

# CHAPTER 6: ENVIRONMENTAL

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## **Section 6.1 Statutory Authorization, Findings of Fact, Purpose and Objectives**

### **6.1.1 Statutory Authorization**

The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Parts 3 and 4 of Article 18 of Chapter 153A; and Part 121, 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.

Therefore, the Board of Commissioners of the County of Currituck, North Carolina, does ordain as follows:

### **6.1.2 Findings of Fact**

- A. The flood prone areas within the jurisdiction of the County of Currituck 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.

### **6.1.3 Statement of Purpose**

It is the purpose of this ordinance 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,

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

## **6.1.4 Objectives**

The objectives of this ordinance 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 losses and interruptions;
- E. To minimize damage to public facilities and utilities (i.e. water and gas mains, electric, telephone, cable and sewer lines, streets, and bridges) that are located in flood prone areas;
- F. To help maintain a stable tax base by providing for the sound use and development of flood prone areas; and,
- G. To ensure that potential buyers are aware that property is in a Special Flood Hazard Area.

## **Section 6.2 General Provisions**

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### **6.2.1 Lands to Which this Ordinance Applies**

This ordinance shall apply to all Special Flood Hazard Areas within the jurisdiction of the County of Currituck.

### **6.2.2 Basis for Establishing the Special Flood Hazard Areas**

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 Currituck County dated December 16, 2005, and as amended thereafter which, with accompanying supporting data, are adopted by reference and declared to be a part of this ordinance.

### **6.2.3 Establishment of Floodplain Development Permit**

A floodplain development permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities within Special Flood Hazard Areas as determined in this chapter. See Chapter 11 for further requirements.

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## **6.2.4 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 ordinance and other applicable regulations.

## **6.2.5 Abrogation and Greater Restrictions**

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

## **6.2.6 Interpretation**

In the interpretation and application of this ordinance, 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.

## **6.2.7 Warning and Disclaimer of Liability**

The degree of flood protection required by this ordinance 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 ordinance 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 ordinance shall not create liability on the part of Currituck County or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

## **6.2.8 Penalties for Violation**

See Chapter 15, Administration for a complete description of Enforcement procedures.

## **Section 6.3 Floodplain Administration**

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### **6.3.1 Designation of Floodplain Administrator**

The Planning Director or their designee, hereinafter referred to as the Floodplain Administrator, is hereby appointed to administer and implement the provisions of this ordinance.

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## 6.3.2 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 ordinance have been satisfied.
- B. Advise permittee that additional Federal or State permits (Wetlands, Endangered Species, Erosion and Sedimentation Control, CAMA, Riparian Buffers, Mining, etc.) may be required, and require that copies of such permits be provided and maintained on file with the floodplain development permit.
- 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 not diminished.
- E. Prevent encroachments into floodways and non-encroachment areas unless the certification and flood hazard reduction provisions 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 or substantially improved structures.
- G. Obtain the actual elevation (in relation to mean sea level) to which the new or substantially improved structures and all utilities have been floodproofed.
- H. Obtain actual elevation (in relation to mean sea level) of all public utilities.
- I. When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect.
- J. Where interpretation is needed as to the exact location of boundaries of the Special Flood Hazard 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 section.

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- K. When Base Flood Elevation (BFE) data has not been provided, 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 Section 6.4.3.B.2, in order to administer the provisions of this ordinance.
- L. When Base Flood Elevation (BFE) data is provided but no floodway nor non-encroachment area data has been provided, 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 ordinance.
- M. When the exact location of boundaries of the Special Flood Hazard Areas conflict with the current, natural topography information at the site, advise the property owner of the option to apply and be approved for a Letter of Map Amendment (LOMA) by 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 ordinance and make these records available for public inspection.
- 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 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, or 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.

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- R. Make periodic inspections throughout all 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.
- T. Maintain a current map repository to include, but not limited to, the FIS Report, FIRM and/or other official flood maps /studies of this ordinance, including any revisions thereto including Letters of Map Change, issued by State and/or FEMA. Notify State and FEMA of mapping needs.

### **6.3.3 Floodplain Development Application**

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:

- A. A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:
  - 1. 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;
  - 2. The boundary of the Special Flood Hazard Area as delineated on the FIRM or other flood map as determined in this chapter, or a statement that the entire lot is within the Special Flood Hazard Area;
  - 3. Flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in this chapter;
  - 4. The boundary of the floodway(s) or non-encroachment area(s) as determined in this chapter;
  - 5. The Base Flood Elevation (BFE) where provided as set forth in this chapter;
  - 6. The old and new location of any watercourse that will be altered or relocated as a result of proposed development;
  - 7. The boundary and designation date of the Coastal Barrier Resource System (CBRS) area or Otherwise Protected Areas (OPA), if applicable;

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8. Lots 20,000 square feet or smaller, shall require a professional survey/site plan, excluding the placement of mobile homes in mobile home parks and accessory structures.
- B. Proposed elevation, and method thereof, of all development within a Special Flood Hazard Area including but not limited to:
1. Elevation in relation to mean sea level of the proposed reference level (including basement) of all structures.
  2. Elevation in relation to mean sea level to which any non-residential structure in Zone AE, A or AO will be flood-proofed.
  3. Elevation in relation to mean sea level to which any proposed utility systems will be elevated or floodproofed.
- C. If floodproofing, a Floodproofing Certificate (FEMA Form 81-65) along with detailed back-up computations and operational plans that specify the location on a FIRM panel of floodproofing measures, the entity responsible for transportation and installation according to the design within the warning time available, and maintenance of floodproofing measures assuring their effectiveness when installed. Floodproofing certificate and back-up computations and operational plans shall be certified by a registered professional engineer or architect to ensure that the non-residential floodproofed development will meet the floodproofing criteria in Section 6.4.2.B.
- D. A foundation plan drawn to scale which shall include details of the proposed foundation system to ensure all provisions of this ordinance are met. These details include but are not limited to:
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).
  2. Openings to facilitate equalization of hydrostatic flood forces on walls in accordance with Section 6.4.2.D, when solid foundation perimeter walls are used in Zones A, AO, AE, and A1-30.
  3. The following, in Coastal High Hazard Areas, in accordance with Section 6.4.2.D and Section 6.4.6:
    - a. V-zone Certification form with accompanying plans and specifications verifying the engineered structure and any breakaway wall designs;

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- b. Plans for open wood latticework or insect screening, if applicable;
  - c. Plans for non-structural fill, if applicable.
- E. Usage details of any enclosed areas below the regulatory flood protection elevation.
- F. 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.
- G. Copies of all other local, state, and federal permits required prior to floodplain development permit issuance (Wetlands, Endangered Species, Erosion and Sedimentation Control, CAMA, Riparian Buffers, Mining, etc.).
- H. Documentation for placement of recreational vehicles and/or temporary structures, when applicable, to ensure Section 6.4.2.F & G of this ordinance are met.
- I. 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.

## **6.3.4 Floodplain Development Permit Requirements**

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 per available data specified in this chapter.
- 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 shall encroach into the floodway or non-encroachment area of any watercourse, as applicable.
- G. The minimum opening requirements, if in Zone A, AO, AE or A1-30.

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- H. Limitations of below BFE enclosure uses (if applicable). (i.e., Parking, Building Access and Limited Storage only).
- I. A statement, if in Zone VE or V1-30, that there shall be no alteration of sand dunes which would increase potential flood damage.
- J. A statement, if in Zone VE or V1-30, that there shall be no fill used for structural support.

## **6.3.5 Certification Requirements** (08-49, 9-15-08)

### A. Elevation Certificates

1. An Elevation Certificate (FEMA Form 81-31) or Floodproofing Certificate (FEMA Form 81-65) is required after the reference level is established. Within seven calendar days of establishment of the reference level elevation, it shall be the duty of the permit holder to submit to the floodplain administrator or their designee shall review the certification of the elevation of the reference level, in relation to mean sea level. Elevation certification shall be prepared by, or under the direct supervision of, a registered land surveyor or professional engineer and certified by same. Any work done within the seven day calendar period and prior to submission of the certification shall be at the permit holder's risk. The floodplain administrator or their designee shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further work being permitted to proceed. Failure to submit the certification or failure to make required corrections shall be cause to issue a stop-work order for the project.
2. 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 or their designee a certification of final as-built construction of the elevation of the reference level and all attendant utilities. Elevation certification shall be prepared by, or under the direct supervision of, a registered land surveyor or professional engineer and certified by same. The floodplain administrator or their designee 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.

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- B. If non-residential floodproofing is used to meet the regulatory flood protection elevation requirements, a Floodproofing Certificate (FEMA Form 81-65) 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 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 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. Failure to construct in accordance with the certified design shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.
- C. 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.
- D. If a watercourse is to be altered or relocated, a description of the extent of watercourse alteration or relocation; 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 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.
- E. Certification Exemptions. The following structures, if located within Zone A, AO, AE or A1-30, are exempt from the elevation/floodproofing certification requirements specified above:
1. Recreational Vehicles meeting requirements of Section 6.4.2;
  2. Temporary Structures meeting requirements of Section 6.4.2; and
  3. Accessory Structures less than 150 square feet meeting requirements of Section 6.4.2.
- F. A completed V-Zone Certification form with back up design plans and specifications is required prior to issuance of a Floodplain Development permit within coastal high hazard areas. It shall be the duty of the permit applicant to submit to the floodplain administrator said certification data to ensure the design standards of this ordinance are met. A registered professional engineer or architect shall develop or review the structural design, plans, and specifications for construction and certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of this ordinance. This certification is not a substitute for an Elevation Certificate.

## 6.3.6 Corrective Procedures

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- 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 pertaining to their property.
- 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 Flood Damage Prevention Ordinance;
  - 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 appears appropriate.
- 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 the Flood Damage Prevention Ordinance, 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 days, nor more than 180 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.
- D. **Appeal:** Any owner who has received an order to take corrective action may appeal the order to the Board of Adjustment by giving notice of appeal in writing to

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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 Board of Adjustment 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, he or she shall be guilty of a misdemeanor and shall be punished at the discretion of the court.

## **Section 6.4 Provisions for Flood Hazard Reduction**

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### **6.4.1 General Standards**

In all Special Flood Hazard Areas 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 below the regulatory flood protection elevation 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. These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, appliances (washers, dryers, refrigerators, freezers, etc.), 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 floodwaters.
- G. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

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- H. Any alteration, repair, reconstruction, or improvements to a structure, which is in compliance with the provisions of this ordinance, shall meet the requirements of “new construction” as contained in this ordinance.
- I. Nothing in this ordinance shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this ordinance and located totally or partially within the floodway, non-encroachment area, or stream setback, provided that the bulk of the building or structure below the regulatory flood protection elevation in the floodway, non-encroachment area, or stream setback is not increased and provided that such repair, reconstruction, or replacement meets all of the other requirements of this ordinance.
- J. New solid waste disposal facilities and sites, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted in Special Flood Hazard Areas, except by variance. 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.
- K. All development proposals shall be consistent with the need to minimize flood damage.
- L. All 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 development proposals shall have adequate drainage provided to reduce exposure to flood hazards.

## 6.4.2 Specific Standards

In all Special Flood Hazard Areas where Base Flood Elevation (BFE) data is available as provided in this Ordinance, the following provisions are required:

- A. Residential Construction. New construction or 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.
- B. Non-Residential Construction. New construction or 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. Structures located in A, AO, AE and A1-30 Zones may be floodproofed to the regulatory flood protection elevation in lieu of elevation

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provided that all areas of the structure below the required 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 standards of this subsection are satisfied. Such certification shall be provided to the official, along with the operational and maintenance plans.

## C. Manufactured Homes:

1. New or replacement manufactured homes shall be elevated so that the reference level of the manufactured home is no lower than the regulatory flood protection elevation.
2. Manufactured homes shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement in accordance with the State of North Carolina Regulations for Manufactured/Mobile Homes, 1995 Edition, and any revision thereto adopted by the Commissioner of Insurance pursuant to NCGS 143-143.15 or a certified engineered foundation. 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 foundation enclosures or skirting shall be in accordance with Section 6.4.2.D.
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. Enclosed areas, of new construction or substantially improved structures, which are below the regulatory flood protection elevation:

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 partitioned or finished into separate rooms, except to enclose storage areas;

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2. Shall be constructed entirely of flood resistant materials below the regulatory flood protection elevation;
3. Shall include, in Zones A, AO, AE, and A1-30, measures 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 the following minimum design criteria:
  - a. Provide a minimum of two openings on different sides of each enclosed area subject to flooding;
  - b. The total net area of all openings must be at least one square inch for each square foot of enclosed area subject to flooding;
  - c. If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit;
  - d. The bottom of all required openings shall be no higher than one foot above the adjacent grade;
  - e. Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and,
  - f. Foundation enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires openings as outlined above.
4. Shall allow, in Coastal High Hazard Areas (Zones VE and V1-30), breakaway walls, latticework or insect screening below the regulatory flood protection elevation, provided it is not part of the structural support of the building and is designed so as to breakaway, under abnormally high tides or wave action, without causing damage to the structural integrity of the building on which they are to be used, provided the following design specifications are met:
  - a. Material shall consist of open wood latticework or insect screening; or,
  - b. Breakaway walls shall meet the following design specifications:
    - i. Design safe loading resistance of each wall shall be not less than 10 nor more than 20 pounds per square foot; or,

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- ii. Breakaway walls that exceed a design safe loading resistance of more than 20 pounds per square foot (either by design or when so required by State or local codes) shall be certified by a registered professional engineer or architect certifying that the designed wall will collapse from a water load less than that which would occur during the base flood event, and the elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). The water loading values used shall be those associated with the base flood. The wind loading values used shall be those required by the North Carolina State Building Code.

## 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 to 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 to the existing structure and the addition and/or improvements must comply with the standards for new construction.
4. Where a fire wall or independent perimeter load-bearing wall is provided between the addition and the existing building, the addition(s) shall be

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considered a separate building and only the addition must comply with the standards for new construction.

- F. Recreational Vehicles. Recreational vehicles placed on sites within a Special Flood Hazard Area 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, including anchoring and elevation requirements.
- G. Temporary Non-Residential Structures. Prior to the issuance of a floodplain development permit for a temporary structure, applicants 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 should be minimal with total time on site not to exceed one 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 (i.e., 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 a trucking company to ensure the availability of removal equipment when needed; 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. When accessory structures (sheds, detached garages, etc.) are to be placed within a Special Flood Hazard Area, the following criteria shall be met:
1. Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas);

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2. Accessory structures shall not be temperature-controlled;
3. Accessory structures shall be designed to have low flood damage potential;
4. Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
5. Accessory structures shall be firmly anchored;
6. All service facilities such as electrical shall be installed in accordance with Section 6.4.1.D;
7. Openings to relieve hydrostatic pressure during a flood shall be provided below regulatory flood protection elevation in conformance with Section 6.4.2.D.1.; and,
8. 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.

## **6.4.3 Standards for Floodplains without Established Base Flood Elevations**

Within the Special Flood Hazard Areas, where no Base Flood Elevation (BFE) data has been provided by FEMA, the following provisions, in addition to the standards above, 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 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.
- B. The BFE used in determining the regulatory flood protection elevation shall be determined based on one of the following criteria set in priority order:
  1. If 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 ordinance and shall be elevated or floodproofed.
  2. All subdivision, manufactured home park and other development proposals located within Special Flood Hazard Areas 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 to be utilized in implementing this ordinance.

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3. 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 above the highest adjacent grade as required in the regulatory flood protection elevation definition.

## **6.4.4 Standards for Riverine Floodplains with BFE but without Established Floodways or Non-Encroachment Areas**

Along rivers and streams where BFE data is provided 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 outlined in Section 6.4.1 & 6.4.2; and
- B. 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 foot at any point within the community.

## **6.4.5 Floodways and Non-Encroachment Areas**

Areas designated as floodways or non-encroachment areas are located within the Special Flood Hazard Areas. 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 6.4.1 and 6.4.2, shall apply to all development within such areas:

- A. No new structures shall be permitted in areas designated as floodways or non-encroachment areas.
- B. Substantial improvements, new encroachments (other than structures), fill, and other developments shall not be permitted unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood. Such certification and technical data shall be presented to the floodplain administrator prior to issuance of floodplain development permit.
- C. If Section 6.4.5.B is satisfied, all development shall comply with all applicable flood hazard reduction provisions of this ordinance.

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- D. 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 Section 6.4.2.C; and
  2. The no encroachment standard of Section 6.4.5.B are met.

## **6.4.6 Coastal High Hazard Areas (Zones VE and V1-30)** (PB 10-22, 8/2/10)

Coastal High Hazard Areas are Special Flood Hazard Areas designated as Zones VE or V1-30. These areas have special flood hazards associated with high velocity waters from surges and; therefore, in addition to meeting all other provisions in this ordinance with the exception of floodway and non-encroachment area provisions, the following provisions shall apply:

- A. All development shall:
1. be located landward of the reach of mean high tide;
  2. be located landward of the first line of stable natural vegetation; and,
  3. Comply with all applicable CAMA setback requirements.
- B. All new and substantially improved structures shall be elevated so that the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings or columns) is located no lower than the regulatory flood protection elevation. Floodproofing shall not be utilized on any structures in Coastal High Hazard Areas to satisfy the regulatory flood protection elevation requirements.
- C. All space below the regulatory flood protection elevation shall be open so as not to impede the flow of water with the following exceptions:
1. Open wood latticework or insect screening may be permitted below the regulatory flood protection elevation for aesthetic purposes only and must be designed to wash away in the event of abnormal wave action and in accordance with Section 6.4.2.D.2. Design plans shall be submitted in accordance with Section 6.4.2.D.4; or
  2. Breakaway walls may be permitted below the regulatory flood protection elevation provided they meet the criteria set forth in Section 6.4.2.D.2. Design plans shall be submitted in accordance with Section 6.4.2.D.4.
- D. All new and substantial improved structures shall be securely anchored on pilings or columns. All pilings and columns and the structures attached thereto shall be anchored to resist flotation, collapse, and lateral movement due to the effect of wind and water loads acting simultaneously on all building components.

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1. Water loading values used shall be those associated with the base flood.
  2. Wind loading values used shall be those required by the current edition of the North Carolina State Building Code.
- E. A registered professional engineer or architect shall certify that the design, specifications and plans for construction are in compliance with the provisions contained in this Chapter on the current version of the Currituck County V-Zone Certification form.
- F. Fill shall not be used for structural support. Limited non-compacted and non-stabilized fill may be used around the perimeter of a building for landscaping/aesthetic purposes provided the fill will wash out from storm surge, thereby rendering the building free of obstruction prior to generating excessive loading forces, ramping effects, or wave deflection. Design plans shall be submitted in accordance with this ordinance. The floodplain administrator may approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by an engineer, architect, and/or soil scientist which demonstrates that the following factors have been satisfied:
1. Particle composition of fill material does not have a tendency for excessive natural compaction;
  2. Volume and distribution of fill will not cause wave deflection to adjacent properties; and'
  3. Slope of fill will not cause wave run-up or ramping.
- G. There shall be no alteration of sand dunes which would increase potential flood damage.
- H. No manufactured homes shall be permitted except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring and elevation standards are in compliance with this section of ordinance.
- I. Recreational vehicles may be permitted in Coastal High Hazard Areas provided that they meet the Recreational Vehicle criteria of Section 6.4.2.F and the Temporary Structure provisions of Section 6.4.2.G.

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## Section 6.5 Special Provisions for Subdivisions

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- A. An applicant for a special use permit authorizing a major subdivision and an applicant for minor subdivision final plat approval shall be informed by the Administrator of the use and construction restrictions contained in this chapter if any portion of the land to be subdivided lies within a floodplain.
- B. Final plat approval for any subdivision containing land that lies within a floodway or floodplain may not be given unless the plat shows the boundary of the floodway or floodplain and contains in clearly discernible print the following statement: "Use of land within a floodway or floodplain is substantially restricted by Chapter 6 of the Currituck County Unified Development Ordinance."
- C. Subject to the following sentence, a major development permit for a major subdivision and final plat approval for any subdivision may not be given if:
  - 1. The land to be subdivided lies within a zone where residential uses are permissible and it reasonably appears that the subdivision is designed to create residential building lots;
  - 2. Any portion of one or more of the proposed lots lies within a floodway; and,
  - 3. It reasonably appears that one or more lots described in subdivisions (a) and (b) of this subsection could not practicably be used as a residential building site because of the restrictions set forth in this chapter. The foregoing provision shall not apply if a notice that the proposed lots are not intended for sale as residential building lots is recorded on the final plat, or if the developer otherwise demonstrates to the satisfaction of the authority issuing the permit or approving the final plat that the proposed lots are not intended for sale as residential building lots.

## Section 6.6 Legal Status Provisions

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### 6.6.1 Effect on Rights and Liabilities under the Existing Flood Damage Prevention Ordinance

This ordinance in part comes forward by re-enactment of some of the provisions of the flood damage prevention ordinance enacted July 18, 1984 as amended, and it is not the intention to repeal but rather to re-enact and continue to enforce without interruption of such existing provisions, so that all rights and liabilities that have accrued there under are reserved and may be enforced. The enactment of this ordinance shall not affect any action, suit or proceeding instituted or pending. All provisions of the flood damage prevention ordinance of Currituck County enacted on July 18, 1984, as amended, which are not reenacted herein, are repealed.

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## **6.6.2 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 ordinance; provided, however, that when construction is not begun under such outstanding permit within a period of six months subsequent to the date of issuance of the outstanding permit, construction or use shall be in conformity with the provisions of this ordinance.

## **Section 6.7 Natural Drainage System Utilized to Extent Feasible**

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- A. 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.
- B. 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 6.8 Developments Must Drain Properly**

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- A. All developments 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:
  - 1. the retention results from a technique, practice or device deliberately installed as part of an approved Sedimentation or Storm Water Runoff Control Plan; or,
  - 2. 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.
- B. No surface water may be channeled or directed into a sanitary sewer.
- C. 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.
- D. Construction specifications for drainage features are contained in the Drainage Plan Requirements Section of Chapter 11.

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## Section 6.9 Storm Water Management (10-28, 11/15/10)

- A. All developments shall be constructed and maintained so that adjacent properties are not unreasonably burdened with surface waters as a result of such developments. More specifically:
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,
  2. No development may be constructed or maintained so that 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.
- B. A combination of storage and controlled release of stormwater runoff is required with the release rate of stormwater not to exceed the lesser of: (1) the predevelopment rate, or (2) the runoff predicted by a ten year storm event. Accepted methods for calculating storm runoff are as follows:
1. Rational Method
  2. USGS Method
  3. TR55 Method
  4. Combination of the above methods
- C. All stormwater removal systems within the subdivision shall be designed: (i) to handle a ten year storm event or (ii) to meet NCDOT road drainage specifications.
- D. Plans must address the maintenance of the drainage system and the responsible party. The engineer must certify the stormwater installation was performed as designed and verified by an as-built survey. The subdivider is responsible for maintenance of the drainage system until the Homeowners Association (or other responsible entity) assumes the responsibility for maintenance.
- E. Downstream drainage impediments that restrict flow to a point of making development prohibitive must be addressed by the subdivider. This problem shall be corrected by: (i) storing excess stormwater on site; or (ii) improving downstream flow with the consent of all property owners adjacent to the drainage way.
- F. No fill of any kind shall be allowed within ten feet of any property line, except as associated with a driveway improvements located within ten feet of the front

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(street) property line and/or a bulkhead for shoreline protection, with the exception of lots within planned unit developments and single family residential lots with centralized water and sewer service in an oceanfront LBH zoning district. Single family residential lots with centralized water and sewer service in an oceanfront LBH zoning district shall be subject to county engineer review and approval of a site specific engineered grading and drainage plan.

- G. Fill shall not encroach on natural water courses, their floodplains or constructed channels in a manner to adversely affect water bodies or adjacent property owners. Sediment traps, basins and other control measures for limiting erosion shall be installed per a state approved Erosion and Sedimentation Control Plan and shall be reviewed and inspected by county technical staff members
- H. Any development that requires a CAMA Major Development Permit or a Sedimentation and Erosion Control plan shall be subject to the state stormwater runoff policies promulgated in 15 NCAC 2H Section .1000, unless exempted by those regulations.

## **Section 6.10 Sedimentation and Erosion Control**

- A. No zoning, special use, or conditional 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 requiring prior approval of an erosion and sedimentation control plan by the N.C. Sedimentation Control Commission under GS 113A-57(4) [Mandatory Standards for Land Disturbing Activity] unless the commission has certified to the county, either that:
  - 1. An erosion and sedimentation control plan has been submitted to and approved by the commission; or,
  - 2. The commission has examined the preliminary plans for the development and it reasonably appears that an erosion and sedimentation 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 the commission approves the erosion and sedimentation control plan.
- B. 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 may cause or contribute to sedimentation except activities that are exempt under GS 113A-52(6) [Definitions]. Sedimentation occurs whenever solid particulate matter, mineral or organic, is transported by water, air, gravity, or ice from the site of its origin.

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## **Section 6.11 Mandatory Standards for Land Disturbance Activities, Excluding Residential Lots within Planned Unit Developments (10-28, 11/15/10) (10-31, 3/21/11)**

- A. The provisions of this section shall apply to any land disturbance activity regardless of the size of the disturbed area. A fill permit (Chapter 11) is required when filling/grading above any adjacent grade is proposed.
- B. Land disturbing activities, excluding clearing, grubbing and vegetable gardens, shall not be permitted within ten feet from any property line with the exception of drainage and stormwater improvements and underground utilities. Landscaping and fences located within this area are permitted as long as they do not impede the flow of stormwater. Land disturbances on front (street) property lines for driveways shall be limited to culvert, drainage, and driveway improvements and shall comply with all provisions of this ordinance
- C. Fill is not allowed within ten feet of any side or rear property line. Fill is not allowed within ten feet of the front (street) property line except for driveway improvements and as approved by the county engineer excluding single family residential lots with centralized water and sewer service in an oceanfront LBH zoning district. Single family residential lots with centralized water and sewer service in an oceanfront LBH zoning district shall be subject to county engineer review and approval of a site specific engineered grading and drainage plan.
- D. Stormwater ponds, either wet or dry, shall not be located within the ten foot no fill zone, except as approved by the county engineer.
- E. A lot shall not be filled/graded higher than the adjacent grades except for the following:
  - 1. When Albemarle Regional Health Services (ARHS) determines that fill is necessary for a septic system to function properly, the fill area shall be limited to the septic system and drainfield areas and the maximum fill shall not exceed 24 inches.
  - 2. An additional 12 inches of fill above the septic system and drainfield fill may be allowed for the house pad to ensure adequate flow from the building to the septic system.
  - 3. When fill is required to raise the lot elevation to the base flood elevation.
  - 4. When fill is essential to meet the required pad elevation as shown on an approved preliminary plat/grading plan.
- F. All fill shall be established at a slope not to exceed 3:1 (three feet horizontal run for every one foot vertical rise). The toe of the slope shall meet the ten foot setback requirement from all property lines. A permanent ground cover, sufficient to prevent erosion, must be established on all fill slopes as follows:

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1. Prior to issuance of the certificate of compliance for construction projects; or,
  2. For projects where land disturbance activity has ceased for more than six months, whichever occurs first.
- G. Bulkheads or retaining walls shall not be allowed as a method to stabilize or contain fill, except bulkheads established for the purpose of shoreline protection and as otherwise permitted by the county engineer. This shall not include retaining walls used to stabilize or contain existing natural grade when a driveway or walkway is cut into a lot at an elevation lower than existing natural grade.
- H. Any lot requiring a fill permit shall install erosion and sediment control measures to prevent sediment from leaving the site. The erosion and sediment control measures shall be implemented on the site prior to the commencement of land disturbing activities and shall be continuously maintained during the land disturbance phase of development.
- I. In cases of substantial natural grade differences between adjoining lots of the subject property, the county engineer may accept a certified, engineered stormwater plan that deviate from these requirements. The stormwater plan shall verify that the proposed development will not create flooding or nuisance conditions on the lower adjacent lots. In no case shall the rear and side yard no fill zones be encroached upon with fill.
- J. A fill permit issued by the North Carolina Division of Water Quality shall be required to fill any 401 wetlands.
- K. A fill permit issued by the US Army Corp of Engineers shall be required to fill any 404 wetlands.

## **Section 6.12 Stormwater Management System for Individual Lots** (PB 10-31, 3/21/11)

### **6.12.1 General Provisions**

- A. The provisions of this section shall apply to individual lot development that exceeds the maximum allowed lot coverage as provided in Chapter 2 of this ordinance.
- B. The county engineer may authorize up to 15 percent increase in the maximum allowed lot coverage percentage for lots in subdivisions that have a state permitted and functional stormwater management system, or for an individual lot that installs an engineered stormwater management system. A request to exceed the maximum allowed lot coverage percentage shall be submitted to the county engineer and include the following:

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1. A valid North Carolina State Stormwater Permit for the development that specifies allowable lot coverage. Approval of additional lot coverage shall not exceed the state permit or 15 percent increase, whichever is less; or,
2. A stormwater management system to serve the individual lot, prepared by a North Carolina licensed professional engineer, licensed surveyor, or landscape architect.

## 6.12.2 Standards for Stormwater Management System on Individual Lots

The stormwater management system to serve the individual lot shall include architectural and engineering drawings, maps, assumptions, calculations and narrative statements as needed to adequately describe the proposed development of the property and the measures proposed to comply with the county ordinance and the below requirements:

- A. Existing elevations sufficient to determine the drainage patterns on-site and on adjoining site (i.e. contours in one foot intervals).
- B. Locations and elevations of the adjoining street pavement, shoulder ditches, drainage systems, upstream and downstream driveway culverts.
- C. Approximate depth of seasonal high water table.
- D. Stormwater detention to capture a four inch rainfall event from the built-upon area within the drainage area. The drainage area for the purpose of the detention sizing shall include all built-upon area on the subject lot and any runoff received from built-upon areas within 30 feet of the subject property line.
- E. All runoff from built-upon area must be directed into the stormwater management system.
- F. The proposed methods for stabilizing and maintaining stormwater management improvements.
- G. An operational and maintenance plan, approved by the county and maintained by the property owner. The operation and maintenance shall include but is not limited to sediment removal mowing and revegetation of all areas, immediate repair of eroded areas, debris removal and unclogging of any structures.
- H. Engineers Certification (certification must be on the plan):

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On the site plan entitled \_\_\_\_\_, stormwater drainage improvements shall be installed according to these plans and specifications and approved by Currituck County. Currituck County assumes no responsibility for the design, maintenance or the guaranteed performance of the stormwater drainage improvements.

\_\_\_\_\_  
Registered Land Surveyor/Civil Engineer

\_\_\_\_\_  
Date

- I. Certification of Maintenance (certification must be on the plan):  
I hereby certify that I am the owner of the property at \_\_\_\_\_, Currituck County, North Carolina, and I have received the Operation and Maintenance Plan and I am responsible for the continuing maintenance of all required stormwater improvements in accordance to the approved site plan and Operation and Maintenance Plan.

\_\_\_\_\_  
Property Owner

\_\_\_\_\_  
Date

## 6.12.2 Certification of Completion

Upon completion of the stormwater improvements, the engineer must submit the following certification:

Engineers Certification (certification must be on the plan):

On the site plan entitled \_\_\_\_\_, stormwater drainage improvements have been installed according to the plans and specifications and approved by Currituck County. Currituck County assumes no responsibility for the design, maintenance or the guaranteed performance of the stormwater drainage improvements.

\_\_\_\_\_  
Registered Land Surveyor/Civil Engineer

\_\_\_\_\_  
Date