

**WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DESIGN DIRECTIVE**

**DD-811
ACCESSIBILITY STANDARDS,
CURB RAMPS AND SIDEWALKS**
January 23, 2017

This Design Directive defines the West Virginia Department of Transportation, Division of Highways' policy concerning curbs and sidewalks, and further compliance with the Americans with Disabilities Act of 1990 (ADA) and the U.S. Department of Justice 2010 ADA Standards. Other references will be given to assist the Designer/Project Manager during the assessment of a project for ADA requirements, as well as details and criteria that are to be used when ADA requirements must be met.

Attached to and made a part of this Design Directive is an ADA Exceptions Justification Form. See Section 50 of this DD for more information.

The policies described herein will apply to all projects, whether designed at the District level, in the Central Office, or the Special Projects Section.

Attachment

10. General

In compliance with the Americans with Disabilities Act of 1990 and the U.S. Department of Justice 2010 ADA Standards For Accessible Design, curb ramps as per DOH Standard Details shall be provided at all existing marked and unmarked crosswalks for which the Division of Highways has responsibility. Existing ADA features that are within the limits and scope of work of the project are to be checked for conformity with the DOJ 2010 ADA Standards for Accessible Design and are to be reconstructed if they do not comply. All curb ramps are to have Detectable Warnings installed. In addition, the existing condition of a sidewalk will not affect the decision of whether to add a curb ramp or not.

The following information is to be used to determine, for ADA applicability purposes, whether a project is considered a “Maintenance Project” under which curb ramps are NOT required to be incorporated into the project, or an “Alteration Project” under which curb ramps MUST be incorporated into the project. See the following web page for a more precise definition of some of the terms in the lists below: www.fhwa.dot.gov/civilrights/programs/doj_fhwa_ta_glossary.cfm.

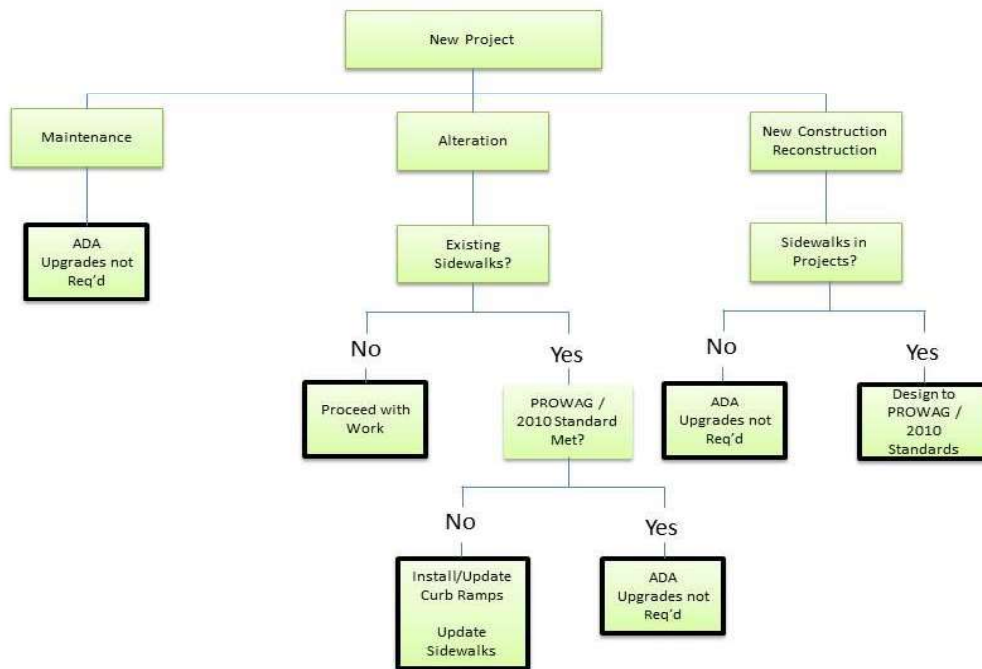
- A. Roadway Maintenance
 - 1. Crack filling and sealing
 - 2. Surface sealing
 - 3. Chip, Slurry, and Fog seals
 - 4. Scrub sealing
 - 5. Joint crack seals
 - 6. Joint repairs
 - 7. Dowel bar retrofit
 - 8. Spot high-friction treatment
 - 9. Diamond grinding
 - 10. Pavement patching
 - 11. Shoulder repairs
 - 12. Pipe and inlet repairs
 - 13. Pulling and restoration of ditches
 - 14. Guardrail repair and installation
 - 15. Re-striping

- B. Roadway Alteration
 - 1. Open-graded surface course
 - 2. Cape seals
 - 3. Mill and fill/Mill and overlay
 - 4. Hot in-place recycling
 - 5. Microsurfacing/Thin-lift overlay
 - 6. Addition of new layer of asphalt
 - 7. Asphalt and concrete rehabilitation and reconstruction
 - 8. New construction
 - 9. Widening of the existing pavement typical section
 - 10. Addition of turning lanes
 - 11. Pavement rubblizing

12. Installation of new drainage structures to improve existing drainage characteristics
- C. Bridge Maintenance
1. All painting of bridge members
 2. Scour Countermeasure Activities
 3. Expansion Joint Repairs and Replacement
 4. Concrete Crack Repairs
 5. Refurbishing or restoration of existing bridge bearings
 6. Deck drainage system repairs
 7. Seismic retrofit activities that do not include replacement of bearings or structural members
- D. Bridge Alteration
1. Bridge deck overlay projects
 2. Repairs to structural members for the purpose of restoring or enhancing structural capacity
 3. Strength repairs to substructure elements
 4. Bearing replacement
 5. Bridge deck replacement
 6. Superstructure replacement

Alteration projects administered by a municipality on WVDOH R/W, such as a streetscape, involve funds expended on a public right of way. The alteration requires the municipality and the WVDOH to meet full compliance with all federal laws and regulations during the development of plans and construction. As part of the development of plans for construction, where full design criteria for pedestrian access is not feasible, the designer (the municipality or their consultant) shall prepare an exception justification form as described in DD-811 and submit with the plans for review and approval to the WVDOH. All exceptions approved by the Division shall be filed as required for all projects.

ADA Requirements Flowchart



11/06/2014

20. Existing Sidewalks

Projects considered an alteration by the Department of Justice (DOJ) as described in Section 10 of this DD will require all curb ramps within the project limits to meet the requirements of the Americans with Disabilities Act (ADA). This will also require installing curbs ramps where presently a curb ramp does not exist to make the sidewalk ADA accessible. Detectable warning systems will be required on all existing curb ramps that otherwise meet the ADA criteria. Existing sidewalks shall be evaluated for ADA Compliance using the DOJ 2010 ADA Standards for Accessible Design. These Standards are available at:

www.ada.gov/regs2010/2010ADAStandards/2010ADAstandards.htm. The 2010 ADA Standards for Accessible Design consists of the U.S. DOJ TITLE 28 CFR Parts 35.151 from the Code of Federal Regulation combined with the 2004 ADA Accessibility Guidelines.

Within the project limits the evaluation of the sidewalks and any curb ramps which may exist within a project's limits is to be a field evaluation. An evaluation from remote sources such as Google Earth or the Division's pavement video records is not sufficient.

For sidewalks located outside of a municipality, the District/Division shall evaluate and fully document the entire sidewalk within the project limits for ADA Compliance. A cost estimate for the renovation and a copy of the ADA evaluation shall be forwarded for review to the District/Division ADA Coordinator. During project development, the District/Division shall consider incorporating side walk renovations into the project. If there is significant scope creep,

the District/Division may request, through the District ADA Coordinator, that sidewalk renovations not be incorporated into the project, and be included in the WVDOH ADA Transition Plan. The ADA Coordinator shall obtain approval for this request from the State Highway Engineer. Regardless of when the sidewalks are renovated, curb ramp work to make the sidewalk ADA compliant must be incorporated into the alteration project, or completed prior to the alteration project.

For sidewalks located on the WVDOH Right of Way within a municipality where the municipality is responsible for the sidewalk maintenance, the District/Division ADA Coordinator shall contact the municipality to inform them that the existing sidewalks need to be evaluated for ADA Compliance. Non-compliant sidewalks should be added to municipality's ADA Transition Plan. Regardless of sidewalk maintenance responsibility, curb ramp work must be incorporated into the project.

30. Curb Ramps on Resurfacing Projects in Urbanized Areas with Sidewalks

Alteration projects must include curb ramp installation if none previously existed where there is a pedestrian walkway with a prepared surface for pedestrian use within the scope of the project. Where a non-compliant curb exists within the pedestrian walkway, upgrading of the curb ramp to meet the Proposed Accessibility Guidelines for Pedestrian Facilities in the public Right-of-Way (PROWAG), dated July 26, 2011, is required.

When performing roadway activities at intersections and adjoining streets, the limits of resurfacing is to be the curb or gutter line of the street being altered.

The WVDOH recommends not paving to the end of the radius return on side street or alleys and impacting the existing curb ramps of the adjoining street. If flaring of the resurfacing project into an adjoining street is necessary, curb ramps shall be assessed for ADA compliance and addressed within the scope of the project.

Curb ramps are to be assessed for compliance with PROWAG, dated July 26, 2011, or constructed on resurfacing projects when:

- A. Limits of the resurfacing project encroach into the boundary of the curb ramp detail;
- B. Pedestrians may reasonably conclude that they would cross the resurfacing project from one curb ramp to another, even if the curb ramp is outside the limits of resurfacing;
- C. Construction activities expand beyond the original limits and encroach into the curb ramp area; and
- D. Curb ramps aren't present in sidewalks at signals, stop signs or yield signs (they must be constructed with the resurfacing project on each side of the pedestrian access route).

Additionally, when existing Type II (diagonal) curb ramps meet any of the above conditions, they must be assessed to determine if two separate ramps can be provided at the corner.

40. New Sidewalks and Replacement of Existing Sidewalks

The Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right of Way (PROWAG), dated July 26, 2011, should be considered as minimum criteria for the design of any new sidewalk or the replacement of an existing sidewalk. The complete PROWAG document is available at the following web address: <http://access-board.gov>. Certain sections will be referenced for the designer in Section 40 of this DD.

Currently, PROWAG is still in the rule making process and the 2010 ADA Standards for Accessible Design is being enforced by the Department of Justice. Therefore, new sidewalks shall also be checked for compliance with the 2010 ADA Standards for Accessible Design. If sidewalks do not meet the requirements of the 2010 ADA Standards for Accessible Design an ADA Exception Justification Report (attached) shall be submitted to the District/Division ADA Coordinator for review and concurrence

50. Technical Guidance and References

2010 ADA Standards (Existing Sidewalks)

The 2010 ADA Standards are to be used to evaluate existing sidewalks for ADA compliance. If the existing sidewalk is to be replaced, The Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right of Way dated July 26, 2011 shall be used in the design of the new sidewalk.

A technical assistance “tool kit” which includes checklists and information on conducting assessments of existing facilities is available for use by Designers at the following web address: <http://www.ada.gov/pcatoolkit/toolkitmain.htm>. Chapter 6 of this resource provides the technical assistance, and Appendices 1 and 2 provide instructions and a survey form to use to analyze existing sidewalks.

- A. In short, the above-mentioned checklist includes the following items (this listing is NOT all-inclusive).
- B. Sidewalks shall be at least 3 ft. wide.
- C. The cross slope shall not exceed 2%.
- D. When sidewalks are less than 5 ft. in width, passing spaces with a minimum clear space of 5 ft. x 5 ft. shall be provided at intervals not to exceed 200'. Driveways, building entrances, and public sidewalk intersections may be used for passing spaces.
- E. Where an obstacle (example: utility pole or fire hydrant) is considered immovable, a

minimum 32" of sidewalk width (excluding curb width from measurement) must be provided for the pedestrian. Reduction of sidewalk width from 36" (3') due to an obstacle requires an ADA design exception. When developing sidewalk widths, the Roadside Design Guide (RDG) requirements of clear zone (RDG Section 3.1) and minimum lateral offset behind the curb (RDG Section 3.4.1) must also be considered.

- F. Curb ramps shall not exceed a running slope of 1:12 (maximum 1:10 is permitted at existing sites where it is not feasible to provide the 1:12 requirement due to space limitations and the rise is less than 6 inches).
- G. A level landing should be provided at the top of a perpendicular curb ramp.
- H. The transition from curb ramp to gutter should be flush; lips are not permitted.
- I. The foot of a curb ramp should be contained within the crosswalk markings.
- J. Gratings such as tree well covers, valve boxes with vent holes, manhole covers, etc. in the path of travel may not have an opening with a dimension of greater than ½" in any direction. Drainage inlets or any other item with openings greater than ½" in any dimension shall be located out of the path of travel.
- K. Drainage is to be provided upstream of the foot of the ramp to ensure flow depth is at a minimum.

The Designer is cautioned to fully review the requirements contained in the Guide and consult the Checklist for complete information.

Accessibility Guidelines for Pedestrian Facilities in the Public Right of Way (PROWAG) (New Designs)

These standards shall be used in the design of all new sidewalks and the replacement of any existing sidewalks:

- A. The pedestrian access route shall have a minimum width of 4 ft. excluding the width of the curb.
- B. A level landing shall be provided at the top of a perpendicular curb ramp. The landing at the top of the curb ramp shall be a minimum 4 ft. wide when no obstructions exist at the backside of the landing and a minimum 5 ft. wide when obstructions exist such as a building, pole etc.
- C. All other requirements described for Existing Sidewalks above shall apply, noting that the list is NOT all-inclusive.

Additional guidance may be found at the following web site concerning Public Rights-of-Way Access from the United States Access Board (generally referring to facilities in public rights-of-

way): <http://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way>. A manual entitled “Special Report: Accessible Public Rights-of-Way Planning and Design for Alterations”, dated August 2007, is available for technical assistance to the Designer, generally providing guidance for alterations of existing facilities at <http://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/guidance-and-research/accessible-public-rights-of-way-planning-and-design-for-alterations>.

Technical guidance, including sample details, is available for the proposed DOJ rules at the address given heretofore in Section 20 of this Design Directive (the DOJ 2010 ADA Standards for Accessible Design (www.ada.gov/regs2010/2010ADAStandards/2010ADAstandards.htm)). Chapter 2 of this resource includes Scoping Requirements, while Chapter 4 “Accessible Routes”, include requirements and sample details for sidewalks and curb cuts.

Where a sidewalk which is being constructed or reconstructed along a State highway is carried around a radius, and ended, the surface of the sidewalk will smoothly meet the existing ground or adjacent sidewalk where conditions permit. If the sidewalk being constructed or reconstructed extends through the crosswalk on the intersecting street, curb cuts or ramps shall be provided.

The Checklists found in Design Directive 202, Field and Office Reviews for Initial Engineering, Preliminary Engineering and Final Design include lines for the Designer/Consultant Project Manager to initial for compliance when submittals are made.

60. ADA Exception Justification Report

If a requirement of the DOJ 2010 ADA Standards is deemed technically infeasible, the reasons for the exception must be fully documented and approved. Some reasons why an ADA requirement cannot be implemented include historical considerations, limited right-of-way, or problems with geometry (both horizontal and vertical). It is up to the Designer to determine feasibility. If an ADA exception is granted for technical infeasibility, the Designer should make every effort to mitigate the requirement. Specifically, Sections 201, 202, and 206 of the adopted DOJ 2010 ADA Standards discuss scoping, structural impracticality and technical Section 406 discusses Curb Ramps.

Attached to and made a part of this Design Directive is an ADA Exceptions Justification Form which is to be completed by the Designer/Project Manager for all projects which have exceptions to any ADA requirements. A copy of the proposed ADA Exception Report with the recommended signatures shall be mailed to the EEO Division ADA Coordinator to be forwarded to the ADA Board for approval. The completed Form is to be included in the Final Office Review and PS&E submittals.

West Virginia Division of Highways
EEO Division ADA Coordinator
1900 Kanawha Boulevard, East
Building 5, Room 618
Charleston, West Virginia 25305-0430

The District/Division ADA Coordinator shall maintain a copy of all approved ADA Exception Justification Reports and Sidewalk Evaluations for future reference.

AMERICANS WITH DISABILITIES ACT EXCEPTIONS
JUSTIFICATION REPORT

PROJECT DATA

State Project No. _____ **Date:** _____

Federal Project No: _____ **County:** _____

Project Name: _____

Project Description: _____

**Special Project Sponsor
Name and Address:** _____

WVDOH Representative: _____

FHWA Representative: _____

(Note: Project Description in above table should be the complete scope of the project: i.e. major or minor construction, urban or rural, reconstruction, rehabilitation, pavement overlay, etc. using the descriptions given in DD-803 as a guide)

HIGHWAY ROUTE DATA

- AASHTO Functional Classification**
- 1. Urban Rural
 - 2. Arterial Collector Local Road
 - 3. Freeway Divided/Arterial Two-Lane Arterial
 - 4. Interstate
 - 5. Other (i.e. school property)

TERRAIN TYPE Level Rolling Mountainous

ADA REQUIREMENTS (Document Only Exceptions)

<u>ADA Requirements Triggered</u>	<u>Existing Condition</u>	<u>Design Criteria</u>	<u>Proposed Action</u>	<u>Criteria Source</u>
1. Sidewalk	_____	_____	_____	_____
2. Curb Ramps	_____	_____	_____	_____
3. Detectable Warnings	_____	_____	_____	_____
4. Accessible Signals	_____	_____	_____	_____
5. Accessible Parking	_____	_____	_____	_____
6. Van Accessible Spaces	_____	_____	_____	_____
7. Path of Travel	_____	_____	_____	_____
8. Bridge	_____	_____	_____	_____
9. Other	_____	_____	_____	_____

(Note: references to the appropriate Section number of the 2010 ADA Standards for Accessible Design and proposed PROWAG Standards are to be used as the Design Criteria and the Criteria Source in the above table and in the Exception Report)

APPROVAL SIGNATURES

RECOMMENDED:

APPROVED:

1. _____
Consultant

ADA Board Chairman

2. _____
Project Engineer

REVIEWED:

3. _____
District/Division ADA Coordinator

Federal Highway Administration

