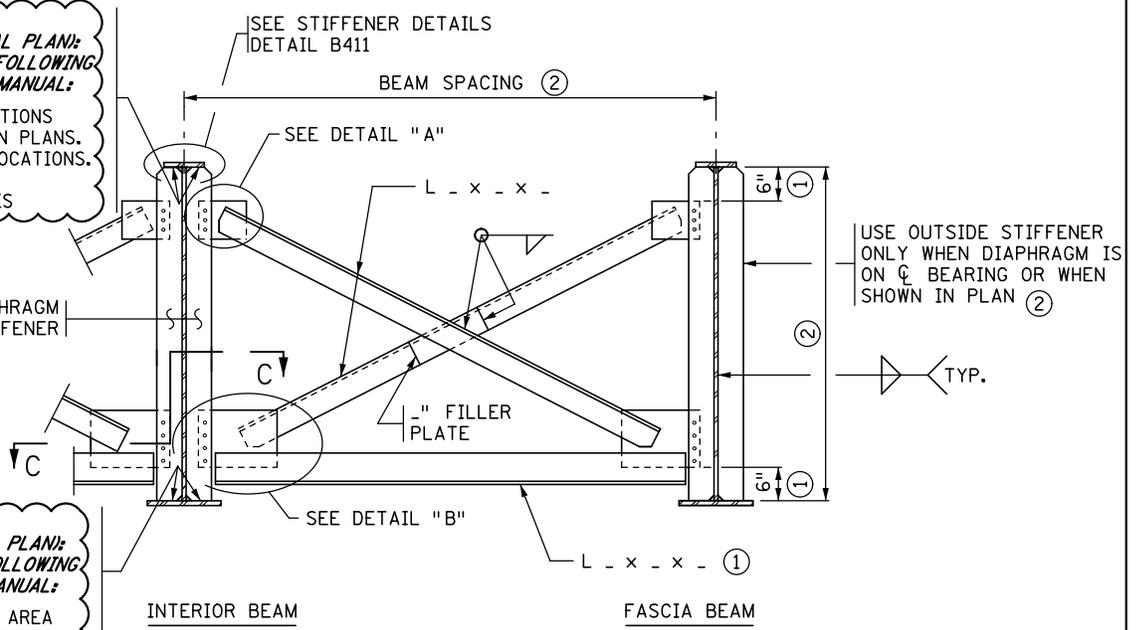
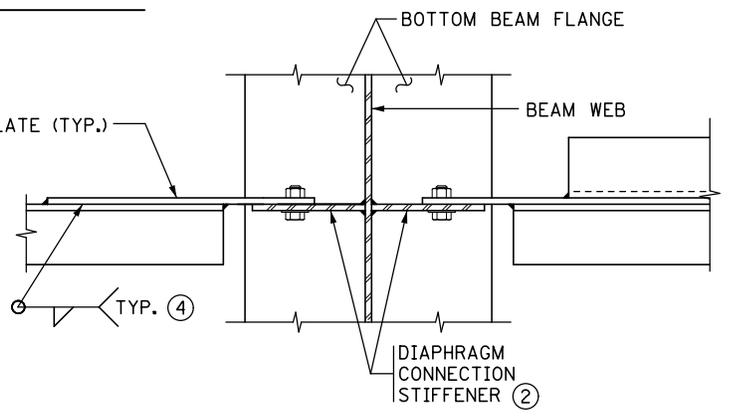


DESIGNER NOTE
 (REMOVE PRIOR TO PLOTTING FINAL PLAN);
 DESIGNER TO CHOOSE ONE OF THE FOLLOWING
 NOTES PER MnDOT LRFD DESIGN MANUAL:
 TIGHT FIT. USE BOLTED CONNECTIONS
 (SEE DETAIL B410) IN AREA "A" ON PLANS.
 WELD BOTH SIDES AT ALL OTHER LOCATIONS.
 OR
 TIGHT FIT. WELD BOTH SIDES

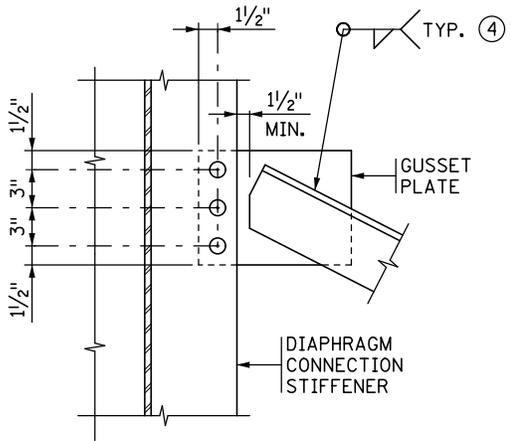


DESIGNER NOTE
 (REMOVE PRIOR TO PLOTTING FINAL PLAN);
 DESIGNER TO CHOOSE ONE OF THE FOLLOWING
 NOTES PER MnDOT LRFD DESIGN MANUAL:
 TIGHT FIT ③. WELD BOTH SIDES IN AREA
 "A" ON PLANS. USE BOLTED CONNECTIONS
 (SEE DETAIL B410) AT ALL OTHER LOCATIONS.
 OR
 TIGHT FIT ③. WELD BOTH SIDES

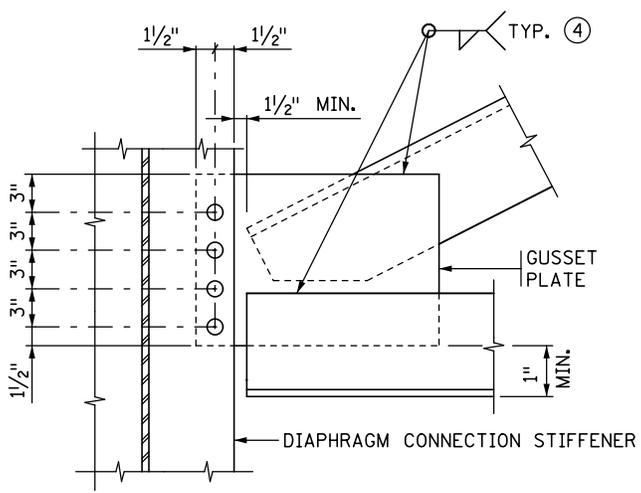
ELEVATION



SECTION C-C



DETAIL "A"



DETAIL "B"

DESIGNER NOTE
 (REMOVE PRIOR TO PLOTTING FINAL PLAN);
 DESIGNER TO SPECIFY GUSSET PLATE THICKNESS,
 1/2" MINIMUM. FILLER PLATE THICKNESS TO MATCH GUSSET.

NOTES:

- PROVIDE STEEL PER SPEC. 3309.
- ① DIAPHRAGMS MAY BE PLACED LEVEL PROVIDED MINIMUM CLEARANCES ARE MET. FOR DIAPHRAGMS LOCATED BENEATH DECK JOINT, ORIENT FLANGES OF CROSS FRAME MEMBERS AWAY FROM THE DECK JOINT.
- ② SEE BRIDGE FRAMING PLAN AND GIRDER ELEVATIONS FOR ADDITIONAL INFORMATION.
- ③ MILL TO BEAR AT BEARING STIFFENERS.
- ④ MINIMUM TOTAL WELD LENGTH EQUAL TO 4 TIMES NOMINAL ANGLE SIZE.

APPROVED: MARCH 26, 2009

Daniel J. Wojcik
 STATE BRIDGE ENGINEER

STATE OF MINNESOTA
 DEPARTMENT OF TRANSPORTATION

CROSS FRAME INTERMEDIATE DIAPHRAGM
 (FOR STRAIGHT STEEL BEAMS)

REVISED
 11-03-2015

DETAIL NO.

B407