

**LEATHERWOOD MOUNTAIN PROPERTY OWNERS ASSOCIATION
ROAD ACCEPTANCE & CONSTRUCTION STANDARDS**

Existing paved roads in Leatherwood Mountain Community were not constructed to a uniform construction standard. They were conveyed to the LM POA by the original developer and a long-range plan for maintenance and repair of these roads has been established. The construction standards herein will apply to existing platted POA roads and shared driveways that have not yet been paved and to any new roads to be added to the POA's responsibility.

(1) Property owners must dedicate, free of charge, a right-of-way sufficient for maintenance and safety purposes. A minimum width of 45 feet for 2-way roads and 30 feet for one-way roads is required.

(2) The LM POA board may authorize rights-of-way for roads that are less than the minimum required width upon a determination by board and its Project Engineer that the minimum required right-of-way width is not feasible, based upon reasonable engineering principles and costs, or creates unnecessary hardships, and safety is not sacrificed.

(3) For unpaved roads, a minimum travel-way width of at least 18 feet is required. Where feasible, road widths of 30 feet including side ditches shall be required. Where not feasible, the requirement may be reduced to a width applicable to the situation, if safety will not be sacrificed.

(4) Unpaved roads may be stabilized based upon the level of service that the roads render for acceptable use in all except extreme weather conditions.

(5) Any road must have drainage established that is adequate to maintain the road in a manner that is justifiable based upon the service that the road renders.

(6) All paved roads shall meet standards designated in the section below titled "Minimum Design and Construction Criteria."

ADDITION OF ROADS TO THE LM POA ROAD SYSTEM

The following requirements must be met before a road will be added to the LM POA road system, provided, however, that the POA Board reserves the right not to add a road to the system if it is evident that the cost of improving or repairing said road to minimum standards is excessive within the funds presently available for maintenance and construction within the development:

(1) Roads one mile or less in length must have at least 5 lots fronting the road or with direct entrance to the road. There must also be at least one home built or being built on one of these lots.

(2) Roads of one or more miles in length must have an average of five lots per mile fronting or having direct entrance to the road. There must be homes built or being built on at least two lots per mile.

- (3) There must be at least two individual property owners per mile on the road.
- (4) The LM POA Board may consider the addition of a road that serves large lots or parcels that are of the size that the "five lots per mile" requirement cannot be met. The number of occupied homes needed shall be a judgment factor based upon the road length and the number of lots or parcels involved. Approval is at the sole discretion of the LM POA.
- (5) Roads must be paved and conform in all respects to the section below titled "Minimum Design and Construction Criteria" and be properly maintained until petitioned for maintenance by the LM POA.
- (6) Utilities requiring adjustment or relocation shall be made at no expense to the LM POA. Existing or relocated utilities may remain within the right of way of any street added to the road system provided the location of same meets LM POA board approval and further provided the utility owner executes an encroachment agreement as required. Utilities are defined as electric power, telephone, television, water, sewage, gas, drainage, irrigation and similar lines.
- (7) Erosion and Sedimentation. All roads shall have a permanent vegetative cover established and other permanent erosion control measures installed in accordance with NC DENR's specifications, prior to addition to the LM POA maintained system.
- (8) All pipe culverts, storm sewers and appurtenances shall be free of all debris and silt build-up and shall be structurally and hydraulically sound, and functioning in a normal manner. All drainage ditches shall be of such a width and depth and with such a slope as to carry the anticipated discharges. Paved ditches or rip rap shall be required where necessary.

MINIMUM DESIGN AND CONSTRUCTION CRITERIA

The NC Department of Transportation publishes two (2) volumes for minimum design & construction:

- (1) 1st volume is entitled "Subdivision Roads." This volume contains illustrations of typical subdivision cross sections, street connections, intersections, driveway turnout grades and cul-de-sacs.
- (2) 2nd volume is entitled "Minimum Design and Construction Criteria for Subdivision Streets" which contains design standards and subdivision street policies. Both of these volumes shall be used to design and construct roads in the Leatherwood Mountain development.
- (3) The LM POA Board shall have the right to amend these requirements at its own discretion and as deemed appropriate.

APPLICATION REQUIREMENTS

Any person or corporation desiring to construct a new subdivision road which is to be dedicated to the LM POA, must submit the following information to the POA Board & Project Engineer for proper evaluation in order to obtain a letter of approval. If the new subdivision road will connect to a State System road, a permit authorizing construction on State right of way must be obtained from the Division of Highways before beginning any construction. Applications shall be made to LM POA Board. Applications for new subdivision roads shall include the following information:

- (1)** Two complete site layouts, including any future expansion anticipated.
- (2)** Horizontal alignment indicating general curve data on site layout plan.
- (3)** Vertical alignment indicated by percent grade, P. I. station which is the point of intersecting grades, and vertical curve length on site layout plan. The plotting of the ground profile for roads where special conditions or problems exist may be required.
- (4)** Typical section indicating the pavement design and width, and the slopes, widths and details for either the curb and gutter or the shoulder and ditch proposed.
- (5)** Routine drainage facilities and drainage areas.
- (6)** Vicinity map.
- (7)** The number of platted lots on each road shall be reviewed to insure that the minimum housing requirements are served.
- (9)** Four copies of the recorded plat after certification or upon application for Maintenance.

UTILITY REQUIREMENTS

The following conditions must be met for utilities to be added to subdivision roads:

- (1)** All utilities must be underground except for normal ground level access points. Exceptions can be made only with approval of LM POA Board and project engineer.
- (2)** Location.
 - (a) Poles and other above-ground utilities which remain inside the right-of-way under an encroachment agreement shall be sited at or as near as practical to the right-of-way line.
 - (b) Where there are curbed sections, above-ground utilities may be located as far as practical behind sidewalks. There is no single minimum dimension for setback of poles, fire hydrants, etc., behind curbs; however, where there are curbed sections and no sidewalks, six feet shall be used as design safety concept guide.
- (3)** Depth of cover for pipe lines and other utilities:
 - (a) longitudinal pipe lines and electric power primary 3'
 - (b) longitudinal electric power secondary, and trenched communication lines 2'
 - (c) crossings under roadways 3'

- (d) crossings under ditches 2'
- (e) plowed-in communication lines 18"

(4) Underground Utilities. For all paved roads, underground utilities may cross under but NOT run longitudinally under the pavement except in unusual situations approved by the Project Engineer.

(5) Acceptable materials for utilities outside pavement shall be reviewed by the Project Engineer.

(6) Any utility to be installed within the right-of-way of a state maintained road will require an encroachment agreement with the LM POA.

DRAINAGE REQUIREMENTS

The Project Engineer shall review all drainage prior to acceptance of any facility to the LM POA road system.

- (1) All storm drainage shall be adequate so that the road may be maintained without excessive cost, and not cause flooding on private property from runoff of an appropriate storm frequency.**
- (2) Permanent drainage easements may be required. The minimum design frequency shall be as follows:**
 - (a) storm sewer collector -- 25 year frequency;
 - (b) cross drainage -- 25 year frequency.
- (3) In areas where ditch grades or quantities of flow deem it impracticable to establish and maintain vegetation, an erosive resistant lining such as paving or rock rip rap may be required.**
- (4) Subsurface drainage shall be adequate to maintain a stable subgrade.**
- (5) When road crossings are within areas designated as flood hazard areas under the Federal Flood Insurance Program, the design must be approved by the responsible local governing agency for its consistency with local flood zoning ordinances.**