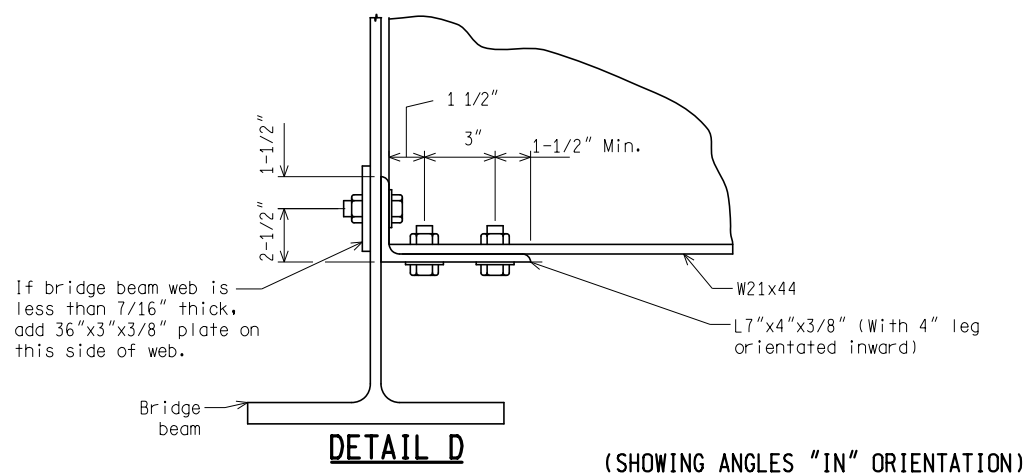


DETAIL B

If beam web is less than 7/16" thick add 3/8" x 3" x 2'-0" steel E on inside face.



DETAIL D

(SHOWING ANGLES "IN" ORIENTATION)

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN

(SPECIAL DETAIL)
F.H.W.A. APPROVAL

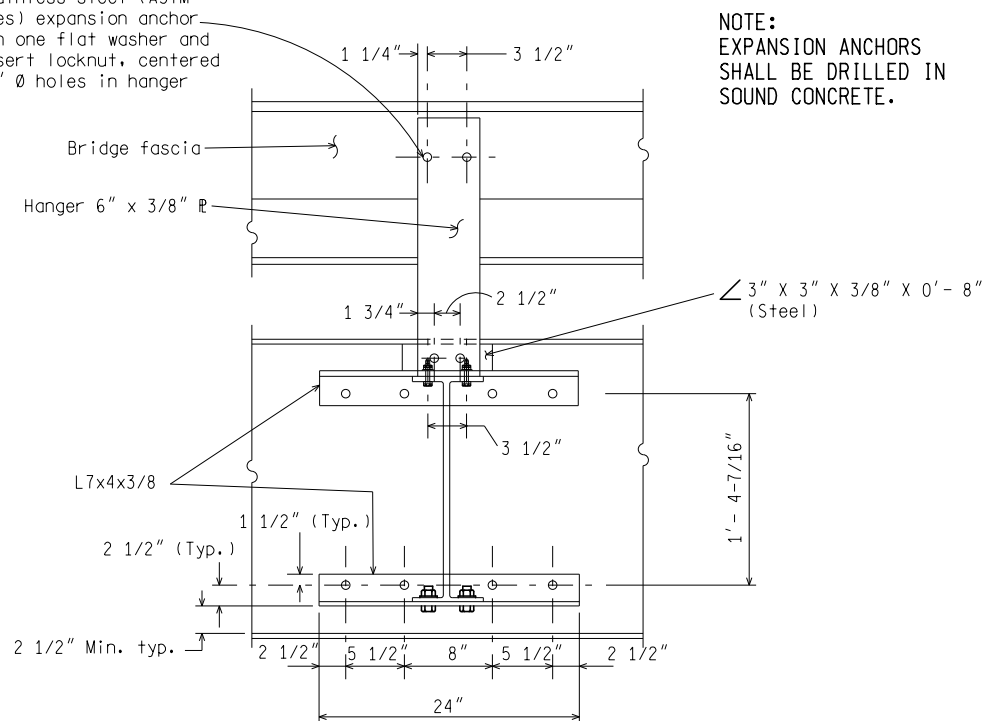
04/16/13
PLAN DATE

SIGN-831-A

SHEET
3 OF 4

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

3/4 Ø Stainless steel (ASTM 300 Series) expansion anchor bolt with one flat washer and nylon insert locknut, centered in 13/16" Ø holes in hanger

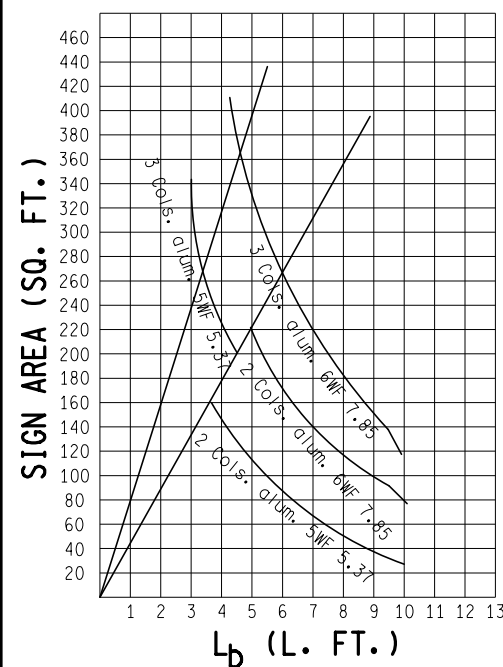


SECTION C - C

Drill 11/16" Ø holes to template for 2 1/2" x 5/8" Ø bolts, nuts, flat washers & lock washers.

NOTE:
EXPANSION ANCHORS
SHALL BE DRILLED IN
SOUND CONCRETE.

Table 2.



NOTES:

- All bolts shall be galvanized high strength bolts (ASTM A-325). All bolts, nuts, and washers shall be hot dip galvanized according to ASTM A-153. nuts shall be tapped 0.015" oversize.
- All alum. components shall be 6061 - T6 alum. alloy. All steel components shall be A-36 and shall be hot-dip galvanized according to ASTM A-123.
- Sign location may be shifted to avoid joints or stiffeners.
- Sign connection to mounting support columns shall have the same bolt arrangement as shown for connections for sign to mounting supports for cantilevers and trusses. (Typical plan VIII-700, Sign Connection Details)
- Bottom edge of sign shall be horizontal when erected and shall be a minimum of 1'-6" above the lower bridge beam flange at all points.
- Expansion anchors shall be chosen from the current qualified products list.
- Expansion anchors shall be installed as per manufactures recommendations.
- θ = angle between sign & bridge fascia. Angle is a function of permissible cantilever "C" and sign length "L". See Sign-840 series.

TO BE USED FOR MAINTENENCE PURPOSES FOR EXISTING BRIDGE CONNECTIONS ONLY.

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN

(SPECIAL DETAIL)
F.H.W.A. APPROVAL

04/16/13
PLAN DATE

SIGN-831-A

SHEET
4 OF 4

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

AS-LET PLAN REVISIONS

NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION



DATE:	CS:
DESIGN UNIT:	JN:
FILE:	TSC:

DRAWING	SHEET
---------	-------