

Office of Bridge Design

Technical Memorandum

Date: August 27, 2014

To: All Bridge Engineering Staff

From: Steve Johnson
Bridge Design Engineer

Subject: Technical Memorandum BTM 14.1
Structural Steel Painting

Structural steel, including pedestrian and bicycle railing shall be painted in accordance with Section 411 or 412, as applicable, of the South Dakota Standard Specifications for Roads and Bridges. Paint color for structural steel shall be as follows:

NEW BRIDGE CONSTRUCTION:

Girders and attachments composed of non-weathering steel shall be painted green (Federal Standard 595B, color no. 24108) or brown (Federal Standard 595B, color no. 30045) with the color chosen in concert with Area personnel and local officials, if applicable. Steel railings on non-weathering steel girder structures shall be painted to match the girders.

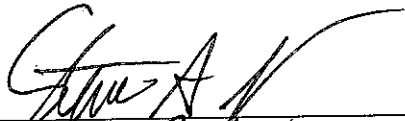
Girders and attachments composed of weathering steel shall not be painted unless requested for aesthetic purposes or if required to protect the structural steel from detrimental corrosion. When required for aesthetics, the outside face and bottom of the bottom flange of fascia girders shall be painted. To prevent detrimental corrosion, weathering steel is painted for a distance of 5 ft. from any open joint. HPS steel is painted when it is used in combination with non-weathering steel or is used in other locations where detrimental corrosion could occur (e.g. over high speed traffic). Paint color for weathering steel girders shall be brown (Federal Standard 595B, color 30045.) Steel railings on weathering steel girder structures shall be painted brown (Federal Standard 595B, color no. 30045) regardless of fascia girder treatment.

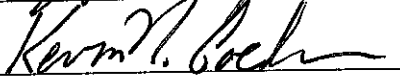
Steel railings on other structures shall be painted green, brown or black (Federal Standard 595B, color no. 27038) with the color chosen in concert with Area personnel and local officials, if applicable.

BRIDGE REHABILITATION OR REPAIR

The color of the final cover coat will depend on the extent of the painting. For spot or partial painting, the new topcoat shall match the existing color. For complete structure painting, the requirements for new bridge construction shall be followed.

Other colors may be considered, subject to the approval of the Chief Bridge Engineer.

Reviewed by:  Date: 8/29/14

Approved by: , Chief Bridge Engineer, Date: 8-29-2014

cc: File