

### BRIDGE DESIGN REVIEW CHECKLISTS

*Reference: IDM 14-2.0 Plan Submittals (2.04 Bridge Plans, New Construction or Replacement Project and 2.05 Bridge Plans, Preservation Projects)*

A brief summary of the latest revisions has been provided at the end of this document.

#### OVERVIEW

In an effort to create more uniformity and transparency throughout the design review, INDOT Bridge Engineering has developed a series of Design Review Checklists.

The following documents can be found attached to this BDA:

[Bridge Replacement\\* Checklist](#)

[Bridge Rehabilitation Checklist](#)

[Bridge Preventive Maintenance Checklist](#)

\*Replacement Checklist will also be used for New Bridge Construction

These documents provide detailed lists of the items to be reviewed at each stage for each specific project type. The design reviewer will complete the checklists and attach it to the Transmittal Letter file in ERMS. The design community is encouraged to utilize these checklists as part of each designer's quality control plans, but the checklists are not to be submitted by the designer.

The checklists are intended to be dynamic and updated over time to reflect changes in design guidance and feedback.

#### DETAILS

The use of the checklist by design reviewers will be required for submittals made on or after January 1, 2021. Reviewers and designers are encouraged to begin incorporating the checklists in their workflows immediately.

Items marked as "Deficient" by the reviewer will be brought to the attention of INDOT Bridge Engineering and a resubmittal may be required at the Department's discretion depending on the severity of the issue. All reviewer notes and comments must be addressed by the designer in the next submittal.

For Stage 3 submissions, deficient items will always require a resubmittal of Stage 3 before Final Tracings can be submitted.

#### NOTE FOR PRESERVATION PROJECTS

Rarely is a Stage 2 design review warranted for preventive maintenance work types. Occasionally a Stage 2 is necessary for environmental documentation, utility coordination or other reasons beyond design review. In those instances, the designer is encouraged to submit complete Stage 3 plans on the Stage 2 timeframe whenever possible. The reviewer will then use the Stage 3 checklist for the submittal. When a full Stage 3 submittal is not possible at an earlier Stage 2 date, the designer should indicate the intent of the submittal and note the missing items in the transmittal letter.

# INDOT | BRIDGE DESIGN AIDS

BDA 100-03 | DECEMBER 18, 2020 (REV. DEC 2023)

Please send questions and comments to [INDOTBridgeDesign@indot.in.gov](mailto:INDOTBridgeDesign@indot.in.gov).

## REV. DEC 2023

Yellow highlighting has been added to all STG3 checklists indicating items that will require a resubmittal if noted as deficient. These items correspond directly with items on the FHWA PS&E checklist that is part of the agency's federal reporting requirements. Other deficient items across all stages may also require a resubmittals.

Thermal movements have been added as an item in the "Overall" category in each checklist. The intent is to check that thermal expansion and contraction has been accounted for throughout the structure.

Other minor edits have been made throughout the checklists. Those has been noted in red font.

Information on submittals names for Preservation Projects has been removed from the BDA. All design submittals should now be using the "Staged" nomenclature.

## REV. APR 2023

Background:

To streamline the Bridge Engineering review process, the checklists have been updated to clarify the field check meeting minutes should be circulated to all attendees for concurrence prior to the STG1 submission. The designer should include a response date in the email, typically 2-3 weeks. Any nonresponses should be considered concurrence. Including a copy of the email confirming this opportunity for concurrence will meet this requirement.

1. The Documentation section on the STG1 checklist for Preventive Maintenance was updated to clarify a copy of the field check meeting minutes are to be sent to all field check invitees including but not limited to the project manager and the district bridge asset engineer prior to the STG1 submission.
2. The Supplemental Documents section on the STG1 checklist for Bridge Rehabilitation was updated to clarify a copy of the field check meeting minutes are to be sent to all field check invitees including but not limited to the project manager and the district bridge asset engineer prior to the STG1 submission.

Minor updates:

A note was added to the Level One Checklist items across all bridge work types and stages. The note reminds reviewers to check that the design speed is greater than or equal to the posted speed.

A note was added to the Pavement Design item at STG3 for all bridge work types. The note indicates a copy of the standard design table highlighted with the specific selection is acceptable documentation.

## REV. NOV 2021

1. Stage 2 Checklist added for Preventive Maintenance projects.
2. Copy of Approved Meeting Minutes to be included with STG3 for projects not requiring a STG2 submittal .
3. MSE Wall Review Design Review Checklist added to STG3 per Design Memo 21-02.
4. Final Pavement Design Memo with appropriate terminal joint included in plans added to STG3 Reports Section.

