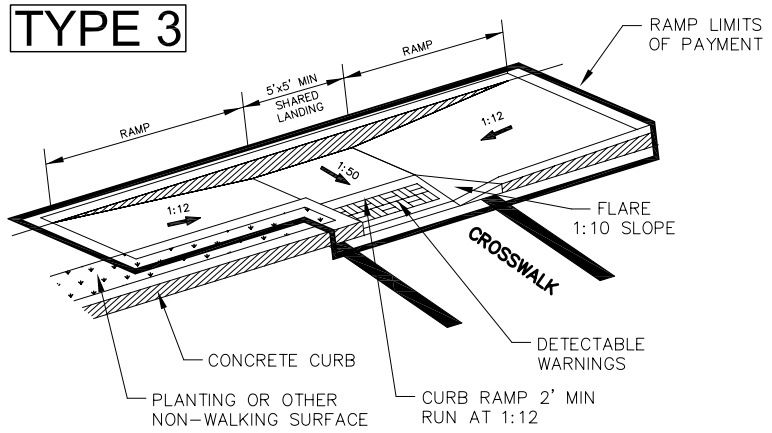
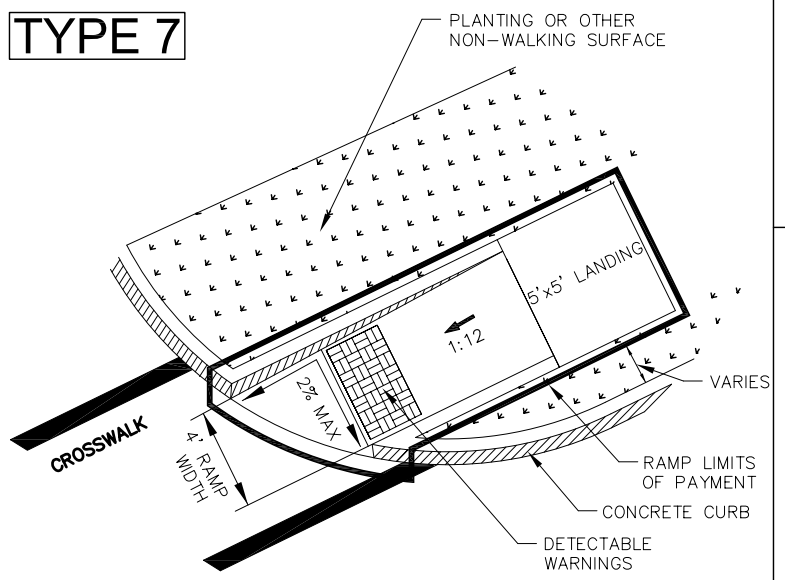
TYPE 3



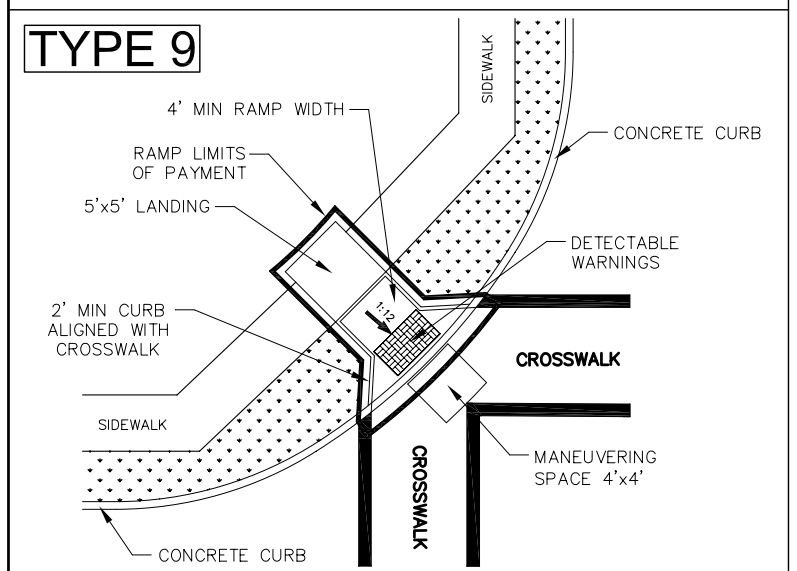
COMBINATION CURB RAMP

TYPE 7



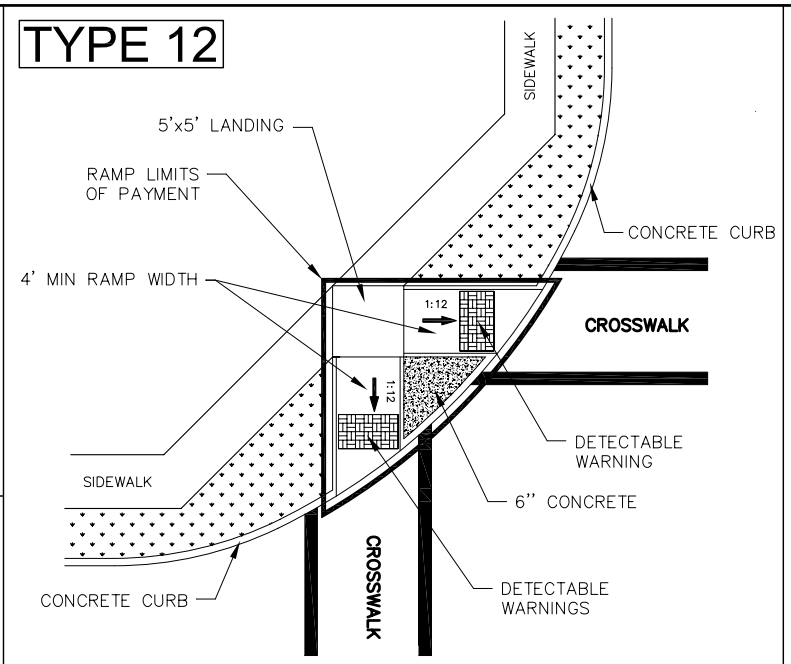
DIRECTIONAL CURB RAMP WITHIN RADIUS

TYPE 9



DIAGONAL CURB RAMP (RETURNED CURB)

TYPE 12



COMBINATION DIRECTIONAL CURB RAMP

DETECTABLE WARNINGS GENERAL NOTES:

1) The use of concrete paver units are required for use in Harris County. Alternative detectable warnings that complies with TAS and TDLR guidelines may be submitted for consideration to Harris County prior to the final approval of design drawings.

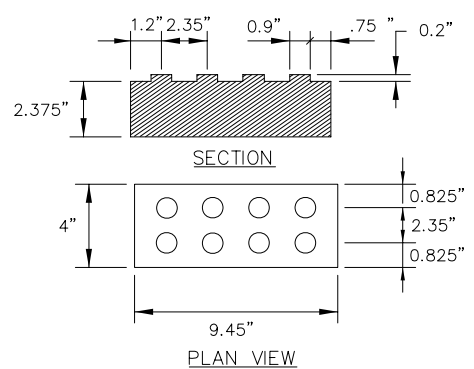
2) Concrete paver units shall meet all requirements of ASTM c-936, C-33, and shall be laid in a two by two unit basket weave pattern, unless shown in the plans.

3) Concrete paver units shall be brick red and have a truncated dome top surface for detectable warning to pedestrians.

4) Concrete paver units shall be saw cut only and any cut unit shall be not less than 25 percent of a full unit.

5) Detectable Warning shall be a minimum of 24" in depth (in the direction of pedestrian travel), and extend the full width of the ramp. (Refer to TAS and TDLR guidelines)

TRUNCATED DOME PATTERN:



Concrete paver with truncated dome surface

ACCESSIBLE CURB RAMPS AND LANDINGS GENERAL NOTES:

1) The design and construction of all elements of pedestrian facilities shall meet the criteria established in the current edition of the Texas Accessibility Standards (TAS), as prepared and administered by the Texas Department of Licensing and Regulation (TDLR), unless otherwise directed by the Engineer.

2) Pedestrian facilities at signalized intersection shall be in accordance with applicable traffic signal design drawings

3) Adjustment to sidewalks that connect to wheelchair ramps and landings may be necessary to match both the grade and the width of the landing. These adjustments may not be shown on the drawings. When deemed necessary by the Engineer, field adjustment to the sidewalk shall be made as directed by the Engineer and paid for separately, as directed by the Engineer.

4) All items necessary for the construction of the wheelchair ramps and landings within the "limits of payment" indicated on appropriate wheelchair ramp details and design drawings (i.e., saw cut of pavement. removal of material, excavation, disposal of materials, etc.) shall be considered incidental to the cost of the wheelchair ramp for projects that are designed and/or constructed using Harris County resources.

5) Flatter slopes that will still drain properly may be used where appropriate, subject to the requirement of notes 7, 8, and 9.

6) Ramps and landings with drop-offs greater that 6 inches in height shall have curb, railings, or projecting surfaces. Refer to Texas Accessibility Standards (TAS) and the Engineer.

7) All slopes shown are maximum allowable. The cross slope of an accessible route and/or landing must not exceed 1:50 (2%). Any part of the accessible route with a slope greater than 1:20 (5%) shall be considered a ramp.

8) If a ramp has a rise greater that 6 inches, or a horizontal projection greater that 72 inches, then it shall have handrails on both sides. The only exceptions shall be at curb ramps. Handrails are not required on curb ramps.

9) Ramp length of grade of approach sidewalk are subject to adjustment in the field by the Engineer.

10) The maximum allowable cross slope on a sidewalk shall be 2%.

11) The minimum thickness for curb ramps shall be $4\frac{1}{2}$ inches.

12) Curb ramps with return curb may be used only where pedestrians would not normally walk across the ramp. Otherwise, flared sides shall be provided.

13) Curb ramps at marked crossings shall be wholly contained within the markings. Flared sides associated with curb ramps are excluded from this requirement.

14) A smooth transition, in accordance with appropriate construction details or as directed by the Engineer, and shall be provided where curb ramps connect to adjacent roadway.

15) Maneuvering spaces at the bottom of the curb ramps shall be a minimum 4 foot X 4 foot clear area, shall be wholly contained within the crosswalk outside of the parallel vehicular travel path.

16) A minimum width of 36 inches shall be provided landings around obstructions (i.e., sign supports, signal supports, poles, etc.) located to adjacent to the pedestrian route.

17) Minimum sidewalk widths of 4 feet in width shall be provided unless otherwise directed by the Engineer.

18) Crosswalks will not be required at unsignalized intersections, unless directed by the engineer.

19) Detectable warning are placed where a pedestrian access route enters the roadway, crosswalk, or other vehicular area. Reference Accessible Ramp Construction Detail.

20) Minimum 32 inches of clearance is required for obstruction less than 24 inches in length, and a minimum 36 inches of clearance is required for obstructions greater than or equal to 24 inches in length.

NO.	REVISIONS	DATE	NAME

HARRIS COUNTY
PUBLIC INFRASTRUCTURE DEPARTMENT
ARCHITECTURE & ENGINEERING DIVISION

HARRIS COUNTY 1836 TEXAS

PROJECT TITLE:		
DRAWN BY: BSH	SHEET DESCRIPTION: ACCESSIBLE COMPLIANT CURB RAMPS AND LANDINGS DETAILS	JOB NO:
CK'D BY:		FILE NAME:
SCALE: NTS		FILE NO:
DATE: 6/28/10	APPROVED BY:	SHT NO: