

VIII. STREET DESIGN

Street layout shall be designed in conformance with Caltrans Highway Design Manual. Some factors to be considered are: safety, design speed, type of street, topography, geotechnical features, profile and utilities including drainage.

A. Design criteria

1. Minimum curve radii
Major street-700 feet
Collector street-400 feet
Local street-250 feet
2. Street intersections
300 feet minimum distance (curb to curb) between street intersections
150 feet minimum distance (curb to driveway edge) between street intersection and driveways
3. Street intersection curb radii
30 feet
4. Longitudinal slope
.006 ft/ft (minimum)
5. Grade Break in vertical curves
0.5% Max.
If exceed 0.5%, provide a vertical curve
6. Minimum length of tangents between centerline curves
50 feet
7. Street cross-slope
2% minimum (typical)
4% maximum.
8. Cul-de-sac's length
1000 feet maximum

9. Cul-de-sac's minimum face of curb radius
 Residential- 40 feet
 Industrial-60 feet

10. Streets ultimate widths*

<u>Type</u>	<u>R/W Width</u>	<u>Curb Width</u>	<u>PSUE**</u>
Major Arterial	124'	104'	10'
Secondary Arterial	90'	70'	10'
Collector	60'	40'	10'
Local	56'	36'	10'
Frontage Local	40'	30'	10'
Frontage Collector	44'	34'	10'
Frontage Industrial	42'	36'	10'
Hillside Local	48'	32'	10'
Hillside Collector	56'	36'	10'
Hillside Major	80'	64'	10'
Industrial Major	80'	68'	10'
Industrial Minor	60'	48'	10'

* Excluding additional right-of-way at significant intersections to accommodate turning lanes

** Both sides of street

11. Traffic index and pavement section

Street Classification	TI*	Mini. AC Thickness (Inch) **	Mini. Class II AB (Inch) **
Public Streets			
Local Residential Streets	6	5	8
Frontage Local			
Local			
Hillside Local			
Collector Residential Streets	8	5	8
Collector			
Hillside Collector			
Frontage Collector			
Local Industrial Streets	9	6	8
Frontage Industrial			
Industrial Minor			
Collector Industrial Streets	10	6	8
Frontage Collector			
Industrial Collector			
Hillside Major			
Arterial			
Major Streets	11	8	8
Industrial Major			
Arterial			
Private Streets	5	4	6

* The following criterion can be used to determine a simplified type of street:

<u>Type</u>	<u>Tributary Dwelling Units</u>	<u>Traffic Volume</u>
Local	up to 200	less than 1,400 ADT
Collector	200 to 700	up to 5,400 ADT
Major	excess of 700	greater than 750 vphpl

NOTE: (VPHPL)-Vehicles per (highest) hour per lane (ADT)-Average daily traffic

** The actual depth of AC and AB shall be determined based on soil reports utilizing the State of California Flexible Pavement Design Method. Thickness shown in this table are minimums.

Pavement sections for new roads serving transit areas will need a TI to be established based on actual axle loading calculations for buses.

12. "R" value
Base-78 minimum
Sub-base-50 minimum

B. Streets shall include the following improvements

1. Asphalt concrete paving on aggregate base
2. Curb and gutter
3. Sidewalk with wheel chair ramps
4. Signs, striping and street name signs
5. Bus stops (as required)
6. Driveways serving 2 or more dwelling units shall be constructed to commercial driveway standards. Driveways longer than 150' may require turn-around per the Fire Department.
7. All hillside development will be a special case and require special considerations.