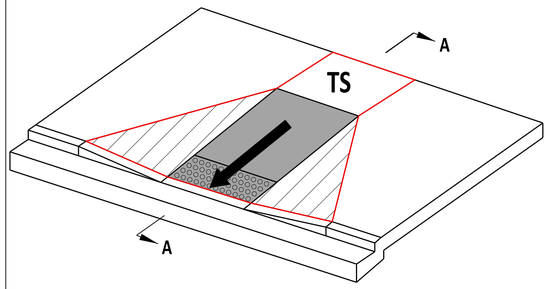
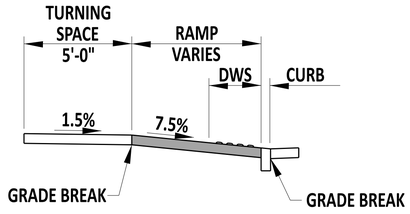
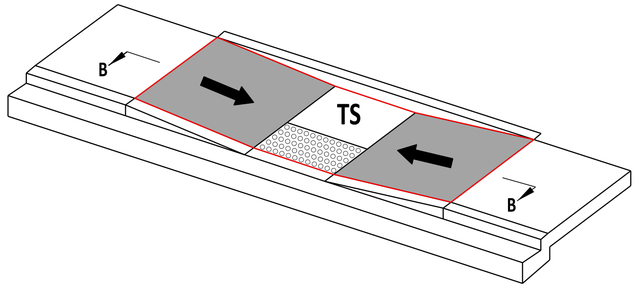


PERPENDICULAR CURB RAMP

SEE SHEET 2 AND 3 FOR LAYOUT ALTERNATIVES

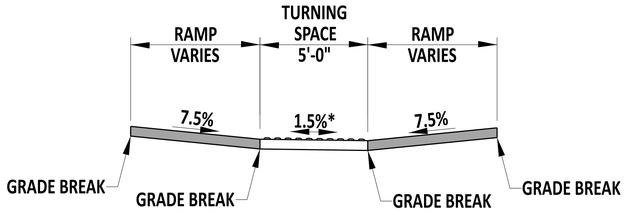


SECTION A-A



PARALLEL CURB RAMP

SEE SHEET 4 FOR LAYOUT ALTERNATIVES



SECTION B-B

*SEE NOTE 3

LEGEND

TS — TURNING SPACE	TRIANGULAR AREA
RAMP	DETECTABLE WARNING SURFACE
BLENDED TRANSITION	FLARED SIDE
CROSSWALK STRIPING	LIMIT OF 6" MIN. SIDEWALK OVER 6" GABC
BUFFER OR OTHER NON-WALKABLE SURFACE	

SCALE : NTS

REQUIRED ELEMENT DIMENSIONS AND CRITERIA (APPLIES TO ALL SHEETS OF STANDARD C-2)				
PEDESTRIAN CONNECTION ELEMENT	CRITERIA	LIMITS FOR DESIGN AND LAYOUT	LIMITS FOR WORK ACCEPTANCE	RELATED NOTES
RAMP	WIDTH	5'-0" MIN.	5'-0" MIN.	SEE NOTE 6
	RUNNING SLOPE	7.5%	8.3% MAX.	SEE NOTE 1
	CROSS SLOPE	1.5%	2.0% MAX.	SEE NOTE 3
	SLOPE OF FLARED SIDE	9.5%	10.0% MAX.	SEE NOTE 10
TURNING SPACE	DIMENSION	5'-0" X 5'-0" MIN.	5'-0" X 5'-0" MIN.	SEE NOTE 6
	RUNNING SLOPE	1.5%	2.0% MAX.	
	CROSS SLOPE	1.5%	2.0% MAX.	SEE NOTE 3
BLENDED TRANSITION	RUNNING SLOPE	4.5%	5.0 MAX.	
	CROSS SLOPE	1.5%	2.0% MAX.	SEE NOTE 3
TRIANGULAR AREA	RUNNING SLOPE	1.5%	5.0% MAX.	
	CROSS SLOPE	1.5%	2.0% MAX.	SEE NOTE 3
CLEAR SPACE	DIMENSION	4'-0" X 4'-0"	4'-0" X 4'-0"	SEE NOTE 12

* CROSS SLOPE IS MEASURED PERPENDICULAR TO THE PRIMARY DIRECTION OF PEDESTRIAN TRAVEL.

** RUNNING SLOPE IS MEASURED PARALLEL TO THE PRIMARY DIRECTION OF PEDESTRIAN TRAVEL.

*** ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE.

GENERAL PEDESTRIAN CONNECTION NOTES:

1). TO AVOID CHASING GRADE INDEFINITELY ON STEEP ROADWAYS, RAMP LENGTH IS NOT REQUIRED TO EXCEED 15'-0" REGARDLESS OF THE RESULTING RAMP RUNNING SLOPE.

2). ALL JOINTS AND GRADE BREAKS ARE TO BE CONSTRUCTED FLUSH.

3). TO CREATE A FLUSH TRANSITION TO THE STREET, THE CROSS SLOPE OF THE INDICATED ELEMENTS MAY EXCEED THE REQUIRED 2.0% MAXIMUM CROSS SLOPE. THE ELEMENT PERMITTED TO EXCEED THE 2.0% MAXIMUM VARIES BY PEDESTRIAN CONNECTION TYPE. SEE THE CURRENT PEDESTRIAN ACCESSIBILITY STANDARDS MANUAL FOR ADDITIONAL INFORMATION ABOUT WHICH ELEMENTS MAY BE PERMITTED TO EXCEED THE 2.0% MAXIMUM. IN ALL CASES, THE CROSS SLOPE OF THE ELEMENT PERMITTED TO EXCEED THE 2.0% MAXIMUM IS NOT TO EXCEED THE SLOPE OF THE ADJACENT ROADWAY.

4). GRADE BREAKS AT THE TOP AND BOTTOM OF A RAMP, BLENDED TRANSITION, AND TURNING SPACE SHALL BE PERPENDICULAR TO THE RUNNING SLOPE. GRADE BREAKS SHALL NOT BE LOCATED WITHIN THE RAMP, BLENDED TRANSITION, TURNING SPACE, OR DETECTABLE WARNING SURFACE.

5). WHEN ADJACENT TO GRASS, A 6:1 GRADE IS REQUIRED FOR A MINIMUM OF 2'-0" ADJACENT TO THE PEDESTRIAN CONNECTION IN ACCORDANCE WITH M-3, SHEET 1. ALTERNATIVELY, A CURB AT THE BACK OF THE PEDESTRIAN PATH MAY BE INSTALLED AT DEPRESSED TURNING SPACES OR RAMP SEGMENTS IN LIEU OF PROVIDING A 6:1 GRADE.

6). SEE PLANS FOR WIDTH. PEDESTRIAN CONNECTIONS THAT SERVE SHARED USE PATHS ARE TO PROVIDE A RAMP WIDTH AND TURNING SPACE WIDTH THE SAME WIDTH AS THE APPROACH SHARED USE PATH.

7). PROVIDE A TURNING SPACE AT LOCATIONS WHERE THE PRIMARY DIRECTION OF TRAVEL IS REQUIRED TO CHANGE IN ORDER TO ACCESS THE PEDESTRIAN CONNECTION IN ACCORDANCE WITH THESE SHEETS.

8). IN ALTERATIONS, WHERE THE PEDESTRIAN CONNECTION WILL TIE INTO AN EXISTING CROSS SLOPE THAT EXCEEDS 2.0%, PLACE A MINIMUM 5'-0" LONG TRANSITION SLAB IN THE DIRECTION OF PEDESTRIAN TRAVEL TO CONNECT THE NEW PEDESTRIAN CONNECTION TO THE EXISTING PEDESTRIAN PATH. THE TRANSITION SLAB SHALL NOT OVERLAP ANY OTHER REQUIRED PEDESTRIAN CONNECTION ELEMENT. THE CROSS SLOPE TRANSITION SHALL BE SPREAD EVENLY OVER THE SLAB TO MINIMIZE THE DEGREE OF WARPING. THE RATE OF CROSS SLOPE CHANGE IN THE TRANSITION AREA SHALL NOT EXCEED 3% PER LINEAR FOOT.

9). REFER TO THE DE MUTCD FOR DETAILS REGARDING THE LOCATION OF PEDESTRIAN PUSH BUTTONS.

10). PROVIDE FLARED SIDES ON PERPENDICULAR CURB RAMPS AND BLENDED TRANSITIONS WHERE THE RAMP OR BLENDED TRANSITION EDGE ABUTS A WALKABLE SURFACE. UNLESS APPROVED OTHERWISE BY THE ENGINEER, PROVIDE JOINTS BETWEEN THE FLARED SIDE AND THE ABUTTING WALKABLE SURFACE AND RAMPED SEGMENT. FLARED SIDES MAY BE SUBSTITUTED WITH APPROVAL OF THE ENGINEER WITH VERTICAL RETURNED CURBS OR A 4:1 CURB TAPER WITH ASSOCIATED GRADING ALONG THE RAMP WHERE THE RAMP ABUTS A NON-WALKABLE SURFACE, OR WHERE THE ADJACENT RAMP SURFACE IS BLOCKED TO PEDESTRIAN TRAFFIC. THE RETURNED CURB MUST NOT AFFECT THE CLEAR WIDTH OF THE PEDESTRIAN ACCESS ROUTE AND SHALL BE FLUSH WITH THE PEDESTRIAN PATH AT TERMINATION.

11). LAYOUT JOINTS AND EXPANSION MATERIAL IN ACCORDANCE WITH M-3, SHEET 1 OF 1.

12). ALIGN THE PEDESTRIAN CONNECTION AND THE CROSSWALK SO THAT A 4'-0" X 4'-0" CLEAR SPACE AREA LOCATED BELOW THE BOTTOM GRADE BREAK OF CURB RAMPS AND BLENDED TRANSITIONS IS CONTAINED WHOLLY WITHIN THE CROSSWALK. ONLY DIAGONAL CURB RAMPS REQUIRE THAT THE CLEAR SPACE BE LOCATED OUTSIDE OF THE PARALLEL VEHICLE TRAVEL LANE AND THAT A SEGMENT OF CURB 2'-0" LONG MINIMUM BE LOCATED ON EACH SIDE OF THE DIAGANOL CURB RAMP'S FLARED SIDES AND BE WITHIN THE MARKED CROSSING.

13). WHERE PEDESTRIAN CONNECTIONS ARE LOCATED ON A RADII, THE REQUIRED DIMENSIONS ARE MEASURED PERPENDICULAR TO THE PEDESTRIAN CONNECTION ELEMENT AND NOT ALONG THE CURVE. SEE THE CURRENT DELDOT PAS MANUAL FOR ADDITIONAL INFORMATION.

14). PEDESTRIAN CONNECTIONS

A) PERPENDICULAR CURB RAMPS HAVE A RAMPED SECTION THAT CUTS THROUGH THE CURB AT AN ANGLE.

B) PARALLEL CURB RAMPS HAVE A RUNNING SLOPE THAT IS IN-LINE WITH THE DIRECTION OF SIDEWALK TRAVEL AND LOWERS THE SIDEWALK TO A TURNING SPACE WHERE A TURN IS MADE TO ENTER THE CROSSWALK.

C) COMBINATION PEDESTRIAN CONNECTIONS UTILIZE A PARALLEL CURB RAMP TO LOWER THE PEDESTRIAN PATH TO A MID TURNING SPACE AND THEN A SHORT PERPENDICULAR CURB RAMP TO CONNECT THE TURNING SPACE TO THE CROSSWALK.

D) PERPENDICULAR AND PARALLEL RAMP CONFIGURATIONS ARE PREFERRED TO DEPRESSED CORNERS. DEPRESSED CORNERS SHOULD ONLY BE USED WHERE SITE CONDITIONS MAKE THEM A MORE APPROPRIATE OPTION, OR WHERE PERPENDICULAR OR PARALLEL RAMPS CANNOT BE INSTALLED DUE TO A PHYSICAL SITE CONSTRAINT.

E) A SINGLE CURB RAMP THAT SERVES TWO SEPARATE CROSSWALKS IS CONSIDERED A SHARED CURB RAMP.

DelDOT

Andrew Short — ENGINEERING SUPPORT — 12/22/2023 DATE

RECOMMENDED

PEDESTRIAN CONNECTIONS, GENERAL NOTES

STANDARD NO. C-2 (2024) | SHT. 1 OF 8

REVIEWED — DEPUTY DIRECTOR - DESIGN — 22 December 2023 DATE

APPROVED — CHIEF ENGINEER — 01/11/2024 DATE

22-DEC-2023