

## **Article 16 - Flood Damage Prevention**

### **Storm Water Management & Watershed Protection**

**Flood Damage Prevention-Statutory Authorization.** The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Parts 3, 4, of Article 18 of Chapter 153A; and Article 6 of Chapter 153A of the North Carolina General Statutes, delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry.

**Section 16-16.1. Findings of Fact.** The flood hazard areas of Blowing Rock are subject to periodic inundation which results in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures of flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods.

**Section 16-16.2. Statement of Purpose.** It is the purpose of this article to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- a) restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- b) require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- c) control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;
- d) control filling, grading, dredging and other development which may increase erosion or flood damage; and,
- e) prevent or regulate the construction of flood barriers which will unnaturally divert flood waters, or which may increase flood hazards to other lands.

**Section 16-16.3 Objectives.** The objectives of this article are:

- a) to protect human life and health;
- b) to minimize expenditure of public money for costly flood control projects;
- c) to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- d) to minimize prolonged business interruptions;
- e) to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- f) to help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas; and
- g) to insure that potential home buyers are notified that property is in a flood area.

**Section 16-16.4. Lands to Which This Article Applies.** This article shall apply to all areas of special flood hazard within the planning jurisdiction of the Town of Blowing Rock hereinafter referred to as "Town".

**Section 16-16.5. Basis for Establishing the Areas of Special Flood Hazard.** The Special Flood Hazard Areas are those identified under the Cooperating Technical State (CTS) agreement between the State of North Carolina and FEMA in its Flood Insurance Study (FIS) and its accompanying Flood Insurance Rate Maps (FIRM), for Watauga County dated December 3, 2009, which are adopted by reference and declared to be a part of this article.

The initial Flood Insurance Rate Maps are as follows for the jurisdictional areas at the initial date:

- a) Town of Blowing Rock, dated June 1, 1978
- b) Watauga County Unincorporated Area, dated June 18, 1980

**Section 16-16.6. Establishment of Floodplain Development Permit.** A Development Permit shall be required in conformance with the provisions of this article prior to the commencement of any development activities.

**Section 16-16.7. Compliance.** No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with terms of this article and other applicable regulations.

**Section 16-16.8. Abrogation and Greater Restrictions.** This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

**Section 16-16.9. Interpretation.** In the interpretation and application of this article all provisions shall be:

- a) considered as minimum requirements;
- b) liberally construed in favor of the governing body, and;
- c) deemed neither to limit nor repeal any other powers granted under state statutes.

The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This article does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of the Town or by an officer or employee thereof for any flood damages that result from reliance on this article, or any administrative decision lawfully made hereunder.

**Section 16-16.10. Penalties for Violation.** Violation of the provisions of this article or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this article or fails to comply with any of its requirements shall, upon conviction, therefore, be fined not more than \$50.00 or imprisoned for not more than 30 days, or both. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the Town from taking such other lawful action as is necessary to prevent or remedy any violation.

**Section 16-16.11. Designation of Floodplain Administrator.** The Zoning Administrator, or designee, hereinafter referred to as the “Floodplain Administrator”, is hereby appointed to administer and implement the provisions of this article.

**Section 16-16.12. Development Permit and Certification Requirements.** Application for a Floodplain Development Permit shall be made to the Floodplain Administrator prior to any development activities located within Special Flood Hazard Areas. The following items shall be presented to the Floodplain Administrator to apply for a floodplain development permit:

**16-16.12.1.** A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:

- a) the nature, location, dimensions, and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;
- b) the boundary of the Special Flood Hazard Area as delineated on the FIRM or other flood map as determined in Section 16-16.5, or a statement that the entire lot is within the Special Flood Hazard Area;
- c) flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in Section 16-16.5;
- d) the boundary of the floodway(s) or non-encroachment area(s) as determined in Section 16-16.5;
- e) the Base Flood Elevation (BFE) where provided as set forth in Section 16-16.5; Section 16-16.16; or Section 16-16.26;
- f) the old and new location of any watercourse that will be altered or relocated as a result of proposed development; and

**16-16.12.1.** Proposed elevation and method thereof, of all development within a Special Flood Hazard Area including but not limited to:

- a) Elevation in relation to mean sea level of the proposed reference level (including basement) of all structures;
- b) Elevation in relation to mean sea level to which any non-residential structure in Zone AE, A or AO will be floodproofed; and
- c) Elevation in relation to mean sea level to which any proposed utility systems will be elevated or floodproofed.
- d) If floodproofing, a Floodproofing Certificate (FEMA Form 81-65) with supporting data, an operational plan, and an inspection and maintenance plan that include, but are not limited to, installation, exercise, and maintenance of floodproofing measures.
- e) A Foundation Plan, drawn to scale, which shall include details of the proposed foundation system to ensure all provisions of this article are met. These details include:
  - 1) The proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls); and
  - 2) Openings to facilitate automatic equalization of hydrostatic flood forces on walls in accordance with Section 16-16.20.4 when solid foundation perimeter walls are used in Zones A, AO, AE, and A1-30.
  - 3) Usage details of any enclosed areas below the lowest floor.

- 4) Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage.
- 5) Certification that all other Local, State and Federal permits required prior to floodplain development permit issuance have been received.
- 6) Documentation for placement of Recreational Vehicles and/or Temporary Structures, when applicable, to ensure that the provisions of Section 16-16.23 and 16-16.2.
- 7) A description of proposed watercourse alteration or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map (if not shown on plot plan) showing the location of the proposed watercourse alteration or relocation.

**16-16.12.2.** The Floodplain Development Permit shall include, but not be limited to:

- a) A description of the development to be permitted under the floodplain development permit.
- b) The Special Flood Hazard Area determination for the proposed development in accordance with available data specified in Section 16-16.5.
- c) The Regulatory Flood Protection Elevation required for the reference level and all attendant utilities.
- d) The Regulatory Flood Protection Elevation required for the protection of all public utilities.
- e) All certification submittal requirements with timelines.
- f) A statement that no fill material or other development shall encroach into the floodway or non-encroachment area of any watercourse, as applicable.
- g) The flood openings requirements, if in Zones A, AO, AE or A1-30.

**Section 16-16.13. Elevation Certificates.** A final as-built Elevation Certificate (FEMA Form 81-31) is required after construction is completed and prior to Certificate of Compliance/Occupancy issuance. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to Certificate of Compliance/Occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be caused to withhold the issuance of a Certificate of Compliance/Occupancy.

**Section 16-16.14. Floodproofing Certificate.** If non-residential floodproofing is used to meet the Regulatory Flood Protection Elevation requirements, a Floodproofing Certificate (FEMA Form 81-65), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to mean sea level. Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The Floodplain Administrator shall review the certificate data,

the operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to permit approval. Failure to submit the certification or failure to make required corrections shall be caused to deny a Floodplain Development Permit. Failure to construct in accordance with the certified design shall be caused to withhold the issuance of a Certificate of Compliance/Occupancy.

**16-16.14.1.** If a manufactured home is placed within Zone A, AO, AE, or A1-30 and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required in accordance with the provisions of Section 16-16.20.3.

**16-16.14.2.** If a watercourse is to be altered or relocated, a description of the extent of watercourse alteration or relocation; a professional engineer's certified report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map showing the location of the proposed watercourse alteration or relocation shall all be submitted by the permit applicant prior to issuance of a floodplain development permit.

**Section 16-16.15. Certification Exemptions.** The following structures, if located within Zone A, AO, AE or A1-30, are exempt from the elevation/floodproofing certification requirements specified in items a) and b) of this section

- a) Recreational Vehicles meeting requirements of Section 16-16.23
- b) Temporary Structures meeting requirements of Section 16-16.24 and
- c) Accessory Structures less than 150 square feet meeting requirements of Section 16-16.25.

**Section 16-16.16. Duties and Responsibilities of the Local Administrator.** The Floodplain Administrator shall perform, but not be limited to, the following duties:

- a) Review all floodplain development applications and issue permits for all proposed development within Special Flood Hazard Areas to assure that the requirements of this article have been satisfied.
- b) Review all proposed development within Special Flood Hazard Areas to assure that all necessary Local, State and Federal permits have been received.
- c) Notify adjacent communities and the North Carolina Department of Crime Control and Public Safety, Division of Emergency Management, State Coordinator for the National Flood Insurance Program prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
- d) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is maintained.
- e) Prevent encroachments into floodways and non-encroachment areas unless the certification and flood hazard reduction provisions of Section 16-16.28 are met.
- f) Obtain actual elevation (in relation to mean sea level) of the reference level (including basement) and all attendant utilities of all new and substantially improved structures, in accordance with the provisions of Section 16-16.12.3
- g) Obtain actual elevation (in relation to mean sea level) to which all new and substantially improved structures and utilities have been floodproofed, in accordance with the provisions of Section 16-16.12.3.
- h) Obtain actual elevation (in relation to mean sea level) of all public utilities in accordance with the provisions of Section 16-16.12.3.

- i) When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with the provisions of Section 16-16.12.3 and Section 16-16.20.4.
- j) Where interpretation is needed as to the exact location of boundaries of the Special Flood Hazard Areas, floodways, or non-encroachment areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- k) When Base Flood Elevation (BFE) data has not been provided in accordance with the provisions of Section 16-16.5, obtain, review, and reasonably utilize any BFE data, along with floodway data or non-encroachment area data available from a Federal, State, or other source, including data developed pursuant to Section 16-16.26.2.2 in order to administer the provisions of this article.
- l) When Base Flood Elevation (BFE) data is provided but no floodway or non-encroachment area data has been provided in accordance with the provisions of Section 16-16.5, obtain, review, and reasonably utilize any floodway data or non-encroachment area data available from a Federal, State, or other source in order to administer the provisions of this article.
- m) Permanently maintain all records that pertain to the administration of this article and make these records available for public inspection, recognizing that such information may be subject to the Privacy Act of 1974, as amended.
- n) Make on-site inspections of work in progress. As the work pursuant to a floodplain development permit progresses, the Floodplain Administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local code and the terms of the permit. In exercising this power, the Floodplain Administrator has a right, upon presentation of proper credentials, to enter on any premises within the planning jurisdiction of the town at any reasonable hour for the purposes of inspection or other enforcement action.
- o) Issue stop-work orders as required. Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this article, the Floodplain Administrator may order the work to be immediately stopped. The stop-work order shall be in writing and directed to the person doing or in charge of the work. The stop-work order shall state the specific work to be stopped, the specific reason(s) for the stoppage, and the condition(s) under which the work may be resumed. Violation of a stop-work order constitutes a misdemeanor.
- p) Revoke floodplain development permits as required. The Floodplain Administrator may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, and specifications; for refusal or failure to comply with the requirements of State or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable State or local law may also be revoked.
- q) Make periodic inspections throughout the Special Flood Hazard Areas within the planning jurisdiction of the town. The Floodplain Administrator and each member of the inspections department shall have a right, upon presentation of proper credentials, to enter on any

premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.

- r) Follow through with corrective procedures of Section 16-16.17.
- s) Review, provide input, and make recommendations for variance requests.
- t) Maintain a current map repository to include, but not limited to, the FIS Report, FIRM and other official flood maps and studies adopted in accordance with the provisions of Section 16-16.5 of this article, including any revisions thereto including Letters of Map Change, issued by FEMA. Notify State and FEMA of mapping needs.
- u) Coordinate revisions to FIS reports and FIRMs, including Letters of Map Revision Based on Fill (LOMR-Fs) and Letters of Map Revision (LOMRs).

**Section 16-16.17. Corrective Procedures.** When the Floodplain Administrator finds violations of applicable State and local laws, they shall notify the owner or occupant of the building of the violation. The owner or occupant shall immediately remedy each of the violations of law cited in such notification.

**16-16.17.1. Actions in Event of Failure to Take Corrective Action.** If the owner of a building or property shall fail to take prompt corrective action, the Floodplain Administrator shall give the owner written notice, by certified or registered mail to the owner's last known address or by personal service, stating:

- a) that the building or property is in violation of the floodplain management regulations;
- b) that a hearing will be held before the Floodplain Administrator at a designated place and time, not later than ten (10) days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and
- c) that following the hearing, the Floodplain Administrator may issue an order to alter, vacate, or demolish the building; or to remove fill as applicable.

**16-16.17.2. Order to Take Corrective Action.** If, upon a hearing held pursuant to the notice prescribed above, the Floodplain Administrator shall find that the building or development is in violation of this article, he or she shall issue an order in writing to the owner, requiring the owner to remedy the violation within a specified time period, not less than 60 calendar days, nor more than 180 calendar days. Where the Floodplain Administrator finds that there is imminent danger to life or other property, he or she may order that corrective action be taken in such lesser period as may be feasible.

**16-16.17.3. Appeal.** Any owner who has received an order to take corrective action may appeal the order to the local elected governing body by giving notice of appeal in writing to the Floodplain Administrator and the clerk within ten (10) days following issuance of the final order. In the absence of an appeal, the order of the Floodplain Administrator shall be final. The local governing body shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order.

**16-16.17.4. Failure to Comply with Order.** If the owner of a building or property fails to comply with an order to take corrective action for which no appeal has been made or fails to comply with an order of the governing body following an appeal, the owner shall be guilty of a misdemeanor and shall be punished at the discretion of the court.

**Section 16-16.18. Variance Procedures.** The Board of Adjustments as established by The Town of Blowing Rock, hereinafter referred to as the “appeal board”, shall hear and decide requests for variances from the requirements of this article. Any person aggrieved by the decision of the appeal board may appeal such decision to the Court, as provided in Chapter 7A of the North Carolina General Statutes.

Variances may be issued for:

- a) The repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and that the variance is the minimum necessary to preserve the historic character and design of the structure;
- b) functionally dependent facilities if determined to meet the definition as stated in Section 16-2.4, provided provisions of Section 16-16.18 a), b), and c) have been satisfied, and such facilities are protected by methods that minimize flood damages during the base flood and create no additional threats to public safety;
- c) or any other type of development, provided it meets the requirements of this Section.
- d) any other type of development provided it meets the requirements of this Section.

**16-16.18.1.** In passing upon variances, the appeal board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this article, and:

- a) the danger that materials may be swept onto other lands to the injury of others;
- b) the danger to life and property due to flooding or erosion damage;
- c) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- d) the importance of the services provided by the proposed facility to the community;
- e) the necessity to the facility of a waterfront location as defined under Section 16-2.4 as a functionally dependent facility, where applicable;
- f) the availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- g) the compatibility of the proposed use with existing and anticipated development;
- h) the relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- i) the safety of access to the property in times of flood for ordinary and emergency vehicles;
- j) the expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
- k) the costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

**16-16.18.2.** A written report addressing each of the above factors shall be submitted with the application for a variance.

**16-16.18.3.** Upon consideration of the factors listed above and the purposes of this article, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes and objectives of this article.



**16-16.18.4.** Any applicant to whom a variance is granted shall be given written notice specifying the difference between the Base Flood Elevation (BFE) and the elevation to which the structure is to be built and that such construction below the BFE increases risks to life and property, and that the issuance of a variance to construct a structure below the BFE will result in increased premium rates for flood insurance up to \$25 per \$100 of insurance coverage. Such notification shall be maintained with a record of all variance actions, including justification for their issuance.

**16-16.18.5.** The Floodplain Administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency and the State of North Carolina upon request.

**16-16.18.6. *Conditions for Variances:***

- a) Variances shall not be issued when the variance will make the structure in violation of other Federal, State, or local laws, regulations, or ordinances.
- b) Variances shall not be issued within any designated floodway or non-encroachment area if the variance would result in any increase in flood levels during the base flood discharge.
- c) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- d) Variances shall only be issued prior to development permit approval.
- e) Variances shall only be issued upon:
  - 1) a showing of good and sufficient cause;
  - 2) a determination that failure to grant the variance would result in exceptional hardship; and
  - 3) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

**16-16.18.7.** A variance may be issued for solid waste disposal facilities or sites, hazardous waste management facilities, salvage yards, and chemical storage facilities that are located in Special Flood Hazard Areas provided that all of the following conditions are met:

- a) The use serves a critical need in the community.
- b) No feasible location exists for the use outside the Special Flood Hazard Area.
- c) The reference level of any structure is elevated or floodproofed to at least the Regulatory Flood Protection Elevation.
- d) The use complies with all other applicable Federal, State and local laws.
- e) The Town of Blowing Rock has notified the Secretary of the North Carolina Department of Crime Control and Public Safety of its intention to grant a variance at least thirty (30) calendar days prior to granting the variance.

**Section 16-16.19. General Standards for Flood Hazard Reduction.**

**16-16.19.1. *In all areas of special flood hazard the following provisions are required:***

- a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

- b) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- c) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damages.
- d) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding, to the Regulatory Flood Protection Elevation. These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, hot water heaters, and electric outlets/switches.
- e) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- f) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the system into flood waters.
- g) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- h) Any alteration, repair, reconstruction, or improvements to a structure which is in compliance with the provisions of this article, shall meet the requirements of *new construction* as contained in this article.

**16-16.19.2. Nonconforming Buildings or Uses.** Nothing in this article shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this article and located totally or partially within the floodway, non-encroachment area, or stream setback, provided there is no additional encroachment below the Regulatory Flood Protection Elevation in the floodway, non-encroachment area, or stream setback, and provided that such repair, reconstruction, or replacement meets all of the other requirements of this article.

**16-16.19.3.** New solid waste disposal facilities and sites, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted, except by variance as specified in Section 16-16.18.7. A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a Special Flood Hazard Area only if the structure or tank is either elevated or floodproofed to at least the Regulatory Flood Protection Elevation and certified in accordance with the provisions of Section 16-16.18.

**16-16.19.4.** All subdivision proposals and other development proposals shall be consistent with the need to minimize flood damage.

**16-16.19.5.** All subdivision proposals and other development proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.

**16-16.19.6.** All subdivision proposals and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards.

**16-16.19.7.** All subdivision proposals and other development proposals shall have received all necessary permits from those governmental agencies for which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.

**16-16.19.8.** When a structure is partially located in a Special Flood Hazard Area, the entire structure shall meet the requirements for new construction and substantial improvements.

**16-16.19.9.** When a structure is located in multiple flood hazard zones or in a flood hazard risk zone with multiple base flood elevations, the provisions for the more restrictive flood hazard risk zone and the highest Base Flood Elevation (BFE) shall apply.

**Section 16-16.20. Specific Standards for Flood Hazard Reduction.** In all Special Flood Hazard Areas where Base Flood Elevation (BFE) data has been provided, as set forth in Section 16-16.5, or 16-16.26, the following provisions, in addition to the provisions of Section 16-16.19, are required:

**16-16.20.1. Residential Construction.** New construction and substantial improvement of any residential structure (including manufactured homes) shall have the reference level, including basement, elevated no lower than 1.0 feet above the Regulatory Flood Protection Elevation, as defined in Article 2.

**16-16.20.2. Non-Residential Construction.** New construction and substantial improvement of any commercial, industrial, or other non-residential structure shall have the reference level, including basement, elevated no lower than 1.0 feet above the Regulatory Flood Protection Elevation, as defined in Section 16-2.4. Structures located in A, AE, AO, and A1-30 Zones may be floodproofed to the Regulatory Flood Protection Elevation in lieu of elevation provided that all areas of the structure, together with attendant utility and sanitary facilities, below the Regulatory Flood Protection Elevation are watertight with walls substantially impermeable to the passage of water, using structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the floodproofing standards of this subsection are satisfied. Such certification shall be provided to the Floodplain Administrator as set forth in Section 16-16.18 along with the operational plan and the inspection and maintenance plan.

**16-16.20.3. Manufactured Homes.** New and replacement manufactured homes shall be elevated so that the reference level of the manufactured home is elevated no lower than 1.0 feet above the Regulatory Flood Protection Elevation, as defined in Section 16-2.4.

**16-16.20.3.1.** Manufactured homes shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement, either by certified engineered foundation system, or in accordance with the most current edition of the State of North Carolina Regulations for Manufactured Homes adopted by the Commissioner of Insurance pursuant to NCGS 143-143.15. Additionally, when the elevation would be met by an elevation of the chassis 36 inches or less above the grade at the site, the chassis shall be supported by reinforced piers or engineered foundation.

When the elevation of the chassis is above 36 inches in height, an engineering certification is required.

**16-16.20.3.2.** All enclosures or skirting below the lowest floor shall meet the requirements of Section 16-16.26.

**16-16.20.3.3.** An evacuation plan must be developed for evacuation of all residents of all new, substantially improved or substantially damaged manufactured home parks or subdivisions located within flood prone areas. This plan shall be filed with and approved by the Floodplain Administrator and the local Emergency Management Coordinator.

**16-16.20.4. Elevated Buildings.** Fully enclosed area, of new construction and substantially improved structures, which is below the lowest floor:

- a) shall not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be finished or partitioned into separate rooms, except to enclose storage areas;
- b) shall be constructed entirely of flood resistant materials at least to the Regulatory Flood Protection Elevation; and
- c) shall include, in Zones A, AO, AE, and A1-30, flood openings to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet or exceed the following minimum design criteria:
  - 1) A minimum of two flood openings on different sides of each enclosed area subject to flooding;
  - 2) The total net area of all flood openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding;
  - 3) If a building has more than one enclosed area, each enclosed area must have flood openings to allow floodwaters to automatically enter and exit;
  - 4) The bottom of all required flood openings shall be no higher than one (1) foot above the adjacent grade;
  - 5) Flood openings may be equipped with screens, louvers, or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and
  - 6) Enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require flood openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires flood openings as outlined above.

**Section 16-16.21. Additions/Improvements (Pre-Firm Structures).** The following shall apply to additions and/or improvements to pre-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure areas noted.

**16-16.21.1. Not a substantial improvement.** The addition and/or improvements must be designed to minimize flood damages and must not be any more non-conforming than the existing structure.

**16-16.21.2. A substantial improvement.** Both the existing structure and the addition and/or improvements must comply with the standards for new construction.

**Section 16-16.22. Additions/Improvements (Post-FIRM Structures).** Additions to post-FIRM structures with no modifications to the existing structure other than a standard door in the common wall shall require only the addition to comply with the standards for new construction. The following shall apply to additions and/or improvements to post-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure as noted.

**16-16.22.1. Not a substantial improvement.** The addition and/or improvements only must comply with the standards for new construction.

**16-16.22.2. A substantial improvement.** The existing structure and the addition and/or improvements must comply with the standards for new construction.

**Section 16-16.23. Recreational Vehicles.** Recreational vehicles shall either be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities, and has no permanently attached additions) or meet all the requirements for new construction.

**Section 16-16.24. Temporary Non-Residential Structures.** Prior to the issuance of a floodplain development permit for a temporary structure, the applicant must submit to the Floodplain Administrator a plan for the removal of such structure(s) in the event of a hurricane, flash flood or other type of flood warning notification. The following information shall be submitted in writing to the Floodplain Administrator for review and written approval:

- a) a specified time period for which the temporary use will be permitted. Time specified may not exceed three (3) months, renewable up to one (1) year;
- b) the name, address, and phone number of the individual responsible for the removal of the temporary structure;
- c) the time frame prior to the event at which a structure will be removed (i.e., minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);
- d) a copy of the contract or other suitable instrument with the entity responsible for physical removal of the structure; and
- e) designation, accompanied by documentation, of a location outside the Special Flood Hazard Area, to which the temporary structure will be moved.

**Section 16-16.25. Accessory Structures.** When accessory structures (sheds, detached garages, etc.), are to be placed within a Special Flood Hazard Area, the following criteria shall be met.

- a) Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas).
- b) Accessory structures shall not be temperature controlled.
- c) Accessory structures shall be designed to have low flood damage potential.

- d) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
- e) Accessory structures shall be firmly anchored in accordance with the provisions of Section 16-16.19.1.(d).
- f) All service facilities such as electrical shall be installed in accordance with the provisions of 16-16.19.1.(d).
- g) Flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below Regulatory Flood Protection Elevation in conformance with the provisions of Section 16-16.20.4.(c).
- h) An accessory structure with a footprint less than 150 square feet that satisfies the criteria outlined above does not require an elevation or floodproofing certificate. Elevation or floodproofing certifications are required for all other accessory structures in accordance with section 16-16.12.3.

**Section 16-16.26. Standards for Floodplains Without Established Base Flood Elevations.** Within the Special Flood Hazard Areas designated as Approximate Zone A and established in Section 16-16.5, where no Base Flood Elevation (BFE) data has been provided by FEMA, the following provisions, in addition to the provisions of Section 16-16.19.1, shall apply.

**16-16.26.1.** No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of twenty (20) feet each side from top of bank or five times the width of the stream, whichever is greater, unless certification with supporting technical data by a registered professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

**16-16.26.2.** The BFE used in determining the Regulatory Flood Protection Elevation shall be determined based on the following criteria.

**16-16.26.2.1.** When Base Flood Elevation (BFE) data is available from other sources, all new construction and substantial improvements within such areas shall also comply with all applicable provisions of this article and shall be elevated or floodproofed in accordance with standards in Sections 16-16.19.1 and 16-16.20.

**16-16.26.2.2.** When floodway or non-encroachment data is available from a Federal, State, or other source, all new construction and substantial improvements within floodway and non-encroachment areas shall also comply with the requirements of Sections 16-16.20 and 16-16.28.

**16-16.26.2.3.** All subdivision, manufactured home park and other development proposals shall provide Base Flood Elevation (BFE) data if development is greater than five (5) acres or has more than fifty (50) lots/manufactured home sites. Such Base Flood Elevation (BFE) data shall be adopted by reference in accordance with Section 16-16.5 and utilized in implementing this article.

**16-16.26.2.4.** When Base Flood Elevation (BFE) data is not available from a Federal, State, or other source as outlined above, the reference level shall be elevated or floodproofed (nonresidential) to or above the Regulatory Flood Protection Elevation, as defined in Section 16-2.4. All other applicable provisions of Section 16-16.20 shall also apply.

**Section 16-16.27. Standards for Riverine Floodplains with Base Flood Elevations but Without Established Floodways or Non-encroachment Areas.** Along rivers and streams where Base Flood Elevation (BFE) data is provided by FEMA or is available from another source but neither floodway nor non-encroachment areas are identified for a Special Flood Hazard Area on the FIRM or in the FIS report, the following requirements shall apply to all development within such areas:

- a) Standards of Sections 16-16.19.1 and 16-16.20; and
- b) Until a regulatory floodway or non-encroachment area is designated, no encroachments, including fill, new construction, substantial improvements, or other development, shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.

**Section 16-16.28. Floodways and Non-encroachment Areas.** Areas designated as floodways or non-encroachment areas are located within the Special Flood Hazard Areas established in Section 16-16.5. The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of floodwaters that have erosion potential and carry debris and potential projectiles. The following provisions, in addition to standards outlined in Sections 16-16.19.1 and 16-16.21, shall apply to all development within such areas:

**16-16.28.1.** No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless:

- a) it is demonstrated that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood, based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and presented to the Floodplain Administrator prior to issuance of floodplain development permit, or
- b) Conditional Letter of Map Revision (CLOMR) has been approved by FEMA. A Letter of Map Revision (LOMR) must also be obtained upon completion of the proposed encroachment.

**16-16.28.2.** If Section 16-16.28.1 is satisfied, all development shall comply with all applicable flood hazard reduction provisions of this article.

**16-16.28.3.** No manufactured homes shall be permitted, except replacement manufactured homes in an existing manufactured home park or subdivision, provided the following provisions are met:

- a) the anchoring and the elevation standards of Section 16-16.20.3 and
- b) the no encroachment standard of Section 16-16.28.1.

**Section 16-16.29. Drainage, Erosion Control, Storm Water Management.** To the extent practicable, all development shall conform to the natural contours of the land and natural and pre-existing man-made drainage ways shall remain undisturbed.

To the extent practicable, lot boundaries shall be made to coincide with natural and pre-existing man-made drainage ways within subdivisions to avoid the creation of lots that can be built upon only by altering such drainage ways.

**Section 16-16.30. Development Must Drain Properly.** All development shall be provided with a drainage system that is adequate to prevent the undue retention of surface water on the development site. Surface water shall not be regarded as unduly retained if:

- a) The retention results from a technique, practice or device deliberately installed as part of an approved sedimentation or storm water runoff control plan; or
- b) The retention is not substantially different in location or degree than that experienced by the development site in its pre-development stage, unless such retention presents a danger to health or safety.

**16-16.30.1.** No surface water may be channeled or directed into a sanitary sewer.

**16-16.30.2.** Whenever practicable, the drainage system of a development shall coordinate with and connect to the drainage systems or drainage ways on surrounding properties or streets.

**16-16.30.3.** Use of drainage swales rather than curb and gutter and storm sewers in subdivisions is provided for in Section 16-14.7. Private roads and access ways within unsubdivided developments shall utilize curb and gutter and storm drains to provide adequate drainage if the grade of such roads or access ways is too steep to provide drainage in another manner or if other sufficient reasons exist to require such construction.

**16-16.30.4.** Construction specifications for drainage swales, curbs and gutters, and storm drains are contained in Appendix C.

**Section 16-16.31. Storm Water Management.** All developments shall be constructed and maintained so that adjacent properties are not unreasonably burdened with surface waters as a result of such developments. The requirements set forth herein are intended to assure compliance with this standard.

**16-16.31.1.** No development may be constructed or maintained so that such development unreasonably impedes the natural flow of water from higher adjacent properties across such development, thereby unreasonably causing substantial damage to such higher adjacent properties; and

**16-16.31.2.** No development may be constructed or maintained so that the surface waters from such development are unreasonably collected and channeled onto lower adjacent properties at such locations or at such volumes as to cause substantial damage to such lower adjacent properties.

**16-16.31.3.** The following requirements shall be complied with for all new construction or development in the Town. For the purposes of this subsection, a single-family residential subdivision shall be considered a development and the requirements shall be applicable to such a development. The requirements, however, shall not apply to the construction of single-family houses on individual lots with less than 10,000 square feet of impervious surface.

**16-16.31.3.1.** Storm water on the property shall be controlled and released at a rate between 2.2 CFS (cubic feet per second) and 2.4 CFS per acre.



**16-16.31.3.2.** Construction or development sites shall contain a minimum storage area for detention with controlled release of 9,100 cubic feet per acre of impervious surface on the site plus 3,600 cubic feet per acre of area with vegetative cover. The entire site must be considered when computing the required detention. For purposes of this subsection, all buildings, drives, roads, and/or streets shall be considered impervious to a distance three (3) feet beyond the ditch line on cuts and to the top of the slope on fill.

**16-16.31.3.3.** All new culverts, including all culvert replacements, shall be sized for 6.8 inches of rainfall per 24 hours and shall be based on run off resulting from maximum densities permitted by zoning.

**16-16.31.3.4.** All culverts, except those required for a controlled discharge, shall not be less than 18 inches in diameter when crossing streets, roadways and driveways.

**16-16.31.3.5.** For projects in the Central Business or General Business zoning districts that receive a Special Intensity Allocation under Section 16-16.38.3.1.c) of the Land Use Code, the detention shall be 13,600 cubic feet per acre of the total site. The release shall be between 2.2 CFS and 2.4 CFS per acre.

**16-16.31.3.6.** Where open basins are used for detention, the emergency overflow shall be designed to carry a minimum of 11.75 CFS per acre of total drainage to the basin.

**16-16.31.3.7.** Where an open basin is used, there shall be at minimum a four-foot-wide concrete channel sloped to the outlet at 1% grade. All areas of the basin must slope to the channel.

**16-16.31.3.8.** The maximum slope for all fills shall be 2:1 or flatter. Where possible, slopes should be 4:1 to allow for mowing.

**16-16.31.3.9.** Maintenance of all detention facilities shall be the responsibility of the property owner(s). Failure to properly maintain said facilities will result in the Town taking all necessary actions to maintain such facilities, including replacement if necessary, with all costs to be charged to the property owner(s).

**16-16.31.3.10.** In order to ensure that the design standards set forth herein are met and complied with, Engineering Certifications from a licensed professional Engineer shall be required to certify that the design for storm water release and retention meets the standards set forth herein, and, upon completion of the project, that construction was in accordance with the certified plans. The final certifications must be submitted to the Town prior to the Town issuing a Certificate of Occupancy.

**16-16.31.4.** An applicant shall have the right to seek a variance or waiver of the above specifications if said applicant is able to demonstrate to the Town that compliance with said specifications places an undue hardship on the applicant and that no other property owners would be adversely impacted by the applicant's failure to strictly comply with said specifications. The applicant's appeal shall be submitted to the Town Engineer whose recommendations shall be submitted to the Town Council for final decision.

**Section 16-16.32. Sedimentation and Erosion Control.** No zoning or special use permit may be issued and final plat approval for subdivisions may not be given with respect to any development

that would cause land disturbing activity subject to the jurisdiction of the Watauga County Erosion Control Officer or the North Carolina Sedimentation Control Commission, unless such officer or agency has certified to the Town that:

- a) Any permit required by such officer or agency has been issued or any erosion control plan required by such officer or agency has been approved: or
- b) Such officer or agency has examined the preliminary plans for the development, and it reasonably appears that any required permit or erosion control plan can be approved upon submission by the developer of more detailed construction or design drawings. However, in this case, construction of the development may not begin (and no building permits may be issued) until such officer or agency issues any required permit or approves any required erosion control plan.

**16-16.32.1.** For purposes of this section, *land disturbing activity* means any use of 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. Sedimentation occurs whenever solid particulate matter, mineral or organic, is transported by water, air, gravity, or ice from the site of its origin.

**16-16.32.2.** The Watauga County Erosion Control Officer is authorized by resolution of the Blowing Rock Board of Commissioners to enforce within the Town the Watauga County Soil Erosion and Sedimentation Control Ordinance. This ordinance requires that before a developer undertakes any land disturbing activity that would result in the uncovering of one acre or more, an erosion and sedimentation control plan must be submitted to and approved by the Erosion Control Officer. However, any activity under the exclusive jurisdiction of the North Carolina Sedimentation Control Commission is exempt from these requirements. (See Section 16-16.32.3 below.)

**16-16.32.3.** The North Carolina Sedimentation Control Commission has exclusive jurisdiction over land disturbing activities that are:

- a) Conducted by the State;
- b) Conducted by the United States;
- c) Conducted by the persons having the power of eminent domain;
- d) Conducted by local government;
- e) Licensed by the State or the United States; or
- f) Funded in whole or in part by the State or the United States.

**Section 16-16.33. Purpose of the Watershed Protection Ordinance.** It is the purpose of this article to protect the quality of drinking water for the Town of Blowing Rock by setting standards for the development that occurs within designated Public Water Supply Watershed areas. It is further intended that the establishment of watershed regulations reflect the protection of critical environmental areas in accordance with the State of North Carolina's Water Supply Watershed Protection Rules.

**16-16.33.1. Authority and Enactment.** The Legislature of the State of North Carolina has, in Chapter 160A, Article 8, Section 174, General Ordinance Authority; and in Chapter 143, Article 21, Watershed Protection Rules, delegated the responsibility or directed local governmental

units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. The Governing Board of Blowing Rock does hereby ordain and enact into law the following articles as the Watershed Protection Ordinance of Blowing Rock.

**16-16.33.2. Jurisdiction.** The provisions of this Article shall apply within the areas designated as a Public Water Supply Watershed by the N.C. Environmental Management Commission and shall be defined and established on the map entitled, "Watershed Protection Map of Blowing Rock, North Carolina" ("the Watershed Map"), which is adopted simultaneously herewith. The Watershed Map and all explanatory matter contained thereon accompanies and is hereby made a part of this Article.

**16-16.33.3. Exceptions to Applicability.** Nothing contained herein shall repeal, modify, or amend any Federal or State law or regulation, or any ordinance or regulation pertaining thereto except any ordinance which these regulations specifically replace; nor shall any provision of this Article amend, modify, or restrict any provisions of the Code of Ordinances of the Town of Blowing Rock; however, the adoption of this Article shall and does amend any and all ordinances, resolutions, and regulations in effect in the Town of Blowing Rock at the time of the adoption of this Article that may be construed to impair or reduce the effectiveness of this Article or to conflict with any of its provisions.

**16-16.33.3.1.** It is not intended that these regulations interfere with any easement, covenants, or other agreements between parties. However, if the provisions of these regulations impose greater restrictions or higher standards for the use of a building or land, then the provisions of these regulations shall control.

**16-16.33.3.2.** Existing development, as defined in this Article, is not subject to the requirements of this Article. Expansions to structures classified as existing development must meet the requirements of this Article. However, the built-upon area of the existing development is not required to be included in the density calculations.

**16-16.33.3.3.** If a nonconforming lot of record is not contiguous to any other lot owned by the same party, then that lot of record shall not be subject to the development restrictions of this article if it is developed for single-family residential purposes.

**Section 16-16.34. Duties of the Watershed Administrator.** It shall be the duty of the Watershed Administrator to administer and enforce the provisions of this article as follows.

**16-16.34.1.** The Administrator shall issue Watershed Protection Permits and Watershed Occupancy Permits as prescribed herein. A record of all permits shall be kept on file and shall be available for public inspection during regular office hours of the Administrator.

**16-16.34.2.** The Administrator shall keep records of all amendments to the local Water Supply Watershed Protection Ordinance and shall provide copies of all amendments upon adoption to the Water Quality Section of the Division of Environmental Management.

**16-16.34.3.** The Administrator shall keep records of the jurisdiction's use of the provision that a maximum of ten percent (10%) of the protected area of WS-IV watersheds may be developed with new development at a maximum of seventy percent (70%) built-upon surface area. Records for each watershed shall include the total acres of non-critical watershed area, total acres eligible to be developed under this option, total acres approved for this

development option, and individual records for each project with the following information: location, number of developed acres, type of land use, and stormwater management plan (if applicable).

**16-16.34.4.** The Administrator is granted the authority to administer and enforce the provisions of this article, exercising the responsibility of the full police power of the Town. The Administrator, or a duly authorized representative, may enter any building, structure, or premises, as provided by law, to perform any duty imposed upon them by this article.

**16-16.34.5.** The Administrator shall keep a record of variances to the local Water Supply Watershed Protection Ordinance. The record shall be submitted for each calendar year to the Water Quality Section of the Division of Environmental Management on or before January 1<sup>st</sup> of the following year and shall provide a description of each project receiving a variance and the reasons for granting the variance.

**Section 16-16.35. Appeal from the Watershed Administrator.** Any order, requirement, decision or determination made by the Watershed Administrator may be appealed to and decided by the Watershed Review Board.

**16-16.35.1.** An appeal from a decision of the Administrator must be submitted to the Watershed Review Board within thirty (30) days from the date the order, interpretation, decision or determination is made. All appeals must be made in writing stating the reasons for appeal. Following submission of an appeal, the Administrator shall transmit to the Board all papers constituting the record upon which the action appealed from was taken.

**16-16.35.2.** An appeal stays all proceedings in furtherance of the action appealed, unless the officer from whom the appeal is taken certifies to the Board after the notice of appeal has been filed with him, that by reason of facts stated in the certificate, a stay would cause imminent peril to life or property. In such case, proceedings shall not be stayed otherwise than by a restraining order which may be granted by the Board or by a court of record on application of notice of the officer from whom the appeal is taken and upon due cause shown.

**16-16.35.3.** The Board shall fix a reasonable time for hearing the appeal and give notice thereof to the parties and shall decide the same within a reasonable time. At the hearing, any party may appear in person, by agent, or by attorney.

**Section 16-16.36. Establishment of Watershed Review Board; Powers and Duties.** The Blowing Rock Planning Board shall act as the Watershed Review Board on proposed plats of land subdivision and shall hear major and minor variance requests related to subdivisions within the designated Water Supply Watersheds. The Planning Board shall also hear cases concerning major and minor variances, vested rights, administrative reviews, and appeals involving the interpretation or application of this article in the designated Water Supply Watersheds.

**16-16.36.1. Administrative Review.** The Watershed Review Board shall hear and decide appeals from any decision or determination made by the Administrator in the enforcement of this article.

**16-16.36.2. Variances.** The Watershed Review Board shall have the power to authorize, in specific cases, minor variances from the terms of this article as will not be contrary to the

public interests where, owing to special conditions, a literal enforcement of the article will result in practical difficulties or unnecessary hardship, so that the spirit of this article shall be observed, public safety and welfare secured, and substantial justice done. In addition, the Administrator shall notify and allow a reasonable comment period for all other local governments having jurisdiction in the designated watershed where the variance is being considered.

**16-16.36.2.1.** Applications for a variance shall be made on the proper form obtainable from the Administrator and shall include the following information:

- a) A site plan, drawn to a scale of at least one inch to forty feet indicating the property lines of the parcel upon which the use is proposed; any existing or proposed structures; parking areas and other built-upon areas; and surface water drainage. The site plan shall be neatly drawn and indicate north point, name and address of the person who prepared the plan, date of the original drawing, and an accurate record of any later revisions.
- b) A complete and detailed description of the proposed variance, together with any other pertinent information that the applicant feels would be helpful to the Watershed Review Board in considering the application.

**16-16.36.2.2.** The Watershed Administrator shall notify in writing each local government having jurisdiction in the watershed and the entity using the water supply for consumption. Such notice shall include a description of the variance being requested. Local governments receiving notice of the variance request may submit comments to the Watershed Administrator prior to a decision by the Watershed Review Board. Such comments shall become a part of the record of proceedings of the Watershed Review Board.

**16-16.36.2.3.** Before the Watershed Review Board may grant a variance, it shall make the following three findings, which shall be recorded in the permanent record of the case and shall include the factual reasons on which they are based.

**16-16.36.2.3.1.** There are practical difficulties or unnecessary hardships in the way of carrying out the strict letter of this article. In order to determine that there are practical difficulties or unnecessary hardships, the Board must find that the five following conditions exist:

- a) If the applicant complies with the provisions of this article, they can secure no reasonable return from, nor make reasonable use of, their property. Merely proving that the variance would permit a greater profit to be made from the property will not be considered adequate to justify the Board in granting a variance. Moreover, the Board shall consider whether the variance is the minimum possible deviation from the terms of this article that will make possible the reasonable use of their property.
- b) The hardship results from the application of this article to the property rather than from other factors such as deed restrictions or other hardships.
- c) The hardship is due to the physical nature of the applicant's property, such as its size, shape, or topography, which is different from that of neighboring property.

- d) The hardship is not the result of actions of an applicant who knowingly or unknowingly violates this article, or who purchases the property after the effective date of the Ordinance, and then comes to the Board for relief.
- e) The hardship is peculiar to the applicant's property, rather than the result of conditions that are widespread. If other properties are equally subject to the hardship created in the restriction, then granting a variance would be a special privilege denied to others and would not promote equal justice.

**16-16.36.2.3.2.** The variance is in harmony with the general purpose and intent of this article and preserves its spirit.

**16-16.36.2.3.3.** In the granting of the variance, the public safety and welfare have been assured and substantial justice has been done. The Board shall not grant a variance if it finds that doing so would in any respect impair the public health, safety, or general welfare.

**16-16.36.2.3.4.** In granting the variance, the Board may attach thereto such conditions regarding the location, character, and features of the proposed building, structure, or use as it may deem advisable in furtherance of the purposes of this article. If a variance for the construction, alteration, or use of property is granted, such construction, alteration, or use shall be in accordance with the approved site plan.

**16-16.36.2.3.5.** The Watershed Review Board shall refuse to hear an appeal or an application for a variance previously denied if it finds that there have been no substantial changes in conditions or circumstances bearing on the appeal or application.

**16-16.36.2.3.6.** A variance issued in accordance with this Section shall be considered a Watershed Protection Permit and shall expire if a Building Permit or Watershed Occupancy Permit for such use is not obtained by the applicant within twelve months from the date of the decision.

**16-16.36.2.3.7.** If the application calls for the granting of a major variance, and if the Watershed Review Board decides in favor of granting the variance, the Board shall prepare a preliminary record of the hearing with all deliberate speed. The preliminary record of the hearing shall include:

- a) The variance application;
- b) The hearing notices;
- c) The evidence presented;
- d) Motions, offers of proof, objections to evidence, and rulings on them;
- e) Proposed findings and exceptions;
- f) The proposed decision, including all conditions proposed to be added to the permit.

**16-16.36.2.3.8.** The preliminary record shall be sent to the Environmental Management Commission for its review as follows.

**16-16.36.2.3.8.1.** If the Commission concludes from the preliminary record that the variance qualifies as a major variance and that (1) the property owner can secure no reasonable return from, nor make any practical use of the property unless the proposed variance is granted, and (2) the variance, if granted, will not result in a serious threat to the water supply, then the Commission shall approve the variance as proposed or approve the proposed variance with conditions and stipulations. The Commission shall prepare a Commission decision and send it to the Watershed Review Board. If the Commission approves the variance as proposed, the Board shall prepare a final decision granting the proposed variance. If the Commission approves the variance with conditions and stipulations, the Board shall prepare a final decision, including such conditions and stipulations, granting the proposed variance.

**16-16.36.2.3.8.2.** If the Commission concludes from the preliminary record that the variance qualifies as a major variance and that (1) the property owner can secure a reasonable return from or make a practical use of the property without the variance or (2) the variance, if granted, will result in a serious threat to the water supply, then the Commission shall deny approval of the variance as proposed. The Commission shall prepare a Commission decision and send it to the Watershed Review Board. The Board shall prepare a final decision denying the variance as proposed.

**Section 16-16.37. Establishment of Watershed Areas.** The purpose of this Section is to list and describe the watershed areas herein adopted.

- a) WS-II-CA (Critical Area)
- b) WS-IV-PA (Protected Area)

**Section 16-16.38. Watershed Areas Described.** WS-II Watershed Areas - Critical Area (WS-II-CA). In order to maintain a predominately undeveloped land use intensity pattern, single family residential uses shall be allowed at a maximum of one (1) dwelling unit per two (2) acres. All other residential and non-residential development shall be allowed at a maximum six percent (6%) built-upon area. New residual application sites and landfills are specifically prohibited.

**16-16.38.1. Allowed Uses:**

- a) Agriculture subject to the provisions of the Food Security Act of 1985 and the Food, Agricultural, Conservation and Trade Act of 1990. Agricultural activities conducted after January 1, 1993 shall maintain a minimum ten (10) foot vegetative buffer, or equivalent control as determined by the Soil and Water Conservation Commission, along all perennial waters indicated on the most recent versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps or as determined by local government studies. Animal operations greater than 100 animal units shall employ Best Management Practices by July 1, 1994 as recommended by the Soil and Water Conservation Commission.
- b) Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality (15 NCAC II.6101-.0209).
- c) Residential development, including both single family and all other residential.
- d) Non-residential development, excluding: 1) the storage of toxic and hazardous materials unless a spill containment plan is implemented, 2) landfills, and 3) sites for land

application of residuals or petroleum contaminated soils. New industrial development is required to incorporate adequately designed, constructed and maintained spill containment structures if hazardous materials are either used, stored or manufactured on the premises.

**16-16.38.2. Density and Built-upon Limits:**

- a) New Single-Family Residential development shall not exceed one (1) dwelling unit per two (2) acres on a project-by-project basis. No residential lot shall be less than two (2) acres, except within an approved cluster development.
- b) All Other New Residential, Commercial and Industrial development shall not exceed six percent (6%) built-upon area on a project-by-project basis. For the purpose of calculating built-upon area, total project area shall include total acreage in the tract on which the project is to be developed.

**16-16.38.3. WS-IV Watershed Areas - Protected Area (WS-IV-PA).** Only new development activities that require an erosion/sedimentation control plan under State law or approved local government program are required to meet the provisions of this article when located in a WS-IV watershed. In order to accommodate moderate to high land use intensity, single family residential uses shall develop at a maximum of two (2) dwelling units per acre. All other residential and non-residential development shall be allowed at a maximum of twenty-four percent (24%) built-upon area.

**16-16.38.3.1. Uses Allowed:**

- a) Agriculture, subject to the provisions of the Food Security Act of 1985 and the Food, Agricultural, Conservation and Trade Act of 1990.
- b) Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality (15 NCAC II.6101-.0209).
- c) Residential development.
- d) Non-residential development, excluding the storage of toxic and hazardous materials unless a spill containment plan is implemented.

**16-16.38.3.2. Density and Built-upon Limits:**

- a) Single Family Residential development shall not exceed two (2) dwelling units per acre, as defined on a project-by-project basis. No residential lot shall be less than one-half (1/2) acre, except within an approved cluster development.
- b) All Other Residential, Commercial, and Industrial development shall not exceed twenty-four percent (24%) built-upon area on a project-by-project basis. However, non-residential development may occupy up to thirty-six percent (36%) built-upon area in areas of the General Business (GB), Central Business (CB), and Office Institutional (OI) zoning districts that do not have a curb and gutter street system. For the purpose of calculating built-upon area, total project area shall include acreage in the tract on which the project is to be developed.
- c) In addition to the development allowed under paragraphs (a) and (b) above, new non-residential development and expansions to existing non-residential development in the General Business (GB), Central Business (CB), and Office Institutional (OI) zoning districts may occupy up to ten percent (10%) of the protected area with up to seventy percent (70%) built-upon area on a project-by-project basis when approved as a



Special Intensity Allocation (SIA). On projects that do not require the issuance of a special use permit, the Watershed Administrator is authorized to approve SIAs consistent with the provisions of this article. On projects requiring the issuance of a special use permit, the Board of Commissioners is authorized to approve SIAs consistent with the provisions of this article. Projects must, to the maximum extent practicable, minimize built-upon surface area, direct stormwater away from surface waters, and incorporate Best Management Practices to minimize water quality impacts. For the purpose of calculating built-upon area, total project area shall include total acreage in the tract on which the project is to be developed.

**Section 16-16.39. Cluster Development.** Clustering of development is allowed in all Watershed Areas under the following conditions.

**16-16.39.1.** Minimum lot sizes are not applicable to single family cluster development projects. Density or built-upon area for the project shall not exceed that allowed for the critical area or balance of watershed, whichever applies.

**16-16.39.2.** All built-upon area shall be designed and located to minimize stormwater runoff impact to the receiving waters and minimize concentrated stormwater flow.

**16-16.39.3.** The remainder of the tract shall remain in a vegetated or natural state. The title to the open space area shall be conveyed to an incorporated homeowner's association for management; to a local government for preservation as a park or open space; or to a conservation organization for preservation in a permanent easement. Where a property association is not incorporated, a maintenance agreement shall be filed with the property deeds.

**Section 16-16.40. Buffer Areas Required.** A minimum 30-foot vegetative buffer for development activities is required along all perennial waters indicated on the most recent versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps or as determined by local government studies. Desirable artificial stream bank or shoreline stabilization is permitted.

No new development is allowed in the buffer except for water dependent structures, other structures such as flag poles, signs, and security lights that result in only diminutive increases in impervious area, and public projects such as road crossings and greenways where no practical alternative exists. These activities should minimize built-upon surface area, direct runoff away from the surface waters and maximize the utilization of stormwater Best Management Practices.

**Section 16-16.41. Rules Governing the Interpretation of Watershed Area Boundaries.** Where uncertainty exists as to the boundaries of the watershed areas, as shown on the Watershed Map, the following rules shall apply.

**16-16.41.1.** Where area boundaries are indicated as approximately following either street, alley, railroad or highway lines or centerlines thereof, such lines shall be construed to be said boundaries.

**16-16.41.2.** Where area boundaries are indicated as approximately following lot lines, such lot lines shall be construed to be said boundaries. However, a surveyed plat prepared by a registered land surveyor may be submitted to the Town of Blowing Rock as evidence that one or more properties along these boundaries do not lie within the watershed area.

**16-16.41.3.** Where the watershed area boundaries lie at a scaled distance more than twenty-five (25) feet from any parallel lot line, the location of watershed area boundaries shall be determined by use of the scale appearing on the watershed map.

**16-16.41.4.** Where the watershed area boundaries lie at a scaled distance of twenty-five (25) feet or less from any parallel lot line, the location of watershed area boundaries shall be construed to be the lot line.

**16-16.41.5.** Where other uncertainty exists, the Administrator shall interpret the Watershed Map as to location of such boundaries. This decision may be appealed to the Planning Board.

**Section 16-16.42. Existing Development.** Existing development as defined in this article, may be continued and maintained subject to the provisions provided herein. Expansions to structures classified as existing development must meet the requirements of this article; however, the built-upon area of the existing development is not required to be included in the built-upon area calculations.

**16-16.42.1. Uses of Land.** This category consists of uses existing at the time of adoption of this article where such use of the land is not permitted to be established hereafter in the watershed area in which it is located. Such uses may be continued except as follows:

- a) When such use of land has been changed to an allowed use, it shall not thereafter revert to any prohibited use.
- b) Such use of land shall be changed only to an allowed use.
- c) When such use ceases for a period of at least one year, it shall not be reestablished.

**16-16.42.2. Reconstruction of Buildings or Built-Upon Areas.** Any existing building or built-upon area not in conformance with the restrictions of this article that has been damaged or removed may be repaired and/or reconstructed, except that there are no restrictions on single family residential development, provided.

- a) Repair or reconstruction is initiated within twelve (12) months and completed within two (2) years of such damage.
- b) The total amount of space devoted to built-upon area may not be increased unless stormwater control that equals or exceeds the previous development is provided.

**Section 16-16.43. Watershed Protection Permit.** Except where a single-family residence is constructed on a lot deeded prior to the effective date of this article, no building or built-upon area shall be erected, moved, enlarged or structurally altered, nor shall any zoning or building permit be issued nor shall any change in the use of any building or land be made until a Watershed Protection Permit has been issued by the Administrator. No Watershed Protection Permit shall be issued except in conformity with the provisions of this article.

**16-16.43.1.** Watershed Protection Permit applications shall be filed with the Administrator. The application shall include a completed application form and supporting documentation deemed necessary by the Administrator.

**16-16.43.2.** Prior to issuance of a Watershed Protection Permit, the Administrator may consult with qualified personnel for assistance to determine if the application meets the requirements of this article.

**16-16.43.3.** No permit required under the North Carolina State Building Code shall be issued for any activity for which a Watershed Protection Permit is required until the Watershed Protection Permit has been issued.

**16-16.43.4.** A Watershed Protection Permit shall expire if a zoning or building permit for such use is not obtained by the applicant within twelve (12) months from the date of issuance.

**Section 16-16.44. Watershed Occupancy Permit.** The Administrator shall issue a Watershed Protection Occupancy Permit certifying that all requirements of this article have been met prior to the occupancy or use of a building hereafter erected, altered or moved and/or prior to the change of use of any building or land.

**16-16.44.1.** A Watershed Protection Occupancy Permit, either for the whole or part of a building, shall be applied for coincident with the application for a Watershed Protection Permit and shall be issued or denied within ten (10) days after the erection or structural alterations of the building.

**16-16.44.2.** When only a change in use of land or existing building occurs, the Administrator shall issue a Watershed protection Occupancy Permit certifying that all requirements of this article have been met coincident with the Watershed Protection Permit.

**16-16.44.3.** If the Watershed Protection Occupancy Permit is denied, the Administrator shall notify the applicant in writing stating the reasons for denial.

**16-16.44.4.** No building or structure which has been erected, moved, or structurally altered may be occupied until the Administrator has approved and issued a Watershed Protection Occupancy Permit.

**Section 16-16.45. Public Health, in General.** No activity, situation, structure or land use shall be allowed within the watershed which poses a threat to water quality and the public health, safety and welfare.

**Section 16-16.46. Abatement.** The Administrator shall monitor land use activities within the watershed areas to identify situations that may pose a threat to water quality.

**16-16.46.1.** The Administrator shall report all findings to the Watershed Review Board. The Administrator may consult with any public agency or official and request recommendations.

**16-16.46.2.** Where the Watershed Review Board finds a threat to water quality and the public health, safety and welfare, the Board shall institute any appropriate action or proceeding to restrain, correct or abate the condition and/or violation.

**Section 16-16.47. Watershed Boundary Map.** The map showing the approximate boundaries of the Watershed Protection Area, which is available in the Planning Department.

**Section 16-16.48. Amendments.** Any amendment to this ordinance shall follow the procedures outlined in Article 23.

**16-16.48.1.** Under no circumstance shall any amendments, supplements, or changes be adopted that would cause this article to violate the watershed protection rules as adopted by the North Carolina Environmental Management Commission.

**16-16.48.2.** All amendments must be filed with the North Carolina Division of Environmental Management, North Carolina Division of Environmental Health, and the North Carolina Division of Community Assistance.