

Fire Apparatus Access Road Requirements for Expedited and Non-Expedited Subdivisions and Commercial Buildings

NC Fire Code, 2018 edition, Chapter 5 Section 503 and Appendix D, adopted by Orange County:

The following standards apply to all access types including, but not limited to, driveways, joint driveways, access easements, right of ways, and private roads.

- If applicant/property owner proposes three lots, they do not need to meet Fire Code regulations
 - If there are future plans to build three homes on the three lots, applicants/property owners are encouraged to consider meeting Fire Code regulations prior to development when it may be easier.
- If applicant/property owner proposes three homes, they need to meet Fire Code regulations
- If the road includes three existing homes, the road is grandfathered in and is not required to meet Fire Code regulations.
- If the road includes three existing homes and the applicant is proposing to extend the road or add another road to the existing road, the road is required to meet Fire Code regulations.
- General Fire Code standards:
 - Asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds
 - Shall not exceed 10 percent in grade
 - 20 feet wide, not including shoulders
 - Clearance over the road would have to be no lower than 13 ½ feet
 - Dead-end access in excess of 151 feet or more shall meet width and turnaround provisions in accordance with Table D103.4 of the Fire Code

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0—150	20	None required
151—500	20	120-foot Hammerhead, 60-foot "Y" or 96-foot-diameter cul-de-sac in accordance with Figure D103.1
501—750	26	120-foot Hammerhead, 60-foot "Y" or 96-foot-diameter cul-de-sac in accordance with Figure D103.1
Over 750		Special approval required

For SI: 1 foot = 304.8 mm.

- If hydrant(s) are installed, the road must be a minimum of 26 feet wide, not including shoulders.
- There are other requirements if you have gates and/or bridges.
- Road requirements may be waived if the homes are built with sprinklers.
- Fire Code links provided below:

<https://codes.iccsafe.org/content/NCFC2018/chapter-5-fire-service-features>

<https://codes.iccsafe.org/content/NCFC2018/appendix-d-fire-apparatus-access-roads>