

# 4.0

## Sight Distance Requirements

Sight distance is one of the most important design issues to be considered for traffic safety. Before any access to a collector or higher street classification is approved, City Engineering will review design plans for adequate sight distance at intersections.

### 4.1

#### Approach Speed

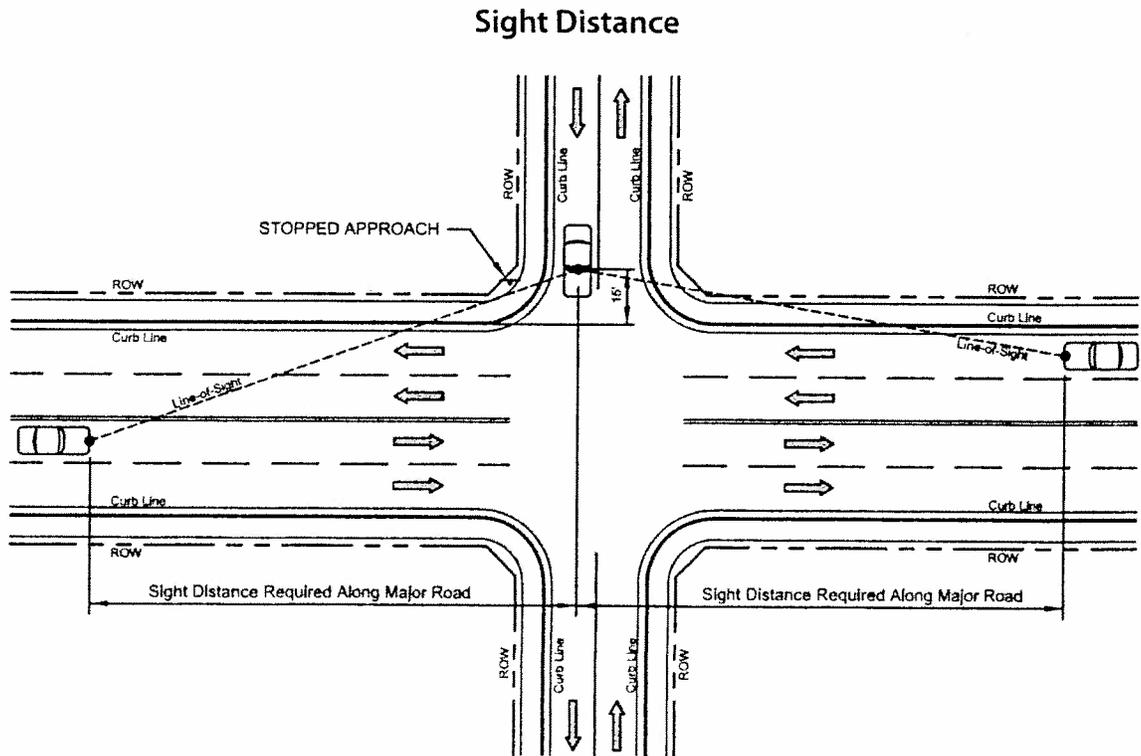
The speed used for determining minimum entering sight distance requirements is assumed to be the posted speed limit. If City Engineering has reason to believe that the operating speed is substantially different than the posted speed they can request that the 85<sup>th</sup> percentile speed be used to determine sight distance. In the case of a new facility, the design speed should be used. For modified cul-de-sacs (knuckles, eyebrows, tee turnarounds, etc) sight distance must be provided based on the expected operating speed of the location.

### 4.2

#### Horizontal Sight Distance

The distance shall be measured from the center of the approach lane at a point fifteen feet (15') behind the flow line of the intersecting street to the center of the nearest approaching traffic lane for each direction. Refer to **Figure 1**.

Figure 1



4.3

**Vertical Sight Distance**

The distance shall be measured to allow a driver at the height of 3.5 feet to see an object 2.0 feet above the roadway at the minimum sight distance described below. For further details, refer to A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials (AASHTO) 2004, Chapter 3, "Elements of Design/Vertical Curves."

4.4

**Intersection Sight Distance**

The minimum sight distance at all public and private street intersections or accesses, and driveways to collector streets or greater shall follow the guidelines below. At no time shall the minimum sight distance be less than the AASHTO stopping sight distance.

Table 1

**Sight Distance**

Speed of Thru Roadway (MPH)	Minimum Sight Distance for Stopped Vehicle (FT)	Grade Correction Distance (FT)					
		Upgrade To:			Downgrade To:		
		3%	6%	9%	3%	6%	9%
15	80	0	-5	-10	+5	+10	+20
20	115	0	-5	-10	+5	+10	+20
25	280	0	-10	-20	+10	+20	+30
30	335	0	-10	-20	+10	+20	+30
35	390	-10	-15	-25	+10	+25	+40
40	445	-10	-20	-30	+10	+30	+50
45	500	-15	-25	-30	+15	+40	+60
50	555	-20	-35	-45	+20	+50	+70

4.5

**Residential Driveway Sight Distance**

The previous sight distance criteria does not apply to single-family back-out drives where sight distance will be provided based on location of the drivers eye when commencing the back-out maneuver. To provide sight distance from driveways to both the street and sidewalk items taller than three (3) feet should not be placed within five (5) feet of the edge of driveway. This restriction extends from the edge of street to ten (10) feet behind the back of sidewalk. This restriction includes solid surface fences and large shrubs. Utility poles, fire hydrants, openly spaced trees, and traffic devices are allowable if visual obstruction is minimal.