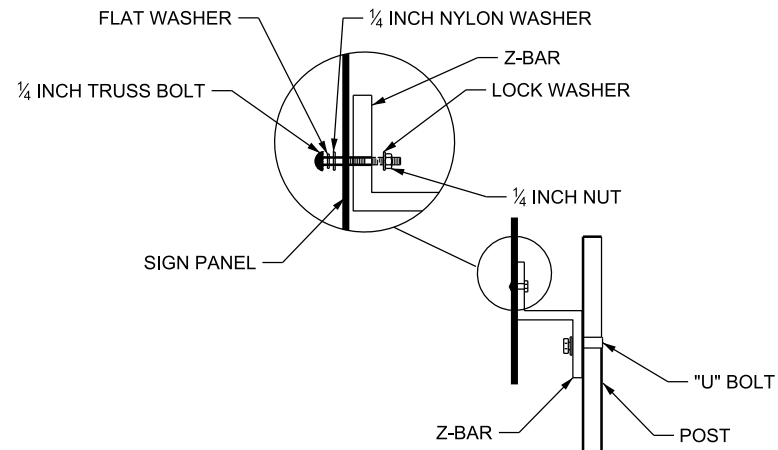
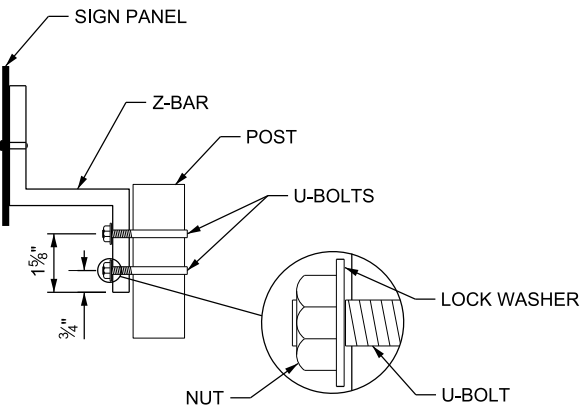


**ATTACHMENT TO POST WITH Z-BAR AND U-BOLT**  
FOR SIGN PANEL 36 INCH WIDE



1. USE THIS INSTALLATION WHEN SIGN IS ON A SINGLE POST WITH MULTIPLE Z-BARS.
2. USE A LONG U-BOLT. REFER TO STD DWG SN 9B FOR U-BOLT REQUIREMENTS.
3. STAINLESS STEEL POP-RIVETS WITH WASHER MAY BE SUBSTITUTED FOR TRUSS BOLT.

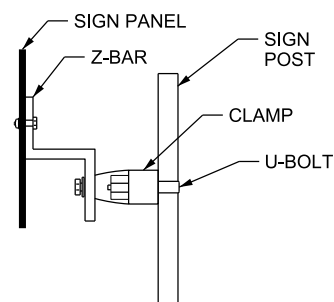
**ATTACHMENT TO POST - SINGLE Z-BAR AND DOUBLE U-BOLT**  
FOR SIGN PANELS WITH 24 INCH HEIGHT OR LESS



1. USE THIS INSTALLATION WHEN SIGN PANEL HAS ONLY ONE Z-BAR AND IS ATTACHED TO A SINGLE PANEL.
2. USE TWO LONG U-BOLTS. REFER TO STD DWG SN 9B FOR U-BOLT REQUIREMENTS.

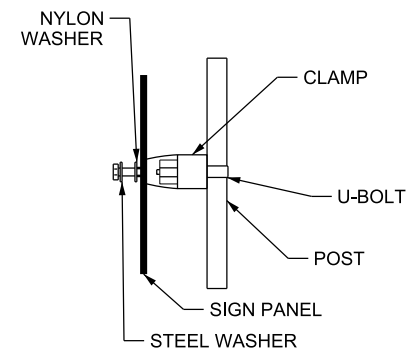
**ATTACHMENT TO POST WITH Z-BAR AND CLAMP**  
FOR DOUBLE POST APPLICATIONS

Z-BAR AND SADDLE REQUIRED WHEN SIGN IS MOUNTED ON DOUBLE POSTS.



**ATTACHMENT TO POST WITH CLAMP**  
FOR SIGN PANEL 30 INCH WIDE OR LESS

1. USE WITH P3, P4, AND P5 POSTS ON A SINGLE POST. DO NOT USE WITH MULTIPLE POSTS.
2. REFER TO STD DWG SN 9B FOR CLAMP AND HARDWARE REQUIREMENTS.

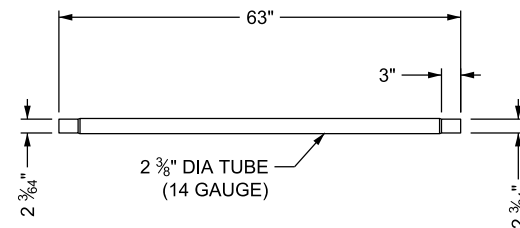
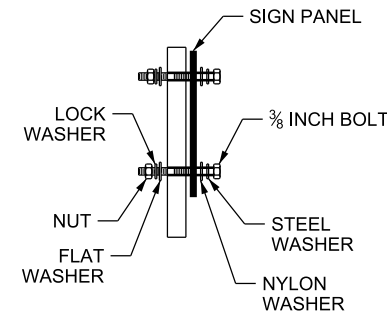


**SIGN PANEL TO POST DIRECT CONNECTION**  
FOR SIGN PANEL 30 INCH WIDE OR LESS WITH PREPUNCHED POST

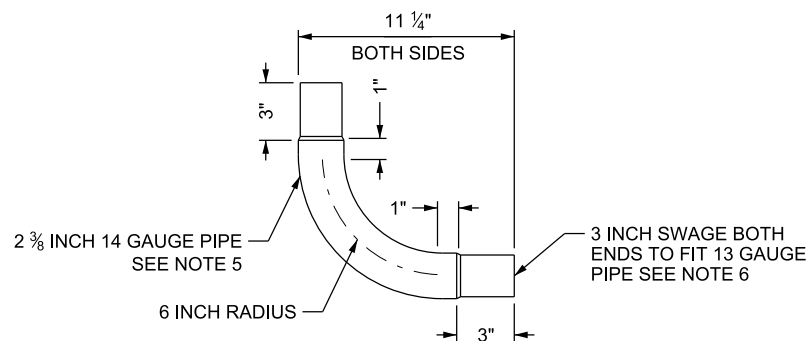
**BOLT & WASHER REQUIREMENTS**

1. USE WITH P1 AND P2 POSTS.
2. HARDWARE:  
3/8 x 3 INCH LONG BOLT  
3/8 INCH DIA HEX HEAD BOLT WITH NUT  
3/8 INCH DIA STEEL FLAT WASHER  
3/8 INCH DIA STEEL LOCK WASHER  
3/8 INCH DIA NYLON WASHER
3. GALVANIZE ALL STEEL COMPONENTS EXCEPT AS NOTED.

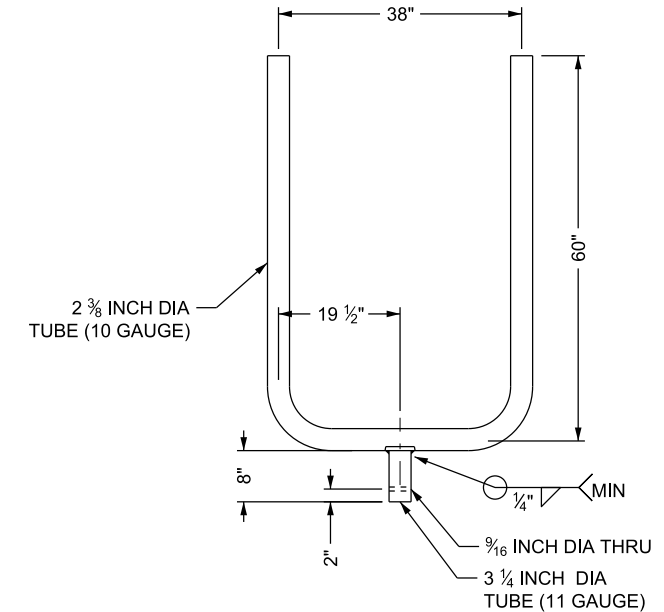
**ASSEMBLY**



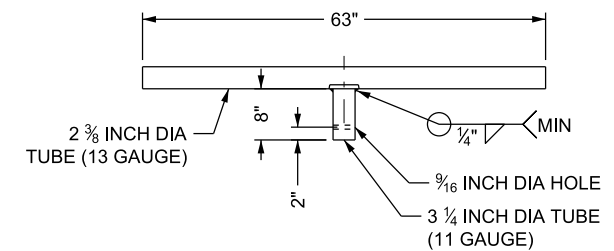
**EXTENSION**  
SEE NOTES 4 AND 7



**90 DEGREE POST EXTENSION**  
SEE NOTE 6



**"U" BRACKET**  
SEE NOTE 7



**"T" BRACKET**  
SEE NOTE 7

**NOTES:**

1. GALVANIZE PIPE TO MEET ASTM A 513.
2. COAT WELD JOINTS WITH ZINC RICH PAINT.
3. CUTTING OF "T" OR "U" BRACKET OR EXTENSION TO MEET REQUIRED LENGTH OR HEIGHT IS ACCEPTABLE. COAT CUT ENDS WITH ZINC RICH PAINT.
4. SWAGE ENDS OF EXTENSION TO PROVIDE A SNUG FIT IN A 2 3/8 INCH DIA (10 BWG) TUBING.
5. 2 3/8 INCH DIA 14 BWG TUBING PER ASTM A 787 AWG FABRICATED FROM GALVANIZED STEEL SHEET 0.083 INCH THICK, ASTM A 653 SS GRADE G90. REMETALIZE WELD SEAM USING ZINC WIRE ACCORDING TO ASTM B 833. TUBE OD WILL BE TREATED WITH CHROMATE CONVERSION SOLUTION AND PROTECTED WITH CLEAR ACRYLIC FILM.
6. BEND 90 DEGREES AND SWAGE 3 INCH ON BOTH ENDS. SWAGE TO BE 1 INCH FROM TANGENT POINT OF BEND RADIUS TO SHOULDER OF SWAGE. SWAGE TO FIT SNUG IN 13 GAUGE PIPE.
7. SWAGE 3 INCH ON BOTH ENDS. SWAGE TO FIT SNUG IN 13 GAUGE PIPE.

**SUPPLEMENTAL DRAWING**

REVISIONS

NO.	DATE	APPR.	REMARKS
1	2/22/18	CGW	UPDATED REFERENCES AND NOTE 6, ADDED NOTE 7

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

RECOMMENDED FOR APPROVAL  
*Randy Park*  
CHAIRMAN STANDARDS COMMITTEE  
APPROVED  
FEB. 22, 2018  
DATE  
DEPUTY DIRECTOR

TUBULAR STEEL  
SIGN MOUNTING  
REQUIREMENTS

STD. DWG. NO.  
SN 9A

STANDARD DRAWING TITLE