

August 2012 Update
ODOT Bridge Design & Drafting Manual

Update Summary

Section 1 – Design and Detailing Practices

1.1.2.9.9 Bridge ID Markers – Revise to have contractor furnish & install (not supplied by ODOT Sign Shop).

1.1.10.2-1 Seismic Design, General Considerations –

-Bridge Widening: clarify flow chart and decision criteria for seismic performance of widened structures.

-Temporary detour bridges: clarify seismic design requirements for temporary detour bridges that carry the traveling public.

1.1.12.5 Permanent Strengthening of Reinforced Concrete Bridges –

(3) Epoxy Injection – clarify crack size criteria. Renumber subsections into decimal sequence: 1.1.12.5(3) becomes 1.1.12.5.3 etc.

1.1.13.1 Reinforcement, General – add new section for Grade 80 bars:

(17) ASTM A706 Grade 80 Reinforcement. Renumber subsections into decimal sequence: 1.1.13.1(17) becomes 1.1.13.1.17 etc.

1.1.14.1 Design of Precast Prestressed Elements –

-Design – General: For side by side slabs, boxes and girders w/ ACWS & waterproofing membrane: increase minimum AC thickness from 2” to 3”. Corrects inconsistency between this section and 1.1.7.1 (4). For spread slabs & box beams, increase minimum deck thickness to 8”. Adds allowance for full-depth precast deck panels.

-Prestress Losses: revise BDDM now that NCHRP loss calculations have been incorporated into AASHTO LRFD 5.9.5.4.

-Girder Shape Selection: Adds new guidance to clarify selection of girder type.

1.1.14.2 Design and Detailing of Precast Prestressed Girders – Renumber subsections into decimal sequence: 1.1.14.2(1) becomes 1.1.14.2.1 etc.

1.1.20.5 Deck Overlays –

(5) Warrants for Overlays – revise chloride level criteria, add investigation recommendations for decks that are in relatively poor condition. Renumber subsections into decimal sequence: 1.1.20.5(5) becomes 1.1.20.5.5 etc.

1.1.21 Bridge Rail :

1.1.21.1.1 Rail Selection, General – clarify Texas rails & off-NHS routes.

1.1.21.1.2 Vehicular Rails – Clarify pre-1998 BR206 2-tube rail NCHRP 230 applicability

1.4.4.5 Protective Screening – add guidance and clarification for screening requirements.

Section 2 – Drafting Practices

2.1.3.1 Drawings Start To Finish – change flow chart to match what is currently being done.

2.1.3.2 What Bridge Headquarters Needs at Completion of a Design Project - updated

2.4.1 Request for Drawing Numbers – clarify options for requesting drawing numbers

2.7.11.1 As-Constructed Drawings – show Engineer of Record initials in revisions table for as-constructed.

A2.2.2 Linework and Levels – removed unused levels

A2.7.1 Deck Plan (Detail Reference Numbers) – add number 81 for Bridge ID Markers.