



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Design Memorandum No. 11-22 Technical Advisory

October 25, 2011

TO: All Design, Operations, and District Personnel, and Consultants

FROM: /s/ Anthony L. Uremovich
Anthony L. Uremovich
Manager, Office of Bridge Standards and Policy
Bridge Design, Inspection, Hydraulics, and Technical Support Division

SUBJECT: Structural Steel Cleaning and Painting

REVISES: *Indiana Design Manual Sections 17-5.11, 17-5.11(04), and 17-5.11(05)*

SUPERSEDES: Design Memorandum 11-13 Technical Advisory

EFFECTIVE: Immediately

Steel-bridge painting and partial-bridge painting are no longer designated by type. The color of the final coat should be shown in revised Summarization 17-5K, Bridge-Painting Locations and Information, which appears on the INDOT editable-documents webpage, <http://www.in.gov/dot/div/contracts/design/dmforms/index.html>.

If possible, the number of bridge sites in one painting contract should be limited to not more than three.

A. Cleaning and Painting Existing Structural-Steel Members

Bridge cleaning and partial-bridge cleaning on an existing bridge are designated by QP type. The QP designation refers to the contractor's certification level. If the structure was built in 1995 or later, the QP-1 designation should be used. If all or a portion of the structure to be

cleaned was built in 1994 or earlier, the QP-2 designation should be used. The Department's *Bridge Inventory Log Book*'s year built should be used to determine the QP type.

Pay items for cleaning and painting structural-steel members should be specified only for existing structural steel. If only the bearings, end diaphragms, beam ends, etc., are to be cleaned and painted, such work should be identified on the plans. The pay items specified should be those regarding partial painting. The pay unit for cleaning bridge steel, painting bridge steel, or painting bridge steel, partial, is lump sum.

B. New Structural-Steel Members

Regardless of whether the steel is regular or weathering, cleaning and painting of new structural-steel members is included in the furnishing of new structural steel. No painting-related pay items should be specified.

For weathering steel, the portions of new structural-steel members to be caulked and painted are shown in new INDOT *Standard Drawing* 619-PRWS-01. It is attached herewith.

C. Paint Colors

Standard paint colors are provided in the INDOT *Standard Specifications*. After consultation with the project manager, one of these colors should be specified for the final coat, and the color number from the *Standard Specifications* placed in Summarization 17-5K's appropriate blank. Light blue or light green is typically specified. Colors not listed in the *Standard Specifications* should be specified only after consultation with the project manager. Reasons for using non-standard colors include a request from an LPA, desire to match surroundings, etc. A non-standard color requires a longer lead time for the contractor to procure the paint and for the paint to be tested.



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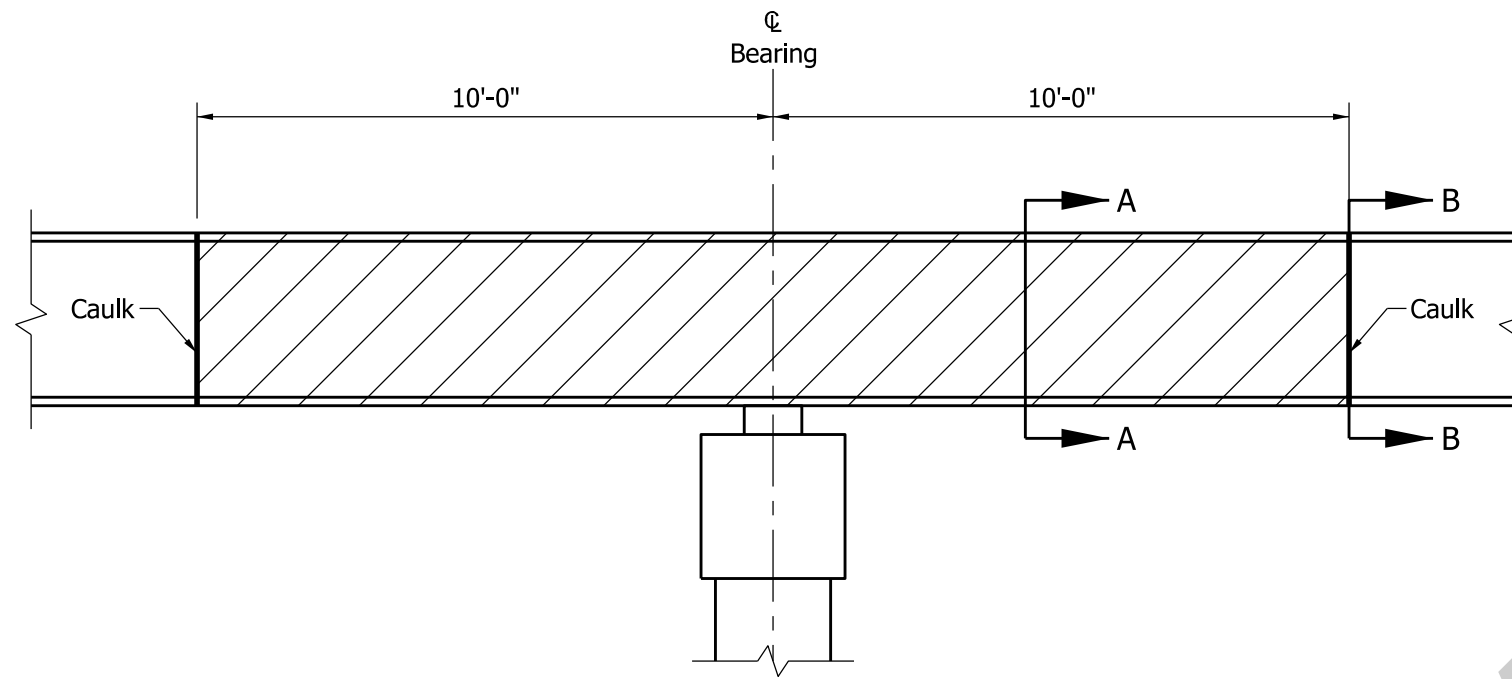
Attachment

NOTE:

1. Caulk shall be placed on the painted surface at the painted/unpainted interface and is intended to function as a drip bead.

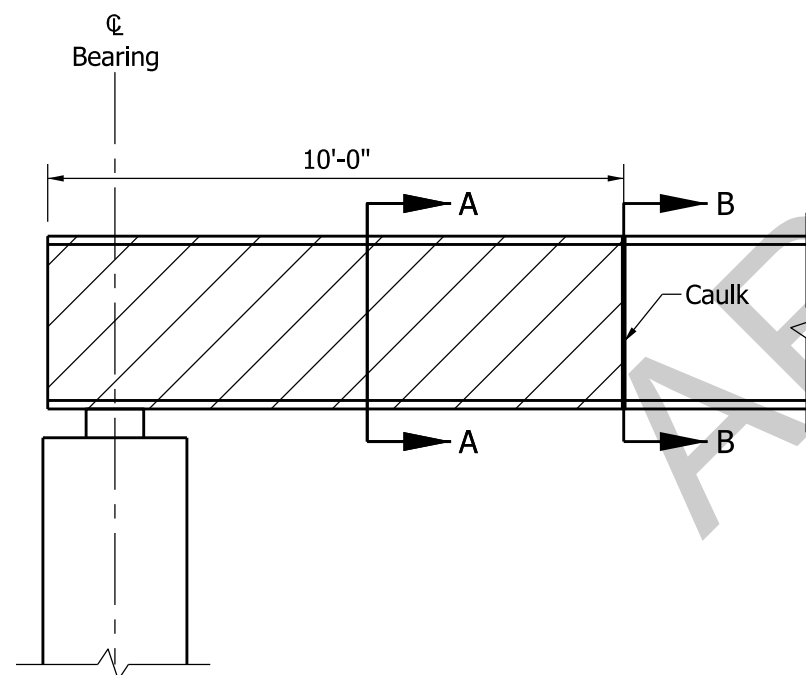
LEGEND:

-  = Area to be painted
-  = Caulk Bead



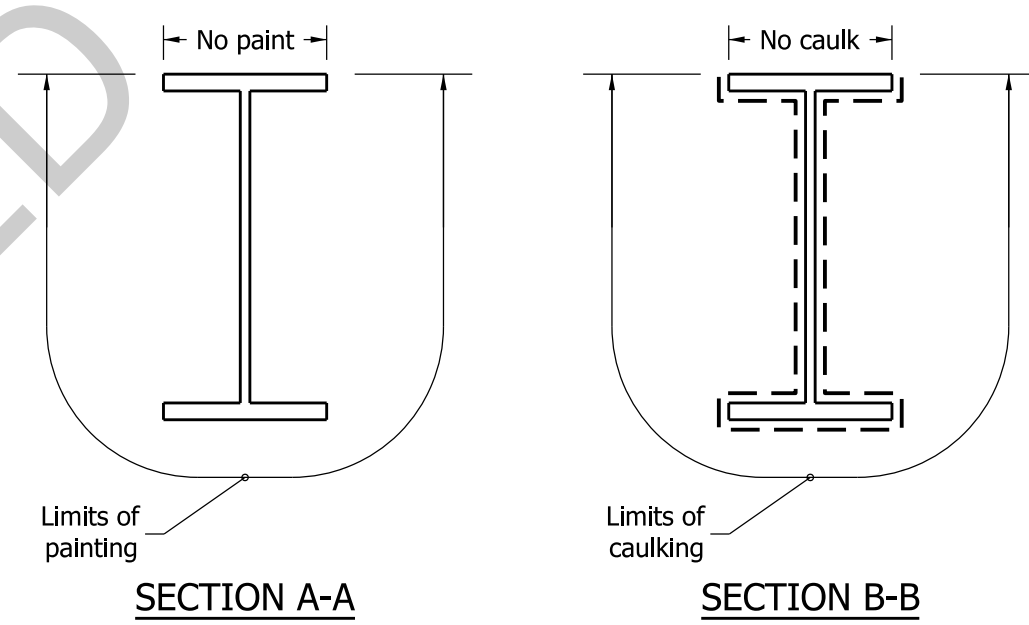
BEAM OR GIRDER AT INTERIOR SUPPORT

ELEVATION VIEW
(Bridge Deck not shown for clarity)



BEAM OR GIRDER AT END-BENT SUPPORT

ELEVATION VIEW
(Bridge Deck, Mudwall, and Concrete Encasement not shown for clarity)

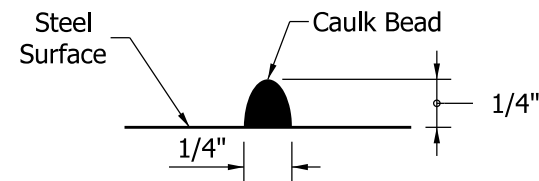


Limits of painting

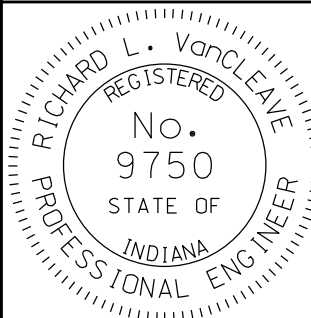
SECTION A-A

Limits of caulking

SECTION B-B



CAULK BEAD DETAIL

INDIANA DEPARTMENT OF TRANSPORTATION	
PAINTING REQUIREMENTS FOR WEATHERING STEEL	
SEPTEMBER 2011	
STANDARD DRAWING NO.	E 619-PRWS-01
	/s/ <i>Richard L. VanCleave</i> 09/01/11
	DESIGN STANDARDS ENGINEER DATE
	/s/ <i>Mark A. Miller</i> 09/01/11
	CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	