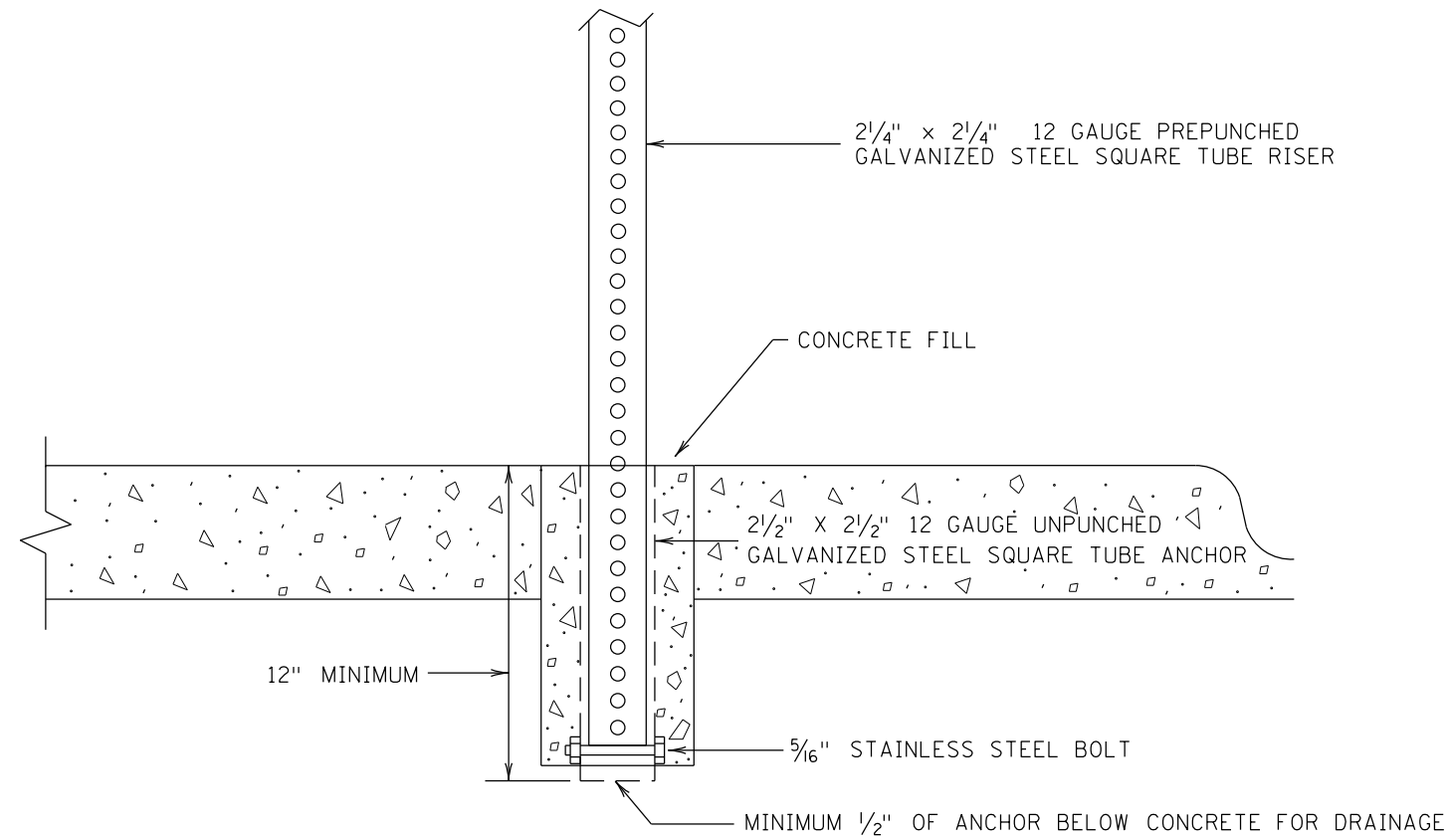


NOTE: CORE OR PREFORM
A 8" (±1/2") DIAMETER
HOLE FOR EACH POST.

CONCRETE OR BITUMINOUS ISLAND

FLANGED U-CHANNEL POST MOUNTED THROUGH CONCRETE
MEDIAN OR SIDEWALK

- NOTE:
- ALL MATERIALS AND WORK ASSOCIATED WITH FURNISHING AND INSTALLING HIGH DENSITY RIGID FOAM BLOCKS FOR SIGN POST INSERTS ARE CONSIDERED INCIDENTAL.
 - FOAM BLOCK DIMENSIONS; THICKNESS = CONCRETE DEPTH, WIDTH = 12 INCHES, LENGTH = SIGN LENGTH PLUS 12 INCHES.
 - POSITION AND STAKE THE FOAM BLOCK TO PROPER SIGN ALIGNMENT, FINISH AND JOINT THE CONCRETE AS NEEDED TO PROVIDE A SURFACE PROFILE THAT HAS THE FOAM BLOCK FLUSH TO THE FINAL CONCRETE.
 - LEAVE THE HIGH DENSITY RIGID FOAM BLOCK INPLACE.
 - CONTACT THE DISTRICT SIGNSHOP FOR SIGN LOCATION ASSISTANCE.



NOTES;

1. DRILL AN 8" DIAMETER HOLE THE FULL DEPTH OF THE ANCHOR.
2. DRILL 3/8" HOLES ON OPPOSITE SIDES OF THE UNPUNCHED GALVANIZED STEEL SQUARE TUBE ANCHOR APPROX. 1" FROM THE BOTTOM OF THE ANCHOR. INSERT A 5/16" STAINLESS STEEL BOLT THROUGH THE HOLES AND SECURE WITH A STAINLESS STEEL LOCK NUT WITH NYLON INSERT. THE PREPUNCHED GALVANIZED STEEL SQUARE TUBE RISER (TO BE INSERTED INSIDE THE UNPUNCHED GALVANIZED SQUARE TUBE ANCHOR) WILL REST ON BOLT.
3. INSERT THE ANCHOR IN THE HOLE.
4. AFTER INSTALLATION OF THE UNPUNCHED GALVANIZED STEEL SQUARE TUBE ANCHOR, FILL THE HOLE WITH A CONCRETE MIX APPROVED BY THE ENGINEER AND LEVEL OFF THE TOP OF CONCRETE.
5. MAXIMUM SIGN PANEL SIZE IS 42" WIDE X 48" HIGH.
6. SIGN PANEL TO BE MOUNTED 7 FT ABOVE THE GROUND.

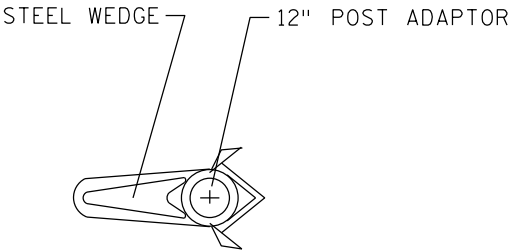
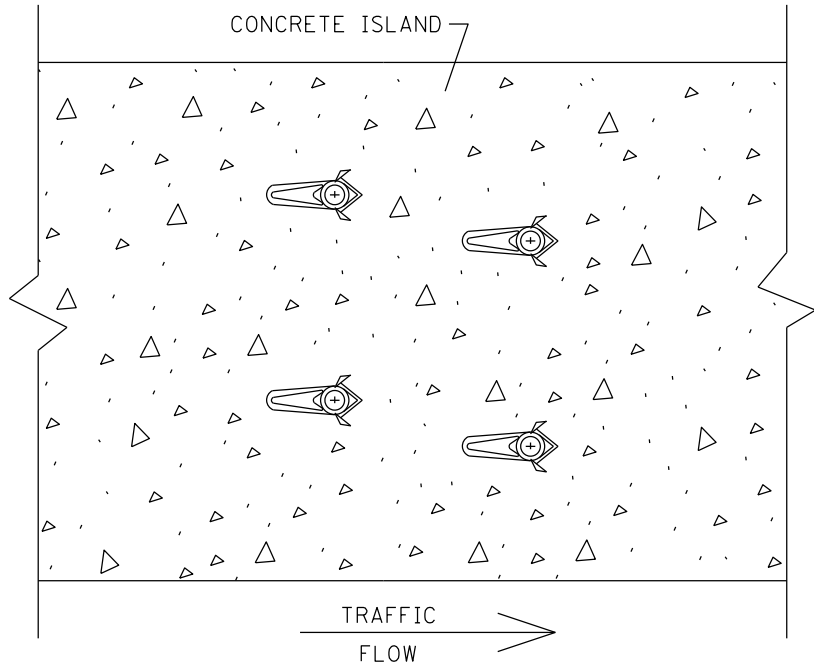
TYPE C SIGNS, DELINEATORS &
 MARKERS IN CONCRETE

PLOTTED/REVISED: 7/18/2017

DISTRICT #: METRO
PLOT NAME: C-Sign-Various Mounting Sheets - 6 sheets2
PATH & FILENAME: IP_PWP-d1624788C Sign-Various Mounting Sheets - 6 sheets.dgn

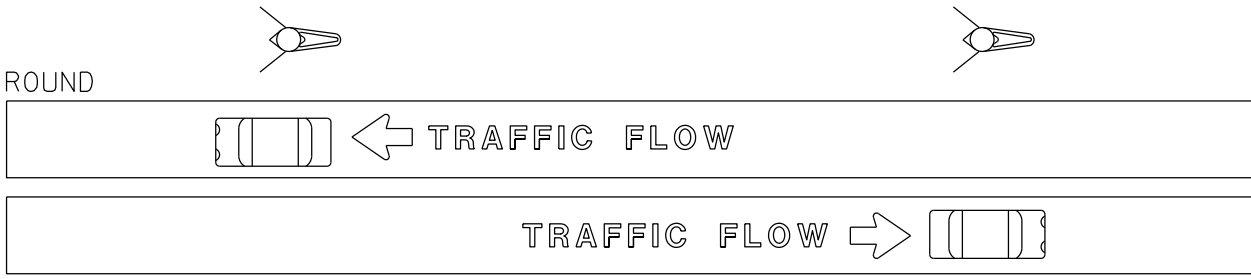
ROADSIDE OR MEDIAN PLACEMENT
FOR ROUND AND U CHANNEL SOCKETS

THE AXIS OF THE SIGNPOST SUPPORT WEDGE SHOULD ALIGN PARALLEL TO THE ROAD
FOR MAXIMUM RESISTANCE TO IMPACT AS SHOWN BELOW:



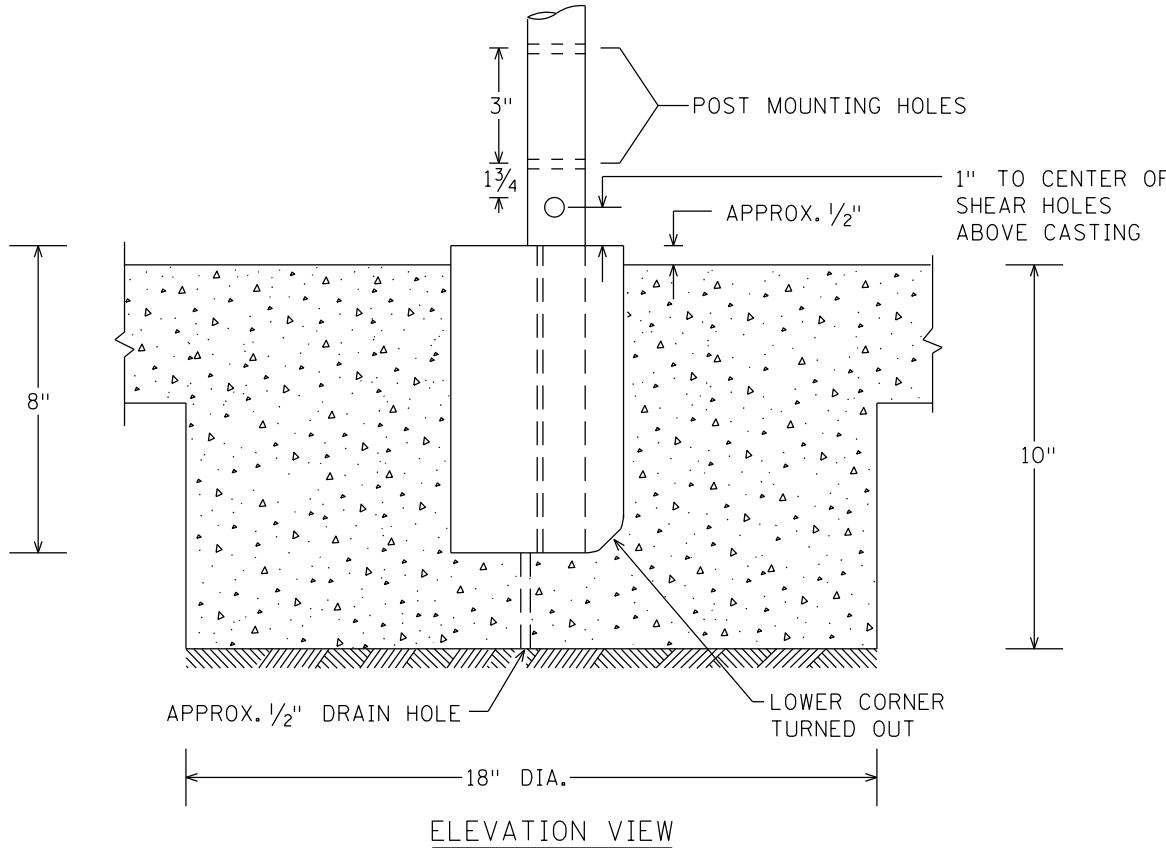
TOP VIEW - LOCKING DEVICE

TOP VIEW
2 POSTS SIGN WITH 2 KNEE BRACES



GENERAL NOTES:

- 1. SEAL BOTTOM OF SIGNPOST SUPPORT WITH DUCT TAPE BEFORE INSTALLATION IN NEW CONCRETE.
- 2. SIGNPOST SUPPORTS SHALL BE INSTALLED PLUMB AND APPROXIMATELY 1/2" ABOVE THE TOP OF THE CONCRETE SURFACE.



SIGNPOST SUPPORT IN CONCRETE

SEE TYPE C SIGNS
(SHEET).

VIEW A-A

2-3/4" x 2-3/4" 12 GAUGE PREPUNCHED
GALVANIZED STEEL SQUARE TUBE RISER

MEDIAN ISLAND
ON BRIDGE

PIPE SLEEVE
SEE BRIDGE PLAN

PIPE STOP

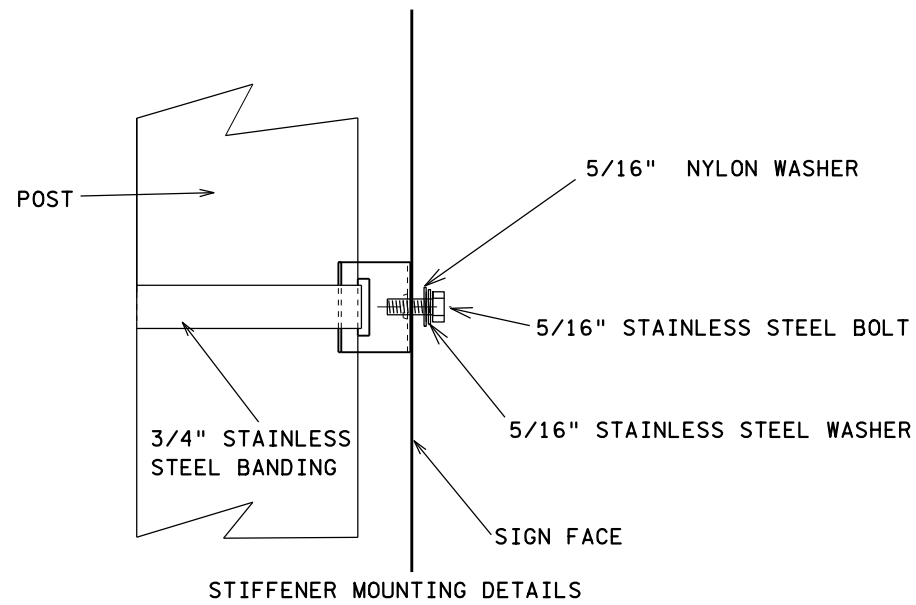
ELEVATION

SEE TYPE C & D SIGN DETAILS
FOR NOTES AND DETAILS NOT SHOWN.

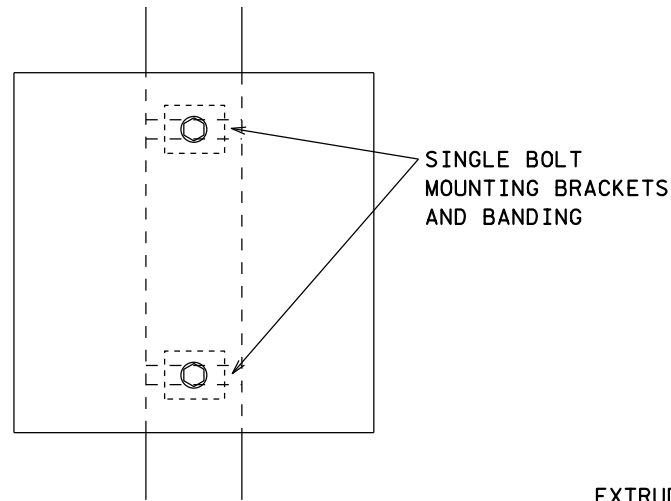
TYPE C SIGNS MOUNTED ON
BRIDGE MEDIAN ISLAND

PLOTTED/REVISED: 7/18/2017

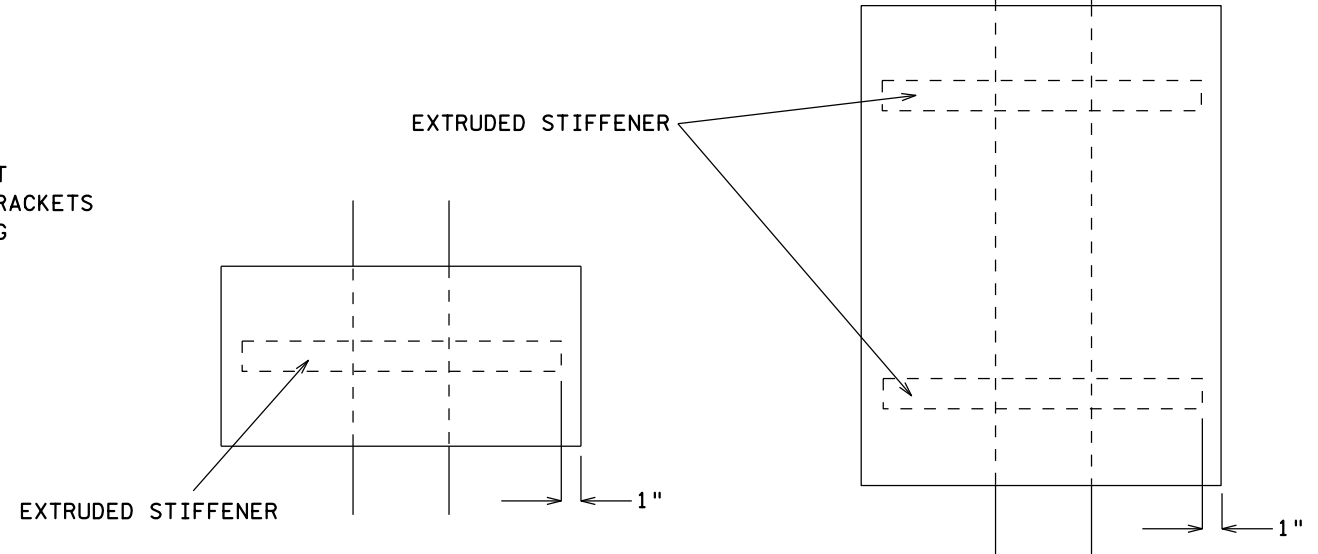
SINGLE BOLT MOUNTING BRACKET AND BANDING DETAILS



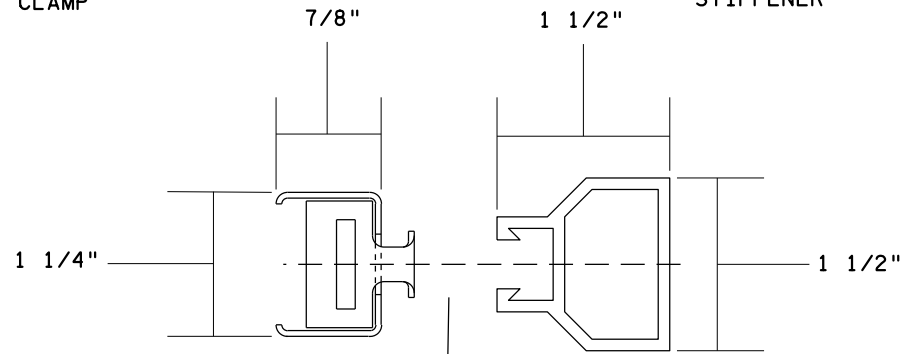
SINGLE POST PUNCHING



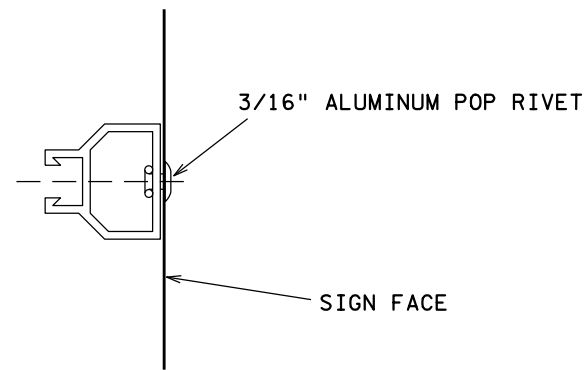
2-POST PUNCHING



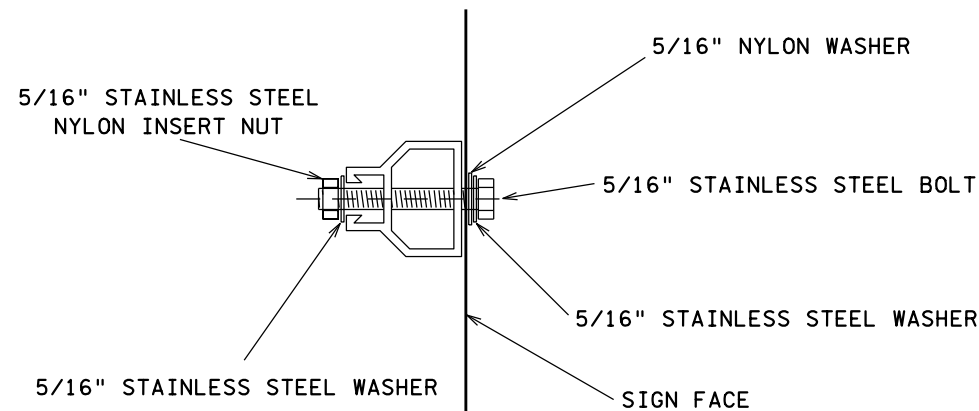
UNIVERSAL CHANNEL CLAMP



SUPPLEMENTAL POP RIVET ATTACHMENT



SUPPLEMENTAL BOLT ATTACHMENT



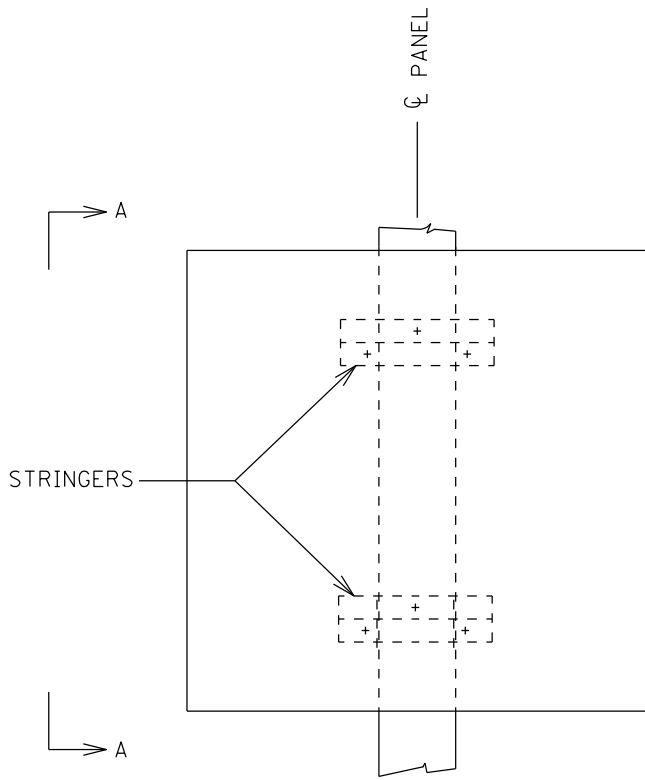
NOTES:

1. FOR DETAILS AND NOTES NOT SHOWN, SEE TYPE "C" AND "D" SIGN DETAILS.
2. FOR BACK TO BACK INSTALLATION, ROTATE STIFFENERS FOR ONE PANEL 180 DEGREES SUCH THAT PANELS CAN BE MOUNTED AT THE SAME ELEVATION.
3. HORIZONTAL SPACING OF STIFFENERS SHALL BE ACCORDING TO THE PUNCH CODES AS SHOWN IN THE MNDOT STANDARD SIGNS AND MARKINGS MANUAL.
4. MOUNTING HOLES ARE NOT REQUIRED ON SIGNS SMALLER THAN 6.3 SQUARE FEET, EXCEPT ON SINGLE POST PUNCHED SIGNS.
5. STIFFENERS SHALL BE ATTACHED TO SIGNS USING EITHER 3/16" DIAMETER POP-RIVETS OR 5/16" DIAMETER BOLTS.
6. USE .75" X .030" BANDING STRAPS OF TYPE 201 "1/4 HARD" STAINLESS STEEL, DOUBLE-WRAPPED AROUND THE POLE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
7. BAND PRETENSION SHALL NOT EXCEED 1300 POUNDS.
8. ALL HARDWARE SHALL BE COMPATIBLE WITH STIFFENER AND MOUNTING SYSTEMS.

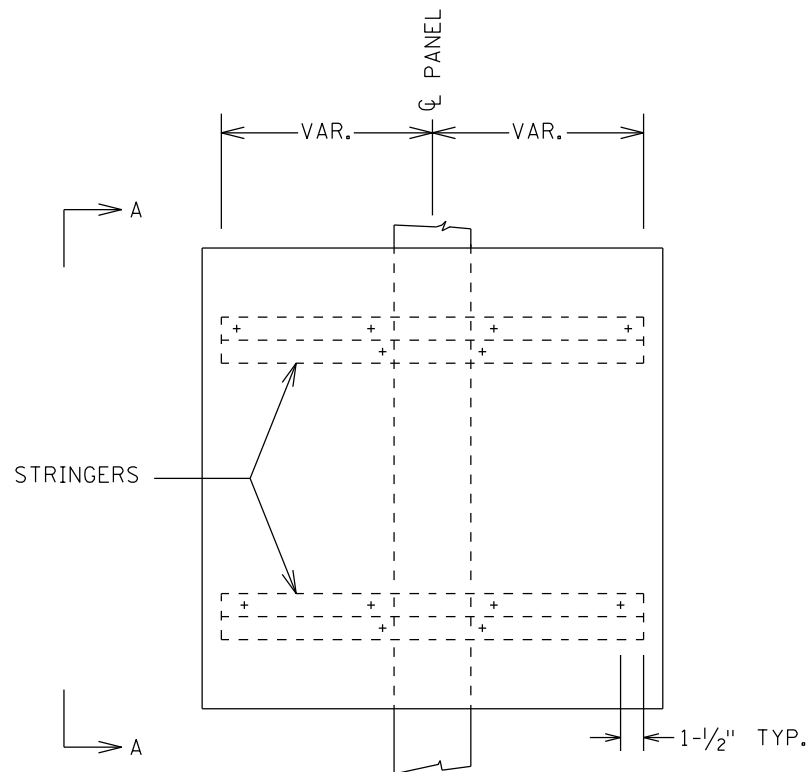
SIGN TYPE C AND D EXTRUDED ALUMINUM MOUNTING SYSTEM FOR ROUND SUPPORTS

DISTRICT #: METRO
 IPLOT NAME: C-Sign-Various Mounting Sheets - 6 sheets4
 PATH & FILENAME: IP_PWP-d1624788\C_Sign-Various Mounting Sheets - 6 sheets.dgn

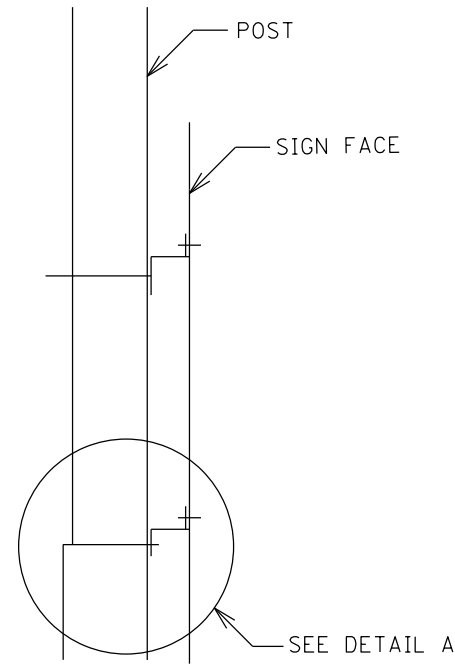
PLOTTED/REVISED: 7/18/2017



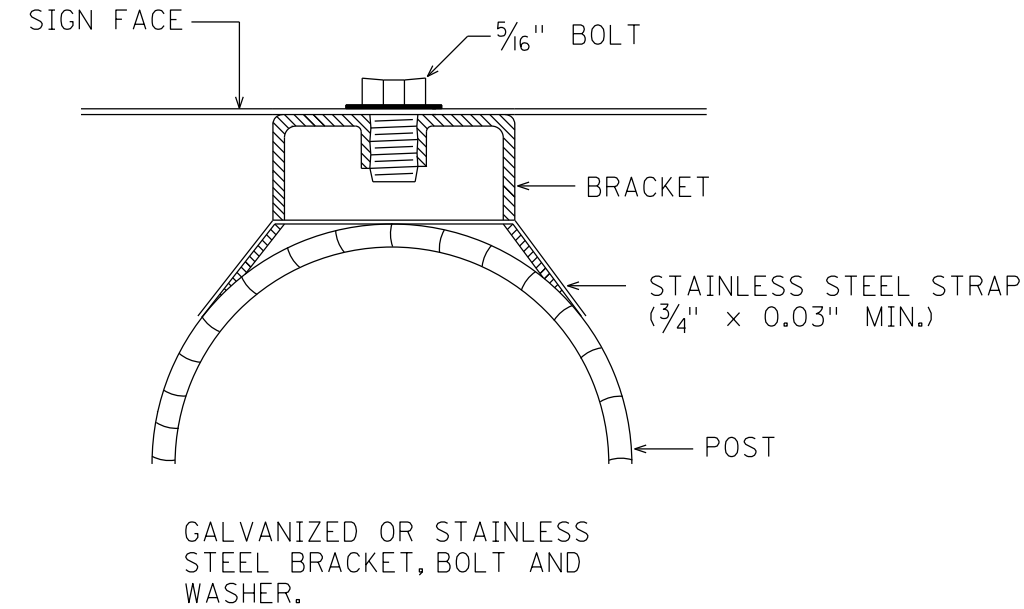
SINGLE POST PUNCHING
ELEVATION



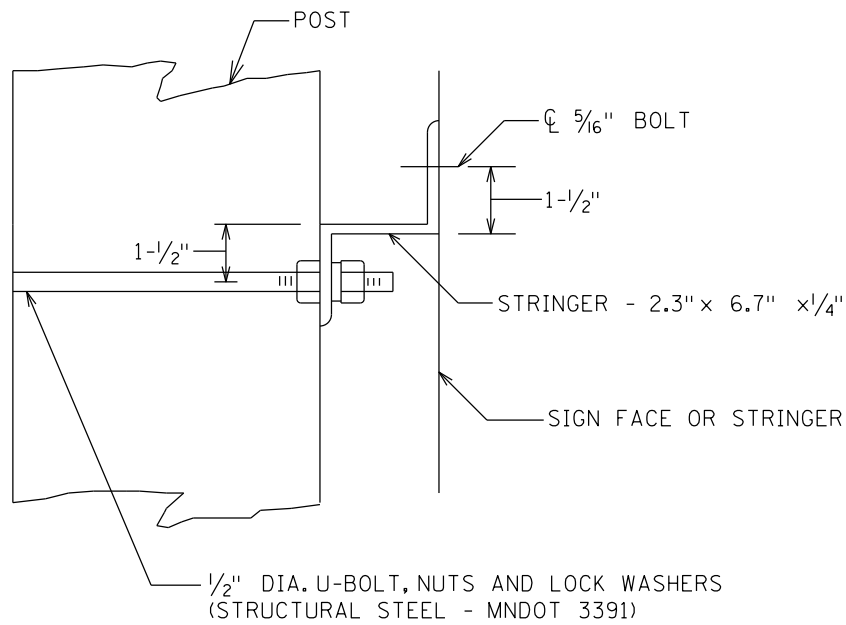
2-POST PUNCHING
ELEVATION



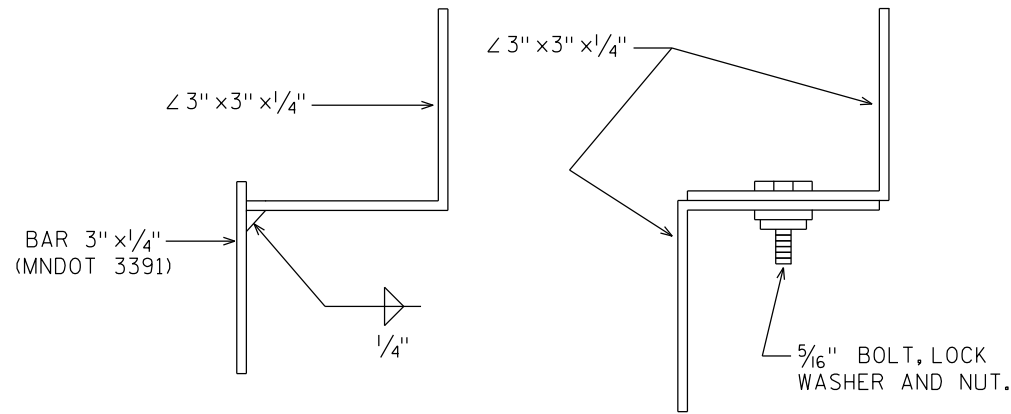
VIEW A-A



STRAP MOUNTING DETAIL FOR
OVERHEAD IDENTIFICATION AND
LIGHTING SYSTEM IDENTIFICATION PLATES



DETAIL A



DETAIL A STRINGER ALTERNATES

- NOTES:
1. FOR DETAILS AND NOTES NOT SHOWN SEE "C" & "D" SIGN DETAILS.
 2. FOR BACK TO BACK MOUNTINGS, ROTATE STRINGERS FOR ONE PANEL 180° FROM WHAT IS SHOWN SUCH THAT PANELS CAN BE MOUNTED AT SAME ELEVATION.
 3. DETAIL A STRINGER MAY BE ONE OF THE THREE DESIGNS DETAILED OR AN APPROVED EQUAL. STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH MNDOT 3306 AND GALVANIZED IN ACCORDANCE WITH MNDOT 3394. FASTENERS SHALL BE IN ACCORDANCE WITH MNDOT 3391.2B AND SHALL BE GALVANIZED EITHER BY THE HOT-DIP PROCESS IN ACCORDANCE WITH ASTM A153, OR BY THE MECHANICAL PROCESS IN ACCORDANCE WITH ASTM B695, CLASS 50 OR GREATER.

SIGN TYPE C AND D STRUCTURAL
STEEL MOUNTING SYSTEM
FOR ROUND SUPPORTS

DISTRICT #: METRO
PLOT NAME: C-Sign-Various Mounting Sheets - 6 sheets5
PATH & FILENAME: IP_PWP-d1624788C Sign-Various Mounting Sheets - 6 sheets.dgn