

Nebraska Board of Public Roads Classifications and Standards
Memorandum of Understanding

Neb. Rev. Stat. § 39-2113(7)

Program 2023-1; Nebraska Department of Transportation
3R Standards for Certain Expressway Projects
(Expressways with access only at interchanges)

THIS MEMORANDUM OF UNDERSTANDING, made and entered into by and between the Nebraska Board of Public Roads Classifications and Standards (the “Board”) and the State of Nebraska, Department of Transportation (the “State”), and collectively, the “Parties.”

Recitals

- A. Pursuant to Neb. Rev. Stat. § 39-2113(7), the Board has authority to develop, support, approve, and implement programs and project strategies that provide additional flexibility in the design standards established by the Board.
- B. Section 39-2113(7) allows the Board to set out such programs or strategies in Memorandums of Understanding (the “MOU”) between the Board and the State, the Counties, or the Cities.
- C. The State has the authority to submit a program or project strategy to the Board under Section 39-2113(7).
- D. The Board and the State have reviewed a program submitted by the State which is described in detail in Exhibit A, and which is known as: 3R Standards for Certain Expressway Projects (Expressways with access only at interchanges).
- E. The Board and the State believe that the Program qualifies as an eligible program under the provisions of Section 39-2113(7).
- F. The purpose of this MOU is to set out the terms and conditions applicable to this Program.
- G. Once this MOU has been properly executed by the Parties, this MOU will constitute State’s “pre-approval” for the design and construction of any project that includes use of the Program consistent with the terms and conditions of this MOU.

NOW, THEREFORE, in consideration of these facts, and other good and valuable consideration, the Board and the State agree as follows:

Section 1. Purpose of the MOU. The purpose of this MOU, as provided in Neb. Rev. Stat. § 39-2113(7), is for the Board to formally approve a program or project strategy intended to provide additional flexibility for State with Nebraska’s highway design standards. The details of the applicable Program are set out below, as are any program conditions or limitations.

Section 2. Duration of the MOU. The MOU will become effective beginning on the date of execution of the MOU by the Chair of the Board. The MOU will continue in effect until rescinded by formal action of the Board or formal addition to the Board’s Standards.

Section 3. Description of the Program. The Program is described in the attached Exhibit A; the Exhibit is hereby made a part of the MOU by this reference. This Program applies to the functional classification of Expressways (Access Only at Interchanges), which classification only applies to the State.

Section 4. Conditions and Limitations of the Program. The conditions and limitations applicable to the approval of the Program, if any, are set out in Exhibit A.

Section 5. Program Approval. This Program is approved upon the full execution of this MOU; State will hereinafter be “pre-approved” and authorized to design and construct Highway projects using the approved Program, so long as the conditions and limitations of the Program have been met and continue to be met by State.

Section 6. Program Approval Reconsideration. Board, by majority vote, may reconsider the Board Approval given to this Program as follows:

- (a) When the Board’s reason for reconsidering the Program Approval is an alleged breach of this MOU by State, Board shall provide State written notice of the alleged breach and allow State 90-days thereafter to cure the alleged breach or provide an acceptable plan to cure the alleged breach.
- (b) When the Board’s reason for reconsidering the Program Approval is related to the merits of the Program, Board shall provide State a written and complete statement of the Board’s concern for continuation of the Program. State shall have 90-days to consider and respond to Board’s concern prior to the Board formally considering Board’s concern at a duly scheduled Board meeting.
- (c) For an Approval Reconsideration under either (a) or (b) above, State will be given a full opportunity to present its response to Board’s concerns at the

Board meeting. The Board may rescind the MOU and the Approved Program by formal action taken at a meeting of the Board.


- (d) Also, this MOU and the Program may be rescinded when the Board and the State jointly agree to do so.
- (e) This MOU and the Program may also be terminated if the Board's standards are changed to no longer make the Program necessary.

Section 7. Contact Information. Questions for the Board about this Program should be directed to the Board Secretary or to the Board Chair at the Board of Public Roads Classifications and Standards, Nebraska Department of Transportation Building, 1500 Nebraska Parkway, P.O. Box 94579, Lincoln, NE 68509. Questions for NDOT about this Program should be directed to the Roadway Design Engineer, at the NDOT mailing address set out in the previous sentence.

Section 8. Change of Law. If the Board's standards change, or Nebraska law changes, and either Party has a good faith question about whether this change affects the validity of the MOU, it may notify the other Party of the concern. The Board will meet within 180 days of the notice being given to discuss the continued validity of the MOU. The MOU will remain in effect as written unless revised or rescinded by action of the Board.

IN WITNESS WHEREOF, the Parties hereby execute this Memorandum of Understanding pursuant to lawful authority.

EXECUTED by the State this 22nd day of August, 2023.

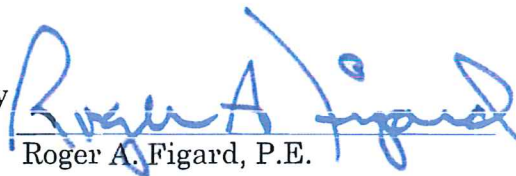

Khalil Jaber, P.E.
Deputy Director - Engineering
STATE OF NEBRASKA
DEPARTMENT OF TRANSPORTATION

EXECUTED by the Board of Public Roads Classification and Standards this 22nd day of August, 2023.

WITNESS:

BOARD OF PUBLIC ROADS
CLASSIFICATION AND
STANDARDS


LeMoyné D. Schulz,
Board Secretary

By 
Roger A. Figard, P.E.
Board Chairperson

Program 23-1, 3R Standards for Certain Expressway Projects

(Expressways with access only at interchanges)

MOU Exhibit A

Nebraska Board of Public Roads Classifications and Standards (Board)

Program. This Nebraska Department of Transportation (State) program will allow State to use newly established 3R Project Standards (Resurfacing, Restoration, and Rehabilitation) for projects on highway segments functionally classified as Expressway but limited to such expressway segments that allow access only from interchanges. (Please note this classification is “Freeway” under the national functional classification system.) (See attached Table of specific 3R Standards.) For purposes of this policy, as noted on the Table, the design standard allowing “existing” refers to design features as per the most recent construction plans. The Board’s current design standards do not include 3R Project Standards for either rural or municipal segments of “Expressway (Access Only at Interchanges).”

Standards and Intent. This Program will impact the following current Board standards: 428 NAC Chapter 2, 001.02O – Rural, and 428 NAC Chapter 2, 001.02U -- Municipal. This program is expected to be an interim program until completion of an expected revision to the Board’s Rules and Regulations to expressly allow 3R Standards for the applicable Expressway projects. The FHWA has only recently given its approval to State to use 3R Standards on applicable Expressway projects using federal-aid funds.

General Conditions applicable to this Program.

- (1) It is understood that it is appropriate to allow 3R Standards on Expressway projects because the expressway segments on which the 3R projects will be constructed were initially designed and constructed to modern and well accepted design standards. Allowing 3R projects on these highway segments is also practical because it allows the State to extend the useful life of these modern expressway segments.
- (2) As a part of the development of a 3R Expressway Project, State will complete a crash history review using a standard crash analysis model to determine whether there is any existing significant need for **making additional improvements with the project related to any Board non-complying geometric feature**. Any geometric change made from this analysis would meet or exceed 3R standards for that geometric feature.
- (3) Program 22-1, Bridge or Culvert Replacement Projects may also be used to make bridge or culvert improvements as a part of an Expressway 3R project.
- (4) If State decides to replace a bridge or a culvert under this Program on **a State Expressway within the corporate limits of a Municipality**, State will coordinate with the Municipality through normal processes.

If the above conditions are not met, then State would not move forward with an Expressway 3R project; in that case, State reserves the right to request a relaxation of standards from the Board.

RESURFACING, RESTORATION AND REHABILITATION (3R) RURAL

State Functional Classification: Expressway (Access Only At Interchanges)
National Functional Classification: Principal Arterial – Other Freeways and Expressways

Design Speed	Posted Speed Limit
Lane Width	12 ft.
Shoulder Width	4-Lane: Lt. = 3 ft. pvd/ Rt. = 8 ft. pvd ≥ 6-Lane: Lt. = Existing/ Rt. = 8 ft. pvd
Horizontal Alignment	
Maximum Superelevation	8%
Minimum Radius (Based on Maximum Superelevation)	Existing
Vertical Alignment	
Crest K Value	Existing
Sag K Value	Existing
Maximum Grade	Existing
Stopping Sight Distance	Existing
Cross Slope	
Lane	1.5% to 2.5% (D)
Shoulder	2% to 6% (B)
Clear Zone	
Fixed Obstacle Clearance	Existing (5)
Lateral Offset to Obstruction	Nominal Shoulder Width (P)
Vertical Clearance	16 ft. (7)

Bridges	
Clear Bridge Width	37.5 ft. (N)
Structural Capacity	(F)

Note: “Existing” refers to design features as per the most recent construction plans.

<p>(5) This area, measured from the edge of the through travel lane, may have crashworthy or break-away obstacles and shall be free of non-shielded obstacles except:</p> <ol style="list-style-type: none"> 1. Traffic signal poles, railroad signals, railroad tracks, bridge rails, ditches, side slopes, driveways, intersections, bike/pedestrian paths, earth dikes, parallel drainage culverts, curbs, raised islands, guardrails, median barriers, crash cushions, drainage inlets, drainage flumes, culverts with flared end sections, erosion control devices, fire hydrants, and traffic control devices; 2. Other obstacles if the NDOT, in its sole discretion, determines based upon an accident review and a Roadside Safety Analysis Program (RSAP) review or a comparable AASHTO approved economic analysis, that the cost to remove or treat such obstacle exceeds the benefits from such removal or treatment.
<p>(7) Vertical clearance shall be provided over the entire roadway including traveled lanes and paved shoulder width. For sign trusses and pedestrian overpasses, the vertical clearance is 1 ft. greater.</p>
<p>(B) The surfaced shoulder slope should not be less than the slope of the adjacent lane. (D) On roadways where there are more than two lanes inclined in the same direction, the cross slope may be increased by 0.5% to 1% for each additional lane, up to a maximum of 3%. (F) The Design Loading used shall be the original design loading or, if unknown, use HS20. (N) For rehabilitated bridges it is desirable to use the new and reconstructed clear bridge width. (P) The “nominal shoulder width” is defined as the shoulder width presented in this table.</p>

**State Functional Classification: Expressway (Access Only At Interchanges)
National Functional Classification: Principal Arterial – Other Freeways and Expressways**

Design Speed	Posted Speed Limit
Lane Width	12 ft.
Shoulder Width	4-Lane: Lt. = 3 ft. pvd/ Rt. = 8 ft. pvd ≥ 6-Lane: Lt. = Existing/ Rt. = 8 ft. pvd
Horizontal Alignment	
Maximum Superelevation	8%
Minimum Radius (Based on Maximum Superelevation)	Existing
Vertical Alignment	
Crest K Value	Existing
Sag K Value	Existing
Maximum Grade	Existing
Stopping Sight Distance	Existing
Cross Slope	
Lane	1.5% to 2.5% (D)
Shoulder	2% to 6% (B)
Clear Zone	
Fixed Obstacle Clearance	Existing (5)
Lateral Offset to Obstruction	Nominal Shoulder Width (P)
Vertical Clearance	16 ft. (7)

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