

**APPENDIX E**  
**TITLE 18, DIVISION 12.12**

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12.12 - Sidewalks, curb and gutter, driveway approaches, curb-cuts, alleys and bikeways.

12.12.1 Sidewalks. In no instance will sidewalks be less than five feet (5') in width (not including curb and gutter). In areas where handrails encroach upon the sidewalk, the sidewalk will be widened to provide a minimum five foot (5') clear width.

12.12.2 Residential Driveway Access. Driveway access will be allowed in accordance with Table 12.11. Design and construction for driveway approaches and curb-cuts will be in accordance with city standards. All residential driveway approaches will enter properties via a standard curb-out. No curb returns are permitted for residential approaches or access. Driveway grades will not exceed fourteen percent (14%). Driveway alignment must be safe and convenient to back a car out, or an adequate turn-around will be provided. Residential driveways will have a minimum width of twelve feet (12') and a maximum width of twenty-seven feet (27'). Driveway width will be measured at the back of walk. Driveways will be constructed of Portland cement concrete in urban areas, and Portland cement concrete or asphalt concrete in rural areas. Alternative materials must be approved by the city.

12.12.3 Commercial Driveways. Spacing from center to center of driveways will comply with the requirements of Table 12.12. Driveways will be located no closer to intersections than indicated in Table 12.13, or as required to provide for left turn bays. The minimum intersection corner clearance as indicated in Table 12.13 will be measured from the intersection of the right-of-way lines to the center of the driveway. Commercial driveways will have a minimum width of fifteen feet (15') for one-way traffic and thirty feet (30') for two-way traffic. Commercial driveways will have a maximum width of thirty-four feet (34') for light commercial traffic and fifty-four feet (54') for heavy commercial and industrial traffic. Driveway width will be measured at the back of walk. Commercial driveways will be constructed of Portland cement concrete. Alternative materials must be approved by the city.

12.12.4 Car Storage Access. Where car storage or access for recreational motor vehicles is desired in residential, business, commercial, or industrial areas, provisions will be made for a driveway.

12.12.5 Pedestrian Ramps. Curb returns at street intersections, and other locations as recommended by the Americans with Disabilities Act, will be provided with pedestrian ramps for the handicapped in accordance with the standard details. Single (i.e., diagonal or depressed corner) sidewalk curb ramps serving two (2) street crossing directions are not permitted (i.e., all ramps will be constructed perpendicular to the street to be crossed). Pedestrian ramps will be constructed in accordance with the Americans with Disabilities Act.

12.12.6 Curb and Gutters. Curbs and gutters are to be constructed of Portland cement concrete in accordance with the standard details.

12.12.7 Radii at Street Intersections. At each right angle street intersection, the right-of-way line and/or road easement line at each block corner will follow the cord of a curve having a radius of not less than fifteen feet (15') on local streets, twenty feet (20') on collector streets, and thirty-five feet (35') on arterial streets.

**Table 12.11  
Driveway Access**

Access to Functional Classification	Land Use Designation SFR	Land Use Designation MFR	Land Use Designation C	Land Use Designation I	Land Use Designation PF	Land Use Designation CR/A
Local Street	P	P	PI	P	PI	P
Collector Street	P	PS	PI	P	PI	P

Industrial Street	P	P	P	P	P	P
Arterial Street	PS	PS	PR/PI	PR/PI	PR/PI	PS

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P	Driveways Permitted
PS	Permitted by Public or Private Streets only
PR	Driveways Permitted, number and distance between driveways restricted
PI	Driveways Permitted, distance from intersecting streets based on projected left turn volumes to intersecting street

Land Use Designation	Abbreviation
Single Family Residential (All)	SF
Multiple-Family Residential	MFR
Commercial (All)	C
Industrial (All)	I
Community or Public Facilities	PF
Open Space/Conservation Reserve	CR
Agriculture	A

**Table 12.12  
Required Spacing Between Driveways**

Street Classification and Posted Speed Limit	Center to Center Spacing Between Driveways (feet) Preferred	Center to Center Spacing Between Driveways (feet) Minimum
Arterial Street		
30 mph speed limit	185	125
35 mph speed limit	245	150
40 mph speed limit	300	185
Collector Street		
30 mph speed limit	185	125
35 mph speed limit	245	150
40 mph speed limit	300	185
45 mph speed limit	350	230
Industrial Street	50	50
Local Street	50	50

**Table 12.13**  
Minimum Intersection Corner  
Clearance for Commercial Driveways

Street Classification	Minimum Intersection Corner Clearance <sup>3</sup> (feet) Signalized Condition	Minimum Intersection Corner Clearance (feet) Stop Sign Condition
Arterial Street	230 <sup>1</sup>	150
Collector Street	175 <sup>1</sup>	85
Industrial Street	175 <sup>1</sup>	85

Local Street	175 <sup>2</sup>	85
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Notes:

1. Where intersections are unsignalized but may be signalized in the future, the minimum corner clearance for signalized intersections will be used.
2. Where intersections on local streets are unsignalized, the minimum corner clearance for signalized intersections will be used.
3. As measured from the intersection of the right-of-way lines, or extension thereof in the case of rounded returns, to the center of the driveway.

Where streets intersect at angles of less than right angles or where other peculiar conditions of intersection occur, the city may require a different radius.

12.12.8 Curb Returns. Curb returns will have minimum face of curb radii of fifteen feet (15') on urban local streets (fifteen feet (15') on rural local streets), thirty feet (30') on urban collector streets (thirty feet (30') on rural collector streets), thirty feet (30') on minor arterial streets, and forty feet (40') on major arterial streets. Curb returns will be used at commercial driveways. Curb returns will not be allowed at residential driveways.

12.12.9 Bicycle Lanes and Bicycle Routes. The design of bicycle lanes, bicycle routes, and bicycle paths will conform to the AASHTO "Guide for Development of Bicycle Facilities," city ordinance, "Standard Specifications for Public Works Construction," and this section. Bicycle lanes and bicycle routes will be constructed at locations designated in the transportation element of the master plan.

The minimum width for bicycle lanes on roadways where on-street parking is prohibited will be four feet (4') as measured from the edge-of-pavement where curbs and gutters are not present and five feet (5') as measured from face-of-curb where curbs and gutters are present.

12.12.10 Bicycle and Pedestrian Paths. The design of bicycle and pedestrian paths will conform to the AASHTO "Guide for Development of Bicycle Facilities," bicycle section of the transportation plan, city ordinances, "Standard Specifications for Public Works Construction," and this section. Bicycle and pedestrian paths will be constructed at locations designated in the master plan.

The minimum width for two-directional bicycle and pedestrian paths shall be ten feet (10'). All bicycle and pedestrian paths will be designed as two-directional facilities. All bicycle and pedestrian paths will have a minimum two-foot wide graded shoulder which consists of a minimum of four inches (4") of type 2 class B aggregate base.

The structural section for these facilities shall be based on a soils engineering report recommendation unless waived by the city engineer. The minimum structural section for paths shall be two inches (2") of asphalt concrete, AC-20 using type 3 aggregate with fog seal over four inches (4") of type 2, class B aggregate base.

12.12.11 Obstructions. Obstructions shall not be located at intersections or other locations, such as driveways, that interfere with sight distance.

Obstructions such as power poles, pull boxes, mail boxes, pedestals, transformers, and telephone boxes shall be placed in easements adjacent to the right-of-way. Where obstructions exist in areas of proposed improvements, it shall be the responsibility of the developer to relocate existing obstructions out of sidewalk and pedestrian areas, and other areas of improvements.

12.12.12 Cut and Fill Slopes. Cut and fill slopes shall be set back a minimum of two feet (2') from the back of the sidewalk. If no sidewalk exists the setback shall be a minimum of seven feet (7') from back of curb. Back of curb drainage shall be installed as necessary. The right-of-way and/or slope easement shall extend at least two feet (2') beyond where the natural surface of the ground must be excavated or covered with fill dirt or materials in constructing cuts, fills, curb and gutter, sidewalk, and drainage improvements.

12.12.13 Alleys. Alleys required to serve a development shall be improved and conform to city standards. Alleys shall have a minimum right-of-way width of twenty-five feet (25'), minimum pavement width of twenty feet (20'), and comply with city drainage requirements.

12.12.14 Alley Grades. Longitudinal grades shall conform to standards for streets, with a cross slope of two percent (2%) minimum from the property line toward the center of the alley. Alleys shall be an inverted crown and if the longitudinal grade is less than one and nine-one-hundredths percent (1.09%) than a concrete valley gutter shall be provided.

(Ord. 2001-23, Development Standards).

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