SECTION 5

SITE ACCESS (SA)

5-1 GENERAL - Driveways shall meet sight distance, width, type and design requirements as discussed in these Design Standards for both ingress and egress movements.

Vehicles backing out of driveways onto the roadway shall only be permitted for single family residential or duplex land use on residential streets where speeds are at or below 25 MPH and sight distance is not an issue. Other land uses shall be designed so both ingress and egress vehicles are traveling forward.

Driveways shall be located to provide at least five (5) feet between the driveway's traveled way and appurtenances such as fire hydrants, poles, drop inlets, etc. No portion of an access will be permitted within curb returns. Driveways must intersect public and private streets at a ninety degree angle whenever possible, and never less than a 75 degree angle.

The City recognizes that infill projects (projects with older, previously developed areas) may have certain constraints such as lot size, existing driveways near the property line on adjacent parcels, etc. which may deem it impractical to achieve the requirements contained in these Design Standards for site access. Infill projects such as these will be evaluated on a case-by-case basis by the City; however, the goal will be to achieve the requirements contained herein to the extent practicable.

5-2 DRIVEWAY LOCATIONS

- **A. MINOR AND PRIMARY RESIDENTIAL STREETS** For single family residential or duplex, the following shall apply:
 - 1. Driveways shall be at least ten (10) feet apart as measured edge to edge, except in cul-de-sac bulbs and the outside portion of elbows, where the minimum shall be five (5) feet. For corner parcels, the driveway shall front whichever street is projected to have a lower traffic volume, and the driveway shall be located at least thirty-five (35) feet from the curb return unless otherwise approved by the City Engineer.
 - 2. Where residential streets intersect collector or arterial streets there shall be no driveways on the residential street within 100 feet of said intersection unless otherwise approved by the City Engineer.
- **B. COLLECTOR OR ARTERIAL STREETS** Where parcel size permits, driveways shall be at least 200 feet apart on collector and arterial streets. Driveways shall be at least 150 feet from an intersection on collector streets.
- **5-3 NUMBER OF DRIVEWAYS SERVING A PARCEL OR SITE** For single family residential or duplex land uses, only one driveway per parcel will be permitted, except where circular drives are proposed and approved by the City Engineer.

For other land uses, the number of driveways shall be minimized, but not to a point that could cause local congestion within the public right-of-way. Consolidation of driveways with adjacent parcels shall occur whenever possible. Where driveway location standards cannot be met for a parcel, the City may require that the only access to that parcel be achieved via cross access over an adjacent parcel.

Where land uses other than single family residential or duplex are adjacent, the City requires cross access to minimize motorists having to use the street to get from one development to another whenever possible.

For projects requiring a Traffic Study, the study shall evaluate the proposed site access for the project. The study shall discuss balancing the number of driveways for the project so the number of driveways is minimized, while still providing a sufficient number of access points to minimize congestion and delay.

5-4 RIGHT TURN DECELERATION LANES FOR DRIVEWAYS - A right turn deceleration lane shall be provided for a driveway if all of the following conditions are met:

A. Conditions -

- 1. The driveway is located on an arterial.
- 2. Right turn ingress volume is expected to exceed fifty (50) vehicles during peak hour flows on the roadway. For right turn ingress volumes between ten (10) vehicles and fifty (50) vehicles, a right turn curb taper shall be constructed.
- 3. There is ample room and frontage to fit a deceleration lane as determined by the City Engineer.
- **4.** The travel speed of the roadway, as determined by the City Engineer, equals or exceeds 30 mph.

There may be cases where some of the above criteria are not met, but City staff may still require a deceleration lane in the interest of safety.

5-5 LEFT TURN DECELERATION/ACCELERATION LANES FOR DRIVEWAYS - Left turn deceleration lanes (left turn pockets) are not required on residential streets.

On collectors and arterials, and where left turns in will be permitted, a left turn deceleration lane shall be provided. This may be in the form of a separate left turn pocket or a continuous two (2)-way-left-turn-lane. The minimum left turn pocket length shall be 200 feet plus a 120 foot entry taper. Longer left turn pockets may be required if a Traffic Study demonstrates the need.

Separate left turn acceleration lanes are not typically required.

- 5-6 MINIMUM OFFSET FOR OPPOSING DRIVEWAYS For land uses other than single family residential or residential duplex, the centerline of driveways on opposite sides of the street shall either be in direct line, or have a minimum offset distance as listed below (measured from the centerline of the driveways):
 - **A. MINOR AND PRIMARY RESIDENTIAL STREETS** For driveways on minor and primary residential streets, the minimum offset shall be 100 feet where lot size permits.
 - **B. COLLECTOR OR ARTERIAL STREETS** For driveways on collectors and arterials, the minimum offset shall be 200 feet where lot size permits.

Where a raised median is provided along the center of the street separating conflicting turning movements, the offset requirements as stated above will not apply.

5-7 SIGNALIZED DRIVEWAYS - The need for signalized driveways shall be based on warrants contained in the latest edition of the California MUTCD. Any such evaluation shall be performed by the Consultant as part of the Traffic Study for the project.

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5-8 GROOVED CONCRETE DRIVEWAY - Any driveway with a grade of ten (10) percent or greater, will be required to provide a grooved concrete surface, unless the requirement is waived by the Fire Department.

- **5-9 VEHICLE STORAGE** Parking facilities must allow for full internal vehicle circulation, delivery/maintenance/business related truck loading/unloading space, sufficient storage capacity for inbound and outbound vehicles, and sufficient storage capacity for drive through facilities.
- **5-10 FIRE APPARATUS ACCESS ROADS** Fire apparatus access roads are required for project sites where fire apparatus access is not provided by an acceptable publicly maintained street. Every facility, building, or addition to a building must be accessible by an approved fire apparatus access road. Fire apparatus access roads must meet the following requirements:
 - **A. COMMERCIAL AND INDUSTRIAL DEVELOPMENTS -** For driveways on minor and primary residential streets, the minimum offset shall be 100 feet where lot size permits. Buildings exceeding three stories, 30 feet in height, or 62,000 square feet in area are required to have at least two means of fire apparatus access for each structure. However, if projects have a gross building area of up to 124,000 square feet equipped with an approved automatic sprinkler system, a single fire apparatus access road will be acceptable.
 - **B. SINGLE AND DUPLEX RESIDENTIAL DEVELOPMENTS** Projects having more than 30 dwelling units shall be equipped with two separate and approved fire apparatus access roads unless all dwelling units are equipped throughout with an approved automatic sprinkler system. All driveways over 150 feet must meet the requirements for dead-end fire apparatus access roads.
 - **C. MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENTS** Projects having more than 100 dwelling units shall be equipped with two separate and approved fire apparatus access roads. However, if projects have up to 200 dwelling units with approved automatic sprinkler systems throughout all buildings, a single approved fire apparatus access road will be acceptable. All driveways over 150 feet must meet the requirements for dead-end fire apparatus access roads.
 - **D. ROAD SECTIONS** Fire apparatus access roads must: 1) meet the Structural Section requirements identified in the Streets section of the Design Standards; 2) have a grade of less than 10 percent, unless approved otherwise by the Fire Chief; 3) have a minimum turning radius of 200 feet; 4) have a minimum road width of 26 feet, exclusive of shoulders, on both sides of fire hydrants and in the immediate vicinity of buildings and facilities over 30 feet in height; 5) not contain any overhead utility and power lines within the roadway to buildings and facilities over 30 feet in height; and 6) meet the requirements in Table 5-1 for dead-ends.

TABLE 5-1
REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

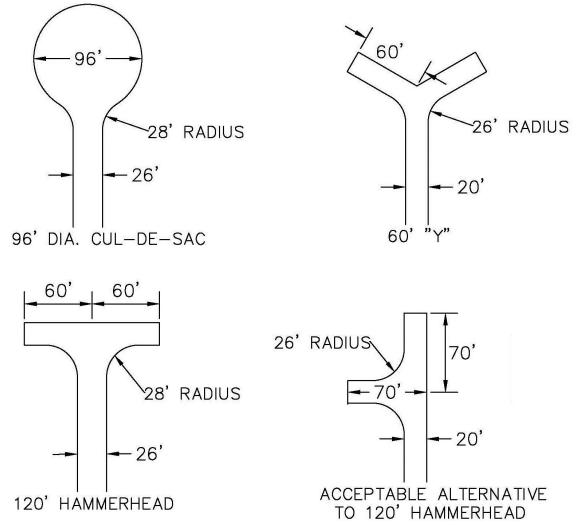
LENGTH	WIDTH	TURNAROUNDS REQUIRED
(feet)	(feet)	
0-150	20	None required.
151-500	20	Refer to Figure 5-1.
501-750	26	Refer to Figure 5-1.
Over 750	Special approval required.	

E. ROAD LOCATIONS - Where two fire apparatus access roads are required, they must 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 accesses. At least one fire

apparatus access road to a building 30 feet in height or more must be located within a minimum of 15 feet and a maximum of 30 feet from the building and must be positioned parallel to one entire side of the building.

- **F. GATES** Gates must: 1) be a minimum of 20 feet in width; 2) be of the swinging or sliding type; 3) be operable manually by a single person; 4) maintained in an operative condition at or times and replaced/repaired when defective; 5) be equipped with a means of opening the gate by the Fire Department for emergency access if electric (emergency opening devices must be approved by the Fire Code Official and be in accordance with UL 325) or be openable by forcible entry tools or a key (when a box containing the key is installed at the gate location) if manual; 6) have all locking device specifications approved by the Fire Code Official; and 7) if intended for automatic operation, be designed, constructed and installed to comply with the requirements of ASTM F 2200.
- **G. SIGNS** Fire apparatus access roads shall be posted on both sides as a fire lane for roads 20 to 26 feet in width and on one side for roads more than 26 feet in width. Signs must meet CA MUTCD requirements. Signs may also be required by the fire code official in additional locations.

FIGURE 5-1
REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS



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