

TABLE 5.12 The Circular Curve Formulas

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$T = R \tan \frac{\Delta}{2}$	$T =$
$C = 2R \text{ SIN } \frac{\Delta}{2}$	$R =$
$R = \frac{57.3L}{\Delta}$	
$L = \frac{\Delta R}{57.3}$	
$\Delta = \frac{57.3L}{R}$	

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intersection, at least 100 ft should be provided between intersections. Streets should intersect at 90° whenever possible (Fig. 5.19).

### Streets for People

The streets in most residential neighborhoods are wide, oversized, unnecessary macadam cartways that were expensive to build and are expensive to maintain. These wide streets encourage excessive speed, increase storm water runoff, and raise the price of new construction and ongoing maintenance. In return for these oversized and underutilized streets, residents are exposed to an increased risk of accidents and level of noise but a decrease in neighborhood social interaction and a loss of character in the appearance of the neighborhood (see Tables 5.13 and 5.14).

Designers have made many attempts to separate traffic from pedestrian activities. An example is the “superblock” concept as constructed, for example, in 1928 in Radburn, New Jersey. Following the superblock design, 40-acre superblocks were developed at a density of four units to the acre. Access to the houses was through cul-de-sacs arranged around a central green space and pedestrian network. In this way all of the automobile traffic was kept on the outside of the superblock, and all of the pedestrian activity was focused in to the green center. The superblock concept, as it has come to be known, was proposed by architects Clarence Stien and Henry Wright. The superblock cul-de-sacs were designed to be only 350 to 450 ft long and had a cartway of only 21 ft. No curbs were used, and the right-of-way was kept to only 35 ft and included a 7-ft-wide utility corridor outside of the cartway on both sides of the street. The design resulted in 25 percent less pavement than a common grid street layout. The design also provided for reduced utility infrastructure costs. In practice, however, the superblock was associated with some observed increase in crime.

Since the development of the Radburn project, the family car has become an even greater influence on our lives. Today the most prominent image of resi-