

ROAD DESIGN MANUAL REVISIONS August 2023

APPENDIX A(1)

- Page A(1)-7 – Revised to Delete the following language: “The guidance, funded by Knight Foundation, uses three principles to enhance safety at the intersection, where conflicts between street users are most frequent: Reduce turning speeds, Make bikes and pedestrians visible and Give bikes the right of way.”
- Page A(1)-7 – Revised to add the following Resources: “In February 2021, The Federal Highway Administration (FHWA) released two new resources intended to supplement its *Bikeway Selection Guide*. The first resource, *Traffic Analysis and Intersection Considerations to Inform Bikeway Selection*, which is intended to inform trade-off decisions associated with bikeway selection at intersections. The second resource, *On Street Motor Vehicle Parking and the Bikeway Selection Process*, is intended to inform discussions about on-street parking and bikeway selection, and In April 2022, FHWA released the *Improving Intersections For Pedestrians and Bicyclists Informational Guide*.”
- Page A(1)-24 – Revised to delete the following language: “When this is not possible and the distance between the outside edge of the graded shoulder and the shared use path is less than 5 feet, a suitable physical barrier is required. A suitable physical barrier is defined as dense shrubbery, railing or chain link fence. Such barriers serve both to prevent path users from making unwanted movements between the path and the highway shoulder and to reinforce the concept that the path is an independent facility. Where used, the barrier should be a minimum of 42 inches high (including on structures), to prevent bicyclists from toppling over it. A barrier between a shared use path and adjacent highway should not impair sight distance at intersections, and should be designed to not be a hazard to motorists or bicyclist.”
- Page A(1)-27– Revised to **Bold** the following language “**When a path is less than 10 ft. wide a Design Waiver is required.**”
- Page A(1)-45 and 47 – Revised language under the heading for **TRAILS AND TRAILHEADS** and Revise to add the following header: “**Trail Information Signs**”.
- Page A(1) – 46 – Deleted Language and Page Left Intentional Blank.
- Page A(1)-55 – Added the following sentence to the first paragraph: “The design requirements for pedestrian facilities in this section have been developed to comply with the Americans with Disability Act (ADA) and the Public Rights-of-Way Accessibility Guidelines (PROWAG) minimum requirements.”
- Page A(1)-55 – Revised to replace the following language: “*When planning and designing pedestrian access routes, attention needs to be given to the areas generating and receiving pedestrian traffic (generators and receptors). **Logical termini are to be established to provide connections between existing facilities or to create a closed circulating loop for the pedestrian access route.** Connecting to existing pedestrian facilities in private or commercial*

developments may require additional right of way or temporary construction easements. Ending a pedestrian access route into a parking lot or roadway shoulder, or stub outs in anticipation of future extension, are not acceptable means of terminating a pedestrian access route.

*In instances where future development may incorporate pedestrian facilities or a pedestrian network, the space necessary for the facility may be dedicated and graded. Items for the pedestrian facility such as sidewalk or curb ramps, shall not be installed until such time as the facility will connect to generators and receptors with a logical terminus.” **And replaced with the following:** “When planning and designing Pedestrian Access Routes, attention needs to be given to the areas generating and receiving pedestrian traffic (generators and destinations). The Pedestrian Access Route when designed, shall establish a connection between existing facilities, adjacent projects, or to create a closed circulating loop for the Pedestrian Access Route. In instances where a future Pedestrian Access Route need is anticipated, it may be appropriate to provide a graded sidewalk space with appropriate right of way. Ending a pedestrian access route into a parking lot or roadway shoulder, are not acceptable means of terminating a pedestrian access route.*

The designer should investigate tying the proposed sidewalk into an existing private or commercial development pedestrian facility when appropriate. The connection may require the purchase of additional right of way or temporary construction easement.

The termination of a Pedestrian Access Route may be necessary due to the highway project limits, land development project limits, and the unavailability of public right of way. When these situations arise, the Pedestrian Access Route may be terminated as long as the following criteria are met:

- *A turning space of 5 feet by 5 feet is provided.*
- *The turning space is level (maximum of 2 percent slope in both directions).*

A barricade shall be installed at the termination of the pedestrian access route to alert all users that the pedestrian access route ends. For the applicability of advance signage for the termination of the pedestrian access route, please consult with District Traffic Engineering.

Should the elimination of the barricade be necessary, a Design Waiver justifying why the barricade cannot be installed, shall be completed in accordance with IIM-LD-227. For consideration of a design waiver, the designer will also need to demonstrate that a distinguishable surface (i.e. grass area) different than the constructed pedestrian facility, free of hazards and obstructions, is beyond the termination of the Pedestrian Access Route.”

- Page A(1)-55 – Revised to delete the following language: “and asphalt concrete” from “Only solid materials such as hydraulic cement concrete and asphalt concrete are to be used for constructing pedestrian facilities.”
- Page A(1)-55 Revised “Asphalt concrete sidewalks shall use the pavement design for shared use paths. See FIGURE A(1)-12 SHARED USE PATH PAVEMENT STRUCTURE for details.” To: “Asphalt concrete may be used for shared use paths. See FIGURE A(1)-12 SHARED USE PATH PAVEMENT STRUCTURE for details.”

- Page A(1)-56 – Revised to delete the following language: “asphalt concrete sidewalk or” from sidewalks along shoulder and ditch section streets.
- Page A(1)-56 – Revised “Drainage Grates” heading to “Drainage and Drainage Grates” and added the following sentences to the Drainage Section: “Roadway drainage or surface drainage shall not be directed across or through pedestrian facilities including sidewalks, curb ramps, or pedestrian cut throughs at medians. Curb ramps and pedestrian cut throughs shall drain to the roadway.”