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 facia 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
facia 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: 6/24/14

Approved by: ___________________________ Chief Bridge Engineer, Date: 3-29-2014

cc: File