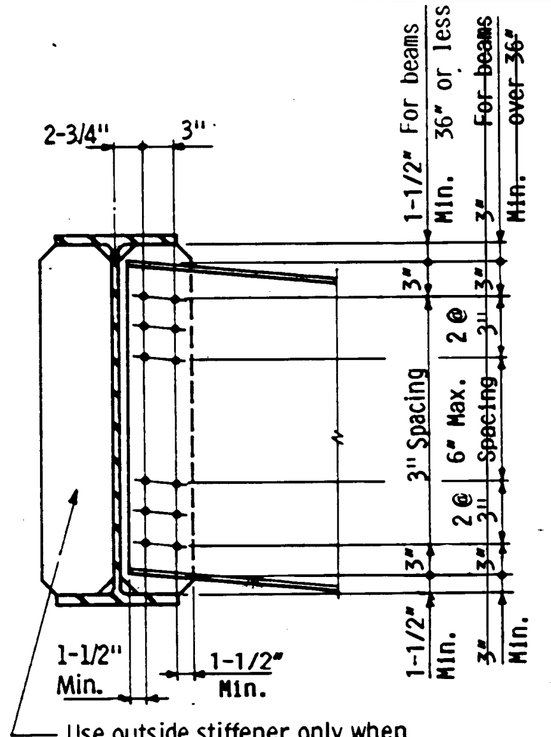
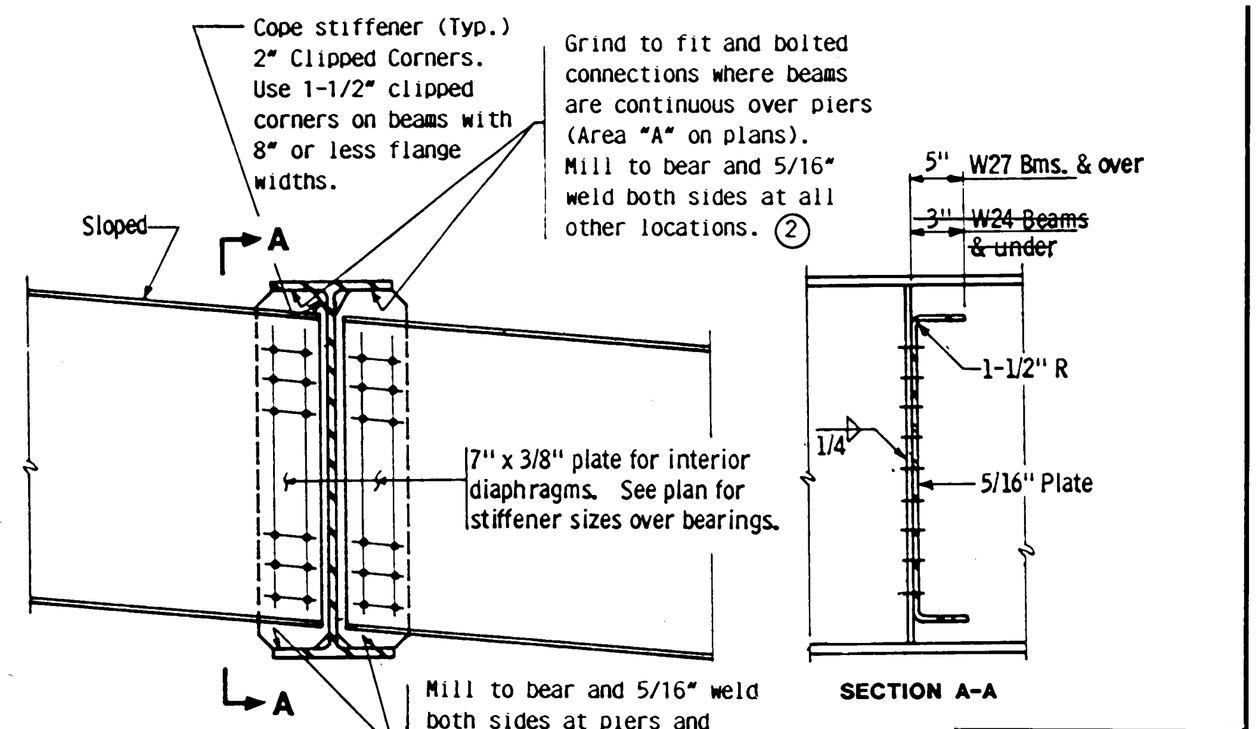


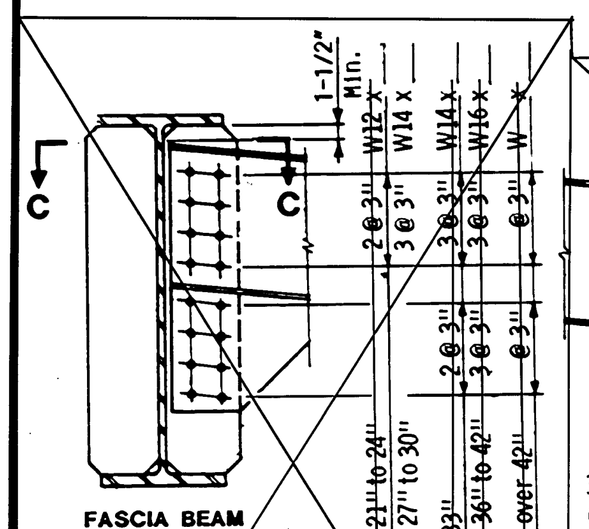
FASCIA BEAM



INTERMEDIATE BEAMS

SECTION A-A

INTERMEDIATE AND PIER DIAPHRAGMS



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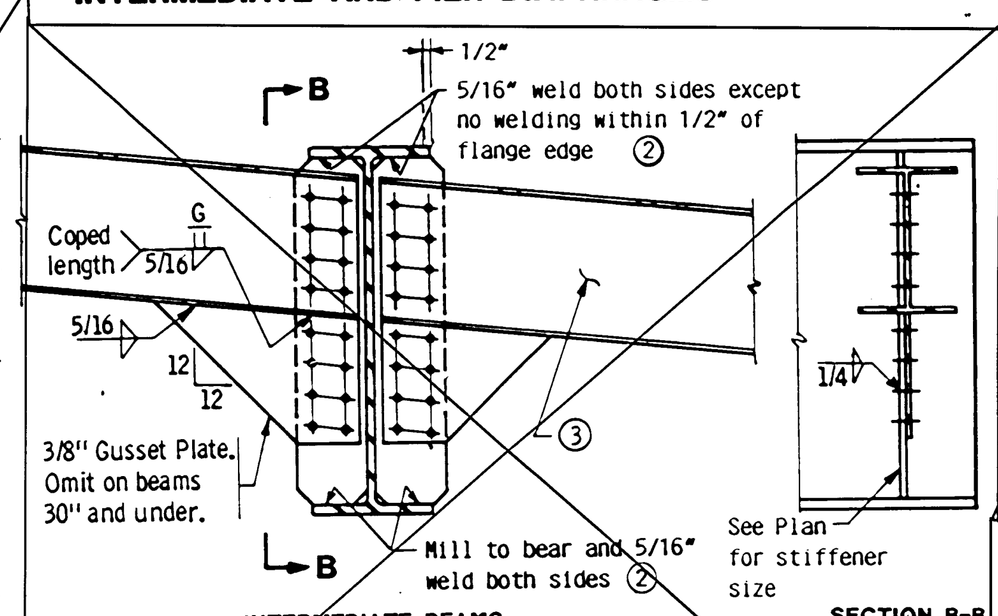
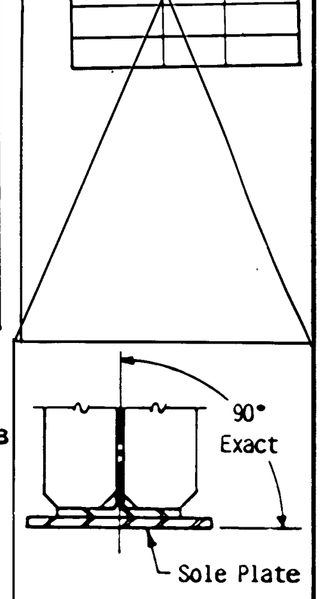


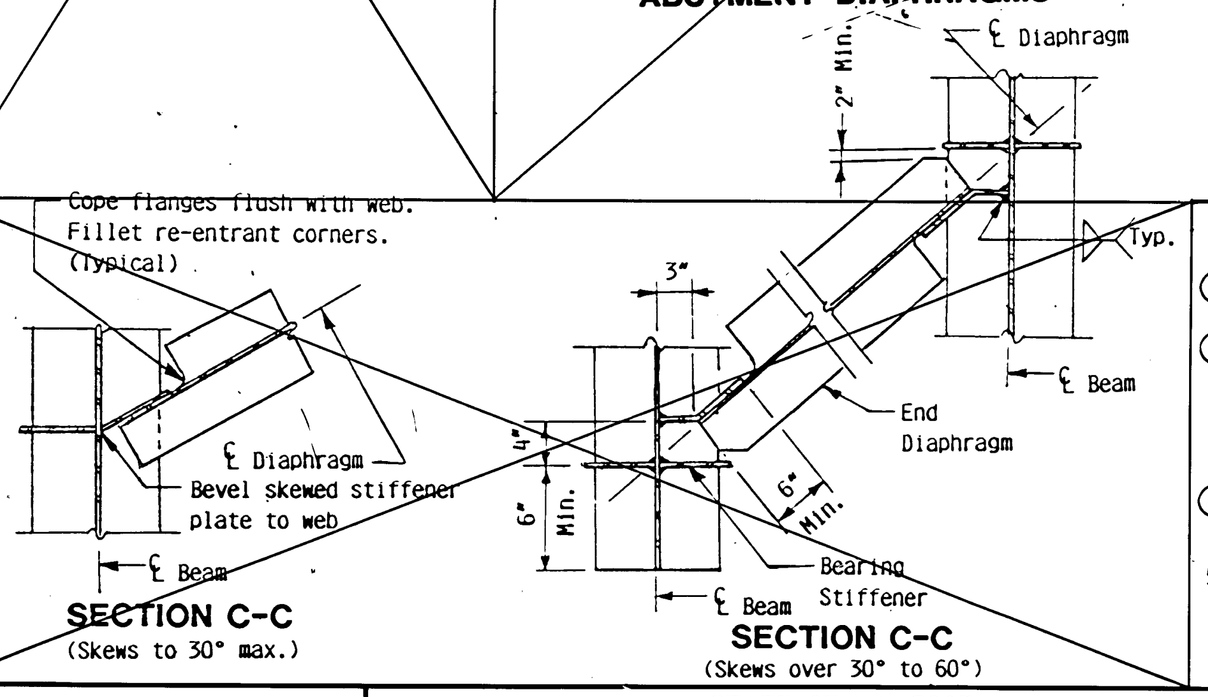
INTERMEDIATE BEAMS

SECTION B-B



TYPICAL DETAIL AT BEARINGS

ABUTMENT DIAPHRAGMS



SECTION C-C (Skews to 30° max.)

SECTION C-C (Skews over 30° to 60°)

ABUT. DIAPH. BOLT TABLE

BEAM SIZE (INCHES)	DIAPH. SIZE	BOLTS PER CONNECTION
21 - 24	W12	6
27 - 30	W14	8
~~33~~	~~W14~~	~~14~~
~~36 - 42~~	~~W16~~	~~16~~

NOTES:

1. Use 7/8" high strength bolts.
2. For flange material over 1-1/2" thick, use 3/8" weld.
3. Where expansion device is bolted to end diaphragm, use W12 x 53 (for 21" to 24" beams), W14 x 61 (for 27" to 33" beams) and W16 x 71 (for 36" to 42" beams). For beam heights over 42", see framing plan for size of diaphragm.
4. For beam heights over 42", diaphragm to be at least 1/3 the beam height.
5. Diaphragms may be placed horizontal, providing minimum clearances are met. and bridge superstructures are not superelevated.

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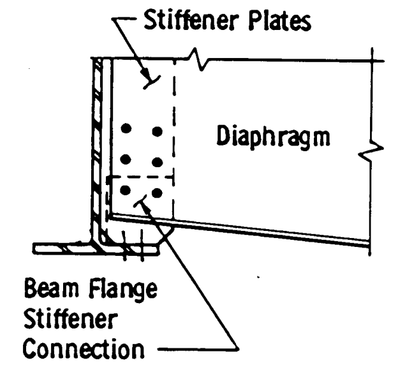
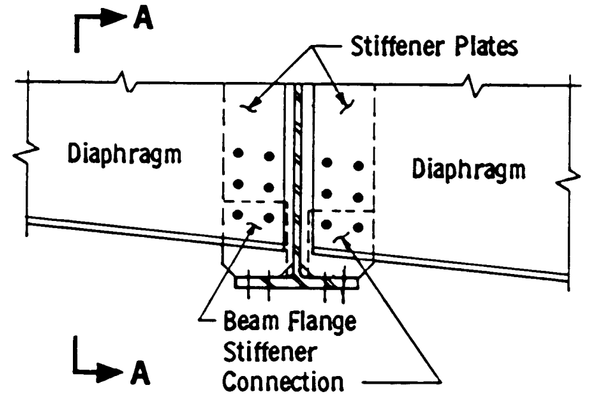
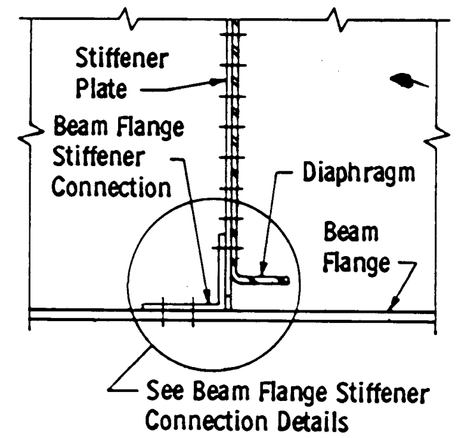


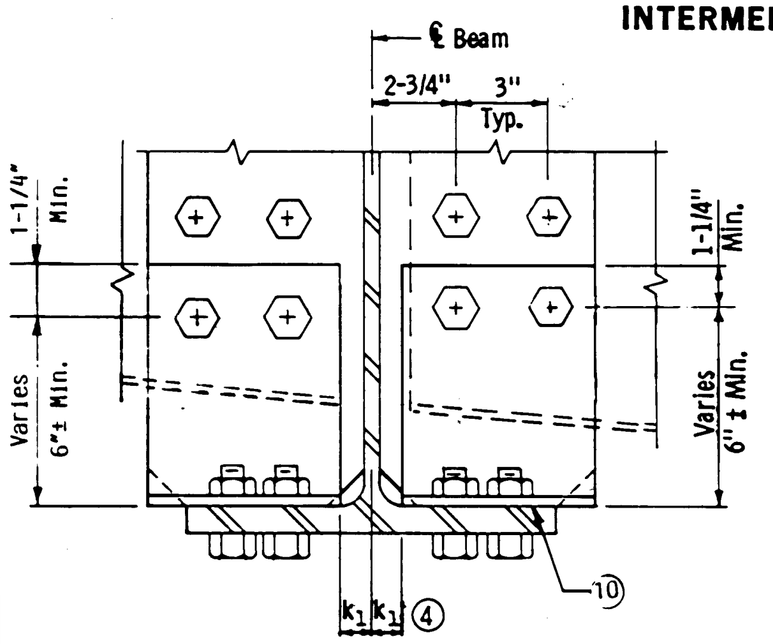
AT FACIA BEAM ONLY



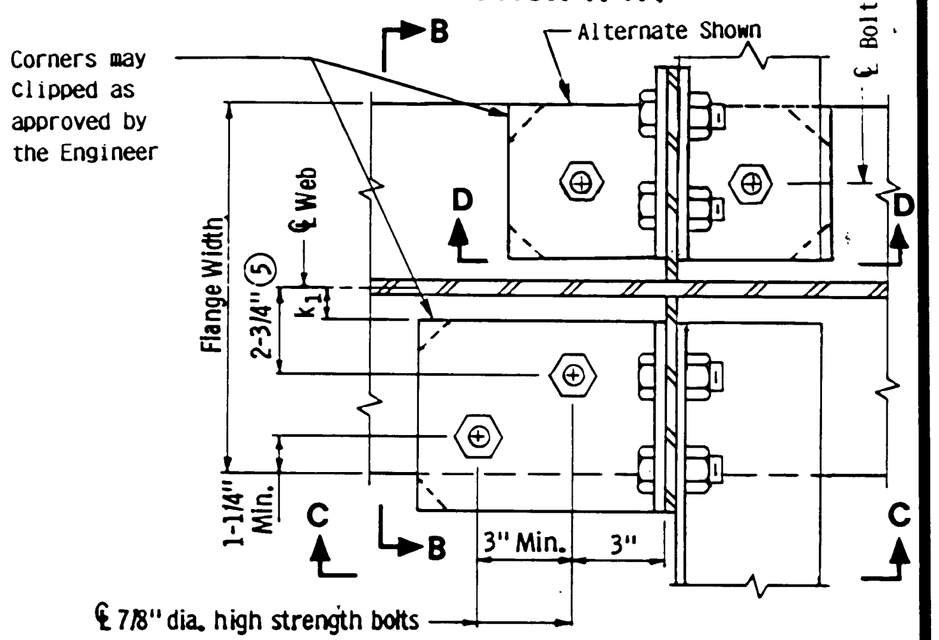
INTERMEDIATE BEAMS



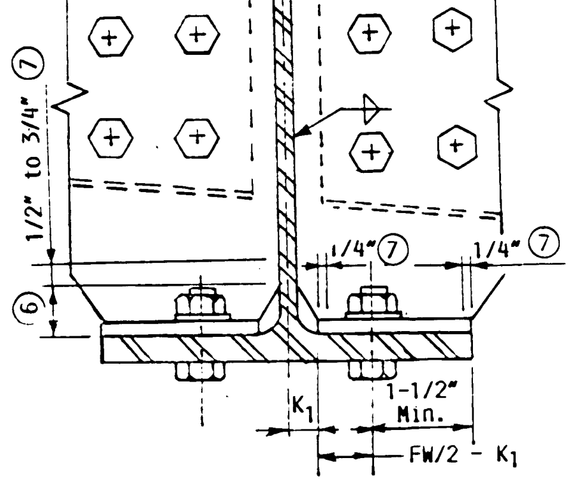
SECTION A-A



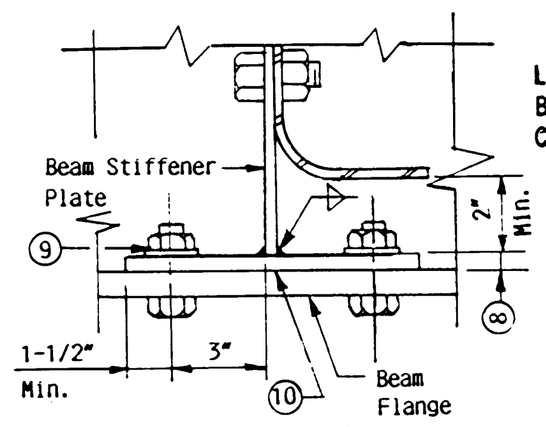
SECTION B-B
INTERMEDIATE BEAMS



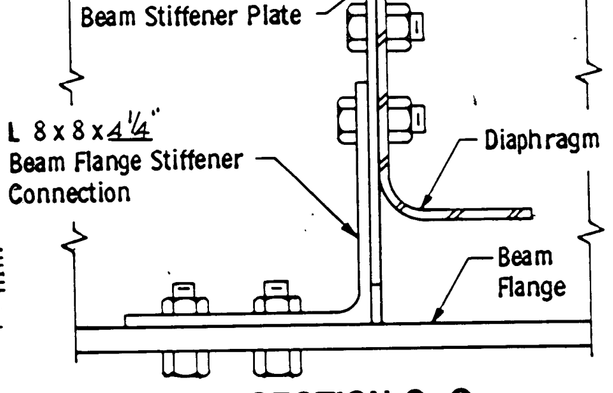
PLAN VIEW
AT INTERMEDIATE BEAMS



SECTION B-B
ALTERNATE - INTERMEDIATE BEAMS



SECTION D-D
ALTERNATE - CONNECTION DETAIL



SECTION C-C
CONNECTION DETAIL

NOTES:

1. This bolted beam flange stiffener connection detail to be used as noted.
2. Structural steel to be the same as diaphragms. See plans.
3. Use 7/8" dia. high strength bolts per Spec. 3391.
4. k_1 = Distance from ℄ of web to toe of fillet on rolled beams (See A.I.S.C. Steel Manual) and 1-1/4" on welded beams.
5. When flange widths are less than 8-1/2", use 1-3/4".
6. Distance is 4 times web thickness or 2" min.
7. Do not weld in this area.
8. Minimum plate thickness to be 3/4 inch.
9. Bolt plate to beam flange prior to welding plate to beam stiffener plate.
10. Remove loose scale and rust from contact area at diaphragm connection. Surface must be flat and primed.

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