

ARTICLE 6

SPECIFIC DESIGN REQUIREMENTS FOR ROADS AND OTHER RIGHTS-OF-WAY

Section 6.01. Road Right-of-Way Widths. The right-of-way width shall be the distance across a road from property line to property line. Minimum road right-of-way widths shall be as follows:

- a. Major Arterials 140 feet
(See Major Road Plan) or as may be required
- b. Minor Arterials 80 feet
(See Major Road Plan)
- c. Primary Collectors 60 feet
(See Major Road Plan)

Secondary or collector roads are those which carry traffic from minor roads to the major system of arterial roads and highways and include the principal entrance roads of a residential development and roads for major circulation within such a development;

- d. Minor Roads 50 feet
- e. Marginal Access Roads 50 feet

Marginal access roads are minor roads which are parallel to and adjacent to arterial roads and highways; and which provides access to abutting properties and protection from through traffic;

- f. Alleys 20 feet

Alleys are minor public ways used primarily for service access to the back or side of properties otherwise abutting on a road.

- g. Cul-de-sacs 50 feet

Cul-de-sacs are permanent dead-end roads or courts designed so that they cannot be extended in the future.

Except where topographic or other conditions make a greater length unavoidable, cul-de-sacs, or dead-end roads, shall not be greater in length than two thousand five hundred (2,500) feet. They shall be provided at the closed end with a turn-around having a property line radius of at least fifty (50) feet with an outside pavement radius of at least forty (40) feet.

Where, in the opinion of the Planning Commission, it is desirable to provide for road access to adjoining property, proposed roads shall be extended by dedication to the boundary of such property. Such dead-end roads shall be provided with a temporary turn-around having a property line radius of at least fifty (50) feet with an outside pavement radius of at least forty (40) feet.

Where deemed necessary by the Planning Commission adequate rights-of-way shall be dedicated to connect with any temporary dead-end roads adjoining the subdivision.

Section 6.02. Additional Width on Existing Roads. Subdivisions that adjoin existing roads shall dedicate additional right-of-way to meet the minimum road width requirements.

- a. The entire right of way shall be dedicated where any part of the subdivision is on both sides of the existing road, and
- b. Where the subdivision is located on only one side of an existing road, the amount of right-of-way to be dedicated is as follows:
 1. If the land across the roadway from the proposed subdivision has not been subdivided or developed, the subdivider is only required to dedicate one-half of the required right-of-way, measured from the center line of the existing roadway.
 2. If the land across the roadway has been subdivided or developed, the subdivider is required to provide enough additional right-of-way on his side of the roadway to bring the total right-of-way to the required width. (In no case shall the right-of-way be less than fifty (50) feet.)
- c. In cases where rights-of-way in excess of fifty (50) feet are required, additional widths shall be reserved and when used just compensation therefore shall be paid by the condemning authority.

Section 6.03. Road Pavement Widths. Road pavement widths shall be as follows:

- a. Major Arterials 30 feet or greater,
or as may be required
- b. Minor Arterials 30 feet or greater,
or as may be required
- c. Primary Collectors 30 feet or greater,
or as may be required
- d. Secondary Collectors 30 feet

- e. Minor (Neighborhood) 20 feet (with 3 foot gravel shoulders on each side of paved road)
- f. Alleys..... 16 feet
- g. Cul-de-sacs 40 foot radius or turnaround.
- h. Through proposed neighborhood or local business areas the road widths shall be increased ten (10) feet on each side to provide for turning movements of vehicles into and out of necessary off-road parking areas without interference to traffic.

NOTE: The pavement widths are measured from inside of curb to inside of curb. These widths are considered the minimum necessary to accommodate modern traffic. All Arterials and Collectors are designed to be high-volume, high-speed traffic movers. At no time should parking be allowed along Arterials or Collectors; however in the case of Local Roads, road parking must be considered in the pavement width. Where no road parking is permitted or none is anticipated, allowances may be made. A parallel parking lane normally requires eight (8) feet.

Section 6.04. Road Grades. Maximum and minimum road grades shall be fourteen (14) percent and five-tenths of one percent (0.5) respectively.

NOTE: These road grade limits are considered to be the optimum requirements to provide adequate safety. Different topographical situations may necessitate adjustment. The minimum grade requirement is necessary for drainage purposes. In this regard, it should be considered that in addition to accommodating traffic, roads are the heart of the surface drainage system.

Section 6.05. Horizontal Curves. Where a deflection angle of more than ten (10) degrees in the alignment of a road occurs, the road shall have a centerline radius of not less than the following:

- a. Arterials 300 feet
- b. Collectors 200 feet
- c. Minor Roads 100 feet

Section 6.06. Vertical Curves. Every change in grade shall be connected by a vertical curve constructed so as to afford a minimum sight distance of two hundred (200) feet, said sight distance being measured from the driver's eyes, which are assumed to be four and one-half (4 1/2) feet above the pavement, to an object four (4) inches high on the pavement. Where, in the opinion of the Planning Commission,

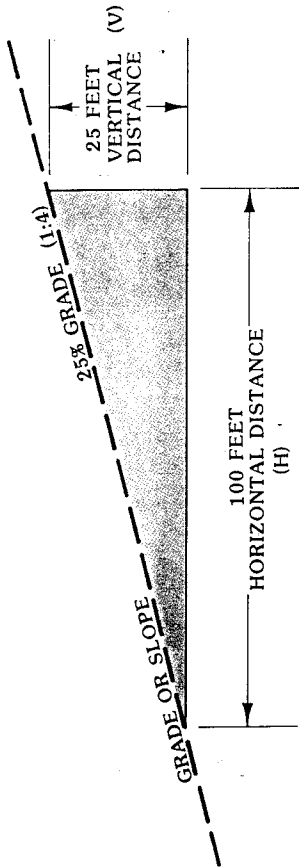
topography warrants it profiles of all roads showing natural and finished grades drawn to a scale of not less than one (1) inch equals one hundred (100) feet horizontally and one (1) inch equals twenty (20) feet vertically may be required.

Section 6.07. Intersections. Road intersections shall be as nearly at right angles as is possible, and no intersection shall be at an angle of less than sixty (60) degrees.

Curb radii at road intersections shall not be less than twenty (20) feet, and where the angle of a road intersection is less than seventy-five (75) degrees, the Planning Commission may require a greater curb radius. Wherever necessary to permit the construction of a curb having a desirable radius without curtailing the sidewalk at a road corner to less than normal width, the property line at such road corner shall be rounded or otherwise setback sufficiently to permit such construction.

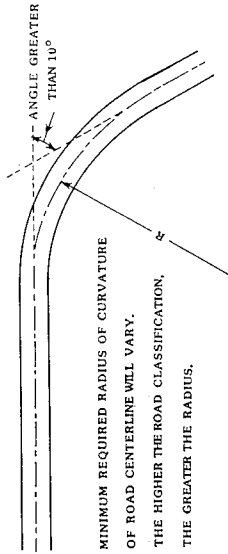
Section 6.08. Tangents. Between reverse curves there shall be a tangent having a length not less than one hundred (100) feet.

Section 6.09. Road Jogs. Road Jogs with centerline off-sets of less than one hundred fifty (150) feet shall not be allowed.

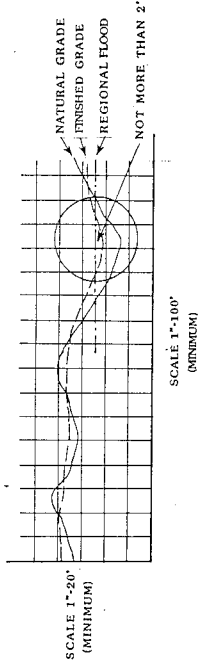


GRADE (SLOPE) FORMULA: $\text{SLOPE} = \frac{V}{H}$

SLOPE CALCULATION

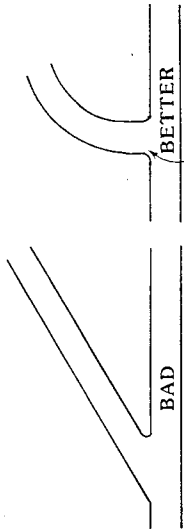


MINIMUM REQUIRED RADIUS OF CURVATURE
OF ROAD CENTERLINE WILL VARY.
THE HIGHER THE ROAD CLASSIFICATION,
THE GREATER THE RADIUS.

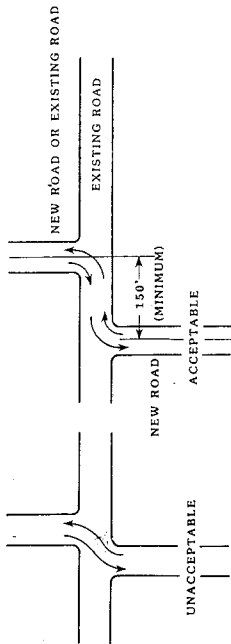


HORIZONTAL CURVE

STREET PROFILE



90° FOR 2 CAR LENGTHS



STREET JOGS

INTERSECTIONS