ORDINANCE NO. 4-2017

AN ORDINANCE AMENDING THE CITY OF HANAHAN’S FLOOD DAMAGE PREVENTION ORDINANCE

WHEREAS, it has been determined that the City of Hanahan Flood Damage Prevention Ordinance be revised to comply with the Community Rating System Program (CRS); and,

WHEREAS, the City of Hanahan Staff, has revised and prepared text changes to the City’s Flood Damage Prevention Ordinance, for adoption;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HANAHAN, SOUTH CAROLINA:

Section 1. Amend the City of Hanahan's Flood Damage Prevention Ordinance.

Adopted and approved this the 14th day of November, 2017.

Minnie Newman, Mayor

ATTEST:

Kim Peters, Clerk of Council

Introduced by: Larry Studium

First Reading and Public Hearing: 10 October 2017

Second Reading: 14 November 2017
City of Hanahan
Flood Damage Prevention Ordinance
CITY OF HANAHAN
FLOOD DAMAGE PREVENTION ORDINANCE

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Article 1. GENERAL PROVISIONS

Section 100 Statutory Authorization. The legislature of the State of South Carolina has in S.C. Code of Laws, Title 5, Chapters 7, 23 and 25 (Articles 5 and 7) and Title 6, Chapter 7, and amendments thereto, 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 mayor and council of the City of Hanahan, South Carolina does ordain as follows:

Section 110 Findings of Fact. The flood hazard areas of the City of Hanahan 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.

Furthermore, these flood losses are caused by the cumulative effect of obstruction in floodplains causing increased flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood proofed, or otherwise unprotected from flood damage.

Section 120 Statement of Purpose and Objectives. It is the purpose of this chapter to protect human life and health, minimize property damage, and encourage appropriate construction practices to minimize public and private losses due to flood conditions by requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction. Uses of the floodplain which are dangerous to health, safety, and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion are restricted or prohibited. The provisions attempt to control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters, and control filling, grading, dredging and other development which may increase flood damage or erosion. Additionally, the article prevents or regulates the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

The objectives of this chapter are to protect human life and health, to help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas, and to ensure that potential home buyers are notified that property is in a flood area. The provisions of the article are intended to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, and sewer lines, streets and bridges located in the floodplain, and prolonged business interruptions. Also, an important floodplain management objective of this chapter is to minimize expenditures of public money for costly flood control projects and rescue and relief efforts associated with flooding.

Floodplains are an important asset to the community. They perform vital natural functions such as temporary storage of floodwaters, moderation of peak flood flows, maintenance of water quality, groundwater recharge, prevention of
erosion, and habitat for diverse natural wildlife populations, recreational opportunities, and aesthetic quality. These functions are best served if floodplains are kept in their natural state. Wherever possible, the natural characteristics of floodplains and their associated wetlands, especially floodways and stream channels, should be the result of careful planning processes which evaluate resource conditions and human needs.

Section 130 Land to Which this Chapter Applies. This chapter shall apply to all areas of special flood hazard within the jurisdiction of City of Hanahan as identified by the Federal Emergency Management Agency in its flood insurance study, date October 16, 2003, as published by the Federal Emergency Management Act, with accompanying flood insurance rate maps and other supporting data, which are hereby adopted by reference and declared to be a part of this chapter. Upon annexation, any special flood hazard areas identified by the Federal Emergency Management Agency in its flood insurance study for the unincorporated areas of Berkeley County, with accompanying map and other data, are adopted by reference and declared part of this chapter.

Non-residential and residential structures must be constructed so that the lowest floor, including basements if permitted, is located no lower than the base flood elevation plus two (2) feet. No environmentally conditioned space shall be allowed below the lowest floor. Floodproofing shall not be permitted within the City.

This chapter shall also apply to areas outside of the special flood hazard areas as prescribed in Section 510 of this chapter.

Section 140 Establishment of Development Permit. A development permit shall be required in conformance with the provisions of this chapter prior to the commencement of any development activities.

Section 150 Compliance. No structure or land shall hereafter be located, extended, converted, or structurally altered without full compliance with the terms of this chapter and other applicable regulations.

Section 160 Interpretation. In the interpretation and application of this chapter, all provisions shall be considered as minimum requirements liberally construed in favor of the governing body, and deemed neither to limit nor repeal any other powers granted under state law. 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, which imposes the more stringent restrictions shall prevail.

Section 170 Partial Invalidity and Severability. If any part of this chapter is declared invalid, the remainder of the chapter shall not be affected and shall remain in force.

Section 180 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 on rare
occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land areas outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create a liability on the part of City of Hanahan 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.

Section 190 **Penalties for Violation.** 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 to grants of variance or special exceptions, shall constitute a misdemeanor. Any person or corporation who violates this chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than five hundred dollars ($500.00), or imprisoned for not more than thirty (30) days, or both. Each day such violation continues shall be considered a separate offense. Nothing contained herein shall prevent the City of Hanahan from taking such other lawful action as is necessary to prevent or remedy a violation.

Article II. **DEFINITIONS**

Section 200 **Definition Interpretation.** Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

Section 210 **Definitions.**

*Accessory structure or use.* A structure or use which is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Detached garages, carports, storage sheds, and swimming pools are common urban accessory structures or uses.

*Addition (to an existing building).* An extension or increase in the floor area or height of a building or structure. Additions to existing buildings shall comply with the requirements for new construction, unless the addition, renovation or reconstruction to any building that was constructed prior to the initial flood insurance study for that area, and the addition, renovation or reconstruction does not equal fifty (50) percent of the present tax value of the structure or certified appraisal. Where a fire wall, load-bearing or exterior wall is provided between the addition and the existing building, the additions(s) shall be considered a separate building and must comply with the standards for new construction. Compliance with mandatory building or zoning codes is also required.

*Agricultural structure.* A structure used solely for agricultural purposes in which the use is exclusively in connection with the production, harvesting, storage, drying, or raising of agricultural commodities, including the raising of livestock. Agricultural structures are not exempt from the provisions of this chapter.

*Appeal.* A request for a review of the local administrator's interpretation of any provision of this chapter.
**Area of shallow flooding.** A designated AO or VO zone on a community's flood insurance rate map (FIRM) with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity now may be evident.

**Base flood.** The flood having a one (1) percent chance of being equaled or exceeded in any given year.

**Basement.** Means any enclosed area of a building which is below grade on all sides.

**Building.** See *structure*.

**Crawlspace.** An under-floor space that has its interior floor area (finished or not) no more than 5 feet below the top of the next-higher floor. Crawlspaces generally have solid foundation walls.

**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.

**Development.** Any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

**Elevated building.** A non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns, piers, or shear walls parallel to the flow of water.

**Existing construction.** Means, for the purposes of determining rates, structures for which the start of construction commenced before the initial FIRM date, or before June 15, 1981, for FIRMs effective before that date.

**Existing manufactured home park or manufactured home subdivision.** A manufactured home park or subdivision for which the construction of facilities for services the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site-grading or the pouring of concrete pads) was completed before June 15, 1981.

**Expansion to an existing manufactured home park or subdivision.** The preparation of additional sites by the construction of facilities for servicing the
lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site-grading or the pouring of concrete slabs.)

**Flood.** A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters, or the unusual and rapid accumulation of runoff of surface waters from any source.

**Flood hazard boundary map (FHBM).** An official map of a community issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been identified.

**Flood insurance rate map (FIRM).** An official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

**Flood insurance study.** The official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the flood boundary floodway map and the water surface elevation of the base flood.

**Flood-resistant material.** Any building material capable of withstanding direct and prolonged contact (minimum seventy-two (72) hours) with floodwaters without sustaining damage which requires more than low-cost cosmetic repair. Any material 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 which restrict evaporation from below and materials which are impervious, but dimensionally unstable are not acceptable. Materials which absorb or retain water excessively after submergence are not flood-resistant. Please refer to Technical Bulletin 2-93, 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.

**Flood vent.** A permanent opening in a wall that allows the free passage of water automatically in both directions without human intervention.

**Floodway.** The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

**Freeboard.** A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. “Freeboard” tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.

**Functionally dependent facility.** A facility which cannot be used for its intended
purpose unless it is located or carried out in close proximity to water such as a fishing pier, docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long term storage, manufacture, sales, or service facilities.

**Highest adjacent grade.** The highest natural elevation, as certified by a registered land surveyor or engineer or architect, of the ground surface next to the proposed exterior walls of a structure.

**Historic structure.** Any structure that is:

(a) Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of the Interior (DOI) or preliminary determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

(b) Certified or preliminarily, determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary [of the Interior] to qualify as a registered historic district;

(c) Individually listed on a state inventory of historic places; and

(d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified:

(1) By an approved state program as determined by the Secretary of Interior; or

(2) Directly by the Secretary of Interior in states without approved programs.

Some structures or districts listed on the state or local inventories may not be “historic” as cited above, but have been included on the inventories because it was believed that the structures or districts have the potential meeting the historic structure criteria of the DOI. In order for these structures to meet NFIP historic structure criteria, it must be demonstrated and evidenced that the South Carolina Department of Archives and History has individually determined that the structure or district meets DOI historic structure criteria.

**Limited storage (enclosures).** An area used for storage and intended to be limited to incidental items which can withstand exposure to the elements and have low flood damage potential. Such an area must be offload-resistant or breakaway material, void of utilities except for essential lighting and cannot be temperature controlled. If the area is located below the base flood elevation in an A, AE and A1-A30 zones, it shall meet the requirements of Section 500.4(b) of this chapter. No storage or enclosures shall be permitted below the base flood elevation in a V, VE and V1-V30 and Coastal A zone.
**Lowest floor.** The lowest floor of the lowest enclosed area. Any unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor, provided such an enclosure is not built so as to render the structure in violation of other provisions of this chapter.

**Manufactured home.** A structure, transportable in one (1) or more sections, which is built to HUD standards on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term *manufactured home* does not include a “recreational vehicle” or a South Carolina Building Code Council approved “modular home.”

**Manufactured home park or subdivisions.** A parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale.

**Mean sea level.** Means, for the purpose of this ordinance, the Nations Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988, or other datum, to which the base flood elevations shown on a community's flood insurance rate maps (FIRM) are shown.

**National Geodetic Vertical Datum (NGVD).** As corrected in 1929, elevation reference points set by National Geodetic Survey based on mean sea level.

**North American Vertical Datum (NAVD) of 1988 vertical control,** as corrected in 1988, unused as the reference datum on flood insurance rate maps.

**New construction.** Structure for which the start of the construction commenced on or after June 15, 1981. The term also includes any subsequent improvements to such a structure.

**New manufactured home park or subdivision.** A manufactured home park or subdivision for which the construction of the facilities services the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete slabs) is completed on or after June 15, 1981.

**Non-conversion agreement.** An agreement signed by the owner as a condition of a certificate of occupancy. The owner must agree to not alter the building at a later date so as to violate the building code or flood damage prevention ordinance requirements. The agreement shall be binding upon heirs, grantees, successors and assigns of parties hereto and shall constitute a covenant running with the structure being constructed under said permit. The agreement shall be recorded in the Berkley County Register of Deeds prior to obtaining a certificate of occupancy inspection.

**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.
Special flood hazard area. The area that will be inundated by the flood event having a one (1) percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. SFHAs are labeled as zone A, zone AO, zone AH, zones A1—A30, zone AE, zone A99, zone AR, zone AR/AE, zone AR/AO, zone AR/A1-A30, zone ARIA, zone V, zone VE, and zones V1—V30 and Coastal A.

Start of construction. For other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348), includes substantial improvement, and means the date of the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, or improvement was within one hundred eighty (180) days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for footings, piers or foundations, or the erection of temporary form; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For substantial improvement, the actual start of the construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

Structure. A walled and roofed building, a manufactured home, including a gas or liquid storage tank or other manmade facility, accessory or appurtenance that is principally above the ground. For the purpose of this chapter, swimming pools and solid fencing shall also be included as a structure.

Substantial damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged conditions would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred. Such repairs may be undertaken successively and their costs counted cumulatively. Please refer to the definition of substantial improvement.

Substantial improvement. Any repair, reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the tax or certified appraised value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. Permits shall be cumulative for a period of five (5) years. If the improvement project is conducted in phases, the total of all cost associated with each phase, beginning with the issuance of the first permit, shall be utilized to determine whether “substantial improvement” will occur. The term does not, however, include:

(a) Any project of improvement to a structure to correct existing violations
of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official, and safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions (does not include Americans with Disabilities Act compliance standards); or

(b) Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure. Permits shall be cumulative for a period of five (5) years (ordinary minor repairs do not count towards cumulative permit totals). 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.

Variance. The grant of relief from a term or terms of this chapter.

Violation. The failure of a structure or other development to be fully compliant with these regulations.

Article III. ADMINISTRATION

Section 300 Definition of Local Administrator. The planning, building and zoning director or his/her designee is hereby appointed to administer and implement the provisions of this chapter.

Section 310 Development Permit and Certification Requirements. Application for a development permit shall be made to the local administrator on forms furnished by the City prior to any development activities. The development permit may require, but not be limited to, plans in duplicate drawn to scale showing: the nature, location, dimensions, and elevations of the area in question; existing or proposed structures; and the location of storage areas, and drainage facilities. Specifically, the following information is required:

(1) A certified survey providing the following information:
   a. Scale and north orientation arrow;
   b. Parcel boundaries and the location and names of adjacent streets;
   c. All watercourses on the parcel;
   d. All floodplain, A, A1-A30, AE, V, VE, or V130, Coastal A-zone, and floodway boundaries that run through the parcel certified by a registered land surveyor or professional engineer with the FIRM map number and date the map was enacted;
   e. Flood boundaries/zones must be certified accurate with latest adopted flood map information included;
   f. All required buffer or setback lines from shoreline or channel banks;
   g. All drainage and utility easements;
h. All areas to be cleared, cut or graded;

i. The location of existing and proposed fences, walls and other structures;

j. Show the 100-year floodplain contour or a statement certifying that the entire lot is within the floodplain must be provided by the development permit applicant when the lot is within or appears to be within the floodplain as mapped by the Federal Emergency Management Agency or the floodplain identified pursuant to either Section 320 or Section 520 of this chapter;

k. The survey must be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same;

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

m. As a condition of receiving a building permit a complete stormwater plan with narrative as set forth in Berkley County Stormwater Management regulations shall be submitted and approved with the permit application. This requirement shall apply to all parcels within the City limits.

(2) The survey required by Section 310 must show the floodway, if any, as identified by the Federal Emergency Management Agency or the floodway identified pursuant to Section 500.6 of this chapter.

(3) Where base flood elevation data is provided as set forth in Section 130 or Section 320 of this chapter, the application for a development permit within the flood hazard area shall include an elevation certificate showing the elevation (in relation to mean sea level) of the lowest floor of all new construction, additions, and substantially improved structures.

(4) If no base flood elevation data is provided as set forth in Section 310 or Section 320 of this chapter, the application for a development permit must show construction of the lowest floor at least 18 inches above the highest adjacent grade.

(5) Where any watercourse will be altered or relocated as a result of proposed development, the application for a development permit shall include: 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.

(6) An elevation certificate providing floor elevation is required after the lowest floor is completed. As soon as possible after completion of the lowest floor and before any further vertical construction commences, it
shall be the duty of the permit holder to submit to the local administrator a certification of the lowest floor, as built, in relation to mean sea level. Said 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 prior to submission of the certification shall be at the permit holder's risk. The local administrator shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior additional working being permitted to proceed. Failure to submit the survey or failure to make said corrections required shall be cause to issue a stop work order for the project.

(7) Upon completion of the development, a registered professional engineer or land surveyor, whichever professional is appropriate, shall certify by elevation certificate and any other documentation required that 0 (6) is built in accordance with the submitted plans and previous predevelopment certifications.

(8) A non-conversion agreement shall be required on all buildings within the special flood hazard area when the building is completed and the owner applies for a certificate of occupancy or a use permit. This is done after the final inspection, when the community confirms that the building meets all building code and flood damage prevention ordinance requirements. The agreement must be recorded in the Berkley County Register of Deeds office and a clocked copy must be returned to the City to be filed with the planning, building and zoning department prior to a certificate of occupancy inspection being made. This requirement includes but is not limited to new construction, additions, substantial improvements and renovations.

(9) If the proposed project will impact the configuration of a watercourse, floodway, or base flood elevation for which a detailed flood insurance study has been developed, the applicant shall apply for and must receive approval for a conditional letter of map revision with the Federal Emergency Management Agency prior to actual construction.

Section 320  **Duties and Responsibilities of the Local Administrator.** Duties and responsibilities of the local administrator. Duties of the local administrator shall include, but not be limited to:

(1) Review all development permits to assure that the requirements of this chapter have been satisfied.

(2) Requirements of federal and/or state permits: Review proposed development to assure that all necessary permits have been received from those governmental agencies from 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.

(3) Watercourse alterations:
a. Notify adjacent communities and the South Carolina Department of Natural Resources, Land, Water, and Conservation Division, 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.

b. In addition to the notifications required watercourse alterations per 0 Duties of the Local Administrator, written reports of maintenance records must be maintained to show that maintenance has been provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is maintained. This maintenance must consist of a comprehensive program of periodic inspections, and routine channel clearing and dredging, or other related functions. The assurance shall consist of a description of maintenance activities, frequency of performance, and the local official responsible for maintenance performance. Records shall be kept on file for FEMA inspection.

c. If the proposed project will modify the configuration of the watercourse, floodway, or base flood elevation for which a detailed flood insurance study has been developed, the applicant shall apply for and must receive approval for a conditional letter of map revision with the Federal Emergency Management Agency prior to the start of construction.

d. Within sixty (60) days of completion of an alteration of a watercourse, referenced in the certification requirements of Section 310 of this chapter, the applicant shall submit as-built certification, by a registered professional engineer, to the Federal Emergency Management Agency.

(4) Floodway encroachments—Prevent encroachments within floodways unless the certification and flood hazard reduction provisions of Section 500.6 of this chapter are met.

(5) Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), the administrator shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretations as provided in this article.

(6) When base flood elevation data or floodway data has not been provided in accordance with Section 310 of this chapter, obtain, review, and reasonably utilize best available base flood elevation data and floodway data available from a federal, state, or other sources (including data developed pursuant to Section 530 of this chapter) in order to administer the provisions of this chapter. Data from preliminary, draft and the final flood insurance studies constitutes best available data from a federal, state, or other source. If an appeal is pending on the study in accordance
with 44 CFR Ch. 1, Parts 67.5 and 67.6, the data does not have to be used.

(7) When the exact location of boundaries of the areas of special flood hazards conflict with the current natural topography information at the site, the property owner may apply and be approved for a letter of map amendment (LOMA) by FEMA. A copy of the letter of map amendment issued from FEMA will be maintained by the local administrator in the permit file.

(8) Make on-site inspections of projects in accordance with Section 330 of this chapter.

(9) Serve notices of violations, issue stop work orders, revoke permits, and take corrective actions in accordance with Section 330 of this chapter.

(10) Maintain all records pertaining to the administration of this chapter and make these records available for public inspection.

(11) Annexations. Notify the land resources and conservation districts division, within six (6) months, of any annexations that include special flood hazard areas. The community must incorporate applicable maps from surrounding jurisdictions into this chapter within ninety (90) days of annexation.

Section 330 Administrative Procedures. Duties and responsibilities of the local administrator. Duties of the local administrator shall include, but not be limited to:

(1) Inspections of work in progress. As the work pursuant to a permit work progresses, the local 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. A minimum of three (3) inspections shall be performed for each permitted development project in the regulated floodplain:

The first inspection is conducted when the site is staked out or otherwise marked. A “construction drawings” elevation certification is provided to the City. The inspector checks that areas subject to special requirements are clearly marked on the ground.

The second inspection is conducted when the lowest floor is built for a building or building addition. The builder provides the City with documentation of the surveyed lowest floor elevation (“building under construction” elevation certificate). The inspector checks that:

(a) The foundation or forms for the structure are correctly located on the site;
(b) Where buildings have enclosures below the base flood elevation (permitted in AE zones only), the location and size of the openings are as specified on the approved plans.

The third inspection is conducted when the project is finished; the “finished construction” elevation certificate is submitted, and before the final building inspection. The inspector checks:

(a) The foundation and floor elevation have not been altered since the second inspection;

(b) All areas below the required elevation are constructed with materials resistant to flood damage.

(c) Where buildings have enclosures below the base flood elevation, the location and size of the openings are specified on the approved plans and recorded on the elevation certificate.

(d) All electrical, heating, ventilation, plumbing, air conditioning, ductwork, and other equipment is located, elevated, or protected as specified on the approved plans and recorded on the elevation certificate.

(e) There has been no alteration of the ground since the second inspection or the ground has been graded according to the approved plans.

(2) **Stop work orders.** Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this chapter, the administrator or his designee may order the work to immediately be stopped. The stop work order shall be in writing and directed to the person doing the work. Notification of the property owner is also required. The stop work order shall state the specific work to be stopped, the specific reasons for the stoppage, and the conditions under which the work may be resumed. Violation of a stop work order shall constitute a misdemeanor.

(3) **Revocation of permits.** The local administrator may revoke and require the return of the development permit by notifying the permit holder and owner in writing, stating the reason 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 permit mistakenly issued in violation of an applicable state or local law may also be revoked.

(4) **Periodic inspections.** The local administrator and each member of the inspection 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.
(5) **Violations to be corrected.** When the local administrator finds violations of applicable state and local laws, it shall be his duty to notify the owner of the building of the violation. The owner shall immediately remedy each of the violations of law on the property he owns.

(6) **Actions in event of failure to take corrective action.** If the owner of a structure or property shall fail to take prompt corrective action, the administrator shall give him written notice, by certified or registered mail, to his last known address or by personal service, that:

(a) The building or property is in violation of the flood damage prevention article;

(b) A hearing will be held before the local administrator at a designated place and time, not later than ten (10) days after the date of notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and

(c) Following the hearing, the local administrator may issue such order to alter, vacate, or demolish the structure, or to remove till as appears appropriate.

(7) **Order to take corrective action.** If, upon a hearing held pursuant to the notice prescribed above, the administrator shall find that the structure or development is in violation of the flood damage prevention article, he shall make such an order in writing to the owner, requiring the owner to remedy the violation within such period, not more than sixty (60) days, the administrator may prescribe; provided that where the administrator finds that there is imminent danger to life or other property, he may order that corrective action be taken in such lesser period that may be feasible.

(8) **Appeal.** Any owner who has received an order to take corrective action may appeal from the order of the City of Hanahan Construction Board of Adjustments and Appeals by giving notice of appeal in writing to the local administrator and the clerk within ten (10) days following issuance of the final order. In the absence of an appeal, the order of the administrator shall be final. The local appeals board shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order.

(9) **Failure to comply with order.** If the owner of a structure or property fails to comply with an order to take corrective action from which no appeal has been taken, or fails to comply with an order of the appeals board following an appeal, they shall be guilty of a misdemeanor and shall be punished in the discretion of the court.

**Article IV. FLOOD HAZARD REDUCTION STANDARDS**

**Section 400 General Standards.** Development may not occur in the special flood hazard floodplain where alternative locations exist due to inherent hazards and risks involved. Before a permit is issued, the applicant shall demonstrate that new structures (and additions) cannot be located out of the floodplain and that
encroachments onto the floodplain are minimized. In all areas of special flood hazard, the following provisions are required:

(1) 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.

(3) All new construction, additions and/or substantial improvements shall be constructed by methods and practices that minimize flood damages.

(4) Electrical, ventilation, plumbing, heating and air conditioning equipment (including ductwork), and other service facilities shall be designed and/or located at least two (2) feet above the required base flood elevation so as to prevent water from entering or accumulating within or on the components during conditions of flooding. This requirement does not preclude the installation of outdoor faucets for shower heads, hoses, etc., as long as cutoff devices and backflow devices are installed to prevent contamination of the service components and thereby minimize any flood damages to a structure and contents.

(5) New gas containers shall be buried below grade and anchored to prevent flotation. Existing gas tanks, when replaced, shall be strapped to prevent movement and flotation.

(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.

(7) New and replacement sanitary sewer shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharges from the systems into floodwaters.

(8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

(9) Any alteration, repair, reconstruction, addition or improvement to a structure which is in compliance with the provisions of this chapter, shall meet the requirements of “new construction” as contained in this chapter. This includes post-FIRM development and structures.
(10) Nonconforming structures or uses. Nonconforming structures or uses may not be enlarged, replaced, or rebuilt unless such enlargement or reconstruction is accomplished in conformance with the provisions of this chapter. Use of nonconforming ground floor habitable spaces or walls for an addition of a second floor above the base flood elevation shall not be allowed.

(11) Americans with Disabilities Act (ADA). A building must meet the specific standards for floodplain construction outlined in Section 500 of this chapter as well as any applicable ADA requirements. The ADA is not justification for issuing a variance or otherwise waiving these requirements. Also, the cost of improvements required to meet the ADA provisions shall be included in the costs of the improvements for calculating substantial improvement.

(12) All new construction, additions and/or substantial improvements shall be designed and sealed by a registered design professional as complying with the requirements of the latest adopted International Building Code or International Residential Code, whichever is applicable.

(13) 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 two (2) feet.

(14) New septic systems in floodplains are prohibited.

(15) Critical facilities: Critical facilities as defined in Section 210 of this chapter shall be prohibited in the 500-year flood zone. (Note: The 500-year floodplain includes the entire SFHA plus other land that is lower than the 500-year flood elevation).

(16) Hazardous velocities. Hydrodynamic pressure must be considered in the design of any foundation system where velocity waters or the potential for debris flow exists. Therefore, solid foundation walls shall not be permitted within any special flood hazard area.

(17) All fences crossing floodplain boundaries are subject to flood review. The most restrictive zone crossed by the fence will prevail. All fencing material shall be flood-resistant materials.

(18) There shall be no alteration of sand dunes which would increase potential flood damage.

(19) Swimming pools in special flood hazard area: Pools located within the SFHA shall be built to the following standards:
   a. Swimming pools must meet all applicable requirements set forth in the Zoning Ordinance.
   b. Swimming pools must be sited as far away from the regulatory flood boundary as feasible.
c. Swimming pools beneath a structure in any SFHA must be flush with the natural grade and must be engineered certifying:

1. The swimming pool or other obstruction will not be subject to breaking up or flooding out the ground and affecting the piles or columns of the structure; and
2. The swimming pool shall meet the same anchoring requirements as the support system of the building.

(20) Recreational vehicles shall not be permitted within the SFHA.

(21) Outdoor storage of any kind shall be prohibited within the SFHA.

(22) No basements shall be permitted within the City limits.

Article V. SPECIFIC STANDARDS

Section 500 Specific Standards. In all areas of special flood hazard AE zones where base flood elevation data has been provided, as set forth in Section 310 of this chapter, the following provisions are required in addition to those set forth in Article IV of this chapter:

(1) Residential construction. New construction, addition and substantial improvement of any residential structure (including manufactured homes) shall have the lowest floor elevated not lower than two (2) feet above the base flood elevation. No basements are permitted.

(2) Nonresidential construction.

a. New construction, addition and substantial improvement of any commercial, industrial, or nonresidential structure (including manufactured structures) shall have the lowest floor elevated no lower than three (3) feet above the level of the base flood elevation.

b. A registered professional engineer shall certify that the standards of this Section are satisfied. Such certifications shall be provided to the official as set forth in Section 330 and Section 310 of this chapter. A variance may be considered for wet floodproofing agricultural structures in accordance with the criteria outlined Article II this ordinance. Agricultural structures not meeting the criteria of Article II must meet the non-residential construction standards and all other applicable provisions of this article. Structures that are floodproofed are required to have an approved maintenance plan with an annual exercise. This local floodplain administrator must approve the maintenance plan and notification of the annual exercise shall be provided to it.

(3) Manufactured homes.

a. 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 the elevation standards of specified in Section 500.3(c) of this chapter are met.

b. Manufactured homes that are substantially improved on sites outside a manufactured home park or subdivision, or in an existing manufactured home park or subdivision on which as manufactured home has incurred “substantial damage” as a result of a flood, must be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated no lower than two (2) feet above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and movement.

c. Manufactured homes as permitted in Section 500.3(a) of this chapter shall be anchored to prevent flotation, collapse or lateral movement. For the purpose of this requirement, manufactured homes must be anchored to resist flotation, collapse or lateral movement in accordance with Section 19-425.39 of the South Carolina Manufactured Housing Board Regulations, effective date May 25, 1990, as amended. Additionally, the chassis must be elevated a minimum of two (2) feet above the base flood elevation the chassis shall be supported by reinforced piers or other foundation elements at least equivalent strength.

(4) Elevated buildings. New construction, addition and/or substantial improvements of elevated buildings that include limited enclosures (allowed only in AE flood zones) in an area other than a basement, and which are subject to flooding shall be designed to preclude finished space and designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.

a. Designs for complying with this requirement must be certified by a professional engineer or meet the following minimum criteria:

1. Provide a minimum of two (2) openings on different walls having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;

2. The bottom of all openings shall be no higher than one (1) foot above the higher of the interior or exterior grade immediately under the opening.

3. Only the portion of openings that are below the base flood elevation (BFE) can be counted towards the required net open area.

4. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they permit the automatic flow of floodwaters in both directions;

5. Subgrade crawlspaces are not permitted. Fill placed around foundation walls must be graded so that the
grade inside the enclosed area is equal to or higher than the adjacent grade outside the building on at least one (1) side of the building.

b. Enclosures below lowest floor in AE zones (excluding crawlspaces):
   1. Access to the enclosed area shall be the minimum necessary to allow for limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator). Total enclosed area shall not exceed two hundred ninety (290) square feet. No other enclosures shall be permitted below the required base flood elevation.
   2. The interior portion of such enclosed area shall not be finished or partitioned or finished into separate rooms, must be void of utilities except for essential lighting as required for safety, and cannot be temperature controlled.
   3. One (1) wet location switch and/or outlet connected to a ground fault circuit interrupt breaker may be installed below the required lowest floor elevation as specified in Section 500 of this chapter.
   4. All construction materials below the required lowest floor elevation specified in Section 500 of this chapter shall be of flood-resistant materials.
   5. New construction and substantial improvements with enclosed areas under elevated buildings, shall sign a Declaration of Land Restriction (Non-Conversion Agreement); the agreement shall be recorded on the property deed prior to issuance of the Certificate of Occupancy or final inspection.

c. Hazardous velocities. Hydrodynamic pressure must be considered in the design of any foundation system where velocity waters or the potential for debris flow exists. Therefore, solid foundation walls shall not be permitted.

(5) **Accessory structures.** Any detached accessory structure, the cost of which is greater than three thousand dollars ($3,000.00), must comply with the elevated structure requirements of Section 500.2 and Section 500.5 of this chapter or constructed completely of flood-resistant materials. When accessory structures of three thousand dollars ($3,000.00) or less are to be placed in the floodplain, the following criteria shall be met:

a. Accessory structures shall not be used for human habitation, temporary or otherwise, including office, workshop, sleeping, living, cooking, or restroom areas;
b. Accessory structures shall be constructed of flood-resistant material designed to have low flood damage potential;

c. Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;

d. Accessory structures shall be firmly anchored to prevent flotation, collapse, or lateral movement of the structure;

e. Service facilities such as electrical shall be installed in accordance with Section 400(4) of this chapter.

f. Openings to relieve pressure during a flood event shall be provided below the base flood elevation in accordance with Section 500.4(a) of this chapter.

g. Accessory structures shall comply with City zoning regulations.

h. Detached garages, used for purposes other than parking of vehicles or limited storage, shall meet the requirements of new construction.

*Exception*: Swimming pools shall be allowed meeting Section 400(20) of this ordinance.

(6) **Floodways.** Located within areas of special flood hazard established in Section 310 of this chapter 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:

a. No encroachments, including fill or raised slab foundation, new construction, substantial improvements, additions, and other developments shall 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 local administrator. Raised slab foundation may be utilized in floodways only when no other practical alternative exists.

b. If specified standards in Section 500.6 of this chapter are satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions.

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.

d. 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 the elevation standards of specified in Section 500.3 of this chapter.

e. Permissible uses within floodways may include: general farming, pasture, outdoor plant nurseries, horticulture, forestry, wildlife sanctuary, game farm, and other similar agricultural, wildlife and related uses; also, lawns, gardens, play areas, picnic grounds, hiking and horseback riding trails are acceptable uses, provided that they do not employ structures or fill. The uses listed in this section are permissible only if and to the extent that they do not cause any increase in base flood elevations.

(7) **Fill.** Fill and raised slab construction is discouraged because storage capacity is removed from floodplains. Elevating buildings by other methods should be utilized. An applicant shall prove through engineering analysis that fill is the only alternative to raising the building to at least two (2) feet above the base flood elevation, and that the amount of fill used will not affect the flood storage capacity or adversely affect adjacent properties. Slabs of any kind, including raised slab foundations, or stem walls shall not be utilized in the special flood hazard area. Piers, pilings, or flow-through crawlspaces shall be utilized. The following provisions shall apply to any fill placed in the special flood hazard area:

a. Fill may not be placed in a floodway unless it is in accordance with specified in Section 500.6 of this chapter;

b. Fill may not be placed in tidal or non-tidal wetlands without the required state and federal permits;

c. Fill must consist of soil and rock materials only. Dredged material may be used as fill only upon certification of suitability by a registered professional geotechnical engineer. Landfills, rubble fills, dumps and sanitary fills are not permitted in the floodplain;

d. Fill used to support structures must be certified by a registered professional engineer for "designed and compacted fill" that meets the criteria of (1) Section 1803.5.8 and Section 1804.5 of the International Building Code, (2) Section 2.4 of ASCE 24, or (3) their equivalent); and must be on fill that has appropriate protection from erosion and scour.

e. Fill slopes shall be no greater than two (2) horizontal to one (1) vertical. Flatter slopes may be required where velocities may result in erosion;

f. The use of fill shall not increase flooding or cause drainage problems on neighboring properties;

g. Fill may not be used for structural support in the coastal high hazard areas (V, VE, or V130).
Any unauthorized or construction inconsistent with plans approved by the City will be required to return the area to original conditions. This requirement includes existing properties.

Section 510 Standards for Area Outside of the Special Flood Hazard Area (SFHA). Other areas of the City are subject to periodic inundation of floodwaters due to acts of nature, stormwater drainage and other issues. These properties, although outside of the SFHA, need to be protected. The City wishes to minimize any potential lost due to periodic flooding by enforcing certain requirements within the 100-year and 500-year flood zones. These flood zones have no base flood elevation data therefore the following requirements are to be enforced on all new construction and additions:

(1) Minimum finished floor elevation.
   a. All new non-commercial structures, not located in a special flood hazard area, shall have the lowest floor and all mechanical or electrical equipment, such as compressors, air conditioning units, etc., elevated not less than 18 inches above the highest adjacent grade of the lot. Final site grading shall insure that ponding of stormwater will not occur beneath the building, nearer than three feet from the building’s perimeter or any mechanical or electrical equipment.
   b. All new commercial structures, not located in a special flood hazard area, shall have the lowest floor and all mechanical or electrical equipment, such as compressors, air conditioning units, etc., elevated not less than 18 inches above the centerline of the road. Final site grading shall insure that ponding of stormwater will not occur beneath the building, nearer than three feet from the building’s perimeter or any mechanical or electrical equipment.

(2) Enclosed crawl space construction must be designed and certified by a professional engineer or meet the following minimum criteria:
   a. Provide a minimum of two (2) flood vents on different walls having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;
   b. The bottom of all flood vents shall be no higher than one (1) foot above the higher of the interior or exterior grade immediately under the opening,
   c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.

(3) The installation of outdoor faucets for shower heads, hoses, etc., are permitted as long as cutoff devices and backflow devices are installed to prevent contamination of the service components and thereby minimize any flood damages to a structure and contents;
(4) Gas containers shall be strapped and anchored to prevent movement and flotation or buried below grade and anchored to a reinforced footing.

Section 520 Standards for Subdivision Proposals. All subdivision proposals and other proposed new development shall be consistent with the need to minimize flood damage and are subject to all applicable standards in these regulations.

(1) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage. An access road at or above the base flood elevation shall be provided to allow emergency access during flood conditions.

(2) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.

(3) Base flood elevation data shall be provided for all subdivision proposals of fifty (50) lots or more than five (5) acres or greater.

(4) All residential subdivision proposals having fifty (50) lots or more shall be required to provide an approved evacuation plan.

Section 530 Standards for Areas of Shallow Flooding (AO Zones). Located within the areas of special flood hazard established in Section 130 of this chapter are areas designated as shallow flooding. The following provisions shall apply within all such areas in addition to those requirements set forth in Article IV 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.

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

Article VI. VARIANCE PROCEDURES

Section 600 Establishment of Appeals Board. The construction board of adjustments and appeals as established by the City of Hanahan shall hear and decide requests for variances from the requirements of this chapter.

Section 610 Right to Appeal. Any person aggrieved by the decision of the appeal board or any taxpayer may appeal such decision to court.
Section 620  **Historic Structure.** Variances may be issued for 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 the variance is the minimum necessary to preserve the historic character and design of the structure.

Section 630  **Consideration.** In passing upon such applications, the appeal board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of the article 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, and the safety of access to the property in times of flood for ordinary and emergency vehicles;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage to 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, 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, and the relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
8. 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;
9. 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; and
10. Agricultural structures must be located in wide, expansive floodplain areas, where no other alternative location for the agricultural structure exists. The applicant must demonstrate that the entire farm acreage, consisting of a contiguous parcel of land on which the structure is to be located, must be in the special flood hazard area and no other alternative locations for the structure are available.

Section 640  **Findings.** Findings listed above shall be submitted to the appeal board, in writing, and included in the application for a variance. Additionally, comments from the department of natural resources, land resources and conservation districts division, state coordinator's office, must be taken into account an included in the permit file.
Section 650  **Floodways.** Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

Section 660  **Conditions.** 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 of this chapter. The following conditions shall apply to all variances:

1. Variances may 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 only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

3. Variances shall only be issued upon a showing of good and sufficient cause, a determination that failure to grant the variance would result in exceptional hardship, and a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create a nuisance, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.

4. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built and a written statement that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. Such notification shall be maintained with a record of all variance actions.

5. The local administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

6. Variances shall not be issued for any structure or development begun without proper permits that is not in compliance with the provisions of this chapter. Violations shall be corrected in accordance with Section 330(5) of this chapter.

**Article VII. LEGAL STATUS PROVISION**

Section 700  **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, 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 City of Hanahan enacted on April 14, 1981, as amended, which are not reenacted herein, are repealed.

Section 710  **Effect upon Outstanding Building Permits.** Nothing herein contained shall require any change in the plans, construction, size or designated use of any building, structure or part thereof for which a building permit has been granted.
by the building official or his 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 sixty (60) days subsequent to the passage of this chapter, construction or use shall be in conformity with the provisions of this chapter.

Section 720 Effective Date. This chapter shall become effective upon adoption.