

Department of Transportation

Technical Leadership Center ODOT Bridge Section MS #4 4040 Fairview Industrial Dr. SE Salem. OR 97302

April 28th, 2023

To: Users of Oregon DOT Bridge Design Manual

Subject: Revisions to the ODOT Bridge Design Manual

The BDM has been updated with multiple technical revisions. See the attachment for an update summary. The revised BDM and format guide are being released in web-based Acrobat files, which can be accessed at the following web site:

http://www.oregon.gov/ODOT/Bridge/Pages/Bridge-Design-Manual.aspx

The revised BDM can be viewed from the site or downloaded and printed. The documents are also available on Projectwise.

These revisions apply to new design projects as of the effective date of July 1st, 2023. New projects for in-house designs are those that do not have an approved DAP by the effective date. New projects for outsourced projects are those that do not have an executed work order contract for PE. However, existing projects may make use of these revisions, if agreed to by the Agency Project Manager or Project Team Leader.

We would like to thank the many people who provided comments and suggestions for this BDM update. Please send comments or suggestions for the October 2023 BDM to Emily Clyburn at: emily.clyburn@odot.oregon.gov



Raymond Bottenberg State Bridge Engineer

Attachment: BDM Update Summary April 2023

April 2023 Update ODOT Bridge Design Manual Update Summary

The following revisions are in reference to current BDM section numbers:

Section 1 – Design Standards and Practices	
1.1	Removed "standards" from the description of BDM Section 2.
1.2.1.1	Added 2022 interims of LRFD Seismic Bridge Design. Deleted reference to IBC for design of structures within public ROW
1.2.4	Deleted BDM section references pertaining to corrosive environments.
1.2.7	Added ADA improvements as a consideration for bridge layout.
1.2.7.1	Added ADA considerations section discussing items relevant to bridge layout.
1.2.9.2	Clarified that bridge ID markers apply to existing structures, widenings and large culverts that have a bridge number assigned.
1.2.10	Clarified slopes related pedestrian overpass and underpass ramps to comply with 2010 ADA Standards for Accessibility Design.
1.2.10.2.2	Clarified work activity triggers walkway requirements, intersections and temporary traffic control and work zones.
1.5.2	Added language about ADA slip resistance requirements on bridge concrete finishes.
1.6.4.4	Added reference to BDM 1.6.2.15 to clarify location of painting requirements at end bents.
1.8.2	Added language about ADA slip resistance requirements on timber pedestrian structures.
1.9.2.2	Added clarification on deck overhang design tables in DET3170 & DET3171.
1.9.2.5.1	Clarified approach slab ledge design criteria.
1.9.3.1.2	Added a table to display deck preparation options.
1.9.5.1	Changed requirements for treatment of sidewalk runoff on bridges.
1.10.5.4.2	Provides guidance on the connection between a pile and pile cap.

1.10.5.8 Rewrote scour design requirements.
1.12.6.2 Clarified use of material for encased conduit to be Sch. 80 PVC.
1.13.3 Added requirements regards objects that may protrude into pedestrian or bike facilities.
1.14.2.4 Added ADA requirements for bridge joints spanning pedestrian walkways.
1.17 Modified to reflect the criteria for classifying Oregon bridges as Ordinary, Recovery, or Critical for purpose of seismic design and performance. Provide design criteria for bridges subject to tsunami effects. Remove outdated information and rearranged select articles.

Acronyms Updated to reflect manual content.

Section 2 - Processes

- 2.1 Removed "standards" from the description of BDM Section 2.
- 2.5 Added table to document QC Plan Revision History

Format Guide

Incorporated required Quality Control Plan updates in the BDM update process.
 Prescribed format for titling published documents.

General Notes

Deleted references to AASHTO interims since they are no longer issued.

Clarified use of HPC4500 in approach slabs.

2023_Letter_for_Final_Revisions_to_BDM

Final Audit Report 2023-04-28

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