



LEGEND

-  Grooved ramp
-  Detectable warning

1. The curb ramp type includes the ramp and flared sides as indicated on the details. A level landing shall be provided at the high end of every curb ramp.
2. For details of sidewalk curb ramp types see Standard Drawings E 604-SWCR-03 to -11.
3. The curb ramps shall be placed within the marked crosswalk area.

④ Flared side of sidewalk curb ramp next to utility strip shall be sodded.

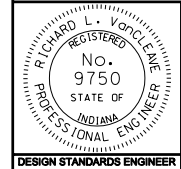
5. See Standard Drawing E 604-SWCR-02 for General Notes.

INDIANA DEPARTMENT OF TRANSPORTATION

**LOCATION PLAN FOR
SIDEWALK CURB RAMPS**

SEPTEMBER 2005

STANDARD DRAWING NO. E 604-SWCR-01



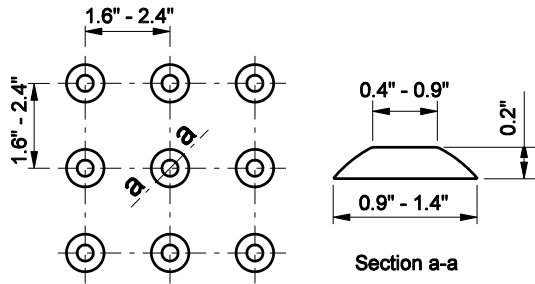
/s/ Richard L. VanCleave 9-01-05
DESIGN STANDARDS ENGINEER DATE

/s/ Richard K. Smutzer 9-01-05
CHIEF HIGHWAY ENGINEER DATE

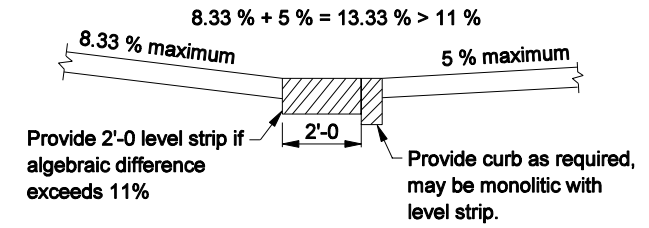
DESIGN STANDARDS ENGINEER

GENERAL NOTES :

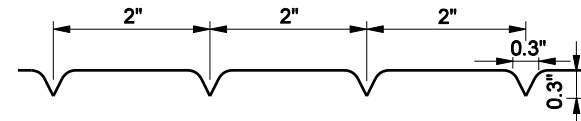
- 1 These dimensions are based on a 6 in. curb height. They shall be proportionally adjusted for other curb heights.
- 2 Where site infeasibility precludes construction to the width shown, such width may be decreased to a minimum of 3'-0.
- 3 The bottom edge of the curb ramp shall be flush with the edge of adjacent pavement and gutter line.
- 4 Landing areas at the top of curb ramps shall have maximum cross slope of 50 : 1 in any direction. When site infeasibility precludes a landing slope of 50 : 1 in any direction, the slope perpendicular to the curb face shall not exceed 50 : 1.
- 5 If site infeasibility precludes construction to the width shown, the landing width may be decreased to 3'-0 minimum. The running slope of the curb ramp may be steepened to a maximum of 10 : 1 for a maximum 6 in. rise.
- 6 Drainage inlets should be located uphill from curb ramps to prevent puddles at the path of travel.
- 7 See Standard Drawing E 604-SWCR-12 for improved access on narrow sidewalks.
- 8 Algebraic difference in grade between the base of curb ramp and the gutter shall be limited to less than 11%. If it is not practical, a 2'-0 wide level strip shall be provided. See detail sketch.
- 9. Minimum recommended width of curb ramp is 4'-0.



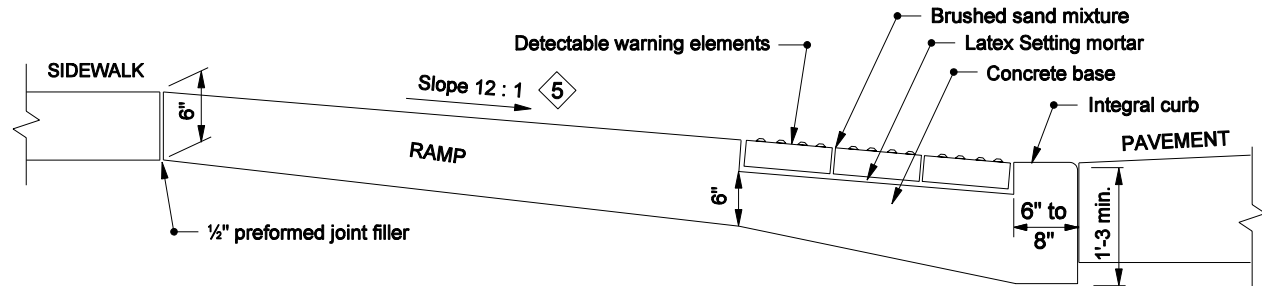
Square pattern
TRUNCATED DOMES USED IN DETECTABLE WARNINGS



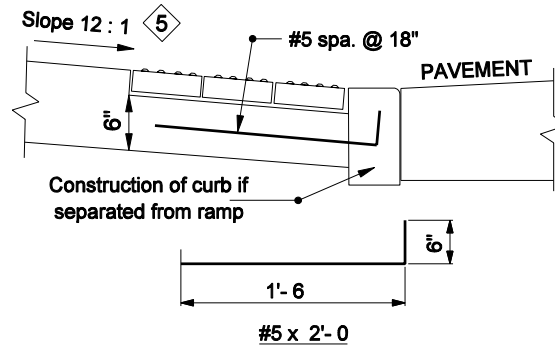
CHANGE OF GRADE



DETAIL OF RAMP GROOVES

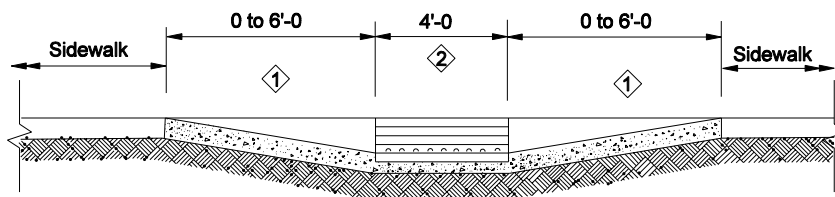
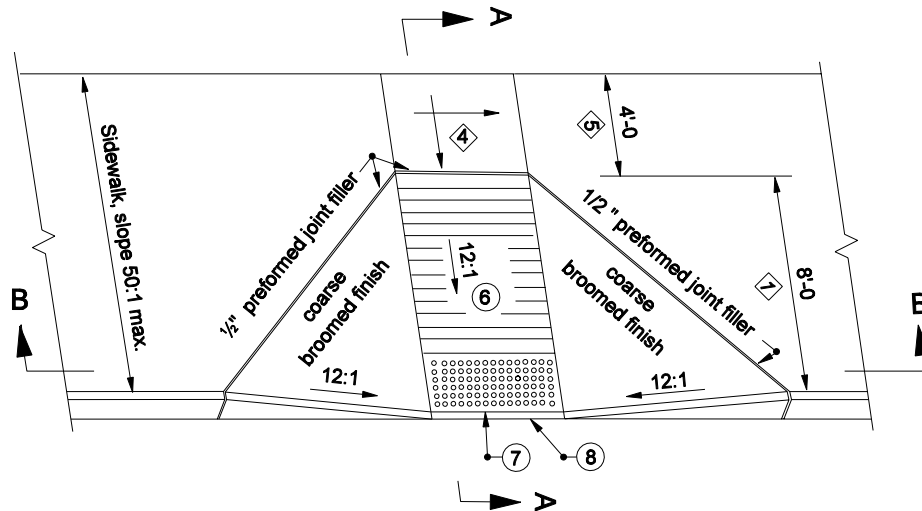


RAMP AND BRICK SURFACE CONSTRUCTION DETAIL

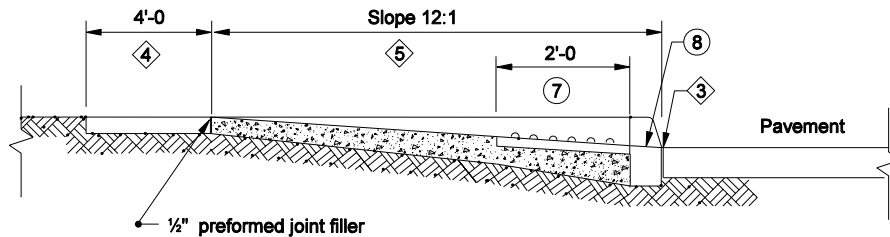


ALTERNATE CURB CONSTRUCTION

INDIANA DEPARTMENT OF TRANSPORTATION	
SIDEWALK CURB RAMPS GENERAL NOTES & DETAILS	
SEPTEMBER 2005	
STANDARD DRAWING NO. E 604-SWCR-02	
	/s/ Richard L. VanCleave 9-01-05 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 9-01-05 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	



SECTION B-B



SECTION A-A

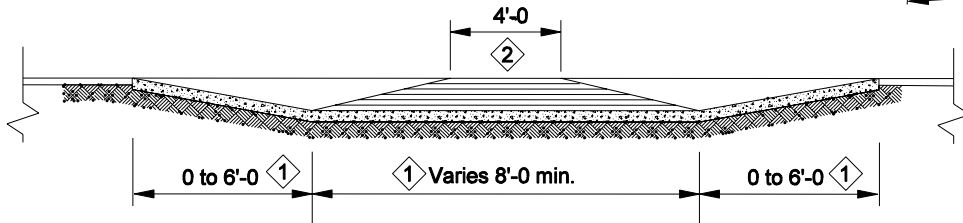
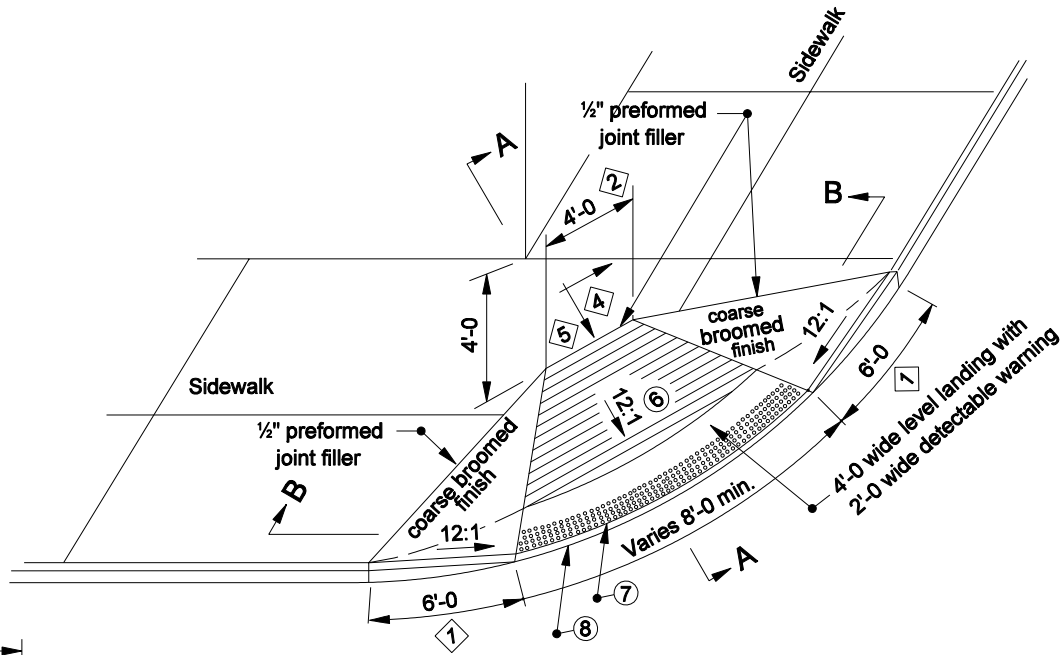
NOTES :

- ⑥ See Standard Drawing E 604-SWCR-02 for groove details.
- ⑦ See Standard Drawing E 604-SWCR-02 for details of the detectable warning.
- ⑧ See Standard Drawing E 604-SWCR-02 for alternate curb construction.
- 10. See Standard Drawing E 604-SWCR-01 and -02 for Location Plan and General Notes respectively.
- 11. See Standard Drawing E 604-SWCR-02 for typical ramp construction detail.

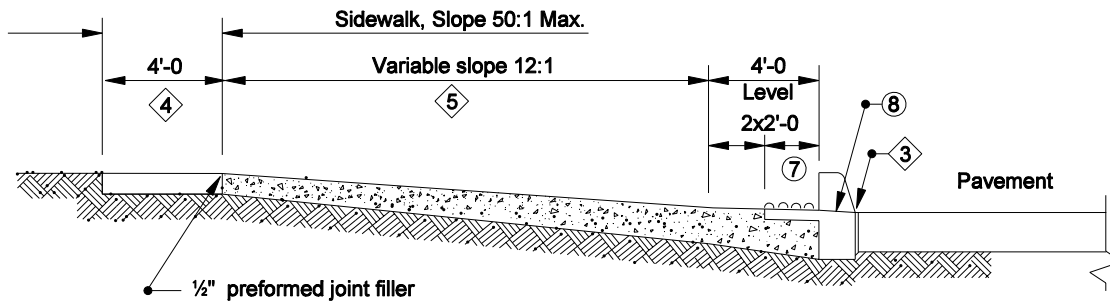
INDIANA DEPARTMENT OF TRANSPORTATION	
SIDEWALK CURB RAMP TYPE A	
SEPTEMBER 2005	
STANDARD DRAWING NO. E 604-SWCR-03	
	/s/ Richard L. VanCleave 9-01-05 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 9-01-05 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	

NOTES :

- ⑥ See Standard Drawing E 604-SWCR-02 for groove details.
- ⑦ See Standard Drawing E 604-SWCR-02 for details of the detectable warnings.
- ⑧ See Standard Drawing E 604-SWCR-02 for alternate curb construction.
- 9. See Standard Drawing E 604-SWCR-02 for typical ramp construction detail.
- 10. See Standard Drawing E 604-SWCR-01 and -02 for Location Plan and General Notes respectively.

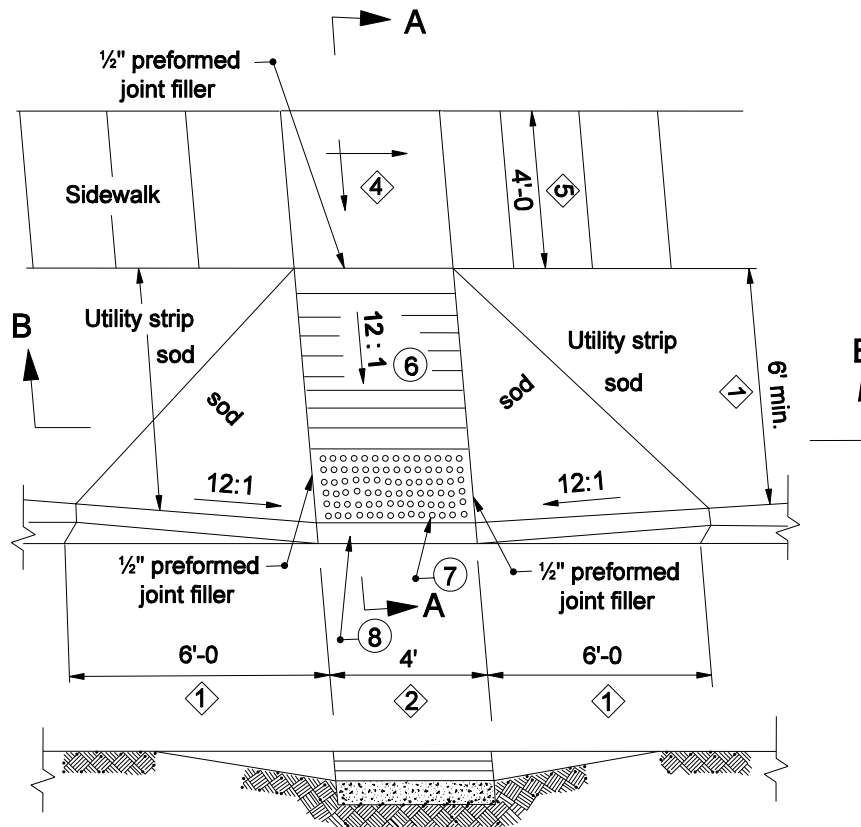


SECTION B-B

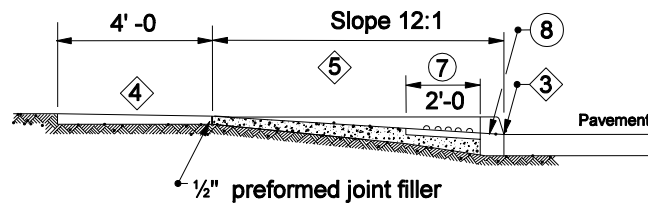


SECTION A-A

INDIANA DEPARTMENT OF TRANSPORTATION	
SIDEWALK CURB RAMP TYPE B	
SEPTEMBER 2005	
STANDARD DRAWING NO. E 604-SWCR-04	
	/s/ Richard L. VanCleave 9-01-05 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 9-01-05 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	



SECTION B-B

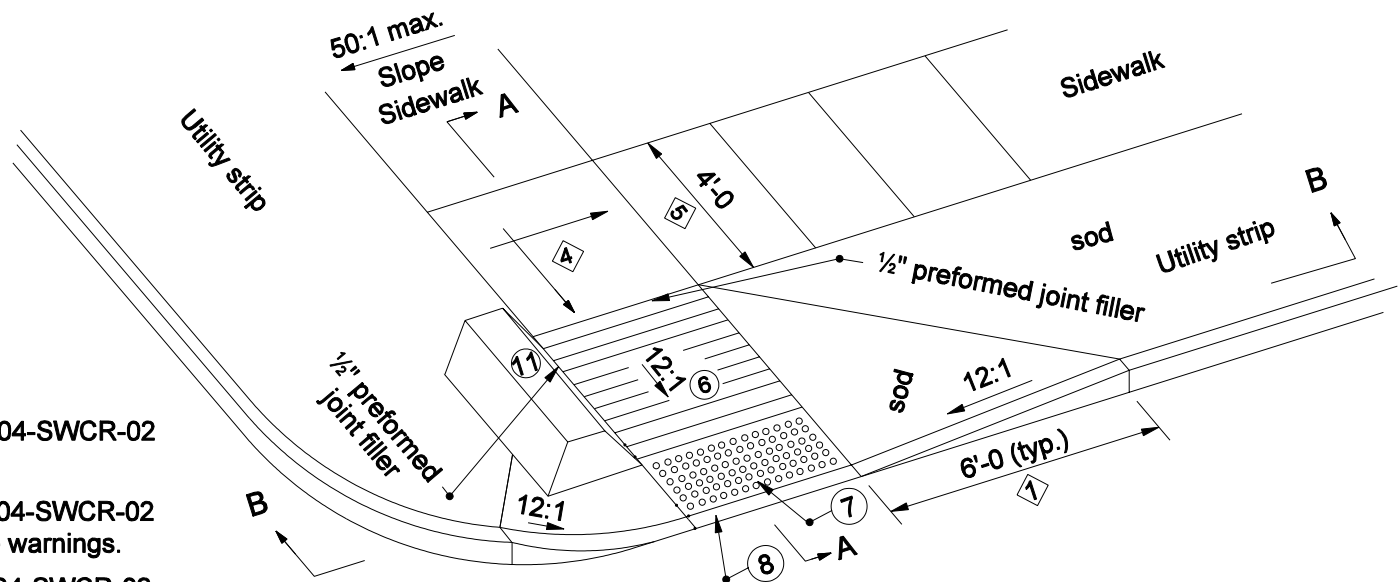


SECTION A-A

NOTES :

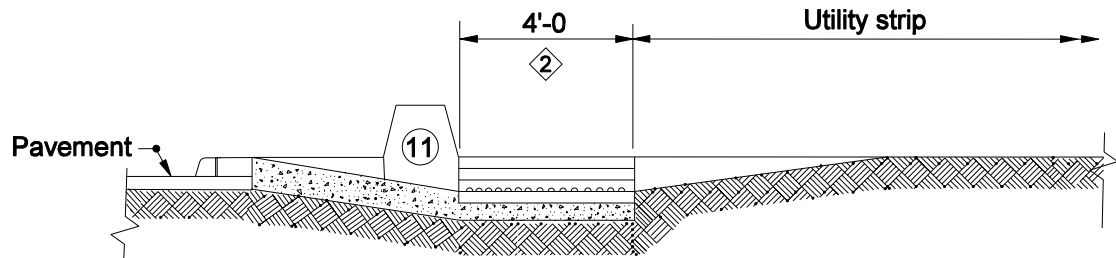
- ⑥ See Standard Drawing E 604-SWCR-02 for groove details.
- ⑦ See Standard Drawing E 604-SWCR-02 for details of the detectable warning surface.
- ⑧ See Standard Drawing E 604-SWCR-02 for alternate curb construction.
- 9. See Standard Drawing E 604-SWCR-02 for typical ramp construction detail.
- 10. See Standard Drawing E 604-SWCR-01 and -02 for Location Plan and General Notes respectively.

INDIANA DEPARTMENT OF TRANSPORTATION	
SIDEWALK CURB RAMPS TYPE C	
SEPTEMBER 2005	
STANDARD DRAWING NO. E 604-SWCR-05	
	/s/ Richard L. VanCleave 9-01-05 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 9-01-05 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	

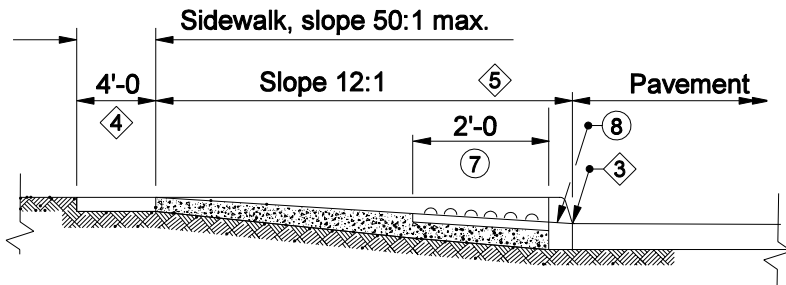


NOTES :

- ⑥ See Standard Drawing E 604-SWCR-02 for groove details.
- ⑦ See Standard Drawing E 604-SWCR-02 for details of the detectable warnings.
- ⑧ See Standard Drawing E 604-SWCR-02 for alternate curb construction.
- 9. See Standard Drawing E 604-SWCR-02 for typical ramp construction detail.
- 10. See Standard Drawing E 604-SWCR-01 and -02 for Plan Location and General Notes respectively.
- ⑪ Street furnishing such as planter, signal base, etc.



SECTION B-B

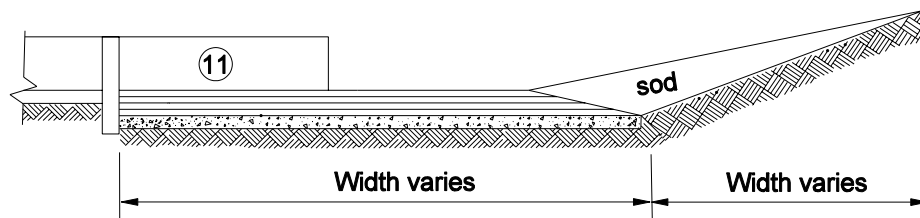
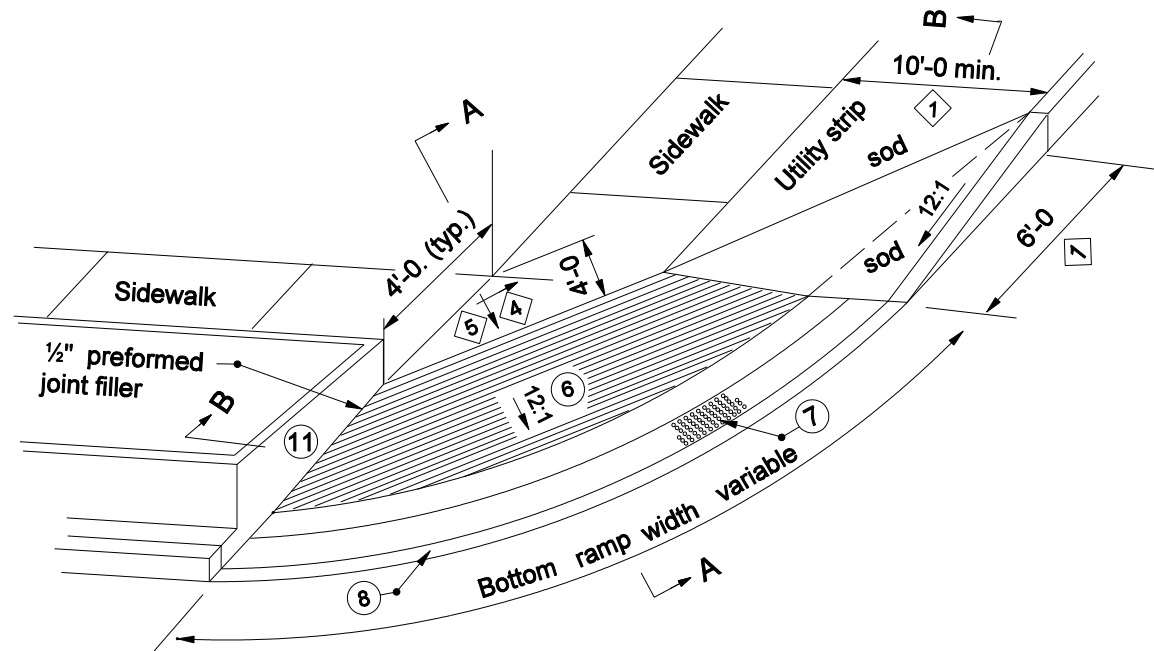


SECTION A-A

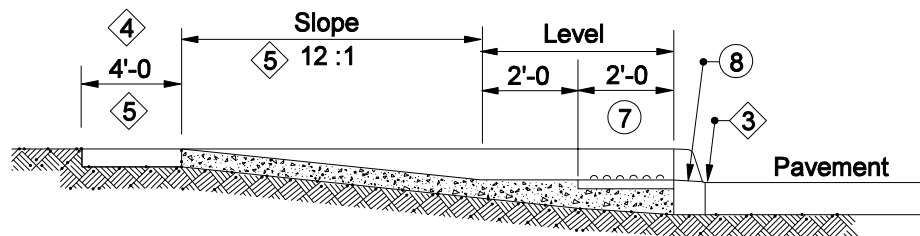
INDIANA DEPARTMENT OF TRANSPORTATION	
SIDEWALK RAMP CURB TYPE D	
SEPTEMBER 2005	
STANDARD DRAWING NO. E 604-SWCR-06	
	/s/ Richard L. VanCleave 9-01-05 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 9-01-05 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	

NOTES :

- ⑥ See Standard Drawing E 604-SWCR-02 for groove details.
- ⑦ See Standard Drawing E 604-SWCR-02 for details of detectable warning surface.
- ⑧ See Standard Drawing E 604-SWCR-02 for alternate curb construction.
- 9. See Standard Drawing E 604-SWCR-02 for typical ramp construction detail.
- 10. See Standard Drawing E 604-SWCR-01 and -02 for Plan Location and General Notes respectively.
- ⑪ Street furnishing such as planter, signal base, etc.



SECTION B-B

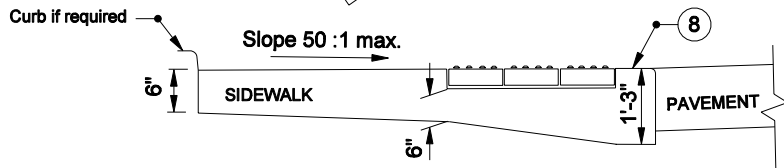
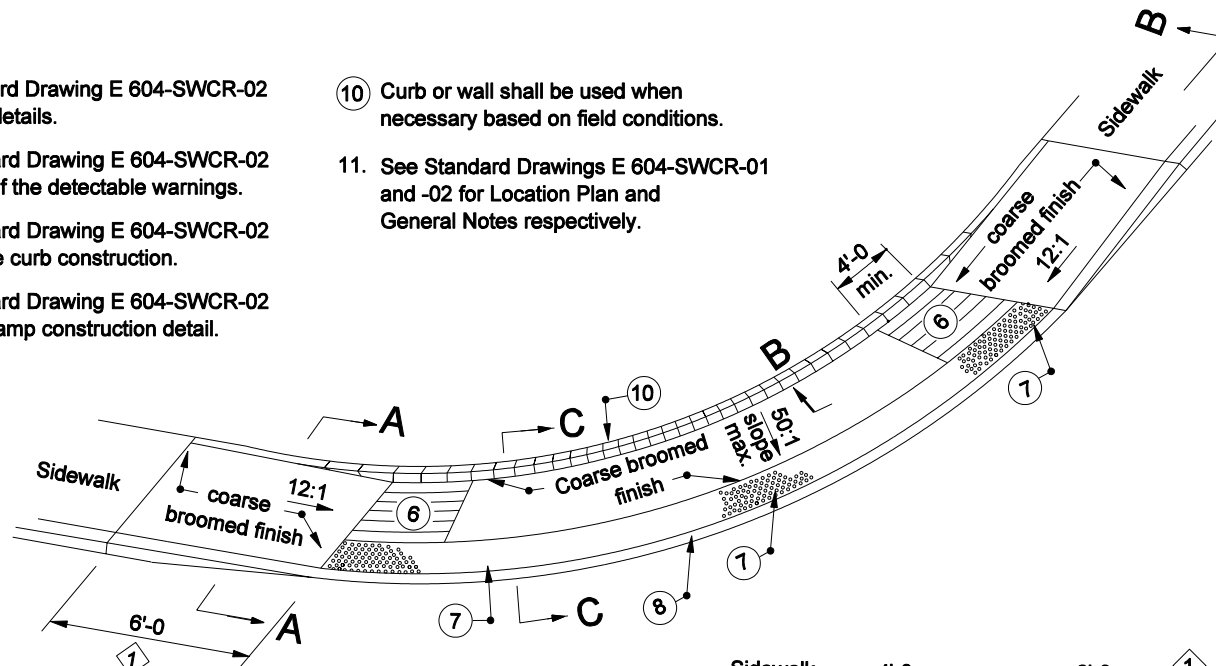


SECTION A-A

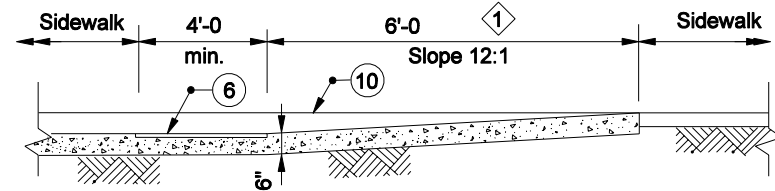
INDIANA DEPARTMENT OF TRANSPORTATION	
SIDEWALK CURB RAMPS TYPE E	
SEPTEMBER 2005	
STANDARD DRAWING NO. E 604-SWCR-07	
	/s/ Richard L. VanCleave 9-01-05 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 9-01-05 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	

NOTES :

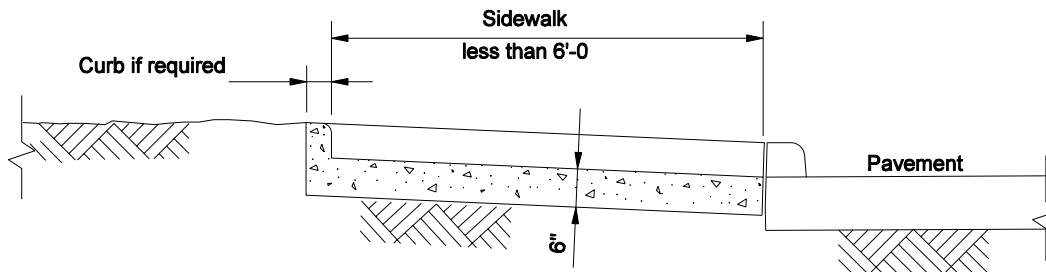
- ⑥ See Standard Drawing E 604-SWCR-02 for groove details.
- ⑦ See Standard Drawing E 604-SWCR-02 for details of the detectable warnings.
- ⑧ See Standard Drawing E 604-SWCR-02 for alternate curb construction.
- 9. See Standard Drawing E 604-SWCR-02 for typical ramp construction detail.
- ⑩ Curb or wall shall be used when necessary based on field conditions.
- 11. See Standard Drawings E 604-SWCR-01 and -02 for Location Plan and General Notes respectively.



SECTION C-C

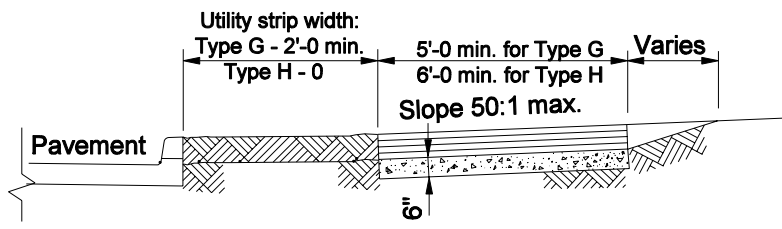


SECTION B-B

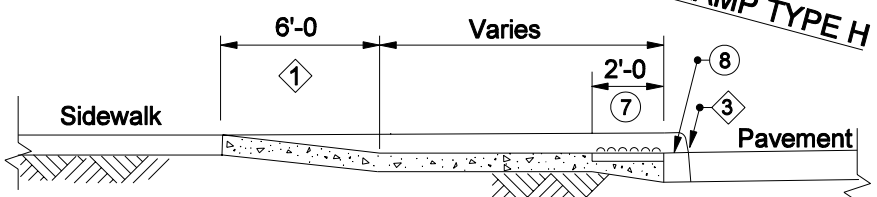
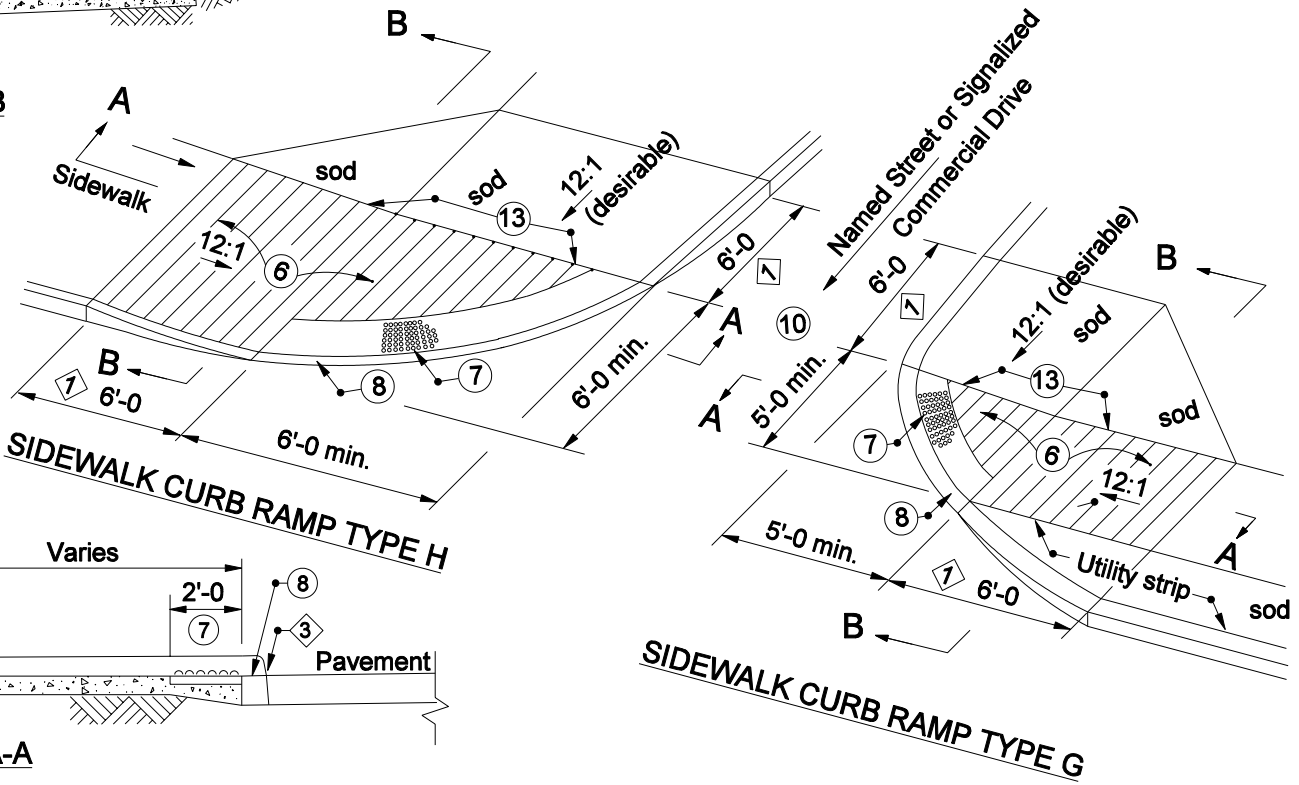


SECTION A-A

INDIANA DEPARTMENT OF TRANSPORTATION	
SIDEWALK CURB RAMPS TYPE F	
SEPTEMBER 2005	
STANDARD DRAWING NO. E 604-SWCR-08	
	/s/ Richard L. VanCleave 9-01-05 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 9-01-05 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	



SECTION B-B

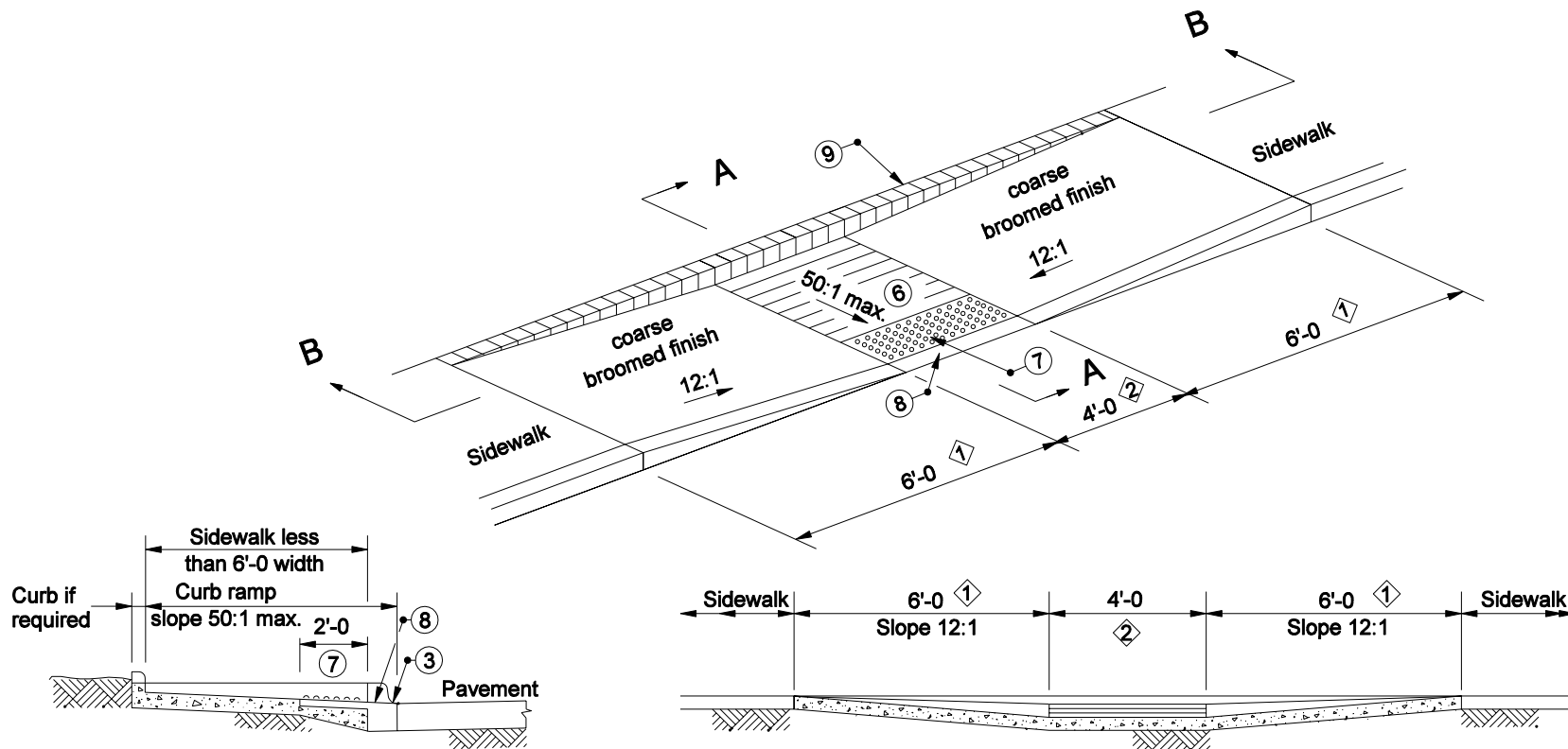


SECTION A-A

NOTES :

- ⑥ See Standard Drawing E 604-SWCR-02 for groove details.
- ⑦ See Standard Drawings E 604-SWCR-02 for details of the detectable warning surface.
- ⑧ See Standard Drawing E 604-SWCR-02 for alternate curb construction.
- ⑩ Sidewalk across approach shall be sloped at 50:1 maximum transversely.
- 11. See Standard Drawing E 604-SWCR-02 for typical ramp construction detail.
- 12. See Standard Drawing E 604-SWCR-01 and -02 for Location Plan and General Notes respectively.
- ⑬ Vertical face curb optional.

INDIANA DEPARTMENT OF TRANSPORTATION	
SIDEWALK CURB'S RAMP'S TYPE G AND TYPE H	
SEPTEMBER 2005	
STANDARD DRAWING NO. E 604-SWCR-09	
	/s/ Richard L. VanCleave 9-01-05 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 9-01-05 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	



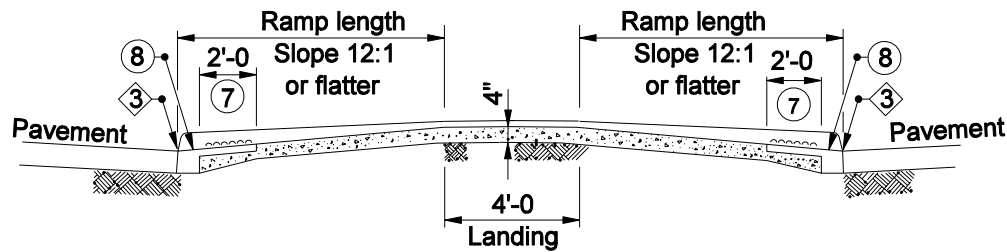
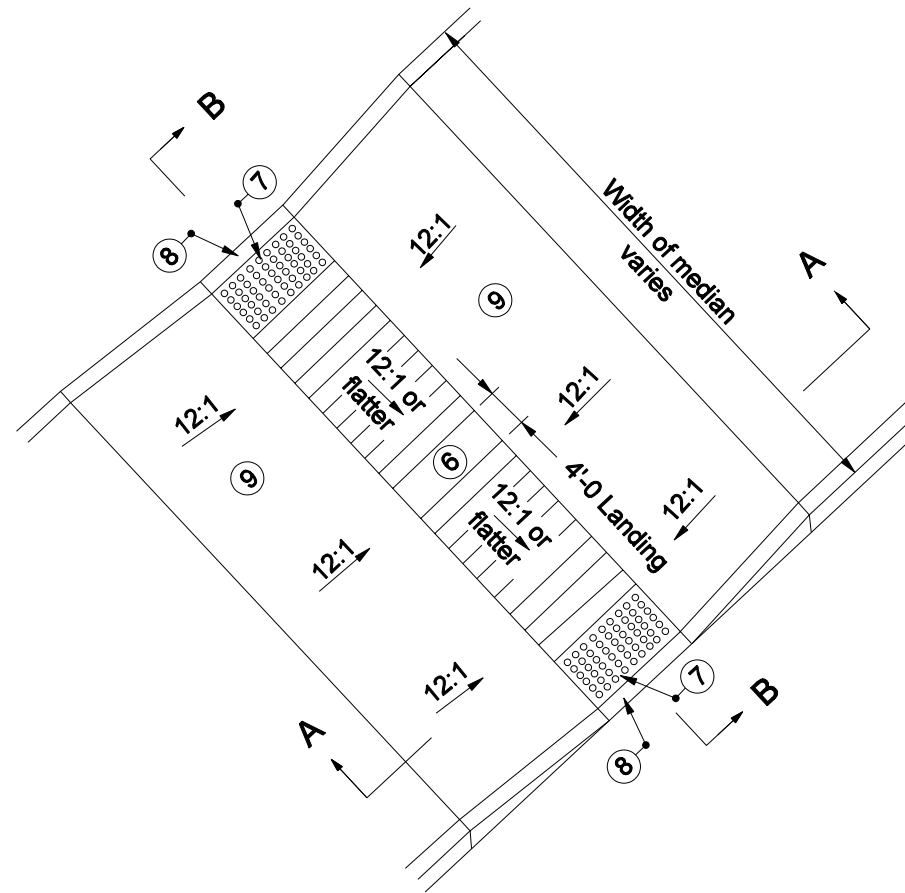
SECTION A-A

SECTION B-B

NOTES :

- ⑥ See Standard Drawing E 604-SWCR-02 for groove details.
- ⑦ See Standard Drawing E 604-SWCR-02 for details of detectable warnings surface.
- ⑧ See Standard Drawing E 604-SWCR-02 for alternate curb construction.
- ⑨ Curb optional. Shall be used when necessary based on field conditions.
- 10. See Standard Drawing E 604-SWCR-02 for typical ramp construction detail.
- 11. See Standard Drawing E 604-SWCR-01 and -02 for Location Plan and General Notes respectively.

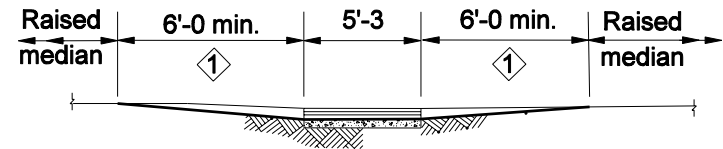
INDIANA DEPARTMENT OF TRANSPORTATION	
SIDEWALK CURB RAMP TYPE K	
SEPTEMBER 2005	
STANDARD DRAWING NO. E 604-SWCR-10	
	/s/ Richard L. VanCleave 9-01-05 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 9-01-05 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	



SECTION B-B

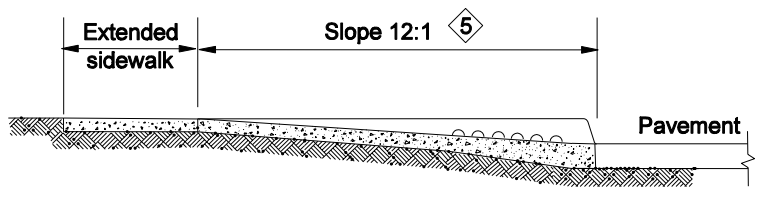
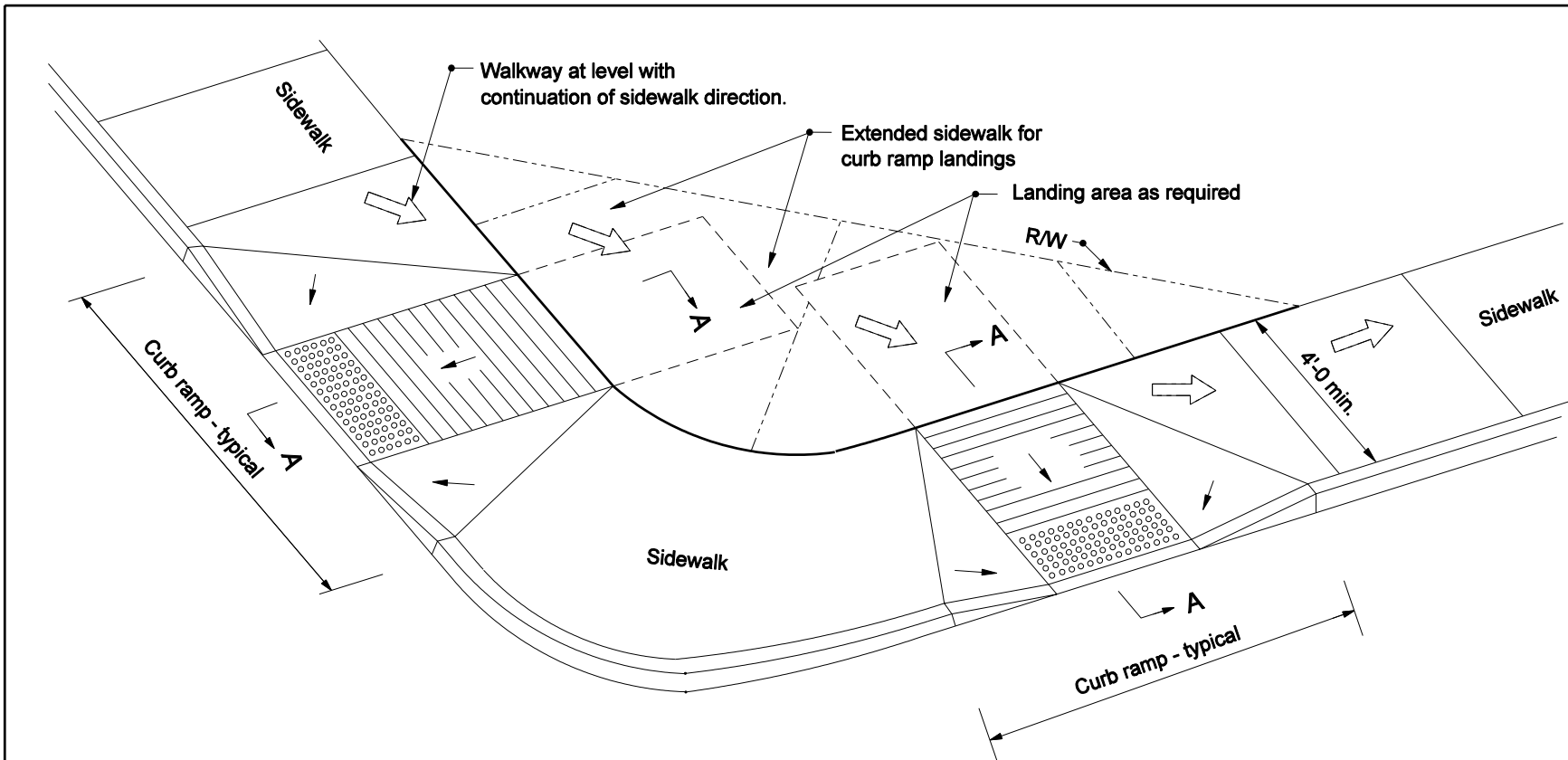
NOTES :

- ⑥ See Standard Drawing E 604-SWCR-02 for groove details.
- ⑦ See Standard Drawing E 604-SWCR-02 for details of the detectable warnings.
- ⑧ See Standard Drawing E 604-SWCR-02 for alternate curb construction.
- ⑨ Match material in place or in plans for median.
- 10. See Standard Drawing E 604-SWCR-02 for typical ramp construction details.
- 11. See Standard Drawing E 604-SWCR-01 and -02 for Location Plan and General Notes respectively.
- 12. Ramp cross slope 50:1 desirable or match grade of roadway.
- 13. Detectable warnings are not required where the roadway crossing is controlled by traffic signals timed to provide full width street crossing by pedestrians.



SECTION A-A

INDIANA DEPARTMENT OF TRANSPORTATION	
SIDEWALK CURB RAMPS TYPE L	
SEPTEMBER 2005	
STANDARD DRAWING NO. E 604-SWCR-11	
	/s/ Richard L. VanCleave DESIGN STANDARDS ENGINEER 9-01-05 DATE
	/s/ Richard K. Smutzer CHIEF HIGHWAY ENGINEER 9-01-05 DATE
DESIGN STANDARDS ENGINEER	



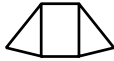




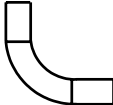

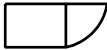


SECTION A-A


NOTES :

1. Additional right-of-way to widen sidewalks if applicable to improve accessibility on narrow sidewalks.
2. See Standard Drawing E 604-SWCR-02 and -03 to -11 for General Notes and typical curb ramps details respectively.

INDIANA DEPARTMENT OF TRANSPORTATION	
SIDEWALK CURB RAMP'S IMPROVED ACCESS	
SEPTEMBER 2005	
STANDARD DRAWING NO. E 604-SWCR-12	
	/s/ Richard L. VanCleave 9-01-05 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 9-01-05 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	

QUANTITY ESTIMATE

Curb Ramp Type	6" curb		8" curb		Pay limits diagram
	Assumptions for calculation purposes (top landing not included in area)	Area sq. yd	Assumptions for calculation purposes (top landing not included in area)	Area sq. yd	
A	10' sidewalk	7.0	12' sidewalk	11.1	
B	R = 10', 13' sidewalk	16.4	R = 10', 15' sidewalk	19.4	
	R = 26', 18' sidewalk	21.4	R = 25', 20' sidewalk	30.6	
C	6' utility strip	2.7	8' utility strip	3.5	
D	6' utility strip	2.7	8' utility strip	3.5	
E	10' utility strip on one side only, 10' radius	10.7	Not possible to construct on 10' utility strip	n / a	
F	R = 15', 4' sidewalk	14.3	R = 15', 4' sidewalk	16.1	
	R = 25', 4' sidewalk	21.6	R = 25', 4' sidewalk	23.3	
G	minimum dimensions	4.9	minimum dimensions	6.0	
H	minimum dimensions	6.3	minimum dimensions	7.7	
K	5' sidewalk	8.9	5' sidewalk	11.1	
L	16' grass median width	9.3	16' grass median width	9.3	

INDIANA DEPARTMENT OF TRANSPORTATION	
SIDEWALK CURB RAMPS QUANTITY ESTIMATE	
SEPTEMBER 2005	
STANDARD DRAWING NO. E 604-SWCR-13	
	/s/ Richard L. VanCleave 9-01-05 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 9-01-05 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	