

4005.2 **SIGHT DISTANCE TRIANGLE (VISION TRIANGLE)**

- A. The intersection sight distance provisions contained in ‘A Policy on Geometric Design of Highways and Streets’ published by the American Association of State Highway and Transportation Officials (the AASHTO Green Book referenced in Section 4008) are adopted as the presumptive standard applicable to all intersections within the City provided, however, that the Director of Public Works or his designee may, where consistent with public safety, specify greater or lesser intersection sight distances. Unless otherwise required by the Director of Public Works or his designee, all intersections shall be designed, constructed and maintained in accordance with such sight distance provision. Additionally, no landscaping, fence, utility equipment, wall or other structure in excess of thirty six inches in height above the roadway shall be constructed or maintained in the area identified as the sight triangle, nor shall any parking be allowed within the area of the sight triangle.
- B. Streets shall not be designed with intersections on the inside of horizontal curves or at any location in general where sight distance will be inadequate for drivers to tell if they can safely enter the traffic flow or cross the street. The minimum distance from an intersection to a curve shall be the applicable minimum sight distance listed below. The Director of Public Works or his designee may make exceptions for especially difficult design circumstances only if visibility easements to provide adequate sight distance are established. In lieu of visibility easements, additional street right-of-way may be dedicated. Minimum intersection design sight distance standards, as specified in the AASHTO “Green Book” shall be as follows:

Design Speed (MPH)	Minimum Sight Distance (Feet) *
25	280
30	355
35	415
40	470
45	530
50	590
55	645
60	705

* Distance measured from an entering driver’s eye position to the position of the closest approaching vehicle’s far front corner

The entering driver’s eye position shall be assumed 3 feet to the right of the entering street’s centerline, 3.5 feet above the pavement surface, and 9 feet to the nearest pedestrian crosswalk line (marked or unmarked) on the street being entered.

The position of the closest approaching vehicle’s far front corner shall be assumed 3 feet from the edge of the nearest approaching vehicle lane and 4.24 feet above the pavement surface for each direction of travel.

- C. Where stop control is not used, the corner sight distance for residential streets shall be a minimum of 70 m (200') [100 m (300') recommended].
- D. To maintain the minimum sight distance, restrictions on height of embankment, locations of buildings, and screening fences may be necessary. Landscaping in the sight distance triangle shall be low-growing, and shall not be higher than 0.9 m (3') above the level of the intersecting street pavements. Tree overhang shall be trimmed to a line at least 2.4 m (8') above the level of the intersections.

4005.3 **RIGHT-OF-WAY**

- A. Intersections containing primary arterials/secondary arterials as classified by the Major Streets and Highways Map of the Norman COMPLAN shall provide a width of one hundred twenty (120) feet of public right-of-way for a distance of two hundred (200) feet from the intersecting right-of-way. Said right-of-way shall then have a one hundred fifty-foot transition from the one hundred twenty-foot width to a one hundred foot standard width
- B. Variations to this right-of-way requirement shall be granted in accordance with the procedure for plat variations contained in the *Subdivision Regulations of the City of Norman, Oklahoma*.

4006 **TRAFFIC IMPACT OF DEVELOPMENTS**

4006.1 **GENERAL**

When a development will have a significant impact on the traffic pattern (100 vph increase, or more) of the adjacent streets, driveways, and intersections, the developer shall provide a traffic impact analysis. The developer shall provide additional traffic lanes and right-of-way width to the streets or other improvements to mitigate the impact of the development. The City Traffic Engineer shall determine the exact type and quantity of construction required. Each development will be evaluated based on the traffic into and out of the development, the traffic load on the arterial, and current and planned configuration of the arterial, as shown in the City's Major Street and Highway Plan and the trip generation rates for the proposed development, including future phases.

4006.2 **GEOMETRIC DESIGN CRITERIA**

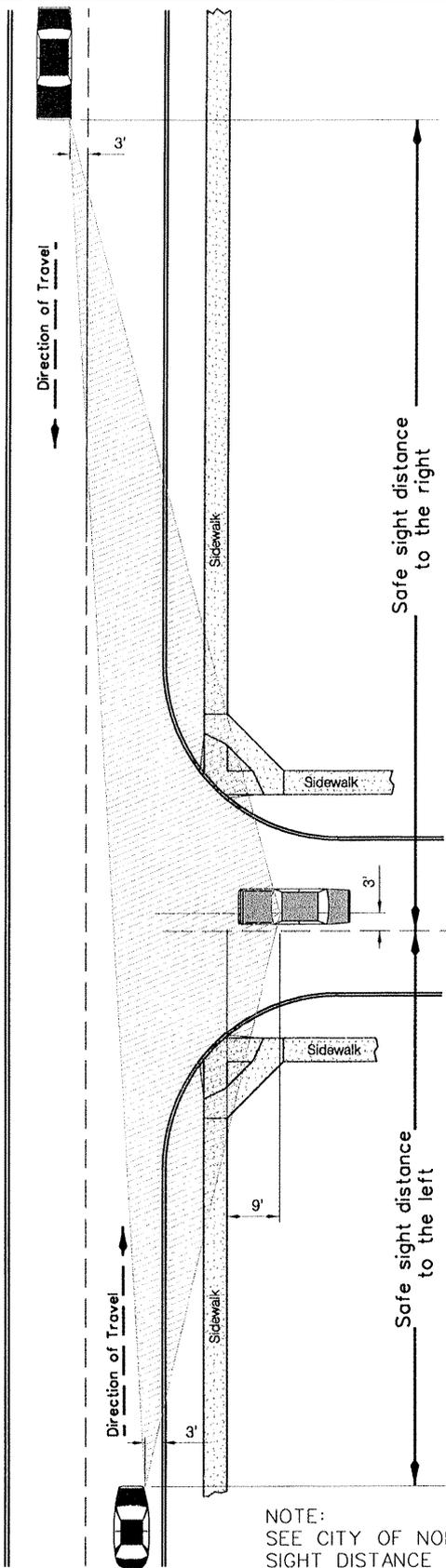
Intersection design (storage, tapers, grades, etc.) shall be based on *National Cooperative Highway Research Report 279, INTERSECTION CHANNELIZATION DESIGN GUIDE*, Transportation Research Board, National Research Council, latest edition.

4006.3 **OUTSIDE LANE**

- A. An outside lane shall be required when:
 1. The development is within 300 m (1,000') of an arterial type intersection.
 2. The arterial will be at or above 130 percent of level C capacity with the addition of the traffic from the development.

4006.4 **DECELERATION LANE**

- A. A deceleration lane is a right turn into a development that has a lane width of not less than 4 m (13') feet wide for a distance of not less than 30 m (100') plus corner radius, measured from the center line of the road on which the right turn is to be executed, and a thirty (30) to one (1) taper back to the existing arterial street width.



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NOTE:
SEE CITY OF NORMAN "STANDARD SPECIFICATIONS" SECTION 4005.2
SIGHT DISTANCE TRIANGLE (VISION TRIANGLE).

INTERSECTION SIGHT DISTANCE

City Engineer Approval:

CITY OF NORMAN, OKLAHOMA

Approval Date:

Revision Date: 5-28-2003

Rev. No. 0

DRAWING NO. ST-36