

**Town of Maggie Valley**

**City Streets**

**July 1, 1995**

**MINIMUM CONSTRUCTION STANDARDS**

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## APPLICATION REQUIREMENTS

Any person or corporation desiring to construct a new subdivision road, to be designated as public and intends for the road to be added to the city system of streets, must submit the following information to the city manager for evaluation.

1. Two complete site layouts, including any future expansion plans.
2. Horizontal alignment indicating general curve data on site layout plan.
3. Vertical alignment indicated by percent grade.
4. Typical roadway section.
5. Vicinity map.
6. Four copies of the recorded plat.
7. Drainage facilities to be reviewed by city manager.

If the new subdivision road will connect to a state road, a permit authorizing construction on state right-of-way must be obtained from the Division of Highways before beginning any construction. Application should be made to the District Engineer, C. R. Styles, P. O. Box 250, Bryson City, N. C. 28713.

Existing roads proposed for addition to the city system must meet all requirements contained herein. Sub-standard roads will be reviewed on a case by case basis by the Board. When extenuating circumstances exist, the Board may permit deviations from design and construction, limited only by safety and maintenance factors.

Road classifications considered for addition:

1. Proposed subdivision roads
2. Existing subdivision roads
3. Local residential paved roads

## 4. Local residential unpaved roads

## Road Classification Definitions

1. Proposed subdivision roads: A road that serves a parcel of land that is subdivided into two or more lots for residential development.
2. Existing subdivision roads: A road that serves a subdivision that is fully developed and is no longer controlled by a developer.
3. Local residential paved roads: A road that serves a community that is not a part of a subdivision. Usually these are older roads no longer considered for expansion.
4. Local residential unpaved roads: The same as number 3, but has never been paved.

## REQUIREMENTS FOR ADDITION TO THE CITY SYSTEM

1. Minimum construction standards and other requirements in this manual must be a part of proposal.
2. A petition from all property-owners or developer is required.
3. Developer or property owners must dedicate a free and clear right-of-way.
4. Development must be 75% complete. Roads not meeting percent must include a \$500.00 entry fee per lot fronting subdivision road.
5. A minimum of four homes is required for addition of less than two-tenths of a mile in length.
6. There must be at least two homes for each one-tenth of a mile.
7. At least 20% of the lots bordering the road must be individually owned.
8. All subdivision roads and local residential roads must have an acceptable vegetative cover established prior to addition.
9. All roads considered for addition must be located within the city limits.

10. Utilities within the right-of-way shall conform to the requirements for location within a municipality.
11. Certification must accompany proposal that roads meet all requirements.

#### MINIMUM CONSTRUCTION STANDARDS

- A. Drainage - The city manager shall review all drainage prior to acceptance of any facility to the city system.

##### Special provisions:

1. Proposed addition must support cross-lines at intervals not to exceed 300 feet.
2. All cross-lines shall be a minimum of 18".
3. All driveway pipe shall be a minimum of 15".

All drainage shall be adequate so that the road may be maintained without excessive cost, and not cause flooding on private property.

- B. Bridges - Structures shall be designed for minimum live loads of HS-20 as specified in the standard specifications for Highway Bridges of the American Association of State Highway officials: All structures must be designed and carry the Seal of an Engineer registered to practice in the State of North Carolina. Documentation must also be submitted to the city by the Engineer, that the structure was constructed according to plans and under his supervision.

- C. Subgrades -

1. All soil subgrades must meet 95% compaction prior to placement of base material.
2. All ABC base must meet 100% compaction prior to placement of pavement.

Documents to support compaction tests, from independent testing laboratories, must be submitted to the city along with the request for addition. Compaction tests must be of sufficient number to accurately reflect the project length. Minimum of (1) one test per 0.1 mile, randomly selected.

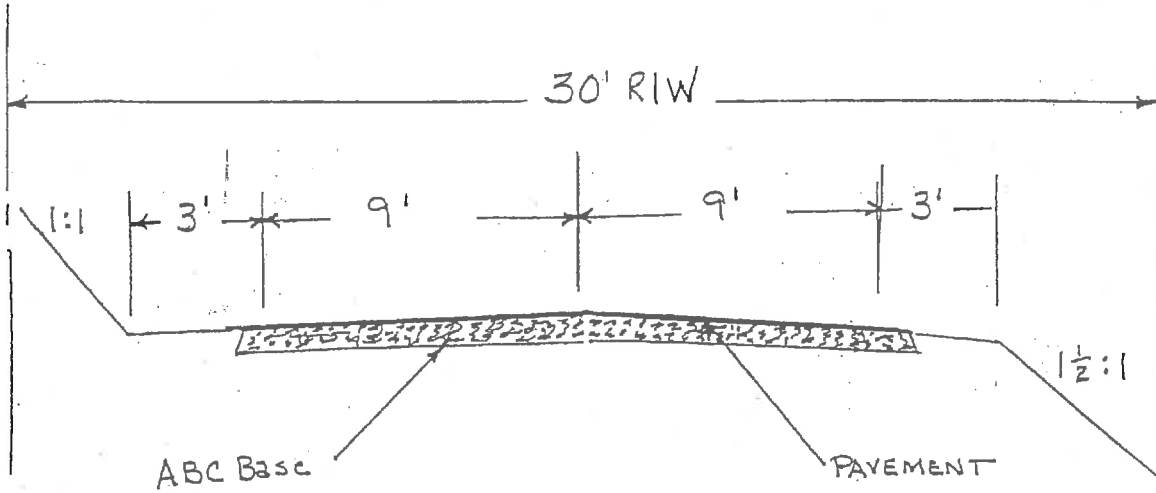
## D. Pavements -

1. 1" Bituminous surface treatment with minimum 8" ABC base.
2. 1½ I-2 plant mix with minimum 6" ABC base.
3. 5" plain concrete.
4. Other pavement combinations to be reviewed on an individual basis.

E. Developers or property owners must submit a certification to the city that roads submitted for addition meet all the requirements and specifications contained herein.

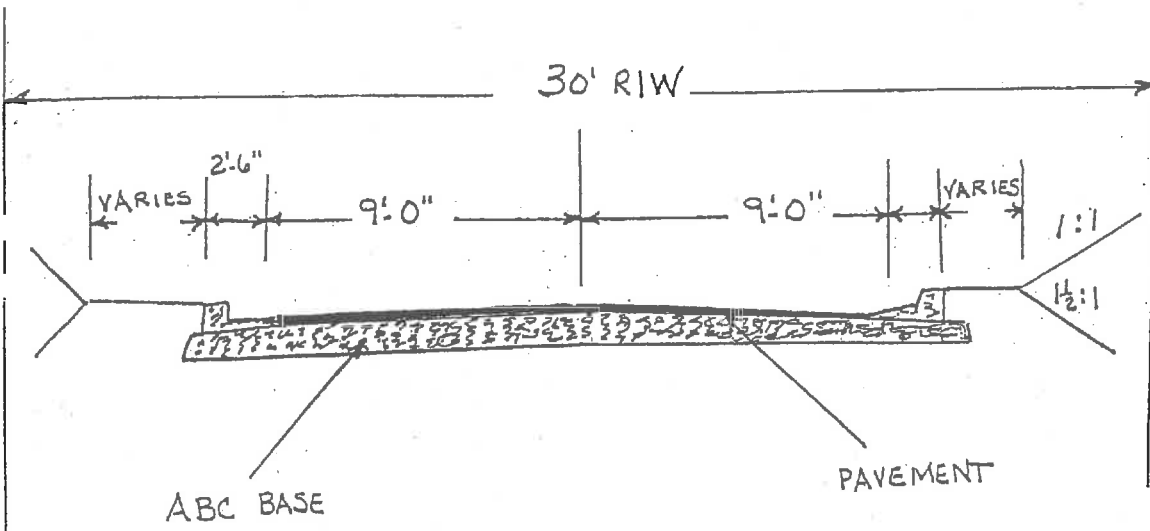
## MINIMUM DESIGN CRITERIA

- A. Right-of-way width: Minimum 30 feet- exceptions to be approved by the Board on individual basis.
- B. Pavement width: 18 feet
- C. Minimum shoulder width: 3 feet
- D. Minimum cut and fill slopes: 1:1 cut, 1½:1 fill
- E. Maximum grade: 12% to 18% for paved streets. In no case shall the grade exceed 18%. Unpaved streets maximum grade, 10%.
- F. Cul-de-Sac radius: 30 feet
- G. Road intersections: Angle or intersection 75° - 90°, See typical sections.
- H. Minimum sight distance for intersections: 50 feet
- I. Minimum grades for intersection: 100' each way from intersection not to exceed 5%
- J. Design speed: 20 mph
- K. Roads submitted for addition to city system supporting guardrail, must meet state and federal requirements for type and installation. Documentation from registered professional engineer must accompany petition certifying stated requirements.
- L. Subdivision name markers shall not be located within the right-of-way limits and the city will not assume maintenance on the markers.
- M. Road with concrete curb and gutter must meet Statute 136-44.14 for wheel chair ramps.

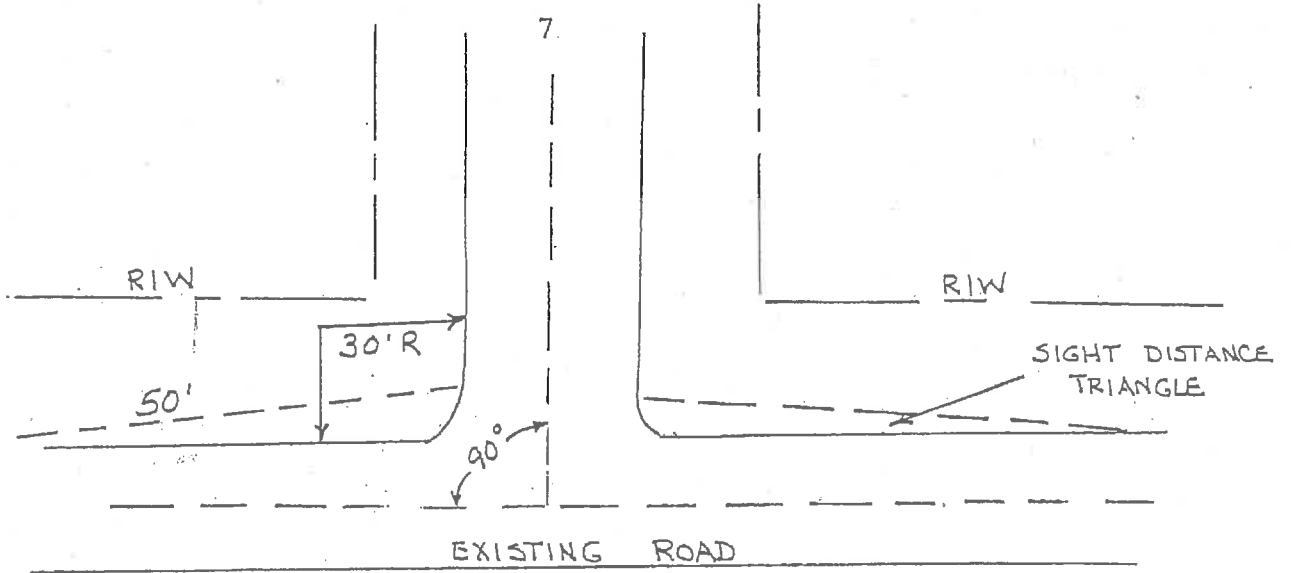


Typical Road Section No. 1  
Local Residential and Subdivision Roads

(For unpaved roads, use typical section minus pavement)

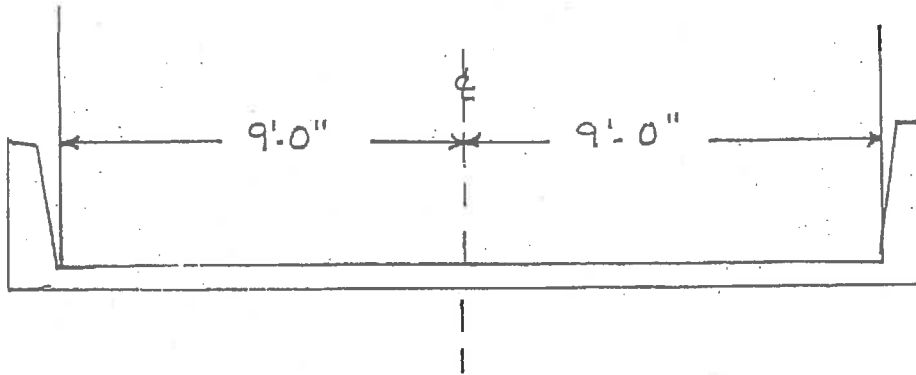


Typical Road Section No. 2  
2' 6" Concrete Curb and Gutter  
Local Residential and Subdivision Roads



Recommended Road Connection Angle  
of Intersection

$75^\circ - 90^\circ$



Typical Bridge Section