# ERRATA
## *Nebraska Department of Transportation*
## *Roadway Design Manual*

### Chapter Three: Roadway Alignment

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 re-issued *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 Contents, List of Exhibits, and the Index

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: Roadway Design Standards, Section 9, AASHTO MINIMUM DESIGN GUIDANCE
- Appendix I has been consolidated with Chapter Six: The Typical Roadway Cross-Section, Section 2.C, Beveled Edge 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 Three**

**① ERRATA JANUARY 2023**

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|---|---|---|
| ① 3-2 | | New **Section 2.A: Maximum Allowable Deflection on a Horizontal Alignment Without a Curve** |
| ① 3-3 | Renumbered **Section 2.B: Horizontal Curvature,** Third & fourth sentences – As a general guide, any change in direction with a deflection angle of 1° or greater will require a horizontal curve. For small deflection angles, curves should be long enough to avoid the appearance of kinks. See Section 3.3.13, "General Controls for Horizontal Alignment", in Chapter 3 of the *Green Book* (Ref. 3.1) for additional information. | Remove these sentences, superseded by new Section 2.A. |
| ① 3-25 | **EXHIBIT 3.7: Standards for Climbing Lanes,** Column 3 – "Minimum", Row 2 – "Shoulder Width" - Other: 4 feet paved plus 2 feet turf. (4) | Other: 4 feet paved plus a 2 feet turf transition. (4) |
| ① 3-28 | **Section 3.B.2: Design**, Fifth paragraph – The use of K values below the minimum values given in **EXHIBITS 3.9 & 3.14** for a New and Reconstructed project will require **Roadway Design Engineer** approval, a design exception from the **FHWA** for projects on the NHS, and/ or a relaxation of the *MDS* (Ref. 3.2) (See Chapter One: Roadway Design Standards, Section 10.C, of this manual) | The use of K values below the stopping sight values given in **EXHIBITS 3.9 & 3.14** for a New and Reconstructed project will require **Roadway Design Engineer** approval, a design exception from the **FHWA** for projects on the NHS, and/ or a relaxation of the *MDS* (Ref. 3.2) (See Chapter One: Roadway Design Standards, Section 10.C, of this manual) |

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| **Chapter Three** | | |
| ① 3-28 | **Section 3.B.2: Design**, Seventh paragraph, first sentence –<br>Special attention to pavement drainage must be exercised where a K value in excess of 143 is used, a minimum roadway cross-slope of 1.5% should be maintained. | Special attention to pavement drainage must be exercised where a K value in excess of 167 is used, a minimum roadway cross-slope of 1.5% should be maintained. |
| ① 3-28 | **Section 3.B.2: Design**, Seventh paragraph, second sentence –<br>See Section 3.2.2, "Stopping Sight Distance", in Chapter 3 of the *Green Book* (Ref. 3.1) for additional information. | Moved this sentence to the end of the first paragraph – better fit. |
| ① 3-42 | **Section 5.A: <u>Horizontal Alignment</u>,** Second bullet point –<br>• Radius of curvature – to the nearest foot | • Radius of curvature – to the nearest 0.01 foot |
| | **<u>③ ERRATA MAY 2025</u>** | |
| ③ | **Entire Chapter** | Removed Superelevation Tables (**Exhibits 3.3c, 3.3d, 3.4c, 3.5c**, and **3.6c**) and referenced the appropriate tables in the *Green Book*. |
| ③ 3-2 | **Section 2.A: <u>Maximum Allowable Deflection on a Horizontal Alignment Without a Curve</u>,** final paragraph –<br>For 3R projects, an improvement to the horizontal alignment may be considered if there is a relevant crash history. See Chapter Seventeen: <u>Resurfacing, Restoration and Rehabilitation (3R) Projects</u>, Section 3.B, of this manual for additional information. | Move this paragraph to the end of **Section 2: HORIZONTAL ALIGNMENT** as a better fit |

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| ③ 3-5 | **Section 2.C: <u>Superelevation</u>**, final paragraph, last sentence – An 8% superelevation rate should be designed in accordance with Section 3.3, "Horizontal Alignment", in Chapter 3 of the *Green Book* (Ref. 3.1). | Remove this sentence. All superelevation's should be designed in accordance with the *Green Book*. |
| ③ 3-5 | **Section 2.C: <u>Superelevation</u>** | Add new final paragraph – See Section 3.3.5, "Design Superelevation Tables", in Chapter 3 of the *Green Book* (Ref. 3.1) for additional information. |
| ③ 3-7 | **Section 2.C.1: Transition Lengths**, final paragraph | Add new final sentence – See Section 3.3.8.9, "Minimum Transition Grades and Drainage Considerations", in Chapter 3 of the *Green Book* (Ref. 3.1) for additional information. |
| ③ 3-8 | **Section 2.C.2: Axis of Rotation** | Add new final paragraph – See Section 3.3.8.6, "Methods of Attaining Superelevation", in Chapter 3 of the *Green Book* (Ref. 3.1) for additional information. |
| ③ 3-8 | **Section 2.C.3: Smoothing of Pavement Edge Profile** | Add new final paragraph – See Section 3.3.8.7, "Design of Smooth Profiles for Traveled-Way Edges", in Chapter 3 of the *Green Book* (Ref. 3.1) for additional information. |
| ③ 3-23 | **Section 3.A.3: Critical Length of Grade** | Add new final sentence – See Section 3.4.2.3, "Critical Lengths of Grade for Design", in Chapter 3 of the *Green Book* (Ref. 3.1) for additional information. |

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| ③ 3-30 | **EXHIBIT 3.9b: Design Controls for Crest Vertical Curves,** Column headed "Intersection Sight Distance (4-Lane Divided w/54 ft. Median)" | Values corrected - The additional time for traversing the 4 ft. median and attached shoulders was incorrectly added to the Crossing Maneuver instead of the Left-Turn Condition |
| ③ 3-34 | **Section 3.C.1: Stopping Sight Distance** | Added new paragraph (third from the bottom of page) – To determine the length of a parabolic crest curve required to provide any specified value of sight distance, see Eq. 3-42 and Eq. 3-43 in the *Green Book* (Ref. 3.1), Section 3.4.6.2, "Crest Vertical Curves". |
| ③ 3-39 | **EXHIBIT 3.14b: Design Controls for Sag Vertical Curves,** Column headed "Intersection Sight Distance (4-Lane Divided w/54 ft. Median)" | Values corrected - The additional time for traversing the 4 ft. median and attached shoulders was incorrectly added to the Crossing Maneuver instead of the Left-Turn Condition |