ALL NUMBERING BEGINS FROM THE NORTHWEST CORNER AND GOES CLOCKWISE. EACH CORNER HAS ITS SPECIFIC NUMBER THAT SHALL BE USED IF CURB RAMPS ARE IN THESE LOCATIONS.

* MEDIAN RAMPS ON THE WEST AND/OR EAST LEGS WOULD BE M1, M8, AND M4, M5 RESPECTIVELY.
GENERAL NOTES, CURB RAMPS

1. CURB RAMPS SHALL BE INSTALLED PER STD DWGS 2300, 2303, 2319, CMSC 608, AND DPS ADA RULES AND REGULATIONS.

2. MATERIAL: THE RAMP PANEL AND FLARED SIDES SHALL BE CONCRETE.

3. RAMP TYPES ARE CATEGORIZED BELOW IN TIERS BY REQUIRED ORDER OF USE. LOCATING THE RAMP AS CLOSE AS POSSIBLE TO THE INTERSECTION FOLLOWING THE CURB RAMP DESIGN BOUNDARY CONTAINED IN THE ADA RULES AND REGULATIONS IS THE FIRST PRIORITY. THE DESIGNER SHALL NOT USE A LOWER TIERED RAMP WITHOUT FIRST DETERMINING AND HAVING JUSTIFICATION THAT THE UPPER TIER RAMPS ARE NOT CONSTRUCTIBLE.

CITY OF COLUMBUS RAMP TYPE HIERARCHY

TIER 1 (THESE PERPENDICULAR RAMPS SHOULD BE UTILIZED WHENEVER POSSIBLE.)
- TYPE D
- TYPE C
- TYPE A

TIER 2 (PARALLEL RAMPS SHOULD ONLY BE USED DUE TO RIGHT OF WAY (ROW) OR OTHER SPACE CONSTRAINTS WHERE A TIER 1 RAMP CANNOT BE USED.)
- TYPE P-6 (6' OF ROW AVAILABLE)
- TYPE P-7 (7' OF ROW AVAILABLE)
- TYPE P-5 (5' OF ROW AVAILABLE)
- TYPE P-4 (4' OF ROW AVAILABLE)

TIER 3 (TIER 3 RAMPS CAN ONLY BE USED WITH WRITTEN APPROVAL BY THE CITY ENGINEER OR DESIGNEE. TIER 3 RAMPS SHALL BE IDENTIFIED IN THE DESIGN SCOPE OR APPROVAL REQUESTED BY THE DESIGNER JUSTIFYING THAT THIS RAMP TYPE IS NECESSARY.)
- TYPE J (MODIFIED ALLEY RAMP), USE SHOULD BE LIMITED DUE TO DRAINAGE CONCERNS
- RADIAL RAMPS
- SINGLE SHARED RAMPS

SPECIALTY RAMPS (SHALL ONLY BE USED FOR THE LISTED SITUATION, OR WRITTEN APPROVAL BY THE CITY ENGINEER OR DESIGNEE.)
- TYPE G - ONLY TO BE USED ON ALLEY CROSSINGS
- TYPE H - ONLY TO BE USED ON ALLEY CROSSINGS
- TYPE L-1 - ONLY FOR MEDIAN CROSSINGS
- TYPE L-2 - ONLY FOR MEDIAN CROSSINGS
- PEDESTRIAN PADS - USED FOR ACCESS TO PUSHBUTTONS WHERE THERE IS NO EXISTING SIDEWALK. THE INTENT IS TO PROVIDE ACCESS TO CROSS THE INTERSECTION IN BOTH DIRECTIONS WITHOUT ENTERING THE STREET TO ACCESS TO OTHER CROSSING. THE FOLLOWING IS THE ORDER OF PREFERENCE ON PEDESTRIAN PADS:
  1. PP-1 TWO CONNECTED RAMPS WITH UTILITY STRIP
  2. PP-2 TWO CONNECTED RAMPS WITH SIDEWALK AGAINST CURB
  3. PP-3 USED AS SINGLE SHARED RAMP THAT CAN ACCESS BOTH CROSSWALK LEGS AND THE PUSHBUTTON
  4. PP-3 USED TO ONLY ACCESS THE LEG OF THE INTERSECTION CONTROLLED BY THE PUSHBUTTON

4. RAMP RUNNING SLOPE: THE RUNNING SLOPE SHALL BE NO GREATER THAN 7.69%. THE MINIMUM SLOPE FOR ANY RAMP SHALL BE 5% AND SHOULD BE MAXIMIZED UP TO 7.69% WHENEVER POSSIBLE FOR DRAINAGE.

5. ALL JOINTS BETWEEN NEW AND EXISTING MATERIALS SHALL BE FLUSH.

6. LANDINGS:
- LANDINGS SHALL HAVE A MAXIMUM 1.56% SLOPE IN ALL DIRECTIONS FOR ALL CURB RAMP TYPES.
- A PARALLEL RAMP, CONSTRAINED ON TWO (2) SIDES, E.G., TYPE P-7, SHALL HAVE A LANDING 5-FT WIDE BY 5-FT DEEP A PARALLEL RAMP, CONSTRAINED ON ONE (1) SIDE, E.G., TYPES P-4, 5, & 6, SHALL HAVE A LANDING NO LESS THAN 4-FT MINIMUM BY 5-FT. THE 5-FT DIMENSION SHALL BE PROVIDED AS SHOWN IN THESE STANDARD DRAWINGS.
- All perpendicular ramps shall have a landing no less than 4-ft minimum by 4-ft. A perpendicular ramp that is constrained at the back of sidewalk shall have a landing 4-ft by 5-ft. The 5-ft dimension shall be provided in the direction of ramp run, as shown in these standard drawings.
- Landing at intersecting sidewalks - wherever sidewalks intersect, there shall be a landing.

7. Street counter slope: The counter slope at the base of the ramp shall be a maximum of 5% for a minimum of 2-ft.

8. Clear space: At marked crossings the ramp and street clear space must be fully contained within the marked crosswalk. At unmarked crossings the ramp and clear must be within the curb ramp design boundary.

9. Surfaces: Ramp, flare, and landing surfaces must be stable and slip resistant. Ramps shall be broom finished, transverse to the direction of travel. Gratings, valve boxes, and utility boxes shall not be located in the ramp or landing.

10. Detectable warnings: Detectable warnings shall be installed according to these standard drawings, CMSC 608, and DPS ADA rules and regulations.

11. Curb walls may be necessary for curb ramp construction where space restriction do not allow for grading within row at a 3:1 slope or flatter. The maximum height of 6” thick, non-reinforced curb wall is 12” above the sidewalk surface. The buried portion of the non-reinforced curb wall shall be equal to the exposed reveal. Retaining embankment to a height of more than 12” above the sidewalk will require a designed retaining wall or cellular wall.

12. Ramps must be constructed to allow for positive drainage. The ramp itself shall not hold excess water and the adjacent pavement shall not be altered to inhibit flow of water. If an existing constraint prevents building the ramp and adjacent area with positive drainage it must be brought to the city’s attention prior to construction and final design approved by the city.
CODED NOTES:
A) SEE SHEET 22 FOR DETECTABLE WARNING DETAILS

GENERAL NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
UTILITY STRIP

1'-0"  4'-0"

90°  90°

CURB RAMP

SIDEWALK

UTILITY STRIP

1'-0"

7.69% MAX.

90°

2319

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

A

MAX.

A

ITEM 608

SECTION A - A

CODED NOTES:

A) SEE SHEET 22 FOR DETECTABLE WARNING DETAILS

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
PERMANENT OBSTRUCTION OR NON-WALKABLE SURFACE ONE SIDE

THE OBSTRUCTION MUST BE 15" OR CLOSER TO THE FACE OF CURB

UTILITY STRIP OR OTHER OBSTRUCTION

4'-0" MIN. 

90°

10.0% MAX. ALONG THE FACE OF CURB

1.56% MAX.

7.69% MAX.

4'-0" MIN. LANDING

2'-0"

1/2" EXPANSION MATERIAL

5% MAX.

4" CONCRETE

8" CONCRETE

1/2" EXPANSION MATERIAL

SECTION A - A

PAVEMENT

CURB

7.69% MAX.

RAMP

1.56% MAX.

4'-0" MIN. LANDING

DETECTABLE WARNING

ITEM 608

GENERAL NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CODED NOTES:
A SEE SHEET 22 FOR DETECTABLE WARNING DETAILS

CURB RAMP TYPE D

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2319
07/01/20
SHT 6 OF 22
ALTERNATE FACE OF CURB, AS RADIUS VARIES

FLARE SHOWN IS NOT TYPICAL FOR UNCURBED ALLEYS OR DRIVEWAYS

4'-0" MIN.
1.56% MAX.
LANDING*

90°

PAR
4'-0" MIN.

7.69% MAX.

90°

PAR
4'-0" MIN.

1.56% MAX.

5'-0" MAX.

4'-0" MIN.
REQUIRED CLEAR SPACE

A ALTERNATE FACE OF CURB, AS RADIUS VARIES

FLARE SHOWN IS NOT TYPICAL FOR UNCURBED ALLEYS OR DRIVEWAYS

B CURB FOLLOWS SLOPE OF RAMP

C GRADE BREAK

4" CONCRETE

"LANDING IS REQUIRED ONLY WHEN RAMP AND/OR EXISTING SIDEWALK SLOPE IS GREATER OR EQUAL TO 5%"

SIDEWALK
1.56% MAX.
4'-0" MIN. LANDING*

7.69% MAX.

4'-0" MIN.
4'-0" MIN.
REQUIRED CLEAR SPACE

8" CONCRETE
GRADE BREAK
1/2" EXPANSION MATERIAL

ITEM 608

5% MAX.

P AVEMENT

4'-0" MIN.
5'-0" MAX.

PAR
4'-0" MIN.

7.69% MAX.

> 5-FT.

C GRADE BREAK

DETAIL TO BE USED WHEN DISTANCE FROM BACK OF CURB TO THE GRADE BREAK IS GREATER THAN 5 FT.

CODED NOTES:
A SEE SHEET 22 FOR DETECTABLE WARNING DETAILS
B PROVIDE POSITIVE DRAINAGE ALONG CURBLINE, SHOULD BE 1.00% MINIMUM SLOPE
C WHERE THE DISTANCE FROM EITHER END OF THE BOTTOM OF THE GRADE BREAK TO THE BACK OF CURB IS GREATER THAN 5-FT, THE DETECTABLE WARNING SHALL BE PLACED AT THE BACK OF CURB

GENERAL NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP
TYPE G

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2319

07/01/20
SHT 7 OF 22
**Code Notes:**

A. See Sheet 22 for Detectable Warning Details

B. Provide positive drainage along curbline, should be 1.00% minimum slope

C. Where the distance from either end of the bottom of the grade break to the back of curb is greater than 5-ft, the detectable warning shall be placed at the back of curb

D. For the length of the ramp, the utility strip may be removed and replaced with 8" concrete (item 608), provided the utility strip is no wider than 2-ft

**General Notes:**

1. See sheet 2 for additional detailed information.
2. The edge of the curb within the clear space shall be flush with the edge of the adjacent pavement and gutter.

**City of Columbus, Ohio**

**Department of Public Service**

**Division of Design and Construction**

**Curb Ramp**

**Type H**

**STD DWG 2319**

07/01/20

SHT 8 OF 22
**CODED NOTES:**

- A) SEE SHEET 22 FOR DETECTABLE WARNING DETAILS
- B) PROVIDE POSITIVE DRAINAGE ALONG CURBLINE, SHOULD BE 1.00% MINIMUM SLOPE

**GENERAL NOTES:**

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

**SECTION A-A**

*LANDING* IS REQUIRED ONLY WHEN RAMP AND/OR EXISTING SIDEWALK SLOPE IS GREATER OR EQUAL TO 5%
CODED NOTES:
A SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

GENERAL NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
2. RAMP L-1 SHALL BE USED IN ALL CIRCUMSTANCES WHERE NOT PROHIBITED BY DRAINAGE ISSUES. AN L-1 RAMP SHOULD NOT BE PLACED IN A WAY THAT WOULD CONVEY THE CURB FLOW OF WATER THROUGH THE MEDIAN PASSTHROUGH. WHERE THE ROADWAY CROSS-SLOPE DIRECTS WATER TOWARDS THE MEDIAN AND FLOWS THROUGH THE GUTTER LINE ADJACENT TO THE PASSTHROUGH, USE AN L-2 RAMP.
3. MEDIANS / ISLANDS WITHIN COMMERCIAL DRIVES REQUIRE DETECTABLE WARNINGS ONLY WHEN OPPOSING CURB RAMPS REQUIRE DETECTABLE WARNINGS. (SEE SHEET 22 OF 22, NOTE 1)
CODED NOTES:
A SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

GENERAL NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
2. MEDIANS / ISLANDS WITHIN COMMERCIAL DRIVES REQUIRE DETECTABLE WARNINGS ONLY WHEN OPPOSING CURB RAMPS REQUIRE DETECTABLE WARNINGS. (SEE SHEET 22 OF 22, NOTE 1).
3. TYPE L-2 RAMPS ARE ONLY TO BE INSTALLED WHEN IT IS NOT POSSIBLE TO INSTALL A TYPE L-1 RAMP DUE TO DRAINAGE ISSUES.
4. TYPE L-2 RAMPS CAN ONLY BE USED ON MEDIANS 8 FEET WIDE OR MORE.

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CURB RAMP
TYPE L-2

STD DWG 2319
07/01/20
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Coded Notes:

A. See Sheet 22 for detectable warning details.

B. Exposed reveal must equal buried depth; 12" maximum reveal; for additional details see curb wall specification.

General Notes:

1. See Sheet 2 for additional detailed information.

Curb Ramp
Type P-4

City of Columbus, Ohio
Department of Public Service
Division of Design and Construction
CODED NOTES:

A) SEE SHEET 22 FOR DETECTABLE WARNING DETAILS
B) EXPOSED REVEAL MUST EQUAL BURIED DEPTH; 12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS SEE CURB WALL SPECIFICATION

GENERAL NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP
TYPE P-5

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2319
07/01/20
SHT 13 OF 22
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CURB RAMP
TYPE P-6

SECTION A-A

CODED NOTES:
A SEE SHEET 22 FOR DETECTABLE WARNING DETAILS
B EXPOSED REVEAL MUST EQUAL BURIED DEPTH; 12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS SEE CURB WALL SPECIFICATION

GENERAL NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
CODED NOTES:

A) SEE SHEET 22 FOR DETECTABLE WARNING DETAILS
B) EXPOSED REVEAL MUST EQUAL BURIED DEPTH; 12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS SEE CURB WALL SPECIFICATION

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP

TYPE P-7

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
TRANSPORTATION DIVISION

STD DWG 2319
07/01/20
SHT 15 OF 22
PEDESTRIAN PAD (PP)
TYPE 1 CONDITION-CONNECTED
SEPARATED FROM CURB

CODED NOTES:
A USE 1-FT FLARES ON CURBED ROADWAY. ON UNCURBED ROADWAY RAMP SHALL BE CONSTRUCTED WITHOUT FLARES, SEE SHEET 22 FOR DETECTABLE WARNING PLACEMENT DETAILS. THE FRONT TWO FEET OF THE RAMP AND FLARES SHALL BE CONSTRUCTED USING CONCRETE 8" THICK AND TRANSITIONING TO 4" CONCRETE FURTHER THAN 2 FEET FROM THE BACK OF THE CURB.
B ORIENTATION/LOCATION OF PUSH BUTTON/PEDESTAL TO BE PER POLICY.
C LANDING SHALL BE 5-FT BY 5-FT WHEN SURROUNDED BY CURB WALL, AND THE PEDESTRIAN PUSH BUTTON SHALL BE INTEGRAL WITH THE CURB WALL.
D IF UTILITY STRIP IS LESS THAN 3-FT, SIDEWALK SHALL BE CONSTRUCTED ADJACENT TO CURB, SEE PP-2.
E SIDEWALK WIDTH AND LANDING DEPTH MAY BE REDUCED TO 4' DUE TO CONSTRAINTS.

GENERAL NOTES:
1. RAMP AND LANDING MUST BE CONSTRUCTED TO DRAIN, TYPICALLY TOWARDS THE ROADWAY, BUT MAY VARY BASED ON EXISTING TOPOGRAPHY. WEEP HOLES ARE NOT PERMITTED FOR DRAINAGE.
2. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP
TYPE PP-1
PEDESTRIAN PAD (PP)  
TYPE 2 CONDITION-CONNECTED  
ADJACENT TO CURB

GENERAL NOTES:
1. RAMP AND LANDING MUST BE CONSTRUCTED TO DRAIN, TYPICALLY TOWARDS THE ROADWAY, BUT MAY VARY BASED ON EXISTING TOPOGRAPHY. WEEP HOLES ARE NOT PERMITTED FOR DRAINAGE.
2. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CODED NOTES:
A SEE SHEET 22 FOR DETECTABLE WARNING DETAILS. THE FRONT TWO FEET OF THE RAMP AND FLARES SHALL BE CONSTRUCTED USING CONCRETE 8" THICK AND TRANSITIONING TO 4" CONCRETE FURTHER THAN 2 FEET FROM THE BACK OF THE CURB
B ORIENTATION/LOCATION OF PUSH BUTTON/PEDESTAL TO BE PER POLICY
C WIDTH OF THE RAMP AND LANDING MAY BE REDUCED TO 4-FT WHERE NO CURB WALL IS PRESENT
D SIDEWALK WIDTH MAY BE REDUCED TO 5-FT MIN. WHEN CONSTRAINED. SEE RAMP TYPE P-4, SECTION A-A FOR RAMP AND LANDING

CITY OF COLUMBUS, OHIO  
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DIVISION OF DESIGN AND CONSTRUCTION

CURB RAMP  
TYPE PP-2

STD DWG 2319  
07/01/20  
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PEDESTRIAN PAD (PP)
TYPE 3 CONDITION-SHARED
CURB IS PRESENT

CODED NOTES:

A. SEE SHEET 22 FOR DETECTABLE WARNING DETAILS. THE FRONT TWO FEET OF THE RAMP AND FLARES SHALL BE CONSTRUCTED USING CONCRETE 8" THICK AND TRANSITIONING TO 4" CONCRETE FURTHER THAN 2 FEET FROM THE BACK OF THE CURB.

B. ORIENTATION/LOCATION OF PUSH BUTTON/PEDESTAL TO BE PER POLICY.

C. CURB WALL MAY BE NECESSARY BASED ON EXISTING TOPOGRAPHY. IF CURB WALL IS NOT CONSTRUCTED, THE LANDING WIDTH CAN BE REDUCED TO 4'x4'.

GENERAL NOTES:

1. RAMP AND LANDING MUST BE CONSTRUCTED TO DRAIN, TYPICALLY TOWARDS THE ROADWAY, BUT MAY VARY BASED ON EXISTING TOPOGRAPHY. WEEP HOLES ARE NOT PERMITTED FOR DRAINAGE.

2. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
1. Written approval from the City Engineer or an authorized representative shall be obtained prior to the design or construction of granite or an alternate material curb ramp.

2. Along with the requirement of this sheet for brick or granite curb ramps, all other applicable requirements of 2319 shall be followed.

3. Brick or granite curb ramps shall be typed per 2319. Typically Type A or Type D will be used. All applicable dimensions and requirements for the selected type of ramp shall be followed.

4. Long flares will be used wherever possible. A modified flare shall be used when an obstruction exists.

5. The installation of the brick or granite pavers shall be done per STD DWG 2301, brick sidewalk.

Coded Notes:
A. See Sheet 22 for detectable warning details.
CODED NOTES:
A) SEE SHEET 22 FOR DETECTABLE WARNING DETAILS
B) EXPOSED REVEAL MUST EQUAL BURIED DEPTH;
   12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS
   SEE CURB WALL SPECIFICATION

GENERAL NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED
   INFORMATION.
**CODED NOTES:**

- **A** SEE SHEET 22 FOR DETECTABLE WARNING DETAILS
- **B** EXPOSED REVEAL MUST EQUAL BURIED DEPTH; 12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS SEE CURB WALL SPECIFICATION

**GENERAL NOTES:**

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

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**PARALLEL BRICK RAMP**

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2319

07/01/20
SHT 21 OF 22
NOTES:

1. DETECTABLE WARNINGS SHALL BE PROVIDED WHEREVER A CURB RAMP CROSSES A VEHICULAR WAY. EXCLUDING UNSIGNALIZED DRIVEWAY CROSSINGS.

2. DETECTABLE WARNINGS SHALL BE PROVIDED 24" IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. THE DETECTABLE WARNING SHALL BE LOCATED ADJACENT TO THE CURB LINE.

3. MATERIALS SHALL COMPLY WITH CMSC 608 AND DPS ADA RULES AND REGULATIONS.

4. DETECTABLE WARNINGS SHALL BE PLACED 6" TO 8" BEHIND THE FACE OF CURB AND BEHIND THE CURB JOINT.

5. CAST IN PLACE OR ANY NON-SURFACE APPLIED DETECTABLE WARNING SHALL HAVE A MINIMUM OF 3" OF CONCRETE ON EACH SIDE OF THE WARNING.