

## GENERAL DESIGN STANDARDS FOR NON-ARTERIAL PUBLIC STREETS

1. Grades along street centerline shall be as follows:

Desirable Maximum: 10%  
Absolute Maximum: 12%  
Minimum: 0.4%

2. Vertical curves shall be placed where grade breaks over 0.5% occur. Summit or sag vertical curves shall be provided with a minimum 0.4% straight grade for a distance of 25 feet either side of the summit or the sag point.
3. Intersections shall occur at right angles whenever possible. Skewed intersections in excess of 15° from a right angle shall not be permitted.
4. A minimum centerline tangent distance of 20 feet shall be required between the EC of a curvilinear street and the prolongation of the nearest right of way line of an intersecting street.
5. A minimum centerline distance of 20 feet with a maximum grade of 1% shall be required between the EVC of a vertical curve and the prolongation of the nearest right of way line of an intersecting street.
6. Cul-de-sac and dead-end streets shall have a maximum length of 600 feet. In all cases, adequate turning provisions for trash trucks, street sweepers, and large emergency vehicles shall be provided.
7. Radii on curvilinear streets shall be 200 feet minimum. Curve angles ( $\Delta$ ) of 90° or greater may require additional street width, elimination of street parking, and/or prohibition of driveways at the discretion of the City Engineer to accommodate safe turning movements and adequate sight distance.
8. Distances between offset or adjacent local street centerline intersections with arterial highway shall be as follows:
- Desirable Minimum: 660 feet  
Absolute Minimum: 440 feet
9. Design speed for non-arterial streets shall be 25 miles per hour. Street horizontal alignments and vertical profiles shall comply with the criteria for safe stopping sight distance per State of California Highway Design Manual.



3-14-06  
DATE APPROVED

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CITY OF ORANGE PUBLIC WORKS DEPARTMENT

GENERAL DESIGN STANDARDS FOR  
NON-ARTERIAL PUBLIC STREETS

STANDARD  
PLAN No.  
124