

# ERRATA

## *Nebraska Department of Transportation*

### *Roadway Design Manual*

#### Glossary

June 2016

① February 2017

② July/August 2017

③ February 2018

④ June 2018

⑤ August 2018

⑥ December 2018

The last update to the Roadway Design Manual (RDM) was in 2006. In the intervening years some design guidance has become obsolete, new/updated guidance has become available, offices of responsibility have changed, design procedures have been streamlined, etc. The NDOT is 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 December 2018 Errata RDM. Deleted text in the December 2018 Errata RDM is in green with a strike through (~~errata~~) and new/corrected text is in red (correct). The following chapters have already been addressed:

- ⑥ Contents (updated in December 2018)
- ⑥ List of Exhibits (updated in December 2018)
- Chapter Three: Roadway Alignment (updated on June 17, 2011)
- Chapter Four: Intersections, Driveways and Channelization (updated on April 19, 2012)
- Chapter Six: The Typical Roadway Cross-Section (updated on February 18, 2016)
- ⑤ Chapter Seven: Earthwork (updated on August 2, 2018)
- Chapter Eight: Surfacing (updated on December 15, 2015)
- ⑥ Chapter Nine: Guardrail and Roadside Barriers (updated on December 13, 2018)
- ① Chapter Eleven: Highway Plans Assembly (updated on February 21, 2017)
- ② Chapter Twelve: Cost Estimating & Funding (updated on August 16, 2017)
- ① Chapter Fourteen: Traffic (updated on October 19, 2016)
- ③ Chapter Fifteen: Right-of-Way (updated on February 26, 2018)
- Chapter Sixteen: Pedestrian and Bicycle Facilities (added on February 8, 2016)
- Chapter Seventeen: Resurfacing, Restoration and Rehabilitation (3R) Projects (added on March 26, 2014)
- ⑥ Index (updated in December 2018)

The following items pertain to the entire manual:

- June 2016 and all subsequent changes – Chapter and EXHIBIT citations have been updated to the latest edition of the *RDM*
- ② July 2017 - All references to the **Nebraska Department of Roads (NDOR)** have been changed to the **Nebraska Department of Transportation (NDOT)**
- ⑥ December 2018 – Plan Sheet numbering updated (See Chapter Eleven, EXHIBIT 11.1)

Page	Existing Text	Corrected Text
<b>Glossary</b>		
I	<b>DR Form 343</b> – “Cost Item Sheet” and <b>DR Form 333</b> – “Initial Project Data Sheet”	These forms are void, remove these items.
③ II		Added <b>HSIP</b> – “Highway Safety Improvement Program”
③ II		Added <b>NHPP</b> – “National Highway Performance Program”
③ III		Added <b><i>Proposed Guidelines</i></b> – “The <u>Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way</u> ”
③ III		Added <b>RRZ</b> – “Rail Highway Crossings Program”
③ III		Added <b>STBG</b> – “Surface Transportation Block Grant Program”
③ III		Added <b>STIP</b> – “Statewide Transportation Improvement Program”
V		Added <b>Accessible Route</b> – “A continuous and unobstructed pedestrian circulation path in the public right-of-way, the various components of which adhere to the guidance found in <i>PROWAG</i> .”
V		Added <b>ADA</b> – “The Americans with Disabilities Act of 1990 which provides comprehensive civil rights protection to individuals with disabilities in the areas of employment, transportation, public accommodations, state and local government services, and telecommunications.”

Page	Existing Text	Corrected Text
<b>Glossary</b>		
V		Added <b>Alteration</b> – Defined by <i>PROWAG</i> as “A change to a facility in the public right-of-way that affects or could affect pedestrian access, circulation, or use. Alterations include, but are not limited to, resurfacing, rehabilitation, reconstruction, historic restoration, or changes or rearrangement of structural parts or elements of a facility.”
V		Added <b>Arterial Highway</b> – “Defined by <b>AASHTO</b> as “A highway primarily for through traffic, usually on a continuous route.”
VI		Added <b>Bicycle Facilities</b> – Defined by <i>MUTCD</i> as “A general term denoting improvements and provisions that accommodate or encourage bicycling, including parking and storage facilities, and shared roadways not specifically defined for bicycle use.”
VI	<b>Bicycle Lane</b> – “A portion of a roadway that has been designated by striping, signing and pavement markings for either preferential or exclusive use by bicyclists.”	Defined by <i>MUTCD</i> as “A portion of a roadway that has been designated for preferential or exclusive use by bicyclists by pavement markings and, if used, signs.”
VII		Added <b>Bikeway</b> – Defined by <i>MUTCD</i> as “A generic term for any road, street, path or way that in some manner is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.”

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③ VII		Added <b>Blended Transition</b> – Defined by the <i>Proposed Guidelines</i> as “A raised pedestrian street crossing, depressed corner, or similar connection between the pedestrian access route at the level of the sidewalk and the level of the pedestrian street crossing that has a grade of 5 percent or less.”
VII	<b>Buffer Area</b> – “The area between the back of curb and the sidewalk.”	Remove this definition
VII	<b>CADD Coordination Plan</b>	<b>CADD Coordination Policy</b>
VIII		Added <b>Clarity</b> – “A computerized system that programs, schedules and monitors projects through preconstruction stages. The <b>Project Scheduling Section</b> of the <b>Program Management Division</b> manages it.”
IX	<b>Clear Zone</b> – “The total roadside border area, starting at the edge of the traveled way, available for safe use by errant vehicles.”	“The total roadside border area, starting at the edge of the traveled way, available for use by errant vehicles.”
X	<b>Crash Cushions</b> – “A protective system that prevents errant vehicles from impacting roadside obstacles by decelerating the vehicles to a safe stop when the cushion is hit head on or redirecting the vehicle away from the obstacle when the cushions are hit from the side.”	“A protective system that prevents errant vehicles from impacting roadside obstacles by decelerating the vehicles to a stop when the cushion is hit head on or redirecting the vehicle away from the obstacle when the cushions are hit from the side.”
X	<b>Cross Slope</b>	<b>Cross Slope (Roadway)</b>

Page	Existing Text	Updated Text
<b>Glossary</b>		
③ X		Added <b>Cross Slope (Sidewalk)</b> – Defined by the <i>Proposed Guidelines</i> as “The grade that is perpendicular to the direction of pedestrian travel.”
XI	<b>Crosswalk</b> – “Pedestrian crossings, usually at intersections, delineated by pavement markings and/or surfacing materials.”	<p>“The Nebraska Revised Statutes, Chapter 60 Motor Vehicles defines a crosswalk as:</p> <ol style="list-style-type: none"> <li>1. That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of such roadway measured from the curbs or, in the absence of curbs, from the edge of the roadway; or</li> <li>2. Any portion of a roadway at an intersection or elsewhere distinctly designated by competent authority and marked for pedestrian crossing by lines, signs, or other devices.”</li> </ol>
XI	<b>Curb Ramp</b> – “Sidewalk ramps provided in curbed roadways to provide accessibility for the handicapped.”	<p>“A connection between the pedestrian access route at the level of the sidewalk and the level of the pedestrian street crossing that has a grade which is between 5 percent and 8.3 percent inclusive in the direction of pedestrian travel. Curb ramps can be perpendicular or parallel, or a combination of parallel and perpendicular ramps.”</p>
XII	<b>Decision Sight Distance</b> – “...4) initiate and complete the required maneuver safely and efficiently.”	<p>“...4) initiate and complete the required maneuver.”</p>

Page	Existing Text	Updated Text
<b>Glossary</b>		
XII	<b>Design Speed</b> – “The maximum safe speed that can be maintained over a specified section of highway when condition are so favorable that the design features of the highway govern.”	“The maximum speed that can be maintained over a specified section of highway when condition are so favorable that the design features of the highway govern.”
XII	<b>Design Year</b> – “The year 20 years after the initial construction of the project.”	“The year 20 years after the initial construction of a new / reconstructed project. For 3R projects use 20 years for Portland Cement Concrete and 10 years for hot mixed asphalt surfacing.”
① XIII	<b>Engineering Review</b> – “A process by the <b>Planning and Project Development Division Location Studies Section</b> early in the project to establish the concept of work to be performed and the initial itemized cost estimate for major, non-interstate projects.”	“A process by the <b>Project Development Division Location Studies Section</b> early in the project to establish the concept of work to be performed and the initial itemized cost estimate for major, non-interstate projects.”
XIV	<b>Environmental Impacts</b> – “The possible affects of projects on the quality of the social, cultural or natural environment.”	“The possible effects of projects on the quality of the social, cultural or natural environment.”
① XIV	<b>Environmental Summary Sheet</b> – “A form from the <b>Planning and Project Development Division</b> that outlines the measures to be taken to mitigate the effects of a project on the environment, the applicable permits, etc.”	“A form from the <b>Project Development Division</b> that outlines the measures to be taken to mitigate the effects of a project on the environment, the applicable permits, etc.”
XIV	<b>Exempt Projects</b> – “Projects exempt from <b>FHWA</b> oversight, e.g., any new/reconstructed or 3R NHS projects estimated at less than \$1 million or off-NHS projects.”	“Projects exempt from <b>FHWA</b> oversight, e.g., new/reconstructed or 3R NHS projects estimated at less than \$5 million or off-NHS projects.”

Page	Existing Text	Updated Text
<b>Glossary</b>		
XVI		Added <b>Freeway</b> – “An arterial highway with full control of access.”
XVII	<b>Intercepting Dikes</b> – “Small dikes constructed at the top of cut slopes that prevent stormwater from flowing down the cut slopes by intercepting the runoff and redirecting the flow to where it can safely be discharged into a ditch, creek, stream, etc.”	“Small dikes constructed at the top of cut slopes that prevent stormwater from flowing down the cut slopes by intercepting the runoff and redirecting the flow to where it can be discharged into a ditch, creek, stream, etc.”
XVII	<b>Interchange</b> – “A combination of ramps and grade separations designed to increase capacity, reduce or eliminate traffic conflicts, and improve safety at the junction of two or more roadways.”	“A combination of ramps and grade separations designed to increase capacity, reduce or eliminate traffic conflicts, and reduce the potential for crashes at the junction of two or more roadways.”
① XVII	<b>Intergovernmental Agreements</b> – “Agreements prepared by the <b>Agreements Unit</b> in the <b>Planning and Project Development Division</b> that outline the scope and participation of all governmental parties involved in a project and are executed for projects involving other units of government.”	“Agreements prepared by the <b>Agreements Section</b> in the <b>Project Development Division</b> that outline the scope and participation of the governmental parties involved in a project and are executed for projects involving other units of government.”
XVIII	<b>Lane Balance</b> – “A condition in which there is a balance in the number of traffic lanes on a freeway and the number of lanes on ramps to ensure safe and efficient traffic operations through and beyond interchanges.”	“A condition in which there is a balance in the number of traffic lanes on a freeway and the number of lanes on ramps to provide for efficient traffic operations through and beyond interchanges.”

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XIX	<b>Limits of Construction Plans</b> – “They include all culverts, driveways, intersections, dikes, etc. for use in right-of-way design.”	“They include culverts, driveways, intersections, dikes, etc. for use in right-of-way design.”
XIX	<b>Local Roads</b> – “All rural roads not classified otherwise except minimum maintenance roads.”	“Rural roads not classified otherwise except minimum maintenance roads.”
XX	<b>Minimum Maintenance Standards</b>	<b>Maintenance Resurfacing Standards</b>
XX	<b>Mountable Curb</b> – “A curb designed so that errant vehicles can cross them safely.”	“A curb designed so that errant vehicles can cross them easily.”
XXI	<b>Needs Study Criteria</b> – “Criteria to provide a higher level of rehabilitation than minimum 3R standards for rural projects.”	Remove this text.
XXI	<b>Needs Study Segment Evaluation</b> – “An annual review of the condition of existing roadways throughout the state conducted by the <b>Classification, Needs, and Pavement Management Unit</b> in the <b>Materials and Research Division</b> .”	<b>Needs Assessment</b> – An annual review of the condition of existing roadways throughout the state conducted by the <b>Classification, Needs, and Pavement Management Unit</b> in the <b>Materials and Research Division</b> . A summary of the results are published in the <u>State Highway Inventory Report</u> .”
XXI	<b>New Jersey Barriers</b> – “Concrete safety shape rigid barriers generally used as median barriers and as barriers in work zones.”	“Concrete rigid barriers generally used as median barriers and as barriers in work zones.”

Page	Existing Text	Updated Text
<b>Glossary</b>		
XXII	<b>Operating Speed</b> – “The highest overall speed at which a driver can travel on a given highway under favorable weather conditions and under prevailing traffic conditions without at any time exceeding the safe speed as determined by the design speed on a section-by-section basis.”	“The highest overall speed at which a driver can travel on a given highway under favorable weather conditions and under prevailing traffic conditions without exceeding the design speed on a section-by-section basis.”
XXII	<b>Passing Sight Distance</b> – “The distance required for an overtaking vehicle to pass another vehicle safely on a two-lane, two-way roadway.”	“The distance required for an overtaking vehicle to pass another vehicle on a two-lane, two-way roadway.”
XXII		Added <b>Pedestrian</b> – Defined by <i>MUTCD</i> as “A person on foot, in a wheelchair, on skates, or on a skateboard.”
XXII		Added <b>Pedestrian Crossing</b> – “A pedestrian crossing facilitates the movement of the non-motorized public (e.g. pedestrians, bicyclists) across highways, railroad tracks, and rivers or streams.”
XXII		Added <b>Pedestrian Ramp</b> – “A part of an accessible route that has a running slope which is between 5% and 8.3% inclusive in the direction of pedestrian travel.”

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XXIII	<b>Preconstruction Scheduling System (PSS)</b> – “A computerized system that programs, schedules and monitors projects through preconstruction stages. The <b>Project Scheduling and Program Management Section</b> manages it.”	Remove this text. PSS was replaced with Clarity.
③ XXIV		Added <b>Public Right-of-Way</b> – Defined by the <i>Proposed Guidelines</i> as “Public land or property, usually in interconnected corridors, that is acquired for or dedicated to transportation purposes.”
XXIV	<b>Recoverable Slope</b> – “A slope on which a motorist can stop his/her vehicle or slow it and then return safely to the roadway; a slope of 1:4 or flatter.”	“A slope on which a motorist can stop his/her vehicle or slow it and then return to the roadway; a slope of 1:4 or flatter.”
XXIV	<b>Right-Of-Way Certification</b> – “Certificate stating that all right-of-way is available to the contractor and clear of improvements or the estimated date when all non-complying tracts will be clear and available.”	“Certificate stating that the right-of-way is available to the contractor and clear of improvements or the estimated date when the non-complying tracts will be clear and available.”
XXV	<b>Right-Of-Way Negotiation Plans</b> – “Right-of-way plans that reflect right-of-way contracts and any changes made during negotiations.”	“Right-of-way plans that reflect right-of-way contracts and changes made during negotiations.”
XXV	<b>Roadway Lighting</b> – “Lighting which is provided along a roadway or highway to improve nighttime visibility and safety.”	“Lighting which is provided along a roadway or highway to improve nighttime visibility.”

Page	Existing Text	Updated Text
<b>Glossary</b>		
③ XXV		Added <b>Running Slope</b> – Defined by the <i>Proposed Guidelines</i> as “The grade that is parallel to the direction of pedestrian travel.”
XXVI	<b>Service Ramps</b> – “Ramps, usually low-speed, that transfer traffic between an Interstate or expressway and an arterial.”	“Ramps, usually low-speed ( $\leq 45$ mph), that transfer traffic between an Interstate or expressway and an arterial.”
XXVI		Added <b>Shared Roadway</b> – Defined by <i>MUTCD</i> as “A roadway that is officially designated and marked as a bicycle route, but which is open to motor vehicle travel and upon which no bicycle lane is designated.”
XXVII		Added <b>Shared-Use Path</b> – Defined by <i>MUTCD</i> as “A bikeway outside the traveled way and physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent alignment. Shared-use paths are also used by pedestrians (including skaters, users of manual and motorized wheelchairs, and joggers) and other authorized motorized and non-motorized users.”
XXVII	<b>Sidewalk</b> – “A walkway primarily for pedestrian traffic, at the side of a roadway.”	Defined by <i>MUTCD</i> as “That portion of a street between the curb line, or the lateral line of a roadway, and the adjacent property line or on easements of private property that is paved and intended for use by pedestrians.”

Page	Existing Text	Updated Text
<b>Glossary</b>		
XXVIII	<b>State Highway Inventory Report</b> – “A summary of results from the needs study segment evaluation.”	“A summary of results from the needs assessment.”
XXX		Added <b>Technically Infeasible</b> – Defined by the Department of Justice in the <u>2010 ADA Standards for Accessible Design</u> as “...or because other existing physical or <i>site</i> constraints prohibit modification or <i>addition of elements, spaces</i> , or features that are in full and strict compliance with the minimum requirements.” (emphasis original to DOJ) A finding of “technically infeasible” still requires that the element of the pedestrian path in question be built to the minimum applicable standards to the maximum extent possible.
XXXI	<b>Threatened Species</b> – “Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its habitat.”	“A species that is likely to become endangered species within the foreseeable future throughout all or a significant portion of its habitat.”
XXXI	<b>Traffic Control Plan</b> – “An essential part of the overall design of the roadway that provides for the routing of traffic safely through and/or around the construction zone while providing a safe and adequate working area for the contractor.”	“An essential part of the overall design of the roadway that provides for the routing of traffic through and/or around the construction zone while providing an adequate working area for the contractor.”

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**Glossary**

XXXII

**Utility** – “A privately, publicly or cooperatively owned line, facility or system for producing, transmitting or distributing communications, cable television, electricity, light, heat, gas, oil, crude products, water, steam, waste, stormwater not connected with highway drainage, or any other similar commodity including any fire or police signal system or street lighting system.”

“A privately, publicly or cooperatively owned line, facility or system for producing, transmitting or distributing communications, cable television, electricity, light, heat, gas, oil, crude products, water, steam, waste, stormwater not connected with highway drainage, or other similar commodity including a fire or police signal system or street lighting system.”