



# FACILITIES DEVELOPMENT MANUAL

Wisconsin Department of Transportation

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Revise 5-2-1.1 (FHWA Administration and Oversight) to provide link to the "Federal Highway Administration and Wisconsin Department of Transportation Stewardship & Oversight Agreement" dated May 2015. Also included are revisions associated with the FHWA revision letter dated September 14, 2016.

Revise Exhibit 1.1 with the updated Attachment 1 (PoCI/PoDI List including FHWA Responsibilities (FPY 2017)) and the updated Attachment 2 (Project Approval Responsibilities List) dated September 14, 2016.

Remove former attachment 1.2 (Oversight Agreement (Appendix A) of FHWA and WisDOT Stewardship Agreement, September 2010)) and replaced with the FHWA Revision Letter and attachments dated September 14, 2016. The letter describes the revisions and includes updates to Appendix A of the "Federal Highway Administration and Wisconsin Department of Transportation Stewardship & Oversight Agreement" and Attachment 2 of the "FHWA and WisDOT Stewardship & Oversight of Projects through Implementation of a Risk-Based Approach" supplement.

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**Revise 8-5-3.4 (Conflict of Interest for Consultants) by moving former number 7 to number 3 and renumbering.**

**Revise 8-5-55.1 (Federal Approval) to add copy of email approval from FHWA regarding the use of management consultants.**

**Add Attachment 55.1 (Management Consultant email Record) to provide a copy of FHWA approval for WisDOT management consultants.**

- [Section 8-10](#) .....Contract Negotiation

**Revise Attachments 30.1, 30.2, 30.4, 30.5, 30.6, and 30.8 consultant forms.**

- [Section 8-15](#) .....Contracts

**Revise 8-15-1.2 (Contract Format) language.**

**Revise 8-15-2 (Contract Types and Formats) language. Remove phrase "journal voucher" and replace with "redistribution", change contract provisions typical language.**

[Section 8-20](#) ..... Contract Procedures

**Revise 8-20-1.1 (Contract/Work Order Submittal Requirements) to remove former attachment 1.1 and replace with link to the Contract/Work Order Submittal Sheets. Replace Financial Operating System (FOS) Object Code with PeopleSoft Account number.**

[Section 8-25](#) ..... Contract Management

**Revise 8-25-15.3 (Submittal to BSHP CAU) to remove DT1521 and replace with Amendment Submittal Sheet.**

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**Revise 11-1-1.2 (General) reference for AASHTO GDHS to 2011 version.**

**Revise 11-1-2.3 (Controlling Criteria) controlling criteria based on updated guidance from FHWA.**

**Add 11-1-10 (Performance Based Practical Design) to introduce the concepts of Performance Based Practical Design.**

[Section 11-2](#) ..... Alternative Contracting

**Revise 11-2-1.10 (Warranty Clauses) to remove references to asphalt pavement warranties which are no longer used.**

[Section 11-3](#) ..... Community Sensitive Design

[Section 11-5](#) ..... General Design Considerations

[Section 11-10](#) ..... Design Controls

**Revise 11-10-5.1.1.3 (Application of Stopping Sight Distance (SSD) and Decision Sight Distance (DSD)) to update guidance for evaluating sight distances for physical obstructions along horizontal and vertical curves.**

**Additional revisions to 11-10-5.1.1.3 (Application of Stopping Sight Distance (SSD) and Decision Sight Distance (DSD)) are being developed and will be published in future FDM transmittals, in particular FDM 11-40.**

**Revise 11-10-5.3 (Superelevation) guidance.**

**Additional revisions are being developed and will be published in future FDM transmittals, in particular FDM 11-40.**

**Revise 11-10-5.3.2 (Superelevation Rate) guidance, add side friction factor for 75 mph.**

**Additional revisions to 11-10-5.3.2 (Superelevation Rate) are being developed and will be published in future FDM transmittals, in particular FDM 11-40.**

**Revise 11-10-5.4.1 (Grades) to include language for a DSR variance.**

**Revise 11-10-5.4.2 (Vertical Curves) to include language for DSR variance.**

**Additional revisions to 11-10-5.4.2 (Vertical Curves) are being developed and will be published in future FDM transmittals, in particular FDM 11-40.**

[Section 11-15](#) ..... Cross-section Elements for Rural Highways and Freeways

[Section 11-20](#) ..... Cross Section Elements for Urban Highways

[Section 11-25](#) ..... Intersections at Grade

[Section 11-26](#) ..... Roundabouts

**Revise 11-26-30.5.4 (Design Guidance for all Trucks) where roundabout off-tracking is anticipated along outside entrance area. Tie bar requirements are revised at interface of backside of mountable concrete curb and gutter and truck apron based on truck apron width.**

**Revise 11-26-35.2 (Pavement Markings) with epoxy pavement marking at roundabouts and its approaches, replacing grooved thermoplastic and plastic tape markings. Web link to Traffic Guidelines Manual (TGM) for pavement marking requirements is provided.**

**Revise 11-26 Attachment 35.2 to reflect epoxy pavement marking.**

[Section 11-30](#) ..... Interchange

[Section 11-35](#) ..... Structures

**Revise 11-35-1.2 (Clear Roadway Width of Bridges) language to show that lateral clearance and bridge width are now non-controlling criteria.**

**Revise 11-35-1.3 (Lateral Underclearances to Structures) language to show that lateral clearance and bridge width are now non-controlling criteria.**

**Revise Attachments 1.5, 1.6, 1.7 language to show that lateral clearance and bridge width are now non-controlling criteria and correct cross references.**

**Revise Attachment 1.8 to add 20'-0" minimum height for sign structures on the OSOW high clearance route. Add notes to Attachments 1.8 and 1.9 concerning vertical clearance for sign structures on the "OSOW High Clearance Route".**

[Section 11-40](#) ..... Resurfacing, Restoration and Rehabilitation (3R) Projects for Highways other than Interstate

[Section 11-44](#) ..... Interstate Highways

**Revise 11-44-1.3 (Design Criteria) to incorporate FHWA May 2016 controlling criteria revisions.**

[Section 11-45](#) ..... Other Elements Affecting Geometric Design

[Section 11-46](#) ..... Complete Streets

**Revise 11-46-5 (Pedestrian Facilities) to include additional guidance for considerations of right-of-way acquisition to accommodate curb ramp improvements.**

**Revise 11-46-10 (Curb Ramps) to clarify technical infeasibility application for 3R projects and detectable warning field placement at curb ramps with skewed intersections and narrow terraces.**

[Section 11-50](#) .....Traffic Control

**Revise 11-50-10.4 (Work Zone Incident Management Plan) to add guidance for work zone incident management plans.**

**Add 11-50 Attachments 10.3, 10.4 and 10.5 to provide example guidance for the work zone incident management plan.**

**Add 11-50-20.7.8 (Traffic Control Surveillance and Maintenance) to add guidance on when a traffic control specialist may be needed.**

[Section 11-52](#) .....Traffic Engineering and Operations

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**Revise 11-55-20 (Overhead Sign Structures) to change name from overhead sign supports.**

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**Revise 12-10-1.2.26 (Compensable Utilities) to update how compensable utility facilities and lines are shown on transportation project plats.**

[Section 12-15](#) .....Traditional Right-of-Way Plat Preparation

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[Section 14-10](#) .....Pavement Design

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[Section 14-15](#) .....Pavement Type Selection

[Section 14-25](#) .....Pavement Rehabilitation

### **Chapter 15: Plan Preparation**

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**Revise Attachment 5.4 (Construction Detail) sign support details.**

**Revise 15-1-20.10 (Permanent Signing) to add information for sign fabrication details and contact information for signs. Also add information relating to overhead sign support clearance and fatigue category.**

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**Chapter 19: Plans, Specifications and Estimates**

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[Section 19-5](#) .....Estimates

**Revise 19-5-10 (Create Estimate and Proposal) to notify that the current program Trns•port (AASHTOWare) PES (used to prepare an estimate, developing a proposal, and submit for PS&E) is being replaced with an updated web based version of the product called AASHTOWare Project Preconstruction. A link to guidance documents for the new AASHTOWare Project Preconstruction is provided.**

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[Section 19-10](#) .....PS&E Transmittal and Composition

**Revise 19-10-15.1.2 (Introduction) item number 6 to clarify the anticipated all work complete date information.**

[Section 19-15](#) .....Special Provisions

**Revise 19-15-1 (Special Provisions - Introduction) language to update information.**

**Revise 19-15-2.3 (Lane Rental) language and renumber attachments.**

**Rename Attachments 2.5 and 2.6 relating to lane rentals. Remove former attachments 2.7 (Lane Rental (Off-Peak and Peak Hour Use Restricted)), 2.8 (Lane Rental (Long Term - No Restrictions or Use)) and 2.9 (Lane Rental (Long Term - Restricted Access)) and re-number remaining attachments.**

Revise 19-15-15.1.1 (Contract Time Frame) to add information.

Revise FDM 19-15-20.1 (Sample Special Provision) to remove language regarding lane rental.

Revise 19-15-35.1 (Railroad Contact Information) to update language and remove contact information that can be found in the STSP.

Revise 19-15-60.1 (Sample Special Provisions) language.

Revise 19-15-75.1 (Sample Special Provisions) language.

Revise 19-15-85.1 (Modifying and Existing Special Provision) regarding when to use an SPV item.

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- Section 19-22 ..... Post-Advertisement Activities
- Section 19-25 ..... Local Force Account Agreements
- Section 19-30 ..... Razing and Removal Contracts
- Section 19-35 ..... TEA and EDA Funded Projects
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Revise 19-40 Exhibit 1.2 (Standard Detail Drawings (Examiner's List)) to update the SDD list.

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