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 minimum* dimensions, radii, skews, angles, and the types of island separations, etc.

For curb and gutter applications see AASHTO's <u>A Policy on Geometric Design of Highways and Streets</u>, 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.

Figures 2-11 and 2-12 are also applicable for intersection designs without sign islands.

^{*} Rev. 3/11