ERRATA

Nebraska Department of Transportation Roadway Design Manual

Chapter Six: The Typical Roadway Cross-Section

- ① January 2023
- 3 May 2025

The last update to the Roadway Design Manual (RDM) was in May 2022. In the intervening time some design guidance has become obsolete, new/updated guidance has become available, offices of responsibility have changed, design procedures have been streamlined, etc. The Nebraska Department of Transportation is continually in the process of updating the RDM but, in the interim, the obsolete/incorrect guidance is being addressed through this document and a reissued RDM. Page numbers cited in this document are referenced to the latest Errata RDM. Deleted text in the Errata RDM (Roadway Design Manuals - NDOT) is in green with a strike through (errata) and new/corrected text is in red (correct). Additions to previously added text is in blue (added).

THE FOLLOWING ITEMS PERTAIN TO THE ENTIRE MANUAL:

January 2023 and all subsequent changes – Division and Section reorganizations have been incorporated, *RDM* Chapter Sections and **EXHIBITS** have been re-numbered as required by the errata. Chapter and **EXHIBIT** citations, Clarity task numbers, references, and internet links are updated to the latest edition of the *RDM* as are the <u>Contents</u>, <u>List of Exhibits</u>, and the <u>Index</u>

① January 2023

Design Process Outline (DPO) task order/ terminology updated to the July 2022 edition.

② October 2023

- Intelligent Transportation Systems (ITS) transferred from the Operations Division to Roadway Design and combined with the Lighting Unit (02-27-2023)
- "Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way (with 2013 Supplement)" replaced by "Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way" (August 2023)

3 May 2025

- Appendix H is now in Chapter One: <u>Roadway Design Standards</u>, Section 9, AASHTO MINIMUM DESIGN GUIDANCE
- Appendix I has been consolidated with Chapter Six: <u>The Typical Roadway Cross-Section</u>,
 Section 2.C, <u>Beveled Edge</u> and removed from the *Design Manual*.
- Appendix K, Project Coordination Meetings, has been removed from the *Design Manual*. The forms may be found in OnBase and on the L Drive.

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Chapter Six

① ERRATA JANUARY 2023

① 6-3 Section 2.A.2: Installation of Two-Foot Surface Shoulders on Lower Volume Roads, numbered list -

- 3. ADT ≥ 1.000 VPD
- 5. Other segments may be included when:
 - The segments exhibit 0.25 or greater roadway departure crashes per year per mile
 - The segments are Interstate alternate routes and roads connecting the Interstate to the Interstate alternate routes, regardless of the ADT

- ADT ≥ 1,000 VPD (segments with ADTs from 1,000 ADT to 1,999 ADT are eligible for HSIP funding, see Chapter Twelve: <u>Cost Estimating</u> and Funding, Section 2.A.3).
- 5. Other segments may be included when the segments exhibit 0.25 or greater roadway departure crashes per year per mile.
- Connecting links on the Alternate Route System connecting the Interstate to the Parallel Alternate Route System (US-6, US-30, or US-34), regardless of the ADT. The following links are included despite having an ADT < 1,000 VPD:
 - L10B Odessa
 - L10C Gibbon
 - L10D Shelton
 - L40C Alda
 - S41B Giltner
 - S93A Henderson

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Chapter Six

① 6-4 Section 2.C: Beveled Edge

A beveled edge may allow a smoother return to the roadway when a vehicle has departed the surfacing. The beveled edge will be installed on rural high-speed ($V \ge 50$ mph) highways in the following conditions:

- 1. The project includes surfacing placement of two inches or greater.
- 2. Surfaced shoulders are less than six feet in width, not including segments of erosion control curbed shoulders.
- 3. On the inside (median) shoulders which are less than six feet in width of Interstates, freeways and expressways with depressed medians.
- 4. The roadway is not curbed.
- 5. In other locations as determined by **Traffic Engineering**.

The type of beveled edge to be used is based upon the project type and surfacing recommendation. See Appendix I, "Installation of the Beveled Edge", for additional information.

A beveled edge is a sloping finish to the edge of the pavement (both asphaltic concrete and Portland Cement Concrete) allowing errant vehicles to more easily re-enter the travelled way. The beveled edge will be installed on rural high-speed ($V \ge 50$ mph) highways when:

- 1. The project includes two inches or greater of surfacing placement
- Surfaced shoulders are less than six feet in width, not including segments of erosion control curbed shoulders
- 3. On the inside (median) shoulders which are less than six feet in width of Interstates, freeways and expressways with depressed medians
- 4. The roadway is not curbed
- At other locations identified by Traffic Engineering as a mitigation measure for a crash history

The type of beveled edge to be used is based upon the project type and surfacing recommendation. For additional information, see Appendix I, "Installation of the Beveled Edge", of this manual and the FHWA publication Safety Edgesm Design and Construction Guide (January 5, 2012) (web site). Modified by the May 2025 Errata

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| Chapter Six | | |
| ① 6-8 | EXHIBIT 6.4 : Typical Section – Rural Major Arterial 1,000 to 3,999 ADT | Differentiated the Horizontal Clear Zone: 30 ft. for ADT ≥ 2,000 VPD 23 ft. for ADT 1,000 – 1,999 VPD |
| ① 6-14 | EXHIBIT 6.9 : Typical Half-Sections of Three- Lane and Five-Lane Undivided Low-Speed Municipal Highways with Two-Way Left Turn Lanes | Added to 5-Lane Detail: (Note: Remove the TWLTL for a Typical Half- Section of a 4-Lane Undivided Low-Speed Municipal Highway) |
| ① 6-25 | Section 6: AUXILIARY LANES, Second paragraph – For further information, see Chapter Three: Roadway Alignment, Section 3.A.4 and Chapter Four: Intersections, Driveways and Channelization, Section 1.D of this manual and Chapter 9, Section 9.7, "Auxiliary Lanes", of the Green Book (Ref. 6.1). | For further information, see Chapter Three: Roadway Alignment, Section 3.A.4 and Chapter Four: Intersections, Driveways and Channelization, Section 1.D of this manual and Chapter 9, Section 9.7, "Auxiliary Lanes", and Chapter 10, Section 10.9.5.10, "Auxiliary Lanes", of the <i>Green Book</i> (Ref. 6.1). |
| ① 6-28 | Section 9.B.1: Fill Slopes (Parallel) | New final paragraph — For additional information see Appendix H, "AASHTO Minimum Design Guidance", Figure 3.2 , of this manual. Voided by May 2025 Errata |

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| Chapter Six | | | |
| | <u>③ ERRATA MAY 2025</u> | | |
| ③ 6-3 | Section 2.A.2: Installation of Two-Foot Surface Shoulders on Lower Volume Roads, numbered list - | New point 3 – Highways in the Sandhills area. | |
| ③ 6-4 | Section 2.C: <u>Beveled Edge</u> | New second paragraph – For beveled edge installation on 3R Interstate projects, see Chapter Seventeen: Resurfacing, Restoration and Rehabilitation (3R) Projects, Sections 1.D.2 and 1.D.3. | |
| ③ 6-4 | Section 2.C: <u>Beveled Edge</u> | New third paragraph – The beveled edge is a recognized and recommended crash mitigation measure by FHWA therefore, if the average roadway departure crash rate for rural two-lane roads shows the addition of a beveled edge to be safety beneficial, Federal-aid Highway Safety Improvement Program (HSIP) funds may be used for that purpose. This may be done on individual projects or on a system-wide basis. Additionally, per 23 CFR 924.5(c), "Other Federal-aid funds are eligible to support and leverage the safety program. Improvements to safety features that are routinely provided as part of a broader Federal-aid project should be funded from the same source as the broader project." A project specific benefit-cost calculation will not be required. | |

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| Chapter Six | | |
| ③ 6-4 | Section 2.C: <u>Beveled Edge</u> , final paragraph, second sentence – For additional information, see Appendix I, "Installation of the Beveled Edge", of this manual and the FHWA publication <u>Safety Edgesm</u> <u>Design and Construction Guide</u> (January 5, 2012) (web site). | For additional information see the FHWA publication Safety Edge _{SM} Design and Construction Guide (January 5, 2012) (web site). |
| 3 6-9 | EXHIBIT 6.4 : Typical Section – Rural Major Arterial 1,000 to 3,999 ADT | Added note "4 ft. paved if on the Priority Commercial System" |
| 3 6-10 | EXHIBIT 6.5 : Typical Section – Rural Major Arterial 400 to 999 ADT | Added note "Paved if on the Priority Commercial System" |
| ③ 6-20 | EXHIBIT 6.12 : Typical Concrete Curb Details | Remove Exhibit, refer to Standard Plan 301 |
| ③ 6-21 & 6-22 | EXHIBIT 6.13 : Erosion Control Curb Location | Split into EXHIBIT 6.12 : Curb Location – High Speed Roadway and EXHIBIT 6.13 : Erosion Control Curb Location |