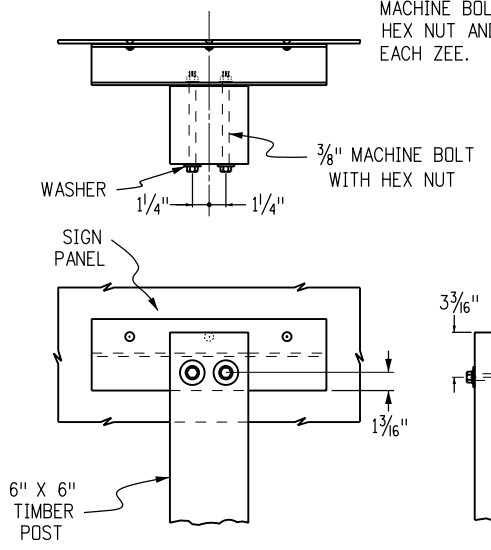


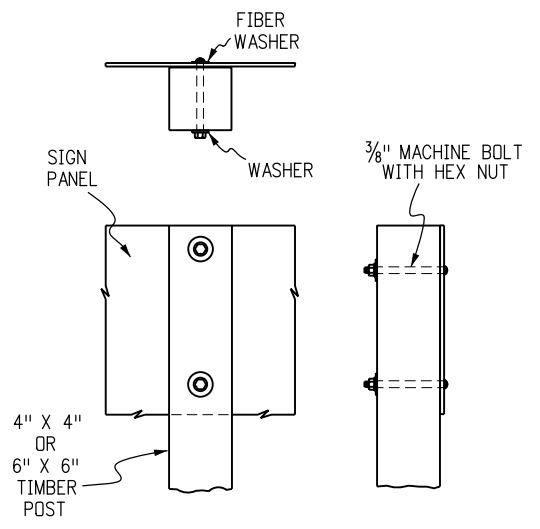
PANEL COMBINATIONS	ZEE LENGTH	NOTES:
21", 24", 30", 36", 45"	*	1. HOLE SPACING SHALL BE COUNTED FROM LEFT TO RIGHT LOOKING AT THE BACK OF SIGN WITH FIRST AND LAST HOLES 2 IN. FROM EDGE OF THE Z-BAR. HOLES IN BETWEEN SHALL BE 6 IN TO 8 IN APART. 2. * Z-BAR LENGTH SHALL BE 3 IN. ( $\pm 1/2$ IN.) SHORT OF THE EDGE OF THE SIGN ON BOTH SIDES. 3. SUPPLEMENTAL PANELS SHALL BE CENTERED RELATIVE TO THE PRIMARY PANELS. Z-BAR LENGTHS FOR SUPPLEMENTAL PANEL GROUPS MAY BE ADJUSTED TO FIT.
24" & 24"	43"	
24" & 30"	49"	
30" & 30"	55"	
36" & 36"	67"	
45" & 36"	76"	
24" & 24" & 24"	68"	
24" & 24" & 30"	74"	
24" & 30" & 24"	74"	
30" & 24" & 30"	80"	
24" & 30" & 30"	80"	
30" & 30" & 30"	86"	

FOR SINGLE POST SIGNS WITH TWO BACKING ZEES, USE ONE  $5/8$ " MACHINE BOLT WITH WASHER AND HEX NUT AND LOCK WASHER AT EACH ZEE.



**CLASS II MARKER ASSEMBLY INSTALLATION**

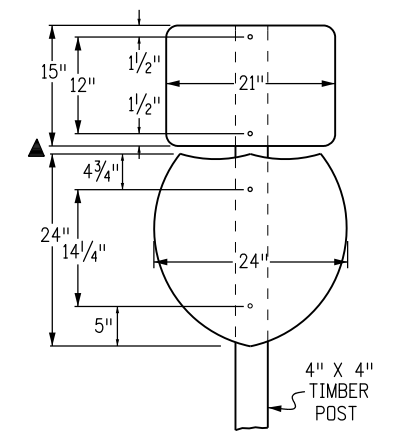
$3/8$ " 90° COUNTERSUNK ALUMINUM LOCKBOLT FASTENERS (NO. 4 THRU NO. 10 AS REQUIRED). EXPOSED LOCKBOLT FASTENER HEADS ON THE FACE OF THE SIGN SHALL BE REFLECTORIZED TO MATCH THE SURROUNDING COLOR.



**CLASS I MARKER ASSEMBLY INSTALLATION**


**GENERAL NOTES**

- FOR SIGN PLACEMENT, SEE "TYPICAL GROUND SIGN PLACEMENT" STANDARD.
- ROUTE MARKERS SHALL BE SINGLE SHEET ALUMINUM 0.100 IN. MINIMUM THICKNESS.
- TIMBER POSTS SHALL BE 4"X4" OR 6"X6" AS NOTED IN THE "TABULATION OF SIGNS" AND SHALL CONFORM TO STANDARD DRESSED (S4S) SIZES.
- FOR TUBULAR STEEL POST INFORMATION, SEE STANDARD PLAN S-614-8.
- BACKING ZEES ARE 3 IN. X 2 IN. X  $1/16$  IN. 2.33 6061-T6 ALUMINUM ALLOY WEIGHING 2.33 LBS. PER FOOT.
- ALL SIGNS SHALL BE FABRICATED USING RETROREFLECTIVE SHEETING CONFORMING TO ASTM D4956. THE TYPE SHALL BE AS DESCRIBED IN THE STANDARD SPECIFICATIONS AND/OR AS SHOWN ON THE PLANS.
- VERTICAL SPACING BETWEEN PANELS SHALL BE 1 IN. MINIMUM TO  $1/2$  IN. MAXIMUM.
- VERTICAL SPACING BETWEEN GROUPS OF PANELS SHALL BE 4 IN.
- BOLTS, NUTS, AND METAL WASHERS SHALL BE GALVANIZED OR CADMIUM PLATED.
- ZEE LENGTH AND HOLE SPACING FOR AUXILIARY MARKERS TO BE THE SAME AS FOR CORRESPONDING ROUTE MARKERS.
- WASHERS ON TIMBER POSTS SHALL BE  $1/2$  IN. DIA.



Computer File Information	
Creation Date: 07/04/12	Initials: KEN
Last Modification Date:	Initials:
Full Path: codot.gov/library/traffic/traffic-standards/2012-s-standard-plans	
Drawing File Name: S-614-10_1of1.dgn	
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	

Sheet Revisions	
Date:	Comments

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**MARKER ASSEMBLY INSTALLATIONS**  
 Issued By: Safety & Traffic Engineering Branch July 4, 2012

**STANDARD PLAN NO.**  
 S-614-10  
 Sheet No. 1 of 1