

- Limiting a proposed entrance to right-in/right-out movements because the parcel does not have enough usable property frontage on the highway (e.g. parcel dimensions, physical constraints) to meet the spacing standards.
- Limiting a proposed signalized entrance to right-in/right-out movements if the proposed entrance does not meet the signalized intersection spacing standards.

Exceptions / Waivers to the Design Standards

For both land development and highway construction projects,* the appropriate intersection sight distance from Table 2-7 must be met for all commercial entrances, intersections, and crossovers. If sight distance can not be met, a request for a design exception (Form LD-440) or design waiver (Form LD-448) shall be submitted in accordance with IIM-LD-227, available at <http://www.virginiadot.org/business/locdes/rd-ii-memoranda-index.asp> Sections 24VAC30-72-50B and 73-50 B in the Regulations also provide details on the sight distance exception process.

For both private developments and highways construction projects, if any design standard in Appendix F (everything except the spacing standards) can not be met, a request for a design exception (Form LD-440) or design waiver (Form LD-448) shall be submitted in accordance with IIM-LD-227, available on the VDOT web site at <http://www.virginiadot.org/business/locdes/rd-ii-memoranda-index.asp>.

Signalized and Unsignalized Intersection Design

At-grade intersections must provide adequately for anticipated turning and crossing movements.

For shoulder applications, Figures 2-11 and 2-12 provides the designer with the basic types of intersection designs and recommendations pertinent to dimensions, radii, skews, angles, and the types of island separations, etc., to be considered.

For curb and gutter applications see AASHTO's A Policy on Geometric Design of Highways and Streets, Chapter 9 (Intersections). This chapter provides additional information to be considered in the design since the site conditions, alignment, grades, sight distance and the need for turning lanes and other factors enter into the type of intersection design.

Sufficient offset dimensions, pavement widths, pluses, and radii shall be shown in the plans by the designer to insure that the sign island is properly positioned.

Care should be taken in the design of four-lane roadways with intersecting two-lane roadways. If traffic conditions clearly warrant a four-lane divided design for the two-lane road at the intersection, the divided design must be constructed for a sufficient distance to allow for the approaching divided design and the subsequent stop condition ahead to be properly signed. The four-lane divided design should not be constructed unless it is clearly warranted and the approaches can be properly signed or the minor road is expected to be improved to a divided status in the near future.

* Rev. 7/10