

BRIDGE DESIGN MEMORANDUM - DM0624

TO: RPG Structural Engineers

Alternative Delivery Structural Design Engineer

Design Consultants

Date: July 11, 2024

RE: Elastomeric Bearing Pads for Box Beams and Cored Slabs

Apply these requirements to all projects where design has not advanced beyond preliminary plans submittal and/or whenever SCDOT Structural Drawings and Details for box beams or cored slabs are incorporated into the 95% bridge plans.

With the release of the Structural Drawings & Details, bearing assemblies for adjacent box beams and adjacent cored slabs are detailed with steel-reinforced elastomeric pads with holes provided in the pads for avoiding conflicts with dowels connecting the adjacent box beams and adjacent cored slabs to the substructure.

Make the following revisions in the Bridge Design Manual:

Replace the last sentence of Section 21.2.1 with:

With the exception of bearings for box beams and cored slabs, bearings shall be aligned normal to the centerlines of beams and girders.

Revise Section 21.2.2.3 as follows:

SCDOT prohibits the use of holes in steel-reinforced bearing pads with the exception of bearing pads supporting box beams and cored slabs. Holes are permitted in steel-reinforced bearing pads for box beams and cored slabs provided 1/8 in of elastomeric cover is maintained at the holes in the steel reinforcement.



Please note the changes above in your copy of the SCDOT Bridge Design Manual.

Terry B. Koon, P.E. Structural Design Support Engineer

TBK:hl

ec:

Julie Barker, Dir. of Preconstruction Robbie Isgett, Dir. of Construction Jeff Terry, Dir. of Maintenance Brent Dillon, Dir. of Traffic Engineering Chris Gaskins, Dir. of Alternate Delivery Rob Bedenbaugh, Dir. of Engr. Support Chris Lacy, Dir. of Bridge Management Jeremy Harmon, Acting RP Engr. - Lowcountry Leah Quattlebaum, RP Engr. - Pee Dee Adam Humphries, RP Engr. - Midlands Julie Barker, RP Engr. - Upstate Jae Mattox Preconstruction Alt. Deliv. Engr. Tad Kitowicz, FHWA Blake Gerken, FHWA

