

# EL DORADO COUNTY REGIONAL FIRE PROTECTION STANDARD

#### **EMERGENCY APPARATUS ACCESS WAYS**

STANDARD #B-003

EFFECTIVE 05-05-2009

#### **PURPOSE**

To establish a consistent guideline for fire access roadways required by the Fire Department.

#### **SCOPE:**

This standard applies to every public and private street, road, alley, drive and access way within the boundaries served by the Fire Department.

#### **AUTHORITY:**

This standard is adopted under authority of the 2008 Edition of the California Fire Code (CFC) and the Title 14 Natural Resources Code, Division 1.5, Chapter 7, Subchapter 2, Articles 1-5 of the Fire Safe Regulations as adopted by the Fire Department.

#### **DEFINITIONS:**

*Bollards* – Permanent or removable poles that are placed across a roadway for the purpose of restricting vehicular access to a portion of a site or to protect a piece of equipment from potential vehicular damage.

Fire Access Roadways – 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, parking lot lane, and access roadway. Roadways must extend to within 150 feet of all portions of the exterior of the first floor of any structure and must meet specified criteria for width, pavement characteristics, roadway gradient, turning radius, etc. Fire access roadways are also referred to as fire lanes.

*Fire Lane Identification* – Specific requirements that allow fire access roadways to be readily recognized so that they will remain unobstructed and available for emergency use at all times.

Gates and Barriers – Devices that restrict pedestrian and vehicle ingress and egress to and from a facility.

Gate and Barrier Locks – Devices that are installed on gates and barriers to secure a property or facility shall be required to have a key switch and electronically controlled switch to facilitate fire department and police access.

*Premises Identification* – The visual means used to readily identify a property or facility. It is also the numbering system that is placed on structures for the purpose of identification of separate buildings within a single facility.

#### **REQUIREMENTS:**

#### **Fire Access Roadways**

Fire access roadways, sometimes referred to as fire lanes, shall be provided for every facility or building when any portion of an exterior wall of the first story is located more than 150 feet from a public roadway, as measured along an approved route. Extenuating circumstances, increased hazards, and additional fire safety features may affect these requirements.

- 1. <u>Fire Apparatus Access Roadway Construction Facilities</u>, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete, or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds.
- Vehicular Access During Construction: The development and each phase shall have at least two (2) points of vehicular access for Fire Department and other emergency vehicles as well as for routes of egress for evacuations. Fire Access Roads shall be constructed and approved prior to combustibles being brought onto the site. Temporary "NO PARKING FIRE LANE" signs shall be posted during construction as needed. All construction shall comply with Fire Apparatus Access during Construction Standard F004.
- 3. <u>Number of Fire Department Access Roads Required</u>:
  - a) Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this standard and shall extend to within 150 feet of all portion of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.
  - b) The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.
  - c) The maximum length of a dead-end residential road, including all dead-end roads accessed from that dead-end road, shall not exceed the following cumulative lengths, regardless of the numbers of parcels served:

Parcels zoned for less than one acre 800 feet Parcels zoned for 1 acre to 4.99 acres 1320 feet Parcels zoned for 5 acres to 19.99 acres
Parcels zoned for 20 acres or larger

2640 feet
5280 feet

- d) All road lengths shall be measured from the edge of the roadway surface at the intersection that begins the road to the end of the road surface at its farthest point. Where a dead-end road crosses areas of differing zoned parcel sizes, requiring length limits, the shortest allowable length shall apply.
- 4. Width of Fire Access Roads The minimum width of a fire access roadway is 20 feet. The width of the roadway is measured from curb face to curb face, flow line to flow line, curb face to flow line, or from the inside of a defining edge stripe. Where a raised center median is included the required width shall be provided on both sides of the median. (See Page 5)
- 5. <u>Width of Fire Access Road at a Fire Hydrant</u> The minimum road width shall be 26 feet, 10 feet on either side of the fire hydrant. Each end shall be tapered to enable a fire apparatus to maneuver in and out of the access.
- 6. <u>Aerial Fire Apparatus Access Road</u> The minimum unobstructed width of 26 feet in the immediate vicinity of any building or portion of buildings more than 30 feet in height shall be maintained for Aerial Fire Apparatus.
- 7. Parking adjacent to fire access roadways Whenever the parking, stopping or standing of any vehicle would encroach into the minimum 20' foot clearance requirements for fire access roadways, said parking, stopping or standing shall be restricted by the use of signs or red curb markings (or both) with the requirements.
- 8. <u>Vertical Clearance</u> Fire access roads shall have an unobstructed vertical clearance of not less than 13 feet 6 inches. If trees are located adjacent to the fire access roadway, the owner is responsible for keeping the overhanging vegetation cleared to this standard. (See Page 6)
- 9. <u>Inside and Outside Turning Radii</u> The inside turning radius for an access road shall be 40 feet or greater. The outside turning radius for an access road shall be 56 feet or greater. (See Pages 5 & 6).
- 10. <u>Turn-around/Hammerheads</u> Terminating roadways in excess of 150 feet shall be designed to accommodate emergency equipment to turn around using a hammerhead or cul-de-sac as specified in appendix D of the California Fire Code. The minimum cul-de-sac radius is 40 feet with no parking allowed.
- 11. <u>Turn Outs</u> Turn outs shall be provided for any road longer than 400 feet long and every 400 feet thereafter. Roadway turnouts shall be a minimum of 10 feet wide and 30 feet long with a minimum 25 foot taper on each end.

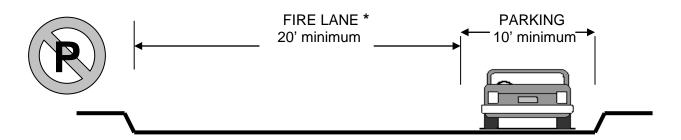
- 12. <u>Gates</u> The Fire Department shall approve Emergency gated access. Proposed gated Communities and/or secured commercial/industrial sites shall comply with the El Dorado County Regional Standard B002.
- 13. <u>Speed Bumps Traffic calming devices such as speed bumps or lower dips are allowed by the discretion of the Fire Chief or his designee.</u>
- 14. <u>Access to Multi-Family Residential Units</u> In all apartments, duplexes, triplexes, condominium or cluster-type housing, all portions of buildings shall be within one hundred fifty feet (150') of the edge of the travel way of an improved public alley, street, driveway or designated fire lane. Walkways to buildings shall be a minimum of five feet (5') in width and shall be provided at no less than one hundred fifty foot (150') intervals.
- 15. <u>Easements</u> Access drives which cross property lines shall be provided with CC&R's, access easements or reciprocating agreements and shall be recorded on the titles of affected properties. Copies of the recorded documents shall be provided at the time of Fire District Plan Review.

# **STANDARD**



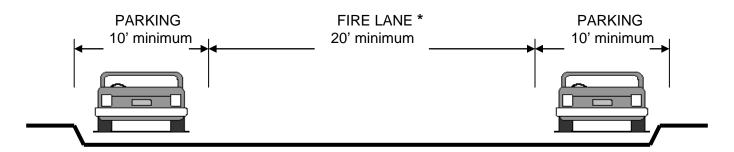
#### ROADWAY 20 - 29 FEET

Parking prohibited.
Roadway is required to be posted as a fire lane.



# **ROADWAY AT LEAST 30' BUT LESS THAN 39'**

Parking permitted on one side only.



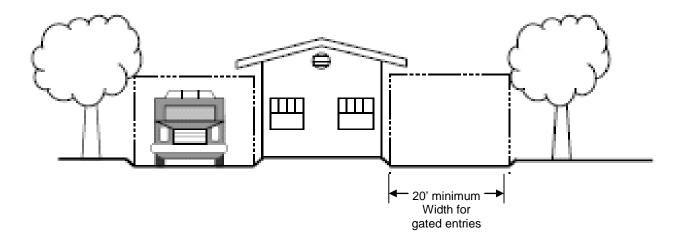
# **ROADWAY 40' OR WIDER**

Parking permitted on both sides

Std. #B-003

Emergency Access Roadways Rev. 05-05-09

# Fire Department Access Roadway Clearance For Typical Gated Community Security Post



# PROPER CLEARANCE PROVIDED

Eaves and vegetation do not encroach upon the 20'- wide by 13'-6" High fire access roadway envelope required for gated entries.