



Menlo Park Fire Protection District Fire Prevention Bureau

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MENLO PARK FIRE DISTRICT STANDARD PRIVATE ROADS AND DRIVEWAYS

Standards include requirements for Gates, Turnarounds & Turnouts

SCOPE. This standard provides the minimum requirements necessary for Private Roads and Driveways. Private Roads or Driveways exceeding the definition below, shall comply with the California Fire Code (CFC), Chapter 5 and Appendix D. Where there is a conflict between the Fire Code and this Standard, the more specific requirement shall apply.

When necessary, these minimum standards will be increased to ensure adequate access for fire apparatus and the public. Some factors that may contribute to these increases are walls or cliffs along roads, angle of approach or departure, grade/slope and the likelihood of future obstructions.

PLAN CHECKS

Plan check. Two copies of a clear accurate site plan (with scale shown) are required for plan review. Plans shall include fire hydrant location(s) with the submittal. When approved, one copy will be kept by the Fire Prevention Division and all the others will be returned to the applicant. Final approval is subject to an on site inspection.

Gates. The design for all gates across private roads and driveways shall be approved by the Fire District. Plans and specifications shall be submitted to the Fire District for review and approval prior to construction.

1. DEFINITIONS

ALL WEATHER ROAD: A road or driveway constructed of asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds (34 050 kg).

PRIVATE ROAD: An access road that is outside the boundaries of the properties being served and/or serving 3 or more dwelling units.

DRIVEWAY: An access road serving not more than 2 dwelling units and is located within the boundaries of the properties being served.

2. GENERAL REQUIREMENTS

Surface. All the items in this standard shall meet the requirements for an all weather road.

Landscape. Landscaping shall not interfere with the required fire apparatus access.

Parking. Parking (or any other obstruction) will not be allowed on any of the items in this standard, unless additional space is provided and approved.

Fire Lane Signs. Installation and placement of signs and markings and designating fire lanes shall be in accordance with Menlo Park Fire Protection District Standard, "Fire Lane Requirements."

Easements. All access improvements (roads, turnarounds and turnouts) required by the CFC and this Standard shall be within recorded easements or the public right-of-way.

Bridges and elevated surfaces. Where a bridge or an elevated surface is part of the private roadway or driveway, the bridge shall be constructed and maintained in accordance with the CFC Chapter 5.

Address markers. All buildings shall have a permanently posted address, which shall be placed at each driveway entrance and be visible from both directions of travel along the road. In all cases, the address shall be posted at the beginning of construction and shall be maintained thereafter, and the address shall be visible and legible from the road on which the address is located. Address signs along one-way roads shall be visible from both the intended direction of travel and the opposite direction.

Where multiple addresses are required at a single driveway, they shall be mounted on a single post, and additional signs shall be posted at locations where driveways divide.

Where a roadway provides access solely to a single commercial or industrial business, the address sign shall be placed at the nearest road intersection providing access to that site.

Grades. The gradient for private roadways and driveways shall be in accordance with CFC Appendix D. Turnarounds and cul-de-sacs shall not have a grade greater than 5% in any direction. Turnouts, curves, and 90° turns shall not have a grade greater than allowed for the road they are on. Transitions between grade changes shall not exceed 5% and shall not interfere with the angle of approach, angle of departure or high centering of fire apparatus.

Timing of Installation. Access roadways and water supply (including the items required by this standard) shall be provided prior to and kept in place during the time of construction

3. DRIVEWAYS

Driveway Specifications. Driveways shall be provided when any portion of an exterior wall of the first story of a building is located more than 150 feet (45 720 mm) from a fire apparatus access road. Driveways shall provide a minimum unobstructed width of 16 feet (3658 mm) and a minimum unobstructed height of 13 feet 6 inches (4115 mm). Driveways in excess of 150 feet (45 720 mm) in length shall be provided with turnarounds. Driveways in excess of 500 feet (60

960 mm) in length and less than 20 feet (6096 mm) in width shall be provided with turnouts in addition to turnarounds. A driveway shall not serve in excess of 2 dwelling units.

Exception: When such driveways meet the requirements for an access road in accordance with the *International Fire Code*.

Turnarounds. Driveway turnarounds shall have inside turning radii of not less than 30 feet (9144 mm) and outside turning radii of not less than 45 feet (13 716 mm). Driveways that connect with a road or roads at more than one point may be considered as having a turnaround if all changes of direction meet the radii requirements for driveway turnarounds. Driveways exceeding 1 mile in length shall be provided with approved turnaround areas at ½ mile intervals.

Turnouts. Driveway turnouts shall be an all-weather road surface at least 10 feet (3048 mm) wide and 30 feet (9144 mm) long. Driveway turnouts shall be located every 500 feet or at the midpoint if the road is 1,000 feet or less.

Gates. The design for all gates across private roads shall be approved by the Fire District. Gates securing roadways shall comply with all of the following criteria:

1. A minimum clear, unobstructed width of 16 feet shall be provided.
2. Gates shall be of the swinging or sliding type.
3. Construction of gates shall be of materials that allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. All locking devices shall provide for Fire District access. Electric gates shall have a Knox override key switch installed.
6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or when a key box containing the key(s) to the lock is installed at the gate location.
7. Locking device specifications shall be submitted for approval by the fire code official.

4. PRIVATE ROADWAYS

Roadway Specifications. Private roadways serving 3 or more residential occupancies shall be all-weather roads with a minimum width of 20 feet (6096 mm) and a clear height of 13 feet 6 inches (4115 mm); shall be designed in accordance with CFC Appendix to accommodate the loads and turning radii for fire apparatus; and have a gradient negotiable by the specific fire apparatus normally used at that location within the jurisdiction. Dead-end roads in excess of 150 feet (45 720 mm) in length shall be provided with turnarounds as specified by CFC Appendix D. Access roads exceeding 1 mile in length shall be provided with approved turnaround areas at ½ mile intervals.

Marking of roads. . All road identification signs and supports shall be of noncombustible materials. Signs shall have minimum 4-inch-high (102 mm) reflective letters with 1/2 inch (12.7 mm) stroke on a contrasting 6-inch-high (152 mm) sign. Road identification

signage shall be mounted at a height of 7 feet (2134 mm) from the road surface to the bottom of the sign.

Marking of Fire Protection Equipment. Fire protection equipment and fire hydrants shall be clearly identified accordance with Menlo Park Fire District Standard, “Water Supplies, Fire Hydrants.” On-site fire hydrants shall not be obstructed.

Gates. The design for all gates across private roads shall be approved by the Fire District. Gates securing roadways shall comply with all of the following criteria:

1. A minimum clear, unobstructed width of 20 feet shall be provided.
2. The location of the gate shall have a minimum setback of 40 feet from the intersection with any road.
3. Gates shall be of the swinging or sliding type.
4. Construction of gates shall be of materials that allow manual operation by one person.
5. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
6. All locking devices shall provide for Fire District access. Electric gates shall have a Knox override key switch installed.
7. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or when a key box containing the key(s) to the lock is installed at the gate location.
8. Locking device specifications shall be submitted for approval by the fire code official.

Cul-de-sacs, Curves, and 90° Turns. Cul-de-sacs, curves, and 90° turns shall be in accordance with CFC Appendix D. No obstructions are allowed within the cul-de-sac, such as trees, planters, islands etc.