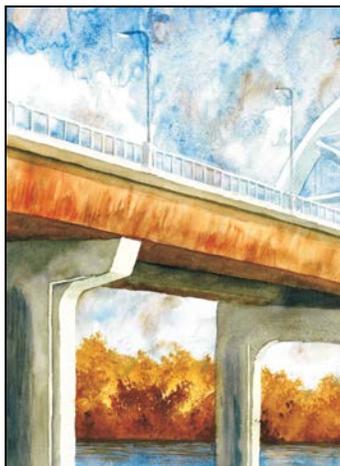
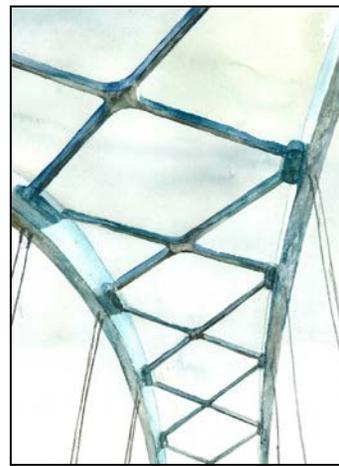




Division of Transportation
System Development
Bureau of Structures
PO Box 7916
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Bridge Manual



Standard Details

DATE: July 31, 2014
TO: Bridge Manual Users
FROM: DTSD – Bureau of Structures
SUBJECT: **July 2014 Bridge Manual Update**

The Bridge Manual revisions to text and standards are now complete and posted online for this six month cycle. Please see the attached sheets for a list, with brief explanation, of the Text and Standards that were revised. Corresponding plan insert sheets have also been updated and posted online.

Of particular interest in this edition:

- **Chapter 19:** Revised “Maximum Span Length vs. Girder Spacing” tables to better reflect actual loading (previous tables were slightly unconservative).
- **Standard 13.03:** Now explicitly states that cofferdams should not be used for pile encased piers.
- **New Standards 30.26 – 30.29 – Standards for NY 3&4 Rail Railing:** Due to clarification/approval needed for a couple of details, these railings are on hold. Once the situation has been rectified, the standards will be posted online (we won’t wait until the January Bridge Manual release if done beforehand).
- **New Standard 36.08 – Standard for Guardrail Post Anchorage System:** Crash tested anchorage to work in conjunction with FDM SDD 14 B 51-1.
- **Insert Sheets:** Numerous insert sheets have been updated and/or created for this 6-month cycle. Please make sure that the current insert sheets are being utilized for structures projects.
- **New Special Provisions:**
 - Wall Concrete Panel Mechanically Stabilized Earth LRFD/QMP
 - Wall Wire Faced Mechanically Stabilized Earth LRFD/QMP
- **Note: Other Special Provisions have been (or are being) converted to STSP’s as part of a statewide effort to reduce SPV’s.**

Most other changes are fairly minor. Please use the example calculations with care (follow along in AASHTO). A couple of mistakes have been pointed out. Unfortunately, due to time/resource issues, the corrections were not made at this time.

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 update.

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

July 2014 Bridge Manual Text Update Summary

Chapter	Page Number(s)	Change
1	1	Added Chapter 7 - Accelerated Bridge Construction to Index (had been overlooked earlier)
3	3	Clarified guidance regarding vertical curve crest location on bridges
4	8	Added a reference to the Traffic Guideline Manual for signs and medallions
6	29	Now states that each substructure must have own plan sheet(s)
	38	"Excavation Common" may be used instead of "Excavation for Structures Bridges" if the excavation is req'd for the roadway.
9	5	Removed reference to bar lengths based on mandatory construction joints in pier shafts as such joints are optional
	15	Describe paint systems for I-girder vs. tub girder
12	24,29,30,37	Clarified approach loads and structural approach usage
14	9	Clarified that walls used as wings for bridges <i>and culverts</i> do not require R-numbers
	54	Corrected formula at bottom of page -- term in parantheses was in denominator rather than numerator.
	126,127	Included wall QMP Special Provisions
19	42,43,44	Updated design table for wide flange girders based on a thicker haunch thickness
24	86	Describe paint systems for I-girder vs. tub girder
29	2	Highlighted in first paragraph the acceptable spread of water at gutterline and what it is a function of.

July 2014 Standard Details Update Summary

Chapter 4

- Std 4.01 ■ No revisions.

Chapter 7

- Std 7.01 ■ No revisions.
- Std 7.02 ■ No revisions.
- Std 7.03 ■ Minimum end of cap dimension changed to 3'-6" (glitch had it at 11")
 - Revised boxed statement regarding precast pier design development
- Std 7.04 ■ No revisions.

Chapter 11

- Std 11.01 ■ No revisions.

Chapter 12

- Std 12.01 ■ Added "Rodent Shield Detail" and added note to clarify B.F. bars
 - Added wingwall width when "NY3" or "NY4" railing is used.
- Std 12.02 ■ Added top of wing details when "NY3" or "NY4" railing is used.
- Std 12.03 ■ Changed "Rodent Shield Detail" reference and added note to clarify B.F. bars
 - Corrected paving block width in Section B-B
 - Corrected note referencing A3 Bars - wing with pile
 - Added abutment body chamber note if skew > 40°
- Std 12.04 ■ No revisions.
- Std 12.05 ■ Changed "Rodent Shield Detail" reference and added note to clarify B.F. bars
- Std 12.06 ■ No revisions.
- Std 12.07 ■ Changed "Rodent Shield Detail" reference and added note to clarify B.F. bars
- Std 12.08 ■ Changed "Rodent Shield Detail" reference and added note to clarify B.F. bars
- Std 12.09 ■ No revisions.
- Std 12.10 ■ Added "FF Abut" and "BF Abut" labels
- Std 12.11 ■ Changed 20'-0" slab dimension reference
- Std 12.12 ■ Added keyed note near section B-B
- Std 12.13 ■ No revisions.

Chapter 13

- Std 13.01 ■ No revisions.
- Std 13.02 ■ Changed min. dimension of cofferdam beyond footing from 1'-6" to 3'-0"
- Std 13.03 ■ Added Designer Note to not use cofferdams with pile encased piers
 - Added Designer Note to not use construction joints for pile encased piers
 - Slightly rearranged views (no content change)
- Std 13.04 ■ No revisions.
- Std 13.05 ■ No revisions.
- Std 13.06 ■ No revisions.
- Std 13.07 ■ No revisions.
- Std 13.10 ■ No revisions.
- Std 13.11 ■ No revisions.

Chapter 14

- Std 14.01 ■ Changed "Rodent Shield Detail" reference
- Std 14.02 ■ No revisions.
- Std 14.03 ■ Changed "Rodent Shield Detail" reference
 - Added Designer Note for panel detailing

- Std 14.04 ■ No revisions.
- Std 14.05 ■ No revisions.

Chapter 15

- Std 15.01 ■ No revisions.
- Std 15.02 ■ No revisions.
- Std 15.03 ■ Changed "Rodent Shield Detail" reference

Chapter 17

- Std 17.01 ■ Changed Z-bars to C-bars in Section Thru Sidewalk to avoid edge of deck form & paving machine interference.
 - Added "NOTE" to the note below "Cross Section Thru Unanchored Median"
- Std 17.02 ■ Revised V-Groove in Designer Notes to be 6" not 3" from face of Abutment

Chapter 18

- Std 18.01 ■ No revisions.
- Std 18.02 ■ No revisions.

Chapter 19

- Std 19.01 ■ No revisions.
- Std 19.02 ■ No revisions.
- Std 19.03 ■ No revisions.
- Std 19.04 ■ No revisions.
- Std 19.11 ■ No revisions.
- Std 19.12 ■ No revisions.
- Std 19.13 ■ No revisions.
- Std 19.14 ■ No revisions.
- Std 19.15 ■ No revisions.
- Std 19.16 ■ No revisions.
- Std 19.17 ■ No revisions.
- Std 19.18 ■ No revisions.
- Std 19.19 ■ No revisions.
- Std 19.20 ■ No revisions.
- Std 19.31 ■ No revisions.
- Std 19.32 ■ No revisions.
- Std 19.33 ■ No revisions.
- Std 19.34 ■ No revisions.
- Std 19.35 ■ No revisions.
- Std 19.36 ■ No revisions.
- Std 19.37 ■ No revisions.
- Std 19.38 ■ No revisions.
- Std 19.51 ■ No revisions.
- Std 19.52 ■ No revisions.
- Std 19.53 ■ No revisions.

Chapter 23

- Std 23.01 ■ No revisions.
- Std 23.02 ■ No revisions.
- Std 23.03 ■ No revisions.

Chapter 24

- Std 24.02 ■ No revisions.

- Std 24.03 ■ No revisions.
- Std 24.04 ■ No revisions.
- Std 24.06 ■ No revisions.
- Std 24.08 ■ No revisions.
- Std 24.09 ■ No revisions.
- Std 24.10 ■ No revisions.
- Std 24.11 ■ No revisions.
- Std 24.12 ■ No revisions.

Chapter 27

- Std 27.02 ■ No revisions.
- Std 27.05 ■ No revisions.
- Std 27.06 ■ No revisions.
- Std 27.07 ■ No revisions.
- Std 27.08 ■ No revisions.
- Std 27.09 ■ No revisions.

Chapter 28

- Std 28.01 ■ No revisions.
- Std 28.02 ■ No revisions.
- Std 28.03 ■ No revisions.
- Std 28.04 ■ No revisions.
- Std 28.05 ■ No revisions.
- Std 28.06 ■ No revisions.
- Std 28.07 ■ No revisions.
- Std 28.08 ■ No revisions.

Chapter 29

- Std 29.01 ■ Added Designer Note requesting location of holes for drain pipe bracket req'd in the girder web be placed on the Prestressed Girder sheet in the plans
- Std 29.02 ■ Added Designer Note requesting location of holes for drain pipe bracket req'd in the girder web be placed on the Prestressed Girder sheet in the plans
- Std 29.03 ■ Added Designer Note requesting location of holes for drain pipe bracket req'd in the girder web be placed on the Prestressed Girder sheet in the plans

Chapter 30

- Std 30.01 ■ No revisions.
- Std 30.02 ■ Removed nested cell showing railing in Section Thru Railing
- Std 30.04 ■ Clarified anchor bolt diameter (removed ambiguous note from General Notes and put diameter on drawing of anchor bolt).
- Std 30.05 ■ Clarified anchor bolt diameter (removed ambiguous note from General Notes and put diameter on drawing of anchor bolt).
- Std 30.07 ■ Added note on Inside Elevation for Rdwy. Opening
- Std 30.10 ■ Clarified that Adhesive Anchor Connection is not to be detailed on the plan (contractor may request to use it, however)
- Std 30.11 ■ No revisions.
- Std 30.12 ■ Added note on Inside Elevation for Rdwy. Opening
- Std 30.13 ■ Added note on Inside Elevation for Rdwy. Opening
- Std 30.14 ■ No revisions.
- Std 30.15 ■ Changed "speed limit" to "design speed" in the Designer Notes
- Std 30.16 ■ No revisions.
- Std 30.17 ■ No revisions.

- Std 30.18 ■ No revisions.
- Std 30.19 ■ No revisions.
- Std 30.20 ■ Added note on Inside Elevation for Rdwy. Opening
- Std 30.21 ■ No revisions.
- Std 30.24 ■ No revisions.
- Std 30.25 ■ No revisions.
- New* Std 30.26 ■ *(on hold)*
- New* Std 30.27 ■ *(on hold)*
- New* Std 30.28 ■ *(on hold)*
- New* Std 30.29 ■ *(on hold)*
- Std 30.30 ■ Added note on Inside Elevation for Rdwy. Opening
- Std 30.31 ■ Added note on Inside Elevation for Rdwy. Opening
- Std 30.32 ■ Added note on Inside Elevation for Rdwy. Opening
- Std 30.33 ■ Added note on Inside Elevation for Rdwy. Opening
- Std 30.34 ■ No revisions.
- Std 30.35 ■ No revisions.
- Std 30.36 ■ No revisions.
- Std 30.37 ■ No revisions.

Chapter 36

- Std 36.01 ■ No revisions.
- Std 36.02 ■ Removed note specifying bid item for old Guard Rail Post Anchorage System hardware. This no longer applies.
- Std 36.03 ■ Removed note referencing Guard Rail Post Anchorage System. This item is now covered in Standard 36.08 of the Bridge Manual and FDM SDD 14 B 51-1.
- Std 36.04 ■ No revisions.
- Std 36.05 ■ No revisions.
- Std 36.06 ■ No revisions.
- Std 36.07 ■ No revisions.
- New* Std 36.08 ■ Added details for crash-tested Guardrail Post Anchorage System to coordinate with FDM SDD 14 B 51-1.
- Std 36.10 ■ No revisions.
- Std 36.11 ■ No revisions.
- Std 36.12 ■ No revisions.
- Std 36.13 ■ No revisions.
- Std 36.14 ■ No revisions.
- Std 36.15 ■ No revisions.
- Std 36.16 ■ Changed approval contact

Chapter 37

- Std 37.01 ■ No revisions.
- Std 37.02 ■ No revisions.

Chapter 38

- Std 38.01 ■ Changed title of engineer to contact & minor changes

Chapter 39

- Std 39.01 ■ No revisions.
- Std 39.02 ■ No revisions.
- Std 39.03 ■ No revisions.
- Std 39.09 ■ No revisions.
- Std 39.10 ■ No revisions.

- Std 39.11 ■ No revisions.
- Std 39.12 ■ No revisions.
- Std 39.13 ■ No revisions.

Chapter 40

- Std 40.01 ■ No revisions.
- Std 40.02 ■ Changed polymer overlay thickness from 3/8" to 1/4" min.
- Std 40.03 ■ No revisions.
- Std 40.04 ■ No revisions.
- Std 40.05 ■ No revisions.
- Std 40.06 ■ No revisions.
- Std 40.07 ■ No revisions.
- Std 40.08 ■ No revisions.
- Std 40.09 ■ No revisions.
- Std 40.10 ■ Revised date to 1-14 (missed in last revision)
- Std 40.11 ■ No revisions.
- Std 40.12 ■ No revisions.
- Std 40.13 ■ No revisions.
- Std 40.14 ■ No revisions.
- Std 40.15 ■ No revisions.
- Std 40.16 ■ No revisions.
- Std 40.17 ■ No revisions.
- Std 40.18 ■ No revisions.
- Std 40.19 ■ No revisions.
- Std 40.20 ■ No revisions.
- Std 40.21 ■ No revisions.
- Std 40.22 ■ No revisions.
- Std 40.23 ■ No revisions.
- Std 40.24 ■ No revisions.
- Std 40.25 ■ No revisions.