



Design Memo No. 26-08

March 12, 2026

TO: All Design Personnel and Consultants

FROM: */s/ William Schmidt*
 William Schmidt
 Hydraulics Engineering Director

SUBJECT: Hydraulic Design Updates

REVISES: *Indiana Design Manual*

Chapter	Sections Affected
Chapter 201	Chapter title, 201-2.0
Chapter 202	Sections 202-1.02, 202-2.03, 202-2.04, 202-4.02(02), 202-4.03(02) Figures 202-2E, 202-3A
Chapter 203	Sections 203-2.02, 203-2.02(02), 203-2.02(10) thru (15), 203 2.03(04)[Add.], 203-2.03(05), 203-2.04(03), 203-2.05(03) thru (04), 203-2.06, 203-2.06(01), 203-2.07, 203-2.08(01), 203-3.02, 203-3.02(01), 203-3.02(03), 203-3.02(04), 203 3.02(09), 203-3.02(10)[Add.], 203-3.03, 203-3.04(02) thru (04), 203-3.04(05)[Add.] 203-3.05, 203-3.06, 203-4.04(08), 203-4.04(10), 203-4.04(16), 203-5.01, 203-5.02(02)[Add.], 203-5.03(02) thru (03), 203-5.03(05) thru (06), 203-5.03(08), 203-5.04, 203-5.04(01) thru (04), 203-5.06, 203-6.02, 203-6.04(01), 203-6.04(03), 203-7.0 and all subsections[Add.] Figures 203-2D, 203-2F, 203-2G, 203-2I, 203-2T[Add.], 203-3D[Add.], 203-3E(new), 203-4A, 203-4G[Del.], 203-6C[Del.], 203-7A[Add.]
Chapter 17	17-4.07, Figures 17-4F[Del.] and 17-4G[Del.]

EFFECTIVE: Hydraulic submittals on or after April 1, 2026 and as noted.

IDM Chapters [201](#), [202](#), and [203](#) have been revised to incorporate guidance previously found on the INDOT Hydraulics webpage, under Developing Design Guidance. In addition to editorial revisions in several sections, a new section for median drains has been added to Chapter 203.

Guidance incorporated from the Hydraulics webpage is considered current practice and is effective immediately. Otherwise, guidance should be incorporated for hydraulic submittals as noted.

A summary of IDM revisions is provided for reference on the following pages. The summary is not comprehensive but focuses on the more notable changes.

Summary of IDM Revisions

Chapter 201	Revised the chapter title and added a definition for a blind tee connection.
Chapter 202	<p>Revised exceedance probability (EP) terminology to annual exceedance probability (AEP).</p> <p>Figures 202-2E was updated to provide revised guidance for Pavement C-values. 202-3A was updated to include Discharge Method for median drains.</p>
Chapter 203	
Small Structure (203-2.0)	<p>Revisions include</p> <ul style="list-style-type: none"> • Cross-sectional area for selecting replacement structures • Allowable backwater • Sumping • Pipe lining • Hydraulic analysis for structure extensions • Use of energy dissipators • Joint probability analysis • End treatments • Slab-top structures on vertical abutments • Plan details for specialty structures • Hydraulic report documentation • Condition requirements for replacement in kind <p>Figures 203-2D revised to include partially grouted riprap note. 203-2F revised to include Smooth Steel pipe Manning's n-value. 203-2G revised to correct AEP reference. 203-2I revised to provide Entrance Loss Coefficients for standard culverts. 203-2T added to illustrate backfill limits for specialty structures</p>
Bridge (203-3.0)	<p>Revisions include</p> <ul style="list-style-type: none"> • Software selection based on geometry and structure type • Allowable backwater • Freeboard • Velocity • Wildlife crossing applicability based on permit requirements • 2D analysis • When scour analysis is needed • Scour evaluation modeling and data reporting and modeling, scour countermeasure, and scour memo. • Documentation

<p>Bridge (203-3.0)</p>	<p>Figures 203-3D added to provide clarification on when spread foundations are scour critical. 203-3E added to provide clarification on when pile foundations are scour critical.</p>
<p>Pavement Drainage (203-4.0)</p>	<p>Revisions include</p> <ul style="list-style-type: none"> • Use of a drop manhole • Use of slotted drains and trench drains • Hydraulic calculations for bridge deck drains. <p>Figures 203-4A revised to provide additional spread guidance for ramps. 203-4B deleted figure casting compatibility. Figure replaced with reference to appropriate Standard Drawings series 203-4G deleted figure for flanking inlets. Flanking inlets should be designed using HEC-22.</p>
<p>Stormwater Management and Detention (203-5.0)</p>	<p>Revisions include</p> <ul style="list-style-type: none"> • Applicability of guidance to peak flow runoff and in conjunction with the INDOT Post-Construction Stormwater Management guidance document • INDOT detention requirements • Detention basins (previously detention ponds) • Infiltration basins (previously retention ponds) • Outlet conditions • Roadside ditch detention • Oversized storm drain and inline detention • Documentation
<p>Channels and Ditches (203-6.0)</p>	<p>Revisions include</p> <ul style="list-style-type: none"> • Design discharge • Roadside ditch depth • Roadside ditch lining requirements for ditch grades less than 0.3%. Ditch grades less than 0.3% are to be paved. <p>Figure 203-6C, Lug Intervals, deleted. Figure replaced with reference to the appropriate INDOT <i>Standard Drawings</i> series.</p>
<p>Median Drains (203-7.0)</p>	<p>New section for the hydraulic design of median drains Figure 203-7A added for Design-Storm Frequency and Allowable Spread for Median Drains</p>
<p>Chapter 17</p>	<p>Revised Section 17-4.07 to reflect ditch lining requirements in Section 203-6.0. Deleted Figures 17-4F, Paved Side Ditches, and 17-4G, Lug Intervals.</p>

For questions related to this design memo, please contact the Hydraulics Engineering Division at Hydraulics@indot.in.gov.