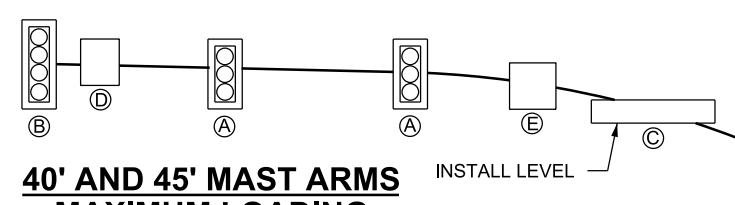


**30' AND 35' MAST ARMS  
MAXIMUM LOADING**

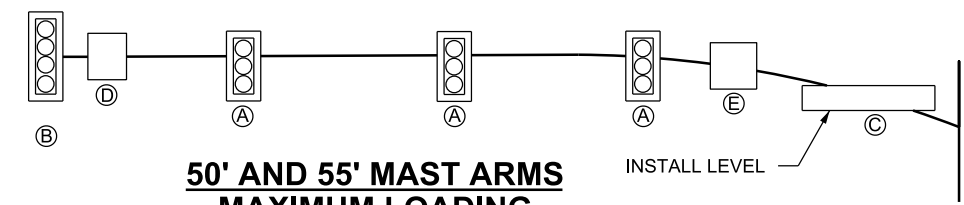
(SEE NOTES 8 AND A)

FIELD CUT END OF MAST ARM IF 25 FOOT MAST ARM LENGTH IS REQUIRED. INSTALL CUSTOM ARM END CAP.



**40' AND 45' MAST ARMS  
MAXIMUM LOADING**

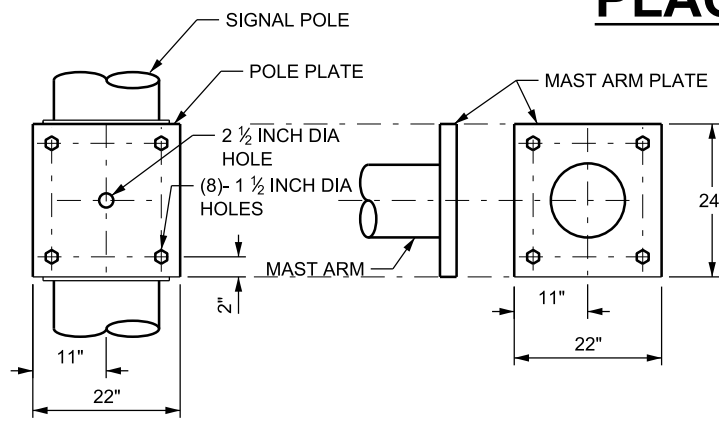
(SEE NOTES 8 AND A)



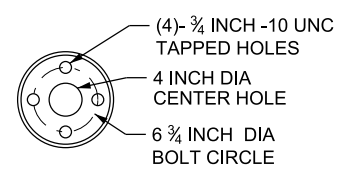
**50' AND 55' MAST ARMS  
MAXIMUM LOADING**

(SEE NOTES 8 AND A)

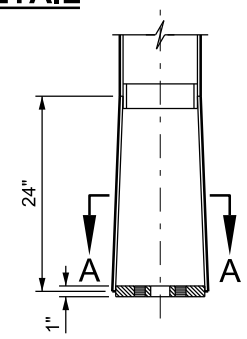
**TYPICAL SIGNAL HEAD & SIGN  
PLACEMENT FOR MAXIMUM LOADING**



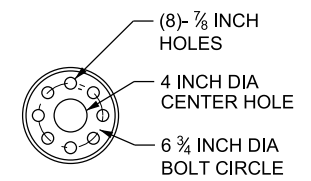
**30' TO 55' MAST ARM AND  
POLE PLATE DETAIL**



**SECTION A-A**



INSTALL POLE CAP IF LUMINAIRE EXTENSION IS NOT SPECIFIED.

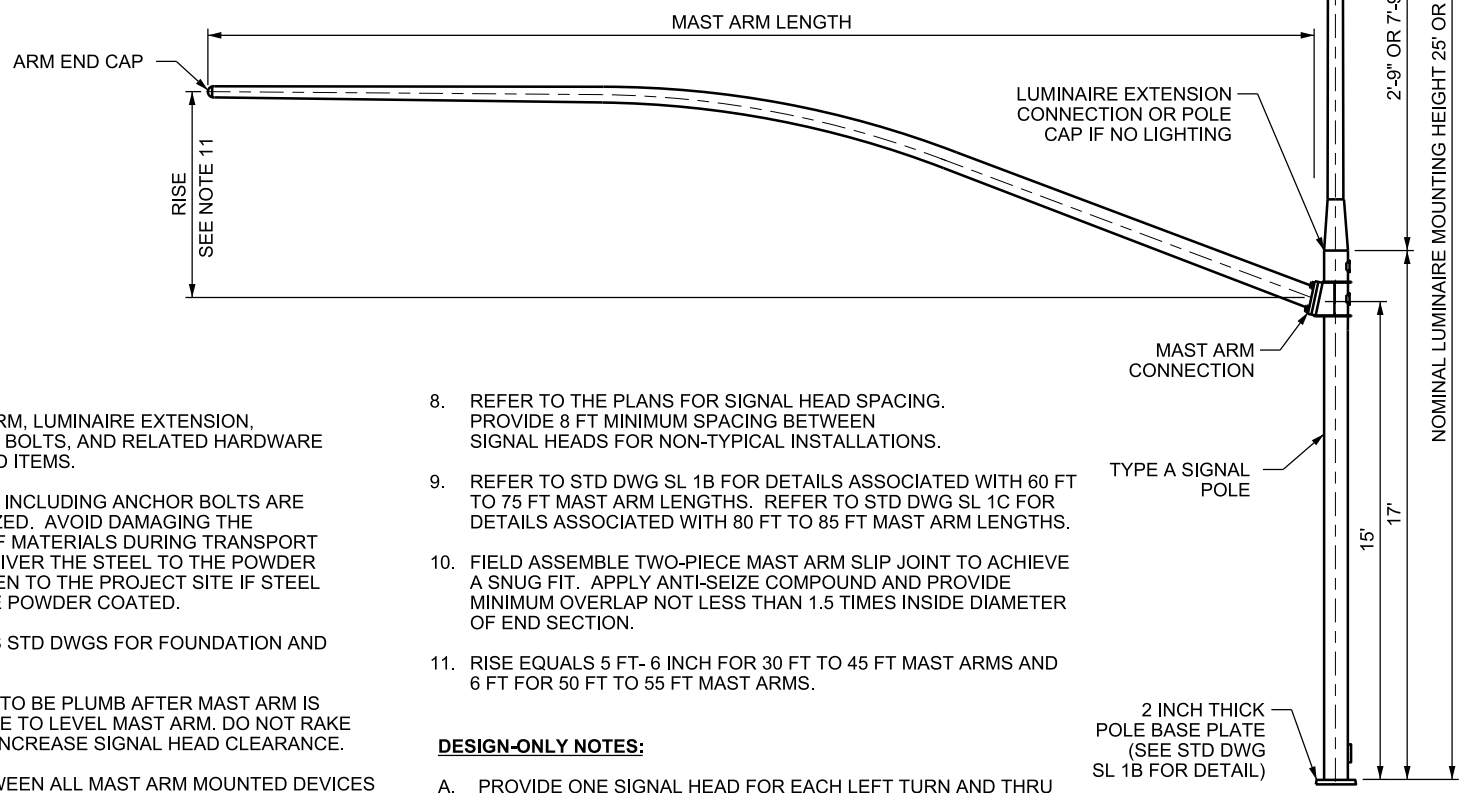


**SECTION B-B**

**30' TO 55'  
MAST ARM POLE EXTENSION  
AND CONNECTION DETAIL**

DEVICE	DESCRIPTION/SIZE	MAXIMUM PROJECTED AREA (SF)	*MAXIMUM WEIGHT (LBS)	MOUNTING (SEE STD DWG SL 3 SERIES)
(A) SIGNAL	12", 3-SECTION WITH BACK PLATE	8.7	55	BRACKET
(B) SIGNAL	12", 4-SECTION WITH BACK PLATE	11.1	72	BRACKET
(C) SIGN	STREET SIGN 18" x 96", OR 30" x 60"	12.5	24	OPTION A
	STREET SIGN 24" x 120", (MAX) OR 18" x 96", OR 30" x 60"	20.0	38	OPTION B
(D) SIGN	SIGN 30" x 36" (MAX)	7.5	15	OPTION A
(E) SIGN	BLANKOUT SIGN 36" x 36" (MAX)	9.0	80	BRACKET

\* DOES NOT ACCOUNT FOR PROGRAMMABLE HEADS. SEE NOTE A.



**GENERAL NOTES:**

- SIGNAL POLE, MAST ARM, LUMINAIRE EXTENSION, FOUNDATION ANCHOR BOLTS, AND RELATED HARDWARE ARE STATE FURNISHED ITEMS.
- ALL STEEL MATERIALS INCLUDING ANCHOR BOLTS ARE HOT-DIPPED GALVANIZED. AVOID DAMAGING THE GALVANIZED FINISH OF MATERIALS DURING TRANSPORT AND PLACEMENT. DELIVER THE STEEL TO THE POWDER COATING FACILITY THEN TO THE PROJECT SITE IF STEEL MATERIALS ARE TO BE POWDER COATED.
- REFER TO SL 2 SERIES STD DWGS FOR FOUNDATION AND POLE BASE DETAILS.
- INSTALL SIGNAL POLE TO BE PLUMB AFTER MAST ARM IS ATTACHED. RAKE POLE TO LEVEL MAST ARM. DO NOT RAKE THE SIGNAL POLE TO INCREASE SIGNAL HEAD CLEARANCE.
- THE CLEARANCE BETWEEN ALL MAST ARM MOUNTED DEVICES AND THE ROADWAY SURFACE MUST BE BETWEEN 18.5 FT AND 21 FT. A 17.5 FT CLEARANCE IS ALLOWED WITH APPROVAL FROM THE REGION TRAFFIC OPERATIONS ENGINEER.
- MOUNT ALL SIGNAL HEAD ASSEMBLIES AT THE SAME BOTTOM ELEVATION +/- 2 INCHES FOR EACH MAST ARM.
- PROVIDE SIGNAL HEAD BRACKET MOUNT FOR ATTACHING SIGNAL HEADS AND SIGNS TO MAST ARM. SEE SL 3 SERIES STD DWGS FOR DETAILS.

- REFER TO THE PLANS FOR SIGNAL HEAD SPACING. PROVIDE 8 FT MINIMUM SPACING BETWEEN SIGNAL HEADS FOR NON-TYPICAL INSTALLATIONS.
- REFER TO STD DWG SL 1B FOR DETAILS ASSOCIATED WITH 60 FT TO 75 FT MAST ARM LENGTHS. REFER TO STD DWG SL 1C FOR DETAILS ASSOCIATED WITH 80 FT TO 85 FT MAST ARM LENGTHS.
- FIELD ASSEMBLE TWO-PIECE MAST ARM SLIP JOINT TO ACHIEVE A SNUG FIT. APPLY ANTI-SEIZE COMPOUND AND PROVIDE MINIMUM OVERLAP NOT LESS THAN 1.5 TIMES INSIDE DIAMETER OF END SECTION.
- RISE EQUALS 5 FT-6 INCH FOR 30 FT TO 45 FT MAST ARMS AND 6 FT FOR 50 FT TO 55 FT MAST ARMS.

**DESIGN-ONLY NOTES:**

- PROVIDE ONE SIGNAL HEAD FOR EACH LEFT TURN AND THRU LANE. CENTER LEFT TURN SIGNAL HEADS WITH LEFT TURN APPROACH LANES AND CENTER THRU SIGNAL HEADS WITH THRU ACCEPTANCE LANES WHERE POSSIBLE. PROVIDE TWO THRU HEADS SPACED AT 8 FT TO 10 FT FOR ONE THRU LANE ROADWAYS. CONTACT THE ENGINEER FOR LOADING APPROVAL IF MAST ARM LOADING EXCEEDS LOADING SHOWN OR IF USING PROGRAMMABLE SIGNAL HEADS.

REVISIONS

NO.	DATE	APPR.	REMARKS
1	8/31/17	JS	UPDATED NOTES AND TABLE.

**UTAH DEPARTMENT OF TRANSPORTATION**  
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION  
SALT LAKE CITY, UTAH

RECOMMENDED FOR APPROVAL  
  
 CHAIRMAN STANDARDS COMMITTEE  
 APPROVED

DATE: AUG. 31, 2017  
 DEPUTY DIRECTOR:   
 DATE: AUG. 31, 2017

**TRAFFIC SIGNAL MAST ARM  
POLE AND  
LUMINAIRE EXTENSION  
30 FT THROUGH 55 FT**

STANDARD DRAWING TITLE

SUPPLEMENTAL DRAWING

STD. DWG. NO.  
SL 1A