25x3
20.0	8.0	0.1793	12	12	1.5	1.25	1.25x3
25.0	9.0	0.2391	12	12	1.5	1.25	1.25x3
30.0	11.0	0.2391	14	14	1.75	1.5	1.25x3.5
35.0	11.0	0.3125	14	14	1.75	1.5	1.25x3.5
40.0	12.0	0.3125	17	17	2.0	1.5	1.5x3.5
45.0	13.0	0.375	17	17	2.0	1.5	1.5x3.5
50.0	14.0	0.375(1)	20	19.5	2.25	1.75	1.75x4
55.0	15.0	0.375(1)	20	19.5	2.25	1.75	1.75x4
60.0	16.0	0.375(1)	21	21.0	2.25	1.75	1.75x4
(1) REDUCE ARM THICKNESS TO 0.25" 20' FROM BASE							

LUMINAIRE ARM DATA TABLE								
ARM LENGTH (FT)	APPROX. RISE (IN)	THICK–NESS (IN)	BASE DIA. (IN)	SQUARE (IN)	BOLT CIRCLE (IN)	ARM PL THICKN–ESS (IN)	POLE PL THICKNESS (IN)	BOLT DIA x L (INxIN)
6.0	18.0	0.1875	4.5	9.0	9.0	1.0	1.0	3/4x2.5
8.0	30.0	0.1875	5.0	9.0	9.0	1.0	1.0	3/4x2.5
10.0	41.0	0.1875	6.0	9.0	9.0	1.0	1.0	3/4x2.5
12.0	53.0	0.1875	6.5	9.0	9.0	1.0	1.0	3/4x2.5
15.0	70.0	0.1875	6.5	9.0	9.0	1.0	1.0	3/4x2.5
20.0	72.0	0.25	6.5	9.0	9.0	1.0	1.0	3/4x2.5
25.0	78.0	0.25	6.5	9.0	9.0	1.0	1.0	3/4x2.5

NOTES:

1. SIGNAL POLES AND MAST ARMS SHALL BE DESIGNED TO THE FOLLOWING CRITERIA: 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.
   - –100MPH 3 SECOND GUST
   - –GUST FACTOR G=1.14
   - –Ir=1.0 (50YR. RECURRENCE INTERVAL)
   - –FATIGUE CATEGORY II, NO GALLOPING, TRUCK SPEED = 55 MPH
2. POLES, MAST ARMS, AND LUMINAIRE ARMS SHALL BE ROUND IN CROSS SECTION AND HAVE A TAPER OF 0.14 IN/FT.
3. POLE, MAST ARM, AND LUMINAIRE ARMS SHALL BE POWDER COATED MATTE BLACK
4. FABRICATION SHALL CONFORM TO 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTRUAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.
5. FASTENERS LESS THAN 1/2" SHALL BE STAINLESS STEEL OR BRASS.
6. PUSHBUTTONS MOUNTED ON SIGNAL POLE REQUIRING A PUSHBUTTON EXTENDER MUST BE APPROVED BY CITY ENGINEER.
7. OTHER MATERIALS SHALL CONFORM TO THE FOLLOWING STANDARDS:
   - –ALL STEEL IN TUBES, BASE PLATES, FLANGE PLATES & GUSSET PLATES SHALL CONFORM TO ASTM A572 GR50.
   - ANCHOR BOLTS SHALL CONFORM TO ASTM 1307C. NUTS SHALL CONFROM TO ASTM 1563 GR DH HEAVY HEX, WASHERS SHALL CONFORM TO ASTM F436 TYPE 1.
   - –CONNECTION BOLTS SHALL CONFORM TO ASTM A325, WASHERS SHALL CONFORM TO ASTM F436 TYPE 1.
   - –GALVANIZING SHALL CONFORM TO ASTM A123 & A153.
   - –PIPE TENONS AND WIRE GUIDES SHALL CONFORM TO ASTM A53 GR B.
   - –STAINLESS STEEL RECESSED TERMINAL COMPARTMENT DOOR CONFORM TO AISI SS304.





Standard Drawing No. WL–TM450–A

Effective Date: 08/01/19

Title: TRAFFIC SIGNAL POLE, MAST ARM, AND LUMINARIES

Approved City Engineer

CITY OF West Linn
PUBLIC WORKS DEPARTMENT – STANDARD DRAWINGS
22500 Salamo Road, West Linn OR 97068
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NOTE: All material and workmanship shall be in accordance with the City of West Linn Standard Construction Specifications.

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