



Oregon

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FILE CODE:

June 22, 2010

To: Users of Oregon DOT Bridge Design and Drafting Manual

Subject: New changes and additions to the ODOT Bridge Design and Drafting Manual

The ODOT Bridge Design and Drafting Manual (BDDM), 2004 has been updated with several changes and additions. The revised Manual is being released in web-based Acrobat files, which can be access at the following web site:

http://www.oregon.gov/ODOT/HWY/BRIDGE/standards_manuals.shtml#Bridge_Design_Drafting_Manual

The Manual and changes can be viewed from the site, or downloaded and printed. The update consists of 18 areas covering changes listed in the attachment.

The BDDM changes apply to new design projects as of the effective date of June 21, 2010. New projects for ODOT designed projects 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 new changes, if agreed to by the CPM or Project Team Leader.

We are very interested in comments and suggestions on these proposals from those who use the manual. Please provide comments and questions about the changes to Kevin Davidson at (503) 986-3342, Kevin.F.Davidson@odot.state.or.us or Craig Shike at (503) 986-3323.

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Attachment: BDDM Update Summary April 2010

BVJ/mvs

April 2010 Update
ODOT Bridge Design & Drafting Manual

Update Summary

Section 1 – Design and Detailing Practices

1.1.1.1 Standard Specifications & Standard Drawing Manuals – adopt AASHTO 5th Edition LRFD Bridge Design Specifications, and LRFD Guide Specifications for the Design of Pedestrian Bridges, December 2009. List the AASHTO Guide Specifications for LRFD Seismic Bridge Design.

1.1.2.9.9 Bridge ID Paddles – clarify instructions: include in bridge plans (not traffic sign plans).

1.1.5.5 Drilled Shafts – (Was revised Oct. 2009, no change this time)

(12) Shaft Reinforcement – clarify moments in shafts, revise language to agree with seismic guide specifications.

1.1.7.2 Live Loads – (2) Pedestrian Structures: revise to follow AASHTO LRFD Guide Specification for the Design of Pedestrian Bridges (December 2009). Combine truck load Fig's 1.1.7.2 F&G into one diagram 1.1.7.2F per Guide Spec Fig. 3.2-1.

1.1.10 Seismic Design:

1.1.10.2-1 General Considerations – Rearrange subsection to clarify design approach for each retrofit phase.

1.1.10.3-1 General Considerations – Relax seismic design requirements for pedestrian structures that do not cross highways. Clarify requirements for buried structures supported on drilled shafts or piles.

1.1.15.7 Box Girder Bottom Slab – Orient transverse bars in same direction as deck transverse bars. Add cross reference to BDDM 1.1.20.1 for deck transverse bar orientation.

1.1.16.8 Post-Tension Strand Duct Placement – add duct tie requirements, correct duct high point and low point details.

1.1.20.1 Decks, Design and Detailing

Skewed decks, transverse bar orientation – add reference to AASHTO LRFD 9.7.1.3. Add cross reference to BDDM 1.1.15.7 for box girder bottom slab reinforcement.

1.4.4.2.2 Bridge Superstructures – new subsection, add snooper crane discussion

1.4.5.1 Culvert Design, General – designed by Tech Centers, clarify 6' diameter or greater gets structure number & drawing number, 20' or longer span is NBI "bridge".

1.4.11 Bat Habitat – new section

Section 2 – Drafting Practices

2.1.3.2 What Bridge Headquarters Needs At Completion of a Design Project – delete Foundation Report.

2.7.3.3 Hydraulic Data – add scour elevations to Fig. 2.7.3.3A Hydraulic Data table

2.7.11.1 As-Constructed Drawings – add requirements for various items to include.

A2.1.3.1 Contract Plans Sheet Development Matrix – revised

A2.2.2 Material Patterns – revised

A2.6 Type, Size and Location Plan & Elevation –
Bridge Design Checklist: add scour elevations