

*ARTICLE 25*  
**DRIVEWAYS**

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<b>Section</b>	<b>25.01</b>	<b><u>GENERAL</u></b>
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All curb cuts and driveways constructed, altered, or removed within the limits of the City of Ocoee shall be constructed, altered, or removed as provided for in this ARTICLE and the LDC. No person shall make any curb cut for a driveway, walkway or any other purpose within the street right-of-way or connect to an existing curb cut or driveway without first obtaining a permit from the City. Additional permits may be required from the County or FDOT for rights-of-way under their jurisdiction. The City Engineer has approval jurisdiction over the design, location, construction permits, materials, methods, and operational portion of this ARTICLE and any requests for modifications from these Standards.

<b>Section</b>	<b>25.02</b>	<b><u>REQUIRED SUBMITTALS</u></b>
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Information required on plans submitted shall include:

- A) A complete plot plan showing all proposed and/or existing buildings and parking layouts and shall include a north arrow, date, and dimensions.
- B) Existing and proposed driveway locations and widths on the site and within 150 feet of the site on both sides of the street and in both directions.
- C) Distances to the nearest public intersection and to the nearest median cut in both directions, if applicable.
- D) Street pavement types and widths, lane layout and widths, curb types, and right-of-way widths.
- E) Proposed and/or existing off-street loading and unloading facilities, interior parking arrangements and interior traffic circulating arrangements. (Non-residential requirement only.)
- F) Retaining walls, drainage, utility poles, trees, fences, and other physical features which affect the driveway location and sight distance.

**Section 25.03 DESIGN CONSIDERATIONS**

- A) The choice of the proper location of driveways must involve consideration of the amount of the conflict which can be expected to occur both within the parking area and on the abutting streets. One primary concept which shall be followed is to reduce the number of driveways to a practical minimum and to promote consolidated driveway usage wherever possible, thus providing fewer locations where conflicts may occur.
- B) The area to which the driveway provides access shall be of sufficient size and design to allow all necessary functions for ingress, egress, loading, unloading, parking, circulation, and standing to be carried out on private property completely off the street right-of-way.
  - 1) Parking areas shall be so designed and marked as to provide for orderly and safe movement and storage of vehicles and pedestrians.
  - 2) No design shall be permitted which requires any vehicle to back out onto a public right-of-way, i.e., a public street, parkway, or sidewalk, except for single family residences.
  - 3) Facilities with drive-in windows must be so designed that waiting vehicles do not extend into the street or right-of-way. A by-pass lane shall be required for all such facilities.

**Section 25.04 DESIGN SPECIFICATIONS**

**25.04.01 Location**

- A) Single family residential driveways shall not be permitted in the radius return of an intersection.
- B) No single family residential driveway, other than duplex or zero lot line, or temporary commercial driveway shall be permitted with its center nearer than 40 feet to the center of the next nearest driveway, except upon special approval of the City Engineer.
- C) No centerline of a residential driveway, other than duplex or zero lot line, driveway shall be closer to the adjacent property than ½ of the driveway width plus 6 feet.
- D) The centerline of all other types of driveways shall be no closer to the adjoining property than ½ the width of the driveway plus the return radius dimension and 3 feet.
- E) No driveway shall be permitted which includes any facility such as traffic signal standards, trees, utility poles, site sign, catch basins, fire hydrants, or any other similar type structure, unless such facility is relocated at the property Owner's/Developer's expense. All setbacks shall meet the FDOT requirements for fixed object hazards.

- D) No curb cut shall be made within 3 feet of a drainage inlet or property line.
- G) Joint-use driveways shall be used when deemed necessary. The above criteria shall be complied with unless otherwise approved by the City Engineer.

25.04.02 Width

- A) The minimum width of single family residential driveways shall be 10 feet and the maximum width shall be 18 feet, with 3 foot flares on either side. For driveways longer than 100 feet, the width may be increased at the discretion of the City of Ocoee Fire Rescue Department.
- B) The minimum and maximum widths of commercial driveways, are based upon 12 foot travel lanes for two-way and emergency vehicles for one-way, shall be as specified below:

<u>Table 25-1</u>		
	<u>Minimum</u>	<u>Maximum</u>
One-Way	16	20*
Two-Way	24	36*
*or as required for multi-lane driveways		

- C) Non-residential driveways exceeding the maximum width shall only be considered when usage of 40 foot radius cannot be accommodated.
- D) All driveway widths shall be measured at the throat.
- E) For all residential driveways, the width of the curb opening shall not exceed the width of the driveway by more than 3 feet on each side.

25.04.03 Angle

- A) All driveways shall be constructed as nearly to a right angle (90°) to the street or roadway as possible.
- B) This requirement may be waived for one-way driveways, provided that the angle chosen represents improved ingress or egress compared to a right angle driveway and does not adversely affect the driver's sight distance.

25.05.04 Radii

- A) On commercial and multi-family residential driveways, a proper radius which will accommodate the minimum turning radii and off-track of the design vehicle according to AASHTO Standards shall be provided. Normally, the design vehicle will be fire and emergency apparatus requiring a minimum radius of 40 feet based on a 24 foot wide two lane driveway. Consideration may be given to the street speed limit and width of driveway opening.
- B) Tractor trailer combination shall be the design vehicle, when warranted, with a 55 foot radius as a minimum on all non-single family residential driveways.
- C) A radius of less than 40 feet may be approved upon the applicant's demonstration to the City Engineer that the smaller radius is more appropriate for the particular parcel of property being served and that the traffic flow on the street being accessed is not impaired. The minimum radii for internal circulation shall be 20 feet. Three foot flares may be utilized on commercial projects where inadequate distance between the property and the road edge prohibits the use of radii, and shall be used on all non-single family residential driveways.
- D) Contraction joints shall be tied at the radii to prevent uneven settlement.

25.04.05 Grade

- A) All driveways shall cross the sidewalk/bikepath area at the sidewalk/bikepath grade as approved by the City Engineer. See the Typical City Details attached as part of this Manual.
- B) In cases where property slopes down from the street, the driveway shall be constructed in such a manner as to raise the driveway to a height equal to the top of the curb at the right-of-way line or at a more appropriate point, as determined by the City Engineer, before the down slope or up slope of the driveway begins. See the Typical City Details attached as part of this Manual.
- C) The driveway shall be designed so that approach, ramp and departure angles do not exceed the maximum as determined by the appropriate design vehicle.

Single Family Residential Driveway - Design Vehicle - Passenger Car

<u>Table 25-2</u>	
<u>Angle Type</u>	<u>Maximum Angle</u>
Approach Angle (A)	16.4°
Ramp Angle (B)	11.0°
Departure Angle (C)	10.9°

All Other Driveways - Design Vehicle - Emergency Fire Apparatus

<b>Angle Type</b>	<b>Maximum Angle</b>
Approach Angle (A)	14.14°
Ramp Angle (B)	7.26°
Departure Angle (C)	8.53°

- D) All curb cuts shall consist of a 6 inch raised or flush header curb for non-concrete approaches from the point of curvature to the point of tangency on each side of the driveway, except in locations where the accessed road is constructed with an existing swale, then a flush concrete header curb shall be provided.

25.04.05 Construction Specifications

- A) All driveways shall be constructed in conformance to the plans and specifications approved by the City Engineer.
- B) Concrete for the construction of the driveway approaches (the portion of the driveway in the right-of-way) shall be at least 3,000 psi concrete and at least 6 inches in thickness and shall utilize 6 x 6 WWF installed on proper benching. Fiber reinforced concrete mixture conforming to the standards of ASTM C1116 may be used in addition to the WWF if desired. Break and expansion joints shall be installed at the property line.
- C) Concrete for the construction of curbs shall be at least 3,000 psi concrete.
- D) Subgrade of driveways, driveway approaches, and curbs shall be compacted to a minimum density of 98% of the maximum density as determined by AASHTO T-180.

**Section 25.05 HANDICAP RAMPS**

Handicap ramps shall be constructed for all sidewalks/bikepaths at their intersection with a driveway. All handicap ramps shall be constructed in accordance with ARTICLE 19 of this Manual.

**Section 25.06 EXISTING DRIVEWAYS AND ACCESS POINTS**

- A) Existing driveways shall not be relocated, altered, or reconstructed without a permit approving the relocation, alteration, or reconstruction, and such driveway shall be subject to the provisions of this Section.
- B) When the use of any driveway is discontinued, the Owner/Developer(s) of the abutting property shall, at the Owners'/Developers' own expense, remove the driveway and replace all curbs, gutters, sidewalks/bikepaths, swales, and grass areas.

- C) When the use, building size or ownership of any property with a driveway(s) is changed, the Owner/Developer(s) of the subject property shall reconstruct the driveway in conformance with City Standards.
- D) If an existing driveway becomes a hazard to the driving or pedestrian public using the public facilities within the public right-of-way, the City Engineer may require reconstruction, relocation, or removal of said driveway. Proper notice shall be made to the property Owner as required by law.