

INTEROFFICE MEMORANDUM

DATE: February 2, 1987

TO: BRIDGE DESIGN PERSONNEL
FROM: Veral Pinkerton, Bridge Engineer
SUBJECT: Stiffeners at Cross Frame Locations

Section 10.20.1 of the AASHTO Standard Specifications for Highway Bridges includes the following sentence:

"Vertical connection plates such as transverse stiffeners which connect diaphragms or cross frames to the beam or girder shall be rigidly connected to both top and bottom flange."

The sentence following this one concerns horizontally curved girders only; but it is assumed the above sentence concerns straight girders as well. We voted against the addition of this sentence as it was not felt a rigid connection was necessary and it is unwise to risk the possible fatigue problems from welding to tension flanges.

Our policy on the quoted sentence for straight girders will be as follows:

Rolled Beams: Retain the details we have used in the past for diaphragms on simple beam spans and continuous beam spans.

Welded Plate Girders: Continue past policy of cutting the connection plate back from the tension flange at cross frames not at bearings in accordance with the last paragraph of Section 10.48.5.5. All clips at tension flanges of bearing stiffeners will be sized as above to meet Section 10.48.5.5. Connection plates will be fillet welded to compression flanges.

Our policy for horizontally curved girders will be as follows:

Rolled Beams or Plate Girders: Stiffeners which are also connection plates for cross frames or diaphragms shall be full depth and welded to both flanges. Clips at tension flanges will be sized to meet Section 10.48.5.5.

See attached sketches for details of above policies.

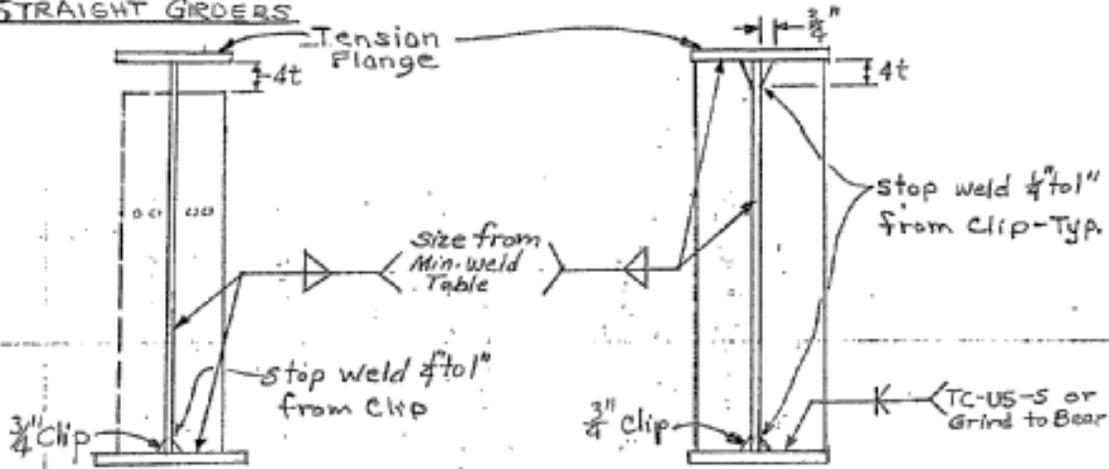
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ARKANSAS HIGHWAY DEPARTMENT
BRIDGE DESIGN DIVISION
CALCULATIONS FOR _____

MADE BY _____ DATE 2-2-77 SHEET NO. _____
CHECKED BY _____ DATE _____ JOB NO. _____
BRIDGE NO. _____

STRAIGHT GIRDERS



INTERMEDIATE STIFFENERS
AND CORRECTION PLATES

BEARING STIFFENERS

CURVED GIRDERS

