

LRFD Bridge Design Manual Update ~ July 1, 2024

BDM Articles Updated	Description of BDM Update	Implementation Date
1.5, 1.5.1 (see also 3.5)	Preferred sidewalk cross slope on bridge is 1.5%, maximum is 2%.	July 1, 2024
1.8.2.1, 5.2.4.1.2, 12.1.9.4.2	Added language that Construction Survey be included as mandatory bid item for new structures (culvert and bridge), deck replacements, and widenings.	October 15, 2024 Letting
3.1.5.1	Reference update for Iowa DOT Standard Specifications.	July 1, 2024
3.1.5.2	Reference added for Iowa Bicycle and Pedestrian Long Range Plan. Removed reference for Iowa Trails 2000.	July 1, 2024
3.2.1	Clarification that structure widenings, extensions, and repairs become part of the existing structure FHWA number or Asset ID number. Clarifies that DOT Preliminary Design Unit staff may need to request Asset ID numbers.	July 1, 2024
3.2.2, C3.2.2	Edits and cross reference updates consistent with recent freeboard changes to BDM 3.2.2.4.	July 1, 2024
3.2.2.1	Hydrology policy updates.	July 1, 2024
3.2.2.2	Added a condition for use of Iowa DOT Bridge Backwater Program.	July 1, 2024
3.2.2.10	This article has been renamed “Stream Stability” and expanded to include a new article for Grade Control Structures.	July 1, 2024
3.5, C3.5	Updated and additional guidance relative to sidewalk or path profile and drainage on a highway structure.	July 1, 2024
3.6.2.2, C3.6.2.2	Added cross reference to BDM 3.5 Deleted article and commentary information to be superseded by BDM 3.5 additional guidance.	July 1, 2024
3.8	Increase preliminary estimated cost percentage for bridge aesthetics to 5%.	July 1, 2024
3.10.1	Permit application submittal information updates. Added information regarding the Notice of Completion to Iowa DNR for sites constructed under a flood plain construction permit. NFIP Record of Coordination requirement clarification.	July 1, 2024
3.11	Update related to the DNR’s Joint application Form 36 phase out.	July 1, 2024
4.1.5.1	Reference update for Iowa DOT Standard Specifications.	July 1, 2024
4.2.1	Updates to policy on hydrology.	July 1, 2024
4.2.9	New Article on Stream Stability.	July 1, 2024

4.3.2	Update to language regarding the documentation of pipe culvert site history.	July 1, 2024
5.2.1.1, 5.2.4.1.2	Deleted outdated text related to j-bar design in Art. 5.2.1.1. In Article 5.2.4.1.2, added text and Table 5.2.4.1.2-2 to address j-bar size and spacing requirements for TL-4 and TL-5 single slope rails in interior and end regions.	July 1, 2024
5.2.2.4	Updated Table 5.2.2.4-2. Corrected an Mc-base yield line value and added table notes.	July 1, 2024
5.2.4.1.2	Polypropylene fiber will now be bid separately from Class C and HPC deck concrete when used on selected projects. This is effective for the October 15, 2024 letting. DS-23063 “Fiber Reinforcement for Structural Concrete” shall be used.	October 15, 2024 Letting
5.8.1.2.1.1	Added clarification to Note 1 for Table 5.8.1.2.1.1-2 regarding minimum end region lengths for rail bar spacing and how it relates to the standards.	July 1, 2024
5.8.3.1.1, 5.8.3.4, C5.8.3.4.1, 5.8.6.1.1, 6.5.1.1.1	New BE pavement expansion joint for integral abutment bridges replaces CF-1, CF-2, and CF-3 joints. This is effective for the October 15, 2024 letting.	October 15, 2024 Letting
7.2.4.10	Clarified vertical spacing clearance requirement for culverts placed beneath bridges with tight beam spacing.	July 1, 2024
12.1.1, 12.1.6, 12.1.7, 12.1.11	Address deck replacement projects and bridge rating requirements for bridge repairs.	July 1, 2024
12.1.9.1.2	Polypropylene fiber will now be bid separately from HPC-O deck overlay concrete. Fiber is currently used for all deck overlay projects with HPC-O. This is effective for the October 15, 2024 letting. DS-23063 “Fiber Reinforcement for Structural Concrete” shall be used.	October 15, 2024 Letting
12.1.11, C12.1.11	Address traffic management concerns for narrow interstate bridges.	July 1, 2024