



SUBJECT Design for Program Funded Curb Ramp Projects Programmed to be Constructed in 2021, 2022, 2023, and 2024	FINAL NUMBER RD21-04(B)	EFFECTIVE DATE 01/01/2022	VALIDATION DATE N/A	SUPERSEDES or RESCINDS RD21-03(B)
WEB LINK(S) https://www.oregon.gov/ODOT/Engineering/Pages/Technical-Guidance.aspx				
TOPIC/PROGRAM ADA Program	APPROVED SIGNATURE Original signed by Michael J. Kimlinger, PE State Traffic Roadway Engineer			

PURPOSE

This technical services bulletin establishes design standards and requirements for curb ramp projects funded by the ADA program for construction years 2021, 2022, 2023, and 2024.

GUIDANCE

1. Compliant Design

The Engineer of Record is permitted to design and represent designs on plan sheets that, when installed, will result in a curb ramp that will comply with Applicable Standards as represented in the ODOT inspection forms or have design exceptions for features that do not.

- ODOT design standards, best practices, and preferences related to providing full access that exceed Applicable Standards can be adjusted to the maximum allowed by the Applicable Standards at the discretion of the Engineer of Record with no design exception required.
- The Engineer of Record will determine whether to include design tolerance for dimensions and slope angles within the maximum allowed by the Applicable Standards.
- The Engineer of Record will attempt to provide a ramp for each crossing direction (typically two per corner). However, if this cannot be accomplished within existing ROW, a single compliant ramp can be provided. When even a single compliant curb ramp cannot be constructed within existing ROW and some ROW must be purchased, enough ROW to build two compliant curb ramps will be acquired. A design exception for providing a single compliant ramp must be approved by the State Traffic-Roadway Engineer.
- ROW will be acquired where necessary for a proposed curb ramp installation to meet Applicable Standards. The need to acquire ROW to meet Applicable Standards will not be justification for a design exception.

- Curb ramp designs that do not meet Applicable Standards are required to have approved design exceptions. Reasons that justify design exceptions include but are not limited to:
 - Underlying terrain (i.e. steep grades).
 - Right-of-way availability (not available to purchase).
 - Underground structures (pole boxes and utility vaults or luminaire, signal, and utility poles, etc.).
 - Adjacent developed facilities (driveways, sign structures, or retaining walls, etc.).
 - Drainage (changes to drainage patterns, drainage structure impacts, drainage inlets, etc.).
 - The presence of notable natural or historic and other sensitive environmental features.
- Where existing sidewalk widths are greater than or equal to 4 feet, the existing width can be used as the design width. Where existing sidewalks are less than 4 feet, the design width will be 4 feet. This assessment will be made at each corner.
- The Engineer of Record will follow [RD21-01\(B\)](#) to determine the skew of the crossings. Specifically, opposing curb ramps shall be directional and orient pedestrians toward the receiving curb ramp. If the offset is greater than 15 degrees or 10 feet, whichever is less, from the opposite curb ramp, the crossing will be closed.
- Transition panels will be utilized as needed to transition from compliant features to non-compliant existing sidewalks. A maximum transition rate of 1% per foot will be used for transitioning cross-slope. Minimum horizontal taper will be 1:3 per RD722. Longitudinal slope of the transition panel will match the existing sidewalk slope to the degree possible. The Joint between a transition panel and existing sidewalk must be flush.
- Gutter flow slopes will be designed to provide continuous flow. Gutter flow slopes may be adjusted (warped) at curb ramps to create compliant cross-slopes provided that no pooling, diversion or other impediment is created. Design exceptions will be required for any curb ramp cross slopes that do not meet Applicable Standards. The minimum number of design exceptions will be prepared for each project by combining locations within a single intersection with similar features.

2. Non-ADA Features and Installations

When curb ramp retrofit projects impact other features like, but not limited to, signal installations, signs, or driveways, the features will be restored to the condition and function they were before the project. Non-ADA features will not be brought to current standards nor their functionality enhanced. Access management for driveways is not required.

3. Survey and Design Approach (2D Design)

Existing geometry can be established by tape measure and smart level at the discretion of the Engineer of Record. This method can be used to derive horizontal and vertical coordinates.

The following requirements apply for projects using the 2D Design approach:

- The amount of horizontal and vertical data provided on plan sheets will be at the discretion of the Engineer of Record.
- The Engineer of Record will be present or represented during construction of the curb ramps to advise the inspector and contractor.
- The Engineer of Record may interpret or alter the design during construction within the maximum allowable limits of the Applicable Standards.
- Curb ramp installations that do not meet applicable standards must be made compliant or receive a design exception.

Note: Roadway will continue a QA program to review compliance of curb ramp installations with Applicable Standards.

DEFINITIONS

ADA – Americans with Disabilities Act “on or along the State Highway” – includes public sidewalk and accessible route features that are adjacent to the state highway road system regardless of who has public ownership, public easements, or intergovernmental agreements of the underlying property where the accessible route feature resides.

ADAAG – ADA Accessibility Guidelines.

MUTCD - Manual on Uniform Traffic Control Devices.

ODOT – Oregon Department of Transportation.

PROWAG – Public Rights of Way Accessibility Guidelines from the US Access Board.

EXPLANATION

This bulletin is pursuant to cost reduction measures being developed for the ADA Program. This bulletin is intended to minimize curb ramp footprint and ROW acquisition needs. This bulletin will be applied to curb ramp projects funded by the ADA program intended for construction in 2021, 2022, 2023, and 2024. Further guidance or bulletins may be provided in the future.

Minimizing footprint and ROW needs will be achieved by complying with the standards cited in the Settlement Agreement (Applicable Standards) as interpreted by the Traffic and Roadway Manager. The Applicable Standards cited in the Settlement Agreement are: ADA, PROWAG, ADAAG, Sec 504, and Part 4 (Highway Traffic Signals) and Part 6 (Temporary Traffic Control) of MUTCD.

CONTACT INFORMATION

Title: State Traffic-Roadway Engineer
Branch/Section: Engineering and Technical Services Branch/Traffic-Roadway
Section
Phone: 503-986-3606
E-mail: michael.j.kimlinger@odot.state.or.us