Appendix 1: Design of Bridge Curb Ramps

When an alteration project includes a bridge with a pedestrian access route, upgrade any pedestrian curb ramps to meet current ODOT standards. In most cases, a bridge sidewalk is a continuation of:

- a shoulder
- a sidewalk
- an adjacent intersection

The following guidance is for designing accessible curb ramps for each of these facilities.

Bridge sidewalk to a shoulder

A pedestrian access route on a bridge may either be aligned within the shoulder of a roadway or they may be partially or completely outside of the shoulder area. Requirements for the curb ramp from the sidewalk to the shoulder are: a cross slope of less than 2% (1.5% design), a running slope of less than 8.33% (7.5% design) and a level landing with cross and running slopes less than 2% (1.5% design). If the end of the existing bridge sidewalk does not have a cross slope of less than 2%, provide an additional sidewalk panel that transitions the sidewalk cross slope to the 2% cross slope. The following describe ramp treatments based on their alignment to the shoulder

a. Tapered shoulder ramp

When a bridge sidewalk is partially or completely outside of the shoulder area, provide a level landing that acts as a turning space at the bottom of the curb ramp and a tapered shoulder to transition users to the existing shoulder as illustrated in Figure 1.

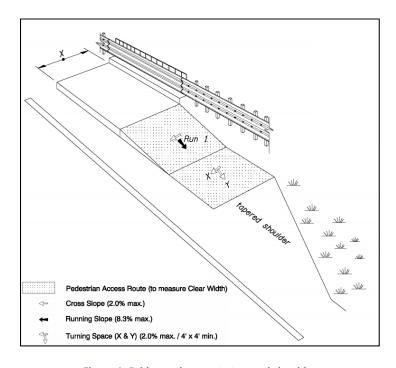


Figure 1: Bridge curb ramp to tapered shoulder

b. Continuous shoulder ramp

When the bridge sidewalk is within the full width of the shoulder provide curb ramp from the sidewalk to the shoulder. The image in Figure 2 illustrates a transitional panel at the end of the bridge sidewalk to transition from the existing cross slope of the bridge to a panel with a cross slope of 2% at the top of the ramp.

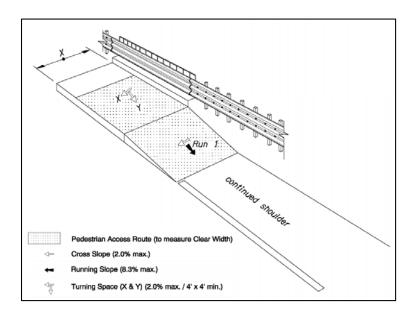


Figure 2: Bridge curb ramp to continuous shoulder with transitional panel

Bridge sidewalk to an approaching sidewalk

Bridge curb heights are generally greater than standard curb heights. Provide a transition panel between existing roadway sidewalk and bridge sidewalk. Ensure the transitional ramp has a running slope less than 5% finished (4.5% design) and a cross slope of less than 2% finished (1.5% design).



Bridge curb ramps at an intersection

Intersections are presumed have crosswalks at all approaches unless they have been officially closed. Crossings must be accessible. When a pedestrian access route exists at an intersection, curb ramps are required. Unless technically infeasible, provide two curb ramps at each corner; one to serve each direction of pedestrian travel. Follow ODOT Standard curb ramp guidance for compliant curb ramp design.