

SUBDIVISION REGULATIONS

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## SUBDIVISION REGULATIONS

### 1 GENERAL PROVISIONS

#### § 91.01 SHORT TITLE

This ordinance shall be known and may be cited as the “Subdivision Regulations of the Town of Lake Lure, North Carolina.” **(Adopted 3-22-94)**

#### § 91.02 AUTHORITY.

The Town Council, pursuant to the authority conferred by an act of the General Assembly of the State of North Carolina (G.S. Ch. 160A, Art. 19) does hereby ordain and enact into law these articles and sections. **(Adopted 3-22-94)**

#### § 91.03 PURPOSE.

The purpose of these regulations is to establish procedures and standards for the land clearing, land disturbance, development and subdivision of real estate within the jurisdiction of the town in an effort to, among other things, ensure proper legal description, identification, monumentation and recordation of real estate boundaries; further the orderly layout and appropriate use of the land; prevent the excessive removal of trees and native shrubs; minimize land disturbance; provide safe, convenient and economic circulation of vehicular traffic; provide suitable building sites which are readily accessible to emergency vehicles; assure the proper installation of streets and utilities; promote the eventual elimination of unsafe or unsanitary conditions arising from undue concentration of population; and help conserve and protect the physical and economic resources of the town. **(Adopted 3-22-94; amended 10-10-06, 6-10-08)**

#### § 91.04 APPROVAL OF PLATS.

All plats for the subdivision of land shall be submitted to the town’s Community Development Department for review by the Zoning and Planning Board or by the Subdivision Administrator, as appropriate, and shall conform to the requirements of these regulations, and shall be submitted in accordance with the procedures and specifications established herein and shall be accompanied by fees as established by the schedule of fees adopted by resolution of the town council. No plat of a subdivision of land within the town shall be filed or recorded by the County Register of Deeds until it has been submitted and given final approval as provided herein, and until such approval is entered on the face of the final plat by the Zoning and Planning Board or by the Subdivision Administrator, as appropriate. **(Adopted 3-22-94; amended 10-10-06)**

#### § 91.05 CERTIFICATES of ZONING COMPLIANCE.

No certificate of zoning compliance shall be issued for any building construction in any subdivision (except minor subdivisions) for which a plat is required to be approved until the final plat has been approved by the Zoning and Planning Board. No certificate of zoning compliance shall be issued for any building construction in any minor subdivision for which a plat is required to be approved until the final plat has been approved by the Subdivision Administrator. **(Adopted 3-22-94; amended 10-10-06)**

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### § 91.06 DEFINITIONS.

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

Arterial Street: A major roadway serving as the primary artery through the town. **(Amended 4-9-02)**

Building and grading envelope (BGE): The limits of disturbance affected by the establishment of a building and grounds. All buildings, walls, lawns, driveways, site amenities, septic fields, and associated disturbance from construction activity shall be confined within this zone. The BGE may be sited in one mass or apportioned into several smaller compounds connected by walks or drives. Provided, however, alternative septic systems shall not be included within the BGE where it is demonstrated that any disturbance associated with them is minimal. **(Adopted 11-18-08, Amended 3-10-09)**

Building Setback Line: A line delineating the minimum allowable distance between the property line and a building on a lot, within which no building or other structure shall be placed except as otherwise provided. Whenever the front, side or rear portion of a lot abuts a street right-of-way, setback lines shall be measured perpendicularly from said right-of-way line, or where no right-of-way exists, from a point 16 feet from the center line of the street.

Buffer Strip: An area of land, whether landscaped or in its natural state, consisting of evergreen trees and shrubs used to physically separate or screen one use, structure, or property from another so as to visually shield or block noise, light, or other nuisances. Any width that may be specified for such a buffer strip shall be measured in the horizontal plane. **(Adopted 6-10-08)**

Caliper: Caliper is the term used for the diameter measurement of small tree trunks, taken at 6 inches above the average ground level. **(Adopted 11-14-06)**

Canopy Coverage: The area of the subject property that is covered by the foliage of trees. **(Adopted 6-10-08)**

Clearcutting: Clearcutting is the removal of over 70% of the existing trees on a property. **(Adopted 10-10-06)**

Collector Street: A street that collects traffic from minor streets and lanes and provides access to arterial streets. **(Amended 4-9-02)**

Common Amenities: Clubhouses, gazebos, tennis courts, swimming pools, amphitheater parks, or other facilities or structures accessory to one or more residential developments, intended to provide recreational, cultural or social enrichment to people residing in a residential subdivision and / or the general public. **(Adopted 8-12-08)**

Corner Lot: A lot abutting upon two or more streets at their intersection.

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Cul-de-sac: A street permanently terminated by a turn around.

Dbh: Dbh stands for the diameter of a tree trunk measured at breast height, four and one-half feet above the average ground level. **(Adopted 10-10-06)**

Development: Development is the construction, reconstruction, conversion, structural alteration, relocation, or enlargement of any structure; any mining, excavation, landfill; or any use or extension of the use of land. **(Adopted 10-10-06, Amended 6-10-08)**

Double Frontage Lot: A continuous lot of the same depth as the width of a block containing two tiers of lots and which is accessible from both of the streets upon which it fronts.

Easement: A grant by the property owner for use, by the public, a corporation, or person(s) of a strip of land for specified reasons.

Excessive Removal of Trees: The removal, by any means, of all or substantially all the trees and/or woody shrubs from one acre or 25 percent of the acreage of a lot or tract of land, whichever is greater. **(Adopted 2-8-11, Effective 4-1-11)**

Forest Coverage: The forest coverage of a piece of property refers to the extent of forestation on the property. This coverage may be quantified by any of the following means: (1) by analysis of the canopy coverage as seen in aerial photography; (2) by calculation of the significant tree density on the property; or (3) by other means deemed suitable by the Tree Protection Officer. See Attachment C. **(Adopted 6-10-08)**

Girdle: To girdle a tree is to inflict a cut or other damage to the bark such that the wound encircles the tree to sufficient depth and extent that the likely result will be the death of that tree. **(Adopted 10-10-06)**

Green Area: A green area is an area of land designated for conservation, preservation, landscaping, or reforestation. **(Adopted 10-10-06)**

Impervious Material: Impervious material is any material that prevents absorption of storm water into the ground. **(Adopted 10-10-06)**

Improvements Guarantee: An improvements guarantee is an agreement between the subdivider and the town, secured by a letter of credit or other security placed with the town, that improvements described in an approved subdivision plat will be carried out according to that plat, that tree and/or environmental protection measures shown on the plat will be properly installed and maintained, that trees and/or forest areas designated as protected on the plat will be undamaged at the conclusion of land clearing, land disturbance and/or development, that areas indicated on the plat as requiring grading will be graded as specified, and that areas indicated on the plat to be left ungraded will be untouched and undamaged at the conclusion of land clearing, land disturbance and/or development. **(Adopted 10-10-06; Amended 6-10-08)**

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Independent Community Water System: A privately owned central water system constructed to town and state standards consisting of a source of potable water, a distribution system and, where needed, a water storage facility. Independent community water systems shall be operated and maintained by the owners of the area to be served or by a private entity with whom the owners shall contract for said service. **(Amended 1-14-02)**

Individual Sewer System: Any septic tank, privy or other facility serving a single source or connection and approved by the County Sanitarian.

Individual Water System: Any well, spring, stream, or other source used to supply a single connection.

Land Clearing: Land clearing is tree removal, underbrushing, grubbing, or any activity that removes live woody plants such as trees and shrubs. **(Adopted 10-10-06)**

Land Disturbance: Any use of the land by any person in residential, industrial, educational, institutional, or commercial development, highway and road construction and maintenance or other construction or maintenance activity, including chemical applications or other techniques, that results in a change in the natural cover or topography and that may cause or contribute to sedimentation. **(Adopted 6-10-08)**

Lane: A private street serving as primary access to not more than 4 lots and meeting a lesser standard than minor streets. **(Amended 4-9-02)**

Lot: A portion of a subdivision or any other parcel of land intended as a unit for transfer of ownership, for land clearing, for land disturbance, for development, or for all three. The word "lot" includes the words "plot" or "parcel." **(Amended 6-10-08)**

Major Subdivision: Any subdivision of a tract of land into more than five lots, or any subdivision requiring the extension of public utilities and/or development or dedication of new streets. **(Amended 11-13-01; 05-10-11)**

Minor Street: A public or private street serving as primary access to 5 or more lots. **(Amended 4-9-02)**

Minor Subdivision: Any subdivision of a tract of land into five or fewer lots and involving no new public or private streets or roads, right-of-way dedication, easements, or utility extensions. **(Amended 11-13-01; 05-10-11)**

Natural Water Course: Any perennial or intermittent surface water approximately shown on either the most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture or the most recent version of the 1:24,000 scale (7.5 minute) quadrangle topographic maps prepared by the United States Geologic Survey (USGS). Notwithstanding the foregoing, the Subdivision Administrator may determine that a water body does or does not qualify as a natural water course depending upon the presence of surface waters in accordance with the provisions of 15A NCAC 2B.0233(3)(a) or other methods approved by the North

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Carolina Division of Water Quality. For purposes of these regulations, the term “natural watercourse” shall not include Lake Lure. **(Adopted 10-9-07)**

Official Maps or Plans: Any maps or plans officially adopted by the Town Council as a guide for land clearing, for land disturbance and/or for the development of the town. **(Amended 6-10-08)**

Open Space: Any area of land or water essentially unimproved and set aside, designated, or reserved for conservation, preservation and/ or passive recreation. **(Adopted 4-10-12)**

Passive Recreation: recreational activities that have minimal impact to the natural environment such as hiking, running, biking, wildlife observation, photography, fishing, swimming, picnicking, lake access and other similar uses. **(Adopted 4-10-12)**

Planned Unit Development: In this chapter, a planned unit development means a development where more than one principal building is proposed to be constructed on a single tract, or any residential complex containing nine or more dwelling units on a single tract, or any building with a gross floor area of 25,000 square feet or more.

Private Drive (Driveway): A private access not intended to be a public ingress or egress. Private drives are intended to provide direct access from one lot or building site to a publicly or privately dedicated and maintained street. However, a private drive may provide access for up to 3 residential lots provided it meets the requirements of § 91.39A of the Subdivision Regulations. Private drives shall be excluded from the definition of street. The term “private drive” shall include the term “driveway”. **(Amended 11-26-96, 4-9-02, 6-11-13)**

Private Street: A street which has not been dedicated to and accepted by the town of Lake Lure but is instead owned and maintained by any other party.

Protected Forest Area: A protected forest area is a green area consisting of existing forest designated for protection on a subdivision plat and in the associated tree protection plan. All significant trees within such an area are protected trees. **(Adopted 10-10-06)**

Protected Tree: A protected tree is any tree marked for protection, or any significant tree not expressly marked for removal, in a Tree Protection plan. **(Adopted 10-10-06)**

Protective Boundary: A protective boundary is a substantial visual screen, such as an orange barrier fence, sufficient to clearly identify and set apart a protected tree or protected forest area and the associated root protection zones. **(Adopted 10-10-06)**

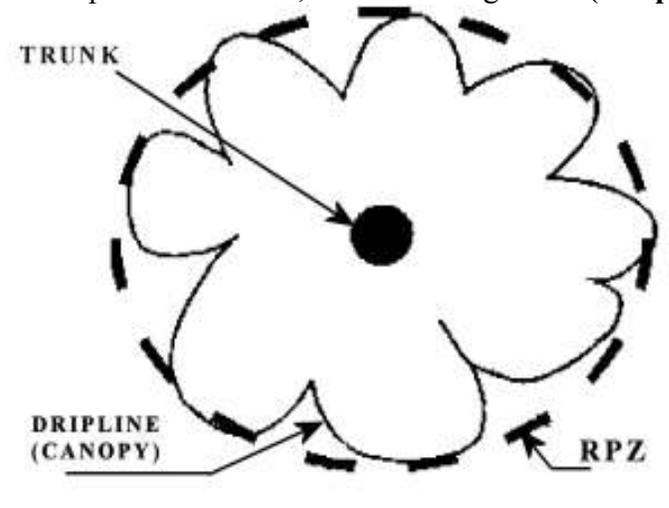
Public Street: A street which has been dedicated to and accepted by the town and which is maintained by the town.

Qualified Licensed Professional: A licensed professional in a discipline relevant to the task at hand, whose knowledge and capability to successfully carry out that task have been amply demonstrated through his or her certified practical experience in that

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discipline and in successful completion of previous tasks similar to the one at hand. **(Adopted 6-10-08)**

Root Protection Zone: The root protection zone (RPZ) is the area that encompasses the entire system of a tree's major and minor roots, 24 inches deep and extending from the trunk of the tree a radial distance equal to one foot for each inch of trunk diameter or to the drip line of the tree, whichever is greater. **(Adopted 10-10-06)**



Sensitive Natural Area: Any area, which is sensitive or vulnerable to physical or biological alteration, as identified now or hereafter by the North Carolina Natural Heritage Program and which contains one or more of the following: (1) habitat, including nesting sites, occupied by rare or endangered species; (2) rare or exemplary natural communities; (3) significant landforms, hydroforms, or geological features; or (4) other areas so designated by the North Carolina Natural Heritage Program, which are sensitive or vulnerable to physical or biological alteration. **(Adopted 10-9-07)**

Shall: The word “shall” is always mandatory and not merely directory.

Significant Tree: A significant tree is any stable, healthy tree with a dbh equal to or greater than the dbh noted as significant for that species in the table shown in Attachment D, or a tree of any other species with a dbh of 6 inches or greater. **(Adopted 10-10-06)**

Significant Tree Density: Significant tree density is the number of significant trees per acre. For example, a one acre lot with 10 significant trees has a significant tree density of 10; a 3-acre lot with 30 significant trees also has a significant tree density of 10. (See Attachment C.) **(Adopted 10-10-06, amended 11-14-06)**

Initial Significant Tree Density: Initial significant tree density means significant tree density at the time of initial inspection and platting.

Final Significant Tree Density: Final significant tree density means significant tree density following land clearing, land disturbance, and/or development. In terms of subdivision development this means the significant tree density following completion of roads, utilities and common areas. **(Amended 6-10-08)**

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Single Tier Lot: A lot which backs upon a limited access highway, a physical barrier, or a nonresidential use and to which access from the rear of the lot is usually prohibited.

Stream Buffer: The strip of land in its natural state or restored to a suitably vegetated state, of specified width, lying adjacent to any stream, river, creek, brook, run, branch, wetland, or waterway, or any reservoir, lake, or pond, natural or impounded. (See also the discussion of Buffer Zones in Section §96.07A of the Soil Erosion and Sedimentation Control regulations.) **(Amended 6-10-08)**

Street: In this chapter, a street shall be a right-of-way intended for vehicular traffic which affords the principal means of access to abutting properties.

Subdivider: Any person, firm or corporation who subdivides or develops any land deemed to be a subdivision as herein defined.

Subdivision: A “subdivision” shall mean all divisions of a tract or parcel of land into two or more lots, building sites, or other divisions, for the purpose of sale or building development, whether immediate or future, and shall include all divisions of land involving the dedication of a new street or a change in existing streets; but the following shall not be included within this definition nor be subject to the regulations of this ordinance:

- (1) The combination or recombination of portions of previously subdivided and recorded lots where the total number of lots is not increased and the resultant lots are equal to or exceed the standards of the town as required by this chapter.
- (2) The division of land into parcels greater than ten acres where no street right-of-way dedication is involved.
- (3) The public acquisition by purchase of strips of land for the widening or opening of streets.
- (4) The division of a tract of land in single ownership whose entire area is no greater than two acres into not more than three lots, where no street right-of-way dedication is involved, and where the resultant lots are equal to or exceed the standards of the town as required by this chapter.

Subdivision Administrator: The official responsible for the overall administration and enforcement of these regulations. Such individual shall be the Community Development Director and/or such other person specifically designated as Subdivision Administrator by the Community Development Director. The Subdivision Administrator may delegate duties under these regulations; however, the Subdivision Administrator shall remain responsible for their overall administration and enforcement. **(Adopted 10-10-06; amended 10-9-07)**

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Temporary Construction Road: A private access to a construction project or logging operation intended to be removed at the completion of the project or operation. **(Amended 4-9-02)**

Tree: A tree is a woody plant with a well-developed main trunk of at least 10 cm (almost 4 inches) dbh at maturity. **(Adopted 10-10-06)**

Tree Protection Officer: A tree protection officer is a duly authorized town official whose function or scope of authority includes enforcing the tree protection provisions of this chapter. **(Adopted 10-10-06)**

Tree Protection Plan: A tree protection plan is information provided as part of a sketch plan, preliminary plat, and/or final plat regarding protections provided to trees during land clearing, land disturbance, and/or development as well as the extent and condition of both the initial and final tree cover of the affected parcel. **(Adopted 10-10-06; Amended 6-10-08)**

Viewshed: Lake Lure's viewshed is the totality of near, medium, and long-distance views of lakes, streams, forests, ridgelines, mountains, or any combination thereof, as seen from the lakes, roadways, public areas, and homes, encompassing all the natural beauty of the area. **(Adopted 10-10-06)**

Zoning and Planning Board: The town's Zoning and Planning Board.

Zoning Administrator: An official or designated person of the town charged with administering the Subdivision Regulations. For purposes of this ordinance, the Office of the Zoning Administrator is designated a planning agency as referred to in G.S. § 160-373.

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### **2 PROCEDURE FOR REVIEW AND APPROVAL OF SUBDIVISION PLATS**

#### § 91.15 APPROVAL.

No final plat of a subdivision within the Town of Lake Lure shall be recorded by the County Register of Deeds until it has been approved as provided herein. To secure such approval of a final plat, the subdivider shall follow the procedure established in this subchapter. Furthermore, no street shall be maintained by the town nor street dedication accepted for ownership and maintenance, nor shall water, sewer or other public facilities or services be extended to or connected with any subdivision for which a final plat is required to be approved unless and until such approval has occurred as provided herein.

#### § 91.16 SKETCH PLAN.

- (A) General. The subdivider may submit a sketch plan prior to submitting a preliminary plat. The purpose of submitting the sketch plan is to afford the subdivider an opportunity to obtain the advice and assistance of the town planning staff in order to facilitate the subsequent preparation and approval of the preliminary plat. This procedure does not require formal application or fee.
- (B) Suggested Information. It is suggested that the sketch design plan depict or contain the following information:
- (1) A sketch vicinity map showing the location of the subdivision in relation to neighboring tracts, subdivisions, roads, and waterways;
  - (2) The boundaries of the tract and the portion of the tract to be subdivided;
  - (3) The total acreage to be subdivided;
  - (4) The existing and proposed uses of the land within the subdivision and adjoining it;
  - (5) The proposed street and lot layout and whether public or private;
  - (6) The name, address, and telephone number of the owner;
  - (7) Streets and lots of adjacent developed or platted properties;
  - (8) The zoning classification(s) of the tract and adjacent properties, if applicable;
  - (9) The proposed water and sewer system; and

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- (10) Depiction of all forested areas proposed to be protected plus individual significant trees outside protected forest areas. Clear identification of those forest areas and individual trees proposed to be protected and those forest areas and individual trees proposed to be removed. **(Adopted 10-10-06; amended 11-14-06)**

### § 91.17 PRELIMINARY PLAT.

- (A) General. For all major subdivisions, the subdivider shall submit seven copies of a preliminary plat containing all required information to the Subdivision Administrator. **(Amended 11-13-01, 10-10-06)**
- (B) Contents Required. The preliminary plat shall be clearly and legibly drawn at a scale sufficient to clearly indicate the necessary details. The preliminary plat shall be executed by a registered land surveyor and shall contain the following information: **(Amended 6-10-08)**
  - (1) Vicinity map.
  - (2) Boundaries of the tract.
  - (3) Existing and proposed uses.
  - (4) Name, address and telephone number of owner.
  - (5) Streets and lots of adjacent properties.
  - (6) Zoning classification and adjacent zoning.
  - (7) Proposed water and sewer line location.
  - (8) Boundaries with bearing, distances and closures.
  - (9) Drainage channels.
  - (10) Any public or private easements.
  - (11) Setback lines, all shall comply with minimum requirements of Chapter 92.
  - (12) Title, date, name and location of subdivision.
  - (13) Name of subdivider, registered surveyor and seal.
  - (14) Plans for water and sewer accompanied by written recommendations from the town engineer after thorough review. **(Amended 1-9-07)**

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- (15) Location of any areas of environmental concern: wooded areas, steep slopes, or water courses such as wetlands, marsh, trout streams, lakes, tributaries, etc. **(Amended 10-10-06, 11-14-06)**
  - (16) Copy of any covenants or deed restrictions that will affect land clearing, land disturbance and/or development standards; **(Amended 11-13-01, 6-10-08)**
  - (17) Tree protection plan. (See § 91.59.5.) **(Amended 10-10-06, 11-14-06)**
  - (18) Erosion control plans accompanied by written recommendations from the town erosion control officer after thorough review. **(Amended 1-9-07)**
- (C) The following items shall be required information for review of a minor subdivision plat, in conjunction with any applicable standards referenced in 91.19, Final Plat:
- (1) Vicinity map showing location of subdivision in relation to neighboring tracts
  - (2) Boundaries of tract and portion to be divided.
  - (3) Total acreage to be divided.
  - (4) Existing and proposed uses within the subdivision and existing uses of adjacent land.
  - (5) Existing street layout and right-of-way width, lot delineation and size.
  - (6) Name, address and phone number of owner, name of subdivision.
  - (7) All setback lines.
  - (8) Streets and lots of adjacent developed or platted property.
  - (9) Zoning classification of tract and adjacent tracts.
  - (10) Date of preparation, Township, County and State.
  - (11) Proof of sewer and water utility permits; **(Amended 11-13-01)**
  - (12) Tree protection plan. (See § 91.59.5.) **(Amended 10-10-06, 11-14-06)**
- (D) Town staff review procedure.
- (1) Upon submission of a preliminary plat to the Subdivision Administrator in accordance with division (A) above, the Subdivision Administrator shall

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circulate one copy of said plat to appropriate town staff for review of streets, utilities, and zoning.

- (2) Within 14 days of receipt of a copy of the preliminary plat, the appropriate town staff shall submit written approval or disapproval to the Subdivision Administrator as follows:
    - (a) The Public Works Director shall approve or disapprove plans for the sanitary sewer and water distribution systems.
    - (b) The Public Works Director shall approve or disapprove plans for streets and drainage within the proposed subdivision.
    - (c) The Subdivision Administrator shall approve or disapprove the preliminary plat based on conformity or nonconformity with all applicable elements of Chapter 92 (Zoning Regulations).
  - (3) Any disapprovals submitted to the Subdivision Administrator shall be accompanied by a list of actions necessary to eliminate the reasons for such disapproval. Upon receipt of any disapproval from town staff, the Subdivision Administrator shall notify the subdivider in writing of such disapproval and the actions necessary to eliminate the reasons for such disapproval. The Subdivision Administrator and the staff person or persons indicating any disapproval shall be available to work with the subdivider as he takes steps necessary to eliminate reasons for such disapproval.
- (E) Zoning and Planning Board review procedure. When the Subdivision Administrator receives written approval from all staff as required in this section, he shall notify the chairman of the Zoning and Planning Board or his designee. At that time copies of the preliminary plat shall be distributed to members of the Zoning and Planning Board. First consideration of the preliminary plat shall be at the next regularly scheduled meeting of the Zoning and Planning Board that follows at least seven days after the chairman or his designee has received said notification from the Subdivision Administrator. The Zoning and Planning Board shall approve or deny the preliminary plat at its first consideration or within 35 days of its first consideration. Failure to take official action within this time frame shall constitute approval by the Zoning and Planning Board unless the board extends its review time for reasons specified below.
- (1) Before taking action on the preliminary plat, the Zoning and Planning Board may refer copies of the plat and any accompanying material to those public and any private agencies concerned with new land clearing, land disturbance and/or development, provided that the Zoning and Planning Board may extend the 35 day review period if within said time period it has not received information it deems necessary for a thorough review of the plat. **(Amended 6-10-08)**

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- (2) If the Zoning and Planning Board approves the preliminary plat, such approval shall be indicated in its minutes and such approval shall be shown on each copy of the plat by the following signed certificate:

Certificate of Approval

I certify that the preliminary plat shown hereon complies with the Lake Lure Subdivision Regulations and is approved by the Town of Lake Lure Zoning and Planning Board.

\_\_\_\_\_

Date

\_\_\_\_\_

Chairman, Zoning and Planning Board

- (3) If the preliminary plat is disapproved by the Zoning and Planning Board, the reasons for such disapproval shall be stated in writing, specifying the provisions of the code with which the preliminary plat does not comply. One copy of the reasons and one copy of the plat shall be retained by the Zoning and Planning Board; one copy of the reasons and the remaining copies of the plat shall be transmitted to the subdivider. If the preliminary plat is disapproved, the subdivider may make such changes as will bring the plat into compliance and resubmit same for reconsideration by the Zoning and Planning Board as provided in this ordinance.
- (4) Approval of the preliminary plat shall be valid one year unless a written extension is granted by the Zoning and Planning Board on or before the one year anniversary of said approval. If the final plat is not submitted for approval within said one year period or any period of extension, the said approval of the preliminary plat shall be null and void.  
(Ord., passed 3-22-94) Penalty, see § 91.99
- (F) Erosion Control Plans. No person shall initiate any land disturbing activity which disturbs more than one contiguous acre within the proposed subdivision without having an erosion control plan approved by the Land Quality Section of the North Carolina Department of Natural Resources and Community Development and the Subdivision Administrator, as required by Chapter 96 of the Code of Ordinances for the Town of Lake Lure. Written documentation shall accompany the preliminary plat. **(Amended 11-13-01)**
- (G) Deposit of Compliance. A deposit of compliance that is refundable when all infrastructure has been approved by the Subdivision Administrator. In the event that any damages occur to Town infrastructure and/or property, these funds may be seized to cover any costs associated with correcting said damages. The deposit of compliance shall be a certified or cashier's check in the amount set by the Zoning and Planning Board. The Zoning and Planning Board shall establish the amount of the deposit based on the degree of risk to town infrastructure and/ or property. This amount shall be no less than one thousand dollars (\$1000), and no more than ten thousand dollars (\$10,000). **(Adopted 11-10-09)**

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### § 91.18 BEGIN DEVELOPMENT.

- (A) Upon approval of the preliminary plat by the Zoning and Planning Board, the subdivider may proceed with preparation of the final plat, the land clearing, the land disturbance and/or the installation of or arrangements for roads, utilities, and other improvements as specified in the approved portion of the preliminary plat that will be submitted for final approval. **(Amended 6-10-08)**
- (B) Improvements Guarantees.
- (1) Agreement Prior to Final Plat Approval. In lieu of requiring the completion, installation and dedication of all improvements prior to final plat approval, the town may enter into an agreement with the subdivider whereby the subdivider shall agree to complete all required improvements as specified on the approved preliminary plat for that portion of the subdivision to be shown on the final plat within a reasonable time to be determined in said agreement. **(Amended 10-10-06, 11-14-06)**

The guarantees under such an agreement shall include the following:

- (a) That water supply and distribution systems and sewer collection systems are installed in accordance with the *Town of Lake Lure Standard Specifications and Details for Construction*; **(Adopted 10-10-06)**
- (b) That streets and the storm water collection network are installed as specified in these regulations; **(Adopted 10-10-06)**
- (c) That soil erosion control measures are installed and maintained as specified in Chapter 96, the Soil Erosion and Sedimentation Control Regulations; **(Adopted 10-10-06)**
- (d) That tree and/or environmental protection measures shown on the plat shall be properly installed and maintained throughout land clearing, land disturbance and/or development; **(Adopted 10-10-06; Amended 6-10-08)**
- (e) That areas of the subdivision specified on the plat to be graded shall be graded as specified or shall be so graded at the expense of the subdivider; **(Adopted 10-10-06)**
- (f) That areas of the subdivision specified on the plat to be left ungraded shall be left ungraded as specified or shall be returned as far as possible to the original condition at the expense of the subdivider; **(Adopted 10-10-06)**

## SUBDIVISION REGULATIONS

- (g) That any significant trees cut without appropriate approvals, or damaged to an extent likely to cause the death of those trees, shall be replaced by healthy trees at the expense of the subdivider; **(Adopted 10-10-06)**
  - (h) That any areas exceeding 100 sq. ft. in size from which native shrubbery and their stumps and roots have been removed without approval as part of a tree protection plan, or damaged to an extent likely to cause the death of those shrubs, shall be replanted with healthy shrubbery at the expense of the subdivider; **(Adopted 10-10-06)**
  - (i) That replacement trees and shrubbery shall be of species recommended in the *Lake Lure Tree Protection Handbook*, and at the 'minimum dbh for replanting' sizes appropriate to the species as shown in Attachment D. They shall be planted in sufficient numbers to equal the total inches in dbh of the trees so damaged or removed, and/or to fully replant the area of shrubbery so damaged or removed, and; **(Adopted 10-10-06)**
- (2) The Town may require that the final plat be broken into smaller phases when the required security exceeds five hundred thousand dollars (\$500,000), or when the Town's interest (as determined by Town Council) would be served by an alternate phasing plan. The extent of the smaller phases shall be established by the applicant in cooperation with the Subdivision Administrator. **(Adopted 11-10-09)**
- (C) Once said agreement is signed by both parties and security required herein is provided, the final plat may be approved by the Zoning and Planning Board provided it meets with the requirements of § 91.19. To secure this agreement, the subdivider shall provide, following the preliminary plat approval of the Zoning and Planning Board, either one or a combination of the following guarantees not exceeding 1.75 times the entire cost as approved by the Subdivision Administrator, of installing required improvements, replanting, and repairs, as specified in 91.18(B)(1), on the approved preliminary plat for that portion of the subdivision to be shown on the final plat. **(Amended 10-10-06, 11-10-09)**
- (1) Surety Performance Bond(s). The subdivider shall obtain a performance bond(s) with supporting references relative to our region from a surety bonding company authorized to do business in the state, and having a "Secure" financial strength rating from the A.M. Best Company or an equivalent rating from a firm acceptable to the Town. No bond(s) in excess of one hundred thousand dollars (\$100,000) shall be accepted from any single surety bonding company with a rating from the A.M. Best Company lower than A- (or an equivalent rating from a firm acceptable to

## SUBDIVISION REGULATIONS

the Town). The bond(s) shall be payable to the Town of Lake Lure. The duration of the bond(s) shall be until such time as the improvements are approved by the Town Council. **(Amended 10-10-06, 11-14-06, 11-10-09)**

- (2) Cash or Equivalent Security. The subdivider shall deposit cash or other instrument readily convertible into cash at face value, either with the town or in escrow with a financial institution designated as an official depository of the town. The use of any instrument other than cash shall be subject to the approval of the Town Council. If cash or other instrument is deposited in escrow with a financial institution as provided above, then the subdivider shall file with the Town Council an agreement between the financial institution and himself guaranteeing the following: **(Amended 10-10-06, 11-14-06, 11-10-09)**
  - (a) That said escrow account and any accumulated interest shall be held in trust until released by the Town Council and may not be used or pledged by the subdivider in any other matter during the term of the escrow; and **(Amended 10-10-06, 11-10-09)**
  - (b) That in the case of a failure on the part of the subdivider to complete any improvements or any required replantings or repairs, the financial institution shall, upon notification by the Town Council and submission by the Town Council to the financial institution of the Subdivision Administrator's determination of the amount needed to complete the improvements, replantings, or repairs immediately either pay to the town the funds determined to be needed to complete the improvements, replantings, or repairs up to the full balance of the escrow account, or deliver to the town any other instruments fully endorsed or otherwise made payable in full to the town. **(Amended 10-10-06)**
- (3) Letter of Credit. When a letter of credit is submitted it shall be approved by the Town Attorney and the Town Council and deposited with the Subdivision Administrator; the following information shall be contained in said letter: **(Amended 10-10-06, 11-10-09)**
  - (a) Shall be entitled "Irrevocable Letter of Credit";
  - (b) Shall indicate that the town is the sole beneficiary;
  - (c) The amount (of the letter of credit) as approved by the Subdivision Administrator;

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- (d) Account number and/or credit number that drafts may be drawn on;
  - (e) List of improvements that shall be built that the letter is guaranteeing;
  - (f) List of conditions to be met with regard to tree and/or native shrub health and safety at the conclusion of land clearing, land disturbance and/or development, including replanting any replaced trees and/or shrubs nor found in good health for the period specified in §91.18(B)(1)(j). **(Adopted 10-10-06, amended 11-14-06, 6-10-08)**
  - (g) Terms in which the town may make drafts on the account;
  - (h) Expiration date of the letter.
- (D) Default. Upon default, meaning failure on the part of the subdivider to complete the required improvements, replantings, and/or repairs in a timely manner as spelled out in the agreement in division (B) (1) above, then the surety, or the financial institution holding the escrow account shall, if requested by the Town Council, pay all or any portion of the bond or escrow fund to the town up to the amount needed to complete the improvements, replantings, and/or repairs based on the Subdivision Administrator's determination. Upon payment, the Town Council, in its discretion, may expend such portion of said funds as it deems necessary to complete all or any portion of the required improvements, replantings, and/or repairs. The town shall return to the surety or escrow account any funds not spent in completing the improvements, replantings, and/or repairs. **(Amended 10-10-06)**
- (E) Release of Guarantee Security. The Town Council may release a portion of any security posted as the improvements, replantings, and/or repairs are completed and recommended for approval by the Subdivision Administrator. Prior to release of all or any portion of the security posted, the subdivider shall **(Amended 10-10-06)**
- (1) Submit signed and sealed statements from a licensed engineer and/or the tree protection officer that the improvements, replantings, and/or repairs for which the developer seeks release of funds have been installed in accordance with all applicable state and local specifications and according to the approved plans and that the property is properly stabilized. **(Amended 10-10-06)**
  - (2) Obtain a two-year extension of the letter of credit in cases where trees and/or shrubs were required to be replaced, to assure replanting of any such trees and/or shrubs not found to be in good health at the end of the period specified in §91.18(B)(1)(j). This deposit shall be in an amount equal to 1.75 times determined cost of replanting the failed replacement trees, as determined by

## SUBDIVISION REGULATIONS

the Subdivision Administrator. **(Adopted 10-10-06, amended 11-14-06, 11-17-09)**

At such time as these requirements have been met, and the Subdivision Administrator approves all improvements, replantings, and/or repairs placed in the subdivision as set forth by the Zoning and Planning Board, then all security posted shall be immediately released. **(Amended 5-23-95, 10-10-06)** Penalty, see § 91.99

### § 91.19 FINAL PLAT.

- (A) General. No final plat for a major subdivision shall be considered unless it has been preceded by a preliminary plat approved by the Zoning and Planning Board. The final plat shall constitute only that portion of the preliminary plat which the subdivider proposes to record and develop at the time of submission. No final plat shall be considered unless and until the subdivider shall have installed in that area represented on the final plat all improvements required by this ordinance as specified in the approved preliminary plat, or financial guarantees of said improvements have been arranged in accordance with § 91.18. No final plat shall be considered until any and all damages (caused as a result of the development of the subdivision) to public infrastructure and/or property has been corrected to the satisfaction of the Town. The subdivider shall submit seven copies and one original of the final plat to the Subdivision Administrator. At the time of submission of the final plat, the subdivider shall pay such fee as established by the town and any fees incurred by the town during the plat review process. **(Amended 10-10-06, 11-10-09)**
- (B) Contents Required. The original of the final plat shall be at a scale of not more than 100 feet to 1 inch, on a sheet of a size and material that will be acceptable to the County Register of Deeds, and shall conform substantially to the preliminary plat as approved. The plat shall conform to the provisions of the G.S. § 47-30, as amended. The final plat shall be executed by a registered land surveyor and shall show the following information:
- (1) Subdivision name, north arrow, scale denoted graphically and numerically, date of plat preparation, and township, county and state in which the subdivision is located; and the name(s) of the owner(s) and the registered surveyor (including the seal and registration number).
  - (2) The exact boundary lines of the tract to be subdivided fully dimensioned by lengths and bearings, and the location of intersecting boundary lines of adjoining lands.
  - (3) The names and deed references (when possible) of owners of adjoining properties and adjoining subdivisions of record (proposed or under review).

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- (4) All visible and apparent rights-of-way, watercourses, utilities, roadways, and other such improvements shall be accurately located where crossing or forming any boundary line of the property shown.
- (5) Sufficient engineering data to determine readily and reproduce on the ground every straight or curved boundary line, street line, lot line, right-of-way line, easement line, and setback line, including dimensions, bearings or deflection angles, radii, central angles, and tangent distances for the centerline of curved streets and curved property lines that are not the boundary of curved streets.
- (6) The accurate locations and descriptions of all monument markers and control points.
- (7) The blocks numbered consecutively throughout the entire subdivision and the lots numbered consecutively throughout each block.
- (8) Minimum building setback lines.
- (9) Street names and right-of-way lines of all streets, and the location and width of all adjacent streets and easements.
- (10) The location and dimensions of all rights-of-way, utility, or other easements.
- (11) Forms for final certifications. The following certificates shall be lettered or rubber stamped on the final plat in such a manner as to ensure that said certificates will be legible on any prints made therefrom. Prior to final plat approval, certificates (a), (b), (c) and (d) (if applicable) shall be signed by the appropriate person.

(a) Certificate of Ownership

I (We) hereby certify that I am (we are) the owner(s) of the property shown and described hereon, and that I (we) hereby adopt this plan of subdivision with my (our) free consent, establish minimum building lines and minimum standards for all streets, sewers, water lines, alleys, walks, parks, and other sites. Further, I (we) certify the land as shown hereon is within the platting jurisdiction of the Town of Lake Lure, North Carolina.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Owner

\_\_\_\_\_  
Owner

SUBDIVISION REGULATIONS

(b) Certificate of Accuracy

(As required under G.S. § 47-30 as amended.)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Registered Surveyor

(c) Certification of Approval of the Installation and Construction of Streets, Utilities and Other Required Improvements, and of the Protection and/or Replacement of Trees. (Amended 10-10-06)

I hereby certify that streets, utilities, and other required improvements have been installed, and that existing trees have been successfully protected and/or have been replaced with trees of acceptable species, health, and size, according to an approved tree protection plan, or that a guarantee of such installation has been arranged as authorized in § 91.18, in accordance with the preliminary plat approved by the Zoning and Planning Board, and according to town specifications and standards in the subdivision entitled

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Subdivision Administrator

(d) One of the following certificates regarding ownership and maintenance of street rights-of-way in the subdivision must be lettered or stamped on the final plat indicating whether streets are to be private or dedicated to the public.

1. Certificate of Ownership and Maintenance of Private Streets

I hereby certify that the streets shown on this plat of the subdivision entitled \_\_\_\_\_ are private streets, and the responsibility for maintenance shall not be with the Town of Lake Lure.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Owner

2. Certificate of Dedication to the Public

I hereby certify that the rights-of-way and design of all streets represented on this plat have been approved by the Town of Lake Lure and that said streets have been or will be constructed in accordance with Town requirements for

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public streets. I hereby dedicate said rights-of-way to the Town for use as public streets. Further, until such time that the Town, by resolution, accepts said dedication, the responsibility for maintenance shall rest with \_\_\_\_\_.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Owner

3. Certificate of Dedication to the Public

I hereby certify that I dedicate to the public use all areas shown on this plat as streets, alleys, walks, parks, open space, and easements, except those specifically indicated as private. I hereby certify that the rights-of-way and design of all streets represented on this plat have been approved by the Town of Lake Lure and that said streets have been or will be constructed in accordance with Town requirements for public streets. All property shown on this plat as dedicated for public use shall be deemed to be dedicated for any public use authorized by law when such other use is approved by the Town of Lake Lure Town Council in the public interest. Further, until such time that the Town, by resolution, accepts said dedication, the responsibility for maintenance shall rest with \_\_\_\_\_.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Owner

**(Amended 9-27-94)**

(C) Subdivision Administrator Review and Approval. Upon receipt of the final plat in accordance with division (A) above, the developer shall submit a signed and sealed statement from a licensed engineer that all streets and water and sewer utilities have been installed in accordance with all applicable state and local specifications and according to the approved plans, unless a guarantee of such installations has been arranged in accordance with § 91.18. The Subdivision Administrator shall certify that the subdivision complies with all applicable elements of Chapter 92 (Zoning Regulations). The Subdivision Administrator shall also receive approval of the water and/or sewer plans and/or installation as required in § 91.57. Upon receipt of said written approvals, the Subdivision Administrator shall approve the final plat and sign the "Certificate of Approval of the Installation and Construction of Streets, Utilities and Other Required Improvements" as required in division (B) (11) (c) above. **(Amended 5-23-95)**

(D) Zoning and Planning Board Review and Approval. When the final plat is approved by the Subdivision Administrator, he shall submit the plat to the Zoning and Planning Board for final approval. The Zoning and Planning Board shall

## SUBDIVISION REGULATIONS

consider the final plat at the next regularly scheduled meeting that follows at least seven days after submission by the Subdivision Administrator. The Zoning and Planning Board shall take action on the final plat at its first consideration or at any regular or special meeting within 35 days of the plat's first consideration. The Zoning and Planning Board may extend the review period if it deems necessary in order to obtain additional information necessary for a thorough review of the plat.

- (E) Disposition of Copies. If the final plat is approved by the Zoning and Planning Board, the original tracing and one print shall be retained by the subdivider, and one print shall be filed with the Subdivision Administrator.
- (F) Certificate of Approval. After approval by the Zoning and Planning Board, the following certificate shall be lettered or rubber stamped on the final plat in such a manner as to ensure that said certificate will be legible on any prints made therefrom:

### Certificate of Approval.

I certify that the final plat shown hereon complies with the Lake Lure Subdivision Regulations and is approved by the Zoning and Planning Board for recording in the Rutherford County Register of Deeds Office.

\_\_\_\_\_

(Amended 9-27-94, 5-23-95) Penalty, see § 91.99

\_\_\_\_\_

Chairman, Zoning and Planning Board

### § 91.20 RECORDING OF THE FINAL PLAT.

Within 60 days after the final plat has been approved by the Zoning and Planning Board, it shall have been recorded with the County Register of Deeds. Should the 60 day time limit expire before the plat is recorded, it must be resubmitted in accordance with the provisions of this ordinance. Upon adoption of this ordinance, the County Register of Deeds shall not thereafter file or record a plat of a subdivision located within the town until said plat has been approved by the Zoning and Planning Board. Without the approval of the Zoning and Planning Board, the filing or recording of a subdivision plat shall be null and void. Penalty, see § 91.99

### § 91.21 EFFECT OF PLAT APPROVAL ON DEDICATIONS.

The approval of a final plat shall not be deemed to constitute or effect the acceptance by the town of the dedication of any street, public utility line, or other public facility as shown on the plat. The Town Council shall pass a resolution in order to accept any dedication made to the public of lands or facilities for streets, parks, public utility lines, or other public purposes.

## SUBDIVISION REGULATIONS

### § 91.22 MINOR SUBDIVISIONS.

- (A) No preliminary plat is required for minor subdivisions. Final plat for a minor subdivision must contain all information required by § 91.19 (B) and shall be presented to the Subdivision Administrator at least three working days prior to offering any portion for recording in the office of the Register of Deeds. Additional information may be needed by zoning staff in order to evaluate the proposed subdivision to see if the subdivision meets the requirements of this section. Once the additional information is received by zoning staff, the three day review period will begin. If the minor subdivision complies with the following standards, the Subdivision Administrator shall provide the approval in writing on the face of the deed or plat. Once the deed or plat has been approved, the owner or the owner's agent may record the deed or plat in the office of the Register of Deeds.
- (B) The following are the standards for approval of minor subdivisions:
- (1) Minor subdivisions may be approved provided that the subdivision: does not violate any adopted plan, policy, or ordinance of the town; does not create any new public streets; does not block or impede the extension of a public street located within a subdivision recorded on a final plat in the office of the Register of Deeds or a public street shown on a preliminary subdivision which is on file in the zoning office; does not leave an implied division of property which would not meet the requirements of Chapter 92 (Zoning Regulations) or any other land regulatory ordinances; or does not land lock any tract of land.
  - (2) If a minor subdivision lies within a preliminary subdivision which has been approved by the Zoning and Planning Board, then official action must be taken by the Zoning and Planning Board to withdraw the subdivision or any portion thereof before a minor subdivision can be approved. Penalty, see § 91.99
  - (3) There may be only 1 minor subdivision in one tract of land, or contiguous tracts of land owned by an individual, group of individuals, or partnership or a company or any combination thereof. All minor subdivisions shall be reviewed in accordance with the provisions in this chapter. However, if the owner leases, holds an option on or holds any legal or equitable interest in any property to be subdivided, the subdivision shall not qualify under the abbreviated minor plat procedure. Furthermore, the abbreviated procedure may not be used a second time within 3 years on any property less than 1,500 feet from the original property boundaries by anyone who owned, had an option on or any legal interest in the original subdivision at the time the subdivision received preliminary or final plat approval; **(Amended 11-13-01)**

## SUBDIVISION REGULATIONS

### § 91.23 PLANNED UNIT DEVELOPMENT.

Non-traditional subdivisions may be developed as planned unit developments as described in § 92.048. Planned unit developments are permitted as a conditional use in most zoning districts.

SUBDIVISION REGULATIONS

**3 GENERAL REQUIREMENTS**

§ 91.35 CONFORMITY TO EXISTING MAPS OR PLANS.

The location and width of all proposed streets, trails, and paths, and the location of proposed green areas shall be in conformity with official plans and maps of the Town of Lake Lure. **(Adopted 3-22-94, amended 10-10-06)** Penalty, see § 91.99

§ 91.36 CONTINUATION OF ADJOINING STREET SYSTEM.

The proposed street layout shall be coordinated with the street system of the surrounding area. Where possible, existing principal streets shall be extended. Penalty, see § 91.99

§ 91.37 ACCESS TO ADJACENT PROPERTIES.

Where, in the opinion of the Zoning and Planning Board, it is desirable to provide for street access to an adjoining property, proposed streets shall be extended by dedication to the boundary of such property and a temporary turn around shall be provided. Penalty, see § 91.99

§ 91.38 LARGE TRACTS OR PARCELS.

Where land is subdivided into larger parcels than ordinary building lots, such parcels shall be arranged so as to allow for the opening of future streets, trails, paths, and green areas, and logical further re-subdivision. **(Adopted 3-22-94, amended 10-10-06)** Penalty, see § 91.99

§ 91.39 ALLEYS.

Alleys shall be provided to the rear of all lots used for other than residential purposes. All dead end alleys shall be provided with a turn around. Penalty, see § 91.99

§ 91.39A PRIVATE DRIVES.

No private drives shall serve more than one lot, except that driveways may be permitted to serve up to three residential lots provided each lot fronts a public or private street and after a determination by the Subdivision Administrator that reasonable access from the street to said lots cannot be achieved due to topography or natural features. Driveways shall have a travelway width of not less than 10 feet and shall be surfaced with gravel or pavement. Driveways which intersect with a state road shall require a permit from the North Carolina Department of Transportation. Private drives will not be maintained by the Town of Lake Lure. **(Amended 11-26-96, 4-9-02)** Penalty, see § 91.99

## SUBDIVISION REGULATIONS

### § 91.40 STREET NAMES.

Proposed streets which are obviously in alignment with existing streets shall bear the assigned name of the existing streets. Streets shall be named under the procedure found in § 40.02. **(Amended 11-26-96)** Penalty, see § 91.99

### § 91.41 SURVEYING AND PLACEMENT OF MONUMENTS .

“The Manual of Practice for Land Surveying,” as adopted by the North Carolina Board of Registration for Professional Engineers and Land Surveyors, under provisions of G.S. Ch. 89C, shall apply when conducting surveys. **(Amended 11-26-96)** Penalty, see § 91.99

### § 91.42 PREPARATION OF PLANS BY A REGISTERED SURVEYOR OR ENGINEER.

- (A) All plans for streets, and drainage as required in this ordinance shall be executed by a registered engineer or a registered surveyor. The engineer's or surveyor's seal shall be affixed to such plans.
- (B) All plans for water and sewer (except individual water or sewer systems) as required in this ordinance shall be executed by a registered engineer. The engineer's seal shall be affixed to such plans. **(Amended 11-26-96)** Penalty, see § 91.99

### § 91.43 PRESERVATION OF WATER AREAS

It is the intent of these regulations both to safeguard existing and potential land clearing, land disturbance and/or development in appropriate locations and to preserve and promote a desirable ecological balance. Insofar as is reasonably practicable, subdivisions shall, therefore, be located, designed and improved to accomplish the following: (a) preserve important natural water areas and related vegetation and wildlife habitats; (b) avoid creation of upstream impoundments or downstream runoff harmful to such complexes or to existing or potential development in appropriate locations; and (c) maintain desirable groundwater levels. **(Adopted 10-9-07; Amended 6-10-08)**

- (A) ***Maintenance of natural water courses.*** Standards for maintenance of natural watercourses are as provided herein. **(Adopted 10-9-07)**
  - (1) Where a proposed subdivision is traversed by or includes in whole or in part a natural watercourse, as defined herein, the following requirements shall apply.

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- (a) Such natural watercourse shall be maintained in its natural state except for those vehicular or utility crossings which are necessary and deemed unavoidable by the approving authority.
  - (b) Bordering lands within 25 feet of the edge of any natural watercourse shall be maintained in a naturally vegetated and unaltered state.
  - (c) Bordering lands likely to be inundated at the period of high water during periods of rainfall of ten-year return frequency shall be maintained in a naturally vegetated and unaltered state.
- (2) The Subdivision Administrator, as a condition for plat approval, may make such requirements as are reasonable for the protection of such areas, including the following.
- (a) The Subdivision Administrator may require that streets and/or parkways shall border such areas, setting them apart from residential or other intensive uses; or
  - (b) The Subdivision Administrator may require that all or part of such area shall be platted as part of residential or other lots.
- (3) In making decisions concerning such requirements, the Subdivision Administrator shall consider topography, drainage patterns, soil types, character of existing and potential upland uses, ground cover, erosion control requirements, character of the area to be protected, the adequacy of proposed filter areas, and the like.
- (B) *Minor incursions for recreational purposes.* Minor incursions into areas protected under this section may be permitted for the purpose of providing pedestrian and bicycle access for passive recreational activities. Such incursions shall be permitted only if shown on the preliminary and final plats and approved by the Subdivision Administrator. **(Adopted 10-9-07)**

### § 91.44 CONSERVATION DESIGN.

The requirements in this section are intended to provide for a subdivision design that is more efficient and better suited to the natural features of the land. Conservation design allows smaller and less costly networks of roads and utilities, encourages closer-knit and potentially safer neighborhoods, preserves sensitive farmland, woodlands, scenic views and open space, and reduces the amount of impervious surface and resulting stormwater runoff. The open space provided by conservation design can be used to provide recreational opportunities for the subdivision's residents or employees, to conserve and protect significant natural areas and environmentally sensitive areas, to conserve

## SUBDIVISION REGULATIONS

important historic resources, and/or to conserve productive farming and forestry uses. **(Adopted 10-9-07)**

- (A) ***Compliance required.*** Subdivisions containing 20 or more acres shall utilize conservation design in accordance with the requirements of this section. Notwithstanding the foregoing, subdivisions of land situated entirely within the R-1 zoning classification containing at least five contiguous acres may utilize conservation design but are not required to do so.

It is the intent of this section to preclude any attempt to avoid conservation design by the sequential subdivision of land into two or more subdivisions containing less than 20 acres. To that end, two or more subdivisions shall be aggregated and treated as a single subdivision under this ordinance when they are contiguous to property owned or controlled by person(s) owning or controlling the land to be subdivided. **(Adopted 10-9-07)**

- (B) ***General design requirements.*** In addition to the other standards contained in these regulations, conservation design subdivisions shall comply with the following design requirements. **(Adopted 10-9-07)**

- (1) ***Minimum conservation design subdivision site size.*** The minimum land area within a parcel to create a conservation design subdivision shall be at least five contiguous acres.
- (2) ***Maximum number of lots in conservation design subdivision.*** The maximum number of lots allowed within a conservation design subdivision shall be determined by dividing the total acreage in the tract, excluding state road and town street rights-of-way and primary conservation areas, by the lot size requirement for zoning classification of the property contained in §92.040 of the Zoning Regulations.
- (3) ***Lot design and dimensional requirements for subdivisions.*** Lots shall be clustered in one or more contiguous areas. Furthermore, provided the arrangement, design and shape of lots is such that lots provide satisfactory and desirable sites for building and contribute to the overall preservation of open space and all other requirements in this section and applicable local, state and federal requirements are met, the minimum lot area, lot width and yard requirements as shown in §92.040 for the applicable zoning classification may be reduced as stated herein. Any reduction in the yard requirements as shown in §92.040 shall be approved by the Zoning and Planning Board during the preliminary and final plat process and clearly stated on the final plat for the approved conservation subdivision. If the reduced setback is not stated on the final plat, the standard setbacks noted in §92.040 shall apply. **(Amended 2-8-11)**

## SUBDIVISION REGULATIONS

- (a) The minimum lot area shall not be less than 75 percent of the lot area required in the underlying zoning, or 10,000 square feet, whichever is greater.
  - (b) The minimum lot width requirement at the building site may be reduced by 50 percent, but shall not be less than 45 feet.
  - (c) The minimum front yard requirement may be reduced by 40 percent.
  - (d) The minimum rear yard requirements may be reduced by 40 percent, but shall be no less than ten feet.
  - (e) The minimum side yard requirements may be reduced to zero feet.
  - (f) When buildings are separated, they shall be separated a minimum of twenty feet.
  - (g) Yards abutting the perimeter boundaries of a conservation subdivision shall be no less than the minimum requirements contained in Section 92.040 of the Zoning Regulations. **(Amended 6-10-08, 8-12-08)**
- (C) ***Required open space.*** Land within the subdivision site that is not contained in lots or in rights-of-way or parcels devoted to accommodating necessary streets and utilities shall be in one or more connected parcels dedicated or reserved as permanent open space as specified herein. Lands identified as primary conservation areas pursuant to §91.44(D)(1), below, shall be deemed permanent open space in accordance with this ordinance. In addition to primary conservation areas, 25 percent of the remaining land area of the subdivision shall be included in permanent open space. Secondary conservation areas shall be included in open space to the extent they do not exceed 25 percent of the remaining land area. In the event secondary conservation areas do not equal or exceed 25 percent of the remaining land area of the subdivision, additional open space shall be designated so that at least 25 percent of the remaining land area of the subdivision is made permanent open space. **(Adopted 10-9-07)**
- (D) ***Open space use, location and design.*** Design requirements for open space use, location and design are contained in this section. **(Adopted 10-9-07)**
- (1) ***Primary conservation areas.*** The following areas are considered primary conservation areas and shall be designated as open space on the plat of any major subdivision:
    - (a) Natural watercourses and any adjoining areas required to be maintained in a natural vegetated and unaltered state by this Ordinance.

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- (b) Any identified sensitive natural area as defined herein,
  - (c) Other areas specified in §91.43(A)(1), above.
- (2) *Secondary conservation areas.* The following areas are considered secondary conservation areas and should be considered for designation as open space on the plat of any conservation design subdivision:
- (a) Any environmentally sensitive areas where land clearing, land disturbance and/or development might threaten water quality or ecosystems (e.g., stream buffers, groundwater recharge areas). **(Amended 6-10-08)**
  - (b) Any identified important historic resources (e.g., homesteads, mills, barns, archeological sites) identified from a local archeological or architectural survey or an individual site survey.
  - (c) Productive farmland or forest land intended for continued agricultural and/or forestry use.
  - (d) Steep slopes (those exceeding 30 percent).
- (3) Open space which is not situated within a primary conservation area may be used to provide active and/or passive outdoor recreation opportunities (e.g., ballfields, playgrounds, tennis courts, swimming pools, basketball courts, bikeways, walking trails, nature trails, and picnic areas), either for the general public or for the subdivision's residents or employees and their guests. Note: This does not preclude a membership requirement or monetary charge for use of recreation facilities, such as a swim or tennis club, as long as subdivision residents have an opportunity to join the club or pay to use club facilities. No more than ten percent of such additional open space shall be covered with impervious surfaces.
- (4) Open space situated within a primary conservation area may be used for limited passive recreational activities, such as nature trails, so long as such activities do not impair the functionality of the area.
- (5) Sidewalks may be provided by the developer, if approved by the Subdivision Administrator, as leading to a pedestrian destination point, such as a school, park, etc., and may constitute part of the open space requirements.
- (6) The location, size, character, and shape of required open space shall be appropriate to its intended use (e.g., open space proposed to be used for recreation, particularly active recreation, shall be located and designed so as to be conveniently and safely reached and used by those persons it is

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intended to serve, and open space proposed to be used for ballfields, playing fields, or other extensive active recreational facilities should be located on land that is relatively flat and dry).

- (7) *Phasing.* When a conservation design subdivision is developed in phases, it shall be designed and developed in such a manner that total open space is never less than 25 percent of the total land area in any such phase and all previously approved phases.
  - (8) No portion of any required primary or secondary areas may be used for septic drain fields.
- (E) ***Open space dedication or reservation.*** Open space shall be dedicated or reserved in accordance with the standards contained herein. **(Adopted 10-9-07)**
- (1) Subdivision occupants shall be ensured direct access to and use of the subdivision's open space, by conveying that portion of open space to a homeowners' association, property owners' association, or similar legal entity or to a public agency or nonprofit organization that is organized for, capable of, and willing to accept responsibility for managing the open space for its intended purpose and that will ensure subdivision occupants direct access to and use of the open space. Any other open space provided may be conveyed to such organizations or to any agency, organization, person, or other legal entity that is organized for, capable of, and willing to accept responsibility for managing the open space for its intended purpose, provided such conveyance is restricted to ensure continued open space use and maintenance.
  - (2) Each dedicated or reserved open space parcel shall be shown on all subdivision plans and on a record plat recorded with the county register of deeds, with a notation of its area and its intended open space use, as identified herein. The owner of an open space parcel may rededicate or re-reserve the parcel for another open space use allowed under this section by recording a record plat showing the parcel and its new intended open space use.
  - (3) The land clearing, land disturbance and/or development area for any lot in a conservation design subdivision shall be delineated on subdivision plats. Those areas described in §91.44(D)(1), above, shall not be included in the area of any lot intended for development and shall be set aside for the common use and enjoyment of occupants of the subdivision, and arrangements for maintenance by a homeowners' association, management group or other acceptable arrangement shall be made. These areas shall be designated for permanent protection on the subdivision plat and recorded deeds, with appropriate recorded deed restrictions for the use and protection of these areas stipulated, and all management responsibilities

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set forth in homeowners' association bylaws or other appropriate and binding documents for the development. **(Amended 6-10-08)**

- (F) ***Open space maintenance.*** The owner of the open space shall be responsible for maintaining the open space so that it continues to effectively function for its intended use, and any dedication or conveyance of an open space parcel shall provide for such responsibility. Where the subdivision is located within a watershed protection district, retention of undeveloped open space in a vegetated or natural state, shall be ensured by maintenance provisions filed with the county register of deeds, either as part of recorded documentation providing for establishment of a homeowners' association or similar legal entity that is to be responsible for maintenance and control of open space or in a maintenance agreement recorded with the property deeds. **(Adopted 10-9-07)**
- (G) ***Design procedure.*** The following conservation design procedures shall be used in evaluating conservation design subdivision applications. **(Adopted 10-9-07)**
- (1) ***Existing features/site analysis.*** An existing features/site analysis map shall be submitted to the Planning Director. The map shall indicate all features that exist on the subject site as described in this section.
  - (2) ***Identification of open space conservation areas.*** Open space areas shall be identified. Guidance as to which parts to classify as open space areas shall be based upon three factors:
    - (a) On-site visits by the Subdivision Administrator, the subdivider and the site designer.
    - (b) The open space standards contained in this section.
    - (c) The evaluation criteria as shown in §91.44(H), below.
  - (3) ***Principal structure setback from open spaces.*** Any principal structures must be set back a minimum of 30 feet from all open space lot lines. Provided, however, the Planning Director may reduce this setback requirement when, due to soil types, topography or other site considerations, strict compliance would result in practical difficulty or unnecessary hardship and when adequate assurances have been given for the protection of the open space.
  - (4) ***Street, trail and sidewalk locations and alignments.*** All streets, sidewalks and trails shall be located and aligned on the site in the most reasonable, economical, and environmentally protective manner. Trails shall be provided from housing clusters to the designated open space.

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- (H) ***Evaluation criteria.*** For any given site, resources may vary widely by importance. Likewise, for each type of resource, there should be examples of greater or lesser significance. In evaluating the layout of a site, the following evaluation criteria will be considered in determining the site's features and allowing for site design flexibility. **(Adopted 10-9-07)**
- (1) The open space shall be reasonably contiguous and shall abut existing open space on adjacent sites.
  - (2) Wetlands, flood hazard areas and natural watercourses with associated stream buffers shall not be cleared, filled or graded except as authorized by state, federal and other applicable regulations and as may be approved by the Planning Director. Water features shall constitute no more than 50 percent of the open space area. **(Amended 6-10-08)**
  - (3) Dwellings shall be located in unwooded parts of the site to prevent unnecessary clearing practices. Exceptions may be made when a site investigation reveals all or part of wooded areas are not worth saving due to tree decay/disease or unsightly overgrowth.
  - (4) The impacts on larger woodlands over two acres shall be minimized as much as practical.
  - (5) Where farmland preservation is the goal of a site design, dwellings shall be located away from active farming areas, as is practical.
  - (6) Where preserving scenic views is the goal of a site design, such scenic views shall remain unblocked and uninterrupted. In wooded areas, where enclosure (i.e., a tree canopy) is a feature to be maintained, a no-cut and no-build buffer strip shall be considered along the public roadway. **(Amended 6-10-08)**
  - (7) Where historic or archeological preservation is the goal of a site design, new streets, driveways, fences and/or utilities shall not interfere with the historic site. Building designs of the new homes shall reflect the qualities and designs of the historic buildings, as much as is practical.
  - (8) Where power line rights-of-way are proposed to be included as part of the open space, the right-of-way shall not exceed 50 percent of the required permanent open space.
- (I) ***Estate lot subdivisions.*** Estate lot subdivisions exist as an alternative to conservation design subdivisions as regulated herein. In addition to other applicable standards of this ordinance and other applicable regulations, estate lot subdivisions shall comply with the standards contained in this subsection. **(Adopted 10-9-07)**

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- (1) *Minimum lot size.* Each lot within an estate lot subdivision shall contain at least five acres of land area.
- (2) *Maximum disturbed area.* No more than 25 percent of the area of a lot within an estate lot subdivision may be cleared of natural vegetation or otherwise disturbed.
- (3) *Maximum impervious surface.* No more than 10 percent of the area of a lot within an estate lot subdivision may be covered with impervious surfaces.
- (4) *Protection of primary conservation areas.* Primary conservation areas, as specified in §91.44(D)(1), above, shall be protected in accordance with the standards of this ordinance with the exception that such areas need not be included within the open space of the subdivision and may be included within the boundaries of an estate lot.
- (5) *Plats and restrictive covenants.* The plat of an estate lot subdivision shall bear a notation concerning the maximum disturbed area, the maximum impervious surface and the protection of primary conservation areas, and restrictive covenants so limiting the use, land clearing, land disturbance and/or development of any such lot shall be recorded in the Office of the Register of Deeds of Rutherford County. The restrictive covenants shall be reviewed and approved by Town of Lake Lure prior to recordation. **(Amended 6-10-08)**

### § 91.45 COMMON AMENITIES.

When common amenities are intended for subdivisions, they shall be placed in the interior of the development. When it is impractical to locate such places in the interior of the development, they shall be separated from adjacent properties by a wooded buffer at least 50 feet in width. Such buffer shall not be required for common amenities adjacent to, and functionally associated with, that body of water known as Lake Lure. This requirement shall not apply to golf courses. **(Adopted 8-12-08)**

### § 91.46 EASEMENTS.

Easements shall be provided for all utilities if they are outside the dedicated street right-of-way. Access to open or piped storm drainage channels shall be guaranteed to the town by granting an easement no less than 20-feet wide (to be shown on plat). **(Adopted 1-13-09)**

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### § 91.47 PERMANENT OPEN SPACE LOTS

In some instances, property owners may wish to permanently designate land as open space for conservation and preservation purposes. It is the intent of this section to allow for subdivision of permanently restricted open space lots while relaxing specific standards provided that a plat note is added to the plat and a deed restriction or a conservation easement is recorded with the County Register of Deeds that prohibits development of the property in perpetuity. The plat note, deed restriction and conservation easement may allow limited passive recreational activities. In conjunction with these activities, development on the property is limited to trails, walkways, steps, foot bridges, parking areas and retaining walls necessary for erosion control provided that said development does not exceed 5% of the lot area. A copy of the recorded deed restriction or conservation easement shall be submitted to the Subdivision Administrator. Provided that the open space lot complies with the above provisions, evidence of adequate water and sewer services is not necessary. **(Adopted 4-10-12)**

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**4 IMPROVEMENTS REQUIRED; MINIMUM STANDARDS OF DESIGN**

§ 91.55 SUITABILITY OF LAND.

- (A) Where land to be subdivided is found by the Zoning and Planning Board to be subject to the conditions of flooding, or improper drainage, or of severe erosion or slides, particularly on steep slopes or to have other characteristics which pose an ascertainable danger to health, safety or property, the subdivider shall take measures necessary to correct said conditions and to eliminate said dangers. **(Adopted 3-22-94, amended 10-10-06)** Penalty, see § 91.99

It should, however, be noted that due to severe topographic conditions, inadequate road access, distance from services, sensitive natural areas, soils that do not easily support soil drainage systems, or the proximity to existing and incompatible land uses, all land may not be suited to be subdivided for the purpose of dense development. **(Adopted 10-10-06; Amended 6-10-08)**

(B) Steep Slopes

- (1) No residential lot shall be created pursuant to this Chapter unless the average slope of such lot is less than 30% or, in the alternative, unless such lot contains a building and grading envelope with an average slope of less than 30%. **(Amended 11-18-08)**
- (2) The preliminary plat shall demonstrate compliance with this paragraph in the following manner: **(Amended 11-18-08)**
- (a) A note indicating the topographic survey confirms all lots in the proposed subdivision have average slopes of less than 30%; or
  - (b) A note, based on the topographic survey, identifying which lots have average slopes of 30% or greater and confirming that all other lots have average slopes of less than 30%.
  - (c) Lots with average slopes of 30% or greater shall have depicted thereon a building and grading envelope meeting the requirements of Article 12 of Chapter 92, Mountain & Hillside Development.
- (3) No development activities shall take place outside the bounds of any such building and grading envelope except as authorized by Article 12 of Chapter 92, Mountain & Hillside Development. **(Amended 11-18-08)**

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- (4) For the purpose of demonstrating compliance with this paragraph, the formula contained in §92.206(I) of the Zoning Regulations shall be used to determine slope. **(Amended 11-18-08)**

§ 91.56 STREETS AND ROADS.

- (A) All lots to be platted shall have access to a street, and all proposed streets shall be installed or financially guaranteed as provided in § 91.18B, and in accordance with the requirements below, prior to final plat approval.
- (B) All streets shall be designated as either public or private on both the preliminary and final plats. If streets are designated as private, the developer shall submit a written statement with the preliminary plat specifying plans for ownership and maintenance of said streets. In addition, said statement shall appear on the original of the final plat in such a manner that it will be legible on any copies made therefrom. If streets are designated as public, the town may, by resolution, in accordance with § 91.21, accept said streets for ownership and maintenance. If requested by the developer and at the option of the Town Council, streets may be accepted by the town for ownership and maintenance in stages as planned by the developer in order to save undue expense to the developer as well as the town. Council may, at its option, delay acceptance of a street for up to one year from completion to establish the quality of the construction. In no case will the streets be accepted for ownership and maintenance by the town until the following minimum standards have been met or financially guaranteed as provided in § 91.18B. All public and private streets shall meet the following minimum standards:

- (1) Development standards:

<u>Street Type</u>	<u>Right-of-Way Width</u>	<u>Travelway Width</u>	<u>Surface Material</u>
Temp. Const. Road	None	12'	Gravel
Lane	30'	16'	Gravel
Minor Street	40'	18'	Pavement
Collector Street	50'	20'	Pavement
Arterial Street <b>(Amended 4-9-02)</b>	60'	Per NC DOT Standards	

- (2) All grading and ditching shall be done to meet town specifications. **(Amended 4-9-02)**

## SUBDIVISION REGULATIONS

- (3) All drainage pipe shall be installed at the expense of the developer. The pipe size shall be determined by the town, but in no case will anything less than 15-inch pipe be permitted. **(Amended 4-9-02)**
- (4) The amount of right-of-way to be graded may vary depending on the drainage method selected by the developer. For standard double-ditch drainage, it will be necessary to clear a minimum of 32 feet from ditch to ditch. When alternative drainage methods are used (i.e. curb & gutter, drainage to one side of the road, inverted crown road, etc) grading of less than 32 feet may be possible. See Attachment A for illustrations of drainage methods. **(Amended 5-23-95)**
- (5) Curb and gutter is optional, but the town would encourage that it be installed. Total cost of curb and gutter to be paid by the developer. **(Amended 4-9-02)**
- (6) All classes of streets except temporary construction roads shall have stabilized shoulders of at least 3 feet in width on each side of the travelway. **(Amended 4-9-02)**
- (7) Within 14 days after road grading and excavation work has been completed, all banks, shoulders (if grass) and ditches created shall be seeded by the developer to prevent erosion and to cover ecological scars. **(Amended 5-23-95, 4-9-02)**
- (8) On any banks or shoulders seeded in (6) and (7), continued effort must be made by the developer to establish a good growth of grass and to take any action necessary to prevent erosion until a good grass growth is established. **(Amended 5-23-95)**
- (9)
  - (a) An approved turn around shall be provided where access is a dead end. The town encourages use of a cul-de-sac for such a turn around. Minimum paved radius for a cul-de-sac is 40 feet to allow for adequate turning room for emergency vehicles. Alternative turn around styles, including T-shaped and Y-shaped turn arounds, will be considered but must be approved by the town Fire Coordinator.
  - (b) A temporary turn around, temporary for no more than 12 months, shall be installed on any street which will later be extended. The 12 month period may be extended upon request of the developer and approval of the Subdivision Administrator. If permission to extend this period is not sought or is not given, the turn around must be converted to a permanent turn around which meets the minimum requirements. At a minimum, the temporary turn around shall consist of six inches of compacted stone and shall provide adequate turning room for emergency vehicles. See Attachment B for examples and dimensions of permanent and temporary turn around. **(Amended 5-23-95, 4-9-02)**

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- (10) Where the combined width of paving and stabilized shoulders required by this section is determined to be impractical due to topographical or other extreme physical conditions, the Zoning and Planning Board may authorize a lesser width after special review. **(Amended 1-24-95, 4-9-02).**
- (11) Street paving shall consist of a six-inch compacted stone base and two-inch I-2 bituminous plant mix. Lanes shall have not less than two inches of compacted gravel. Temporary construction roads shall have not less than four inches of compacted ballast stone. **(Amended 4-9-02)**
- (12) The total cost of paving shall be paid by the developer. The paving may be arranged by the developer, with the contract being approved by the town, or, should the developer request, paving may be arranged by the town. **(Amended 4-9-02)**
- (13) The grade of roads shall not exceed 15 % because of the difficulty of operating vehicles on such a steep road and the high potential for erosion of the travelway and ditches. Provided, however, roads may exceed a 15 % grade only after review by the Fire Coordinator and approval of the Zoning and Planning Board. Where possible, to avoid environmental impact, yet commensurate with safety, roads should be constructed along the contour of the land to avoid steep grades. **(Amended 5-23-95, 4-9-02)**
- (14) At the option of the Town Council, streets and roads may be accepted as part of the town's street system provided they have been paved to the standards in this section or the developer has submitted funds to the town for such paving as part of the improvements guarantee in accordance with § 91.18B. **(Amended 7-26-94, 1-24-95, 5-23-95, 4-9-02)** Penalty, see § 91.99

### § 91.57 WATER AND SEWER SYSTEMS.

The preliminary subdivision plat must be accompanied by satisfactory evidence as to the proposed method and system of water supply and sanitary sewage collection and disposal. The installation of all said systems except wells or septic tanks serving only one connection shall be required prior to final plat approval unless financially guaranteed according to § 91.18B. Said systems may be owned and operated by a public or private entity. Any well or septic tank or alternative sewer disposal system serving only one connection shall be approved by the County Health Department prior to final plat approval. For all new systems or expansion of existing systems serving two or more connections, approval shall be according to state statutes. All major subdivisions shall install water lines of six inches or greater to be able to serve property owners when water service becomes available. Subdivisions having 10 or more lots of under 2 acres in area shall be connected to the town water system or shall be served by an independent community water system. Said system shall be designed to provide minimum fire protection as required by the Town Manager. Where access to the town water

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distribution system is available within one half mile of any new subdivision or the extension of an existing subdivision, said subdivision or extension of an existing subdivision shall be connected to the town system. Where an independent community water system is established, such system shall be connected to the town system and dedicated to the town at such time as the town is able to provide service to the subdivision. The preliminary plat shall be accompanied by written assurance from the developer that plans for said new or expansion of existing systems have been submitted for approval to the appropriate state and/or local agencies. If the developer wishes to install said new or expanded systems prior to final plat approval, then submission of the final plat shall be accompanied by written approval of the installation of said systems by the appropriate state and/or local agencies. Prior to final plat approval, if the developer wishes to financially guarantee the installation of said systems, then submission of the final plat shall be accompanied by written approval of plans for said systems from the appropriate state and/or local agencies. In addition, the town will require that all water and sewer installations meet the following requirements. Whenever any conflict occurs between these requirements and those of the appropriate state and/or local agency, the stricter of the two requirements shall apply. **(Amended 1-14-02)**

### (A) Water Lines

- (1) All contractors must be approved by the town, and approval shall not be unreasonably withheld, and if total cost of the project exceeds \$30,000, the contractor must be licensed by the State of North Carolina.
- (2) The size and material of water lines to be installed will be determined by the Town Manager, Subdivision Administrator, and Public Works Director.
- (3) The subdivider will be responsible for all costs of water pipe, fittings, fire hydrants, and installation. All fittings and fire hydrants must be approved by the town for installation. Where a water line six inches or greater in diameter is required in a public system, and the system has been designed and approved by the Division of Health Services of the North Carolina Department of Human Resources to provide fire protection, fire hydrants shall be installed on said line. The hydrants shall be spaced so that coverage to all building sites along said line may be provided with not more than 500 feet of hose, and shall be located to facilitate access, hose laying, and drainage. The developer or his contractor shall contact the Fire Coordinator so that he may inspect fire hydrants during and after installation. **(Amended 5-23-95)**
- (4) If the water system is to be connected to the town water system, then when all water line installation has been completed and water connection fees paid, the town's water department will make the water connections and set water meters

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on each of the building lots. (Copy of current water connection fees available.)

- (5) Main water line to be installed 16 feet from center of the road or five feet from the edge of pavement, or at other distances approved by the Public Works Director and shall include a connector line to serve each building lot, extending across the road where needed, prior to paving the road. **(Amended 1-24-95)**
  - (6) Warranty. The contractor will be responsible for material and workmanship for a period of 12 months from the date accepted by the town.
  - (7) Water lines will not be extended until permits for such extensions have been obtained in order to comply with state law.
  - (8) No work shall be covered up before being inspected by the town's representative.
  - (9) Minimum cover on water lines shall be 36 inches or as otherwise required by the Public Works Director.
  - (10) Compaction shall be approved by the Public Works Director.
  - (11) In a situation where the subdivision is located along an existing road and an existing water main it will be the responsibility of the new lot owner to decide whether to have a well or pay to connect and tap on to the existing water system pursuant to the other ordinances and policies of the town in existence at that time. **(Amended 1-24-95)**
- (B) Sewer Lines. Where collector sewer mains are available, the following requirements must be met:
- (1) All contractors must be approved by the town, and approval shall not be unreasonably withheld, and if the total cost of the project exceeds \$30,000, the contractor must be licensed by the State of North Carolina.
  - (2) The size and material of sewer pipe to be used will be determined by the Town Manager, Subdivision Administrator, and Public Works Director.
  - (3) The cost of sewer pipe, manholes, materials, and cost of installation will be borne by the developer.

All sewer lines should be laid in the center of the roadway with stub outs at every manhole to each side of the road. The minimum cover shall not be less than 36 inches measured from finished grade. Grades shall be such that the lowest lot in the subdivision can receive adequate sewer service on the ground

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floor and shall be established by transit levels. In no case shall the grades be less than four-tenths of one percent.

- (4) Sewer lines will not be extended until permits have been obtained for such extension in order to comply with state law.
  - (5) No work shall be covered up before being inspected by the town's representative.
- (C) Utility Improvements Outside Town Limits. Any extension of water and sewer lines outside the town limits must be under contract between the Town of Lake Lure and the developer. The developer must provide all right-of-way easements in providing utility services to the subdivision, and provide the following requirements:
- (1) The developer must purchase water and sewer pipe and have installed at his cost.
  - (2) Water pipe size and material to be determined by the Town Manager, Subdivision Administrator, and Public Works Director.
  - (3) Sewer line size and material to be determined by the Town Manager, Subdivision Administrator, and Public Works Director.
  - (4) Water and/or sewer lines will not be extended until permits have been obtained for such extension in order to comply with state law.
  - (5) It will be necessary to have a profile of water and/or sewer lines to submit to the state for permit application.
  - (6) The cost for profile sheets will be borne by the developer.  
**(Amended 1-24-95, 5-23-95) Penalty, see § 91.99**

### § 91.58 STORM WATER DRAINAGE.

- (A) It shall be the responsibility of the developer to provide a drainage system which is designed to meet the following objectives:
- (1) Connect onto an existing storm sewer system, where feasible.
  - (2) Provide for adequate drainage from all roads, parking lots, and other developed areas.
  - (3) Prevent both the unnecessary impoundment of natural drainageways and the creation of areas of standing water.

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- (4) Ensure that existing drainage ways serving adjacent properties are maintained.
  - (5) Ensure that natural runoff levels are not substantially increased in order to prevent harmful flooding downstream and to maintain desirable groundwater levels.
  - (6) Prevent inundation of surface water into sanitary sewer system.
  - (7) Protect all roads, driveways, utilities and other types of land clearing, land disturbance and/or development from damages caused by improper drainage control. **(Amended 6-10-08)**
- (B) The drainage system shall be executed by a registered engineer or registered surveyor in conjunction with the street plans and shall be installed or financially guaranteed as provided in § 91.18B prior to final plat approval. Penalty, see § 91.99

### § 91.59 SEDIMENTATION CONTROL.

In order to prevent soil erosion and sedimentation pollution of streams, springs, flat water bodies or other drainage networks, and when there are plans for a land disturbing activity of one acre or more, the subdivider shall show proof with the preliminary plat of an erosion and sedimentation control plan which has been approved by the state agency having jurisdiction in accordance with the North Carolina Administrative Code, Title 15, as adopted by the North Carolina Sedimentation Commission, January 11, 1978, as amended. Penalty, see § 91.99

### § 91.59.5 TREE PROTECTION

- (A) Any cutting of trees in excess of the percentages permitted by the Forest Coverage Table (see Attachment C) is prohibited unless such excess cutting is shown in the approved tree protection plan (§91.59.5 (C)) and compensated for by replacing such trees, as described in §91.59.5 (B). Land clearing for subdivision development is prohibited except as permitted under the provisions of these regulations and Chapter 96, the Soil Erosion and Sedimentation Control Regulations. **(Adopted 10-10-06, amended 11-14-06, 6-10-08, 2-8-11 [effective 4-1-11])**
- (B) General. Land clearing permitted under these subdivision regulations shall be limited to the minimum necessary for the construction of roads, utilities, and structures or open green areas intended for common use of residents, and shall not include clearing for individual lots, whether for home sites, structures, driveways, individual wells or septic systems, landscaping, or development of views. One exception shall be that in cases where it is determined by the Subdivision Administrator that two or three homesites can reasonably be served by a single driveway, such driveway may be platted, approved, and constructed subject to all the usual provisions of town regulations. Structures or open green areas intended for common use of residents shall, to the extent that is possible, utilize pre-existing

## SUBDIVISION REGULATIONS

open spaces for this purpose. Clearing in common areas intended to be maintained in a forested state shall be limited to the development of trails, bicycle paths, small picnic areas, and other common amenities.

Any significant tree cut in excess of the number allowed by the Forest Coverage Table (See Attachment C), or without an approved tree protection plan, or in violation of an approved tree protection plan, or that is damaged during land clearing, land disturbance and/or development to the extent that the tree is likely to die, shall be replaced by healthy trees at the expense of the owner of the property or his agent, as follows: Such trees shall be replaced by species recommended in the *Lake Lure Tree Protection Handbook*, at the 'minimum dbh for replanting' sizes appropriate to the species as shown in Attachment D, and in sufficient numbers to equal the total inches in dbh of the trees damaged or unlawfully removed. Any areas exceeding 100 sq. ft. in size from which native shrubbery and their stumps and roots have been removed without approval as part of a tree protection plan, or that are damaged to an extent likely to cause the death of those shrubs, shall be replanted with healthy shrubbery at the expense of the subdivider. Such replacement trees and/or shrubs shall be planted in the approximate location of the originals that were damaged or unlawfully removed, or in areas specified by the tree protection officer, and shall be inspected at intervals by the tree protection officer. Any replanted trees or shrubs not continuing in good health for a minimum of two years shall be replanted at the expense of the owner or his agent. **(Adopted 10-10-06, amended 11-14-06, 6-10-08)**

- (C) Tree Protection Plan. Overall land clearing shall be governed by the forest coverage existing on the site prior to development. (See ATTACHMENT C). To this end, a tree protection plan shall be prepared as part of any subdivision plat, and shall include at least the information listed below regarding the trees and/or shrubs to be removed for the purposes approved above, and the protection of all other trees on the property. Estimated forest coverage both before and after tree removal shall be provided by a survey provided by a qualified licensed professional for individual forested areas as well as for the subdivision as a whole. Plans shall include: **(Adopted 10-10-06, amended 11-14-06, 6-10-08)**

- (1) Location and extent of all forested areas.
  - (a) Forest areas intended for later sale as building lots shall be designated on the plat and shall not be developed in any way, except for driveways that serve two or three homesites as provided above, until certificates of zoning compliance have been issued.
  - (b) Forest areas intended to be maintained as common forest areas shall be marked as protected on the plat except for those areas marked to be cleared for trails, paths, and the like.

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- (c) All forest areas not marked for construction of roads, common utilities, or common areas, or future sale as building sites except as noted above, shall be marked as protected on the plat.
  - (2) Location and extent of all areas proposed for tree removal and/or land clearing.
  - (3) Location and nature of tree protection measures to be installed.
  - (4) Location, size, and species of any trees and/or shrubs to be planted at the direction of the tree protection officer.
  - (5) Estimated significant tree density of each individual forested area as well as of the subdivision as a whole, both before and after permitted land clearing and replanting.
  - (6) Location of any steep slopes, or other areas that may not be suited for land clearing, land disturbance, and/or dense development, and any specifications for their particular management, as discussed in §91.55. **(Amended 6-10-08)**
  - (7) Any additional documentation that the tree protection officer may require.
- (D) Trout Buffer. An undisturbed stream buffer, as defined and illustrated in the Town of Lake Lure Land Disturbance Regulations, that is required for the protection of waters that have been classified as trout waters by the Environmental Management Commission. Any removal of vegetation, including the removal of living branches, is prohibited within such areas. **(Adopted 10-10-06; Amended 6-10-08)**
- (E) Protective Boundaries. Protective boundaries shall be shown on the plat surrounding individual protected trees and their root protection zones and lying along the boundaries of all protected forest areas, especially where areas marked for tree removal abut areas where trees are to be protected, unless physical characteristics of the area render additional protections unnecessary. Such barriers shall be installed prior to any land clearing, land disturbance and/or development activity and maintained until such development is complete. All workers in the area shall be clearly informed that trees and forest areas so marked are to be protected from cutting, girdling, any damage by construction equipment, and any disruptions of their root protection zones including trenching, dumping of excavated soil, spilling of toxic materials, vehicle parking or drive-over, the storage of equipment or materials, and addition of any impervious material. **(Adopted 10-10-06; Amended 6-10-08)**
- (F) Inspections and Remedies. The tree protection officer shall inspect all subdivision projects prior to any permit approvals and at intervals throughout land clearing,

## SUBDIVISION REGULATIONS

land disturbance and/or development. In the course of these visits said officer may provide assistance with estimates of forest coverage and the steepness of slopes, assist in evaluating the suitability of steep slopes for land clearing and development, and approve the entire tree protection plan, including protective boundaries and any required replanting. **(Amended 6-10-08)**

The tree protection officer is authorized to issue a stop-work order at any time that any of the following is determined:

- (1) Tree removal has commenced prior to obtaining subdivision plat approvals.
- (2) A significant deviation from pre-approved plans/permits has occurred.
- (3) Systematic or habitual removal of or damage to protected trees or their root protection zones.

Following a stop-work order the tree protection officer shall provide the property owner and/or subdivider with detailed descriptions of approved methods, protective barriers, and the repairs and/or replantings needed to correct the damage. The tree protection officer shall verify that those measures have been implemented before work is allowed to resume. **(Adopted 10-10-06)**

- (G) Forestry Lands. Where the land to be subdivided was previously taxed on the basis of present-use value as forestry land under Article 12 of Chapter 105 of the General Statutes, or has been logged under a forestry plan prepared or approved by a registered forester, the town may deny a certificate of zoning compliance or refuse to approve a site or subdivision plan for a period of three years after harvest if the land has been cleared in violation of these regulations, five years if the land clearing was a willful violation. Reference General Statute 160A-458.5 of the General Assembly of North Carolina. **(Adopted 10-10-06)**

### § 91.60 LOTS.

The requirements of Chapter 92 (Zoning Regulations) shall govern lot size and standards. Penalty, see § 91.99

### § 91.61 BUILDING SETBACK LINES.

The requirements of Chapter 92 (Zoning Regulations) shall govern the location of the minimum building setback lines. Penalty, see § 91.99

## SUBDIVISION REGULATIONS

### 5 AMENDMENTS

#### § 91.70 AMENDMENT PROCEDURES.

This chapter may be amended from time to time by the Town Council as herein specified, but no amendment shall become effective unless it shall have been proposed by or shall have been submitted to the Zoning and Planning Board for review and recommendation. The Zoning and Planning Board shall have 35 days from the date of presentation to the Zoning and Planning Board within which to submit its report. If the Zoning and Planning Board fails to submit a report within the specified time, it shall be deemed to have approved the amendment.

Before enacting an amendment to this chapter, the Town Council shall hold a public hearing. A notice of such public hearing shall be published in a newspaper of general circulation in Rutherford County once a week for two successive weeks, the first publication shall not appear less than ten days or more than 25 days prior to the fixed date of the public hearing. In computing such period, the day of the publication is not to be included, but the day of the hearing shall be included. The notice shall include the time, place, and date of the hearing, and include a description of the property or nature of the change or amendment.**(Amended 11-26-96)** Penalty, see § 91.99

SUBDIVISION REGULATIONS

**6 LEGAL PROVISIONS**

§ 91.80 SEPARABILITY.

Should any section or provision of this ordinance be decided by a court of competent jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole or any part thereof other than the part so declared to be unconstitutional or invalid.

§ 91.81 ABROGATION.

This ordinance shall neither repeal, abrogate, annul, impair nor interfere with any existing subdivision, the plats of which are properly recorded in the office of the Register of Deeds prior to the effective date of this ordinance nor with the existing easements, covenants, deed restrictions, agreements or permits previously adopted or issued pursuant to law prior to the effective date of this ordinance.

§ 91.99 PENALTY.

(A) After the effective date of these regulations, any person who, being the owner or agent of the owner of any land located within the territorial jurisdiction of these regulations, thereafter subdivides his land in violation of these regulations or transfers or sells land by reference to, exhibition of, or any other use of a plat showing a subdivision of the land before the plat has been properly approved under the terms of these regulations and recorded in the office of the County Register of Deeds, shall be guilty of a misdemeanor. The description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring land shall not exempt the transaction from this penalty. The town may bring an action for injunction of any illegal subdivision, transfer, conveyance or sale of land, and the court shall, upon appropriate findings, issue an injunction and order requiring the offending party to comply with the subdivision regulations.

**(Adopted 3-22-94, amended 10-10-06)**

(B) This chapter may be enforced by any one, all, or a combination of the remedies authorized and prescribed by G.S. § 160A-175. **(Adopted 10-10-06)**

(C) Fines

(1) Failure to receive plat approvals as required by this chapter prior to commencement of any form of land clearing, land disturbance and/or development shall subject the subdivider to a civil fine not to exceed \$500.00 per day of violation, for each occurrence of such a violation. The fine shall be payable immediately upon notification and shall be assessed from the date of violation. Each day of a continuing violation shall constitute a separate violation. If, following the appropriate inspections,

## SUBDIVISION REGULATIONS

the illegal land clearing, land disturbance and/or development is found to meet all requirements of this chapter, plat approvals shall be issued upon payment of the fine and submittal of the appropriate documents including fees. If the land clearing, land disturbance and/or development does not meet said requirements, the development shall either be returned as far as possible to its original state, or be brought into compliance prior to receipt of plat approvals. **(Adopted 10-10-06; Amended 6-10-08)**

Failure to comply with the provisions of an approved plat and the representations submitted as part of the application for the plat shall be cause for the Subdivision Administrator to place a stop order on the land clearing, land disturbance and/or development for which the plat was approved until such time as the land clearing, land disturbance and/or development is altered to comply or until a revised plat is approved. If the land clearing, land disturbance and/or development is not brought into conformance, or a revised plat meeting the standards of this chapter is not submitted within 30 days of the original notice of violation, the subdivider shall be subject to a fine not to exceed \$500.00 for each day of delay beyond the 30 day period. **(Adopted 10-10-06; Amended 6-10-08)**

- (2) In addition to the above, the removal of significant trees, or native shrubbery with their stumps and roots, without prior inspection of the site and an approved tree protection plan, as required by this chapter, shall subject the subdivider to fines of \$500.00 for each significant tree illegally removed and \$500.00 for each 100 sq. ft. of native shrubbery, with their stumps and roots, illegally removed. If the number of significant trees and/or extent of native shrubbery previously existing on the property is not known, fines shall be levied on estimates based upon the average densities of significant trees and/or native shrubbery on nearby undeveloped properties. In addition to these fines, illegally removed significant trees and shrubs shall be replaced at the expense of the owner and/or subdivider as set forth in §91.59.5. **(Adopted 10-10-06, 11-14-06)**
- (D) Violation of any provision of this chapter may subject the offender to a civil penalty which would be determined, assessed and recovered by the town in a civil action in the nature of debt if the offender does not pay the penalty within a reasonable period of time prescribed by an administrative officer of the town after such offender has been cited for such violation. **(Adopted 10-10-06)**
- (E) Any provision of this chapter that makes unlawful a condition existing upon or use made of any property may be enforced by injunction and order of abatement, and the General Court of Justice shall have jurisdiction to issue such orders. When a violation of such a provision occurs, the town may apply to the appropriate division of the General Court of Justice for a mandatory or prohibitory injunction and order of abatement commanding the defendant to correct the unlawful condition upon or cease the unlawful use of the property. The action shall be

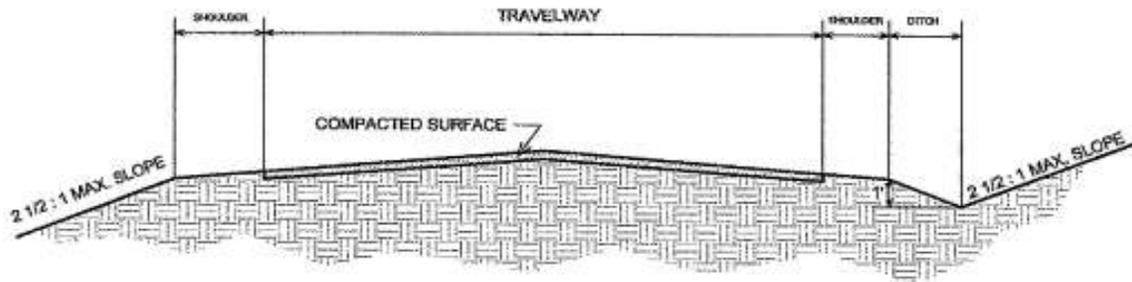
## SUBDIVISION REGULATIONS

governed in all respects by the laws and rules governing civil proceedings, including the Rules of Civil Procedure in general and Rule 65 in particular. In addition to an injunction, the court may enter an order of abatement as a part or the judgment in the cause. An order of abatement may direct that improvements or repairs be made and/or trees and/or shrubs be replanted as specified herein; or that any other action be taken that is necessary to bring the property into compliance with this policy or such ordinance. If the defendant fails or refuses to comply with an injunction or with an order of abatement within the time allowed by the court, such defendant may be cited for contempt, and the town may execute the order of abatement. The town shall have a lien on the property for the cost of executing an order of abatement in the nature of a mechanic's and material man's lien. The defendant may secure cancellation of an order of abatement by paying all costs to the town of the proceedings and posting a bond for compliance with the order. The bond shall be given with sureties approved by the clerk of Superior Court in an amount approved by the judge before whom the matter is heard and shall be conditioned on the defendant's full compliance with the terms of the order of abatement within a time fixed by the judge. Cancellation of an order of abatement shall not suspend or cancel an injunction issued in conjunction therewith. **(Adopted 10-10-06)**

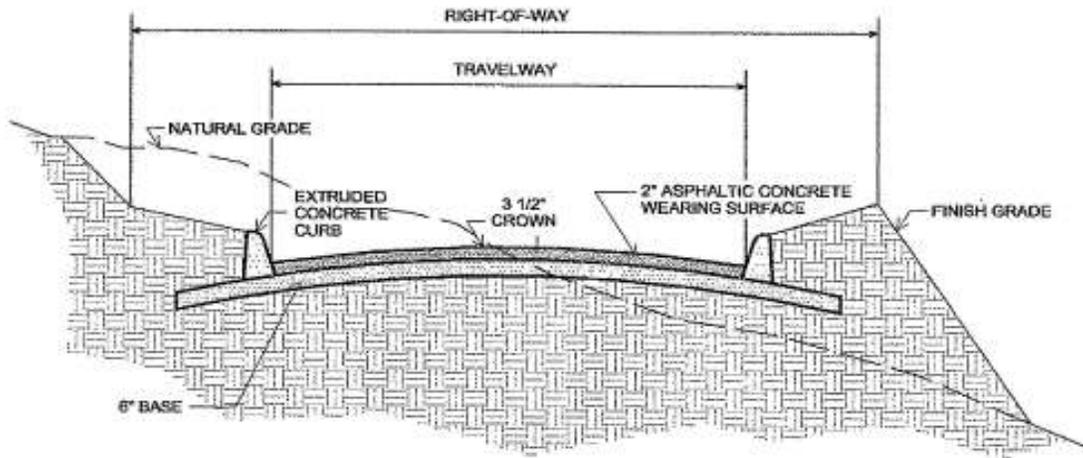
- (F) Except as otherwise specifically provided, each day's continuing violation of any provision of this ordinance shall be a separate and distinct offense. **(Adopted 10-10-06)**

SUBDIVISION REGULATIONS

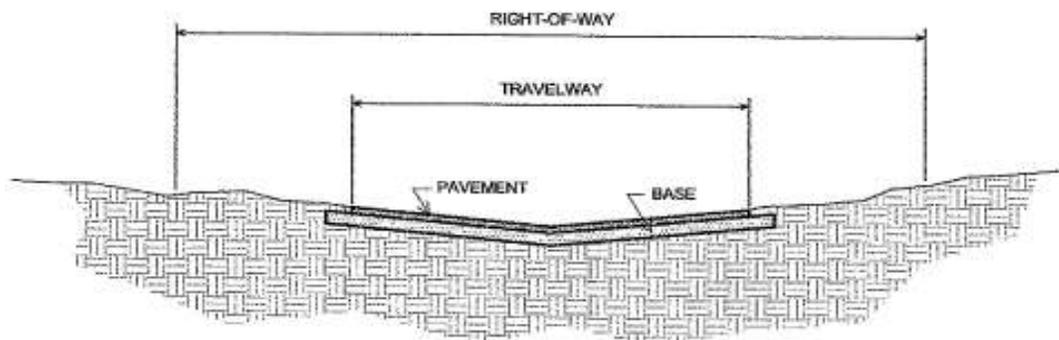
**7 ATTACHMENT A**  
**Typical Street Drainage Methods**



Drainage to One Side of Road



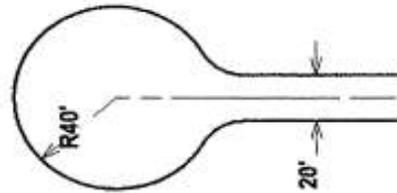
Curb and Gutter



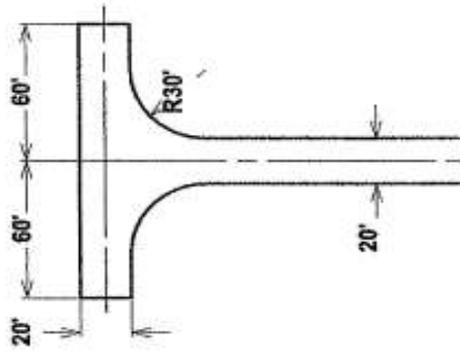
Inverted Crown

# 8 ATTACHMENT B

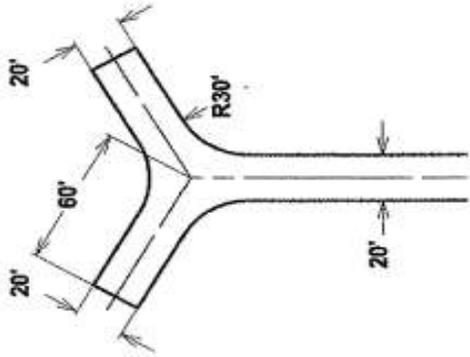
## ATTACHMENT B Minimum Dimensions for Cul-de-Sacs and Alternative Turn Around Arrangements



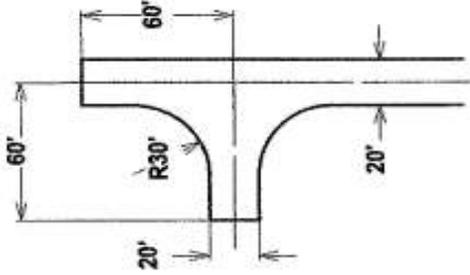
80' Diameter Cul-de-Sac



T-Shaped Turn Around



Y-Shaped Turn Around



Alternative T-Shaped  
Turn Around

## SUBDIVISION REGULATIONS

### 9 Attachment C

The Forest Coverage Table  
Significant Tree Density and Canopy Coverage  
(Adopted 10-10-06, amended 11-14-06, 6-10-08)

Forest coverage can be estimated in one of the following methods, depending on the size and topography of the property, the number of trees on the property, and the availability of suitable aerial photographs. The table below shall be used to determine the minimum forest coverage that must be retained during land clearing, land disturbance, and/or development or achieved through replanting with trees and shrubs recommended in *The Lake Lure Tree Management Handbook*. Copies of all materials used to arrive at tree density or canopy coverage estimates must be presented with the site plan.

*The Ground Survey – significant tree density:* With this method, a qualified licensed professional shall visit the area on foot (at the owner's expense), count or (if necessary) estimate the number of significant trees before clearing, and report the significant tree density. Significant trees, and/or significant forest areas, shall be marked on the plat for protection or removal as described in § 91.59.5. Estimates of significant tree densities that will remain after land clearing, land disturbance and/or development shall be based on the number of significant trees to be removed. Where this density falls below that required on the Forest Coverage Table, the tree protection officer shall direct the replanting of trees to make up the deficit.

*The Aerial Survey – canopy coverage:* A property with steep topography or significant forest coverage might best be managed by a canopy coverage estimate involving analysis of existing aerial photographs. This analysis shall be carried out by a qualified licensed professional, at the owner's expense, by the method described under **Aerial Survey – Canopy Coverage Method** at the end of this Attachment.

*The combined Ground and Aerial Survey:* When an area to be evaluated by aerial survey also includes pockets of forest that are to be left for greenspace or common areas, or small undisturbed forest areas (less than 1 acre and less than 50% canopy coverage) that will be disconnected from larger undisturbed forest areas, these isolated areas shall be evaluated by a ground survey, with the Significant Tree Density figure to be shown on the plat for each such isolated area. This method will improve accuracy in calculating overall forest coverage, particularly where common areas and greenspace are so designated. The Significant Tree Density method shall also be used when planning tree thinning on a portion of the property or for other special purposes needing particular accuracy.

*Other methods:* Property owners wishing to compute the pre-land clearing/land disturbance/development forest coverage estimate by their own methods shall provide their calculations to the Tree Protection Officer with sufficient clarity and accuracy that the tree protection officer can duplicate and validate their results.

## SUBDIVISION REGULATIONS

*The Forest Coverage Table:* This table computes the minimum Significant Tree Density or Canopy Coverage that shall remain on a property after land clearing, land disturbance, and/or development, based on the Significant Tree Density or Canopy Coverage on the property prior to land clearing, land disturbance, and /or development. Where these values fall below those required on the Forest Coverage Table, the tree protection officer shall direct the replanting of trees to make up the deficit.

**Forest Coverage Table**

Pre-Land Clearing/Land Disturbance/Development Significant Tree Density (significant trees per acre)	Pre-Land Clearing/Land Disturbance/Development Canopy Coverage (percentage of total property area)	Post-Land Clearing/Land Disturbance/Development Significant Tree Density or Canopy Coverage
0 to 10	0% to 10%	1.0 x initial value
11 to 20	11% to 20%	.90 x initial value
21 to 50	21% to 50%	.80 x initial value
50 or more	50% or more	.70 x initial value

### Examples

*Tree Density Example:* For a 200 acre subdivision development with an average initial significant tree density of 25 significant trees per acre, the final significant tree density (after accounting for roads, facilities, homes and driveways) shall average 20 significant trees per acre (.80 x 25).

*Canopy Coverage Example:* For a 200 acre subdivision development with an initial canopy coverage of 25%, the minimum final canopy coverage (after accounting for roads, facilities, homes and driveways) shall be 20% of the 200 acre development (.80 x .25).

### Aerial Survey – Canopy Coverage Method

**STEP 1:** Using a clear, 2005 or later aerial photo of the property, draw a grid overlaying the property. The grid lines shall be spaced at ½ inch intervals. Count the total number of squares in the grid, then study the squares and estimate each square’s coverage level – the percentage (100%, 75%, 50%, 25%, or 0%) of each square that is covered by forest canopy.

- For squares with 100% canopy coverage a value of 1 shall be assigned.
- For squares with 75% canopy coverage a value of .75 shall be assigned.
- For squares with 50% canopy coverage a value of .5 shall be assigned.
- For squares with 25% canopy coverage a value of .25 shall be assigned.
- For squares with 0% canopy coverage a value of 0 shall be assigned.

## SUBDIVISION REGULATIONS

**STEP 2** Count the number of squares with 100% coverage and multiply by 1. To calculate the percentage of the total property area that the 100% coverage squares represent, divide the number of 100% squares by the total number of squares in the grid. Use the following formula to do the division and convert the results into a percentage:

x = total # of squares covering the whole property.

a = total # of squares with a 100% canopy coverage level

$$\frac{(a \times 1)}{x} \times 100 = (?)\%$$

Then count the number of squares with 75% coverage and multiply by .75. Use the same formula to do the division and convert the results into percentages:

x = total # of squares covering the whole property.

b = total # of squares with a 75 % canopy coverage level

$$\frac{(b \times .75)}{x} \times 100 = (?)\%$$

Follow the same steps for the other levels of canopy coverage using the following values.

For the 50% canopy coverage:

x = total # of squares covering the whole property.

c = total # of squares with a 50% canopy coverage level

$$\frac{(c \times .5)}{x} \times 100 = (?)\%$$

For the 25% canopy coverage:

x = total # of squares covering the whole property.

d = total # of squares with a 25% canopy coverage level

$$\frac{(d \times .25)}{x} \times 100 = (?)\%$$

For the 0% canopy coverage:

x = total # of squares covering the whole property.

e = total # of squares with a 0% canopy coverage level

$$\frac{(e \times 0)}{x} \times 100 = (?)\%$$

## SUBDIVISION REGULATIONS

When the area percentage for each coverage level is known, add the percentages together for the total estimated canopy coverage as a percentage of the total property acreage.

Example Problem: A grid is laid over a 2 acre tract. The property has been previously disturbed and shows mixed patches of forest and cleared areas. The total number of squares covering the parcel is 140. 100 squares are completely vegetated; 10 squares are 75% vegetated; 15 squares are 50% vegetated; 10 squares are 25% vegetated; and 5 squares no longer contain any vegetation. Using the above equation, calculate the estimated canopy coverage for the site.

x = 140  
a = 100  
b = 10  
c = 15  
d = 10  
e = 5

$\frac{(a \times 1)}{x} \times 100 = (?)\%$	$\frac{(b \times .75)}{x} \times 100 = (?)\%$	$\frac{(c \times .5)}{x} \times 100 = (?)\%$
$\frac{(100 \times 1)}{140} \times 100 = (?)\%$	$\frac{(10 \times .75)}{140} \times 100 = (?)\%$	$\frac{(15 \times .5)}{140} \times 100 = (?)\%$
$\frac{100}{140} \times 100 = (?)\%$	$\frac{7.5}{140} \times 100 = (?)\%$	$\frac{7.5}{140} \times 100 = (?)\%$
<b>.71 x 100 = 71%</b>	<b>.053 x 100 = 5.3%</b>	<b>.053 x 100 = 5.3%</b>
<hr/>		
$\frac{(d \times .25)}{x} \times 100 = (?)\%$	$\frac{(e \times 0)}{x} \times 100 = (?)\%$	71.0%
		5.3%
		5.3%
$\frac{(10 \times .25)}{140} \times 100 = (?)\%$	$\frac{(5 \times 0)}{140} \times 100 = (?)\%$	1.8%
		<u>+ 0.0%</u>
		<b>83.4% Total Canopy</b>
$\frac{2.5}{140} \times 100 = (?)\%$	$\frac{0}{140} \times 100 = (?)\%$	
<b>.0179 x 100 = 1.8%</b>	<b>0 x 100 = 0%</b>	
<hr/>		

The estimated canopy coverage is **83.4%**.

SUBDIVISION REGULATIONS

**10 ATTACHMENT D**

**Significant Trees:  
Common Tree Species of Lake Lure and Recommended Diameters  
(Adopted 10-10-06)**

<b>Tree Species</b>	<b>Average Diameter at Breast Height (dbh)</b>	<b>Significant dbh</b>	<b>Maximum Caliper for replanting</b>
<u>White Oak</u>	2-3'	12"	3"
<u>Northern Red Oak</u>	3-4'	15"	3"
<u>Scarlet Oak</u>	1-2'	6"	3"
<u>Chestnut Oak</u>	3-4'	15"	3"
<u>Blackjack Oak</u>	1-2'	6"	3"
<u>White Ash</u>	1-2'	6"	3"
<u>Red Maple</u>	1-2'	6"	3"
<u>Flowering Dogwood</u>	12 -18"	4"	3"
<u>Black Locust</u>	2-3'	12"	3"
<u>Black Walnut</u>	2-4'	12"	3"
<u>Bitternut Hickory</u>	18-24"	10"	3"
<u>Pignut Hickory</u>	2-3'	12"	3"
<u>Mockernut Hickory</u>	18-24"	10"	3"
<u>Yellow Poplar</u>	2-6'	12"	3"
<u>Sycamore</u>	3-4'	15"	3"
<u>Basswood*</u>	2-3'	12"	3"
<u>Beech</u>	2-3'	12"	3"
<u>Slippery Elm*</u>	1-2'	6"	3"
<u>Sweet Birch</u>	2-3'	12"	3"
<u>Black Cherry</u>	2-3'	12"	3"
<u>American Holly</u>	6-24"	6"	3"
<u>Sourwood</u>	18-20"	6"	3"
<u>Carolina Silverbell</u>	6-12"	6"	3"
<u>Persimmon</u>	10-12"	6"	3"
<u>Blackgum</u>	1-2'	6"	3"
<u>Cucumber Magnolia*</u>	1-2'	6"	3"
<u>Fraser Magnolia</u>	10-12"	6"	3"
<u>Redbud</u>	10-12"	6"	3"
<u>Yellow Buckeye*</u>	To 3'	12"	3"
<u>Eastern Hemlock</u>	2-3'	12"	3"
<u>Carolina Hemlock</u>	2-3'	12"	3"
<u>Shortleaf Pine</u>	3-4'	6"	3"
<u>Virginia Pine</u>	1-2'	6"	3"
<u>Pitch Pine</u>	1-2'	6"	3"
<u>White Pine</u>	2-3'	12"	3"

\* Species that may or may not occur in Lake Lure but do occur in the region.

\*\* It may become necessary to preserve all these trees, regardless of dbh , due to potential loss of the species due to mortality from invasive species.