Florida Department of Transportation

MEMORANDUM

September 15, 2004

TO: District Structures Design Engineers
   (Gerard Moliere, Rod Nelson, Keith Shores, John Danielsen, Neil Kenis, Kim Saing, Jose Rodriguez, Agnes Spielmann)
   District Directors of Production
   (Mike Williams, Larry Parks, Tommy Barfield, Gerry O'Reilly, Noranne Downs, Javier Rodriguez, Donald Skelton, Nancy Clements)
   District Structures and Facilities Engineers
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FROM: William Nickas, P.E., State Structures Design Engineer

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SUBJECT: Temporary Design Bulletin CO4-05
        Bolted Connection Slip Resistance

REQUIREMENTS:

Section 5.11.1 of the “Structures Design Guidelines” to be revised as follows:

5.11.1 Slip Resistance [6.13.2.8]
A. Design bolted connections for Class A surface condition.

Commentary: Department engineers have decided that FDOT projects will use a Class A friction coefficient for the design of slip critical connections. There are numerous variables associated with this design decision including the clamping force at the connection, paint thickness, surface preparation and cleanliness of the contact surfaces.

IMPLEMENTATION:

Those projects that are less than 90% complete shall incorporate this revision. Implementation on projects at or beyond the 90% complete stage will be left to the judgment of the District Structures Design Engineer.

NOTES:
• This revision is necessary to meet serviceability requirements on many projects. It is not a strength issue.
• Continue to check that the slip resistance class designation on which the design was based is noted on the bridge plans in the General Notes section.
• A future edition of Standard Specifications will conservatively require that all primers meet Class B friction coefficient for faying surfaces.
• A future release of the Structures Design Guidelines will identify specific zones of corrosion exposure on bridges.

WNN/DOH/h