

Decision Paper

Written by: Jon Harrah

1/9/2018

1. SUBJECT: First Reading of Ordinance #18-0864 amendments to Chapter 14 Flood Damage Prevention.
2. PURPOSE: Amending text per SC DNR based off the recent Community Assistance Visit on September 28, 2017 and to comply with the recommendation for flood mitigation from SCDNR.
3. ASSUMPTIONS:
 - a. Town Council desires compliance with the recommendations for flood mitigation from South Carolina Department of Natural Resources (SCDNR).
 - b. Town Council desires to resolve conflicts in town code.
4. FACTS:
 - a. Put the Town's flood ordinance in compliance with the recommendation from SC DNR.
 - b. Community Assistance Report states serious problems with the community's floodplain management regulations.
 - c. The amendments update accessory structures, changes the date of existing construction and delete section 14-18(6) c.
 - d. Conflicts within Section 14-17(6) requires average grade of adjacent lots, survey, etc. for X, X shaded and AE Zones, then further states this requirement shall not apply to Coastal A, V and VE zones as no fill shall be allowed. Under Coastal high hazard areas Section 14-22 (6), there shall not be fill material used as structural support. Non-compact fill may be used around the perimeter of a building. As provide by SCDNR Model.
 - e. Redundant wording in Section 14-18(4)(5) enclosures are listed under Section 14-22(14) for Coastal A, V and VE zones.
 - f. Section 14-18 pertains to AE zones, Section 14-18(7)(g), Fill may not be uses as structural support in V, VE, Coastal A zones is stated in 14-22(6).
 - g. Town Attorney has reviewed the amendments and recommends that Town Council adopt as presented.
5. RECOMMENDATION: Town Council to make a motion to adopt first reading of ordinance #18-0864 as presented.

12/12/2017 Council Meeting Discussion
1/9/2018 Council Meeting
1/23/2018 Council Meeting

considered a separate building and must comply with the standards for new construction. Compliance with mandatory building or zoning codes is also required.

~~*Critical facility.* A structure or other improvement that, because of its function, size, service area, or uniqueness, has the potential to cause serious bodily harm, extensive property damage, or disruption of vital socioeconomic activities if it is destroyed or damaged or if its functionality is impaired. Critical facilities include but are not limited to fire stations, police stations, hospitals, residential health care facilities, electrical transmission switching stations and distribution substations, main telephone switching office, and hazardous materials storage sites. Sanitary sewer pump stations are not considered a critical facility for the purpose of this chapter.~~

Critical Development – development that is critical to the community's public health and safety, is essential to the orderly functioning of a community, store or produce highly volatile, toxic or water-reactive materials, or house occupants that may be insufficiently mobile to avoid loss of life or injury. Examples of critical development include jails, hospitals, schools, fire stations, nursing homes, wastewater treatment facilities, water plants, and gas/oil/propane storage facilities.

Executive Order 11988 (Floodplain Management) - Issued by President Carter in 1977, this order requires that no federally assisted activities be conducted in or have the potential to affect identified special flood hazard areas, unless there is no practicable alternative.

~~*Existing construction.* Means, for the purposes of determining rates, structures for which the start of construction commenced **December 17, 1979** before the initial FIRM date, or before January 1, 1975, for FIRMs effective before that date.~~

~~*Flood-resistant material.* Any building material capable of withstanding direct and prolonged contact (minimum seventy-two (72) hours) with floodwaters without sustaining damage ~~that which~~ requires more than low-cost cosmetic repair. Any material ~~that which~~ is water soluble or is not resistant to alkali or acid in water, including normal adhesives for above-grade use, is not flood-resistant. Pressure-treated lumber or naturally decay-resistant lumber are acceptable flooring materials. Sheet-type floor coverings ~~that which~~ restrict evaporation from below and materials ~~that which~~ are impervious, but dimensionally unstable are not acceptable. Materials ~~that which~~ absorb or retain water excessively after submergence are not flood-resistant. Please refer to Technical Bulletin 2, *Flood Damage-Resistant Materials Requirements*, dated 8/08, and available from the Federal Emergency Management Agency. -93, Flood-Resistant Materials for Buildings Located in Special Flood Hazard Areas in Accordance with the National Flood Insurance Program, document number FIA-TB-2, date 4/93, and available from the Federal Emergency Management Agency. Class 4 and 5 materials, referenced therein, are acceptable flood-resistant materials.~~

Increased Cost of Compliance (ICC) – applies to all new and renewed flood insurance policies effective on and after June 1, 1997. The NFIP shall enable the

purchase of insurance to cover the cost of compliance with land use and control measures established under Section 1361. It provides coverage for the payment of a claim to help pay for the cost to comply with State or community floodplain management laws or ordinances after a flood event in which a building has been declared substantially or repetitively damaged.

Lowest Adjacent Grade (LAG) - is an elevation of the lowest ground surface that touches any deck support, exterior walls of a building or proposed building walls.

~~North American Vertical Datum (NAVD). Datum point established at Pointe-au-Pere on the St. Lawrence River, Quebec Province, Canada, based on the mass or density of the earth. The datum listed as the reference datum on flood insurance rate maps should be used for elevation certificate and floodproofing certificate completion.~~

Sec. 14-13. - Designation of local administrator.

The ~~planning, building and zoning director or his/her designee~~ **floodplan manager, shall be ASFPM Certified Floodplan Manager** is hereby appointed to administer and implement the provisions of this chapter.

Sec. 14-14. - Development permit and certification requirements.

(l) A certified survey providing the following information:

a. If the permit includes a new building or an expansion of an existing building ~~the plot plan or a survey~~ must show the footprint of all existing and proposed buildings and building additions;

Sec. 14-15. - Duties and responsibilities of the local administrator.

Duties of the local administrator shall include, but not be limited to:

(13) **Adjoining Floodplains** - Cooperate with neighboring communities with respect to the management of adjoining floodplains and/or flood-related erosion areas in order to prevent aggravation of existing hazards.

(14) **Notifying Adjacent Communities** – Notify adjacent communities prior to permitting substantial commercial developments and large subdivisions to be undertaken in areas of special flood hazard and/or flood-related erosion hazards.

(15) **Federally Funded Development** - The President issued *Executive Order 11988, Floodplain Management May 1977*. E.O. 11988 directs federal agencies to assert a leadership role in reducing flood losses and losses to environmental values served by floodplains. Proposed developments must go through an eight-step review process. Evidence of compliance with the executive order must be submitted as part of the permit review process.

(16) **Substantial Damage Determination** – Perform an assessment of damage from any origin to the structure using FEMA's Residential Substantial Damage Estimator (RSDE) software to determine if the damage equals or exceeds 48 percent of the market value of the structure before the damage occurred.

(17) **Substantial Improvement Determinations** – Perform an assessment of permit applications for improvements or repairs to be made to a building or structure that equals or exceeds 48 percent of the market value of the structure before the start of construction. Cost of work counted for determining if and

when substantial improvement to a structure occurs shall be cumulative for a period of five years. If the improvement project is conducted in phases, the total of all costs associated with each phase, beginning with the issuance of the first permit, shall be utilized to determine whether "substantial improvement" will occur.

The market values shall be determined by one of the following methods:

1. the current assessed building value as determined by the county's assessor's office or the value of an appraisal performed by a licensed appraiser at the expense of the owner within the past 6 months.
2. one or more certified appraisals from a registered professional licensed appraiser in accordance with the laws of South Carolina. The appraisal shall indicate actual replacement value of the building or structure in its pre-improvement condition, *less the cost of site improvements and depreciation for functionality and obsolescence.*
3. Real Estate purchase contract within 6 months prior to the date of the application for a permit.

Sec. 14-16. – Administrative Procedures.

(a) *Inspections of work in progress.* As the work pursuant to a permit progresses, the local floodplain administrator or his designee 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 any premises within the territorial jurisdiction at any reasonable hour for the purpose of inspection or other enforcement action. A minimum of three (3) inspections shall be performed for each permitted development project in the regulated floodplain

(j) **Denial of Flood Insurance under the NFIP:** If a structure is declared in violation of this ordinance and after all other penalties are exhausted to achieve compliance with this ordinance then the local floodplain administrator shall notify the Federal Emergency Management Agency (FEMA) to initiate a Section 1316 of the National Flood insurance Act of 1968 action against the structure upon the finding that the violator refuses to bring the violation into compliance with the ordinance. Once a violation has been remedied the local floodplain administrator shall notify FEMA of the remedy and ask that the Section 1316 be rescinded.

(k) The following **documents** are incorporated by reference and may be used by the local floodplain administrator to provide further guidance and interpretation of this ordinance as found on FEMA's website at www.fema.gov:

- 1) FEMA 55 Coastal Construction Manual
- 2) All FEMA Technical Bulletins
- 3) All FEMA Floodplain Management Bulletins
- 4) FEMA 348 Protecting Building Utilities from Flood Damage
- 5) FEMA 499 Home Builder's Guide to Coastal Construction Technical Fact Sheets

Sec. 14-17. - Flood hazard reduction standards.

- (1) **Review all permit applications to determine whether proposed building site will be reasonable safe from flooding.** All new construction, additions and/or substantial improvements shall conform to the requirements contained in the latest adopted International Building Code or International Residential Code, whichever is applicable and anchored to prevent flotation, collapse, or lateral movement of the structure.
- (2) All new construction, additions and/or substantial improvements shall be constructed with flood-resistant materials and utility equipment resistant to flood damage **in accordance with Technical Bulletin 2, Flood Damage—Resistant Materials Requirement, dated 8/08, and available from the Federal Emergency Management Agency.**
- (6) Non-commercial developable lots located in the X, X shaded and AE flood zones shall have an average grade of all adjacent lots. A foundation/current conditions survey shall be provided and approved prior to the foundation being poured or piers being filled prior to additional inspections being performed. Adjacent lot grades shall be measured at a minimum of 20 feet into all adjacent lots.

~~This requirement shall not apply to Designated Coastal A Zones, V, and VE zones as no fill shall be allowed in these Special Flood Hazard Areas (SFHA).~~

~~(14) Flood proofing or wet proofing as a flood protection measure shall be prohibited. All structures (including non-residential) shall be required to elevate to the base flood elevation plus three (3) feet~~

~~(21) Recreational vehicles. Shall not be permitted within the SFHA.~~

A. A recreational vehicle is ready for highway use if it is:

1. on wheels or jacking system
2. attached to electrical for maintenance only
3. has no permanently attached additions

B. Recreational vehicles on sites shall either be

1. On site for fewer than 90 consecutive days or
2. be fully licensed and ready for highway use, or meet the development permit and certification requirements of Sect 14-15, general standards outlined in Sec. 14-17.

(24) Critical Development - shall be elevated to the 500 year flood elevation or be elevated to the highest known historical flood elevation (where records are available), whichever is greater. If no data exists establishing the 500 year flood elevation or the highest known historical flood elevation, the applicant shall provide a hydrologic and hydraulic engineering analysis that generates 500 year flood elevation data,

(26) Water Supply Systems - All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system,

Sec. 14-18. - Specific standards.

- (4) Elevated buildings

(b) Enclosures below lowest floor in AE zones:

~~5.—Enclosures of any kind shall be prohibited in the V, VE, or V130 and Coastal A zone except for elevators and open stairways.~~

(6) *Floodways.* Located within areas of special flood hazard established in section 14-4, are areas designated as floodway. The floodway is an extremely hazardous area due to the velocity of floodwaters, which carry debris and potential projectiles and has erosion potential. The following provisions shall be presented to the local administrator:

~~c. Stream crossing for any purpose (i.e., timber harvesting operations), if temporary, shall be permitted. Otherwise, the development shall comply with all applicable flood hazard reduction provisions.~~

(7) Fill.

~~g. Fill may not be used for structural support in the coastal high hazard areas (V, VE, or V130).~~

~~Sec. 14-21. Standards for areas of shallow flooding (AO zones).~~

~~Located within the areas of special flood hazard established in section 14-4, are areas designated as shallow flooding. The following provisions shall apply within all such areas in addition to those requirements set forth in section 14-17 of this chapter:~~

~~(1) All new construction, addition and substantial improvements of residential structures shall have the lowest floor elevated to at least as high as the depth number specified on the flood insurance rate map, in feet above the highest adjacent grade. If no depth number is specified, the lowest floor shall be elevated at least three (3) feet above the highest adjacent grade.~~

~~(2) All new construction, addition and substantial improvements of nonresidential structures shall:~~

~~Have the lowest floor elevated to at least as high as the depth number specified on the flood insurance rate map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor shall be elevated at least three (3) feet above the highest adjacent grade; or~~

~~(3) All structures on slopes must have drainage paths around them to guide water away from the structures.~~

~~Sec. 14-22. - Coastal high hazard areas (V, VE, or V130 and Coastal A zones)~~

~~(6) There shall not be fill material used as structural support. Non-compacted fill **minor grading, and the placement of minor quantities of fill** may be used around the perimeter of a building for landscaping/aesthetic purposes **and for drainage purposes under and around buildings and for support of parking slabs, pool decks, patios and walkways** 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. Only beach-compatible sand may be used. Parking slabs under structures shall be designed without grade beams, a maximum of four (4) inches in thickness, designed to break apart during storm surge scouring. The local administrator shall approve design plans for landscaping aesthetic fill only after the~~

applicant has provided analysis by an engineer and/or soil scientist, which demonstrates that the following factors have been fully considered:

- a. Particle composition of fill material does not have a tendency for excessive natural compaction;
- b. Volume and distribution of fill will not cause wave deflection to adjacent properties; and
- c. Slope of fill will not cause wave run-up or ramping.

, shall be permitted for landscaping

~~(10) Recreational vehicles shall not be permitted in coastal high hazard areas.~~

ARTICLE II. - VARIANCE PROCEDURES

Sec. 14-30. - Effect on rights and liabilities under the existing flood damage prevention ordinance.

This chapter in part comes forward by reenactment of some of the provisions of the flood damage prevention ordinance enacted ~~June 21, 1988~~ **November 10, 2014**, as amended, and it is not the intention to repeal but rather reenact 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 chapter shall not affect any action, suit, or proceeding, instituted or pending. All provisions of the flood damage prevention ordinance of the Town of Surfside Beach enacted on June 21, 1988, as amended, which are not reenacted herein, are repealed.

SEVERABILITY. If any provision, clause, sentence, or paragraph of this ordinance or the application thereof to any person or circumstances shall be held invalid, that invalidity shall not affect the other provisions of this article, which can be given effect without the invalid provision or application, and to this end the provisions of this article are declared to be severable.

EFFECT OF SECTION HEADINGS. The headings or titles of the sections hereof shall be solely for convenience of reference and shall not affect the meaning, construction, interpretation or effect of this ordinance.

REPEAL AND EFFECTIVE DATE. All ordinances or parts of ordinances inconsistent with this ordinance are hereby repealed. This ordinance shall take effect immediately upon approval at second reading by the Town Council of the Town of Surfside Beach, South Carolina.

BE IT ORDERED AND ORDAINED by the Mayor and Town Council of the Town of Surfside Beach, South Carolina, in assembly and by the authority thereof, this _____ day of _____ 2018.

Surfside Beach Town Council

VOTE: Yes No

Robert F. Childs, III, Mayor

Ron Ott, Mayor Pro Tempore

Timothy T. Courtney, Town Council

Mark L. Johnson, Town Council

David L. Pellegrino, Town Council

Julie M. Samples, Town Council

Randle M. Stevens, Town Council

Attest:

Debra E. Herrmann, CMC, Town Clerk

DRY