




Office of Engineering
Project Development Division
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John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

MEMORANDUM

TO: ALL IN-HOUSE BRIDGE DESIGNERS AND CONSULTANTS

FROM: ZHENGZHENG "JENNY" FU, P.E. 
BRIDGE DESIGN ENGINEER ADMINISTRATOR

SUBJECT: BRIDGE DESIGN TECHNICAL MEMORANDUM NO. 94 (BDTM.94) -
CAST-IN-PLACE BOX CULVERT RATING RESEARCH REPORTS
IMPLEMENTATION

DATE: August 21, 2020

Effective immediately, this BDTM applies to the structural load rating of Cast-in-Place (CIP) concrete box culverts. Significant issues arise when load rating Louisiana CIP concrete box culverts. These culverts have been providing good service, but are being rated as deficient when analyzed using the current AASHTO LRFD Bridge Design Specifications and the AASHTO Manual of Bridge Evaluation.

Therefore, in an effort to improve CIP concrete box culvert load ratings, the research reports shown below are to be incorporated when performing structural load ratings for CIP concrete box culverts. Load rating engineers should use judgment when selecting an approach recommended in the reports.

1. **LA DOTD CIP Box Culvert Rating Study Report dated 07/15/2020.**
2. **NCHRP Web-Only Document 268: Proposed Modifications to AASHTO Culvert Load Rating Specifications dated July 2019.**

The above two reports can be found on the Bridge Design website under the following folder:
[Bridge Load Rating](#) > [Bridge Load Rating Documents](#) > [Culverts](#)

3. **LTRC Report 593: Live Load Rating of Cast-in-Place Concrete Box Culverts dated July 2018.**
This report can be found on the LTRC website under "Final Reports" at the following location:

https://www.ltrc.lsu.edu/pubs_final_reports.html

This technical memorandum is posted on the LA DOTD Website under [Inside La DOTD](#) > [Divisions - Engineering](#) > [Bridge Design](#) > [Technical Memoranda – BDTMs](#)

Please contact Kelly Kemp (225-379-1809, kelly.kemp@la.gov) if you have questions or comments.

ZZF/kmk

Attachments

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