



Secondary Emergency Vehicle Access Standard

Standard

2018 International Fire Code,
Appendix D RMC Title 20

Practice

The purpose of this standard is to provide the requirements for secondary emergency vehicle access (SEVA) for residential developments.

- A residential development that serves more than sixteen (16) dwelling units and each lot is less than one acre in size, shall be provided with an approved SEVA.
- A residential development that serves more than fifty (50) dwelling units and each lot is more than one acre in size, shall be provided with an approved SEVA.
- The number of dwelling units within a residential development served by a single fire apparatus access road may be increased without a permanent SEVA by the Fire Code Official, if the fire apparatus road will connect to a future development with separate access points that would omit the need for a SEVA within a 12-month window. Binding legal agreements, easements and future phased plans shall be provided to the Fire Code Official for determination if a temporary (less than 12 month) or permanent (greater than 12 months) SEVA access is required.
- Temporary SEVA roads allowed during continued development stages/phases lasting greater than 12 months and permanent SEVA roads must be paved with 12-inch minimum shoulders to support the imposed loads of 75,000 pounds. Temporary SEVA roads lasting less than 12 months shall have a minimum surface of two (2) inches of compacted gravel and support imposed loads of 75,000 pounds.
- When a SEVA is required by this Standard, it must be separated from the primary access point by enough distance to avoid a situation where both would be blocked or unavailable simply because they are too close together. All dwelling units must be able to be accessed from two completely separate access routes. These separate access routes shall be placed a distance apart equal to not less than one-half the length of the maximum overall diagonal dimension of

- the property or area to be served, measured in a straight line between the accesses, as determined by the Fire Code Official.
- All SEVA roads shall have a twenty (20) foot unobstructed road width, meet the turning radius requirements listed in the Richland Fire Department Subdivision and Street Requirement Standard and a vertical clearance of thirteen feet six inches (13'6").
- Long SEVA roads may be reduced, if approved by the Fire Code Official, to twelve (12) feet in width, provided 20' total road width and 35' long turnouts are present every 400 feet to accommodate the passage of emergency vehicles in both directions.
- SEVA road slope shall not exceed 12% longitudinal or 2% cross-slope.
- Bollards placed at potential access points where the Fire Code Official determines emergency access for structure fires, urban interface, wildland fires or where EMS access may be needed, shall be standardized as releasing with a ¼ turn release mechanism using a 5-sided AWWA hydrant wrench, 32" standard height with less than 4" collapse height and painted in safety yellow. Bollards shall not be interconnecting by hardware such as cables, chains or other devices. Typical applications would include bollards placed at SEVA accesses, fire lanes, alleyways, bike paths, trailheads, school grounds, playgrounds, commercial buildings, and parking areas. Additional applications may be required by the Fire Code Official.
- The primary fire apparatus access road for the development must meet all the design requirements of the International Fire Code, Section D and Fire Department Standards, whichever is most restrictive as determined by the Fire Code Official.
- When the dwelling units on a single access fire apparatus road exceed 16, but remain less than 50 and a NFPA 13, 13R or 13D sprinkler system is installed throughout all dwelling units, the fire code official may consider omitting the SEVA requirement. Consideration to omit the SEVA requirement by the Fire Code Official shall not consider monetary developer considerations or a lack neighboring property access. The determination to omit the SEVA requirement must heavily weigh the need for EMS as well as fire response needs and should be on an extremely limited basis.

Guide

The International Fire Code, Section 304.1.2, the Richland Municipal Code, Title 10.04.040 and the Richland Fire Department Hazard Mitigation Standard is an intentional, preplanned effort to educate and enforce urban interface prevention standards that do not rely on the need for emergency evacuation during wildland fires. The typical local fuel loads, mitigation requirements, elimination of ladder fuels and construction standards are designed to safely encourage sheltering in place. SEVA roads are not intended to provide emergency egress, but rather secondary fire apparatus access.

Modifications of this standard may be made with the approval of the Chief or designee.