

BRIDGE DESIGN MEMORANDUM - DM0324

TO: RPG Structural Engineers

Alternative Delivery Structural Design Engineer

Design Consultants

Date: July 11, 2024

RE: Debonded Strand Requirements

Apply these requirements to all projects where design has not advanced beyond preliminary plans submittal.

Requirements for debonding of prestressing strands currently provided in the *SCDOT Bridge Design Manual* are being revised to match criteria in Article 5.9.4 of the *AASHTO LRFD Bridge Design Specifications* (9th Edition). To revise the debonding requirements, make the following revisions in the **Bridge Design Manual**:

<u>Delete the first paragraph and Items 1 through 6 of Section 15.5.3.3 of the Manual and replace with:</u>

Reference: LRFD Article 5.9.4

Debonding (shielding) of strands at the ends of precast/prestressed concrete AASHTO I-beams, modified bulb tee beams, Florida I-beams, cored slabs, and box beams will be allowed on projects for SCDOT, provided debonding complies with LRFD Article 5.9.4.

The last paragraph of Section 15.5.3.3 was previously replaced by Bridge Design Memorandum DM0108, which is still in effect.

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:

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