

2013 Bridge Design Conference

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INDOT Standards & Policy

September 17, 2013



Agenda

Communication

Policy Updates

Design Manual
Updates

Procedure
Updates

Recent Inquiries



Communication

- Design Consultant Listserv is the email distribution list used to communicate changes to the Design Manual and Standard Specifications

The on-line version of the *Design Manual* was last updated on or after January 1, 2013.

It is the designer's responsibility to check design manual after this publication. Stay current on IN by subscribing to [DesignConsultants Listserv](#).

This page last updated January 11, 2013.

Communication

- Technical Advisory and Policy Change Design Memos communicate changes to INDOT Policy and Procedures and typically involve revisions to the *Indiana Design Manual*

[INDOT](#) > [Doing Business with INDOT](#) > [Standards & Specifications](#) > Active Design Memoranda

Active Design Memoranda

- [Click here](#) to print Active Design Memoranda Index
- [Link to archived memos](#)
- [Subscribe or Unsubscribe to Design Consultants](#) e-mail list to receive automatic notification of changes concerning design memos and Design Manual updates
- [Link to Construction Memoranda](#)

Design Memos issued prior to January 1, 2013, except those listed below, have been archived. Last Updated: 08/16/2013

Number	Memo Date	Effective Date	Affected Design Manual Section	Subject	PDF Files		
					Policy	Advisory	Attachments
13-17	08/15/13	Immediately	26-2.0, Figure 26-2D	Location Control Route Survey (LCRS) and LCRS Plat		Advisory	Section 26-2.0, Figure 26-2D
13-16	08/15/13	Immediately	26-1.01	Survey Transmittal Deliverables Related to Geo-Coordinated Survey		Advisory	Section 26-1.01
13-15	08/14/13	See memo	None	HMA Pavement Pay Items for 2014 Standard Specifications Section 402		Advisory	Mixture Type Conversion Table, USP HMA
13-14	08/08/13	Immediately	Ch. 10, Ch. 11, 402-5.05, 402-5.06, 402-6.01(03)	Indiana Design Manual Rewrite		Advisory	

Communication

- Changes to the Design Manual are incorporated concurrently with the release of the Design Memo

CHAPTER 412

72-2.05(02) Bridge Scoping Report [Rev. Mar. 2012, Jan. 2013]

The Bridge Scoping Report should be prepared and submitted as soon as possible after the field inspection, but not later than 30 days after the field inspection, unless otherwise directed by the project manager. The purpose of the Bridge Scoping Report is to provide the project manager with a clear understanding of the scope of the project and the anticipated costs.

Design Memorandum	Revision Date	Sections Affected
13-01	Jan. 2013	72-2.05, Figure 72-2B



Communication

- A Special Provision Technical Advisory communicates changes to the Recurring Special Provision Menu that result from action taken by the Standards Committee.

[INDOT](#) > [Doing Business with INDOT](#) > [Standards & Specifications](#) > Special Provisions Technical Advisories

Special Provisions Technical Advisories

Last Updated: 07/18/2013

Number	Memo Date	Recurring Document
SP 13-06	07/18/13	New RSP 801-T-198
SP 13-05	07/01/13	Revised RSP 401-R-581
		New RSP 108-C-234



Communication

- Standard Drawings published each year and are effective September 1st.
 - Changes documented in Revision Notes

Drawing Series & Numbers	Drawing Title	Eff. Date
E 701-BPIL	Bridge Piling	09/04/12
E 701-BPIL-01	Reinforced-Concrete Encasement for Piles (eff. 09/04/12, prev. E 701-BPIL-02)	Revision Notes
E 701-BPIL-02	Field Splicing Pipe Piles (rev. 09/04/12)	
E 701-BPIL-03	Steel H-Pile Splice (eff. 09/04/12, prev. E 701-BPIL-04)	
E 701-BPIL-04	Steel H-Pile Splice (continued) (rev. 09/04/12)	
E 701-BPIL-05	Alternate Steel H-Pile Mechanical Splice (rev. 09/04/12)	
E 701-BPIL-06		
E 702-BCAW	STANDARD DRAWING E 701-BPIL	
E 702-BCAW-01		12 on
F 702-C.ITA		12

SHEET	DATE	BY	REVISION
01	09/04/12	ALU	Renumbered, prev. E 701-BPIL-02. Added spiral reinforcement.



Policy Updates

[INDOT > Doing Business with INDOT > Standards and Specifications > Standard Specifications](#) > 2014 Standard Specifications

- NEW** 2014 Standard Specifications
Effective for Lettings on or after September 1, 2013



- Published on a 2-year cycle.
- 2014 SS effective for lettings on or after September 1, 2013.
- Recurring Special Provisions incorporated
- Full list of revisions to 2012 SS available with 2014 on-line version
- Highlights
 - Metric designations removed
 - Section 402 HMA pay items deleted
 - Mainline and shoulder pavement will be QC/QA
 - HMA mixture designations still valid
 - Section 205 Temporary Erosion and Sediment control
 - Temporary seed mixture, Temporary Mulch, No. 2 Stone



Policy Updates



- In-Kind Culvert Replacement Policy
 - Design Memo 13-05

- Interstate Highway Congestion Policy
 - Design Memo 13-02



Design Manual Updates

- Highlights from 2012
 - Elastomeric bearing pads – design using 55 durometer
 - Part 4, Structural published
 - Part 2, Hydraulics published
 - MSE Wall 100-year design life clarified
 - 2012 LRFD incorporated into Part 4
 - Integral End Bents acceptable for spans up to 1000'
 - Tooth Joints for Integral Structures greater than 500' (also RSP 724-B-200)
 - Vehicle Collision force at MSE Wall
 - Elastomeric Bearing Pad



Design Manual Updates

- Design Memo 13-01 2013 Indiana Design Manual

Indiana Department of Transportation

Indiana Design Manual - Indiana Design Manual 2013 - Current

Indiana Design Manual 2013 - Current

Welcome to the current version of the *Indiana Design Manual*. The *Design Manual* was restructured during 2011 and 2012. Those chapters that have not yet been rewritten are found in their new part and chapter location but retain their existing chapter number. View the [IDM Chapter Reorganization](#) document for details.

Active on or after January 1, 2013

The on-line version of the *Design Manual* was last updated: January 1, 2013

It is the designer's responsibility to check [revision memoranda](#) which may have revised the design manual after this publication. Stay current on INDOT design standards and policy changes by subscribing to [Design Consultants Listserv](#).

This page last updated January 11, 2013

Download complete [Indiana Design Manual 2013 \(PDF 51.2 MB\)](#)

- [Part 1 - Project Design Development](#)
- [Part 2 - Hydrologic and Hydraulics](#)
- [Part 3 - Roadway](#)
- [Part 4 - Structural](#)
- [Part 5 - Traffic and Safety](#)

[Indiana Design Manual 2013 \(PDF 51.2 MB\)](#)

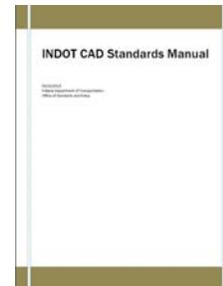


Right-click and select Save Target As to download.



Design Manual Updates

- Design Memo 13-02 CAD Standards Manual
 - *IDM* Chapter 15 (Chapter 103)
 - Standards already in use for INDOT-designed projects
 - "Look and feel" effective for consultant-designed projects Stage 1 submission on or after March 31st
 - Primarily Sections 4.6 & 4.7
 - PDF is current deliverable



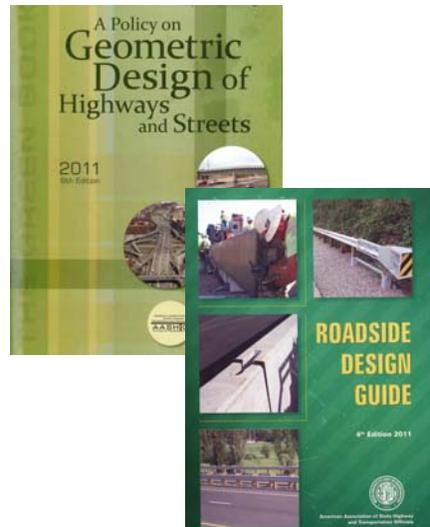
Design Manual Updates

- Design Memo 13-08 IDM Geotechnical Chapter
- Design Memo 13-09 Small Structures Replacement and Guardrail Length of Need
 - Recommended shoulder widths for small structure replacement projects
 - Use of Roadside Design Guide (RDG) L_R values regardless of project type
- Design Memo 13-11 Errata and Editorial Revisions
- Design Memo 13-14 IDM Utility and Railroad Coordination Chapters
 - Revised Chapter 402 Structure Size & Type to include a discussion of RR grade separations
 - FHWA participation limited to 20' horizontal clearance



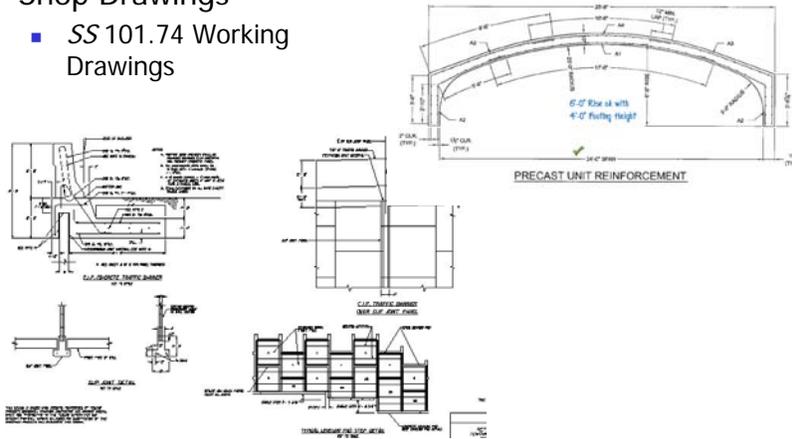
Design Manual Updates

- Design Manual Rewrite
 - 'Restructure and reduce in scope' means more references to source material rather than to IDM figures
 - AASHTO Policy on Geometric Design of Highways and Streets (Green Book) and AASHTO Roadside Design Guide are heavily referenced.



Procedure Updates

- Shop Drawings
 - SS 101.74 Working Drawings



Inquiries

SS 105.04
Notes on plans which are not also included in either the special provisions or among the general notes portion of the plans, and refer to payment, non-payment, or cost to be included in that of other pay items, will not govern over specifications.

Pay items

Special Provisions

← Plans

Supplemental Specifications

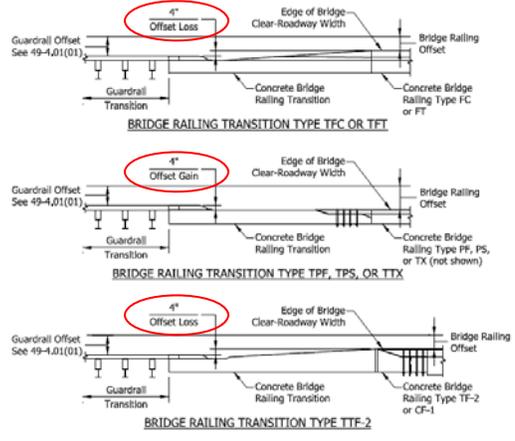
Standard Specifications



Inquiries

Bridge Railing Offset – IDM Figure 402-6H

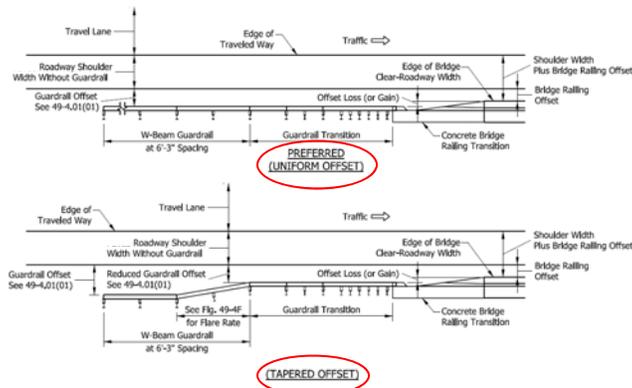
W	BRIDGE-RAILING TYPE
1'-3 1/2"	PF-1, PP-2, PS-1, PS-2, TX
10 1/2"	CF-1, TF-2
8 1/2"	FC
6 1/2"	FT



Inquiries

Bridge Railing Offset – IDM Figure 402-6H

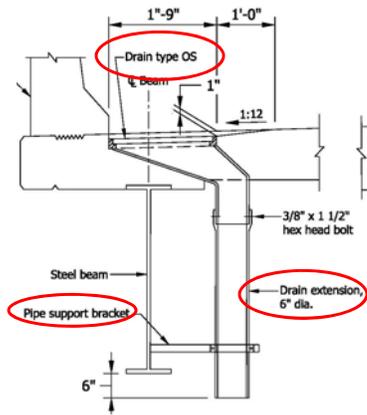
- Uniform offset preferred
- Tapered offset acceptable



Inquiries

Bridge Deck Drainage Components

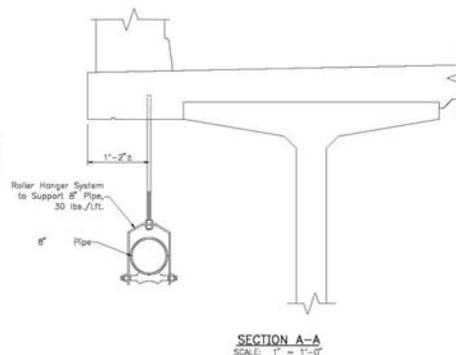
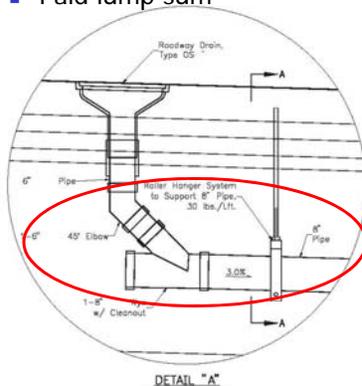
- OS and SQ Drains (702.18)
 - Paid as Grates, Basins, and Fittings Cast Iron
- Roadway Drain Pipe Extension(715.02)
 - May be cast iron, reinforced thermosetting resin, or PVC
 - Paid as each, pipe support brackets included in cost



Inquiries

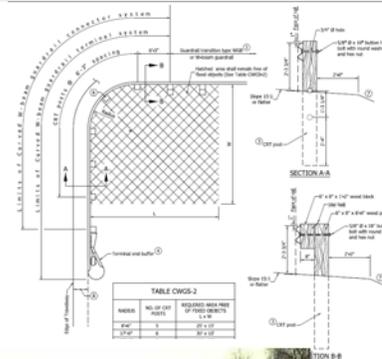
Bridge Deck Drainage Components

- Enclosed Bridge Deck Drainage System (715.02)
 - Must be cast iron or reinforced thermosetting resin
 - Paid lump sum



Inquiries

- Curved W-Beam Systems
 - FHWA Technical Advisory 5040.32
 - Curved W-beam system cannot be connected directly to bridge railing.
 - Adequate space is needed between the curved system and a rigid barrier (approximately 25')
 - TGB or WGB currently under review



Questions?

Office of Standards and Policy
Elizabeth Phillips
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Identify what works well and what we can do better.



ASCE-INDOT Structure Committee

To submit an item for committee consideration, please contact:

Anne Rearick
Director of Bridges
arearick@indot.in.gov

Michael McCool
Beam, Longest and Neff, LLC
mmccool@b-l-n.com

- Order of Operations
- Meeting Minutes
- Committee Membership Application



<http://www.in.gov/dot/div/contracts/standards/bridges/bridges.html>

ASCE-INDOT Structure Committee

Committee Agenda Items (8-16-13)

- INDOT Bridge Design Conference
- PTFE Design Requirements
- Bearing Pad Details
- Pavement Ledge Details
- Approach Slab Reinforcing



ASCE-INDOT Structure Committee

Committee Agenda Items (8-16-13)

- Prestressed Beam Notching Requirements
- Standard Beam Detail Sheets
- Software Practice Pointers
- Stay-in-Place metal form details
- Steel Diaphragm Details for Hybrid Girders



ASCE-INDOT Structure Committee

Committee Agenda Items (8-16-13)

- Steel Diaphragm Details for Steel Beams
- MSE walls and riprap turnouts
- Prestressed Beam Camber and Shipping Strands
- Post Tensioning Specs
- Concrete mix design concerns

