



# **INDIANA DEPARTMENT OF TRANSPORTATION**

*Driving Indiana's Economic Growth*

## **Design Memorandum No. 23-13**

September 14, 2023

**TO:** All Design, Operations, and District Personnel, and Consultants

**FROM:** /s/ Bill Schmidt  
Bill Schmidt  
Director of Hydraulics

**SUBJECT:** Hydraulic Submittals and Replacement in Kind Policy

**REVISES:** *Indiana Design Manual* Sections 201-1.02, 203-2.02, and 203-2.08 [new]

**EFFECTIVE:** Immediately

The Division of Hydraulics has implemented a Replacement in Kind Policy and revised which hydraulic designs require review and approval.

Revisions have been incorporated into the referenced sections of IDM [Chapter 201](#) and [Chapter 203](#). A summary of revisions is included on the next page.

The companion guidance for hydraulic review and assessment found in Maintenance Operations Memo 11-06 is currently being revised to incorporate these changes.

For questions related to this design memo, please contact the Hydraulics Division at [Hydraulics@indot.in.gov](mailto:Hydraulics@indot.in.gov)

## **Summary of Revisions**

### **IDM 201-1.02 Responsibilities**

1. Reorganized to provide individual section headers for each topic.
2. Revised the Engineering Assessment section to increase the threshold for the Division of Hydraulics to perform design during scoping. The threshold was increased from  $\geq 36$  in. diameter to  $\geq 48$  in.
3. Added a dedicated section for design responsibilities for consultant-design and in-house designed projects.
4. Added a dedicated section for requirements to submit hydraulic analysis for review and approval on an INDOT project.
5. Added a dedicated section for design and review of LPA projects. This guidance was previously found in Design Memo 18-12.

### **IDM 203-2.02 Small Structure Policy**

1. Added reference to the Replacement in Kind Policy.
2. Revised the design, review, and approval requirements to refer to 201-1.02.

### **IDM 203-2.08 Replacement in Kind Policy**

Added a new section to implement a replacement in kind policy for existing culverts with a span or diameter  $< 48$  in. These structures can be replaced without modeling and design computations or review and approval from the Division of Hydraulics. The policy is subject to the following condition requirements.

1. The existing culvert is not on a fully access-controlled corridor, e.g. freeway.
2. The existing culvert is a single span, e.g. not twin pipes.
3. The existing culvert is not within the limits of a pavement reconstruction project.
4. The existing culvert does not have drainage issues, e.g., scour holes, history of roadway overtopping, ponding, or debris. Confirmation from both the appropriate district Culvert Asset Engineer and district Maintenance Engineer is required.
5. The road profile does not change.

Where the condition requirements are satisfied, design criteria for the replacement culvert have been established. Ecology and waterway permitting applies regardless of the use of the policy.