

DRIVEWAY DESIGN CRITERIA

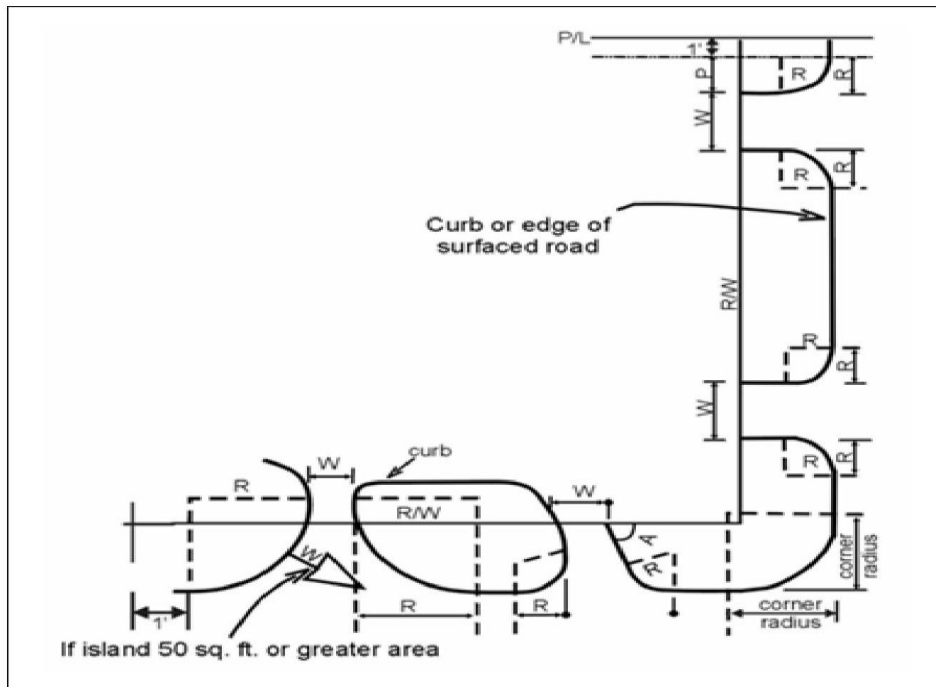
Driveway Dimensions:

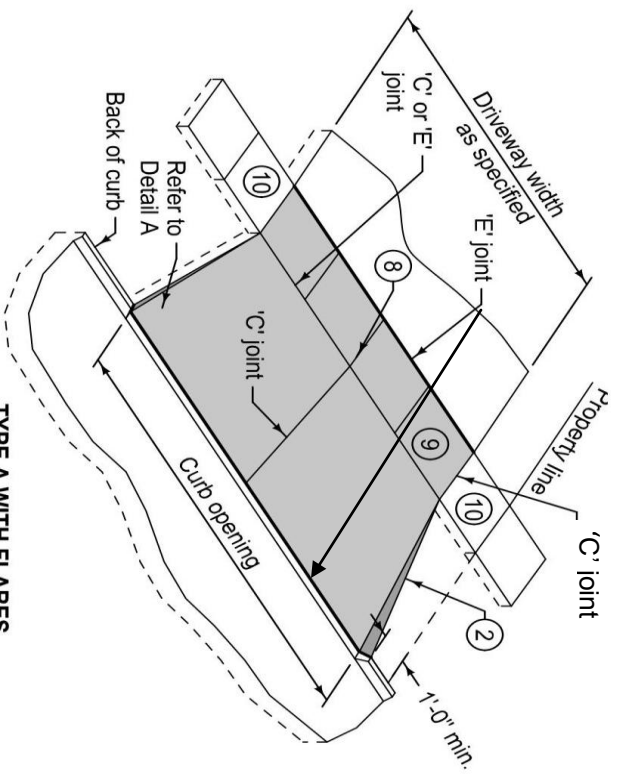
Table 5L-4.01: Driveway Dimensions¹ (all dimensions are in feet)

Dimension Reference (See Figure 5L-4.01)		Major Arterial Street				Minor Arterial Street				Collector (Major and Minor)				Local Street				
		Residential	Commercial	Industrial	Agricultural	Residential	Commercial	Industrial	Agricultural	Residential	Commercial	Industrial	Agricultural	Residential	Commercial	Industrial	Agricultural	
Width	W	Minimum	15	24	24	20	15	24	24	20	10	24	24	20	10	24	24	20
		Maximum	30	45	45	30	30	45	45	30	38	40	45	30	38	32	40	30
Right-turn Radius ²	R	Minimum	10	10	25	25	10	10	25	25	10	10	25	25	10	10	10	20
		Maximum	25	35	50	35	25	35	50	35	25	35	50	35	15	20	30	35
Min. Acute Angle ³ Pref. Acute Angle	A	60°	70°	70°	70°	60°	70°	70°	70°	60°	70°	70°	70°	60°	70°	70°	70°	70°
		90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°
Min. Pavement Thickness (inches)	T	6/8	7/9	*	6	6	7	*	6	6	7	*	6	6	7	*	6	

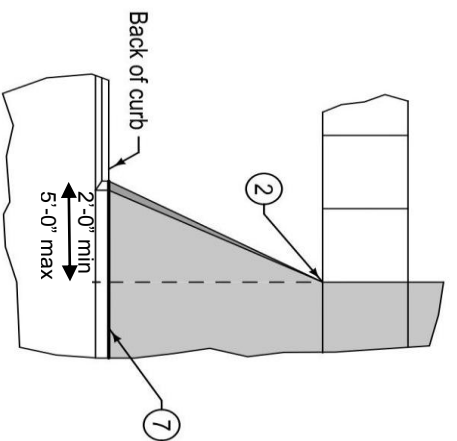
¹ Major entrances require special design.
² 2 foot flares (F) may be used for residential and agricultural entrances.
³ Any variation from 90° will be evaluated on a case by case basis. The minimum acute angle (measured from the edge of the pavement) is 60°.
⁴ Maximum curb opening width shall not exceed 42 feet for residential driveway openings.
⁵ All sidewalks shall be at least five (5) feet in width unless noted otherwise.
 * Requires special design.

Figure 5L-4.01: Entrance Dimensions

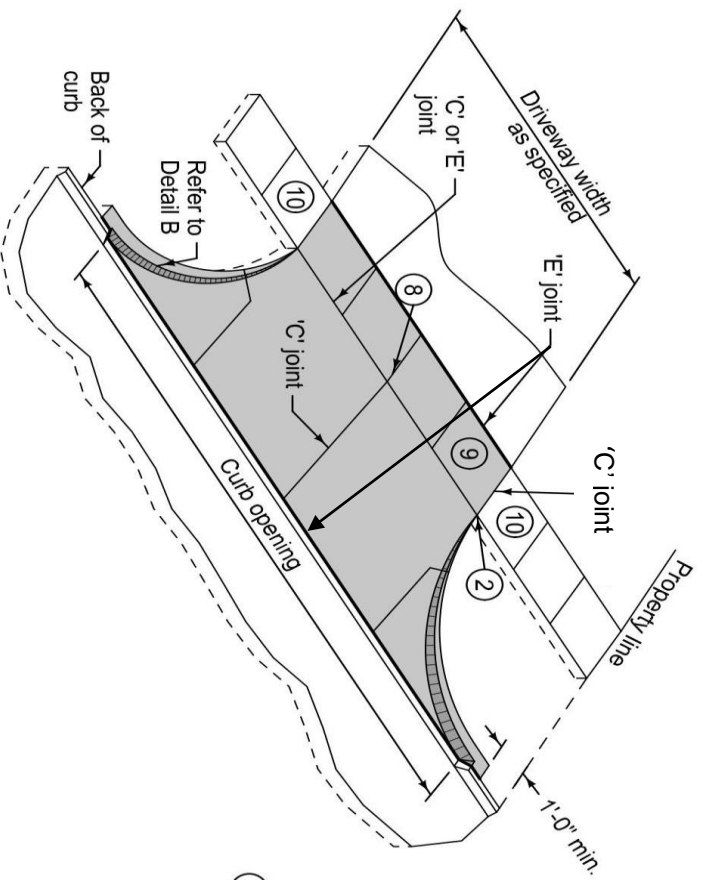




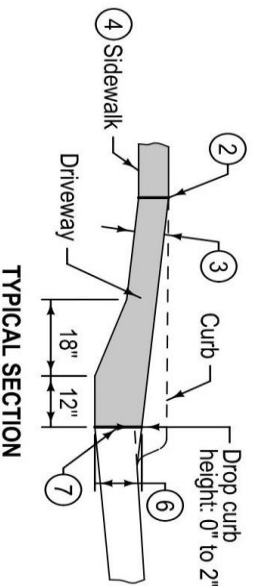
TYPE A WITH FLARES



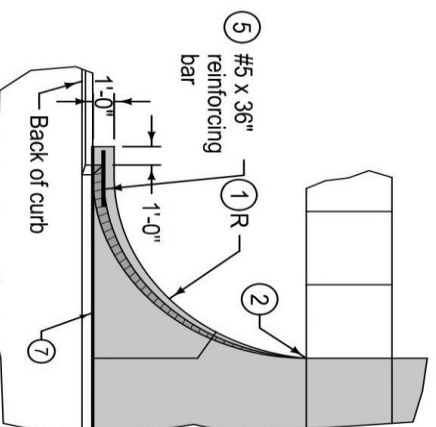
DETAIL A



TYPE A WITH RADII



TYPICAL SECTION



DETAIL B

- ① Driveway radius (R). Residential: 10 foot minimum, 15 foot maximum. Commercial and Industrial: As specified in the contract documents.
- ② Transition the curb height to 0 inches at end of taper/radius or at the front edge of sidewalk. Do not extend raised curb across sidewalk.
- ③ Pavement thickness. Residential: 6 inches minimum. Commercial and Industrial: 7 inches minimum.
- ④ Sidewalk thickness through driveway to match thickness of driveway.
- ⑤ Center reinforcing bar vertically in the pavement.
- ⑥ Match thickness of adjacent roadway, 8 inches minimum.
- ⑦ Provide 'E' joint at back of curb
- ⑧ For alleys, invert the pavement crown 2% toward center of alley.
- ⑨ Target cross slope of 1.5% with a maximum cross slope of 2.0%. If specified in the contract documents, construct the sidewalk through the driveway 5 feet wide to serve as a passing space.
- ⑩ If cross slope of adjacent sidewalk panel exceeds 2.0%, remove and replace to transition from existing sidewalk to sidewalk through driveway.

JOINTS

(C) 1/4" W x 1-1/4" D Saw Cut
 (E) 1/2" Expansion Joint

Note: Expansion joint shall be full depth

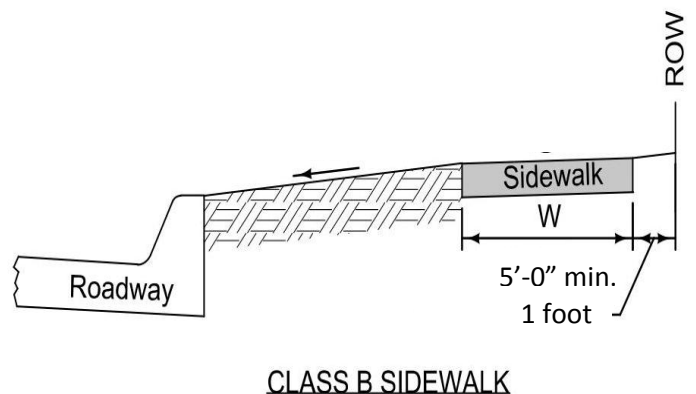
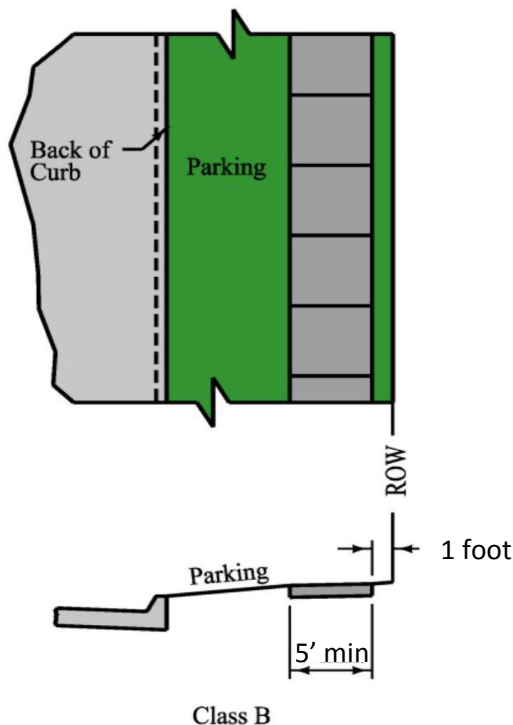
***Joint Sealant Optional**

SIDEWALK DESIGN CRITERIA

General Specifications:

The following specifications shall apply to all sidewalks in Hiawatha unless noted otherwise:

- a. **Type:** Sidewalks shall be Class B sidewalks placed one (1) foot from the edge of the right of way unless noted otherwise and approved by City Council.
- b. **Width:** sidewalks shall be at least five (5) feet in width.
- c. **Sidewalk Thickness:** Sidewalks should be constructed of PCC with a minimum thickness of 4 inches. Where sidewalks cross driveways, the minimum thickness is 6 inches, or the thickness of the driveway, whichever is greater.
- d. **Obstructions:** All obstructions are to be removed or relocated unless prior approval by the City Engineer.
- e. **Transverse construction joints:** Construct a ½ inch expansion joint every 75 feet or at nearest joint for all PCC sidewalks and shared use paths.
- f. **Control Joints:** Provide a saw cut or tooled joint spaced in increments equal to the width of the sidewalk. Saw cuts shall be 1/4" W x 1-1/4" D. Tooled joints shall be limited to 1/4" radius (**Maximum**).
- g. **Target slopes:** Sidewalks shall have a target cross slope of 1.5% with a maximum cross slope of 2.0% (including sidewalk through driveway).
- h. **Parking slopes:**
 - a. If parking width is less than 10 feet wide, slope at ¼ inch per foot (**Maximum**).
 - b. If parking width is 10 feet wide and greater, slope at ½ inch per foot (**Maximum**).
 - c. Special grade may be specified in the contract documents with City Engineers approval.



Note: Sidewalks and approaches (driveways) in the city right of way require a permit.