

## SECTION 5

### SITE ACCESS

**This section establishes requirements for site access and driveway locations.**

**5-1 GENERAL** – Driveways shall meet sight distance requirements as discussed in Section 7-12 of these Design Standards for both ingressing and egressing movements. Driveway width, type and design shall conform to Section 7-14 of these Design Standards.

Backing of vehicles out of driveways onto the roadway shall only be permitted for single family residential or duplex land use. Other land uses shall be designed so both ingressing and egressing vehicles are traveling forward.

Driveways shall be located to provide at least five (5) feet between the driveways's traveled way and appurtenances such as fire hydrants, poles, and drop inlets.

The City recognizes that infill projects (projects within 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.

**NOTE: Distances discussed below are measured to driveway centerlines. Where distances refer to an intersection, the intersection point of reference is the near curb return.**

**5-2 DRIVEWAY LOCATIONS ON MINOR AND PRIMARY RESIDENTIAL STREETS** – For single family residential or duplex, the following shall apply:

**A.** 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 as far from the curb return as possible, i.e., at the far end of the lot.

For Land uses other than single family residential or duplex, the following shall apply:

**B.** Driveways shall be at least 100 feet apart. There shall be no driveways within 100 feet of an intersection. Where residential streets intersect collector or arterial streets there shall be no driveways on the residential streets within 150 feet of said intersection.

**5-3 DRIVEWAY LOCATIONS ON COLLECTOR OR ARTERIAL STREETS** – There shall be no driveways along collector or arterial streets serving single family residential or duplex land uses. Driveways fronting roadways which have been classified in the General Plan as expressways shall be at least 500 feet apart, shall be right-turn-in, right-turn-out only, and shall have a standard right turn deceleration lane. No portion of a driveway shall be allowed within the straight portion of an acceleration or deceleration lane, however, driveways are permitted within acceleration and deceleration lane tapers. No portion of a driveway shall be allowed within a separate bus turnout, including tapers.

Driveways shall be at least 200 feet apart on collector streets and at least 250 feet apart on arterial streets. Driveways on collector streets shall be at least 150 feet from a collector/collector or a collector/arterial intersection or per standard drawing ST-46 if the collector has a right turn lane. Driveways on arterial streets near an arterial/collector or arterial/arterial intersection shall be located and restricted per standard drawing ST-46.

**5-4 NUMBER OF DRIVEWAYS SERVING A PARCEL OR SITE** – For single family residential or duplex land uses, only one (1) 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 the only access to that parcel be achieved via cross access over an adjacent parcel. This shall satisfy legal requirements for access to a parcel, and the City therefore shall not be required to permit direct access to any parcel via a driveway along the parcel's frontage.

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

For projects requiring a Traffic Study, the study shall evaluate the proposed site access for the project (see Section 4-5 (F), "Site Access"). 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.

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

- A.** The driveway is located on an arterial or expressway.
- B.** Right turn ingress volume is expected to exceed fifty (50) during peak hour flows on the roadway. For right turn ingress volumes between ten (10) and fifty (50) a right turn curb taper shall be constructed in conformance with the Standard Drawings.
- C.** There is ample room and frontage to fit a deceleration lane as determined by the City Engineer.
- D.** The travel speed of the roadway, as determined by the City Engineer, equals or exceeds 45 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.

There may be cases where it will be necessary to merge a deceleration lane with an existing acceleration lane. Where the beginning of a deceleration taper will be within 100 feet of the end of acceleration taper, then the deceleration and acceleration shall be merged to form a continuous auxiliary lane.

There may be cases where it is desirable to provide room for right turn deceleration, but an entirely separate deceleration lane is either too difficult to install, due to design constraints, or is not reasonable. In these cases, a right turn curb taper shall be provided in accordance with the Standard Drawing.

Right turn acceleration lanes for driveways shall not be provided.

**5-6 LEFT TURN DECELERATION/ACCELERATION LANES FOR DRIVEWAYS** – Left turn deceleration lanes (left turn pockets) are not required on collector or residential streets.

On arterials and expressways 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 on a six (6)-lane road, or a continuous two (2)-way-left-turn-lane on a four (4)-lane road. 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.

**5-7 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.** For driveways on minor and primary residential streets the minimum offset shall be 150 feet.
- B.** For driveways on collectors the minimum offset shall be 200 feet.
- C.** For driveways on arterials and expressways the minimum offset shall be as specified in detail ST-47.

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.

**5-8 RESTRICTED TURNING MOVEMENTS FOR DRIVEWAYS –** Turning movement restrictions shall apply to unsignalized driveways on arterial and expressway streets as listed below:

- A.** Left turns out of driveways onto six (6)-lane roads shall be prohibited.
- B.** On six (6)-lane roads, driveways within 400 feet of an intersection containing left turn pockets shall be right turn-in, right turn out only. No driveways will be permitted in Zones One (1) and Six (6) as shown in detail ST-46.
- C.** On 6-lane roads, left turns into driveways may be allowed if all of the following conditions are met:
  - 1.** The standard left turn lane length and bay taper can be achieved.
  - 2.** Opposing traffic will not queue-up to the point of blocking the left turn in movement. Such a queuing calculation shall be provided by the Consultant preparing the Traffic Study for the project, and the analysis shall use the City's projected modeled traffic volumes for the model's horizon year.
  - 3.** The driveway is at least 400 feet downstream and 600 feet upstream of an intersection containing left turn pockets.
- D.** On four (4)-lane roads, see detail ST-46 for permitted turning movements.
- E.** Turning movements may be restricted for any driveway where deemed necessary by the City Engineer because of safety concerns.

**5-9 SIGNALIZED DRIVEWAYS** – The need for signalized driveways shall be based on warrants contained in the latest edition of the Caltrans Traffic Manual. Any such evaluation shall be performed by the Consultant as part of the Traffic Study for the project. For a more detailed description of a traffic signal that needs assessment, refer to Section 4-5 (G) (Traffic Impact Studies) of these Design Standards. Attention is directed to signal spacing requirements as discussed in that section. The City will typically deny a request for a new signal if spacing requirements cannot be met.

Attention is also directed to Section 4-5 (F) for Minimum Required Throat Depth (MRTD) for signalized access locations.

The City does not share in the cost of design and construction of traffic signals which solely serve private property (i.e. a “tee” intersection where the driveway is situated as the “stem” of the “tee”). The Developer shall bear all costs of providing signalization at the private access point, including design and construction. In the case where a private access point comprises the fourth (4<sup>th</sup>) leg of an intersection where the other three (3) legs are public streets, the Developer shall ultimately be 100% financially responsible for the private leg (or approximately one-fourth the cost of signalizing the intersection). The obligation is in addition to sharing in the cost of the remaining signal via payment of the City’s Traffic Mitigation Fee.

See Section Six (6) of these Design Standards for more information on traffic signals.

The interconnect shall connect the subject signal with at least one existing traffic signal. If the subject signal is between two existing signals, the interconnect shall connect all three signals.

If a City Parcel is adjacent to a new fiber run, a fiber stub shall be provided.

Unless specified otherwise on the plans, six (6) feet of copper and/or fifteen (15) feet of fiber optic cable slack shall be provided in each pull box. Fifty (50) feet of copper and/or one hundred (100) feet of fiber optic cable slack for each signal interconnect cable run shall be provided in the dedicated communications Home Run pull box in front of each signal controller or the last pull box before the controller if a dedicated communications Home Run pull box is not available.

Signal interconnect cable (SIC) shall be 9/125  $\mu\text{m}$  wavelength, 72 to 216 strand, single mode, indoor/outdoor, loose tube, all-dielectric fiber optic cable as specified on the plans. 24 strand fiber shall be allowed where the majority of a pre-existing SIC conduit run’s pull boxes are smaller than No. 6.

**5-10 MINIMUM REQUIRED THROAT DEPTH** - Driveways shall meet the Minimum Required Throat Depth (MRTD) requirements as discussed in Section 4-5 (F) of these Design Standards. In the case of “drive-thru” facilities, attention is directed to the latter part of Section 4-5 (G) for minimum on-site storage distances for ingressing vehicles.

On-site parking shall not be permitted within the MRTD area. The MRTD requirement does not apply to single family residential or duplex land uses.

In cases where a Traffic Study is not required or in cases where there is insufficient data available to calculate the MRTD in accordance with Section 4-5 (F), Exhibit 4-2 shall be used to determine Minimum Required Throat Depth for access points for the site. In cases where a traffic study will be provided, but the access points have not yet been determined for a site, Exhibit 4-2 shall be used to estimate the MRTD during the site design process. In these cases, the final MRTD requirements shall be determined by the Traffic Study via the methodology in Section 4-2 (F). The distances shown in Table 5-1 represent vehicle storage equivalents, which means the total required distance may be achieved by summing the throat depths for several access points if more than one access point is to serve the site. In these cases, the distance shown in Exhibit 4-2 shall be prorated to each access point to the nearest 25 feet based on the estimated relative percent usage of each access point.

**TABLE 5-1  
 MINIMUM THROAT DEPTH**

LAND USE	SIZE		STREET RIGHT-OF-WAY		
			<60'	60'	>60'
<b>Apartment, Condos, Mobile Homes, Planned Unit Development</b>	<b>0</b>	- <b>80 units</b>	<b>25'</b>	<b>50'</b>	<b>50'</b>
	<b>81</b>	- <b>160</b>	<b>50'</b>	<b>50'</b>	<b>50'</b>
		> <b>160</b>	<b>50'</b>	<b>50'</b>	<b>100'</b>
<b>Quality Restaurant</b>	<b>0</b>	- <b>15,000 SF</b>	<b>25'</b>	<b>25'</b>	<b>25'</b>
		> <b>15,000</b>	<b>25'</b>	<b>25'</b>	<b>50'</b>
<b>High Turnover/Sit Down Restaurant</b>	<b>0</b>	- <b>8,000</b>	<b>25'</b>	<b>25'</b>	<b>25'</b>
<b>Drive-Thru Restaurant</b>	<b>0</b>	- <b>2,000 SF</b>	<b>25'</b>	<b>25'</b>	<b>25'</b>
	<b>2,001</b>	- <b>3,000</b>	<b>25'</b>	<b>50'</b>	<b>100'</b>
	<b>3,001</b>	- <b>5,000</b>	<b>50'</b>	<b>75'</b>	<b>150'</b>
		> <b>5,000</b>	<b>75'</b>	<b>100'</b>	<b>225'</b>
<b>Motel</b>	<b>0</b>	- <b>150 rooms</b>	<b>25'</b>	<b>25'</b>	<b>25'</b>
	<b>151</b>	- <b>400</b>	<b>25'</b>	<b>75'</b>	<b>125'</b>
		> <b>400</b>	<b>25'</b>	<b>100'</b>	<b>175'</b>
<b>Convention Hotel</b>	<b>0</b>	- <b>150 rooms</b>	<b>50'</b>	<b>50'</b>	<b>100'</b>
	<b>151</b>	- <b>400</b>	<b>50'</b>	<b>150'</b>	<b>250'</b>
		> <b>400</b>	<b>50'</b>	<b>250'</b>	<b>350'</b>
<b>Office Park</b>	<b>0</b>	- <b>20,000 SF</b>	<b>25'</b>	<b>25'</b>	<b>25'</b>
	<b>20,001</b>	- <b>50,000</b>	<b>25'</b>	<b>50'</b>	<b>75'</b>
	<b>50,001</b>	- <b>100,000</b>	<b>25'</b>	<b>75'</b>	<b>175'</b>
	<b>100,001</b>	- <b>150,000</b>	<b>75'</b>	<b>125'</b>	<b>250'</b>
	<b>150,001</b>	- <b>300,000</b>	<b>125'</b>	<b>250'</b>	<b>500'</b>
		> <b>300,000</b>	<b>200'</b>	<b>400'</b>	<b>825'</b>
<b>General Office</b>	<b>0</b>	- <b>50,000 SF</b>	<b>25'</b>	<b>25'</b>	<b>50'</b>
	<b>50,001</b>	- <b>100,000</b>	<b>25'</b>	<b>50'</b>	<b>100'</b>
	<b>100,001</b>	- <b>150,000</b>	<b>50'</b>	<b>75'</b>	<b>175'</b>
	<b>150,001</b>	- <b>200,000</b>	<b>50'</b>	<b>100'</b>	<b>225'</b>
	<b>200,001</b>	- <b>300,000</b>	<b>75'</b>	<b>175'</b>	<b>350'</b>
	<b>300,001</b>	- <b>400,000</b>	<b>125'</b>	<b>225'</b>	<b>450'</b>
		> <b>400,000</b>	<b>150'</b>	<b>275'</b>	<b>575'</b>

**TABLE 5-1 (cont.)  
 MINIMUM THROAT DEPTH**

LAND USE	SIZE	STREET RIGHT-OF-WAY		
		<60'	60'	>60'
<b>Light Industrial</b>	<b>0 - 100,000 SF</b>	25'	25'	50'
	<b>100,001 - 200,000</b>	25'	50'	100'
	<b>200,001 - 300,000</b>	50'	75'	150'
	<b>300,001 - 400,000</b>	50'	100'	200'
	<b>&gt; 400,000</b>	75'	125'	250'
<b>Industrial Park</b>	<b>0 - 500,000 SF</b>	25'	25'	50'
<b>Discount Store</b>	<b>0 - 30,000 SF</b>	25'	25'	25'
	<b>30,001 - 50,000</b>	25'	50'	75'
	<b>50,001 - 75,000</b>	125'	50'	125'
	<b>&gt; 75,000</b>	50'	75'	175'
<b>Shopping Center</b>	<b>0 - 10,000 SF</b>	25'	25'	50'
	<b>10,001 - 20,000</b>	25'	50'	125'
	<b>20,001 - 30,000</b>	50'	100'	175'
	<b>30,001 - 40,000</b>	75'	125'	225'
	<b>40,001 - 100,000</b>	75'	150'	250'
	<b>100,001 - 150,000</b>	100'	175'	375'
	<b>150,001 - 200,000</b>	125'	250'	500'
	<b>200,001 - 250,000</b>	150'	300'	625'
	<b>250,001 - 600,000</b>	175'	375'	750'
	<b>600,001 - 700,000</b>	200'	375'	750'
	<b>700,001 - 800,000</b>	225'	425'	875'
	<b>800,001 - 900,000</b>	250'	500'	975'
	<b>900,001 - 1 million</b>	275'	550'	1075'
	<b>&gt; 1 million</b>	425'	825'	1625'
<b>Drive-In Bank</b>	<b>0 - 10,000 SF</b>	25'	25'	50'
	<b>10,001 - 20,000</b>	50'	50'	200'
	<b>20,001 - 30,000</b>	75'	150'	300'
	<b>30,001 - 40,000</b>	100'	200'	400'
	<b>&gt; 40,000</b>	150'	250'	500'
<b>Supermarket</b>	<b>0 - 20,000 SF</b>	25'	25'	50'
	<b>20,001 - 30,000</b>	25'	50'	75'
	<b>30,001 - 40,000</b>	25'	50'	100'
	<b>&gt; 40,000</b>	25'	75'	150'
<b>Medical Clinic</b>	<b>0 - 100 employees</b>	25'	25'	50'