# **Appendix G**ODOT ADA Curb Ramp Process

## **Project Requirements July 2022**

**Appendix G** 

OREGON DEPARTMENT OF TRANSPORTATION

## ODOT ADA Curb Ramp Process

Project Requirements
July 2022

This document comprises ODOT project requirements based on the Federal Americans with Disabilities Act (ADA). It applies to projects that receive State or Federal funds or for projects on or along the State Highway. It is intended to provide guidance for addressing pedestrian accessibility requirements during the development of project bid packages. This package includes a checklist and detailed instructions with links to useful resources and contacts. It is intended for use by local agencies that have not received LPA ADA Certification, Consultants and ODOT staff.

## **ODOT Roadway Engineering Section | Highway Design Manual**

## **ODOT ADA Curb Ramp Process**

Appendix G

## **CONTENTS**

1. Scoping	G-4
1.1 Curb Ramp Evaluation in Project Scoping	G-4
2. Design	G-7
2.1 Design Acceptance Package (DAP) / Design Verification Package (DVP)	G-7
2.2 Curb Ramp Detail Sheets and Standard Drawings	G-8
2.3 Accessible Pedestrian Push Button Requirements	G-9
2.4 Temporary Pedestrian Accessible Route Plan (TPARP) Process	G-10
2.5 Curb Ramp Design Exception Process	G-12
2.6 Crosswalk Closure Process	G-13
2.7 Advance/90% Plans	G-15
2.8 PS & E/ Final Plans	G-16
3. Pre-Closeout, 2 <sup>nd</sup> Note, Curb Ramp Inspection	G-16
4. Ongoing Maintenance Agreements	G-18
5. Jurisdictional Transfer of State Highway	G-18
6. ODOT ADA Document Links and Resources	G-19
6.1 Operational Notices	G-19
6.2 Technical Bulletins Related to ODOT ADA requirements	G-19
6.3 Manuals	G-20
6.4 Standard Drawings and Details	G-21
6.5 Tools	G-21
7. Contacts	G-22
8. Checklist for Curb Ramp Process	G-23

#### **ODOT Roadway Engineering Section | Highway Design Manual**

#### **ODOT ADA Curb Ramp Process**

Appendix G

This document is intended to give designers, developers and local agencies information and guidance on the ODOT pedestrian curb ramp design and construction acceptance process.

In addition to the civil rights requirements under the Federal Americans with Disabilities Act (ADA), Federal and State Law requires that all projects that receive Federal or State funding meet current Federal and State requirements. The following is intended to help guide your agency or project team through the requirement process and expectations set by the Oregon Department of Transportation (ODOT) as an obligation to receive such funds. The following document provides milestones, detailed instructions, and a checklist to assist you in meeting the requirements of your project.

This ADA Curb Ramp Process is based on ODOT Statewide Transportation Investment Program (STIP) project delivery process. The Local Agency process may be different than ODOT's process presented in this document. The intention of this document is not to constrain an Agency to ODOT's format but for the Agency to incorporate Federal and State requirements and expectations into an Agency's process when receiving applicable funds or administering work on the State Highway system.

Appendix G

Critical Project Curb Ramp Milestones

#### Scoping

- ✓ Verify scope of ADA obligations based on project type and work
- ✓ Conduct site visit to assess curb ramps and other pedestrian facilities
- ✓ Obtain curb ramp condition data
- ✓ Request additional survey data at intersections
- ✓ Begin preliminary curb ramp design

#### Design Acceptance Package/Design Verification Package

- ✓ Draft Curb Ramp Detail Sheets
- ✓ Utilize Curb Ramp Check List to assess design criteria
- ✓ Begin draft Design Exception Request process, if applicable
- ✓ Begin Crosswalk Closure Request process, if applicable
- ✓ Begin draft for Temporary Pedestrian Accessible Route (TPAR) as part of TCP
- ✓ Begin ROW and Easement requests if needed

#### Advance/90% Plans

- ✓ Complete Curb Ramp Detail Sheets
- ✓ Complete TPAR in TCP
- ✓ Final submittal of Design Exceptions with signatures, if applicable
- ✓ Obtain Final Crosswalk Closure Approvals, if applicable
- ✓ Finalize ROW and Easement Approvals if needed
- ✓ Complete Construction Specifications for final review

#### PS & E/ Final Plans

- ✓ Approved Design Exceptions, if applicable
- ✓ Final Curb Ramp Detail Sheets with DE approval numbers
- ✓ Crosswalk Closure Approval letters, if applicable
- ✓ Final Construction Specifications
- ✓ Final TPAR

#### Pre-Closeout, 2<sup>nd</sup> Note

- ✓ Conduct Curb Ramp Inspection with certified inspector
- ✓ Submit completed passing Curb Ramp Inspection Forms to:
  - √ 1) Email link on the ODOT Curb Ramp Inventory Form
  - √ 2) State's Project Manager

## 1. Scoping

## 1.1 Curb Ramp Evaluation in Project Scoping

When scoping projects, pedestrian curb ramp evaluation is required on new construction, full rebuild and alterations to existing facilities. The term "on or along the State Highway" refers to 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. Project teams that scope new construction projects should be aware of the applicable ODOT ADA curb ramp standards and consider them in early phases of design to ensure the footprint of the project is adequate to provide the required accessibility features. Scoping requirements for right of way are outlined in the <u>Technical Service Directive 18-03(D)</u>.

## 1.1.1 New Construction and Full Rebuild Projects

When scoping new construction and full rebuild projects, projects must comply with current ODOT ADA Standards and ODOT policies. In addition to the TSB 18-03(D) right of way scoping directive, the ODOT <u>ADA Transition Plan</u> should also be reviewed for accessible feature priorities that have been established and is to be used to evaluate the need for improvements included in the project scope of work. Contact the region's liaison for existing or outstanding ADA Concern, Questions, Comment, and Request's (CQCR) that could be considered for inclusion with the project scope of work to remedy the concern or request.

All pedestrian facilities are required to be ADA compliant and are to be fully accessible with new construction. New construction projects are those improvements that construct pedestrian facilities where no previous public right of way existed (i.e. virgin horizontal alignments and 4R projects). Fully rebuilt projects have already established an existing public right of way and are considered alterations to the facility. Alterations on existing facilities must be accessible to the maximum extent feasible (see section 2.1.2). A list of applicable ODOT documents is listed in Section 6, but may not be comprehensive as new policies or guidance is developed. For the most current information refer to the ODOT Engineering for Accessibility website.

## 1.1.2 Construction Work on Existing Facilities

When working on existing facilities it must be determined if the work is an alteration or maintenance activity. Alterations are projects with changes to an existing facility that affects or

Appendix G

could affect the usability of the facility and are therefore projects that are required to construct or upgrade any missing or non-compliant curb ramps. Alterations such as resurfacing, signal work and sidewalk work are project activities that could trigger curb ramp evaluation. Regular maintenance is not considered an alteration; ODOT has published two Maintenance Operational Notices that provide the distinction between maintenance and alteration work for paving and signal work on or along the highway: MG100-107 (see Appendix H) and MG144-03 (see Appendix J). For the most current information refer to the ODOT Engineering for Accessibility website.

ODOT Highway Division Maintenance Operation Notice MG100-107, titled *Guidelines for Pavement Maintenance Activities and their impact on ADA requirements* addresses pavement maintenance(see Appendix H). Figure 1, Definition of Maintenance Patching, on the last page of the operational notice illustrates the narrative. The policy in the notice is consistent with the 'Department of Justice/Department of Transportation Joint Technical Assistance on the Title II of the Americans with Disabilities Act Requirements to Provide Curb Ramps when Streets, Roads, or Highways are Altered through Resurfacing'.

ODOT Highway Division Maintenance Operation Notice MG144-03, titled *Traffic Signal Work and Americans with Disabilities Act (ADA)* addresses maintenance work on signals on or along the state highway and includes an informative Question and Answer section (see Appendix J).

If an alteration in your project requires evaluation of the existing curb ramps, use the evaluation described in Section 0 below. Existing inspection data for curb ramps on or along the State highway is available through the ODOT TransGIS site and the ODOT FACS-STIP site. If there is missing data, contact ODOT's ADA Inventory Program Lead. When a curb ramp asset is removed from the state system with a construction activity, contact the ODOT's ADA Inventory Program Lead. For example, an asset is removed when a driveway is reconfigured from a curb radius style to a dust pan style approach, or when sidewalk infill occurs which removed the curb ramp access to the shoulder.

Project teams must be aware that in Oregon, crosswalks exist at all intersections per ORS 801.220 and missing curb ramps on the system must be addressed in the project if the project activities are considered alterations. If an investigation finds that a crosswalk location is a safety concern, an official crosswalk closure request may be submitted for approval through the Region Traffic Unit for submittal to the State Traffic-Roadway Engineer. The crosswalk closure process is covered in Section 0 in this document. Verify that existing marked crossings including mid-block or school crossings have State Traffic Roadway Engineer (STRE) approval when on or along the state highway. Requests for marked crossings may be submitted for approval through the Region Traffic Unit. STRE approval's need to be completed prior to reinstallation of the marked crossing. Compliant curb ramps are required for these locations if they do not exist.

For the most current information refer to the ODOT <u>Engineering for Accessibility</u> website. At a minimum, any sidewalks reconstructed with maintenance work are expected to meet ODOT sidewalk standards, provided in Oregon Standard Drawings. Links to Standard Drawings are in

Appendix G

Section 2.2 below. This may require transition panels to be added to the design to match back to existing sidewalk.

When maintenance work includes an alteration to any portion of a curb ramp, the requirement is to rebuild the entire curb ramp to meet ODOT ADA curb ramp standards.

When constraints exist that make it infeasible to rebuild a ramp to meet ODOT ADA standards, reconstruction must meet standards to the maximum extent feasible and justification must be documented with a design exception. Refer to 2.5 Curb Ramp Design Exception Process in this document.

## 1.1.3 Evaluate the Accessibility of Pedestrian Facilities

When scoping an alteration project, first determine where sidewalks exist within the scope of the project. Where sidewalks exist, they must be accessible. Curb ramps are required to allow a pedestrian to continue on the path of travel when the sidewalk ends. Existing bridges with sidewalks must also include an end of walk curb ramp at the end of the bridge if there is no sidewalk along the roadway. All intersections are crosswalks in Oregon (ORS 801.220) and if sidewalks exist at intersections, curb ramps are required for each street crossing. Signals can also affect or be impacted by curb ramp upgrades. Location of crosswalks on state highways is described in RD21-01(B). Refer to the 2.3 Accessible Pedestrian Push Button Requirements Section for information on push button requirements and their relationship to curb ramp design.

- Conduct a site visit to assess the condition of existing curb ramps and accessibility of other pedestrian facilities within scope of the project.
  - o Identify locations of existing sidewalks and if curb ramps exist at adjacent intersections and at the end of sidewalk.
  - o Identify locations of signals and note placement and condition of pedestrian features
  - Review curb ramp condition data from ODOT's TransGIS site. It is recommended to request additional survey data where curb ramps are to be upgraded or newly constructed or where additional right-of-way may be needed.
  - Begin preliminary curb ramp design. Use the <u>ODOT Curb Ramp Design Check List Form</u>
     734-5184 to determine if there are design, safety, right-of-way or survey data issues.

The ODOT <u>ADA Transition Plan</u> should also be reviewed for accessible feature priorities that have been established and is to be used to evaluate the need for improvements included in the project scope of work. Contact the region's liaison for existing or outstanding ADA Concern, Questions, Comment, and Request's (CQCR) that could be considered for inclusion with the project scope of work to remedy the concern or request.

For questions about the curb ramp inventory contact:

Appendix G

#### **ADA Inventory Lead**

Melissa Borges, Roadway Statewide Asset Specialist

## 2. Design

## 2.1 Design Acceptance Package (DAP) / Design Verification Package (DVP)

The Design Acceptance Package (DAP)/ Design Verification Package is a critical point in the design when key elements and accessibility features included in the scope of work are identified. Alternative analysis of curb ramp designs are to be completed when it has been determined that there are no fully compliant curb ramp options prior to the DAP/DVP and are retained in project files. Design narratives stored with the project files describing the accessible upgrades included in the project are to be documented, including options explored when topography and site constraints may be challenging. By DAP/DVP, the following items should be included in the plan set:

 A draft Curb Ramp Detail sheet for each corner consistent with the ODOT details (Example of Minimum Curb Ramp Details DET1720 and DET1721).

At this stage, the curb ramp design should be adequate to ensure the necessary footprint is identified. For alteration projects, this will often require a 3D design.

Using the Highway Design Manual and the ODOT ADA Curb Ramp Design Check List Form 734-5184, assess any technical infeasibility to meet ODOT ADA curb ramp standards. Prepare draft ODOT ADA Curb Ramp Design Exception Request Forms 734-5361 for review. Draft curb ramp design exceptions shall be submitted to the Region Roadway Unit prior to being sent to the Technical Services Roadway Unit. Crosswalk closures and curb ramp design exceptions maybe interdependent and both require STRE approval on the state highway system. When developing DAP/DVP, the design should be detailed enough to identify when it is technically infeasible to meet criteria of the ODOT ADA Curb Ramp Design Check List. This is the appropriate time to submit a draft ODOT ADA Curb Ramp Design Exception Request Form. Refer to:

- Curb Ramp Design Exception Process in Section 2.5.
- Discuss possible Official Crosswalk Closure requests and other marked crossings with Region Traffic Unit staff and submit any draft Crosswalk Closure requests, if needed.
- A draft Temporary Pedestrian Accessible Route Plan (TPARP) is to be included in the Traffic Control Plans (TCP).

Request any additional Right-of-way (ROW) and/or easements that may be needed
for building compliant curb ramps. ROW acquisition can take up to one year. It is
better to request any potential ROW needs early and then cancel it if it is determined
that the ROW is not needed than asking for necessary ROW later in the project. Refer
to the Technical Services Directive TSB18-03(D) for further guidance.

The appropriate time to develop crosswalk closures is during the development of the DAP/DVP plans. Crosswalk closure on or along the State highway must follow ODOT Crosswalk Closure process described in Section 2.6. All proposed crosswalk closures shall be based on relevant safety concerns. Requests for crossing closures on the state system are required to have State Traffic Roadway Engineer (STRE) approval. In addition, verify that all locations that are functioning as closed crosswalks on or along the State system are officially closed by STRE approval. If not, a Crosswalk Closure request must be approved. Projects that have other marked crossings including mid-block or school crossings on or along the state highway, must verify that the marked crossing is approved, refer to the Traffic Manual for approval process.

Curb ramp design may affect existing signal pedestrian push buttons and require relocation of the pedestrian push button to ensure reach, range and landing requirements are met. Accessible pedestrian pushbutton requirements are identified in Section 3.3.

At DAP/DVP, the project team should begin to develop a <u>Temporary Pedestrian Accessible Route Plan (TPARP)</u>. There will be situations where temporary easements are required to maintain an appropriate temporary pedestrian access route. Due to the time required to obtain temporary easements, a TPARP strategy should be in place prior to DAP/DVP approval. Refer to Section 2.4

Existing utilities both above ground and underground may require relocations or adjustments to the facility based on the curb ramp design to achieve a complaint curb ramp. Curb ramp design details require sufficient information to review and approve a relocation plan for the utility, and will require sufficient time for the utility company to move their facility.

## 2.2 Curb Ramp Detail Sheets and Standard Drawings

Use the Highway Design Manual and Oregon Standard Drawings for curb ramps design and complete the <u>ODOT ADA Curb Ramp Design Checklist Form 734-5184</u>. Retain the ODOT ADA Curb Ramp Design Checklist in the project design records. A curb ramp detail sheet is required for each curb ramp corner. Referencing standard drawings for curb ramps in plans in lieu of curb ramp detail sheets is no longer acceptable. The curb ramp detail sheet should conform to the following:

#### References:

• RD17-01(B) - ADA Sidewalk Curb Ramp Detail: Minimum Requirements in Construction Plans

**Appendix G** 

- o ODOT DET 1720, Example of Minimum Curb Ramp Details Instructions
- ODOT DET 1721, Example of Minimum Curb Ramp Details
- Standard Drawings, Roadway 700 Series Curbs, Islands, Sidewalks, and Driveways
- <u>Standard Drawings, Roadway 900 Series</u> Curb Ramps and Detectable Warning Surfaces
- Standard Drawings, Roadway 1100 Series Bicycle Facilities
- <u>ODOT's CADD drafting standards</u> using the curb ramp detail menu which is on the ODOT engineering workspace

For questions about curb ramp details and standards contact:

Senior Standards Engineer

Will L. Woods, PE

Senior ADA Standard Engineer

Taundra Mortensen, P.E.

## 2.3 Accessible Pedestrian Push Button Requirements

Where a project includes signalized intersections, rectangular rapid flashing beacon (RRFB), or pedestrian hybrid beacons check the ODOT signal inventory for the pedestrian push buttons for accessibility triggers and the surrounding area for reach, range, and landing requirements. Using the ODOT ADA Curb Ramp Design Check List Form 734-5184, assess any technical infeasibility to meet ODOT curb ramp and pedestrian push button standards and prepare draft ADA Curb Ramp Design Exception Request Form 734-5361 for review, if needed. Temporary signals used in work zones must also be accessible to all pedestrians.

Audible pedestrian signals provide information in a non-visual format for pedestrians who have visual disabilities. Check if audible pedestrian signal policies are in place for the local jurisdiction and follow ODOT's policy for APS push buttons in the Signal Manual. If specific intersections have audible signal requests, send documentation of the request to ODOT's Office of Civil Rights (OCR); Attention ADA Title II Coordinator. An on-site meeting is offered and an engineering evaluation may be performed to determine if the audible signal is the appropriate treatment to include in the curb ramp and signal design. Refer to following references:

- MG144-03, Traffic Signal Work and Americans with Disabilities Act (ADA), December 1, 2017 (see Appendix J)
- Traffic Signal Policy and Guidelines

Appendix G

- Signal Design Manual
- Exhibit C, Push Button Clear Space Surface Types
- Turn Space and Paved Shoulder Access Form 734-5245A
- Back-in Maneuver, Ramp Run and Sidewalk Access Form 734-5245B

For questions about accessible pedestrian features at signals and push button requirements contact:

- Scott Cramer, P.E. Traffic Signals Engineer
- Katie Johnson, P.E. Traffic Signal QC Engineer

## 2.4 Temporary Pedestrian Accessible Route Plan (TPARP) Process

ODOT's commitment to pedestrian transportation through and around highway work zones includes considerations for providing safe, efficient and accessible facilities for pedestrians.

This obligation applies to all work zones included in any of the following:

- All projects on or along the State Highway System, regardless of funding source
- All projects funded by the Federal-aid highway program
- All projects that are contracted through ODOT, including project off the State Highway System
- All projects delivered by ODOT maintenance forces off the State Highway System

When accommodating pedestrians in highway work zones, developing a pedestrian-specific temporary traffic control plan is required. A temporary pedestrian accessible route (TPAR) that matches or exceeds the existing level of accessibility shall be provided as part of the temporary traffic control plan when existing pedestrian facilities are impacted by construction, construction staging, and maintenance activities.

In cases where it is technically infeasible to provide an equal or better level of pedestrian accessibility through the TPAR design; document in writing the constraints that preclude this compliance. This documentation may be considered as a TPAR "Design Exception". It is recommended to include a "Memo to File" in the project file. The memo should include supporting correspondence, maps, and any diagrams or plan sheets that can be used to support the decision to design any portion of the TPAR with a level of accessibility less than the existing pedestrian facility. Use the Work Zone Decision Tree form to identify and document any TPAR design concepts that were evaluated as part of the design process. Include a summary statement of the TPAR design exception(s) in the Transportation Management Plan (TMP).

Appendix G

Where the TPAR design might deviate significantly from the existing pedestrian pathway, the designer should consider a peer review and discuss the exceptions with their lead engineer or manager. If the TPAR is being designed by a staff member, and separately sealed by an Engineer of Record, the Engineer should be given a summary of the design exceptions as part of their plan review.

If the TPAR design includes exceptions, incorporate additional temporary measures into the TPARP as enhancements including, but not limited to, pedestrian-specific signing (warning or regulatory) alerting pedestrians of any accessibility restrictions, and estimated durations of those impacts.

Additional TPARP information can be found in the current ODOT <u>Traffic Control Plans Design Manual</u>; within the Technical Services Directive, *Temporary Pedestrian Accessible Route Plans Required for Work Zones* – <u>TSB17-01(D)</u>; in the Highway Division Maintenance Operational Notice – <u>MG-Activities -2</u>; and the following Resources:

#### **Resources:**

- Standard Drawings, Temporary Traffic Control 800 Series
  - o TM844 Temporary Pedestrian Accessible Routes
- Standard Details Traffic 4000 Series
  - o DET4780 Temporary Sidewalk Ramps
  - o DET4781 thru DET4787 TPAR Sidewalk Configurations
- 2021 Standard Specifications for Construction
  - o SP00220 Accommodations for Public Transit
  - o SP00225 Work Zone Traffic Control

For questions about Temporary Pedestrian Accessible Route Plans, contact:

Justin King, P.E. - State Work Zone Engineer

## 2.5 Curb Ramp Design Exception Process

ODOT ADA curb ramp design exceptions (DE) requests must be submitted to the Region Roadway Unit for review, and if appropriate, they will submit the request to the State Traffic-Roadway Engineer for approval. ODOT encourages submitting proposed design exceptions as early as possible in the design process, ideally drafting at DAP/DVP to allow for early resolution of project design issues. By DAP/DVP, the curb ramp design should be sufficiently developed to identify whether any additional Right-of-Way is needed to design and construct compliant curb ramps and any pedestrian signals to meet ODOT accessibility standards. It is important to allow sufficient time for ODOT's review and approval process Allow 1-2 months for the Region to

Appendix G

review the proposed design exception and allow an additional month for State Traffic Roadway Engineer review. All design exceptions, including curb ramp-related exceptions, must complete the review and approval process before PS&E submittal can continue.

#### Process:

- 1. For each curb ramp design, use the <u>ODOT ADA Curb Ramp Design Check List Form 734-5184</u> to determine all features of the curb ramp that do not meet ODOT ADA standards.
- 2. Experiment with different alternative curb ramp designs to determine if another curb ramp type or other design changes could provide full or partial compliance.
- 3. Compare partial compliance tradeoffs in each design.
- 4. If it has been determined that there are no fully compliant curb ramp options that are technically feasible, choose the most accessible curb ramp design and complete an <u>ADA Curb Ramp Design Exception Request Form 734-5112</u> (Note: this is different than the ODOT General Design Exception Form). In the curb ramp DE request, describe the alternative curb ramp designs considered and why the final design was chosen from all considered options.
- 5. Follow Design Exception submission concurrence process on last page of the Design Exception Request form. All curb ramp design exceptions must be on the electronic form and digitally sealed

If a crosswalk has been officially closed by STRE approval, a design exception is not required to document the missing ramp or the single ramp serving a different crossing. Include the closure approval number on the curb ramp detail drawing.

#### **Resources:**

- <u>ODOT Design Exception Web Page</u>, for Digital Signatures and submittal processes
- <u>RD16-01 (B)</u>, Technical Services Bulletin, ADA Curb Ramp Design Exception Request Form and ADA Curb Ramp Guidance, December 22, 2016.
- ADA Curb Ramp Exception Form User Guide

For questions regarding curb ramp design exceptions contact:

- Taundra Mortensen, P.E. Senior ADA Standards Engineer
- Pamela C. Johnson, PE ADA Standards Engineer
- Rodger Gutierrez, P.E. <u>Bicycle and Pedestrian Engineer</u>

## 2.6 Crosswalk Closure Process

It is ODOT's policy to provide accessible crosswalks on the State Highway system unless the crosswalk is officially closed, by STRE approval, to all pedestrians. For crosswalk closures on the local roads, refer to **2.6.4 Crosswalk Closures on Local** Roads below. If a crosswalk has been officially closed by STRE approval, a design exception is not required to document the missing ramp or the single ramp serving a different crossing.

The decision to close a crossing must consider the safety and convenience of pedestrians. Closed crosswalks often force pedestrians to take a less direct route which is inconvenient and exposes pedestrians to more traffic conflicts.

The ODOT Traffic Manual, states that "By statute (ORS 801.220) crosswalks exist at all locations where crosswalk markings indicate a pedestrian crossing and at all intersections (whether marked or unmarked) unless closed by official action. The absence of marked crosswalk lines at an intersection does not preclude ADA requirements for providing ADA accommodation such as adding or upgrading existing curb ramps to meet current ODOT ADA standards for all quadrants of an intersection unless a crosswalk has been closed by official action."

All intersections must provide ADA compliant crossings on the State Highway system unless the crossing is officially closed. There are two situations that warrant pursuing an Official Crosswalk Closure:

- 1. Any crosswalks that currently function as closed. For example, accessible pedestrian features, such as pedestrian signal heads or crosswalk striping, are <u>missing</u> at a signalized intersection or there are missing curb ramps at an intersection.
  - a. Check with the Region Traffic Engineer to determine if the assumed closed crosswalk has been officially closed.
    - i. If it has been officially closed, check the inventory and verify that it meets all closed crosswalk requirements as per the STRE closure approval letter and section 5.1.2 of the Traffic Signal Design Manual.
    - ii. If it has not been officially closed, work with the Region Traffic Engineer to determine if crosswalk closure should be processed or if the crossing should be designed as an open crosswalk.
- 2. The site conditions create a safety concern situation, that justify closing a crosswalk.
  - a. Submit a Crosswalk Closure Approval Request Form 734-5150.

## 2.6.1 How to request an official crosswalk closure

All requests for crosswalk closures shall be submitted to the ODOT Region Traffic Unit to be submitted to the State Traffic-Roadway Engineer with an engineering study that includes:

- A narrative substantiating a geometric design or operational concern that adversely impacts safety.
- Discussion of reasonable alternate pedestrian access routes between the two points of the crossing that are being closed.
- A description of proposed closure treatments. Refer to the 2.6.3 Required Crosswalk Closure Treatments in the following section.

## 2.6.2 When to Submit a Crosswalk Closure Request

Pedestrian circulation paths and potential crosswalk closures should be established early in the project, as they effect the curb ramp design. Crosswalk closure requests should be identified and resolved prior to the DAP/DVP stage to ensure project schedule adherence. Allow 1-2 months for the Region Traffic Engineer to review the proposed closures and prepare closure request. Allow an additional month for State Traffic Roadway Engineer approval.

## 2.6.3 Required Crosswalk Closure Treatments

If a crosswalk closure is granted, a crosswalk closed sign is required along with additional detectible features. Detectible features are used to communicate to pedestrians with visual impairments that the crossing is closed. In addition, detectible features and barriers communicate to all pedestrians that a crossing is closed. ODOT's standard detectible feature is a "Crosswalk Closed" sign and barricade (refer to TM 240). Other supplemental detectible features include grass strips, landscaping, planters, bollards with chains, fencing, railings, or other barriers.

## 2.6.4 Crosswalk Closures on Local Roads

On Local roads, the State crosswalk definition (ORS 801.220) and responsibility still applies. It is recommended that local agencies develop their own crosswalk closure process with delegated authority. When deciding to close a crosswalk on a project that utilizes Federal or State Funds on the local system, follow Local Agency crosswalk closure process. If the Local Agency does not have a process, it is suggested that the Local Agency provide an official letter to document where crosswalks are not intended, and what treatments are to be applied, and retain the document in

#### **ODOT Roadway Engineering Section | Highway Design Manual**

#### **ODOT ADA Curb Ramp Process**

Appendix G

project files. If a crosswalk has been officially closed by the local agency, a design exception is not required to document the missing ramp or the single ramp serving a different crossing.

#### **Resources:**

ODOT Traffic Manual, Chapter 6

Oregon Bicycle and Pedestrian Design Guide, Chapter 5

The Bike/Ped Design Guide is Appendix L of the Highway Design Manual.

For questions regarding crosswalk closures contact:

Gary Obery, P.E.- Active Mode Transportation Engineer

## 2.7 Advance/90% Plans

By Advance/90% plans, the following items should be included in the plan set and submittal:

- A separate curb ramp detail design for each corner with all required components conforming to the ODOT Curb Ramp Design Check List. Ensure that curb ramps numbering information matches ODOT's Trans GIS inventory conventions.
- A complete TPAR Plan is included in the TCP plans.
- If applicable, Final Design Exception(s) with signatures.
- If applicable, Official Crosswalk Closure Approval letter(s).
- Any ROW and easement approvals, if applicable.
- Ensure that Construction Specifications meet current ODOT ADA requirements.

#### **Resources:**

- Oregon Standard Specification for Constructions
- <u>RD17-01(B)</u> ADA Sidewalk Curb Ramp Detail: Minimum Requirements in Construction Plans
  - o ODOT <u>DET1720</u>, Example of Minimum Curb Ramp Details Instructions
  - ODOT <u>DET1721</u>, Example of Minimum Curb Ramp Details
- Standard Drawings, Roadway 700 Series Curbs, Islands, Sidewalks, and Driveways
- <u>Standard Drawings, Roadway 900 Series</u> Curb Ramps and Detectable Warning Surfaces
- Standard Drawings, Roadway 1100 Series Bicycle Facilities
- ODOT's CADD drafting standards using the curb ramp detail menu which is on the ODOT engineering workspace

Appendix G

For questions about ADA plan requirements contact:

Taundra Mortensen, P.E. - Senior ADA Standards Engineer

Pamela C. Johnson, PE - <u>ADA Standards Engineer</u>

William L. Woods, PE - Senior Standards Engineer

## 2.8 PS & E/ Final Plans

By Final Plans, the following items shall be included in the plan set:

- A separate curb ramp detail design for each corner is included in the plan set with all required components necessary to display conformance with the ODOT Curb Ramp Design Check List
  - o Including curb ramp design exception approval number(s)
  - o Conforming to ODOT CADD drafting and detail standards
- If requested, provide Official Crosswalk Closure Approval letter(s) number(s).
- Approved ADA Curb Ramp Design Exceptions.
- Ensure that Construction Specifications meet current ODOT ADA requirements.
- A comprehensive, final TPAR Plan is included in the TCP plans.

## 3. Pre-Closeout, 2<sup>nd</sup> Note, Curb Ramp Inspection

Once curb ramps are constructed, modified, upgraded, or improved as part of the Project, all curb ramps must be inspected by an ODOT Certified Curb Ramp Inspector. ODOT Certified Curb Ramp Inspectors can be from the State, Federal agency, a local jurisdiction, contractor or consultant firm and have completed the <a href="Curb Ramp Inspection Training">Curb Ramp Inspection Training (CRIT)</a> through ODOT.

Post construction, an ODOT Certified Curb Ramp Inspector will conduct a curb ramp inspection and complete curb ramp inspection forms for each curb ramp. Several curb ramp inspection forms are used based on the different curb ramp styles. A list of electronic curb ramp inspection forms is available below. Curb ramps that pass the inspection will have their forms sent to the ODOT Standards Unit though a link on the electronic form. Ramps that fail the initial inspection will need to be remediated before submission of the curb ramp inspection form. For failing ramp inspections, contact the ODOT Project Manager assigned to your project. All curb ramps must pass inspection prior to 2nd note by Agency and prior to release of any Agency contractor.

#### **Process:**

1. Schedule an ODOT Certified Curb Ramp Inspector to inspect all curb ramps postconstruction and prior to 2nd note.

- a. If your project team has an ODOT Certified Curb Ramp Inspector:
  - i. Have inspector conduct a curb ramp inspection on all curb ramps in the project.
  - ii. Have inspector submit passing curb ramp inspection forms to email on curb ramp inspection form, to the ODOT Standards Unit.
  - iii. For curb ramps that fail inspection, contact your ODOT Project Manager.
- b. If you do not have an ODOT Certified Curb Ramp Inspector, contact your ODOT Project Manager to schedule an inspection.

Send copies of the completed ODOT Curb Ramp Inspection Forms to the ODOT Standards Unit which is sent with the Submit Button on the form . Curb ramp Inspection forms for each type of curb ramp:

- Blended Transition Curb Ramps Form 734-5020A
- Combination Curb Ramps Form 734-5020B
- Cut-Through Island Ramps Form 734-5020C
- End-of-Walk Curb Ramps Form 734-5020D
- Parallel Curb Ramps Form 734-5020E
- Perpendicular Curb Ramps Form 734-5020F
- Unique Curb Ramps Form 734-5020G

Send copies of the completed ODOT Push Button Inspection Forms to the ODOT Standards Unit.

- Turn Space and Paved Shoulder Access Form 734-5245A
- Back-in Maneuver, Ramp Run and Sidewalk Access Form 734-5245B

For questions about curb ramp inspections, contact:

Melissa Borges - ADA Program Inventory Lead

## 4. Ongoing Maintenance Agreements

If the local agency is maintaining any portion of the project, the local agency shall ensure that any portions of the project under the local agency's maintenance jurisdiction are maintained in compliance with the ADA throughout the useful life of the Project as agreed to in the Intergovernmental Agreement (IGA).

Appendix G

Pedestrian access will be maintained as required by the ADA. If any complaints are received by the local agency or ODOT including sidewalk, curb ramp, or pedestrian-activated signal safety or access issues are identified on portions maintained by the local agency, they shall be submitted to the ODOT's office of civil rights on the ODOT Office of Civil Rights Concern, Question, Comment or Request (CQCR) Form. Concerns and requests shall be promptly assessed and evaluated for remedies.

Any future alteration work on project or project features during the useful life of the project must comply with the ADA requirements in effect at the time the future alteration work is performed.

## 5. Jurisdictional Transfer of State Highway

States maintain a state route system to assist the traveling public in their travels. Designated routes may be composed of both state highway and local roads. Designation and elimination of state routes are under authority of the Oregon Transportation Commission (OTC). ODOT and a local municipality may enter into an agreement to transfer jurisdictional ownership of a road upon approval of a Jurisdictional Transfer Resolution, by the OTC. All highway segments under state ownership as of November 1, 2016 are subject to curb ramp remediation to make the curb ramps ADA compliant to the greatest extent feasible by December 2032 regardless of any jurisdictional transfer.

ADA construction and alteration requirements for curb ramps are still applicable. If a state highway's jurisdiction is transferred to another local municipality, curb ramps are required to meet ODOT ADA standards. Prior to the jurisdictional transfer, ODOT and the local agency will enter into an intergovernmental agreement (IGA) to determine which agency will reconstruct curb ramps.

Once curb ramps are constructed, modified, upgraded, or improved as part of a Project, all curb ramps must be inspected by an ODOT Certified Curb Ramp Inspector. ODOT Certified Curb Ramp Inspectors can be from the State, Federal agency, a local jurisdiction, contractor or consultant firm and have completed the <a href="Curb Ramp Inspection Training through ODOT">Curb Ramp Inspection Training through ODOT</a>.

Post construction, an ODOT Certified Curb Ramp Inspector will conduct a curb ramp inspection and complete curb ramp inspection forms for each curb ramp. Several curb ramp inspection forms are used based on the different curb ramp styles. A list of electronic curb ramp inspection forms is in section 3.4 Pre-Closeout, 2<sup>nd</sup> Note, Curb Ramp Inspection. Ramps that fail the initial inspection will need to be remediated before submission of the curb ramp inspection form. Send copies of the completed ODOT Curb Ramp Inspection Forms to the ODOT Standards Unit.

## 6. ODOT ADA Document Links and Resources

Many of the links below and other ODOT ADA related guidance and standards can be found at ODOT's Engineering for Accessibility or the ADA Asset Inventory website.

## **6.1 Operational Notices**

- MG100-107, Maintenance Operational Notice, Guidelines for Pavement Maintenance Activities and their impact on ADA requirements, October 18, 2016 (see Appendix H)
- MG144-03, Traffic Signal Work and Americans with Disabilities Act (ADA),
   December 1, 2017 (see Appendix J)
- o MG-Activities-2, Maintaining Accessibility During Maintenance Work

## **6.2 Technical Bulletins Related to ODOT ADA** requirements

- 101 19, Bulletin Statewide Program Unit Certification Program Office (CPO), ODOT Certification Program
- RD13-01(A), ADA ramps in Resurfacing Projects: 1991 Versus Current ADA Standards
- RD16-01 (B), Technical Services Bulletin, ADA Curb Ramp Design Exception Request Form and ADA Curb Ramp Guidance, December 22, 2016
- TSB17-01(D), Technical Services Directive, Temporary Pedestrian Accessible Route Plans Required for Work Zones, October 1, 2017
- RD17-01(B), Technical Services Bulletin, ADA Sidewalk Curb Ramp Detail:
   Minimum Requirements in Construction Plans, May 1, 2017
- o TSB 18-03(D), Curb Ramp Scoping and Right of Way
- RD19-02(B), Measurement Criteria for Newly Constructed Curb Ramps, Driveways and Sidewalks
- o <u>RD20-01(B)</u>, Highway Design Manual 1R/3R Record of Decision and Updates and Clarification to the 1R Standard
- o RD21-01(A), Curb Ramp Gutter Flow Slope Design and Design Exceptions
- o <u>RD21-01(B)</u>, Location of Crosswalks on State Highways
- RW21-01(B), Optional Alternative Acquisition Process for Construction or Alteration of ADA Ramps

Appendix G

o <u>RD21-04(B)</u>, Design for Program Funded Curb Ramp Project Programmed to be Constructed in 2021 or 2022

## 6.3 Manuals

- o Highway Design Manual
- o Appendix L, Oregon Bicycle and Pedestrian Design Guide, Chapter 5
- o <u>Traffic Signal Design Manual</u>
- o ODOT Traffic Manual
- Oregon Standard Specifications for Construction
  - SP00200 Temporary Features and Appurtenances
  - SP00220 Accommodations for Public Transit
  - SP00225 Work Zone Traffic Control
  - SP00759 Miscellaneous Portland Cement Concrete Structures
- o Bridge Design and Drafting Manual
  - BDDM Appendix A ADA Design of Bridge Curb Ramps
  - BDDM Appendix B ADA Bridge Work Examples
- o Traffic Control Plans Design Manual
- o Traffic Signal Policy and Guidelines
- o Oregon Temporary Traffic Control Handbook

## **6.4 Standard Drawings and Details**

- o Standard Drawings, Roadway 700 Series: Curbs, Islands, Sidewalks, and Driveways
- Standard Drawings, Roadway 900 Series: Curb Ramps and Detectable Warning Surfaces
- o Standard Drawings, Roadway 1100 Series: Bicycle Facilities
- o Standard Details, Roadway 1700 Series: Curbs, Islands, Sidewalks, and Driveways
  - DET 1720, Example of Minimum Curb Ramp Details Instructions
  - DET 1721, Example of Minimum Curb Ramp Details
- Standard Drawing, Traffic 200 Series: Permanent Signing
  - TM240, Crosswalk Closure Detail
- o Standard Drawings, Traffic 400 Series: Signals
  - TM457, Vehicle, Pedestrian Signal and Pushbutton Mounting Option Details

#### **ODOT Roadway Engineering Section | Highway Design Manual**

#### **ODOT ADA Curb Ramp Process**

Appendix G

- TM467, Pedestrian Signal Mount and Pedestrian Pushbutton Details
- TM472, Traffic Signal Junction Boxes/Hand Holes
- o Standard Drawings, Bridge 200 Series
  - Pedestrian Rails & Fencing
- Standard Drawings, Temporary Traffic Control 800 Series
  - TM844 Temporary Pedestrian Accessible Routes
- Standard Details Traffic 4000 Series
  - DET4780 Temporary Sidewalk Ramps
  - DET4781 thru DET4787 TPAR Sidewalk Configurations

### 6.5 Tools

- o <u>TransGIS</u>
- o FACS-STIP
- o ODOT Curb Ramp Design Check List Form, 734-5184
- o ADA Curb Ramp Design Exception Request, Form 734-5112
- o Crosswalk Closure Approval Request, Form 734-5150
- o Exhibit A, Curb Ramp Corner and Ramp Position Numbering
- o Exhibit B, Curb Ramp Styles
- o Exhibit C, Push Button Clear Space Surface Types
- o Exhibit D, Gutter Flow Slope Requirements
- o ADA Curb Ramp Inspection Form Submittal Guide
- o ADA Push Button Inspection Form Submittal Guide

## 7. Contacts

### **A.** Active Mode Transportation Engineer

Gary Obery, P.E.

### **B.** Senior ADA Standards Engineer

Taundra Mortensen, P.E.

## c. Bicycle and Pedestrian Engineer

Rodger Gutierrez, P.E.

## **D. ADA Program Inventory Lead**

Melissa Borges, Roadway Statewide Asset Specialist

## **E.** Senior Standards Engineer

Will L Woods, PE

## F. Traffic Signals Engineer

Scott Cramer, P.E.

## **G. Traffic Signal QC Engineer**

Katie Johnson, P.E.

## н. State Work Zone Engineer

Justin King, P.E.

## **I. Work Zone Standards Engineer**

Fahad Alhajri, P.E.

## 8. Checklist for Curb Ramp Process

This checklist is intended to be a tool to help guide the ADA process through your project to ensure that all ADA milestones and requirements are met. It is not a required project document.

<b>✓</b>	Tasks

Appendix G

✓	Tasks
	Scoping – ADA Evaluation in Project Scoping
	<ul> <li>Verify scope of curb ramp remediation based on project type and work performed as well as ADA compliancy of sidewalks, intersections and signals in project:         <ul> <li>Oregon crosswalks exist at all intersections and missing ramps on the system must be addressed with new construction, full rebuild and alterations.</li> <li>For new construction or a full rebuild, projects shall assume all pedestrian facilities including curb ramps and are required to be ADA compliant.</li> <li>Alterations are projects with changes to an existing facility that affects or could affect the usability of the facility. Alterations such as resurfacing, signal work and sidewalk work are typical project activities that could trigger curb ramp compliance evaluation.</li> <li>Normal maintenance is not considered an alteration</li> </ul> </li> <li>Refer to Maintenance Operational Notices MG100-107 (see Appendix H) and MG144-03 (see Appendix J) and 0 1.1 Curb Ramp Evaluation in Project Scoping in this document to establish the distinction between maintenance and alteration work for paving and signal work.</li> <li>Obtain Curb Ramp Condition Data</li> </ul>
	If an alteration in your project requires existing curb ramp evaluation, the ODOT curb ramp inspection process shall be used. Existing inspection data for curb ramps on the State system is available through the ODOT Trans GIS site.
	<ul> <li>Assess condition of existing curb ramps and accessibility of other pedestrian facilities within scope</li> <li>Conduct a site visit to verify existing conditions for accessibility         <ul> <li>Identify locations of existing sidewalks and if curb ramps exist at adjacent intersections</li> <li>Identify locations of signals and note placement and condition of pedestrian features</li> </ul> </li> </ul>
	Request additional survey data for curb ramp design if needed
	Begin preliminary design of curb ramps
	Design - Design Acceptance Package (DAP)/Design Verification Package (DVP)
	<ul> <li>Begin draft curb ramp detail sheets</li> <li>A complete DAP/DVP; will include curb ramp design adequate to ensure the necessary footprint is identified. For alteration projects this will often require a 3D design. Begin drafting Curb Ramp Design Detail sheets for each corner in project.</li> </ul>
	<ul> <li>Utilize Curb Ramp Checklist to assess any technical infeasibility issues</li> <li>Use the ODOT Curb Ramp Design Check List at DAP/DVP to ensure that all elements in the curb ramp design will meet ODOT ADA standards. Curb ramp detail sheets should be</li> </ul>

Appendix G

<b>√</b>	Tasks
	detailed enough to confirm if the design incorporates all ADA elements in the check list or if it is technically infeasible to meet all requirements; if not, a design exception request is needed.
	Submit Draft Design Exception Requests for review if applicable
	<ul> <li>If elements of the curb ramp design cannot meet ADA standard because of technical infeasibility, this is the appropriate time to submit a draft Curb Ramp Design Exception Request Form for review. Refer to Design Exception Process in attached instructions.</li> <li>At DAP/DVP, the project team should begin to develop a 2.4 Temporary Pedestrian Accessible Route Plan (TPARP) Process. There will be situations where temporary easements are required to maintain an appropriate TPAR. Due to the time required to obtain temporary easements a TPARP strategy should be in place prior to DAP approval.</li> </ul>
	Submit Crosswalk Closure Approvals, If applicable
	<ul> <li>Verify that all existing <i>presumed</i> closed crosswalks on the State system are <i>officially</i> closed with an approved crosswalk closure document by contacting the State Traffic-Roadway Engineer. If not, a Crosswalk Closure must be evaluated. An example of a presumed closed crosswalk is one that functions as closed at a signalized intersection; It has no pedestrian facilities, such as curb ramps or pedestrian signal heads but may not have been officially closed.</li> <li>All proposed crosswalk closures in the project shall be based on relevant safety concerns. Requests for crossing closures on the State system are to be submitted through the ODOT Region Traffic Manager to the State Traffic-Roadway Engineer for approval. Refer to 2.6 Crosswalk Closure Process in the attached instructions.</li> </ul>
	Request any needed ROW or easement approvals
	Design- Advance/90% Plans:
	Complete Curb Ramp Detail Sheets     Have completed, final Curb Ramp Design Detail sheets for each corner with all required components necessary to display conformance with the ODOT Curb Ramp Design Checklist and ready for final review.
	<ul> <li>Complete TPAR as part of the TCP</li> <li>A Final 2.4 Temporary Pedestrian Accessible Route Plan (TPARP) Process is included in the plans for review.</li> </ul>
	Final Submittal of Design Exceptions with signatures , if applicable
	Submit any final, signed, Curb Ramp Design Exception Request Forms for approval
	Obtain copies of Final Crosswalk Closures Approvals, if applicable
	Finalize ROW and easement documentation

Appendix G

<b>√</b>	Tasks
	Complete Construction Specifications for final review
	Design- Plans, Specifications and Estimate Submittal/PS & E:
	<ul> <li>Approved Design Exceptions if applicable</li> <li>All curb ramp designs not fully complying with the ODOT Curb Ramp Design Checklist shall have received a Curb Ramp Design Exception Request Form Approval prior to PS&amp;E.</li> <li>Approved Design Exception Requests shall be noted in the corresponding curb ramp detail sheets and documented in the project file (ProjectWise when available).</li> </ul>
	All approved 2.6 Crosswalk Closure Process should be in the project file (ProjectWise when available).
	<ul> <li>Final Construction Specifications</li> <li>Specifications and pay items shall be consistent with the Oregon Standard Specifications for Construction</li> </ul>
	Final TPAR in TCP
	Construction- Use the Oregon Standard Specifications for Construction
	Pre-Closeout, 2 <sup>nd</sup> note
	Conduct Curb Ramp Inspection with Certified Inspector
	Send a completed ODOT Curb Ramp Inspection Form(s) 734-5020 series to the  1) Email link on the ODOT Curb Ramp Inspection Form and 2) the ODOT Standards Unit for each curb ramp constructed, modified, upgraded, or improved as part of the Project. Curb ramp inspections must be completed by certified ODOT curb ramp inspector. 3. Pre-Closeout, 2nd Note, Curb Ramp Inspection instructions.
	Ongoing maintenance Agreement
	If agency is maintaining any portion of the Project on the State Highway System, the Agency shall ensure that any portions of the of the project under the local agency's maintenance jurisdiction are maintained in compliance with the ADA throughout the useful life of the Project as agreed to in the IGA.