Fire Prevention Code Policy

Office of the Fire Marshal • Roanoke Fire-EMS Department

	Subject: Fire Apparatus Access Roads	
	Date: September 1, 2019	**Revision:** A
	Fire Marshal: David Guynn	
	Fire Chief: David Hoback	

Purpose

Fire Prevention Code Policy documents are promulgated by the Office of the Fire Marshal of the Roanoke Fire-EMS Department, acting as the Fire Code Official for the City of Roanoke. This document is intended to provide guidance to stakeholders for compliance with the currently adopted edition of the City of Roanoke Fire Prevention Code ("the Code") and compatibility with the standards and practices of the Roanoke Fire-EMS Department. In the event of a conflict with any provision of the currently adopted Code, the Code shall prevail.

Scope

This policy applies to:

- Construction of new buildings or structures within the City of Roanoke or buildings or structures for which a comprehensive plan review is otherwise required.
- Alterations of required fire apparatus access roads.
- Retroactive designation of fire lanes.

Authority/References

- 2015 Statewide Fire Prevention Code, §503

Policy

Fire Apparatus Access Roads: Where Provided

Fire apparatus access roads shall be provided for every facility, building, or portion of a building constructed or moved into or within the City of Roanoke. Fire apparatus access roads shall be constructed to provide access for fire apparatus to within 150 feet of all portions of the building, and to provide access to fire hydrants and fire department connections.

In addition, the fire marshal or his/her designee is authorized to require more than one fire apparatus access road where the potential exists for impairment of a single road by vehicle congestion, terrain, climatic conditions or other factors that could limit access.

In accordance with §503 of the Statewide Fire Prevention Code, the fire marshal or his/her designee may modify these requirements based on the installation of an automatic sprinkler

system or existing site conditions. The fire marshal may require an alternative means of fire protection if site conditions prevent full compliance with these guidelines.

Fire Apparatus Access Roads: Dimensions

Fire apparatus roads shall have an unobstructed width of not less than 20 feet, exclusive of shoulders, except for approved security gates (see *Fire Apparatus Access Roads: Security Gates* elsewhere in this Policy for details). Fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13 feet 6 inches.

Parking is not permitted within the minimum unobstructed width of 20 feet.

Fire Apparatus Access Roads: Turning Radius

The Roanoke Fire Marshal's Office has performance data available to designers for the most demanding fire apparatus in the Roanoke Fire-EMS fleet. Please contact the Roanoke Fire Marshal's Office to obtain the most current version of this data.

Fire Apparatus Access Roads: Turnarounds

Turnarounds are required for dead-end fire apparatus access roads in excess of 150 feet in length. Roanoke Fire-EMS accepts standard turnarounds provided in Figure D103.1 of the 2015 edition of the Statewide Fire Prevention Code without further design or engineering. Deviations from the standard turnarounds in D103.1 or other designs require the approval of the fire marshal or his/her designee. These standard turnarounds are reproduced for reference in Appendix A of this Policy.

Fire Apparatus Access Roads: Signage and Marking

At minimum, fire lane signage shall state "NO PARKING FIRE LANE", with arrows indicating the beginning, continuation, and end of the fire lane as appropriate. Signage shall be of metal construction, 12 inches by 18 inches in size, with red letters on a white retroreflective background (see Appendix B of this Policy for examples of compliant signage).

Fire lane signs shall be installed as follows:

- At the beginning of the fire lane, at 50 foot intervals, and at the end of the fire lane, or as directed by the fire marshal or his/her designee
- Mounted not less than seven feet from the ground to the bottom of the sign
- Positioned where clearly visible to traffic and not obscured from view by bushes, shrubs, or other objects
- Post mounted with a setback of not greater than six feet from the curb or edge of the roadway. Where the building has a setback of less than six feet from the curb or edge of the roadway the fire marshal or his/her designee may allow building-mounted signage insofar as it is compliant with the other provisions of this section
- On the side of the direction of travel and facing the traffic they are intended to serve

Fire Apparatus Access Roads: Security Gates

Security gates may be installed across fire apparatus access roads when approved by the fire marshal or his/her designee. Security gates may be automatically or manually operated in accordance with this section.

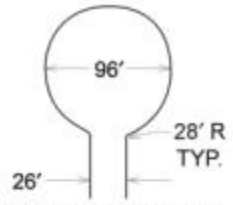
Where a security gate serves as the only means of accessing a building, the security gate must be capable of automatic operation and equipped with an electric key switch that is compatible with the Knox Rapid Entry System adopted by Roanoke Fire-EMS (see Policy FP-02, *Knox Rapid Entry System* for further details and requirements). Where a security gate only controls access to a portion of the building and with the express approval of the fire marshal or his/her designee, the security gate may be manually operated and equipped with a padlock that is compatible with the Knox Rapid Entry System adopted by Roanoke Fire-EMS. However, the fire marshal or his/her designee may require any security gate under this section to have automatic operation where such gate would be necessary for lifesaving or firefighting purposes.

Fire Apparatus Access Roads: Bollards

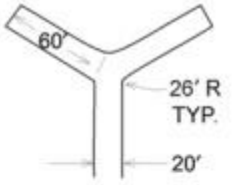
In certain situations, the fire marshal or his/her designee may permit the installation of bollards within a fire apparatus access road in accordance with the provisions of this section. For example, this may be permitted where a security gate is only capable of protecting a portion of the fire apparatus access road. In this case, the fire marshal or his/her designee may permit the remainder of the fire apparatus access road to be protected by bollards.

Bollards installed in a fire apparatus access road must be collapsible and have the capability for manual operation. Sleeved bollards or solid bollards are not acceptable within a fire apparatus access road. Collapse must be in the direction of travel. Bollards shall not obstruct more than eight feet of a required 20 foot fire apparatus access road.

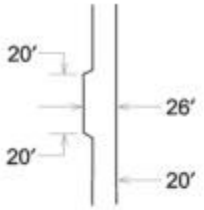
Appendix A: Approved Turnarounds



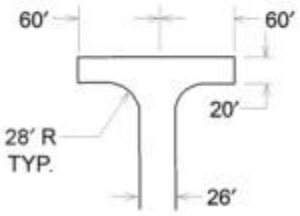
96-FOOT DIAMETER
CUL-DE-SAC



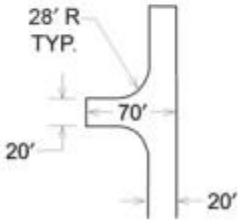
60-FOOT "Y"



MINIMUM CLEARANCE
AROUND A FIRE
HYDRANT



120-FOOT HAMMERHEAD



ACCEPTABLE ALTERNATIVE
TO 120-FOOT HAMMERHEAD

Appendix B: Fire Lane Signs