

Chapter 70

SUBDIVISIONS*

Article I. In General

- Sec. 70-1. Short title of chapter.
- Sec. 70-2. Authority and enactment clause of chapter.
- Sec. 70-3. Jurisdiction of chapter.
- Sec. 70-4. Purpose of chapter.
- Sec. 70-5. Definitions.
- Sec. 70-6. Penalties for violation of chapter.
- Sec. 70-7. General procedure for plat approval.
- Sec. 70-8. Administrator.
- Sec. 70-9. Administration fee.
- Sec. 70-10. Variances.
- Sec. 70-11. Amendments.
- Sec. 70-12. Abrogation or greater restrictions.
- Sec. 70-13. Inspection.
- Secs. 70-14--70-35. Reserved.*

Article II. Approval of Plats

- Sec. 70-36. Required.
- Sec. 70-37. Review of special subdivisions.
- Sec. 70-38. Review of minor subdivisions.
- Sec. 70-39. Review of major subdivisions.
- Sec. 70-40. Specifications for preliminary plans, as-built drawings and final plats for recordation.
- Sec. 70-41. Phased development.
- Sec. 70-42. Resubdivision procedures.
- Sec. 70-43. Amendments to and modification of master and preliminary plans.
- Sec. 70-44. Notice to adjoining properties.
- Secs. 70-45--70-65. Reserved.*

Article III. Standards

- Sec. 70-66. General requirements.
- Sec. 70-67. Road and design standards.
- Sec. 70-68. Hillside development standards.
- Secs. 70-69--70-90. Reserved.*

Article IV. Installation of Improvements

- Sec. 70-91. Permanent reference points.
- Sec. 70-92. Improvement standards and requirements.
- Sec. 70-93. Stormwater drainage.
- Sec. 70-94. Guarantee of improvements.

ARTICLE I. IN GENERAL

Sec. 70-1. Short title of chapter.

This chapter shall be known and cited as the "Land Development and Subdivision Ordinance of Buncombe County, North Carolina," and may be referred to as the "Subdivision Regulations."

Sec. 70-2. Authority and enactment clause of chapter.

Pursuant to the authority and provision conferred by G.S. 153A-330 et seq., the board of commissioners hereby ordains and enacts these articles and sections.

Sec. 70-3. Jurisdiction of chapter.

This chapter shall apply to every subdivision or development in the county which is located outside the planning jurisdiction of a municipality, as established pursuant to G.S. 160A-360. The power to review plans shall be treated as if it were a power authorized by G.S. 160A-360 et seq. Municipalities within the county may elect to allow this chapter to be effective within their corporate limits or their extraterritorial jurisdictions.

Sec. 70-4. Purpose of chapter.

The purpose of this chapter shall be to:

- (1) Establish procedures and standards for the subdivision of land within the jurisdiction of the county, and to provide for orderly growth in a manner and under conditions that facilitate the adequate provision of streets, water, sewage disposal and other considerations essential to public health, safety, and the general welfare.
- (2) Provide the county commissioners, planning board, planning department, and other local government agencies and officials with information regarding land development taking place in the county. This information will assist county officials in projecting the need for various public programs and facilities, in estimating population growth, and in projecting revenues and expenditures.

Sec. 70-5. Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Communal Infrastructure means infrastructure that is common to the development, including but not limited to roadways, shared drives, sidewalks, public utilities, and stormwater controls. Recreational facilities shall not be considered communal infrastructure.

Develop means to convert land to a new purpose so as to use its resources, or to use the land for residential, commercial, or industrial purposes, including, but not limited to, any manmade change to improved or unimproved real estate.

Developer means any person, firm, corporation, or duly authorized agent who develops land.

Easement means a grant by the property owner for the use by the public, a corporation, or person of a strip of land for specified reasons.

Final plat means a complete and exact plan of a development or subdivision prepared for final official review which, if approved, will be submitted to the county register of deeds for recording.

Floodway means the channel of a river or other watercourse and the adjacent land areas which must be reserved in order to discharge the base flood (100-year flood) without cumulatively increasing the water surface elevation.

Global Stability means a geotechnical analysis of characteristics within a reinforced soil mass evaluating potential slip surfaces or failure planes that can go behind or through the reinforced soil mass. The analysis takes into consideration the following factors: 1) the overall geometry of the structural system installed including, but not limited to, foundation and retaining walls, footings, etc. and the slopes above and below the system, 2) loading or surcharge conditions (e.g. 250 pounds per square foot (3.65 kPa) for highway loading); any superimposed load shall be considered surcharge, 3) soil parameters (shear strength and unit weight of the soil) determined by the laboratory tests of the soil conducted as part of a geotechnical survey or assessment or as determined by a licensed geotechnical engineer, and 4) subsurface and surface water conditions (groundwater can have a negative effect on slope stability).

Impervious surface means any surface that, in whole or in part, restricts or prevents the natural absorption of water into the ground. Such surfaces may include, but are not limited to, gravel, concrete, asphalt or other paving material, and all areas covered by the footprint of buildings or structures.

Land disturbing activity means any use of, or operations on, the land by any person in residential, industrial, educational, institutional, or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.

Lot means a portion of a subdivision or any other portion of a parcel of land intended as a unit for transfer of ownership for development, or both. Lot size shall be calculated based on that portion of the lot to be under control of and deeded to the property owner, exclusive of road rights-of-way.

Lot of record means a lot which has not been recombined or merged that is a part of a subdivision, a plat of which has been recorded in the office of the county register of deeds prior to adoption of this chapter, or a lot described by metes and bounds, the description of which has been so recorded prior to the adoption of this chapter unless the lot has been recombined or merged thereafter.

Major subdivision means a proposed subdivision where 11 or more lots will result after the subdivision is complete.

Minor subdivision means a proposed subdivision of land where four to ten lots will result after the subdivision is complete. One phase of planned development cannot be considered a minor subdivision unless the entire development does not exceed ten lots.

Parcel and/or Tract means the entire site to be developed, and includes, but is not limited to, all lots and the total acreage intended for development, including but not limited to easements, rights of way, areas of future development, and communal infrastructure.

Plat means and includes the terms: map, plan, or replat; and also means a map or plan of a parcel of land which is to be or which has been developed or subdivided.

Preliminary plat means a proposed development or subdivision plan prepared for review and consideration prior to preparation of a final plat.

Road means a dedicated public or designated private right-of-way for vehicular traffic.

Access road means a roadway for vehicular traffic from a DOT road to property being divided, when such roadway traverses property not owned or controlled by the subdivider.

Cul-de-sac means local roads with one end open for vehicular access and the other end terminating in a vehicular turnaround. The length of the cul-de-sac road shall be measured along the centerline from its intersection with the centerline of the road from which it runs to the center of the cul-de-sac turnaround.

Service alley means a minor street which generally is parallel to and adjacent to arterial streets, and which provides access to abutting properties and protection from through traffic.

Rock cliff means a naturally occurring vertical, near vertical, or overhanging rock exposure at least 25 feet in height.

Shared private driveway means a shared right-of-way or easement for access to no more than three residences in a special subdivision and no more than two residences (a maximum of three may be allowed with Buncombe County Fire Marshal approval) in either a minor or a major subdivision. A shared driveway in either a minor or major subdivision shall not exceed 20 percent grade, and shall conform to the standards set forth in Sec. 70-67(3)(c) and (d).

Site plan means a graphic layout showing the location of all improvements and land disturbing activities proposed as part of the subdivision of land.

Special subdivision means a proposed subdivision where three or fewer lots will result after the subdivision is complete.

Subdivider means any person who subdivides or develops any land deemed to be a subdivision.

Subdivision means all divisions of a tract or parcel of land into two or more lots, building sites, or other divisions when any one or more of those divisions are created for the purpose of sale or building development (whether immediate or future) and includes all division of land involving the dedication of a new street or a change in existing streets. However, the following are not included within this definition and are not subject to any regulations enacted pursuant to this part:

- (1) The combination or recombination of portions of previously subdivided and recorded lots if the total number of lots is not increased and the resultant lots are equal to or exceed the standards of the county as shown in its subdivision regulations;
- (2) Land subdivided into ten-acre plus lots is exempt from subdivision regulations, however, no land that is subdivided into exempt lots greater than ten acres shall be further divided into lots less than ten acres until all subdivision requirements of this article are met.
- (3) The public acquisition by purchase of strips of land for widening or opening streets or for public transportation system corridors;
- (4) The division of a tract in single ownership the entire area of which is no greater than two acres into not more than three lots, if no street right-of-way dedication is involved and if the resultant lots are equal to or exceed the standards of the county as shown by its subdivision regulations;

- (5) The division of land for the purpose of conveying a single lot to each tenant in common, all of whom jointly inherited the land by intestacy or by will;
- (6) The division of land into no more than two lots for the purpose of conveying at least one of the resulting lots to a grantee who would have been an heir of the grantor if the grantor had died intestate immediately prior to the conveyance;
- (7) The division of land pursuant to an order of a court of the general court of justice;
- (8) The division of land for cemetery lots or burial plots;
- (9) The division of land for the purpose of changing the boundary lines between adjoining property owners where no new road right-of-way dedication is involved; and
- (10) Conveyance to heirs for the purpose of dividing up real estate among such heirs.

Surface water means a water feature that is shown on either the most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the US Department of Agriculture or the most recent version of the quadrangle topographic maps prepared by the USGS.

Wetlands means “waters” as defined by G.S. 143-212(6) and are areas that are inundated or saturated by an accumulation of surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands classified as waters of the state are restricted to waters of the United States as defined by 33 CFR 328.3 and 40 CFR 230.3.

Sec. 70-6. Penalties for violation of chapter.

Any person who, being the owner or agent of any land located within the planning jurisdiction of the county, thereafter subdivides his land in violation of this chapter or transfers or sells land by reference to, exhibition of, or any other use of plat showing a subdivision and recorded in the office of the county register of deeds, shall be guilty of a misdemeanor as set forth in N.C.G.S. § 153A-335 or as amended. 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 transactions from this penalty. The county, through its attorney or other official designated by the board of commissioners, may enjoin illegal subdivision, transfer, or sale of land by action for injunction. Building permits required pursuant to G.S. 153A-357 may be denied for lots that have been illegally subdivided. In addition to other remedies, a county may institute any appropriate action or proceedings to prevent the unlawful subdivision of land, to restrain, correct, or abate the violation, or to prevent any illegal act or conduct. Further, violators of this chapter shall be subject to the remedies as set forth in Code Sec. 1-7. The County may also assess a \$100 per day civil penalty for each day that the plat or property is not in compliance with this Chapter. Each day that such plat or property is not in compliance with this chapter shall constitute a separate and distinct offense.

Sec. 70-7. General procedure for plat approval.

(a) No plat of a subdivision of land within the county's jurisdiction shall be filed or recorded until it has been submitted to and approved by the county planning board and/or the planning director or his designee, and until this approval is entered in writing on the face of the plat by the chairperson of the planning board or the planning director.

(b) The county register of deeds shall not file or record a plat of a subdivision of land located within the planning jurisdiction of the county that has not been approved in accordance with these provisions, nor shall the clerk of court order or direct the recording of a plat if the recording would be in conflict with this chapter.

(c) When work under an approved minor or major subdivision plan is not begun within one year following the date of issuance of the preliminary approval, the preliminary approval shall be deemed to be expired. A single, twelve-month extension may be granted by the Planning Department or the Planning Board, upon receiving a written request from the applicant before the expiration of the approval, when reasonable cause is shown. If work is not begun within twelve months following the extension of the preliminary approval, the application shall be deemed expired and a new application and application fee will be required.

(1) When phased development is approved, the provisions above shall apply to each individual phase approval issued by the Planning Board or Planning Department, and not to the approval of the master plan.

(d) When a complete application scheduled for preliminary review by the Planning Board is removed from the agenda by the applicant, and there is no Planning Board review of the application for six-months from that scheduled review due to the applicant's actions, the application shall be deemed expired and a new application and application fee will be required.

Sec. 70-8. Administrator.

The county planning department through and by the county planning director is hereby designated a planning agency pursuant to G.S. 153A-321 and is appointed to serve as the subdivision administrator.

Sec. 70-9. Administration fee.

A fee, as currently required, for reviewing and approving minor subdivisions and major subdivisions shall be established by the county board of commissioners and posted in the planning department.

Sec. 70-10. Variances.

The purpose of a variance is to provide relief when a strict application of these regulations would impose unusual practical difficulties or unnecessary physical hardships on the applicant. The planning board is responsible for considering applications for variances. The variance request must specify which requirements are to be varied from and must specify alternative methods to be used. Application for a variance shall be with the planning department. A request in complete form shall be received no less than 30 days prior to the planning board meeting.

A variance may also be proper when environmental concerns are viewed in light of the spirit and intent of the planning ordinances. Such request may be made by the applicant or any member of the planning board. Upon motion of any member of the planning board the 30-day requirement may be waived. Variances will not ordinarily be granted if the special circumstances on which the applicant relies are a result of the actions of the applicant or owner or previous owners.

Reasonable conditions may be imposed in connection with a variance as deemed necessary to protect the best interests of the surrounding property or neighborhood, and otherwise secure the purpose and requirements of this chapter.

Variances may be granted in the sole discretion of the planning board for any subdivision plan only if all three expressly written findings below are made:

- (1) That a strict or literal interpretation and enforcement of the specified standard or requirement would result in practical difficulty, unnecessary hardship or adverse environmental impact; and
- (2) That the granting of the variance will not be detrimental to the public health, safety or welfare; and
- (3) That the granting of the variance would support general objectives contained within this chapter.

Variances shall expire if development or building activity is not initiated within one year of the approval date. A single extension may be granted, upon receiving a written request from the applicant before the expiration of the approval, by the planning board when reasonable cause is shown. When any preliminary plan approval expires, any and all variance approvals shall also expire.

Sec. 70-11. Amendments.

The board of commissioners may from time to time amend the terms of this chapter, but no amendment shall become effective unless it shall have been proposed by or shall have been submitted to the planning board for review and recommendation. The planning board shall have 30 working days from the time the proposed amendment is submitted to it within which to submit its recommendation to the county commissioners. If the planning board fails to submit a report within the specified time, it shall be deemed to have recommended approval of the amendment. No amendment shall be adopted by the board of commissioners until they have held a public hearing on the amendment. Notice of the hearing shall be published in a newspaper of general circulation in the county at least once a week for two successive calendar weeks prior to the hearing.

Sec. 70-12. Abrogation or greater restrictions.

It is not intended that this chapter repeal, abrogate, annul, impair, or interfere with any existing easements, covenants, deed restrictions, agreements, rules, regulations, or permits previously adopted or issued pursuant to law. However, where this chapter imposes greater restrictions, the provisions of this chapter shall govern.

Sec. 70-13. Inspection.

The director of the planning department or his designee shall have the power to conduct such investigation as may be deemed necessary to carry out the duties as prescribed in this article, and for this purpose to enter at reasonable time upon any property for the purpose of investigating and inspecting the sites of any developmental activities regulated by this article.

Secs. 70-14--70-35. Reserved.

ARTICLE II. APPROVAL OF PLATS

Sec. 70-36. Required.

(a) Plats shall be prepared and approved pursuant to the provisions of this chapter whenever land is subdivided. A final plat must be prepared, approved, and recorded pursuant to this chapter whenever a subdivision of land occurs.

(b) No land disturbing or construction activity with the exception of utility testing, engineering testing and surveying to be carried out in conjunction with the subdivision of land shall be commenced until the land disturbing permit is approved by the county planning department. The final building inspection for construction in conjunction with a lot in a subdivision shall not take place until the final plat is approved by the county planning board or the county planning department. The county register of deeds shall not file or record a plat of a subdivision subject to this chapter that has not been approved in accordance with these provisions, and the clerk of superior court shall not order or direct the recording of a plat if the recording would be in conflict with this chapter.

(c) The planning department shall assure that the following agencies shall be given an opportunity to make recommendations concerning an individual subdivision plat for both minor and major subdivisions before the plat is given final approved by planning department staff or the planning board:

- (1) The district highway engineer as to proposed state streets, state highways, and related drainage systems;
- (2) The county health director or local public utility, as appropriate, as to proposed water or sewerage systems;
- (3) The office of the county fire marshal; and
- (4) Any other agency or official designated by the board of commissioners.

(d) All plans or requests for any permit submitted pursuant to this chapter must comply with the Buncombe County Fire Prevention Ordinance. No permit shall be issued and no preliminary plan will be approved without the prior approval of the county fire marshal, or designee.

Sec. 70-37. Review of special subdivisions.

(a) The subdivider shall submit to the county planning department the final plat and copy for approval. Upon receipt, the planning department will affix a stamp indicating that the driveway is "approved as a special subdivision, the access is considered a private driveway." The county recommends that the subdivider dedicate a 45-foot right-of-way with each driveway within the subdivision.

(b) The planning department shall approve the final plat within two working days after the plat is submitted for review.

(c) Failure of the planning department to act on the final plat within the specified response time shall be deemed a basis for appealing to the county planning board.

Sec. 70-38. Review of minor subdivisions.

(a) *Preliminary plat submission and review.* The procedure for obtaining preliminary plat approval is as follows:

(1) The subdivider shall submit to the county planning department three copies of a preliminary plat containing the information required in section 70-40.

(2) The planning department shall review the preliminary plat for general compliance with the requirements of this chapter and any other applicable county or state regulations; and shall discuss with the subdivider or his agent any changes deemed advisable in the proposed subdivision or require any additional information necessary for review of the minor subdivision.

(3) The planning department shall approve or disapprove the preliminary plat and shall notify the subdivider in writing of its decision regarding approval within ten working days after the complete preliminary plat is submitted for review. If the plat conforms to the provisions of this chapter, it shall be approved.

(b) *Final plat and as-built drawing submission and review.* Upon approval of the preliminary plat by the planning department, the subdivider may proceed with the preparation of the final plat in accordance with the requirements of section 70-40.

(1) The subdivider shall submit five copies of the final plat to the planning department. One copy of the final plat shall be on reproducible permanent material, which will be returned to the developer with the stamp of approval affixed to the plat, and four copies shall be prints. A final copy will be presented to the county sheriff's department, the office of emergency medical services, and the U.S. Post Office.

(2) The planning department shall approve, approve conditionally with modifications to bring the plat into compliance, or disapprove the final plat and shall notify the subdivider, in writing, of its decision regarding final approval within ten working days after the plat is submitted for review. If the development has been installed as specified in the approved preliminary plat, the final plat shall be approved.

(3) The final plat shall be prepared by a registered land surveyor currently licensed in the state by the state board of registration for professional engineers and land surveyors. The final plat shall conform to the provisions for plats, subdivisions, and mapping requirements set forth in G.S. 47-30, as amended, and as set forth in the Standards of Practice for Land Surveying in North Carolina, and shall comply with the provisions of G.S. 136-102.6.

(4) The final plat shall meet the requirements set forth in section 70-40.

(c) *Appeal procedures.* The decision of the planning department regarding a minor subdivision application may be appealed to the planning board. If appealed, the application shall be placed on the next regular meeting agenda of the planning board. The planning board shall have final approval authority, and, where applicable, all final plats shall contain information and/or conditions approved by the planning board. The planning board in all such appeals shall make findings of fact in support of its decision. The subdivider shall be notified, in writing, of the planning board's decision within ten days after the decision is made.

(d) *Submission to county planning board.* At the planning director's discretion, a preliminary or final plat may be submitted to the county planning board for its approval or disapproval.

Sec. 70-39. Review of major subdivisions.

Whenever any subdivision of any tract of land is proposed for a major subdivision, the subdivider shall contact the Buncombe County Planning Department prior to submittal of plans to schedule a pre-application conference. Preliminary plans may be shown in order to receive general guidance but will not be submitted or accepted during the pre-application conference. General requirements of the Subdivision, Erosion Control, Stormwater Management, Zoning, Flood Damage Prevention, and Fire Prevention Ordinances will be discussed. After a pre-application conference has been completed, the subdivider shall submit plat and plans of the proposed subdivision to the planning department. Paper versions of each document are required. Where the capability exists, the subdivider shall also submit a digital version. The planning director shall advise the subdivider of the procedures to be followed in the preparation and submission of the preliminary and final plats.

(1) *Preliminary plat submission and review.* The procedure for obtaining preliminary plat approval is as follows:

(a) The subdivider shall submit 13 copies of the preliminary plat to the planning department at least 30 calendar days prior to a regularly scheduled meeting of the planning board. The preliminary plat and plans shall contain the information required in section 70-40.

(b) The preliminary plat shall be reviewed for the entire tract or parcel of land which is to be subdivided. Areas not intended for immediate development should be identified as future development.

(c) Prior to submission of the preliminary plat to the planning board, the plat shall be reviewed by the planning department to ensure conformance of the proposed subdivision with the various development standards set forth by state agencies, if applicable, and county standards including those set forth in article III of this chapter. When preliminary plans are initially submitted to the Buncombe County Planning Department and such preliminary plans plainly do not meet all the specifications and standards of this Land Development and Subdivision Ordinance for unqualified approval for preliminary plans, the planning department staff shall have discretion to either reject such preliminary plans or to schedule review of such preliminary plans before the planning board.

(d) Following acceptance by the planning department or appeal of the applicant, all data pertinent to the plat shall be transmitted to the planning board.

(e) The planning board shall review the preliminary plat and shall approve, approve conditionally with modifications to bring the plat into compliance, or disapprove the plat. If the planning board disapproves the preliminary plat, the reasons for such action shall be stated in writing and references shall be made to the specific regulations with which the preliminary plat does not comply and possible modifications may be indicated for further considerations. If the plat conforms to all the specifications and standards of the provisions of this chapter, it shall be approved.

(f) Appeal procedures. The decision of the planning department regarding the rejection of a preliminary plan for a major subdivision application may be appealed to the planning board. If appealed, the application shall be placed on a regular meeting agenda of the planning board within 30 days. The planning board shall have final approval authority, and, where applicable, all plans shall contain information and/or conditions approved by the planning department. The planning board in all such appeals shall make findings of fact in support of its decision. The subdivider shall be notified, in writing, of the planning board's decision within 20 days after the decision is made.

(2) *Final plat submission and review.* The procedure for obtaining final plat approval is as follows:

(a) Upon approval of the preliminary plat by the planning board, the subdivider may proceed with the preparation of the final plat, and the installation of or arrangement for required improvements such as roads and utilities in accordance with the approved preliminary plat and the requirements of section 70-40. Upon approval of the final plat, the subdivider shall have installed the improvements specified in article IV of this chapter or guaranteed their installation as provided in this section.

(b) The final plat shall be approved by the planning department if there are no changes from the preliminary plat. If there are any changes from the preliminary plat, the planning board shall review the final plat, in which case the subdivider shall submit thirteen copies of the final plat to the planning department at least fifteen (15) days prior to a regularly scheduled meeting of the planning board. A final copy will be distributed by the planning department to the county sheriff's department, the office of emergency medical services, the U.S. Postal Service and the superintendent of schools.

(c) The final plat may, at the discretion of the planning board, be reviewed in separate phases, provided that the requirements for submission and review of final plats have been met for each phase.

(d) The final plat shall be prepared by a registered land surveyor currently licensed in the state by the state board of registration for professional engineers and land surveyors. The final plat shall conform to the provisions for plats, subdivisions, and mapping requirements set forth in G.S. 47-30, as amended, and set forth in the Standards of Practice for Land Surveying in North Carolina, and in section 70-40.

(e) The planning board shall review the final plat and shall take formal action to approve, approve conditionally with modifications to bring the plat into compliance, or disapprove the final plat. If the development has been installed, as specified in the approved preliminary plat, the final plat shall be approved. If the action is to disapprove the final plat, the reasons for such action shall be stated in the minutes, and specific reference shall be made to the regulations with which the final plat does not comply. Written notice of the planning board's decision shall be provided to the subdivider.

(f) Approval of the final plat by the planning board shall be affixed to the reproducible permanent tracing of the final plat and shall serve as the original for all subsequent copies.

(g) The following signed certificates shall accompany or be attached to the original tracing and all copies of the final plat:

**Certificate of Ownership and
Dedication**

I 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, and dedicate all road rights-of-way and other sites and easements to public use as noted in the Disclosure of Private Roadways, where applicable.

Date

Owner(s)

**Certification of Private Roads
(if applicable)**

The roads within this subdivision are designated private. The road maintenance agreement, in accordance with G.S. 136-102.6, is recorded in the Office of the Register of Deeds for Buncombe County in Deed Book _____ at Page _____.

Certificate of Survey and Accuracy

State of North Carolina, _____ County, I, _____, certify that this plat was (drawn by me) (drawn under my supervision) from (an actual survey made by me) (an actual survey made under my supervision) (deed description recorded in Book (File) _____, Page _____ (Slide) _____, etc.) (other); that the precision of the survey before adjusting was one part in _____ as calculated by latitudes and departures, and that this map was prepared in accordance with G.S. 47-30, as amended. Witness my original signature, registration number, and seal this _____ day of _____, 20 _____.

Official Seal

Registered Land
Surveyor

Registration Number

**Certification of Road Grades
and Suitability**

State of North Carolina, _____ County, I, _____ certify that the newly constructed or proposed road grades and slopes were (calculated by me) (calculated under my supervision) from (an actual survey made by me) (an actual survey made under my supervision) and do not exceed 18 percent. Witness my original signature, registration number, and seal this _____ day of _____, 20 _____.

Official Seal

Registered Land
Surveyor

Registration Number

Certificate of Approvals

I, _____, Director of the Buncombe County Planning Board, certify that the Planning Board approves this final plat.

Date

Director,
Panning Board

(h) Such approval shall be void unless the final plat is offered for filing and recording in the office of the county register of deeds within 180 days from the date of approval.

(3) *Approval.* If the planning board fails to act on the preliminary or final plat, in writing, within 15 working days following the date of a regularly scheduled planning board meeting, the subdivider may seek approval of the preliminary or final plat at the next regularly scheduled meeting of the board of commissioners.

Sec. 70-40. Specifications for preliminary plans, as-built drawings and final plats for recordation.

(a) *Specifications for minor and major subdivision preliminary plan.* The preliminary plans shall depict or have attached the following information. Preliminary plans shall be clearly and legibly drawn at a scale of not less than one inch = 200 feet and shall be drawn on an appropriate standard sheet size.

(1) *Title block.* The title block shall contain the following:

- a. Name and address of owners and subdivider of record;
- b. Name of subdivision;
- c. Location (township, county, state);
- d. Dates of plans;
- e. Graphic scale and written scale;
- f. Name, address, telephone number, and proof of current registration (e.g., copy of license) of designing engineer, architect, landscape architect, or surveyor (i.e. licensed professional); and
- g. Tax parcel identification number, PIN(s).

(2) *Roads.* The following information shall be supplied about roads:

- a. Existing, platted, and proposed roads within or abutting subdivision (show right-of-ways and dimensions); and
- b. Road names.

(3) *Utilities.* The following information shall be shown for utilities:

- a. Utility and other easements of record within and abutting the subdivision;
- b. Provisions for electrical and telephone services;
- c. Provisions for cable television service, if applicable;
- d. Provision of natural gas lines; and
- e. Sanitary sewers, culverts, detention ponds, and other drainage facilities (proposed/existing).

(4) *Project data.* Project data shall include the following:

- a. Total area of tract to be subdivided;
- b. Total number of lots;
- c. Linear feet in roads (centerline); and
- d. Approximate delineation of wooded and open areas.

- e. An itemized estimate, prepared by a licensed professional, of the cost of implementing and maintaining erosion control devices. Erosion control devices will be maintained for the duration of the development period by the responsible party.

(5) Slope analysis map.

Each application for a major subdivision and any subdivision subject to Section 70-68 Hillside Development Standards shall include a detailed slope analysis conducted using the Buncombe County slope raster data set at a cell resolution of 50 feet showing the following information:

- a. Areas designated as high hazard or moderate hazard on the Buncombe County Slope Stability Index Map prepared by the North Carolina Geological Survey;
- b. Surface waters, as 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 quadrangle topographic maps prepared by the United States Geological Service, and surface water buffers including, but not limited to, trout stream buffers and required stormwater setbacks;
- c. Location of the floodway and 100-year floodplain boundaries;
- d. Wetlands;
- e. A map showing the following categories of slope in the assigned colors:
 - Less than 15% slope; light green
 - 15% but less than 25%; dark green
 - 25% but less than 30%; blue
 - 30% but less than 35%; yellow
 - 35% but less than 50%; orange
 - 50% and greater slope; red;
- f. The number of acres and the percent of the tract in each slope category as shown above; and
- g. The number of acres and percent of the tract that is 35% slope and above

(6) *Other details.* Other details to be shown are as follows:

- a. Vicinity map showing the relationship between the proposed subdivision and surrounding area;
- b. Surveyed boundaries of the tract, shown with bearings and distances and/or standard curve data;
- c. North arrow;
- d. Site-specific topographic information with a minimum five-foot contour interval, prepared by a registered land surveyor or engineer licensed by the State of North Carolina, and indicating the source of the topographic information.
- e. Any natural features affecting the site;
- f. The location of the flood hazard, floodway, and flood fringe boundaries, if applicable;
- g. The location of any known cemeteries;
- h. Existing structures, railroads, and bridges within the subdivision;
- i. Approximate lot lines, area of each lot in acres and lot numbers;
- j. Names of adjacent property owners and parcel identification numbers (PIN);
- k. The existing uses of the land within and abutting the subdivision; and
- l. Proposed parks or open spaces.

(7) *Statement of permission for waste system by one or more of the following as applicable.*

- (a) A written statement from the North Carolina Department of Environment and Natural Resources permitting plans for the community sanitary sewer system, if applicable;
- (b) Proof of a preliminary soils investigation that will evaluate the feasibility of developing a subdivision served by individual septic systems, which shall be done by a professional such as a soils engineer or soils scientist, if applicable; or
- (c) The Metropolitan Sewerage District system design and allocation, and upon issuance, an approval letter from the Metropolitan Sewerage District shall also be provided, if applicable.

(8) *Permission for water system by one or more of the following as applicable.*

- a) A written statement from the North Carolina Department of Environment and Natural Resources approving and permitting plans for a community water system, if applicable; or
- b) System design and allocation for a public water system shall be provided, and upon issuance, an approval letter from the appropriate Water Authority shall also be provided, if applicable.

Note: An investigation evaluating the feasibility of developing a subdivision served by private wells is strongly suggested prior to submission of preliminary plans, if applicable.

(9) *Approved erosion control plan.* A copy of the erosion control plan and a written statement from the county erosion control officer stating that an erosion control plan has been submitted and approved for the project, if applicable.

(10) *Subdivision roads disclosure statement.* A subdivision roads disclosure statement prepared in accordance with G.S. 136-102, if applicable.

(11) *Other applicable information.* Any other information considered by the subdivider, the planning board, and/or planning director to be pertinent to the review of the plat.

(12) *Approval of proposed road and highway plans.* A written statement from the district engineer of the state department of transportation certifying approval of any proposed road and highway plans, if applicable.

(13) NCDOT driveway permit must be submitted prior to preliminary approval.

(b) *Specifications for minor and major subdivision as-built drawings.* The as-built drawing shall be clearly and legibly drawn at a scale of not less than one inch = 200 feet and shall be drawn on an appropriate standard sheet size. No major or minor subdivision lot shall be recorded and no portion of a subdivision bond shall be released until said as-built drawing is provided. The as-built drawings shall depict or have attached the following information:

(1) *Title block.* The title block shall contain the following:

- a. Name and address of owners of record;
- b. Name of subdivision;
- c. Location (township, county, state);
- d. Dates of as-built drawings;
- e. Graphic scale and written scale;

- f. Name, address, phone number of surveyor; and
- g. Tax parcel identification numbers, (PIN).

(2) *Roads.* The following information shall be supplied about roads:

- a. Existing and platted roads within or abutting subdivision (show rights-of-way and dimensions); and
- b. Road names.
- c. Final plans shall include actual surveyed road grades.

(3) *Utilities.* The following information shall be shown for utilities:

- a. Utility and other easements of record to be recorded within or abutting the subdivision;
- b. Provision of electrical and telephone service;
- c. Provision of cable television service, if applicable;
- d. Provision of natural gas lines;
- e. Sanitary sewers, location, line size, top and invert elevations and approval by MSD;
- f. Approval by Asheville-Buncombe Water Authority; and
- g. Storm sewers, culverts, detention ponds, and other drainage facilities.

(4) *Project data.* Project data shall include the following:

- a. Total area of tract subdivided;
- b. Total number of lots; and
- c. Linear feet in roads (centerline).

(5) *Other details.* Other details to be shown are as follows:

- a. Vicinity map showing the relationship between the subdivision and surrounding area;
- b. Exact boundaries of tract and lots shown with bearings and distances and/or standard curve data;
- c. North arrow and orientation reference;
- d. Site-specific and field verified topographic information with a minimum five-foot contour interval prepared by a registered land surveyor or engineer licensed by the State of North Carolina.
- e. Any natural features affecting the site;
- f. The location of the flood hazard, floodway, and flood fringe boundaries, if applicable;
- g. The location of any known cemeteries;
- h. Existing structures, railroads, and bridges within or abutting the subdivision;
- i. Exact lot lines, area of each lot in acres and lot numbers;
- j. Names of adjacent property owners and parcel identification numbers (PIN);
- k. The existing uses of the land abutting the subdivision; and
- l. Parks or open spaces.

(c) *Final plat for recordation.* The final plat for recordation shall include the following:

(1) Compliance with G.S. 47-30, as amended, and Standards of Practice for Land Surveying as adopted by the state board of registration for professional engineers and land surveyors;

(2) All utility and drainage easements;

- (3) All reserved areas, parks and open spaces; and
- (4) All certificates required in section 70-39.

Sec. 70-41. Phased development.

If a subdivider proposes that a subdivision will be constructed in phases, the following procedure shall apply:

- (1) No master plan shall be filed as part of a subdivision plan or preliminary plan unless it includes at least one phase of a multi-phase development intended for immediate development, or constitutes the master plan for the entire development intended to be developed immediately.
- (2) A master plan showing the entire proposed subdivision and the phases of subdivision, proposed density, proposed type and location of utilities, and proposed development timetable shall be submitted to the planning department staff for review. Approval of a master plan by planning department staff or by the planning board as part of the preliminary plan application process for a subdivision shall not constitute approval of the preliminary plan nor shall such approval of a master plan be considered as an acceptance of a preliminary plan, in whole or in part.
- (3) Subdividers of phased developments are hereby put on notice that the terms and conditions of the land development and subdivision ordinance of Buncombe County, North Carolina will change from time to time. Plans submitted to the planning department for review within 30 days of the next scheduled meeting of the planning board that comply with all the specifications and standards of the ordinance for any and all phases of the proposed development shall be deemed to have a vested right to continue under the terms and conditions of the ordinance as written on the date said plans were submitted.
- (4) Each phase of subdivision shall be preceded by submission and approval of a preliminary plat.
- (5) As each phase is completed, a final as-built plan and final recordable plat must be submitted and approved for that phase, prior to the sale or conveyance of any lot in that phase.

Sec. 70-42. Resubdivision procedures.

For any replatting or resubdivision of land, the same procedures, rules and regulations shall apply as prescribed in this article.

Sec. 70-43. Amendments to and modification of master and preliminary plans.

- (a) Insignificant deviations from a filed master plan are permissible and the planning department may authorize such insignificant deviations unless development has proceeded in accordance with an approved preliminary plan in which case the planning board must approve the changes. A deviation is insignificant if it has no discernable impact on neighboring properties, the general public, or those intended to occupy or use the proposed development.
- (b) Significant changes to subdivision approvals will be processed as new applications. Significant changes include, but are not limited to: those that significantly change the essential character of the use or activity that has been previously authorized; those that increase the density of the proposed development; those that a majority of the planning board may, in its sole and complete discretion, determine substantially amounts to a new plan.

(c) The planning director shall determine whether amendments to or modifications of filed master plans constitute an insignificant deviation or a significant change as set forth above. The determination of the planning director shall constitute a final decision and may be appealed to the planning board. When development has proceeded in accordance with an approved preliminary plan, the planning board shall determine whether amendments to or modifications of filed preliminary plans constitute an insignificant deviation or a significant change as set forth above. The determination of the planning board shall constitute a final decision of the county.

(d) A developer requesting approval of changes shall submit a written request for such approval to the planning department, and that request shall identify the changes and applicable ordinance sections affected. If the planning department or planning board disapproves the requested changes, the reasons for such action shall be stated in writing and references shall be made to the specific regulations with which the planned changes do not comply.

Sec. 70-44. Notice to adjoining properties.

The applicant must provide documentation that written notice by certified mail has been sent to all landowners adjoining proposed minor and major subdivisions. The notice shall state tax lot PIN(s) (or parcel identifying numbers), and address of the parcel(s) to be developed as well as the developer's name and address, the number of acres to be developed and the number of proposed building lots. No minor or major subdivision application will be accepted without this documentation.

Secs. 70-45--70-65. Reserved.

ARTICLE III. STANDARDS

Sec. 70-66. General requirements.

(a) *Conformity to existing maps or plans.* The plat of a subdivision shall conform to any official map or plan adopted by the board of commissioners, existing on November 30, 1993 or thereafter adopted.

(b) *Continuation of adjoining road systems.* Whenever possible, the proposed road or road layout should be coordinated with the existing road system of the surrounding area. Where possible, proposed roads should be the extension of existing roads.

(c) *Road names.* Proposed roads which are obviously in alignment with existing roads should be given the same name. All roads shall comply with the applicable provisions of the county street name, street address, and display ordinance, section 66-26 et seq. Public road names designated on a plat shall conform to G.S. 153A-240.

(d) *Public roads.* A maintenance and financial responsibility plan for the roads within the subdivision, covering the period between the time lot sales begin and when the roads are accepted by the state division of highways must be submitted and approved before final plat approval.

(e) *Private roads.* Private roads may be platted in any subdivision and shall conform to the standards set forth in section 70-67. Private roads shall be set out in protective covenants, deeds, or on plats or any combination of those methods, and shall clearly state that the state and/or county will not be obligated to take over or maintain the road.

(f) *Lots.* Lot size shall be regulated as required by the county health department for septic tank purposes, where applicable.

(g) *Lot frontage.* Lot frontage shall be regulated when the average land slope perpendicular to the street exceeds 18 percent. Any residential subdivision lot where the side slope of the land, at a right angle to the frontage street, is in excess of 18 percent slope shall have a minimum of 50 feet street frontage, and the lot street frontage shall be increased four feet for each side slope percentage point over the 18 percent base for such calculations. Example: A side slope of 50 percent requires lot frontage of 178 feet (50 feet, plus 128 feet for the excess side slope of 32 percent).

(h) *Flood damage.* All subdivision proposals shall be consistent with the need to minimize flood damage as provided for in the county flood damage control ordinance, chapter 34 of this Code.

(1) *Utilities.* All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed so as to minimize damage to utilities from flooding.

(2) *Floodway fill.* Fill shall not be used to raise land in the floodway as defined by the Federal Emergency Management Agency's flood insurance rate maps for the county, as amended.

(3) *Drainage easements.* All natural or directed storm water drainage features shall be centered within a ten-foot wide permanent easement to allow for continued maintenance of storm water detention or velocity dissipation structures. This easement shall be required for all storm water drainage features, either along a property line, along a roadway, or contained within a lot.

(i) *Permanent reference points.* Prior to the approval of the final plat, permanent reference points shall have been placed in accordance with G.S. 39-32.1, 39-32.2, 39-32.3, and 39-32.4, as amended.

(j) *Installation of utilities.* All public or private water and sewer systems shall be installed and shall meet the requirements of the county health department or other governmental authorities having jurisdiction thereof.

(k) Flag lots (lots accessed by a deeded access driveway) will have a minimum "pole" width of 20 feet. If the side slope of the land is in excess of 18 percent, then the minimum width will be established in accordance with subsection (g) of this section.

Sec. 70-67. Road and design standards.

Subdivision roads may be designated public or private and are subject to final approval by the Buncombe County Fire Marshal as follows:

(1) *Public use.* Subdivision roads to be dedicated to public use and to be maintained by the state department of transportation, after construction, shall conform in all respects to G.S. 136-102.6. The subdivider shall furnish the county planning department proof that the district engineer of the state department of transportation has issued a design certificate of approval. Upon completion of roads to be dedicated to public use, the developer shall submit confirmation by the state department of transportation or a registered engineer, land surveyor or landscape architect that the roads have been constructed to NCDOT standards.

(2) *Private use.* Subdivision roads to be designated as private shall conform to the following minimum design standards:

- a. Minimum deeded and recorded access road right-of-way widths as follows:
1. Minor subdivision, 20 feet;
 2. Major subdivision, 20-feet; and
 3. If the access road right-of-way is less than the subdivision road right-of-way, then the maximum length of the access road between turn-outs will be 200 feet.
- b. Access roads to both major and minor subdivisions shall traverse a surveyed right-of-way centerline showing calls and distances and its beginning and ending points in relation to adjoining properties. Access roads to both major and minor subdivisions shall have an eight-inch minimum aggregated base course (ABC) No. 7 stone and shall be a minimum width of 16 feet, subject to Buncombe County Fire Prevention Ordinance and approval by the Buncombe County Fire Marshal.
- c. Minimum subdivision road rights-of-way for both minor and major subdivisions are shown on Figure 1, which follows item h. of this section, and are described as follows:
1. Collector or any residential lot frontage road, 45 feet;
 2. Service or utility access or alley not used as primary residential access, 20 feet; and
 3. Minimum cul-de-sac radius, 50 feet.
 4. Shared private driveways, 20 feet.
- d. Horizontal centerline design standards for both minor and major subdivisions are as follows:
1. Minimum centerline radius, 35 feet; and
 2. T-turnarounds, minimum length of perpendicular cord will be 60 feet.
- e. All major subdivision roads (i.e., including features such as streets, cul-de-sacs, and T-turnarounds) shall be paved in accordance with NCDOT "Subdivision Road Minimum Construction Standards," Pavement Design 1(E), current edition. Specify soil conditions and which combination of base and pavement design (see DOT guidance) will be used. Use worst-case design criteria if soil testing is not provided. Final plans will include a statement by a licensed professional engineer that roads are in compliance with the standards of this chapter. No base course shall be placed on muck, pipe clay, organic matter or other unsuitable matter, and a minimum compaction rate of subgrade prior to paving shall not be less than 95 percent by standard proctor method and certified by a licensed engineer. The following provisions shall also apply:
1. Minimum pavement width shall be 18 feet. Two feet of additional drivable surface shall be provided constructed of asphalt, concrete or other approved driving surface (including compacted stone) capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds. The two foot additional drivable surface requirement may be reduced by the Buncombe County Fire Marshal or his or her designee by use of, but not limited to, residential sprinklers, municipal water supply, loop roads, pull outs, etc. Requests for a variance from the provisions of this article must be accompanied by a letter from the Fire Marshal approving the alternate method.
 2. Minimum pavement radius for cul-de-sacs, 35 feet. A T-turnaround may be used in place of a cul-de-sac. The minimum paved length of the perpendicular chord will be 60 feet;
 3. The pavement width and base course shall be increased where the road centerline is less than a 90-foot radius. If radius is 70 to 90 feet, increase pavement width 25 percent; if radius is 60 to 70 feet, increase pavement width 35 percent; if radius is 50 to 60 feet,

increase pavement width 45 percent; if radius is less than 50 feet, increase pavement width 50 percent;

4. Finished grade, typical cross section, and profiles shall be prepared by a registered land surveyor or professional engineer, currently licensed in the state by the state board of registration for professional engineers and land surveyors; and
5. Where two accesses are required for a development by the Buncombe County Fire Marshal, they shall be remote from each other.

f. All minor subdivision roads (i.e., including features such as streets, cul-de-sacs, and T-turnarounds) less than or equal to ten percent in grade shall have an eight-inch minimum aggregated base course (ABC) No. 7 stone. All roads exceeding ten percent grade shall meet major subdivision road construction standards. Final plans will include a statement by a licensed professional engineer that roads are in compliance with the standards of this chapter. No base course shall be placed on muck, pipe clay, organic matter or other unsuitable matter, and a minimum compaction rate of subgrade prior to paving (if required) shall not be less than 95 percent by standard proctor method and certified by a licensed engineer. The following provisions shall also apply:

1. Minimum road width shall be 18 feet. Two feet of additional drivable surface shall be provided constructed of asphalt, concrete or other approved driving surface (including compacted stone) capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds. The two foot additional drivable surface requirement may be reduced by the Buncombe County Fire Marshal or his or her designee by use of, but not limited to, residential sprinklers, municipal water supply, loop roads, pull outs, etc. Requests for a variance from the provisions of this article must be accompanied by a letter from the Fire Marshal approving the alternate method.
2. Minimum road radius for cul-de-sacs, 35 feet. A T-turnaround may be used in place of a cul-de-sac. The minimum length of the perpendicular chord will be 60 feet;
3. The road width shall be increased where the road centerline is less than a 90-foot radius. If radius is 70 to 90 feet, increase road width 25 percent; if radius is 60 to 70 feet, increase road width 35 percent; if radius is 50 to 60 feet, increase road width 45 percent; if radius is less than 50 feet, increase road width 50 percent;
4. Finished grade, typical cross section, and profiles shall be prepared by a registered land surveyor or professional engineer, currently licensed in the state by the state board of registration for professional engineers and land surveyors; and
5. Where two accesses are required for a development by the Buncombe County Fire Marshal, they shall be remote from each other.

g. Minimum shoulder width on fill slopes for both minor and major subdivisions shall not be less than two feet.

h. Maximum grades for both minor and major subdivisions shall be as follows:

1. Maximum centerline grade, 18 percent.
2. As shown in Figure 1 below, tangent grades in excess of 15 percent shall not exceed 200 feet in length and shall have a maximum entrance and exit grade of 15 percent for example:

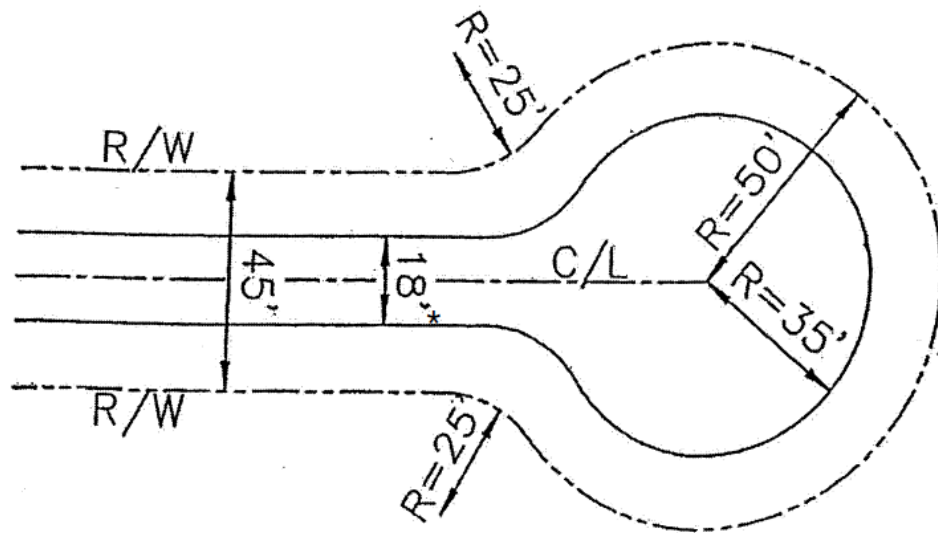
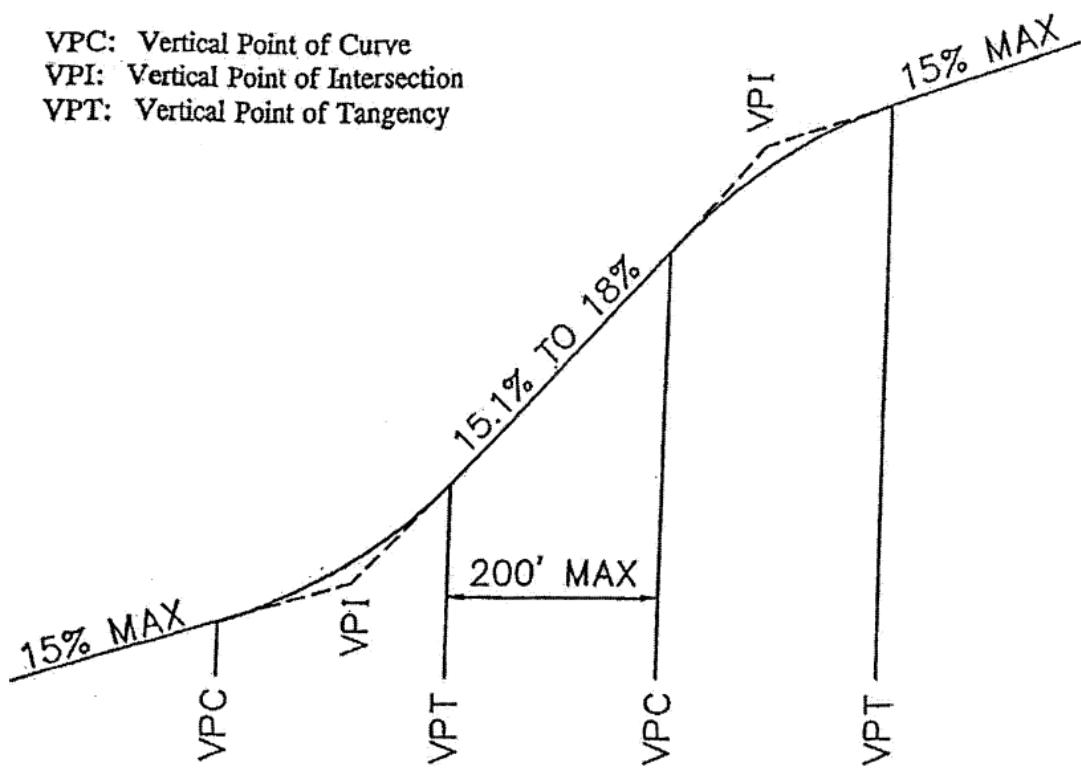


Figure 1

*Minimum road width shall be 18 feet plus an additional 2 feet of drivable surface as approved by the Fire Marshal.

Grade 1 = Maximum 15 percent; Grade 2 = 15.1 percent to 18 percent;

Grade 1 = 15.1 percent to 18 percent; Grade 2 = Maximum 15 percent.

3. Maximum grade, 15 percent, where road centerline radius is less than 90 feet.
4. Grades for 30 feet each way from an intersection shall not exceed ten percent.
5. Grades for cul-de-sac and T-turnarounds shall not exceed ten percent.

i. Cut and fill slopes for both minor and major subdivisions shall be constructed to ensure adequate stability of the natural materials encountered.

j. All storm drainage for both minor and major subdivisions shall be adequate to facilitate the road maintenance without excessive cost, and not cause flooding on private property from storm runoff of the design frequency. All pipe culverts, storm sewers and appurtenances shall be free of all debris and silt buildup and shall be structurally and hydraulically sound, and functioning in a normal manner. All drainage ditches shall be of such a width and depth and with such a slope as to carry the anticipated discharges. Paved ditches or riprap shall be required where necessary. Culvert sizing and materials shall meet or exceed the requirements approved by the NCDOT in "Subdivision Roads Minimum Construction Standards," Utility Requirements, current edition. The following shall also apply:

1. Minimum design frequency for storm sewer collector, ten years; and
2. Minimum design frequency for cross drainage, 25 years.

k. If right-of-way or road is indicated at boundary of development, then master plan for both minor and major subdivisions shall include a description of potential future development; including at a minimum the acreage and anticipated density in houses per acre, if known. If a minor subdivision is expanded to a major subdivision then the entire subdivision shall be brought up to major subdivision standards.

l. Use NCDOT "Subdivision Roads Minimum Construction Standards," Minimum Design and Construction Criteria (B) for Bridges and Dams, current edition for both minor and major subdivisions.

m. Retaining walls utilized to support a roadbed or the adjacent slope for both minor and major subdivisions shall be designed and constructed under the supervision of a licensed professional engineer. Prior to final subdivision approval or release of guarantee of improvements, a report by the engineer shall be required certifying the construction.

n. Alternatives to conventional subdivision roads for both minor and major subdivisions will be considered in the variance process that provide for safe and efficient transportation, while reducing disturbance and tree cutting. This could include, but is not limited to, one way or loop roads, steeper side slopes where soil stability will allow varying grades and those other means that reduce land disturbance, increase environmental protection, and maintain safe and efficient transportation. Trees should be protected within the development whenever possible using temporary fencing. Plant screening is recommended for all retaining walls and cut and fill slopes. These measures should be used in conjunction with required methods of stabilization. The density of new plant material should approximate the density of vegetation prior to development.

o. The temporary terminus of any major or minor subdivision road shall be constructed with a temporary t-turnaround, cul-de-sac, or hammerhead turnaround. No major or minor subdivision

lot shall be recorded and no portion of a subdivision bond shall be released until said temporary turnaround is provided. If a subdivision is subject to the hillside development standards, the disturbance required for temporary turnarounds shall count towards the limits on disturbance of communal infrastructure and shall be shown on preliminary subdivision plans. The temporary T-turnaround or cul-de-sac shall have an eight-inch minimum aggregated base course (ABC) No. 7 stone and shall meet the following design standards:

1. Temporary cul-de-sacs shall have a minimum centerline radius of 35 feet.
2. Temporary T-turnarounds shall have a minimum perpendicular cord of 60 feet and shall be 20 feet wide.
3. Temporary hammerhead turnarounds shall have a minimum perpendicular cord of 30 feet and a minimum horizontal cord of 30 feet, and shall be 20 feet wide.

(3) *Public and private use.* Roads for both minor and major subdivisions to be designated either public or private shall conform to the following minimum standards in addition to the standards set forth in subsections (1) and (2) above:

- a. Any subdivision road shall be contained within a corridor that shall not exceed 90 feet in width along 80% of its total length; up to 20% of the length of the road corridor may be graded to a maximum width of 135 feet. The corridor height, defined as the height of a combined cut and fill slope, shall not exceed 60 feet.
- b. Consultation with a geotechnical engineer shall be required for road construction in areas of a tract in excess of 30 percent natural slope and for all areas designated as High Hazard or Moderate Hazard on the Buncombe County Slope Stability Index Map prepared by the North Carolina Geological Survey, and an investigation for colluvial deposits shall be made. Recommendations of the geotechnical engineer shall be submitted with the application for review. Prior to final subdivision approval or release of guarantee of improvements, a report by the geotechnical engineer shall be required certifying that recommendations were followed during construction.
- c. Private Driveways. Individual and shared private driveways shall be shown on the preliminary plan for the first 20 linear feet, and if traversing a cut or fill slope, the driveway must be shown to the point where it exits the cut or fill slope where the distance is greater than 20 linear feet.
- d. Shared private driveways shall be completed by the developer as a part of the installation of communal infrastructure up to the point where the shared private driveway accesses the last individual lot to be served by said shared driveway. Shared private driveways shall also conform to minimum standards up to the point where the shared driveway accesses the last individual lot to be served by said shared driveway. Shared private driveway standards shall require a minimum driveway width of 10 feet unless the driveway is 500 linear feet or greater, at which point the entire driveway shall be at least 13 feet wide. Shared driveways shall be comprised of an acceptable all-weather surface and shall not be exceed 20% grade.

Sec. 70-68. Hillside development standards.

(a) *Hillside area definition.* For the purposes of this section, a hillside area is defined as any lot, parcel, or tract of land which meets all of the following standards:

- (1) Is located within the jurisdiction of Buncombe County, exclusive of municipalities and their jurisdictions.
- (2) Is defined by section 70-5 as a minor or major subdivision.
- (3) (a) Has an average slope of its natural terrain of 25 percent or greater, or has an average slope of its natural terrain of less than 25 percent, but 30 percent of the tract is greater than 35 percent

slope based on the submitted slope analysis and may follow the standards set forth in Subsection (b) below.

(b) *Drastic Variation Hillside Development Subdivision.* A submitted subdivision plan that has an average slope of its natural terrain of less than 25 percent slope, but 30 percent of the tract is greater than 35 percent slope as shown on the submitted slope analysis, may separate the property into two separate areas (area A and area B) if the proposed subdivision meets the following requirements:

- (1) Development Area A shall be exempted from the Hillside Development Standards and shall meet the following standards:
 - a. 90% of the phase shall be in areas less than or equal to 25% slope as shown on submitted slope analysis.
 - b. The phase shall have an average slope of its natural terrain of less than 25 percent.
- (2) Development Area B shall be the remainder of the tract to be subdivided and shall be subject to Hillside Development Standards.

(b) *Previously approved developments exempt.* Any portion of the lot, parcel, or tract of land which has been approved by the planning department or planning board as a minor or major subdivision prior to the adoption of this section, or developed prior to the adoption of this section, shall not be included within the definition of a hillside area if no further subdivision is proposed within that portion of the lot, parcel, or tract of land. Subsequent phases of a minor or major subdivision, as well as approved subdivision projects where the site plan has been changed, or approved subdivisions where the lot design has changed, shall indicate the proposed contours, limit and area of grading, and percentage of the site to be graded.

(c) *Average slope determination.*

(1) *Contour map required.* Each application for a minor or major subdivision which meets the standards set forth in the hillside definition shall include a contour map which includes a scale and contour interval on the site plan to determine the average slope of the entire tract of land and the average slope of each proposed lot in its natural state.

(2) *Calculation of natural average slope.* The natural average slope is calculated using the following formula:

$$S\% = \frac{0.0023 \times I \times L}{A}$$

Where:

S = Average natural slope of parcel or lot in percent

I = Contour interval of map in feet, with said contour intervals to be five feet or less

L = Total length of the contour lines within the parcel or lot in feet

A = Area of the parcel or lot in acres

0.0023 = Constant which converts square feet into acres

In addition, property owners may submit an alternate method of slope calculation for consideration by the planning board. These methods may include, but are not limited to, the following methods: weighted average, slope mapping, other field-based techniques, etc.

Once "S" or the average natural percent of the tract is calculated, round off to the nearest whole number when "S" is 25% or greater. The density table, as set forth hereinafter, shall be used to determine the maximum number of lots or units allowed. "S" shall also be calculated for each lot and, when "S" is 25% or greater, rounded off to the nearest whole number. The density table shall be used to determine the minimum size allowed for each proposed lot.

(d) *Density table.*

- (1) Development regulated; exceptions. For the purposes of this section, developments which meet the standards set forth in the definition of hillside area shall further be regulated with regard to the permitted density on both the site to be developed as well as to the individual lot. The permitted density shall be determined by first calculating the average natural slope for a site to be developed in accordance with the density table, and, second, by calculating the average slope of the lot to be transferred or developed. The minimum land area for proposed lots shall be calculated based on that portion of the lot to be under control of and deeded to the property owner, exclusive of road rights-of-way.
- (2) *Density table.* The density table to be used in this section is shown in Figure 2 below.

FIGURE 2

SLOPE %	MAXIMUM DENSITY UNITS PER ACRE	MINIMUM LOT IN ACRES
25	1.250	0.80
26	1.064	0.94
27	0.926	1.08
28	0.820	1.22
29	0.735	1.36
30	0.667	1.5
31	0.625	1.6
32	0.588	1.7
33	0.556	1.8
34	0.526	1.9
35	0.500	2.0
36	0.446	2.24
37	0.398	2.51
38	0.356	2.81
39	0.318	3.15
40	0.284	3.52
41	0.253	3.95
42	0.226	4.42
43	0.202	4.95
44	0.180	5.55
45	0.161	6.21
46	0.144	6.96
47	0.128	7.79
48	0.115	8.73
49	0.102	9.77
50 and above	0.100	10.0

- (3) Any proposed development or lot which meets the definition of hillside area and whose average natural slope is above 50 percent is subject to the most restrictive density and lot size requirements as set forth in the Density Table. Any proposed individual lot whose average natural slope is below 25 percent within a development which meets the definition of hillside area will not be subject to a minimum lot size as set forth in the Density Table.

- (4) A reduction in minimum lot size and increase in density and percentage of disturbance for lots that are 30% average natural slope and below may be earned when the gross area disturbed for communal infrastructure installation is 13% of the tract or less, as shown in Figure 3 below.

Figure 3

SLOPE	13 % DISTURBANCE FOR INFRASTRUCTURE (.9 MULTIPLIER REDUCTION IN MINIMUM LOT SIZE)			12 % DISTURBANCE FOR INFRASTRUCTURE (.85 MULTIPLIER REDUCTION IN MINIMUM LOT SIZE)			11 % DISTURBANCE FOR INFRASTRUCTURE (.8 MULTIPLIER REDUCTION IN MINIMUM LOT SIZE)			10 % DISTURBANCE FOR INFRASTRUCTURE (.75 MULTIPLIER REDUCTION IN MINIMUM LOT SIZE)		
	MINIMUM LOT SIZE	ALLOWED DISTURBANCE	% OF LOT	MINIMUM LOT SIZE	ALLOWED DISTURBANCE	% OF LOT	MINIMUM LOT SIZE	ALLOWED DISTURBANCE	% OF LOT	MINIMUM LOT SIZE	ALLOWED DISTURBANCE	% OF LOT
25	0.72	0.24	33.33 %	0.68	0.24	35.29 %	0.64	0.24	37.50 %	0.6	0.24	40.00 %
26	0.846	0.282	33.33 %	0.799	0.282	35.29 %	0.752	0.282	37.50 %	0.705	0.282	40.00 %
27	0.972	0.324	33.33 %	0.918	0.324	35.29 %	0.864	0.324	37.50 %	0.81	0.324	40.00 %
28	1.098	0.366	33.33 %	1.037	0.366	35.29 %	0.976	0.366	37.50 %	0.915	0.366	40.00 %
29	1.224	0.408	33.33 %	1.156	0.408	35.29 %	1.088	0.408	37.50 %	1.02	0.408	40.00 %
30	1.35	0.45	33.33 %	1.275	0.45	35.29 %	1.2	0.45	37.50 %	1.125	0.45	40.00 %
	MAXIMUM DENSITY WILL BE 110% OF THAT ALLOWED IN 70-68(d)(2) DENSITY TABLE			MAXIMUM DENSITY WILL BE 112% OF THAT ALLOWED IN 70-68(d)(2) DENSITY TABLE			MAXIMUM DENSITY WILL BE 114% OF THAT ALLOWED IN 70-68(d)(2) DENSITY TABLE			MAXIMUM DENSITY WILL BE 116% OF THAT ALLOWED IN 70-68(d)(2) DENSITY TABLE		

(e) *Hillside area development review process.*

(1) *Information required subdivision plan review.* Compliance with this section shall be evaluated as part of the subdivision review process set forth in article II of this chapter. In addition to the application information required for a subdivision review, those proposed developments which meet the standards of the hillside area definition must include the following information:

- a. A site plan which includes the boundaries and acreage of the parcel, scale and contour interval, existing and proposed contours;
- b. Average natural slope calculations for the parcel and individual lots which include the average natural slope in percent, contour intervals of five feet or less, individual and total length of contour lines in feet and area of the parcel and lots in acres;
- c. Areas with a natural slope over 30 percent shall not have fill slopes steeper than a 2 H:1V, nor cut slopes steeper than 1.5H:1V unless designed by a geotechnical engineer.
- d. Guardrails, installed to NCDOT specification or to the standard specifications for construction of roads and bridges on federal highway projects, and shoulders of four feet minimum width may be required in construction of roads over 15 percent grade and with downhill slopes of 30 percent or more.
- e. Soils maps shall be submitted from the natural resource conservation service (NRCS).
- f. Global stability analysis shall be performed for homesites on a 35 percent or greater slope or in an area designated as High Hazard or Moderate Hazard on the Buncombe County Slope Stability Index Map prepared by the North Carolina Geological Survey.
- g. Other information or descriptions or maps which may be requested by the planning director or the planning board to address concerns regarding geologic hazards, soil stability, building-to-site relationships, and similar characteristics.
- h. Limitations on disturbed area and impervious surfaces.

(1) Limitations on disturbed area and impervious surfaces for communal infrastructure installation shall be:

Maximum gross area disturbed = 15 percent

Maximum gross area impervious = 10 percent

These limits shall apply to infrastructure installation that is common to the development, including but not limited to roadways, shared drives, sidewalks, public utilities and stormwater controls.

(2) Limitations on disturbed area and impervious surfaces for individual lot development, excluding rights-of-way, shall be:

25 – 35 percent slopes

Maximum gross area disturbed = 30 percent

Maximum gross area impervious = 15 percent

> 35 percent slopes

Maximum gross area disturbed = 15 percent

Maximum gross area impervious = 8 percent

These limits shall apply to individual lot improvements, including but not limited to individual driveways, and well and septic systems. Recreational facilities, including, but not limited to, golf courses, club houses, pools and tennis courts shall be located on an individual lot and shall be considered individual lot improvements.

(3) The preliminary plan shall show the maximum amount of disturbed and impervious acreage and percent of total for infrastructure installation and shall also show the boundaries of the disturbed and impervious areas for the proposed infrastructure installation. Acreage shall be carried out to two decimal places and shall not be rounded.

(4) The limitations on disturbed and impervious area applied to the tract during infrastructure installation shall not be included in the disturbed and impervious area calculations when the individual lots are developed.

(2) *[Site plan required for individual lot development.]* Owners or developers of individual lots that are subject to the requirements of section 70-68, effective July 1, 2006, shall be required to submit a site plan to the planning department, drawn to scale, with the following information:

- a. Topographic data including existing and planned contours for the area of construction or land disturbance, (cuts and fills for structures, driveways, etc.) shown in five-foot contour intervals. This shall be drawn by the homeowner, or his designated representative, using reliable sources such as Buncombe County topographic maps or appropriate software;
- b. All proposed impervious surfaces (including but not limited to building footprints, driveway, parking area, patio, etc.), retaining walls, septic tank and drainfield locations; and
- c. Written and graphic area and percentage of parcel to be disturbed and area and percentage of parcel to have impervious surface.

The site plan shall be approved prior to the issuance of any development or building permits.

(3) *[Land disturbing activity.]* Land-disturbing activity is limited to specific areas within a parcel or lot not to exceed amounts shown in section 70-68 (e)(1)(h). This area does not include setbacks, buffers, easements, etc. There must be an adequate amount of buildable land for proposed structure(s) and all land disturbing activities (including but not limited to roadways, driveways, septic/sewage areas, structures, etc.). Grading shall not take place prior to site plan approval by the planning department and issuance of any permit required by the Buncombe County Soil Erosion and Sedimentation Control Ordinance. Only areas that have been approved for disturbance may be disturbed, and then only after all erosion measures and other regulations have been met. Grading areas shall be clearly marked before any grading begins. Highly visible fencing is required to prohibit earthmoving equipment from moving beyond designated grading boundaries.

a. No development or land disturbance activity may occur in the following areas of a parcel or lot. These areas may be included in the area used to calculate compliance with the minimum standards shown in subsection 70-68(e)(1)(h):

- Rock cliffs,
- Wetlands, buffer areas along surface waters or mapped floodways,
- Significant historical and archeological resource areas defined by the National Register of Historic Places or other federal or state agencies.

The provisions of this section shall not apply to the crossing of streams and creeks for utility corridors and roadways if construction is approved by all applicable agencies.

(4) [State of property during development.] Any new development will create areas that will temporarily be deforested and/or unsightly. Every effort to reduce the length of time the development remains in this state should be taken.

- a. A minimum of the property, as specified in subsection 70-68(e)(1)(h);, is required to remain in a natural state. A natural state is defined as the condition prior to development or other human activity. The only activities that may take place outside the areas of disturbance documented on an approved site plan are:
 - (1) fire fuel reduction (fire fuel reduction may include the installation of firebreaks in the area immediately adjacent to structures and the removal of underbrush)
 - (2) control of invasive species (as defined in Figure 4. Other species may be approved by the Planning Department when demonstrated to be non-native invasive species.)
 - (3) removal of dead or diseased specimens
 - (4) maintenance of the area to ensure adequate screening and buffering (i.e. selective thinning of saplings)
 - (5) maintenance of the area to ensure public health and safety and
 - (6) Non-motorized passive recreation (such as running, walking, biking trails, gardening, primitive camping areas, and similar low impact outdoor activities). The location, type, and materials which will be used to construct passive recreation facilities shall be submitted on the preliminary plans and shall be approved by the Planning Board. The development of passive recreation areas within the natural state area shall not exceed 5% of the total acreage of the tract.

When removing vegetation for the purposes of exceptions (1) through (5) above, vegetation can only be removed through the use of hand-held devices (i.e. chainsaws, pole pruners, hedge trimmers, weed eaters, etc.). Bulk application of chemical herbicides is prohibited. The removal of vegetation shall be conducted in such a manner as to preserve ground cover (through a vegetated cover or through the use of a substrate that will prevent sediment run-off from the site). Removal of healthy tree specimens greater than 3” diameter at breast height (DBH) is prohibited except when installing passive recreation facilities.

Clear cutting will be allowed only for the footprint of the house, driveways, septic systems, and normal landscaping including yards, gardens and flowerbeds. Clear cutting for view will not be allowed. However, selective cutting that eliminates the tunnel effect caused by clear cutting will be allowed. Reducing clear cuttings reduces the potential for erosion, stormwater runoff and landscaping and grading costs. Keeping mature greenery is recommended wherever possible to provide immediate aesthetic, environmental and potential monetary value.

FIGURE 4

Scientific name	Common name
<i>Ailanthus altissima</i> (Mill.) Swingle	Tree of Heaven

<i>Albizia julibrissin Durz.</i>	Mimosa
<i>Alliaria petiolata (Bieb.) Cavara & Grande</i>	Garlic-mustard
<i>Alternanthera philoxeroides (Mart.) Griseb.</i>	Alligatorweed
<i>Celastrus orbiculatus Thunb.</i>	Asian bittersweet
<i>Elaeagnus angustifolia L.</i>	Russian olive
<i>Elaeagnus umbellata Thunb.</i>	Autumn olive
<i>Hedera helix L.</i>	English ivy
<i>Hydrilla verticillata (L.f.) Royle</i>	Hydrilla
<i>Lespedeza bicolor</i>	Bicolor lespedeza
<i>Lespedeza cuneata (Dum.-Cours.) G. Don</i>	Sericea lespedeza
<i>Ligustrum sinense Lour.</i>	Chinese privet
<i>Lonicera fragrantissima Lindl. & Paxton</i>	Fragrant honeysuckle
<i>Lonicera japonica Thunb.</i>	Japanese honeysuckle
<i>Microstegium vimineum (Trin.) A. Camus</i>	Japanese stilt-grass
<i>Murdannia keisak (Hassk.) Hand.-Mazz.</i>	Asian spiderwort
<i>Myriophyllum aquaticum (Vell.) Verdc.</i>	Parrotfeather

<i>Paulownia tomentosa</i> (Thunb.) Sieb.&Zucc. ex Steud.	Princess tree
<i>Phragmites australis</i> (Cav.) Trin. ssp. <i>australis</i>	Common reed
<i>Polygonum cuspidatum</i> Seib. & Zucc.	Japanese knotweed
<i>Pueraria montana</i> (Lour.) Merr.	Kudzu
<i>Rosa multiflora</i> Thunb.	Multiflora rose
<i>Salvinia molesta</i> Mitchell	Aquarium water-moss
<i>Vitex rotundifolia</i> L.f.	Beach vitex
<i>Wisteria sinensis</i> (Sims) DC	Chinese wisteria

b. Re-vegetation is required on all disturbed areas that remain after construction, including areas around permanent structures, resurfaced areas such as driveways and areas of cuts and fills, pursuant to land disturbance regulations. Where trees have been removed due to insect damage or disease, and this tree removal increases the land disturbance percentage in amounts that exceed amounts specified in subsection 70-68(e)(1)(h); replanting is required according to the re-vegetation plan shown in subsection 70-68(e)(5).

c. All surface water buffers are to be maintained in a natural state pursuant to Buncombe County Soil Erosion and Sedimentation Control Ordinance and North Carolina Department of Environment and Natural Resources.

(5) *Re-vegetation plan.*

ELEVATION UNDER 4,000 FEET	
East/North Facing	South/West Facing
Overstory Species	
Eastern White Pine	Black Locust
Yellow Poplar	Virginia Pine
Chestnut Oak	Shortleaf Pine
Northern Red Oak	Southern Red Oak

Black Walnut	White Oak
Native Ash	Chestnut Oak
Sycamore	Hickory
Beech	Red Maple
Yellow Buckeye	Sycamore
Red Maple	
Sugar Maple	
Understory Species	
Sourwood	Native Blueberry
Dogwood	Eastern Redbud
Mountain Laurel	American Holly
Native Rhododendron	Box Elder
Sumac	Sassafras
American Hornbeam	Dog Hobble
	Persimmon
<i>ELEVATION 4,000 FEET AND OVER</i>	
East/North Facing	South/West Facing
Overstory Species	
Sugar Maple	Pitch Pine
Black Birch	Chestnut Oak
Yellow Birch	Northern Red Oak
Beech	Black Cherry
Red Spruce	Eastern White Pine
Black Cherry	
Eastern White Pine	
Northern Red Oak	
Understory Species	
Native Rhododendron	Hawthorn
American Mountain Ash	Striped Maple
Mountain Maple	Serviceberry
Native Blueberry	
Native Crabapple	

All planted species shall be on a ten-foot by ten-foot spacing. A mix of one overstory and one understory species from the table above, appropriate for site elevation and aspect, shall be planted on each 100 square feet.

Pines shall be three to four feet in height, with a minimum stem diameter at the ground of one inch. The root ball shall be 14-18 inches.

Hardwoods shall be 14-18 inches in height, with a minimum stem diameter at the ground of one-half to three-fourths-inches. These trees can be bare-rooted at planting.

All overstory and understory plants shall be limed and slow-release fertilizer stakes shall be inserted around each plant.

All plants shall be mulched with organic mulch to control weeds. Mulch shall extend two feet around each plant.

(6) *Issuance of land disturbing permit.* No land disturbing permit shall be issued for a site plan review or a subdivision review which meets the standards set forth in the definition of hillside area until the site plan review and subdivision plat review have been completed.

(f) *Alternative Path Hillside Development Subdivision.* Alternative path development shall provide design flexibility that will allow for preservation of environmentally sensitive features. The alternative path is encouraged in order to limit disturbed areas and preserve ridge tops, woodlands, open spaces, floodplain, moderate and high risk landslide hazard areas and other environmentally sensitive areas. The following shall apply to all development seeking to be approved through the Alternative Path:

- (1) Minimum road frontage and lot sizes are not applicable to alternative path development. The total number of lots shall not exceed that allowed in subsection 70-68 (d) (2), however a cumulative density bonus will be available for additional measures taken as set forth below.
- (2) Development of any kind shall not occur in areas of 50% slope or greater per the slope analysis submitted as part of the application; home sites shall not be located in areas greater than or equal to 35% slope per the submitted slope analysis.
- (3) The development shall either be classified as a Cluster Development or a Building and Grading Envelope Conservation Development, and as classified, shall follow the standards set forth below.
 - a. **Cluster Development.** Cluster development is encouraged in order to preserve ridge tops, woodlands and open spaces and to provide an alternative for those seeking to construct more cost-effective homes on tracts by providing no lot size requirements and density bonuses by clustering development on the lower elevations and less steep portions of the property. Clustering of lots on lower elevations, less steep slopes and less environmentally sensitive areas is allowed under the following conditions:
 - (1) 30% of the overall tract shall be conserved. Areas to be conserved will be designated as Primary and Secondary conservation areas.
 - (a) The following areas shall be included in primary conservation areas:

- (1) Moderate and high risk landslide hazard areas as shown on the Buncombe County Slope Stability Index Map prepared by the North Carolina Geological Survey;
 - (2) surface waters and surface water buffers including, but not limited to, trout stream buffers and required stormwater setbacks;
 - (3) 100 year floodplain and floodway;
 - (4) wetlands; and
 - (5) areas shown as orange and red (having an average natural slope greater than or equal to 35%) on the submitted slope analysis.
- (b) Secondary conservation areas shall consist of:
- (1) land in a currently undeveloped or natural state not meeting the definition of primary conservation areas above;
 - (2) existing farmland; and
 - (3) other areas subject to review and approval of the Buncombe County Planning Board.
- (c) Areas to be conserved must be located within identified primary conservation areas; if the percentage to be conserved exceeds the amount of primary conservation areas on the tract, areas deemed as secondary conservation areas will be allowed to count toward the required percentage. The final plat of the subdivision shall indicate which areas are conserved open space.
- (d) Conserved open space shall remain in an undeveloped state except for the provision of non-motorized passive recreation such as running, walking, biking trails, gardening, primitive camping areas, and similar low impact outdoor activities. The development of golf courses, club houses, pools, tennis courts, etc. shall not be included in the definition of passive recreation. The location, type, and materials which will be used to construct passive recreation facilities shall be submitted on the preliminary plans and shall be approved by the Planning Board. The development of passive recreation areas within the conservation/open space areas shall not exceed 5% of the total acreage of the tract.
- (e) The conserved area, with the prior written consent of Buncombe County, shall be designated and established of record prior to, or concurrent with, the recording of the first final subdivision plat. Method of conservation of open space shall be stated on the submitted subdivision plans and shall be approved by the Buncombe County Planning Board. Conservation space shall be dedicated to, owned, and maintained in perpetuity by any of the following:
- (1) A homeowners' association in which membership is mandatory for all homeowners within the development;
 - (2) A perpetual conservation easement on the open space held and enforced by an established land trust or conservation organization;
 - (3) With its prior express written consent, a governmental body (e.g. Buncombe County Parks and Recreation, State of North Carolina, United States Government); or
 - (4) Any other structure or entity designed to afford such perpetual maintenance for the conserved area as same may be approved in advance by Buncombe County.
- (2) Disturbed and impervious area shall be calculated for the entire tract and shall include any and all disturbance and impervious surface. This shall include, but is not limited to home sites, infrastructure installment for individual lots, communal buildings such as clubhouses, and communal infrastructure such as roads and

stormwater measures. Limitations on disturbed area and impervious surfaces for the total tract shall be:

Maximum gross site area disturbed = 30%

Maximum gross site area impervious = 15%

The development plan and the final plat shall state, in both percentage and number of acres, the maximum allowed disturbed and impervious area for the entire tract. The preliminary plan and final plat shall provide the maximum amount of disturbed and impervious acreage which will include infrastructure installation and lot development. The preliminary plan and the final plat shall delineate areas that may be disturbed and show areas to be dedicated to Conservation space.

b. Building and Grading Envelope Conservation Development. Building and Grading Envelope Conservation Subdivisions are encouraged in order to limit disturbed areas; preserve ridge tops, woodlands, open spaces, floodplain, and other environmentally sensitive areas; and to provide flexibility in design of a subdivision. By allowing flexibility of design, design professionals have the ability to develop a subdivision while conserving environmentally sensitive areas such as steep slopes, floodplains, wetlands, and ridgelines. Building and Grading Envelope Conservation Development shall be allowed under the following conditions:

- (1) The submitted site plan shall clearly define the disturbance limitations for infrastructure installation. Communal infrastructure installation disturbance shall not constitute more than 15% of the overall tract. Communal infrastructure impervious surface shall not constitute more than 10% of the overall tract. The preliminary plan and the final plat shall state, in both percentage and number of acres, the disturbed and impervious area for the entire tract for infrastructure installment.
- (2) Structures shall only be constructed within Building and Grading envelopes. Building and grading envelopes shall meet the following standards:
 - (a) Building and grading envelopes shall not be located in any of the following areas:
 1. 35% slope or greater as identified on the submitted slope analysis
 2. moderate and high risk landslide hazard areas as shown on the Buncombe County Slope Stability Index Map prepared by the North Carolina Geological Survey
 3. surface waters and surface water buffers
 4. 100 year floodplain and floodway boundaries
 5. wetlands
 - (b) Building and grading envelopes shall be spaced at least 150 feet apart. Spacing between building envelopes shall consist of preserved vegetation.
 - (c) Building and grading envelopes shall be a maximum of and no greater than 0.6 acres and shall be inclusive of the structure, parking, well, and driveway. The location of individual septic systems shall be determined by the Buncombe County Health Department. The size of the building and grading envelope shall dictate the size of the lot to be subdivided, where the lot size shall equal at least 300% of the size of the building and grading envelope.
 - (d) No land disturbing activity for construction of structures or individual lot infrastructure, excluding individual septic systems, shall occur outside the building and grading envelope.
 - (e) Envelopes must be delineated on the preliminary plans; clearly delineated on site during construction by fencing; and recorded on the final plat. Amount and

- location of disturbance shall be certified prior to final certificate of occupancy by a surveyor, landscape architect, or other licensed professional.
- (3) Acreage not included in lots, envelopes, or for the installation of communal infrastructure shall be conserved space. 15% of the overall tract shall be conserved. Areas to be conserved will be designated as Primary and Secondary conservation areas.
- (a) The following areas shall be included in primary conservation areas:
- (1) Moderate and high risk landslide hazard areas as shown on the Buncombe County Slope Stability Index Map prepared by the North Carolina Geological Survey;
 - (2) surface waters and surface water buffers including, but not limited to, trout stream buffers and required stormwater setbacks;
 - (3) 100 year floodplain and floodway;
 - (4) wetlands; and
 - (5) areas shown as orange and red (having an average natural slope greater than or equal to 35%) on the submitted slope analysis.
- (b) Secondary conservation areas shall consist of:
- (1) land in a currently undeveloped or natural state not meeting the definition of primary conservation areas above;
 - (2) existing farmland; and
 - (3) other areas subject to review and approval of the Buncombe County Planning Board.
- (c) Areas to be conserved must be located within identified primary conservation areas; if the percentage to be conserved exceeds the amount of primary conservation areas on the tract, areas deemed as secondary conservation areas will be allowed to count toward the required percentage. The final plat of the subdivision shall indicate which areas are conserved open space.
- (d) Conserved open space shall remain in an undeveloped state except for the provision of non-motorized passive recreation such as running, walking, biking trails, gardening, primitive camping areas, and similar low impact outdoor activities. The development of golf courses, club houses, pools, tennis courts, etc. shall not be included in the definition of passive recreation. The location, type, and materials which will be used to construct passive recreation facilities shall be submitted on the preliminary plans and shall be approved by the Planning Board. The development of passive recreation areas within the conservation/open space areas shall not exceed 5% of the total acreage of the tract.
- (e) The conserved area, with the prior written consent of Buncombe County, shall be designated and established of record prior to, or concurrent with, the recording of the first final subdivision plat. Method of conservation of open space shall be stated on the submitted subdivision plans and shall be approved by the Buncombe County Planning Board. Conservation space shall be dedicated to, owned, and maintained in perpetuity by any of the following:
- (1) A homeowners' association in which membership is mandatory for all homeowners within the development;
 - (2) A perpetual conservation easement on the open space held and enforced by an established land trust or conservation organization;
 - (3) With its express written consent, a governmental body (e.g. Buncombe County Parks and Recreation, State of North Carolina, United States Government); or
 - (4) Any other structure or entity designed to afford such perpetual maintenance for the conserved area as same may be approved in advance by Buncombe County.

(4) Density Bonuses. Density bonuses for developments choosing to follow the alternative path within the hillside development standards may be awarded based on certain development criteria set forth below. Bonuses shall be based on the point system shown in Figure 5 below. Bonus points will be cumulative and may be applied for density bonuses based on the alternative path the applicant has chosen. Density bonuses based on points earned are shown in Figure 6 below. Applicant must clearly identify on submitted preliminary plans how many points were earned and clearly identify how points were used.

Figure 5. Points Chart

Action	Point Value
Percentage of entire tract disturbed (including infrastructure and lot development) is 20.00% or less, but greater than 18.00%	10
Percentage of entire tract disturbed (including infrastructure and lot development) is 18.00% or less, but greater than 16.00%	15
Percentage of entire tract disturbed (including infrastructure and lot development) is 16.00% or less, but greater than 14.00%	20
Percentage of entire tract disturbed (including infrastructure and lot development) is 14.00% or less	25
amount of conserved green space is greater than 30% of the tract but less than or equal to 40% of the tract	10
amount of conserved green space is greater than 40% of the tract but less than or equal to 50% of the tract	15
amount of conserved green space is greater than 50% of the tract but less than or equal to 60% of the tract	20
amount of conserved green space is greater than 60% or the tract	25
Development of any kind occurs only on slopes less than 35% as shown on submitted slope analysis and occurs on property consisting of the lowest 35% of the elevation of the tract	25
Development of any kind occurs in areas less than or equal to 25% slope as shown on submitted slope analysis and occurs on property consisting of the lowest 25% of the elevation of the tract	50

Figure 6. Density Bonuses based on points

Points earned	If development is an Alternative Path <i>Cluster Development</i> or <i>Building & Grading Envelope Conservation Development</i> the allowed number of lots shall be the % listed below of the calculated density per subsection 70-68 (d) (2) based on the number of points earned	If development is an Alternative Path <i>Building & Grading Envelope Conservation Development</i> the following parameters shall be followed in regard to maximum size of building envelope, required size of individual lots, and spacing between lots based on the number of points earned		
		Envelopes shall be a maximum of but no greater than the acreage listed below	The lot size shall equal to at least the % listed below of the size of the building and grading envelope	Building envelopes shall be spaced at least the number of feet apart listed below
20	115%	0.65	280%	150
25	120%	0.66	260%	140
30	125%	0.67	240%	130
35	130%	0.68	220%	120
45	135%	0.69	200%	110
50	140%	0.7	180%	100
55	145%	0.71	160%	90
60	150%	0.72	140%	80
65	155%	0.73	120%	70
70-80	160%	0.75	100%	60
100	no density requirement	no building envelope size requirements	no size requirements for lots	no spacing requirements

(g) *Conservation Easement Hillside Development Subdivision.* Average natural slope for submitted subdivision plans that contain a perpetual conservation easement to be held and enforced by an established land trust or conservancy organization shall be calculated excluding the acreage of the conservation easement. Conserved open space shall remain in an undeveloped state. The conservation easement, with the prior written consent of Buncombe County, shall be designated and established of record prior to, or concurrent with, the recording of the first final subdivision plat. The proposed holder of the conservation easement shall be stated on the submitted subdivision plans and shall be approved by the Buncombe County Planning Board.

(h) *Statement on plat.* All subdivisions of land subject to the requirements of section 70-68, effective July 1, 2006, shall state on the original plat for recordation 1) the average natural slope of the entire tract and of each lot, 2) the maximum allowed disturbed acreage for infrastructure installation and the maximum allowed disturbed acreage for each lot and 3) the maximum allowed impervious ~~area~~ acreage for infrastructure installation and the maximum allowed impervious acreage for each lot.

(i) *Enforcement.* Any person violating any provision of this section shall be subject to a civil penalty of not less than \$100.00 per day and not to exceed \$1,000.00 per day. Each day the violation continues shall constitute a separate violation. Violations shall be subject to the provisions of G.S. 14-4.

Any person failing to comply with any provision of this section shall be subject to revocation of the development permit, building permit or other authorization for work activities.

Any land disturbance percentage in amounts that exceed those specified in subsection 70-68(e)(1)(h): shall be replanted according to the re-vegetation plan shown in subsection 70-68(e)(5).

Any impervious surface percentage in amounts that exceed those specified in subsection 70-68(e)(1)(h): shall be removed.

No penalty shall be assessed until notification of the violation has been made by registered or certified mail, return receipt requested, or other means reasonably calculated to give actual notice. The notice shall describe the violation with reasonable particularity, specify a reasonable time period within which the violation can be corrected, and warn that failure to correct the violation within the time period will result in the assessment of a civil penalty or other enforcement action.

Secs. 70-69--70-90. Reserved.

ARTICLE IV. INSTALLATION OF IMPROVEMENTS

Sec. 70-91. Permanent reference points.

(a) *Placement according to state law.* Prior to the approval of the final plat, permanent reference points shall have been placed in accordance with G.S. 39-32.1, 39-32.2, 39-32.3, and 39-32.4.

(b) *Monuments.* With each block of a subdivision at least two monuments designed as control corners shall be installed. The surveyor shall install additional monuments as required. Each monument shall have imbedded in its top, or attached by suitable means, a noncorroding metal

plate which is marked plainly with the point, the surveyor's registration number, the month and year it was installed and the word "monument" or "control corner." A monument shall be set at least 24 inches in the ground with at least six inches exposed above the ground, unless this requirement is impractical.

Sec. 70-92. Improvement standards and requirements.

Approval of the final plat shall be subject to the subdivider's having constructed or guaranteed, to the satisfaction of the county, the installation of the improvements. The county reserves the right to inspect, reject, stop, or otherwise cease the construction of any or all service facilities or improvements if the same are not being constructed in accordance with the plans, specification standards, written policies, or other requirements of the county. The following standards and requirements shall apply:

(1) *Preparation.* Before grading is started, the required roadbed width area shall be first cleared of all stumps, roots, brush, and other objectionable materials, as follows:

- a. *Cuts.* All tree stumps, boulders, and other obstructions within the proposed roadbed width shall be removed to a depth of one foot below the subgrade.
- b. *Fill.* All suitable material from roadbed cuts may be used in the construction of roadbed fills, approaches, or at other places as needed. The fill shall be installed and compacted to DOT standards.

(2) *Installation of utilities.* All public or private water and sewerage systems shall be installed and shall meet the requirements of the county health department or other governmental authorities having jurisdiction thereof.

(3) *Roadbed base.* After preparation of the subgrade, the roadbed shall be surfaced with material of no lower classification than crushed rock, stone, or gravel. The size of the crushed rock or stone shall be from 1 1/2 inches down, including dust. Spreading of the stone shall be done uniformly over the area to be covered by means of appropriate spreading devices and shall not be dumped in piles. The stone shall be rolled until thoroughly compacted. The compacted thickness of the stone roadbed shall be no less than six inches. Completion of roads shall be tested to confirm compaction by an engineering technician working under the direct supervision of a geotechnical engineer.

Sec. 70-93. Stormwater drainage.

The subdivider shall provide disposal of surface water by natural or artificial means subject to the following standards of the state department of transportation, as reflected in the Handbook for the Design of Highway Surface Drainage Structures, (1973), subject to review by the planning board:

- (1) No surface water shall be channeled or directed into a sanitary sewer.
- (2) Where feasible, the subdivider shall connect to an existing storm drainage system.
- (3) Where an existing storm drainage system cannot feasibly be provided for the subdivision, a surface drainage system shall be provided to protect the development from water drainage.
- (4) Anyone constructing a dam or impoundment within the subdivision must comply with the North Carolina Dam Safety Law of 1967 and the N.C.A.C., title 15, subchapter 2K.

(5) In all areas of special flood hazards, all subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

Sec. 70-94. Guarantee of improvements.

Where the required roadbed, utility improvements, or erosion control devices indicated on the construction documents have not been completed prior to submission of the final plat, the incomplete elements are to be itemized in an attachment to the guarantee of improvements. The approval of the plat shall be subject to the owner/developer guaranteeing the installation of all required improvements within a specified time. The construction elements, cost and anticipated construction schedule for the work must be itemized and certified by a licensed professional consultant and submitted to the planning department for approval. The guarantee of improvements shall be secured in one of the following forms acceptable to the planning department:

- (1) A surety performance bond made by a surety bonding company licensed and authorized to do business in North Carolina.
- (2) A bond of the owner/developer with an assignment to the county of a certificate of deposit with an institution licensed and authorized to do business in North Carolina as security for the bond.
- (3) A bond of the owner/developer by an official bank check drawn in favor of the county and deposited with the county.
- (4) Cash or an irrevocable letter of credit from an institution licensed and authorized to do business in North Carolina deposited with the county.

Such guarantee shall be in the amount equal to 125 percent of the identified cost of the planned improvements and the continuing maintenance as estimated by the licensed professional consultant retained by the owner/developer. The guarantee will remain in full force and effect until all obligations have been faithfully performed.

If the cost estimate for improvements, and maintenance or the schedule for installation is deemed inadequate by the planning department, the planning board reserves the right to require an independent construction appraisal, at the owner/developer's expense, as a condition of final plat approval.

All guarantees of improvements shall contractually stipulate a completion date that is at least 180 days past the stipulated completion date as stated in the approved construction schedule. The owner/developer must submit a signed and sealed statement by a registered land surveyor or civil engineer licensed in North Carolina certifying that all work has been completed to the standards of this article before the planning department will determine satisfactory completion of all guaranteed work. Work not completed within 90 consecutive days following the stipulated completion date will be considered in default. The planning department will proceed immediately with a claim against the guarantee of improvements for all work in default.

An extension of time required for completion may be granted by the planning board if extenuating circumstances are deemed a justifiable cause for such revision.