

CHAPTER FIFTY-EIGHT SPECIAL DESIGN ELEMENTS

58-1 ACCESSIBILITY STANDARDS FOR THE DISABLED

58-1.01 General

58-1.01(a) References

Many highway elements can affect the accessibility and mobility of disabled individuals. These include sidewalks, parking lots, buildings at transportation facilities, overpasses, and underpasses. The Department's accessibility criteria complies with the 1990 ~~Americans with Disabilities Act~~ (ADA) and the ~~Illinois Environmental Barriers Act (410 ILCS 25/1)~~. The following sections present accessibility criteria which are based on information presented in the ~~ADA Accessibility Guidelines for Buildings and Facilities (ADA Guidelines)~~, the ~~Illinois Accessibility Code~~ (Illinois Capital Development Board), ~~Uniform Federal Accessibility Standards (UFAS)~~, and the American National Standards Institute (ANSI). Where other agencies or local codes require criteria which exceed the ~~ADA Guidelines~~, then the stricter criteria may be required. This will be determined on a case-by-case basis.

58-1.01(b) Maintaining Comparable Access

Project designs must include measures to ~~maintain~~ accessibility for the disabled ~~at levels existing before completion of the project~~. For example, where sidewalks are replaced as part of a project, ~~the district will undertake~~ the necessary measures to ensure that accessibility is provided ~~or maintained~~. This may involve construction of additional sidewalks at the State's expense. Contact BDE for guidance when these situations occur.

Accessibility should be maintained during construction of all projects. If a project is being constructed in stages, the designer may need to provide for the reconstruction of certain curb ramps at different times to maintain comparable accessibility. Where a project not being constructed in stages will significantly affect accessibility, a temporary accessibility plan should be developed and included in the construction plans.

58-1.02 Buildings

For interior accessibility criteria in all buildings, ~~airport terminals~~, rest areas, weigh stations, and transit stations (e.g., stations for intercity bus, intercity rail, high-speed rail and other fixed guideway systems), use the accessibility criteria set forth in the ~~ADA Guidelines~~ and/or the ~~Illinois Accessibility Code~~.  The designer should review these documents to determine the

Summary of Comments on Chapter_58_Changes 080702.pdf

Page: 7

-  Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 12:13:18 PM
2005 Draft Public Rights-of-Way Accessibility Guidelines (PROWAG),
-  Author: Lkirchler Subject: Cross-Out Date: 6/17/2008 12:13:32 PM
-  Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 12:14:36 PM
AG
-  Author: Lkirchler Subject: Cross-Out Date: 6/17/2008 12:15:53 PM
-  Author: Lkirchler Subject: Cross-Out Date: 6/17/2008 12:17:34 PM
-  Author: Lkirchler Subject: Cross-Out Date: 6/17/2008 12:16:35 PM
-  Author: Lkirchler Subject: Inserted Text Date: 7/1/2008 7:31:06 AM
ensure
-  Author: Lkirchler Subject: Inserted Text Date: 7/1/2008 7:30:59 AM
to meet accessibility guidelines to the extent feasible.
-  Author: Lkirchler Subject: Cross-Out Date: 6/17/2008 12:17:48 PM
-  Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 12:18:42 PM
to meet current standards
-  Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:19:09 PM
ADAAG
-  Author: Lkirchler Subject: Sticky Note Date: 7/1/2008 7:32:24 AM
*Reference to FHWA Memo dated January 2006 recommending adherence to draft PROWAG until final rule-making has been completed.

appropriate accessibility requirements for interior building features, including rest rooms, drinking fountains, elevators, telephones, etc.

58-1.03 Bus Stops

The following accessibility criteria apply to the construction of bus stops:

1. Bus Stop Pads. New bus stop pads constructed for use in conjunction with a lift or ramp shall meet the following criteria:
 - Provide a firm, stable surface.
 - Provide a minimum clear length of 96 in (2.440 m) (measured from the curb or roadway edge) and minimum clear width of 60 in (1.525 m) (measured parallel to the roadway).
 - Connect the pad to streets, sidewalks, or pedestrian paths with at least one accessible route.
 - The slope of the pad parallel to the roadway will be the same as the roadway to the maximum extent practical.
 - For drainage, provide a desirable cross slope of 1.5% up to a maximum cross slope of 2% perpendicular to the roadway.
2. Bus Shelters. Where new or replaced bus shelters are provided, install or position them to permit a wheelchair user to enter from the public way and reach a location within the shelter having a minimum clear floor area of 30 in by 48 in (760 mm by 1.220 m). An accessible route shall be provided from the shelter to the boarding area.

58-1.04 Parking

58-1.04(a) Off-Street Parking

The following criteria apply to off-street disabled parking spaces:

1. Minimum Number. Figure 58-1A provides the criteria for the minimum number of accessible spaces. A typical disabled stall layout is shown in Figure 58-1B.
2. Location. Parking spaces for disabled individuals and accessible passenger loading zones that serve a particular building shall be the spaces or zones closest to the nearest accessible entrance on an accessible route. In separate parking structures or lots that do not serve a particular building, locate parking spaces for disabled individuals on the

58-1(2)

- 5. **Curb Ramps.** If there are curbs next to an on-street accessible parking space, provide a curb ramp complying with Section 58-1.09. Accessible parking spaces adjacent to intersections may be served by the sidewalk curb ramp at the intersection, provided that the path of travel from the access aisle to the curb ramp is within the pedestrian crossing area.

58-1.05 Accessible Route

58-1.05(a) Definition

An accessible route is a continuous, unobstructed path connecting all accessible elements and spaces in a building, facility, or site. A "site" is defined as a parcel of land bounded by a property line or a designated portion of a public right-of-way. A "facility" is defined as all or any portion of buildings, structures, site improvements, complexes, equipment, roads, walks, passageways, parking lots, or other real or personal property on a site. Interior accessible routes may include corridors, floors, ramps, elevators, lifts, and clear floor space at fixtures. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps, and lifts.

58-1.05(b) Selecting Accessible Routes

Accessible routes must provide at least one accessible route within the boundary of the site from public transportation stops, accessible parking, accessible passenger loading zones, and public streets or sidewalks to the accessible route for the building they serve. The accessible route shall, to the maximum extent feasible, coincide with the route for the general public.

For highway projects, the Department requires at least one continuously accessible route along the highway. During the Phase I study, the designer should examine the project area and note the presence or absence of accessible routes. The determination of an accessible route is the responsibility of the designer and should be logical and practical. For instance, a continuously accessible route on sidewalks should not alternate between one side of a highway and the other unless constrained by terrain, slopes, or other obstacles, or unless caused by temporary pedestrian re-routing due to construction of sidewalks and/or curbs and gutters.

Defining an accessible route may require coordination with the local agency involved in maintaining the continuous route. This also may require coordinating with local support groups. When determining the location of a continuously accessible route, consider the following:

- location of pedestrian generators, particularly those in high priority areas that would be likely to serve disabled pedestrians (e.g., medical facilities, high-rise buildings, housing for the elderly, shopping areas, nursing homes, libraries, government buildings and offices);

T	Author: Lkirchler	Subject: Inserted Text	Date: 6/17/2008 12:23:14 PM
K	Author: Lkirchler	Subject: Replacement Text	Date: 6/17/2008 12:24:28 PM
T	Author: Lkirchler	Subject: Inserted Text	Date: 6/17/2008 12:24:50 PM
T	Author: Lkirchler	Subject: Inserted Text	Date: 6/17/2008 12:25:35 PM
K	Author: Lkirchler	Subject: Replacement Text	Date: 6/17/2008 12:25:57 PM
K	Author: Lkirchler	Subject: Replacement Text	Date: 6/17/2008 12:26:25 PM
T	Author: Lkirchler	Subject: Inserted Text	Date: 6/17/2008 12:26:39 PM

- location of existing sidewalks and curb ramps;
- location of existing utilities, signs, or other poles, or features (e.g., steps) that would need to be removed to provide full accessibility;
- existing ground contours that would affect the longitudinal and transverse slope of sidewalks and ramps;
- location of marked crosswalks; and
- presence of drainage features (e.g., inlets, manholes).

58-1.05(c) Alternative Sidewalk Routes

In some instances, sidewalks may not be accessible because of ~~gaps, steps, or steep terrain~~. In these instances, reconstruction of curb ramps is not necessary if these obstacles prohibit the use of the sidewalk by disabled individuals.

The presence of alternative accessible routes lessens the need for reconstruction in areas in which the terrain or proximity of structures to the sidewalk line will cause substantial difficulty and cost in reconstruction of curb ramps. ~~For example, vaulted sidewalks attached to adjacent structures should not be altered if structural modifications to buildings are required. If an alternative accessible route is available within one city block, curb ramps with construction difficulties may not need to be reconstructed to comply with the accessibility criteria.~~ In these cases, contact the BDE Project Development field engineers for guidance and policy interpretation.

~~Similarly,~~ ramps leading to pedestrian overpass or underpass structures need not be installed if their construction will be extraordinarily difficult or costly, and if an alternative at-grade accessible crossing is available for disabled individuals within approximately 500 ft (150 m) or less from the pedestrian structure. These alternative crossings should have pedestrian-actuated walk signals or a programmed protected pedestrian crossing phase. For cross sections with four or more lanes, all planned or existing islands or raised curb medians should include flat mid-crossing refuges to ensure that disabled individuals in wheelchairs have a place to wait for signal changes.

Certain high-volume roads such as important regional and local arterials (i.e., two or more lanes of travel in each direction) may limit pedestrian crossings to important intersections with pedestrian signal cycles ~~to preserve capacity. For safety, it is not necessary to provide crossings for disabled pedestrians at locations other than these.~~

Author: Lkirchler	Subject: Replacement Text	Date: 6/17/2008 12:27:01 PM
Author: Lkirchler	Subject: Cross-Out	Date: 6/17/2008 12:27:19 PM
Author: Lkirchler	Subject: Replacement Text	Date: 6/17/2008 12:27:41 PM
Author: Lkirchler	Subject: Cross-Out	Date: 6/17/2008 12:27:50 PM
Author: Lkirchler	Subject: Cross-Out	Date: 6/17/2008 12:28:06 PM
Author: Lkirchler	Subject: Cross-Out	Date: 6/17/2008 12:28:29 PM
Author: Lkirchler	Subject: Cross-Out	Date: 6/17/2008 12:28:20 PM

58-1.06 Sidewalks

Section 48-2.04 presents the Department's warrants and design criteria for sidewalks. In addition, all sidewalks must comply with the ADA Guidelines presented in the following sections.

58-1.06(a) Criteria for Accessible Routes

For sidewalks on accessible routes, ensure that the following accessibility criteria are met:

- Width.** The typical sidewalk width is 60 in (1.5 m). Because of restrictions (e.g., poles, right-of-way), this width may be reduced. The minimum clear width at any isolated point along an accessible route shall be 36 in (915 mm).
- Passing Space.** If the sidewalk has less than 60 in (1.5 m) clear width for an extended distance, then passing spaces at least 60 in by 60 in (1.5 m by 1.5 m) shall be located at reasonable intervals not to exceed 200 ft (60 m). A T-intersection between two walks is an acceptable passing space. Paved driveways may also provide acceptable passing space in residential areas.
- Surface.** All sidewalk surfaces shall be stable, firm, and slip resistant. The longitudinal gradient should be flush and free of abrupt changes. However, changes in level up to ¼ in (6 mm) may be accommodated without treatment. Changes in level between ¼ in and ½ in (6 mm and 13 mm) shall be beveled with a slope no greater than 1:2. Changes greater than ½ in (13 mm) shall be accommodated with a ramp; see Section 58-1.08.
- Drainage Structures.** Gratings should not be placed within the walking surface. If, however, gratings must be located in walking surfaces, then they shall have spaces no greater than ½ in (13 mm) wide perpendicular to the dominant direction of travel.
- Slopes.** The sidewalk cross slope shall not exceed 2%. Where driveways or alleys intersect with sidewalks, give design priority to the sidewalk rather than to the driveway or alley. This may require ramping the sidewalk down to the driveway. These longitudinal slopes must meet the criteria in Section 58-1.08 for ramping of sidewalks.
- Protruding Objects.** Objects projecting from walls (e.g., signs, telephones, canopies) with their leading edges between 27 in (685 mm) and 80 in (2.030 m) above the finished sidewalk shall not protrude more than 4 in (100 mm) into any portion of the sidewalk. Freestanding objects mounted on posts or pylons may overhang their mountings up to a maximum of 12 in (305 mm) when located between 27 in (685 mm) and 80 in (2.030 m) above the sidewalk or ground surface. Protruding objects less than 27 in (685 mm) or greater than 80 in (2.030 m) may protrude any amount provided that the effective width of the sidewalk is maintained. Where the vertical clearance is less than 80 in (2.030 m), provide a barrier to warn the blind or visually impaired person.

Author: Lkirchler	Subject: Replacement Text	Date: 6/17/2008 12:29:25 PM
Author: Lkirchler	Subject: Replacement Text	Date: 6/17/2008 12:29:39 PM
Author: Lkirchler	Subject: Inserted Text	Date: 6/17/2008 12:29:53 PM
Author: Lkirchler	Subject: Inserted Text	Date: 6/17/2008 12:30:10 PM
Author: Lkirchler	Subject: Cross-Out	Date: 6/17/2008 12:30:15 PM
Author: Lkirchler	Subject: Inserted Text	Date: 6/17/2008 12:30:35 PM
Author: Lkirchler	Subject: Replacement Text	Date: 6/17/2008 12:30:49 PM
Author: Lkirchler	Subject: Inserted Text	Date: 6/17/2008 12:30:55 PM
Author: Lkirchler	Subject: Replacement Text	Date: 6/17/2008 12:31:13 PM
Author: Lkirchler	Subject: Inserted Text	Date: 7/1/2008 7:37:58 AM
Author: Lkirchler	Subject: Replacement Text	Date: 6/17/2008 12:32:01 PM
Author: Lkirchler	Subject: Inserted Text	Date: 6/17/2008 12:31:48 PM

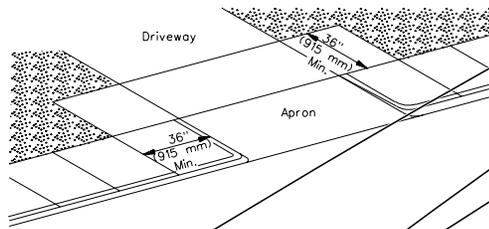
- 7. Separation. Sidewalks will be separated from roadways by curbs, planted parkways, or other barriers, which will be continuous except where interrupted by driveways, alleys, or connections to accessible elements.
- 8. Bus Stops. Where bus passenger loading areas or bus shelters are provided on or adjacent to sidewalks, they must comply with the criteria in Section 58-1.03.
- 9. Curb Ramps/Crosswalks. All curb ramps and crosswalks on an accessible route must comply with the criteria in Section 58-1.03.
- 10. Bridges. Bridges present special problems for meeting the above sidewalk criteria. ~~Due to geometric restraints of the facility being crossed, special treatments may be required; consult with BDE and the Bureau of Bridges and Structures.~~

58-1.06(b) ~~Criteria for Non-Accessible Routes~~

In general, sidewalks ~~on non-accessible routes~~ along public rights-of-way should meet the criteria presented in Section 58-1.06(a). However, some flexibility is required to meet the adjacent roadway conditions and to provide practical designs. ~~The criteria in Section 58-1.06(a) should be implemented, unless noted as follows:~~

- 1. Slopes. Provide the flattest longitudinal slope practical. Preferably, the longitudinal slope should not exceed 1V:12H or the longitudinal slope of the adjacent street. However, at driveways and alleys, the sidewalk may need to be ramped. ~~if space limitation prohibits the use of the 1V:12H slope, then slopes between 1V:10H and 1V:12H are permissible for a maximum rise of 6 in (150 mm). Slopes between 1V:8H and 1V:10H are allowed for a maximum rise of 3 in (75 mm). Slopes steeper than 1V:8H are not permissible. Sidewalk slopes 1V:20H or greater do not require the use of handrails as defined in Section 58-1.08. Cross slopes greater than 2% may be used provided adjacent portions are smoothly blended.~~
- 2. Stairs. Sidewalks with stairs are allowed on non-accessible routes, provided an ~~unobstructed~~ route is available between accessible entrances. Section 58-1.07 presents criteria for stairs.
- 3. Separation. Sidewalks adjacent to the curb or roadway may be offset to avoid a non-conforming cross slope at driveway aprons by diverting the sidewalk around the apron; see Figure 58-1D.
- 4. Protruding Objects. Objects on or along a sidewalk which are not fixed (e.g., newspaper vending machines, trash receptacles) ~~are not subject to the ADA Guidelines. Fixed items (e.g., signal controller cabinets, light standards, utility poles, mailboxes, sign~~

+	Author: Lkirchler	Subject: Cross-Out	Date: 6/17/2008 12:32:54 PM
T	Author: Lkirchler can	Subject: Inserted Text	Date: 6/17/2008 12:32:38 PM
E	Author: Lkirchler	Subject: Replacement Text C	Date: 6/17/2008 12:33:03 PM
+	Author: Lkirchler	Subject: Cross-Out	Date: 7/1/2008 7:39:05 AM
T	Author: Lkirchler	Subject: Inserted Text Sidewalks Not Currently Part of Accessible Routes	Date: 7/1/2008 7:39:39 AM
+	Author: Lkirchler	Subject: Cross-Out	Date: 6/17/2008 12:33:37 PM
T	Author: Lkirchler	Subject: Inserted Text Note: Sidewalks on the public right-of-way may be part of an accessible route in the future as land use changes. These changes should be planned for in current construction projects.	Date: 7/1/2008 7:41:12 AM
E	Author: Lkirchler	Subject: Replacement Text 20	Date: 6/17/2008 12:34:13 PM
T	Author: Lkirchler	Subject: Inserted Text up to 1V: 12H	Date: 6/17/2008 12:34:30 PM
E	Author: Lkirchler	Subject: Replacement Text If the longitudinal slope of the adjacent street is such that providing a 1V: 12H ramp would exceed 15 feet, a steeper ramp could be allowed.	Date: 6/17/2008 12:35:25 PM
E	Author: Lkirchler	Subject: Replacement Text accessible	Date: 6/17/2008 12:35:44 PM
E	Author: Lkirchler	Subject: Replacement Text and fixed	Date: 6/17/2008 12:36:16 PM



SIDEWALKS AT DRIVEWAY APRONS
Figure 58-1D

supports) should not be placed within the sidewalk. In those locations where it is impractical to provide the minimum sidewalk width, maintain a minimum access width of 36 in (915 mm).

58-1.06(c) Historic Districts and Transportation Enhancement Projects

In historic districts, some areas may have sidewalks which are raised several steps above the roadway or which are constructed of brick, stones, or loose gravel. Additionally, old trees may restrict horizontal clearance. Construction of accessible curb ramps in these areas may not be necessary. Because each situation may be unique, the district should contact BDE for guidance.

Some transportation enhancement projects (see Chapter 18) which involve landscaping and scenic beautification in historic districts or downtown areas may involve construction of brick sidewalks. In these situations, the use of bricks on curb ramps and on crosswalks should not occur without concurrence from BDE. Alternative design treatments (e.g., tinted concrete, brick- or stone-texturized liners) for ramps and crosswalks are encouraged in place of bricks; consult with BDE.

58-1.07 Stairs

Stairs shall not be part of an exterior accessible route because they cannot be safely negotiated by individuals in wheelchairs. Where stairs are used, they should be designed to be accessible

- Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:36:33 PM
48
- Author: Lkirchler Subject: Cross-Out Date: 6/17/2008 12:38:07 PM
- Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:37:01 PM
be difficult
- Author: Lkirchler Subject: Replacement Text Date: 7/1/2008 7:43:53 AM
Accessibility should be provided to the maximum extent feasible, because
- Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:38:56 PM
Curb ramps should meet the requirements of Section 58-109(c), including the provision of detectable warnings. The
- Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:39:24 PM
may be considered

by other disabled individuals. Therefore, the design of stairs must comply with Section 4.9 of the *ADA Guidelines*. This includes the provision of handrails.

58-1.08 Ramps

Any part of an accessible route with a slope greater than 1:20 shall be considered a ramp and shall conform to the ADA Guidelines for the design of ramps. This includes the provision of handrails. The following criteria must be met for ramps on accessible routes:

1. Slope and Rise. The least possible slope should be used for any ramp. Figure 58-1E provides the maximum allowable ramp slopes for new construction. Curb ramps and ramps to be constructed on existing sites or in existing buildings or facilities may have slopes and rises as shown in Figure 58-1F, if space limitations prohibit the use of a 1:12 slope or less.
2. Width. The minimum clear width of a ramp shall be 36 in (915 mm).
3. Landings. Ramps shall have level landings at the bottom and top of each run and shall have the following features:
 - The landing shall be at least as wide as the ramp run leading to it.
 - The landing length shall be a minimum of 60 in (1.5 m).
 - If ramps change direction at landings, the minimum landing size shall be 60 in by 60 in (1.5 m by 1.5 m).
4. Handrails. If a ramp run has a rise greater than 6 in (150 mm) or a horizontal projection greater than 72 in (1.830 m), then it shall have handrails on both sides. Handrails are not required on curb ramps. See the ADA Guidelines for handrail criteria.
5. Cross Slope and Surfaces. The cross slope of ramp surfaces shall be no greater than 2%. Ramp surfaces shall comply with the criteria for "Surface" of sidewalks; see Section 58-1.06.
6. Edge Protection. Ramps and landings with dropoffs shall have curbs, walls, railings, or projecting surfaces that prevent people from slipping off the ramp. Curbs shall be a minimum of 2 in (50 mm) high.
7. Outdoor Conditions. Outdoor ramps and their approaches shall be designed so that water will not accumulate on walking surfaces.

Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:45:52 PM
running grade

Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:46:15 PM
5%

Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:46:27 PM
ADAAG

Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:46:54 PM
48

Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:47:19 PM
ADAAG

58-1.09 Curb Ramps**58-1.09(a) General**

All curbs and sidewalks shall be designed with curb ramps at all pedestrian crosswalks. This is required to provide adequate and reasonable access for the safe and convenient movement of physically disabled persons. For the purpose of this section, a pedestrian crosswalk is defined as that portion of a highway or street ordinarily included within the prolongation or connections of lateral lines of sidewalks at intersections. It also includes any portion of a highway or street distinctly indicated as a crossing for pedestrians by lines or other markings on the surface. It does not include such prolonged or connecting lines from an alley across a street.

58-1.09(b) Responsibility for Construction of Curb Ramps

~~Department responsibility for constructing or modifying curb ramps will be determined~~ by the jurisdiction over affected highways and appurtenances pursuant to the applicable sections of the *Illinois Highway Code* (605 ILCS 5/1-101 *et seq.*) and by any relevant jurisdictional agreements or transfers. Jurisdiction will not be determined solely by ownership of right-of-way in fee simple or other ownership instrument, nor will jurisdiction be determined by the existence and provisions of maintenance agreements.

Use the Bureau of Local Roads and Streets publication *Jurisdictional Transfer Guidelines* as the initial basis for establishing jurisdictional responsibility. Where written jurisdictional agreements do not exist, contact the Bureau of Local Roads and Streets to determine the applicable jurisdiction of the highway.

When determining the need for curb ramps, consider the following:

1. No Curb Work. ~~If curbs are not being altered as part of a project and there is no accessible sidewalk or other evidence of pedestrian usage (e.g., well-worn dirt paths), then construction or reconstruction of curb ramps is not required.~~
2. Curb Work. If curbs will be altered as part of a State project and there is an accessible sidewalk or evidence of pedestrian usage, the Department will reconstruct curb ramps consistent with the *Highway Standards* at 100% State expense regardless of jurisdiction.
3. Traffic Signals. On State traffic signal installation projects which involve reconstruction of curb ramps or sidewalks because of the placement of signal hardware, the State will be responsible for 100% of the costs of curb ramps as part of the project.
4. Local Jurisdiction. ~~If curbs will not be altered as part of a project and the Department does not have jurisdiction over the curbs, provisions for curb ramps will be the responsibility of local governments. If the Department does not have jurisdiction over~~

-
- Author: Lkirchler Subject: Replacement Text Date: 7/2/2008 7:48:46 AM
Financial (responsibility for) construction or modification of curb ramps will generally be assigned according to cost sharing of the overall project, per Chapter 5, Section _____. Ongoing maintenance will be determined
-
- Author: Lkirchler Subject: Inserted Text Date: 7/2/2008 7:49:05 AM
for maintenance
-
- Author: Lkirchler Subject: Replacement Text Date: 7/2/2008 7:56:01 AM
If no sidewalks are present or needed per Chapter 17, Section ___, documentation of omission should be provided in the project report.
-
- Author: Lkirchler Subject: Cross-Out Date: 7/2/2008 7:51:12 AM

~~the roadway abutting the curbs (e.g., parking lane, traveled way), jurisdiction over the curbs is presumed to rest with the local government.~~

Author: Lkirchler Subject: Cross-Out Date: 7/2/2008 7:51:19 AM

5. Department Jurisdiction. On State facilities, curbs and curb ramps which will not be altered as part of an improvement should still be removed and replaced if they do not meet Department criteria. Note that, if the Department has jurisdiction over the roadway, it usually can be assumed that it also has jurisdiction over the curbs adjacent to the roadway.

Author: Lkirchler Subject: Inserted Text Date: 7/2/2008 7:52:34 AM

On local facilities, the Department should ensure that curbs and curb ramps, which will not be removed as part of the improvement, should still be removed and replaced if they do not meet Department standards. Financial responsibility should be apportioned per Chapter 5.

6. Radius Returns. At locations where radius returns for curbs under State jurisdiction meet curbs on a local side street, participation in the removal and reconstruction of curb ramps will occur ~~at a ratio of 50% for the State and 50% for the local government.~~

Author: Lkirchler Subject: Replacement Text Date: 7/2/2008 7:53:06 AM

per Chapter 5, Section ____.

7. Mid-Block Crossings. At locations where the Department has jurisdiction over curbs at mid-block crossings, only provide curb ramps if they are located at a marked crosswalk (striped and signed and/or signalized), and only if they can be provided consistent with the criteria shown in the *Highway Standards* without structural modifications to existing buildings or sidewalk structures. The State will be responsible for 100% of the cost of mid-block curb ramps if the curbs will be altered as part of a project. The Department will participate at a 50% State/50% local ratio if curb ramps are altered as part of a local government project.

Author: Lkirchler Subject: Cross-Out Date: 7/2/2008 7:53:12 AM

8. Alleys. Alleys are considered local streets which intersect sidewalks, both of which are a local responsibility. Therefore, accessibility considerations at alleys are primarily a local government concern. However, if a State project involves reconstruction of radius returns at alleys, the State's share may be 100% for curb ramps at the alley, similar to curb ramps at intersections.

9. Past Financial Participation. Do not use past financial participation arrangements for the construction of parking lanes and curbs or maintenance agreements affecting these lanes or curbs to apportion financial responsibility for reconstruction of curb ramps.

10. Maintenance Agreements. Once curb ramps are constructed or reconstructed, they should be included in maintenance agreements with local governments. Maintenance of curb ramps will be considered a local responsibility because they are an extension of the local sidewalk system.

11. Local Projects. In some instances, curb ramps may be built or reconstructed using local forces with the State billed accordingly for its ~~50%~~ share. A joint agreement will be required for this type of arrangement. Ensure that the local government is informed that the State will only allow Class SI concrete to be used in performing this work. See Chapter 5 for more information.

12. SMART and 3P Projects. Districts may include limited reconstruction of curb ramps in 3P projects. If curb ramp work represents approximately more than 20% of the value of

the project, then other program categories such as 3R should be used to accomplish the project, or a separate project or contract for curb ramp reconstruction should be considered. For "SMART"-type projects, curb ramp reconstruction work should not be more than 10% of the value of the entire project.

58-1.09(c) Design and Construction of Curb Ramps

Design and construct all curb ramps according to the criteria in the *Highway Standards*. Only use Type A curb ramps where the area on both sides of the ramp is a planting or other non-walking area. For all other areas, use the Type B curb ramp with flared sides. Variances from this criteria must be obtained from BDE.

Alternative ramp textures may be used when a local government has selected and is using a different texture consistently throughout a community, and where there is evidence that such texture has been endorsed by or developed cooperatively by the local government and disabled individuals. Alternative textures must not depart radically from the *Highway Standards* and must exhibit a stable, firm, and slip-resistant surface. Where texture variances from the *Highway Standards* exist or are being contemplated, the district must notify, in writing, the BDE Policy and Procedures Section. A description of the alternative texture and evidence of coordination by the district with the local government or disabled community should be submitted as part of the notification. This notification need occur only once (i.e., it will not be necessary to submit information for each project using the same alternative texture).

When designing and locating curb ramps, consider the following:

1. **Blind Pedestrians.** Locate the curb ramp so that it will not be a safety hazard for blind pedestrians.
2. **Parked Vehicles.** Place the curb ramp so that it cannot be obstructed by parked vehicles.
3. **Obstructions.** The function of the curb ramp must not be compromised by other highway features (e.g., guardrail, catch basins, utility poles, signs). Also, it is desirable to move any obstructions near curb ramps whenever practical. When this is not practical, consider the direction of traffic relative to the placement of the curb ramp. It is important that drivers can see the person using the curb ramp.
4. **Crosswalks.** Curb ramps at marked crossings shall be wholly contained within the markings, except that the flared sides of a Type B curb ramp may be outside the crosswalk. At intersections where there is no marked crosswalk, place the curb ramp within the area that would reasonably be expected to be used as a crosswalk.
5. **Crosswalk Markings and Stop Bars.** Note that the placement of curb ramps affects the placement of crosswalk markings and stop bars. Conversely, the location of existing

Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 12:48:42 PM
still must include standard detectable warning strips,

Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 12:48:44 PM

Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:49:08 PM
Design

Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 12:49:24 PM
with appropriate running grades, cross slope, side flares, and detectable warnings,

crosswalk markings and stop bars will affect the placement of curb ramps. Some of the crosswalk marking constraints are shown in the Highway Standards and the ILMUTCD.

Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 12:50:07 PM discussed in Chapter 17 and

- 6. **Diagonal Curb Ramps.** Avoid using a diagonal curb ramp whenever practical due to its effect on the crosswalk width. It is preferable to use straight curb ramps rather than to use a diagonal curb ramp.

Author: Lkirchler Subject: Cross-Out Date: 6/17/2008 12:50:20 PM

Author: Lkirchler Subject: Cross-Out Date: 6/17/2008 12:50:51 PM

- 7. **Raised-Curb Medians.** Where raised-curb medians exist within a crosswalk, depress the median to the level of the crosswalk or provide curb ramps on both sides and a minimum level landing area 48 in (1.220 m) long by 36 in (915 mm) wide.

Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 12:50:42 PM and false orientation for blind users.

Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 12:52:02 PM perpendicular

- 8. **Pedestrian Signals.** The location of the curb ramp must be consistent with the operation of pedestrian-actuated traffic signals, if present. In addition, locate the pedestrian push button so it can be reached by wheelchair-bound individuals.

Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:51:54 PM diagonal ramps. Further discussion on ramp types is in Chapter 17.

Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:52:20 PM 60

58-1.09(d) Crossing Controls

If a pedestrian crosswalk and curb ramp are present at an intersection with a traffic signal that has pedestrian detectors (push buttons), the following will apply:

Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:52:42 PM 60

- 1. **Location.** Locate the controls as close as practical to the curb ramp and, to the maximum extent feasible, permit operation from a level area immediately adjacent to the controls.

Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:53:33 PM See Manual on Uniform Traffic Control Devices Section ___ for guidance on location at pedestrian push buttons.

- 2. **Surface.** Provide a firm, stable, and slip-resistant area, a minimum of 36 in by 48 in (915 m by 1.220 m), to allow a forward or parallel approach to the controls.

Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 12:53:51 PM top of the

Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 12:54:08 PM (maximum horizontal reach is 10 inches)

58-1.10 Pedestrian Overpasses and Underpasses

When deciding where to locate a pedestrian crossing, highway and structural designers must coordinate their efforts to properly address the accessibility considerations. The following are applicable:

Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:54:13 PM 60

Author: Lkirchler Subject: Replacement Text Date: 6/17/2008 12:54:17 PM 60

- 1. **Warrants.** Threshold warrants for considering a pedestrian overpass are dependent on pedestrian volumes, vehicular volumes, and distance to the nearest "safe" alternative crossing. These warrants are determined on a case-by-case basis. Additional guidance can be found in FHWA-RD-84/082 *Warrants for Pedestrian Over and Underpasses*.

- 2. **Accessible Route.** All current and future accessible routes must be identified. If existing routes are inaccessible, the designer must evaluate the likelihood that the routes will be made accessible in the future. This evaluation may lead to the decision to relocate the pedestrian overpass or underpass to another site where accessibility can be more easily provided.

3. Design. The proposed design must meet the ADA Guidelines criteria for stairs, ramps, curb ramps, and accessible routes. Also reference FHWA-IP-84-6 *Guidelines for Making Pedestrian Crossing Structures Accessible* for additional design information.

58-1.11 Rest Areas

The references listed in Section 58-1.01(a) discuss the criteria for disabled accessibility for rest area buildings. However, certain items not covered by these documents are addressed below:

1. Picnic Areas. The references listed in Section 58-1.01(a) provide information for the design of picnic areas and tables. Not all such areas and tables in a rest area need to be accessible. However, the district should erect signs using the international symbol of accessibility at those locations which include accessible facilities.
2. Separator Islands. Many rest areas include islands to separate passenger vehicle parking areas from truck parking areas. In many cases, disabled persons travel in vehicles which may have to park in the truck parking area. Also, many tour buses use these areas. Accordingly, provide an opening in the island as detailed in Section 58-1.09(c) to provide accessibility for the disabled. Also consider special markings or signing to indicate the location of this opening.
3. Parking. Provide parking spaces designed for disabled persons in both automobile and truck parking areas. See Chapter 16 for additional design criteria.

	Advantages	Disadvantages
Far-Side Stop	<ul style="list-style-type: none"> Minimizes conflicts between right-turning vehicles and buses. Provides additional right-turn capacity by making the curb lane available for traffic. Minimizes sight distance problems on approaches to the intersection. Encourages pedestrians to cross behind the bus. Creates shorter deceleration distances for buses because the bus can use the intersection to decelerate. Results in bus drivers being able to take advantage of the gaps in traffic flow that are created at signalized intersections. 	<ul style="list-style-type: none"> Multiple stopped buses may block the intersection during peak periods. May obscure sight distance for crossing vehicles. May increase sight distance problems for crossing pedestrians. Can cause a bus to stop twice, first for the traffic signal and then for the far-side stop, which interferes with both bus operations and all other traffic. May increase number of rear-end accidents because drivers do not expect buses to stop again after stopping at a red signal. Could result in traffic queued into intersection when a bus is stopped in travel lane.
Near-Side Stop	<ul style="list-style-type: none"> Minimizes interference when traffic is heavy on the far side of the intersection. Allows passengers to access buses closest to crosswalk. The width of the intersection allows easier re-entry into the traffic stream where curb parking is allowed. Eliminates the potential of double stopping. Allows passengers to board and alight while the bus is stopped at a red signal. Provides driver with the opportunity to look for oncoming traffic, including other buses with potential passengers. 	<ul style="list-style-type: none"> Increases conflicts with right-turning vehicles. May result in stopped buses obscuring curbside traffic control devices and crossing pedestrians. May cause sight distance to be obscured for cross vehicles stopped to the right of the bus. May block the through lane during peak period with queuing buses. Increases sight distance problems for crossing pedestrians.
Mid-Block Stop	<ul style="list-style-type: none"> Minimizes sight distance problems for vehicles and pedestrians. May result in passenger waiting areas experiencing less pedestrian congestion. Desirable if a large generator is located mid-block. Less walking for passengers where the distance between intersections is large. May be appropriate where there is a fairly heavy and continuous transit demand throughout the block. 	<ul style="list-style-type: none"> Requires additional distance for no-parking restrictions. Encourages patrons to cross street at mid-block (jaywalking). Increases walking distance for patrons crossing at intersections.

- Author: Lkirchler Subject: Cross-Out Date: 6/17/2008 2:14:04 PM
- Author: Lkirchler Subject: Cross-Out Date: 6/17/2008 2:14:10 PM
- Author: Lkirchler Subject: Cross-Out Date: 6/17/2008 12:57:16 PM
- Author: Lkirchler Subject: Cross-Out Date: 6/17/2008 2:14:22 PM
- Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 2:15:14 PM

- May require installation of a midblock crosswalk.

COMPARISON OF BUS STOP LOCATIONS

Figure 58-3A

58-9 REFERENCES

1. *Accessibility Guidelines for Building and Facilities*, U.S. Architectural and Transportation Barriers Compliance Board, 1991, 1994.
2. FHWA-IP-84-6, *Guidelines for Making Pedestrian Crossing Structures Accessible*, August, 1984.
3. FHWA-RD-84/082, *Warrants for Pedestrian Over and Underpasses*, 1984.
4. *A Policy on Geometric Design of Highways and Streets*, AASHTO, 2001.
5. *Guide for the Design of Park-and-Ride Facilities*, AASHTO, 1992.
6. *Traffic Engineering Handbook*, Institute of Transportation Engineers, 1992.
7. *The Location and Design of Bus Transfer Facilities*, Institute of Transportation Engineers, 1992.
8. *Guidelines for the Location and Design of Bus Stops*, TCRP Report 19, Transportation Research Board, 1996.
9. *Highway Standards*, IDOT.
10. *Standard Specifications for Road and Bridge Construction*, IDOT.
11. *A Guide for Erecting Mailboxes on Highways*, AASHTO, 1994.
12. *Land Acquisition Policies and Procedures Manual*, IDOT.

Author: Lkirchler Subject: Inserted Text Date: 6/17/2008 2:15:57 PM

13. Draft PROWAAG (2008)
14. AASHTO Pedestrian Guide.