CHAPTER 155: FLOOD DAMAGE PREVENTION

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GENERAL PROVISIONS

§ 155.01 STATUTORY AUTHORIZATION.

Municipal. The Legislature of the State of North Carolina has in Part 6, Article 21 of Ch. 143; Parts 3, 5, and 8 of Article 19 of Ch. 160A; and Article 8 of Ch. 160A of the North Carolina General Statutes, delegated to local governmental units the responsibility to adopt regulations designed to promote the public health, safety, and general welfare.

§ 155.02 FINDINGS OF FACT.

(A) The flood prone areas within the jurisdiction of the Town of Liberty 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.

(B) 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 prone areas of uses vulnerable to floods or other hazards.

§ 155.03 STATEMENT OF PURPOSE.

It is the purpose of this chapter to promote public health, safety, and general welfare and to minimize public and private losses due to flood conditions within flood prone areas by provisions designed to:

(A) Restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards or that result in damaging increases in erosion, flood heights or velocities;

(B) Require that uses vulnerable to floods, including facilities that 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 floodwaters;

(D) Control filling, grading, dredging, and all other development that may increase erosion or flood damage; and

(E) Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or which may increase flood hazards to other lands.

§ 155.04 OBJECTIVES.

The objectives of this chapter are to:

(A) Protect human life, safety, and health;

(B) Minimize expenditure of public money for costly flood control projects;

(C) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(D) Minimize prolonged business losses and interruptions;

(E) Minimize damage to public facilities and utilities (such as water and gas mains, electric, telephone, cable and sewer lines, streets, and bridges) that are located in flood prone areas;

(F) Help maintain a stable tax base by providing for the sound use and development of flood prone areas; and

(G) Ensure that potential buyers are aware that property is in a special flood hazard area.

§ 155.06 LANDS TO WHICH THIS CHAPTER APPLIES.

This chapter shall apply to all special flood hazard areas within the jurisdiction, including extra-territorial jurisdictions (ETJs) if applicable, of the Town of Liberty and within the jurisdiction of any other community whose governing body agrees, by resolution, to such applicability.

§ 155.07 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 Randolph County dated January 2, 2008, which are adopted by reference and declared to be a part of this chapter. The initial flood insurance rate maps for Randolph County unincorporated Area is July 16, 1981 and for the Town of Liberty is January 2, 2008.

§ 155.08 ESTABLISHMENT OF FLOODPLAIN DEVELOPMENT PERMIT.

A floodplain development permit shall be required in conformance with the provisions of this chapter prior to the commencement of any development activities within special flood hazard areas determined in accordance with the provisions of § 155.07 of this chapter.

§ 155.09 EFFECT UPON OUTSTANDING FLOODPLAIN DEVELOPMENT PERMITS.

Nothing herein contained shall require any change in the plans, construction, size, or designated use of any development or any part thereof for which a floodplain development permit has been granted by the Floodplain Administrator or his or her authorized agents before the time of passage of this chapter; provided, however, that when construction is not begun under such outstanding permit within a period of 6 months subsequent to the date of issuance of the outstanding permit, construction or use shall be in conformity with the provisions of this chapter.

§ 155.10 COMPLIANCE.

No structure or land shall hereafter be located, extended, converted, altered, or developed in any way without full compliance with the terms of this chapter and other applicable regulations.

Penalty, see § 155.99

§ 155.11 ABROGATION AND GREATER RESTRICTIONS.

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

§ 155.12 INTERPRETATION.

In the interpretation and application of this chapter, 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.

§ 155.13 WARNING AND DISCLAIMER OF LIABILITY.

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

ADMINISTRATION AND ENFORCEMENT

§ 155.20 DESIGNATION OF FLOODPLAIN ADMINISTRATOR.

The Town Manager or designee, hereinafter referred to as the Floodplain Administrator, is hereby appointed to administer and implement the provisions of this chapter.

§ 155.21 FLOODPLAIN DEVELOPMENT APPLICATION, PERMIT AND CERTIFICATION REQUIREMENTS.

(A) Application 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:

(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 § 155.07, 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 § 155.07;

(d) The boundary of the floodway(s) or non-encroachment area(s) as determined in § 155.07;

(e) The base flood elevation (BFE) where provided as set forth in § 155.07, § 155.22, or § 155.38;

(f) The old and new location of any watercourse that will be altered or relocated as a result of proposed development;

(g) The certification of the plot plan by a registered land surveyor or professional engineer.

(2) 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 flood-proofed; and

(c) Elevation in relation to mean sea level to which any proposed utility systems will be elevated or floodproofed;

(3) If floodproofing, a floodproofing certificate (FEMA Form 81-65) with supporting data and an operational plan that includes, but is not limited to, installation, exercise, and maintenance of floodproofing measures.

(4) A foundation plan, drawn to scalel, which shall include details of the proposed foundation system to ensure all provisions of this subchapter are met. These details include but are not limited to:

(a) The proposed method of elevation, if applicable (such as fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls);

(b) Openings to facilitate automatic equalization of hydrostatic flood forces on walls in accordance with § 155.36(D)(3) when solid foundation perimeter walls are used in Zones A, AO, AE, and A1-30.

(5) Usage details of any enclosed areas below the lowest floor.

(6) 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.

(7) Certification that all other local, state and federal permits required prior to floodplain development permit issuance have been received.

(8) Documentation for placement of recreational vehicles and/or temporary structures, when applicable, to ensure that the provisions of § 155.36, divisions (F) and (G) of this chapter are met.

(9) 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.

(B) Permit requirements. The floodplain development permit shall include, but not be limited to:

(1) A description of the development to be permitted under the floodplain development permit.

(2) The special flood hazard area determination for the proposed development in accordance with available data specified in § 155.07.

(3) The regulatory flood protection elevation required for the reference level and all attendant utilities.

(4) The regulatory flood protection elevation required for the protection of all public utilities.

(5) All certification submittal requirements with timelines.

(6) A statement that no fill material or other development shall encroach into the floodway or non-encroachment area of any watercourse, as applicable.

(7) The flood openings requirements, if in Zones A, AO, AE or A1-30.

(8) Limitations of below BFE enclosure uses (if applicable). (such as parking, building access and limited storage only).

(C) Certification requirements.

(1) Elevation certificates.

(a) An elevation certificate (FEMA Form 81-31) is 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 elevation of the reference level, in relation to mean sea level. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder prior to the beginning of construction. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit.

(b) 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 cause to withhold the issuance of a certificate of compliance/occupancy.

(2) 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 cause to deny a floodplain development permit. Failure to construct in accordance with the certified design shall be cause to withhold the issuance of a certificate of compliance/occupancy.

(3) If a manufactured home is placed within Zone A, AO, AE, or Al-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 § 155.36(C)(2).

(4) 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.

(5) 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 (1) and (2) of this division:

(a) Recreational vehicles meeting requirements of § 155.36(F)(1);

(b) Temporary structures meeting requirements of § 155.36(G); and

(c) Accessory structures less than 150 square feet meeting requirements of § 155.36(H).

Penalty, see § 155.99

§ 155.22 DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN 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 chapter 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 § 155.40 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 § 155.21(C).

(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 § 155.21(C).

(H) Obtain actual elevation (in relation to mean sea level) of all public utilities in accordance with the provisions of § 155.21(C).

(I) When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with the provisions of § 155.21(C) and § 155.36(B).

(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 subchapter.

(K) When base flood elevation (BFE) data has not been provided in accordance with § 155.07, obtain, review, and reasonably utilize any base flood elevation (BFE) data, along with floodway data or non-encroachment area data available from a federal, state, or other source, including data developed pursuant to § 155.38(B)(2), in order to administer the provisions of this chapter.

(L) When base flood elevation (BFE) data is provided but no floodway or non-encroachment area data has been provided in accordance with § 155.07, 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 chapter.

(M) When the lowest floor and the lowest adjacent grade of a structure or the lowest ground elevation of a parcel in a special flood hazard area is above the base flood elevation, advise the property owner of the option to apply for a letter of map amendment (LOMA) from FEMA. Maintain a copy of the letter of map amendment (LOMA) issued by FEMA in the floodplain development permit file.

(N) Permanently maintain all records that pertain to the administration of this chapter and make these records available for public inspection, recognizing that such information may be subject to the Privacy Act of 1974, as amended.

(O) 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 ordinance 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 jurisdiction of the community at any reasonable hour for the purposes of inspection or other enforcement action.

(P) Issue stop-work orders as required. Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this ordinance, 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.

(Q) 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.

(R) Make periodic inspections throughout the special flood hazard areas within the jurisdiction of the community. The Floodplain Administrator and each member of his or her 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.

(S) Follow through with corrective procedures of § 155.23.

(T) Review, provide input, and make recommendations for variance requests.

(U) 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 § 155.07 of this chapter, including any revisions thereto including letters of map change, issued by FEMA. Notify state and FEMA of mapping needs.

(V) Coordinate revisions to FIS reports and FIRMs, including letters of map revision based on fill (LOMR-F) and letters of map revision (LOMR).

§ 155.23 CORRECTIVE PROCEDURES.

(A) Violations to be corrected. When the Floodplain Administrator finds violations of applicable State and local laws, it shall be his or her duty to 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.

(B) 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:

(1) That the building or property is in violation of the floodplain management regulations;

(2) That a hearing will be held before the Floodplain Administrator at a designated place and time, not later than 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

(3) That following the hearing, the Floodplain Administrator may issue an order to alter, vacate, or demolish the building; or to remove fill as applicable.

(C) 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 chapter , they 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, they may order that corrective action be taken in such lesser period as may be feasible.

(D) 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 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.

(E) 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.

Penalty, see § 155.99

§ 155.24 VARIANCE PROCEDURES.

(A) The Zoning Board of Adjustment as established by the Town of Liberty, hereinafter referred to as the Appeal Board, shall hear and decide requests for variances from the requirements of this chapter.

(B) Any person aggrieved by the decision of the Appeal Board may appeal such decision to the Court, as provided in G.S. Ch. 7A.

(C) Variances may be issued for:

(1) 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.

(2) Functionally dependent facilities if determined to meet the definition as stated in § 155.05 of this chapter, provided provisions of division (I)(2), (3), and (5) below 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.

(3) Any other type of development, provided it meets the requirements of this section.

(D) In passing upon variances, the Appeal Board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this chapter, and:

(1) The danger that materials may be swept onto other lands to the injury of others;

(2) The danger to life and property due to flooding or erosion damage;

(3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

(4) The importance of the services provided by the proposed facility to the community;

(5) The necessity to the facility of a waterfront location as defined under § 155.05 of this chapter as a functionally dependent facility, where applicable;

(6) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

(7) The compatibility of the proposed use with existing and anticipated development;

(8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

(9) The safety of access to the property in times of flood for ordinary and emergency vehicles;

(10) 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

(11) 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.

(E) A written report addressing each of the above factors shall be submitted with the application for a variance.

(F) Upon consideration of the factors listed above and the purposes of this chapter, the Appeal Board may attach such conditions to the granting of variances as it deems necessary to further the purposes and objectives of this chapter.

(G) 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 base flood elevation increases risks to life and property, and that the issuance of a variance to construct a structure below the base flood elevation 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.

(H) 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.

(I) Conditions for variances.

(1) Variances shall not be issued when the variance will make the structure in violation of other federal, state, or local laws, regulations, or ordinances.

(2) 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.

(3) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

(4) Variances shall only be issued prior to development permit approval.

(5) Variances shall only be issued upon:

(a) A showing of good and sufficient cause;

(b) A determination that failure to grant the variance would result in exceptional hardship; and

(c) 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.

(J) 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:

(1) The use serves a critical need in the community.

(2) No feasible location exists for the use outside the special flood hazard area.

(3) The reference level of any structure is elevated or floodproofed to at least the regulatory flood protection elevation.

(4) The use complies with all other applicable federal, state and local laws.

(5) The Town of Liberty has notified the Secretary of the North Carolina Department of Crime Control and Public Safety of its intention to grant a variance at least 30 calendar days prior to granting the variance.

FLOOD HAZARD REDUCTION

§ 155.35 GENERAL STANDARDS.

In all special flood hazard areas the following provisions are required:

(A) All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, and 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 and 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, duct work, 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 floodwaters into the system.

(F) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems 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 subchapter, shall meet the requirements of new construction as contained in this chapter.

(I) Nothing in this subchapter shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this chapter 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 chapter.

(J) 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 § 155.24(J). 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 § 155.21(C).

(K) All subdivision proposals and other development proposals shall be consistent with the need to minimize flood damage.

(L) 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.

(M) All subdivision proposals and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards.

(N) 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.

(O) 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.

(P) 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 shall apply.

Penalty, see § 155.99

§ 155.36 SPECIFIC STANDARDS.

In all special flood hazard areas where base flood elevation (BFE) data has been provided, as set forth in § 155.07 or § 155.38, the following provisions, in addition to the provisions of § 155.35, are required:

(A) 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 the regulatory flood protection elevation, as defined in § 155.05 of this chapter.

(B) 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 the regulatory flood protection elevation, as defined in § 155.07 of this chapter. Structures located in A, AE, AO, and Al-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. For AO Zones, the floodproofing elevation shall be in accordance with § 155.41(B). A registered professional engineer or architect shall certify that the standards of this division are satisfied. Such certification shall be provided to the Floodplain Administrator as set forth in § 155.21(C), along with the operational and maintenance plans.

(C) Manufactured homes.

(1) New and replacement manufactured homes shall be elevated so that the reference level of the manufactured home is no lower than the regulatory flood protection elevation, as defined in § 155.05 of this chapter.

(2) 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 G.S. § 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.

(3) All enclosures or skirting below the lowest floor shall meet the requirements of division (D) of this section.

(4) 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.

(D) Elevated buildings. Fully enclosed area, of new construction and substantially improved structures, which is below the lowest floor:

(1) 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;

(2) Shall be constructed entirely of flood resistant materials at least to the regulatory flood protection elevation;

(3) Shall include, in Zones A, AO, AE, and Al-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:

(a) A minimum of 2 flood openings on different sides of each enclosed area subject to flooding;

(b) The total net area of all flood openings must be at least 1 square inch for each square foot of enclosed area subject to flooding;

(c) If a building has more than 1 enclosed area, each enclosed area must have flood openings to allow floodwaters to automatically enter and exit;

(d) The bottom of all required flood openings shall be no higher than 1 foot above the adjacent grade;

(e) 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

(f) 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.

(E) Additions/improvements.

(1) Additions and/or improvements to pre-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:

(a) 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.

(b) A substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.

(2) 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.

(3) Additions and/or improvements to post-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:

(a) Not a substantial improvement, the addition and/or improvements only must comply with the standards for new construction.

(b) A substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.

(F) Recreational vehicles. Recreational vehicles shall either:

(1) 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

(2) Meet all the requirements for new construction.

(G) 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:

(1) A specified time period for which the temporary use will be permitted. Time specified may not exceed 3 months, renewable up to 1 year;

(2) The name, address, and phone number of the individual responsible for the removal of the temporary structure;

(3) The time frame prior to the event at which a structure will be removed (minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);

(4) A copy of the contract or other suitable instrument with the entity responsible for physical removal of the structure; and

(5) Designation, accompanied by documentation, of a location outside the special flood hazard area, to which the temporary structure will be moved.

(H) Accessory structures.

(1) When accessory structures (sheds, detached garages, and the like) 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 § 155.35(A);

(f) All service facilities such as electrical shall be installed in accordance with the provisions of § 155.35(D); and

(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 § 155.36(D)(3).

(2) 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 § 155.21(C).

Penalty, see § 155.99

§ 155.37 RESERVED.

§ 155.38 STANDARDS FOR FLOODPLAINS WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS.

Within the special flood hazard areas designated as Approximate Zone A and established in § 155.07, where no base flood elevation (BFE) data has been provided by FEMA, the following provisions, in addition to the provisions of § 155.35, shall apply:

(A) No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of 20 feet each side from top of bank or 5 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.

(B) The BFE used in determining the regulatory flood protection elevation shall be determined based on the following criteria:

(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 subchapter and shall be elevated or floodproofed in accordance with standards in §§ 155.35 and 155.36.

(2) When floodway data is available from a federal, state, or other source, all new construction and substantial improvements within floodway areas shall also comply with the requirements of §§ 155.36 and 155.40.

(3) All subdivision, manufactured home park and other development proposals shall provide base flood elevation (BFE) data if development is greater than 5 acres or has more than 50 lots/manufactured home sites. Such base flood elevation (BFE) data shall be adopted by reference in accordance with § 155.07 and utilized in implementing this chapter.

(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 (non-residential) to or above the regulatory flood protection elevation, as defined in § 155.05. All other applicable provisions of § 155.36 shall also apply.

Penalty, see § 155.99

§ 155.39 STANDARDS FOR RIVERINE FLOODPLAINS WITH BFE BUT WITHOUT ESTABLISHED FLOODWAYS OR NON-ENCROACHMENT AREAS.

Along rivers and streams where 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 §§ 155.35 and 155.36; 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 1 foot at any point within the community.

Penalty, see § 155.99

§ 155.40 FLOODWAYS AND NON-ENCROACHMENT AREAS.

Areas designated as floodways or non-encroachment areas are located within the special flood hazard areas established in § 155.07. 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 §§ 155.35 and 155.36, shall apply to all development within such areas:

(A) No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless:

(1) 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

(2) A 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.

(B) If § 155.40(A) is satisfied, all development shall comply with all applicable flood hazard reduction provisions of this subchapter.

(C) No manufactured homes shall be permitted, except replacement manufactured homes in an existing manufactured home park or subdivision, provided the following provisions are met:

(1) The anchoring and the elevation standards of § 155.36(C); and

(2) The no encroachment standard of § 155.40(A).

Penalty, see § 155.99

§ 155.41 STANDARDS FOR AREAS OF SHALLOW FLOODING (ZONE AO).

Located within the special flood hazard areas established in § 155.07, are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of 1 to 3 feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In addition to §§ 155.35 and 155.36, all new construction and substantial improvements shall meet the following requirements:

(A) The reference level shall be elevated at least as high as the depth number specified on the flood insurance rate map (FIRM), in feet, plus a freeboard of 2 feet, above the highest adjacent grade; or at least 4 feet above the highest adjacent grade if no depth number is specified.

(B) Non-residential structures may, in lieu of elevation, be floodproofed to the same level as required in § 155.41(A) so that the structure, together with attendant utility and sanitary facilities, below that level shall be watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required in accordance with § 155.21(C) and § 155.36(B).

(C) Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

Penalty, see § 155.99

§ 155.99 PENALTY.

Violation of the provisions of this chapter 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 chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than $50 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 of Liberty from taking such other lawful action as is necessary to prevent or remedy any violation.