

# **INDIANA DEPARTMENT OF TRANSPORTATION**

Driving Indiana's Economic Growth

Design Memorandum No. 17-25 Technical Advisory

November 6, 2017

TO:	All Design, Operations, and District Personnel, and Consultants
FROM:	/s/ Elizabeth W. Phillips
	Elizabeth W. Phillips
	Manager, Standards and Policy Office
	Bridges Division
SUBJECT:	Bridge Load Rating for Design-Build Projects
REVISES:	La Jiman Design Manuel Sections 14,102, 14,204(00), 14,205
	Indiana Design Manual Sections 14-1.02, 14-2.04(09), 14-2.05,
	14-2.05(04)

It is the Department's practice to perform bridge load rating current with the Stage 3 milestone for traditional design-bid-build projects. This approach facilitates the most cost-effective approach to identifying and correcting design issues related to load rating. For alternative methods of contract procurement such as design-build, the milestone submission items – witness and hold points – are included in the technical provisions. The referenced sections of the *Indiana Design Manual* have been revised to highlight the need for bridge load rating hold points to be included in technical provision of design-build contracts and related procurement methods.

Questions regarding bridge load rating should be directed to Jeremy Hunter, INDOT Bridge Design and Load Rating Manager, at <u>jhunter@indot.in.gov</u>.

### <u>14-1.02 Project Development [Rev. Jan. 2013, Nov. 2017]</u>

The Project Development Process documents the information necessary to equitably and systematically advance a project from the end of planning to the beginning of construction. Using this process will ensure that all appropriate information will be addressed in the construction documents. The following discusses the project development relative to a traditional design-bid-build process. Alternative methods of procurement such as design-build will include the project development requirements within the technical provisions.

## <u>14-2.04(09)</u> Stage 3 Review Submission [Rev. Sept. 2011, Feb 2012, May 2013, April 2017, May 2017, Nov. 2017]

#### 11. Bridge Load Rating.

a. Department-Owned Bridge. For both traditional design-bid-build and alternate procurement methods such as design-build, the Bridges Division Load Rating Engineer completes the load rating for a Department-owned bridge.

<u>Traditional Project Development</u>. The completed Bridge Load Rating Request form should be sent via email to Coordinator 8. A separate set of bridge plans (excluding cross sections) should be uploaded to ERMS.

The Load Rating Request form and instructions for use are available for download from the Department's Editable Documents page, under Bridges.

If the analysis shows an unacceptable rating, design and plan revisions will be necessary. When resubmitting the Load Rating Request form due to a change after the initial load rating, "resubmittal" should be noted in the Description section of the form.

<u>Alternate Procurement Project Development</u>. Bridge Load Rating should be included as a hold point in the technical provisions. The Load Rating Request form should be submitted upon completion of the design plans. The load rating must be completed prior to the approval of structural member working drawings. Where working drawings are not required, the load rating must be complete prior to work being performed on bridge elements.

# 14-2.05 Bridge Plans, Preservation Project [Rev. Jan. 2013, Mar. 2016, Apr. 2017, Nov. 2017]

For bridge preservation work included as part of a design-build or other alternate procurement method, Bridge Load Rating must be included as a hold point in the technical provisions. The Load Rating Request form should be submitted upon completion of the design plans. The load rating must be completed prior to the approval of structural member working drawings. Where working drawings are not required, the load rating must be complete prior to work being performed on bridge elements.

## 14-2.05(04) Final Plans Submission [Rev. Jan. 2011, Mar. 2016, Apr. 2017, Nov. 2017]

a. Department-Owned Bridge. For both traditional design-bid-build and alternate procurement methods such as design-build, the Bridges Division Load Rating Engineer completes the load rating for a Department-owned bridge.

<u>Traditional Project Development</u>. The completed Bridge Load Rating Request form should be sent via email to Coordinator 8. A separate set of bridge plans (excluding cross sections) should be uploaded to ERMS.

The Load Rating Request form and instructions for use are available for download from the Department's <u>Editable Documents page</u>, under Bridges.

If the analysis shows an unacceptable rating, design and plan revisions will be necessary. When resubmitting the Load Rating Request form due to a change after the initial load rating, "resubmittal" should be noted in the Description section of the form.

<u>Alternate Procurement Project Development</u>. Bridge Load Rating should be included as a hold point in the technical provisions. The Load Rating Request form should be submitted upon completion of the design plans. The load rating must be completed prior to the approval of structural member working drawings. Where working drawings are not required, the load rating must be complete prior to work being performed on bridge elements.