Loudoun County Fire Marshal's Office Quick Reference Guide for Fire Service Feature Design & Development Plan Review

All topics covered under this document apply to both public and private fire apparatus access roadways.

A fire apparatus access roadway is defined as the following: A road that provides fire apparatus access from a fire station to a residence, facility, building, or portion thereof.

For assistance as it relates to fire service feature design and development plans please contact the Loudoun County Fire Marshal Office at (703) 737-8600, and ask to speak with a plans review person: Assistant Fire Marshal John Bolland or Inspector Christopher Richardson

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TOPIC	CODE SECTION	CODE
Fire Apparatus Access Road Definition	Loudoun County Fire Prevention Code 202	A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as fire lane, public street, private street, and parking lot lane and access roadway.
Timing of Marking of Fire Lanes	FSM 4.810.C	Loudoun County fire lanes are required be installed/marked on the fire apparatus travel way that leads to the building/residence prior to the issuance of a certificate of occupancy
Fire Lane Requirement of a Fire Apparatus Access Road <26' wide	FSM 4.810.C.1.a	Travel way that is used as a fire apparatus access road with a total width less than twenty-six (26) feet will be identified as a fire lane on both sides of the travel way, in accordance with this section.
Fire Lane Requirement of a Fire Apparatus Access Road 26' to 32' wide	FSM 4.810.C.1.b	Travel way that is used as a fire apparatus access road with a total width of twenty-six (26) feet or greater, and less than or equal to thirty-two (32) feet will be identified as a fire lane on one side of the travel way.
Fire Lanes Commercial	FSM 4.810.C.1.c	Commercial/Non-residential buildings will require fire lane Identification, as specified by the Fire Marshal, along the frontage of the building and at other building access points, as designated by the Fire Marshal. This requirement will be no less than those identified in the FSM 4810.C.1.a&b
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TOPIC	CODE SECTION	CODE
Turning Radii	Loudoun County Fire Prevention Code 503.2.4	This allows for the Fire Marshal's Office to ensure that emergency apparatus can access all required areas within the development. The required turning radius of a fire apparatus access road will be determined by the fire code official. The SU-40 design vehicle (AASHTO) is the aerial apparatus and is the minimum design criteria for emergency apparatus access roads.
Dead End road over 150 feet in length	Loudoun Code Fire Prevention Code 503.2.5	This is to provide a safe turn around for larger emergency vehicles. Dead-end fire apparatus access roads in excess of 150 feet in length will be provided with an approved area for turning around fire apparatus.
Dead End turn around types	Loudoun Code Fire Prevention Code 503.2.5 FSM 4.310.E.2	This is to provide developers with turn arounds approved by the FMO other than just the 30 feet face to curb or edge of pavement cul-de-sac found in the FSM. See table 1 below.
Single point of ingress and egress	Loudoun County Fire Prevention Code 503.1.2 FSM 4.200.A.2.g and 4.310.E.3	Additional access or a second fire apparatus access road may be required based on the potential for impairment of a single road. Specifically for a housing development (PDH) with eighty (80) or more dwelling units it will be required to have a secondary means of ingress and egress to a publicly maintained roadway. Development types exceeding the maximum allowable length found in the section 4.310.E.3 table will also be required to have an approved secondary point of access for emergency apparatus. This is to provide a second fire apparatus access road in the event that the main access becomes impaired.

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TOPIC	CODE SECTION	CODE
Location of Fire Department Connection (FDC)	Loudoun County Fire Prevention Code 912.2	Fire department connections will be so located that fire apparatus and hose connected to supply the system will not obstruct fire apparatus access road to the buildings for other incoming fire apparatus.
Location of the Fire Department Connection (FDC)	Loudoun County Fire Prevention Code 912.2.1 and 507.5.1	Fire department connections will be located on the address side of buildings, fully visible and recognizable from the street. Fire hydrant systems will be located as directed by the Fire Department, and will conform to the written standards of the jurisdiction. Our written standards are Loudoun Water's standards.
Location of Fire Department Connection (FDC) to fire hydrant	Loudoun County Fire Prevention Code 507.5.1.1 Loudoun Water Section 4.4(6)	A hydrant is required within 100 feet of the siamese connection, also known as fire department connection (FDC).
Location of Fire Hydrant from building	Loudoun Water Section 4.4(7)	Locate hydrants a minimum of 50 feet from building being protected.
Fire Hydrant Location Residential	Loudoun Water Section 4.4(4)	In one- or two-family residential areas, hydrants will be installed such that there will be at least one hydrant within 300 feet of the nearest corner of any building. When at the upper limit of the requirement, providing concentric marking circles to show distances does not always provide the required level of specificity to assure compliance.

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TOPIC	CODE SECTION	CODE
Fire Hydrant Location Commercial	Loudoun Water Section 4.4(5)	In commercial, industrial, multi-family residential and townhouse areas, hydrants will be placed such that a maximum of 300 feet of hose is required to reach any point on the exterior of all buildings.
Fire Apparatus Access Road Minimum Requirement	Loudoun County Fire Prevention Code 503.2.1	Fire apparatus access roads will have an unobstructed width of not less than 20 feet, exclusive of shoulders and an unobstructed vertical clearance of not less than 13 feet 6 inches. See FSM 4.330.D.2 Table III for a code modification specific for category "C" type roadways only.

If you have concerns about the application of the Fire Prevention Code (FPC) or to request a modification to the provisions of the FPC pursuant to section 106.5, please contact Chief Fire Marshal Linda Hale at 703/737-8600.

Pursuant to section 112.1 of the Fire Prevention Code: The owner of a structure, the owner's agent or any other person involved in the design, construction or maintenance of the structure may appeal a decision of the fire official concerning the application of FPC or the fire official's refusal to grant modification. Persons wishing to file an appeal shall submit a written request for appeal to the Board of Building Code Appeals (BBCA), within 14 calendar days of receipt of the decision being appealed. Person's wishing to file an appeal shall Address it to Deputy Fire Marshal Jerome Swain at DutyFm@Loudoun.gov, or send by certified mail to the Loudoun Fire Marshal's Office at the above address. The appeal shall contain the name and address of the owner of the structure and the person appealing if not the owner. A copy of the written decision of the fire official shall be submitted along with the appeal. Failure to submit an appeal within the time limit established shall constitute acceptance of the fire official's decision.

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References:

Loudoun County Fire Prevention Code 2012 edition

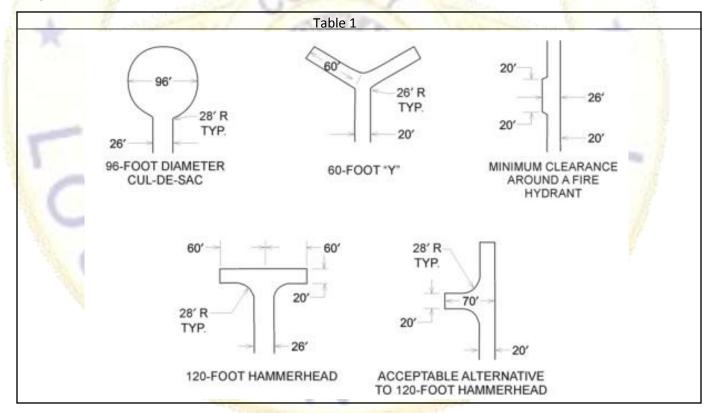
https://codes.iccsafe.org/public/document/toc/595/

Loudoun County Facilities Standard Manual (FSM) 2015 edition

https://www.loudoun.gov/DocumentCenter/View/113092

Loudoun Water Design Manual Chapter 4

https://www.loudoun.gov/DocumentCenter/View/113092



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