



SOUTH CAROLINA
DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION
P.O. BOX 191
COLUMBIA, S.C. 29202

DM0693

MEMORANDUM TO DESIGN GROUP LEADERS AND CONSULTANTS

SUBJECT: Bearing Stiffeners

AASHTO Standard Specifications For Highway Bridges does not specify an effective column length for the design of bearing stiffeners. Since the reaction load applied at one end of the stiffener pair is resisted by forces distributed to the web instead of by a force concentrated at the opposite end, as in columns, it is not necessary to consider the stiffeners as a end-hinged column even when the flanges are free to rotate. Accordingly, it shall be the Department's policy to use an effective column length of three fourths the web depth as stipulated in Part 5, paragraph K1.8 of the AISC Manual of Steel Construction, Allowable Stress Design, Ninth Edition.

Bearing stiffeners will continue to be detailed with the stiffener ends bearing on the loaded flange being milled to bear. The opposite end will be tight fit only to the flange. When bearing stiffeners are also used as diaphragm or crossframe connection plates, the stiffeners shall be detailed as previously described with the addition of fillet welds to the girder flanges as shown on the Department's Standard Details, drawing No. 709-1.

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Bridge Design Engineer

RLK/slb