Oregon
Theodore R. Kulongoski, Governor

Department of Transportation
Transportation Building
355 Capitol St. NE, Rm. 301
Salem, OR 97301-3871

FILE CODE:

July 1, 2011

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 issues covering changes listed in the attachment.

The BDDM changes apply to new design projects as of the effective date of July 1, 2011. 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 Bridge Design changes to Kevin Davidson at (503) 986-3342, Kevin.F.Davidson@odot.state.or.us or Craig Shike at (503) 986-3323. Please provide comments and questions about the Bridge Drafting changes to Jeff Silbernagel at (503) 986-3362, Jeffrey.Silbernagel@odot.state.or.us or Craig Shike at (503) 986-3323.

BJohnson

Bruce V. Johnson
State Bridge Engineer

Attachment: BDDM Update Summary April 2011

BVJ/mg

April 2011 Update
ODOT Bridge Design & Drafting Manual
Update Summary

Section 1 – Design and Detailing Practices

1.1.2.7 Bridge End Panels and Supports – Remove references to local agency bridges and optional end panels.

1.1.2.9.12 ODOT Accelerated Bridge Construction (ABC) Guidelines – add explanation and figures for new Analytic Hierarchy Process (AHP) decision and cost analysis tool

1.1.2.12 Final Design, General – clarify language regarding P.E. stamping

1.1.8.3 Wingwall Design and Construction – add background and explanation on longtime Region 4 preference of having bottom of wingwalls level.

1.1.8.4 End Bents, Integral Abutments – use integral abutments where possible

1.1.8.6 Pile Cap Abutment Details – add guidance for girders which are set on elastomeric pads, then fixed to bent. Fig. 1.1.8.6A: convert metric dimensions

1.1.10.2-1 Seismic Retrofit – clarify Performance Levels for Lower Level Ground Motion with respect to FHWA-HRT-06-032 retrofitting manual

1.1.10.6 Liquefaction Evaluation and Mitigation Procedures – Note 3: add note for design submittals to HQ Bridge Section

1.1.12.5 Permanent Strengthening of Reinforced Concrete Bridges
(3) Epoxy Injection – revisions & clarifications (added 6/10/11)

1.1.20.1.1 Decks, Design and Detailing – new section for Precast Deck Panels

1.1.20.5 Deck Overlays – general cleanup, revise & clarify bid basis for Class 2 and Class 3 deck preparation

1.2.1.5 Bearing Stiffeners – delete skewed weld detail, add instructions for skewed bearing stiffeners.

1.2.1.8 Beam Camber, (2) Shrinkage Camber – remove numeric values from Ec and f'c, make generic.

1.4.9.4 Falsework, General – clarify capacity of jacking systems

1.4.11 Bat Habitat – added guidance for bat habitat on bridges

1.6 ODOT Design Instructions for AASHTO LRFD Bridge Design Specifications
– add LRFD-BDDM Cross-Reference Table

Section 2 – Drafting Practices
2.1.1 Standard File Format – clarify MicroStation requirements

2.1.3.1 Drawings Start to Finish – various revisions