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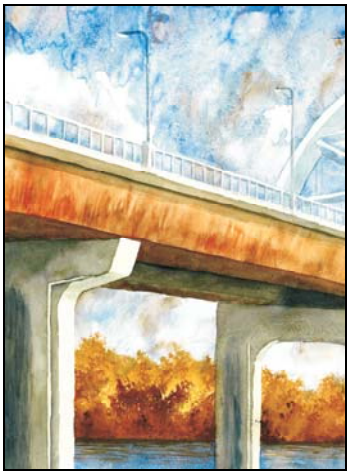

Bridge Manual

Standard Details

DATE: January 29, 2010
TO: Bridge Manual Users
FROM: DTSD – Bureau of Structures
SUBJECT: **January, 2010 Bridge Manual Update**

The Bridge Manual chapters have text and standards that have been revised. Please see the attached sheets for a list, with brief explanation, of the Text and Standards that were revised.

Many changes were fairly minor. Of note, **Chapter 19 has a new prestressed girder shape – 36W"**. The existing 36" prestressed girder is still available for use for both new and rehabilitation work, and may be more economical for shorter spans, etc.

If anything in a given chapter was edited, the date for the entire chapter was updated. A vertical black bar in the left margin notes all changes. Previous black bars were not removed from chapters which were not edited in this edition.

The user's feedback regarding the Bridge Manual is important as that is where we get many ideas for corrections, clarification and new ideas for enhancement.

January 2010 Bridge Manual Text Update Summary

Chapter	Page Number(s)	Change
5	7	Changed SF to SY for "Full Depth Repair"
6	20,21	Bold font to emphasize when it's critical to get FHWA involvemnt
	27	Update pile information & removed specific values (ref. Table 11.3-5)
	42,43	Pile length if driven to rock and preboring length clarified
9	4	Updated list of epoxy-coated reinforcement in abutments
11	15	Increase max. pile spaoing if displacement pile spacing >= 100 ft
	22,23	Removed specific pile values and referenced Table 11.3-5
	22,23	Bold font to emphasize not to indicate max. pile resistance if not req'd
	40,41	**Table changed to reflect Ø going to 0.5 from 0.4, also values for H-piles to reflect feedback from the field**
	43	Better defined Ø as $Ø_{dyn}$
12	18	Terminology updated to match AASHTO
13	6	Including new 36W" prestressed girder in list of structure types
	13	Fixed typos regarding WS loading (0.04 ksf)
	20	For certain pier shapes, clarified policy item for 400 k collision load
	38	Modified exception to include shrinkage and temperature reinforcement
17	49	Include all girder shapes for design sections for deck design
	67	In policy item, clarified that *some* w-flanged girders can have 4'-0" overhangs. Note not to provide bracing detail for exterior girders. Added 36W" section.
19	13	Added skew as a DF variable. Removed Table 17.2.6 reference
	27	Replaced "single spacing of stirrups" with symmetric spacing
	28	Changed S to s as defined variable
	29	Added definition for Vi and Mmax
	43	Span length table for new 36W"
	44	Changed lengths for 1/10 pt. Lifting consideration

Chapter	Page Number(s)	Change
24	26	Clarified minimum flange plate sizes for plate girders
	39	Clarified Kg
		Removed a rigid cross section analysis requirement that was contradictory to a "WisDOT exception to AASHTO" in Chapter 17
	45	Clarified shear stud use on rehabs
	48,49	Less stringent requirement for continuity bar cuttoff
	Ex1, pg7	Noted that the composite slab width calculation is obsolete (it will be fixed at a later date)

45	16	Removed paragraph and added new WisDOT policy item
	28	Updated link
	Ex2, pg 5	Updated composite slab width calculation
	Ex3, pg 8	Updated composite slab width calculation
	Ex4, pg 7	Noted that the composite slab width calculation is obsolete (it will be fixed at a later date)

January 2010 Standard Details Update Summary

Chapter 12

Std 12.01
- Changed detail in Plan View to show top of abutment sloping between beam seats for semi-exp. abutment
- Added reference to new 36W" prestressed girder
- Added text to show coating of dowel bar

Std 12.02
- Clarified which abutment bars are to be coated
- Changed terminology under Design Loads to match AASHTO

Std 12.04
- Clarified which abutment bars are to be coated
- Changed terminology under Design Loads & Notes to match AASHTO

Std 12.06
- Clarified which abutment bars are to be coated
- Changed terminology under Design Loads & Notes to match AASHTO

Std 12.07
- Changed terminology under Design Loads to match AASHTO

Std 12.08
- Added reference to new 36W" prestressed girder
- Added text to show coating of dowel bar

Chapter 15

Std 15.01
- Use of Geotextile Fabric Type 'HR' was added to details

Chapter 18

Std 18.01
- Added text to show coating of dowel bar

Std 18.02
- Added text to show coating of dowel bar

Chapter 19

Std 19.11
- ***New*** 36W" PRESTRESSED GIRDER DETAILS

Std 19.12
- ***New*** 36W" PRESTRESSED GIRDER DESIGN DATA

Std 19.31
- Added 36W" information
- Added text to show coating of dowel bar

Std 19.32
- Added 36W" information

Std 19.33
- Added 36W" & deleted reference to obsolete Std 24.12

Std 19.34
- Added 36W" to slab & superstructure details

Std 19.38
- ***New*** INTERM. STEEL DIAPHS. FOR 36W" PRESTRESSED GIRDERS

Chapter 24

Std. 24.02
- Clarifies issue regarding allowing shear studs to be welded in the no field welding zone on the top flange

Chapter 27

Std. 27.05
- Corrected date that was missed on last update
- Added text to show coating of dowel bar

Std. 27.06
- Removed reference to Special Provision that doesn't exist anymore

Std. 27.07
- Added references to new 36W" prestressed girder

Std. 27.09
- Added references to new 36W" prestressed girder

Chapter 28

Std. 28.03
- Added reference to new 36W" prestressed girder

Chapter 30

Std 30.12
- Added note pertaining to location of Bench Mark Cap

Std 30.13
- Added note pertaining to location of Bench Mark Cap

Std 30.16
- Added 'Minimum" to Deck Edge Thickness. This is a requirement to allow proper placement of the anchor system.