



# INDIANA DEPARTMENT OF TRANSPORTATION

## Design Memo No. 25-09

April 16, 2025

TO: All Design Personnel and Consultants

FROM: /s/ Luis A. Laracuente  
Luis A. Laracuente, PE, MS  
Highway Engineering Director

SUBJECT: *Indiana Design Manual*/Chapter 43 Rewrite

REVISES: Chapter 43 Horizontal Alignment (all sections)  
Chapter 48 Interchanges – Sections 48-4.01(06), 48-5.03(01), and 48-5.03(02)

EFFECTIVE: Stage 2 submittals on or after July 1, 2025.

*Indiana Design Manual* Chapter 43, Horizontal Alignment, has been rewritten. This chapter now appears as [Chapter 305](#), Horizontal Alignment. Notable revisions include:

- **Design Guidance**
  - Added design guidance for reverse, compound, and broken back curves.
- **Superelevation**
  - Added a figure for selecting the maximum superelevation rate,  $e_{\max}$ .
  - Revised distribution of superelevation runoff between the tangent and curve to 2/3 (tangent) - 1/3 (curve).
  - High-speed facilities will be limited to  $e_{\max} = 6\%$  for new construction.
    - Reconstruction projects may perpetuate an existing  $e_{\max} = 8\%$ .
  - Added guidance for the superelevation development of multi-lane facilities.
  - Revised adjustment factor,  $b_w$ , to be 1 for INDOT routes.
  - Deleted superelevation development figure a 6-lane facility with concrete median barrier.
  - Added superelevation development figures for compound curves, reverse curves, and for 6-lane facilities widened to the outside.
- **Revised Minimum Length of Curve**
  - High-speed limited access facilities = 30V desirable, 15V minimum.
  - Other high-speed facilities = 15V minimum.
  - Low-speed facilities = 15V, where practical.
  - Deleted inaccurate length of curve information related to the central angle.

- **Revised Horizontal Stopping Sight Distance**

- Added guidance for the use of CADD for three-dimensional evaluation of horizontal stopping sight distance.
- Added a section for evaluating stopping sight distance using NCHRP Report 910, *Design Guidelines for Horizontal Sightline Offsets*. The report's reliability analysis spreadsheet tool is available from the INDOT [Design Manual Editable Documents](#) webpage, under the Design Submittal category.

References to Chapter 43 in other IDM chapters have been updated as editorial changes.

Please note that the Indiana Design Manual webpage has been revised to reflect an updated numbering system for all chapters in Part 3 – Roadway Design.

Questions regarding horizontal alignment should be directed to the Highway Engineering Division at [RoadReviewTeam@indot.in.gov](mailto:RoadReviewTeam@indot.in.gov).