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**CITY OF BEAUFORT**  
DEPARTMENT REQUEST FOR CITY COUNCIL AGENDA ITEM

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**TO:** CITY COUNCIL **DATE:** 2/3/2021  
**FROM:** Bill Prokop and Reece Bertholf  
**AGENDA ITEM TITLE:** Intergovernmental Agreement (IGA) with Beaufort County for Special Projects and Associated Services  
**MEETING DATE:** 2/9/2021  
**DEPARTMENT:** City Managers Office

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*BACKGROUND INFORMATION:*

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***PLACED ON AGENDA FOR:*** Discussion

***REMARKS:***

**ATTACHMENTS:**

Description	Type	Upload Date
Memo from Bill Prokop, City Manager	Cover Memo	2/3/2021
IGA	Cover Memo	2/3/2021

William A. Prokop  
**CITY MANAGER**  
843-525-7070  
FAX 843-525-7013



**CITY OF BEAUFORT**  
1911 Boundary Street  
BEAUFORT, SOUTH CAROLINA 29902

**COUNCIL MEMBERS:**  
Stephen D. Murray III, Mayor  
Phil Cromer, Interim Mayor Pro Tem  
Mitch Mitchell  
Neil Lipsitz

To: City Council

From: Bill Prokop, City Manager

Date: 2/1/2021

Subject: Background on the Special Projects IGA with Beaufort County

This agreement has been in the works for almost six months and the discussion started with Jared Fralix, Ashley Jacobs, and me. The main purpose was to find a way that our two organization could work together and utilize skills, talent and services that could be shared.

This is a way to share services, and to reduce cost for both our organizations. This IGA is prepared so that the service can come from the County to the City or from the City to the County. For the last several years Jared has been providing us with Sr. Engineering advice and project review on Boundary Street and all our Stormwater projects. In addition, he has worked closely with us in the preparation of grant applications. At the same time the City has managed the "Project Management" part of the projects, has agreed to manage the walkway construction to the White Hall park, and has maintained close to 50% of the traffic lights North of the Broad working with the County and the State DOT.

The agreement is set up so that each project will have an agreed cost finalized before a project begins as well as a clear understanding as to the time involved and project completion dates.

In effect this is formalizing what we have been doing and from the City's point of view saving us the cost of hiring a full-time engineer to provide the technical services that will be needed. I see this as a win - win for both the County and the City and feel that Council should approve it.

Like everything this may not work in the long-term and we may have to hire our own engineer but for the next few years I feel this is a very workable program.

Regards,

Bill

**STATE OF SOUTH CAROLINA )**  
**)**  
**)**  
**COUNTY OF BEAUFORT )**

**INTERGOVERNMENTAL AGREEMENT**  
**SPECIAL PROJECTS AND ASSOCIATED**  
**SERVICES**

THIS INTERGOVERNMENTAL AGREEMENT (IGA) is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2020 by and between the City of Beaufort, South Carolina, (hereinafter referred to as the "City"), and Beaufort County, South Carolina (hereinafter referred to as the "County").

WHEREAS, the City and County seek to establish an agreement whereby the County and City may offer aid and assistance to each other for the engineering and construction management of Special Projects and Associated Services; and

WHEREAS, the City and County agree that Special Projects and Associated Services include Project Management, Inspection Services, Community Relations, Utility Service Agency Coordination, Maintenance and Public Affairs related to those projects which have a defined beginning and conclusion; and

WHEREAS, both the County and the City recognize they possess less capability and capacity when operating separately but greater capability and capacity when leveraging their collective strengths together for well-defined projects or tasks; and

WHEREAS, pending County Council and City Council approval of the annual budget, both intend to possess adequate funds to adequately resource anticipated mutual support; and

WHEREAS, the County and the City agree to provide an annual fee schedule based on the hourly rate plus a percentage for benefits, for each respective personnel involved in carrying out said duties for the service provided prior to the commencement of the fiscal year in which requested support commences; and

WHEREAS, the County and the City both retain the option of agreeing to execute this IGA or leveraging other solutions based on the best interests of the City or County respectively; and

WHEREAS, the County and City will perform a cost benefit analysis for each project or tasking to fully understand the true costs of the service provided before approving execution of support by the County or City for the benefit of the County or City; and

WHEREAS, the County and City jointly agree on a timetable for providing support prior to the execution of support by the County or City for the benefit of the County or City; and

WHEREAS, pursuant to S.C. Code of Laws Sections 4-9-40, and 6-1-20, and Article VIII Section 13 of the State of South Carolina Constitution, cities and counties may enter into agreements to provide for joint services when mutually desirable; and

NOW, THEREFORE, the below listed agreement is established to better serve the needs of both the County or City with respect to Special Projects and Associated Services within the County, City or both.

## SECTION 1 - DEFINITIONS

A. AUTHORIZED REPRESENTATIVE - Shall be the County Administrator, the City Manager or a designated employee of entity who is authorized the County Administrator or City Manager in writing by that government to request, offer, or provide assistance under the terms of this Agreement.

B. PERIOD OF ASSISTANCE: The period of time beginning with the authorization by the County or City to perform Special Projects or Associated Services following a clear understanding of cost, codified by joint memorandum, by both the County and City.

## SECTION 2 - PROCEDURES

A. REQUEST FOR ASSISTANCE: The County or the City may initiate informal discussions at the Staff level with staff counterparts to secure basic support and cost data elements. These informal discussions will provide the facts required for Staff to brief senior management at both the County and City. Once approved by both the County and City, a joint memorandum will be drafted by the requesting organization, either the County or City for signature by authorized representatives of both the County and City.

C. INSPECTION: Once authorized by the requesting organization to perform work, the organization providing the service will provide weekly updates on the status of the assigned task. The staff member responsible for executing that requested support will inform leadership of the progress in order to ensure projects remain on schedule and within the agreed upon budget.

D. SUPERVISION AND CONTROL: The personnel, equipment and resources of the County or City shall remain under operational control of the County or City based on who requests support and who is receiving support for all work being done under this agreement. The designated supervisory personnel of the organization providing support shall: maintain daily personnel time records, material records, and a log of equipment hours; be responsible for the operation and maintenance of the equipment and other resources furnished by the supporting organization; and shall report work progress to the organization receiving the requested support.

E. COMMUNICATIONS: Unless specifically instructed otherwise, the organization providing requested support shall have the responsibility for coordinating communications between the personnel of both the County and the City.

F. INVOICES: Based on which organization is providing support, invoices shall be submitted to the organization receiving support when a particular project or task has been completed or in a way agreed upon by both the County and City by way of the project authorization joint memorandum.

G. PAYMENT: Based on which organization provides support, invoices shall be paid, or advise of any disputed items, not later than thirty (30) days following the billing date.

### SECTION 3 - INSURANCE

Each Party to this agreement shall bear the risk of its own actions, as it does with its day-to-day operations, and determine for itself what kinds of insurance, and in what amounts, it should carry. Each party shall be solely responsible for determining that its insurance is current and adequate prior to providing assistance under this Agreement.

### SECTION 4 - LIABILITY

Each Party to this Agreement shall be responsible for any and all claims, demands, suits, actions, damages, and causes of action related to or arising out of or in any way connected with its own actions, and the actions of its personnel, in providing mutual aid assistance rendered or performed pursuant to the terms and conditions of this Agreement.

### SECTION 5 - TERM

The initial term of this Agreement shall be for two (2) years from the date approved by both the County and City Council, with the option to renew for three additional one (1) year renewal terms, for a total not to exceed five (5) years. This agreement may be terminated upon sixty (60) days advance written notice by the Parties to this agreement. Notice of termination shall not relieve the withdrawing Party from obligations incurred hereunder prior to the effective date of the withdrawal.

### SECTION 6 - SEVERABILITY: EFFECT ON OTHER AGREEMENTS

Should any portion, section, or subsection of this Agreement be held to be invalid by a court of competent jurisdiction, that fact shall not affect or invalidate any other portion, section or subsection; and the remaining portions of this Agreement shall remain in full force and affect without regard to the section, portion, or subsection or power invalidated.

In the event that any parties to this Agreement have entered into other mutual aid agreements or inter-local agreements, those parties agree that said agreements are superseded by this Agreement only for emergency management assistance and activities performed in major disasters, pursuant to this Agreement. In the event that parties to this Agreement have not entered into another mutual aid agreement, and the parties wish to engage in mutual aid, then the terms and conditions of this Agreement shall apply unless otherwise agreed between those parties.

IN WITNESS WHEREOF, the City of Beaufort, South Carolina and Beaufort County, South Carolina, by and through their duly authorized officers have set their hands and seals on this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

**WITNESSES:**

\_\_\_\_\_  
\_\_\_\_\_

**BEAUFORT COUNTY**

**By:** \_\_\_\_\_

**Its:** \_\_\_\_\_

**WITNESSES:**

\_\_\_\_\_  
\_\_\_\_\_

**CITY OF BEAUFORT**

**By:** \_\_\_\_\_

**Its:** \_\_\_\_\_



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**CITY OF BEAUFORT**  
DEPARTMENT REQUEST FOR CITY COUNCIL AGENDA ITEM

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**TO:** CITY COUNCIL **DATE:** 2/2/2021  
**FROM:** Bruce Skipper, Building Official  
**AGENDA ITEM TITLE:** Flood Damage Prevention Ordinance Update  
**MEETING DATE:** 2/9/2021  
**DEPARTMENT:** Community and Economic Development

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**BACKGROUND INFORMATION:**

Status update of ordinance rewrite in response to new FEMA flood maps and presentation of the draft.

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**PLACED ON AGENDA FOR:** *Discussion*

**REMARKS:**

Need to bring to council for first reading February 23rd to meet FEMA deadlines.

**ATTACHMENTS:**

Description	Type	Upload Date
Ordinance_draft	Ordinance	2/5/2021

# The City of Beaufort

## Flood Damage Prevention Ordinance

City of Beaufort, South Carolina

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## **CHAPTER 4. - FLOOD DAMAGE PREVENTION ORDINANCE<sup>171</sup>**

Footnotes:

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**Editor's note**— Ordinance No. O-29-04, adopted Sept. 28, 2004, deleted Ch. 4, Floodplain Regulations, and enacted similar provisions to read as herein set out. Former Ch. 4 derived from Ord. No. O-14-84, adopted Aug. 28, 1984; Ord. No. O-16-86, adopted Sept. 9, 1986; Ord. No. O-06-87, adopted April 14, 1987; and Ord. No. O-30-93, adopted Oct. 12, 1993.

### **ARTICLE I. - GENERAL PROVISIONS**

#### **Sec. 5-4001. - 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 City of Beaufort, Beaufort, South Carolina, does ordain as follows.

#### **Sec. 5-4002. - Findings of fact.**

The flood hazard areas of the City of Beaufort 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 obstructions in floodplains causing increases in 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, floodproofed, or otherwise unprotected from flood damages.

#### **Sec. 5-4003. - Statement of purpose and objectives.**

It is the purpose of this ordinance 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. These provisions attempt to control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters, and control filling, grading, dredging and other development which may increase flood damage or erosion. Additionally, the ordinance 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 ordinance 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 insure that potential home buyers are notified that property is in a flood area. The provisions of the ordinance 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 ordinance is to minimize expenditure 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, 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 and water bodies should be preserved and enhanced. Decisions to alter floodplains, especially floodways and stream channels, should be the result of careful planning processes which evaluate resource conditions and human needs.

**Sec. 5-4004. - Lands to which this ordinance applies.**

This ordinance shall apply to all areas of special flood hazard (Zones A, AE, AH, AO, A1-30, V, and VE) and other areas with the potential of flooding (such as X and Shaded X zones) within the jurisdiction of the City of Beaufort as identified by the Federal Emergency Management Agency in its Flood Insurance Study, dated March 23, 2021, with accompanying maps and other supporting data, which are hereby adopted by reference and declared to be a part of this ordinance.

Upon annexation, any special flood hazard areas identified by the Federal Emergency Management Agency in its Flood Insurance Study for the unincorporated areas of Beaufort County, with accompanying map and other data, are adopted by reference and declared part of this ordinance.

**Sec. 5-4005. - Establishment of development permit.**

A development permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities.

**Sec. 5-4006. - Compliance.**

No structure or land shall hereafter be relocated, constructed, converted, or structurally altered without full compliance with the terms of this ordinance and other applicable regulations.

**Sec. 5-4007. - Interpretation.**

In the interpretation and application of this ordinance 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 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.

**Sec. 5-4008. - Partial invalidity and severability.**

If any part of this ordinance is declared invalid, the remainder of the ordinance shall not be affected and shall remain in force.

**Sec. 5-4009. - 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 on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Beaufort 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.

**Sec. 5-4010. - Penalties for violation.**

Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$500.00 and/or imprisoned for not more than thirty (30) days, or both. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Beaufort from taking such other lawful action as is necessary to prevent or remedy any violation.

**ARTICLE II. - DEFINITIONS**

**Sec. 5-4011. - Definitions.**

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

**Accessory structure.** (Appurtenant Structure) Structures that are 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. Accessory Structures should constitute a minimal investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

**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 as defined in section 5-4032 regardless as to whether the addition is a substantial improvement or not. Where a firewall or loadbearing wall is provided between the addition and the existing building, the addition(s) shall be considered a separate building and must comply with the standards for new construction.

**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 ordinance.

**Appeal.** A request for a review of the local administrator's interpretation of any provision of this ordinance.

**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 to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

**Area of special flood hazard.** The land in the floodplain within a community subject to a one percent or greater chance of being equaled or exceeded in any given year.

**Base flood.** The flood having a one percent chance of being equaled or exceeded in any given year. This is a regulatory standard also referred to as the "100-year flood".

**Base flood elevation (BFE).** The elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year. The BFE is shown on the Flood Insurance Rate Map (FIRM) for zones AE, AH, A1-30, AR, AR/A, AR/AE, AR/A1-30, AR/AH, AR/AO, V1-V30 and VE.

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

**Building.** See Structure. Or any structure built for support, shelter, or enclosure for any occupancy or storage.

**Coastal high hazard area.** An area of special flood hazard extending from offshore to the inland limit of the primary frontal dune along an open coast and any other area subject to velocity wave action from storms or seismic sources.

**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.

**Development.** Any man-made 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.

**Design Flood Elevation (DFE).** The elevation of the highest flood (generally the BFE including freeboard) that a flood protection method is designed to protect against. Also referred to as Flood Protection Elevation. The Design Flood Elevation noted in the City of Beaufort's Flood Damage Prevention Ordinance shall be a minimum of 13 feet which includes a minimum of 1-foot freeboard and is based on the NAVD 1988 datum.

**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.

**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 alternatives.

**Existing construction.** For the purposes of determining rates, structures for which the start of construction commenced before May 20, 1977.

**Existing manufactured home park or manufactured home subdivision.** A manufactured home park or subdivision for which the construction of facilities for servicing 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) is completed before April 26, 1977.

**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 defined as Zone A.

**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 flooring 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, *Flood-Resistant Materials Requirements*, dated 8/08, and available from the Federal Emergency Management Agency. Class 4 and 5 materials, referenced therein, are acceptable flood-resistant materials.

**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 foot.

**Freeboard.** A factor of safety usually expressed in feet above a flood level for the 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 use.** A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

**Highest adjacent grade.** The highest natural elevation of the ground surface, prior to construction, next to the proposed walls of the structure.

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

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of the Interior (DOI)) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register.
- (2) 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 to qualify as a registered historic district.
- (3) Individually listed on a state inventory of historic places.
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified by an approved state program as determined by the Secretary of Interior, or 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 for 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.

**Increased Cost of Compliance (ICC).** Applies to all new and renewed flood insurance policies effective on and after June 1, 1977. 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 claims 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.

**Limited storage.** 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 of flood-resistant or breakaway material, void of utilities except for essential lighting and cannot be temperature controlled. If the area is located below the minimum elevation of 13 feet and located in an A, AE and A1-A30 zone it must meet the requirements of section 5-4031(4), 5-4032(1), and 5-4032(2) of this ordinance. If the area is located below the minimum elevation of 13 feet and located in a V, VE and V1-V30 zone, it must meet the requirements of section 5-4033 (4) of this ordinance.

**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.

**Lowest floor.** The lowest floor of the lowest enclosed area (including basement). 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 that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

**Manufactured home.** A structure, transportable in one or more sections, which is built 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".

**Manufactured home park or subdivision.** 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 National 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 Map (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, used as the reference datum on Flood Insurance Rate Maps.

**New construction.** Structure for which the start of construction commenced after April 26, 1977. The term also includes any subsequent improvements to such structure.

**New manufactured home park or subdivision.** A manufactured home park or subdivision for which the construction of facilities for servicing 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 April 26, 1977.

**Primary frontal dune.** A continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and subject to erosion and overtopping from high tides and waves during coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

**Recreational vehicle.** A vehicle which is: (a) built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projection; (c) designed to be self-propelled or permanently towable by a light duty truck; and, (d) designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.

**Repetitive Loss.** A building covered by a contract for flood insurance that has incurred flood-related damages on 2 occasions during a 10-year period ending on the date of the event for which a second claim is made, in which the cost of repairing the flood damage, on the average, equaled or exceeded 25% of the market value of the building at the time of each such flood event.

**Section 1316 of the National Flood Insurance Act of 1968.** The act provides that no new flood insurance shall be provided for any property found by the Federal Emergency Management Agency to have been declared by a state or local authority to be in violation of state or local ordinances.

**Stable Natural Vegetation.** The first place on the oceanfront where plants such as sea oats hold sand in place.

**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 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 forms; 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 a substantial improvement, the actual start of 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, that is principally above ground.

**Substantial damage.** Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition 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 cost 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 market 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 one (1) year.** 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 term does not, however, include either:

- (1) 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 which are the minimum necessary to assure safe living conditions (does not include American with Disabilities Act compliance standards); or
- (2) Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

**Substantially improved existing manufactured home park or subdivision.** Where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds fifty (50) percent of the value of the streets, utilities and pads before the repair, reconstruction, or improvement commenced.

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

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

**Secs.5-4012—5-4019.Reserved**

## ARTICLE III. - ADMINISTRATION

### Sec. 5-4020. - Designation of local administrator.

The city manager or their designee is hereby responsible for the administration and implementation of the provisions of this ordinance.

### Sec. 5-4021 Adoption of letter of map revisions (LOMR).

All LOMRs that are issued in the areas identified in section 5-4004 of this chapter are hereby adopted.

### Sec. 5-4022. - Development permit and certification requirements.

#### (1) Development Permit:

Application for a development permit shall be made to the local administrator on forms furnished by him or her prior to any development activities. The development permit may include, 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 fill materials, storage areas, and drainage facilities. Specifically, the following information is required:

(a) A plot plan that shows the 100-year floodplain contour or a statement 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 5-4023(11) or sections 5-4032 and 5-4033. The plot plan must be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. The plot plan required by section 5-4022 must show the floodway, if any, as identified by the Federal Emergency Management Agency or the floodway identified pursuant to either section 5-4023(11) or sections 5-4032(12) and 5-4033.

(b) Where base flood elevation data is provided as set forth in section 5-4004 or the duties and responsibilities of the local floodplain administrator of section 5-4023(11), the application for a development permit within the flood hazard area shall show:

- 1- The elevation (in relation to mean sea level) of the lowest floor of all new and substantially improved structures, and
- 2- If the structure will be floodproofed in accordance with the Non-Residential Construction requirements of section 5-4032(2), the elevation (in relation to mean sea level) to which the structure will be floodproofed.

(c) Where base flood elevation data is not provided as set forth in section 5-4004 or the duties and responsibilities of the local floodplain administrator or section 5-4023(11), then the provisions in the standards and streams without estimated base flood elevations and floodways of section 5-4033 must be met.

(d) Alteration of watercourse - 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.

**(2) Certifications**

(a) Floodproofing Certification - When a structure is floodproofed, the applicant shall provide certification from a registered, professional engineer or architect that the nonresidential, floodproofed structure meets the floodproofing criteria in section 5-4032 (2) and 5-4033(3).

(b) Certification During Construction - A floor elevation or floodproofing certification 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, or floodproofing by whatever construction means, whichever is applicable, it shall be the duty of the permit holder to submit to the local administrator a certification of the elevation of the lowest floor, or floodproofed elevation, whichever is applicable, 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 to further progressive work being permitted to proceed. Failure to submit the survey or failure to make said corrections required hereby shall be cause to issue a stop-work order for the project.

(c) V-Zone Certification - When a structure is located in Zones V, VE, or V1-30, certification shall be provided from a registered professional engineer or architect, separate from submitted plans, that new construction and substantial improvement meets the criteria for the coastal high hazard areas outlined in section 5-4033 (4).

(d) As-built Certification - Upon completion of the development a registered professional engineer, land surveyor or architect, whichever professional is appropriate, shall certify that section 5-4022(1) & (2) is built in accordance with the submitted plans and previous predevelopment certifications.

**Sec. 5-4023. - Duties and responsibilities of the local administrator.** Duties of the local administrator shall include, but not be limited to:

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

(2) Requirement of Federal and/or state permits -Review proposed development to assure that all necessary permits have been received from those government 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 Flood Mitigation Programs 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 in section 5-4023(3)(a), 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 not diminished. 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 60 days of completion of an alteration of a watercourse, referenced in the certification requirements of section 5-4022 (2)(d), 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 5-4032(5) are met.
- (5) **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.
- (6) **Notify 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.
- (7) **Certification requirements** –
  - (a) Obtain and review actual elevation (in relation to mean sea level) of the lowest floor of all new or substantially improved structures, in accordance with administrative procedures outlined in section 5-4022(2)(b). or the coastal high hazard area requirements outlined in section 5-4033(4)
  - (b) Obtain the actual elevation (in relation to mean sea level) to which the new or substantially improved structures have been floodproofed, in accordance with section 5-4022 (2)(a).
  - (c) When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with the non-residential construction requirements outlined in section 5-4032(2).
  - (d) A registered professional engineer or architect shall certify that the design, specifications and plans for construction are in compliance with the provisions contained in the coastal high hazard area requirements outlined in section 5-4033(4), (6), (8) of this ordinance.
- (8) **Map Interpretation** - 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), make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.

- (9) **Prevailing Authority** - Where a map boundary showing an area of special flood hazard and field elevations disagree, the base flood elevations for flood protection elevations (as found on an elevation profile, floodway data table, etc.) shall prevail. The correct information should be submitted to FEMA as per the map maintenance activity requirements outlined in section 5-4032(7)(b).
- (10) **Use of Best Available Data** - When base flood elevation data or floodway data has not been provided in accordance with section 5-4004, obtain, review, and reasonably utilize best available base flood elevation data and floodway data available from a federal, state, or other source, including data developed pursuant to the standards for subdivision proposals outlined in section 5-4032(12), in order to administer the provisions of this ordinance. Data from preliminary, draft, and final flood insurance studies constitutes best available data from a federal, state, or other source. Data must be developed using hydraulic models meeting the minimum requirement of NFIP approved model. If an appeal is pending on the study in accordance with 44 CFR Ch. 1, Part 67.5 and 67.6, the data does not have to be used.
- (11) **Special Flood Hazard Area/Topographic Boundaries Conflict** - When the exact location of boundaries of the areas special flood hazards conflict with the current, natural topography information at the site; the site information takes precedence when the lowest adjacent grade is at or above the BFE, the property owner may apply and be approved for a Letter of Map Amendment (LOMA) by FEMA. The local floodplain administrator in the permit file will maintain a copy of the Letter of Map Amendment issued from FEMA.
- (12) **On-Site Inspections** - Make on-site inspections of projects in accordance with the administrative procedures outlined in section 5-4024.
- (13) **Administrative Notices** - Serve notices of violations, issue stop-work orders, revoke permits and take corrective actions in accordance with the administrative procedures in section 5-4024.
- (14) **Record Maintenance** - Maintain all records pertaining to the administration of this ordinance and make these records available for public inspection.
- (15) **Annexations and Detachments** - Notify the South Carolina Department of Natural Resources Land, Water and Conservation Division, State Coordinator for the National Flood Insurance Program within six (6) months, of any annexations or detachments that include special flood hazard areas.
- (16) **Federally Funded Development** - The president issued Executive Order E.O.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 development 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.
- (17) **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 50 percent of the market value of the structure before the damage occurred.
- (18) **Substantial Improvement Determinations** - Perform an assessment of permit applications for improvement or repairs to be made to a building or structure that equals or exceeds 50 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 one year. 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:*

- (a) 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 6 months.
- (b) 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.
- (c) Real Estate purchase contracts within 6 months prior to the date of the application for a permit.

**Sec. 5-4024. - Administrative procedures.**

- (1) **Inspections of work in progress**: As the work pursuant to a permit progresses, the local 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 territorial jurisdiction at any reasonable hour for the purposes of inspection or other enforcement action.
- (2) **Stop-work orders**: 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 reasons for the stoppage, and the conditions under which the work may be resumed. Violation of a stop-work order constitutes a misdemeanor.
- (3) **Revocation of permits**: The local floodplain administrator may revoke and require the return of the development permit by notifying the permit holder 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 floodplain administrator and each member of his 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.
- (5) **Violations to be corrected**: When the local floodplain administrator finds violations of applicable state and local laws, it shall be his 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 on the property he owns.

- (6) **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 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 ordinance;
  - (b) A hearing will be held before the local floodplain administrator at a designated place and time, not later than ten (10) days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and
  - (c) following the hearing, the local floodplain administrator may issue such order to alter, vacate, or demolish the building; or to remove fill as appears appropriate.
- (7) **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/she shall make an order in writing to the owner, requiring the owner to remedy the violation within such period, not less than sixty (60) days, the floodplain administrator may prescribe; provided that where the floodplain administrator finds that there is imminent danger to life or other property, he may order that corrective action be taken in such lesser period as may be feasible.
- (8) **Appeal:** Any owner who has received an order to take corrective action may appeal from the order to the zoning board of appeals (ZBOA) by giving notice of appeal in writing to the floodplain administrator within thirty (30) days following issuance of the final order. In the absence of an appeal, the order of the administrator shall be final. The local governing body shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order.
- (9) **Failure to comply with order:** If the owner of a building 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 zoning board of appeals (ZBOA) following an appeal, he shall be guilty of a misdemeanor and shall be punished in the discretion of the court.
- (10) **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 as ask that Section 1316 be rescinded.
- (11) **Documents included by reference:** 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](http://www.fema.gov):
- (a) FEMA 55 Coastal Construction Manual
  - (b) All FEMA Technical Bulletins

- (c) All FEMA Floodplain Management Bulletins
- (d) FEMA 348 Protecting Building Utilities from Flood Damage
- (e) FEMA 499 Home Builder's Guide to Coastal Construction Technical Fact Sheets

**Secs.5-4025—5-4030.Reserved.**

## **ARTICLE IV. - PROVISIONS FOR FLOOD HAZARD REDUCTION**

### **Sec. 5-4031. - General standards.**

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

- (1) **Reasonably Safe from Flooding** - Review all applications to determine whether proposed building sites will be reasonably safe from flooding.
- (2) **Anchoring** - All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- (3) **Flood Resistant Materials and Equipment** - All new construction and 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 Material Requirements, dated 8/08, and available from the Federal Emergency Management Agency.
- (4) **Minimized Flood Damage** - All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damages.
- (5) **Critical Development** - 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.
- (6) **Utilities** - Electrical, ventilation, plumbing, heating and air conditioning equipment (including ductwork), 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 up to the design flood elevation of 13 feet. This requirement does not preclude the installation of outdoor faucets for shower heads, sinks, hoses, etc., if cut off devices and back flow devices are installed to prevent contamination to the service components and thereby minimize any flood damages to the building.
- (7) **Water Supply Systems** - All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (8) **Sanitary Sewage Systems** - 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; On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

- (9) **Gas or Liquid Storage Tanks** - All gas or liquid storage tanks, either located above ground or buried, shall be anchored to prevent floatation and lateral movement resulting from hydrodynamic and hydrostatic loads.
- (10) **Alteration, Repair, Reconstruction, or Improvements** - Any alteration, repair, reconstruction, or improvement 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. This includes post-FIRM development and structures.
- (11) **Non-Conforming Buildings or Uses** - Nonconforming buildings or uses. Nonconforming buildings or uses may not be enlarged, replaced, or rebuilt unless such enlargement or is accomplished in conformance with the provisions of this ordinance. Provided, however, nothing in this ordinance shall prevent the repair, reconstruction, or replacement of an existing building or structure located totally or partially within the floodway, provided that the bulk of the building or structure below base flood elevation in the floodway is not increased and provided that such repair, reconstruction, or replacement meets all of the other requirements of this ordinance.
- (12) **American with Disabilities Act (ADA)**.- A building must meet the specific standards for floodplain construction outlined in section 5-4032, 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.

#### **Sec. 5-4032. - Specific standards.**

In all areas of special flood hazard (Zones A, AE, AH, AO, A1-30, V, and VE) and other areas with the potential of flooding (such as X and Shaded X zones) where base flood elevation data has been provided, as set forth in section 5-4004, or as outlined in the Duties and Responsibilities of the local Floodplain administrator 5-4023 the following provisions are required:

- (1) **Residential construction.** New construction, substantial improvement, or an addition, including an addition to a Historic Structure, the footprint of which is over thirty-three (33) percent of the footprint of the existing structure, shall have the lowest floor elevated to the most restrictive of the design elevation of 13 feet **or** the base flood elevation plus one foot of freeboard. No basements are permitted. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with sections 5-4011, 5-4023 and 5-4032 (4).
- (2) **Nonresidential construction.**
  - (a) New construction, substantial improvement, or an addition, including an addition to a Historic Structure, the footprint of which is over thirty-three (33) percent of the footprint of the existing structure, shall have the lowest floor elevated to the most restrictive of the design elevation of 13 feet **or** the base flood elevation plus one foot of freeboard. Should solid foundation perimeter walls be used to elevate a structure,

openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with sections 5-4011, 5-4023, and 5-4032(4). No basements are permitted. Structures located in A-zones may be floodproofed in lieu of elevation provided that all areas of the structure below the required 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.

- (b) A registered, professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certifications shall be provided to the official as set forth in section 5-4022(2)(a). A variance may be considered for wet-floodproofing agricultural structures in accordance with the criteria outlined in section 5-4045 of this ordinance. Agricultural structures not meeting the criteria of section 5-4045 must meet the nonresidential construction standards and all other applicable provisions of this ordinance. Structures which are floodproofed are required to have an approved maintenance plan with an annual exercise. The maintenance plan must be approved by the local floodplain administrator and notification of the annual exercise shall be provided to it.
- (3) **Manufactured homes.** No new manufactured homes or manufactured home parks shall be permitted in areas of special flood hazard.
- (a) Manufactured homes that are to be placed or substantially improved on sites outside a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or in an existing manufactured home park or subdivision on which manufactured homes has incurred “substantial damage” as the result of a flood, must be elevated on a permanent foundation such that the lowest floor elevated to the most restrictive of design elevation of 14 feet **or** the base flood elevation plus 2 feet of freeboard and securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
  - (b) Manufactured homes that are to be placed or substantially improved on sites in an existing manufactured home park or subdivision that are not subject to the provisions for residential construction in Section 5-4032(1) of this ordinance and must have the lowest floor elevated to the most restrictive of design elevation of 14 feet **or** the base flood elevation plus (2) two foot of freeboard and be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement.
  - (c) Manufactured homes 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 40-29-10 of the South Carolina Manufactured Housing Board Regulations, as amended. Additionally, when the elevation requirement would be met by an elevation of the chassis at least thirty-six (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 thirty-six (36) inches in height an engineering certification is required.
  - (d) 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 an approved by the local floodplain administrator and the local Emergency Preparedness Coordinator.

- (4) **Elevated buildings.** New construction or substantial improvements of elevated buildings that include fully enclosed areas that are usable solely for the parking of vehicles, building access, or limited storage in an area other than a basement, and which are subject to flooding shall be designed to preclude finished space and be 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 either be certified by a professional engineer or architect 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 square inch for every square foot of enclosed area subject to flooding.
  - 2- The bottom of all openings shall be no higher than one foot above the interior or exterior grade immediately under the opening.
  - 3- Only the portions of openings that are below the required elevation in 5-4032(1) & (2) 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- 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 side of the building.
- (b) Hazardous velocities. Hydrodynamic pressure must be considered in the design of any foundation system where velocity waters or the potential for debris flow exists. If flood velocities are excessive (greater than five 5 feet per second), foundation systems other than solid foundations walls should be considered so that obstructions to damaging flood flows are minimized.
- (c) Enclosures below lowest floor
- 1- Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator).
  - 2- The interior portion of such enclosed area shall not be 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 wet location switch and/or outlet connected to a ground fault interrupt breaker may be installed below the required lowest floor elevation specified in specific standards sections 5-4032(1), (2), (3).
  - 4- All construction materials below the required lowest floor elevation specified in specific standards outlined in sections 5-4032(1), (2), (3), (4) shall be of flood resistant materials.
- (5) **Floodways.** Located within areas of special flood hazard established in section 5-4004, are areas designated as floodways. 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 apply within such areas:

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

1- 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 floodplain administrator.

2- A Conditional Letter of Map Revision (CLOMR) has been approved by FEMA. A letter of Map Revision must be obtained upon completion of the proposed development.

(b) If section 5-4032(5)(a) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article IV.

(c) No new 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 standard of section 5-4032(3) and the encroachment standards of 5-4032(5)(a) are met.

(d) 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, and hiking and horseback riding trails are acceptable uses, provided that they do not employ structures or fill. Substantial development of a permissible use may require a no-rise certification. The uses listed in this subsection are permissible only if and to the extent that they do not cause any increase in base flood elevations or changes to the floodway configuration.

**(6) Recreation Vehicles**

(a) recreational vehicle is ready for highway use if it is:

- 1- on wheels or jacking system
- 2- attached to the site only by quick-disconnect type utilities and security devices;  
and
- 3- has no permanently attached additions

(b) Recreation vehicles placed on sites shall either be:

- 1- on site for fewer than 180 consecutive days; or
- 2- be fully licensed and ready for highway use or **meet** the development permit and certification requirements of section 5-4031, and manufactured home standards in section 5-4032 (3), & (4).

**(7) Map Maintenance Activities** – The National Flood Insurance Program (NFIP) requires flood data to be reviewed and approved by FEMA. This ensures that flood maps, studies and other data identified in section 5-4004 accurately represent flooding conditions so appropriate floodplain management criteria are based on current data. The following map maintenance activities are identified:

(a) Requirement to Submit New Technical Data

1-For all development proposals that impact floodway delineations or base

flood elevations, the community shall ensure that technical or scientific data reflecting such changes be submitted to FEMA as soon as practicable, but no later than six months of the date such information becomes available. These development proposals include but not limited to:

- a Floodway encroachments that increase or decrease base flood elevations or alter floodway boundaries;
  - b Fill sites to be used for the placement of proposed structures where the applicant desires to remove the site from the special flood hazard area;
  - c Alteration of watercourses that result in a relocation or elimination of the special flood hazard area, including the placement of culverts; and
  - d Subdivision or large-scale development proposals requiring the establishment of base flood elevations in accordance with section 5-4033 (1).
- 2- It is the responsibility of the applicant to have technical data, required in accordance with 5-4032(7), prepared in a format required for a Conditional Letter of Map Revision or Letter of Map Revision, and submitted to FEMA. Submittal and processing fees for these map revisions shall also be the responsibility of the applicant.
- 3- The local floodplain administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for:
- a Proposed floodway encroachment that increases the base flood elevation; and
  - b Proposed development which increases the base flood elevation by more than one foot in areas where FEMA has provided base flood elevations but no floodway.
- 4- Floodplain development permits issued by the local floodplain administrator shall be conditioned upon the applicant obtaining a Letter of Map Revision from FEMA for any development proposal subject to section 5-4032 (7).

(b) Right to Submit New Technical Data - The floodplain administrator may request changes to any of the information shown on an effective map that does not impact floodplain or floodway delineations or base flood elevations, such as labeling or planimetric details. Such a submission shall include appropriate supporting documentation made in writing by the local jurisdiction and may be submitted at any time.

(8) **Accessory Structures** – Detached accessory structures used only for parking of vehicles and storage are permitted at grade if:

- (a) In special flood hazard areas other than coastal high hazard areas (Zones A, AE, AH, AO and A1-30), they have a footprint larger than 600 square feet in area. Walls must have openings in compliance with section 5-4032(B)(4)(a).
- (b) In coastal high hazard areas (Zones V, VE, V1-30 and VO) they are not larger than 100 square feet and in compliance with section 5-4033(4).
- (c) Anchored to resist flotation, collapse, and lateral movement.
- (d) Flood damage resistant materials used below the base elevation in accordance with Technical Bulletin 2, Flood Damage Resistant Materials Requirement.
- (e) Mechanical, electrical, and utility equipment comply with the requirements of section 5-4031(6).
- (f) Accessory structures shall be designed to have low flood damage potential.

- (g) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
- (9) **Swimming pool utility equipment rooms.** If the building cannot be built at or above the BFE, because of functionality of the equipment, then a structure to house the utilities for the pool may be built below the BFE with the following provisions:
- (a) Meet the requirements for accessory structures in section 5-4032(8); and
  - (b) The utilities must be anchored to prevent flotation and shall be designed to prevent water from entering or accumulating within the components during conditions of the base flood.
- (10) **Elevators.**
- (a) Install a float switch system or another system that provides the same level of safety necessary for all elevators where there is a potential for the elevator cab to descend below the BFE during a flood per FEMA's Technical Bulletin 4, Elevator Installation for Buildings Located in Special Flood Hazard Areas: and
  - (b) All equipment that may have to be installed below the BFE such as counterweight roller guides, compensation cable and pulleys, and oil buffers for traction elevators and the jack assembly for a hydraulic elevator must be constructed using flood-resistant materials where possible per FEMA's Technical Bulletin 4, Elevator Installation.
- (11) **Fill** - An applicant shall demonstrate that fill is the only alternative to raising the building to meet the residential and non-residential construction requirements of section 5-4032(1) or 5-4032(2) to the most restrictive of the minimum design elevation of 13 feet or base flood elevation plus 1' of freeboard and meet the residential and non-residential construction requirements of section 5-4032(1) & (2). The amount of fill used will not affect the flood storage capacity or adversely affect the adjacent properties. The following provisions shall apply to all fill placed in the special flood hazard zone:
- (a) Fill may not be placed in the floodway unless it is in accordance with section 5-4032(5) & (11).
  - (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 comply with ASTM Standard D-698, and its suitability to support structures certified by a registered, professional engineer.
  - (e) Fill slopes shall be no greater than two (2) horizontal to one 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.

- (h) Will meet the requirements of FEMA Technical Bulletin 10-01, Ensuring That Structures Build on Fill in or Near Special Flood Hazard Areas Are Reasonably Safe from Flooding.

**(12) Standards for Subdivision Proposals and other development –**

- (a) 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.
- (b) All subdivision proposals and other proposed new development shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- (c) All subdivision proposals and other proposed new development shall have adequate drainage provided to reduce exposure to flood damage.
- (d) The applicant shall meet the requirement to submit technical data to FEMA in section 5-4032(7) when a hydrologic and hydraulic analysis is completed that generates base flood elevations.

**Sec. 5-4033. - Standards for streams**

**(1)- Standards for streams without established base flood elevations and/or floodways.**

Located within the areas of special flood hazard (Zones A, AE, AH, AO, A1-30, V, and VE) established in section 5-4004, are small streams where no base flood data has been provided or where no floodways have been identified. The following provisions apply within such areas:

- (a) In all areas of special flood hazard where base flood elevation data are not available, the applicant shall provide a hydrologic and hydraulic engineering analysis that generates base flood elevations for all subdivision proposals and other proposed developments containing at least 50 lots or 5 acres, whichever is less.
- (b) No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within one hundred (100) feet of the stream bank unless certification with supporting technical data by a registered, professional engineer is provided demonstrating that such encroachments shall not result in any increase occurrence of the base flood discharge.
- (c) If section 5-4033(1) is satisfied and base flood elevation data is available from other sources, all new construction and substantial improvements within such areas shall comply with all applicable flood hazard ordinance provisions of Article IV and shall be elevated or floodproofed in accordance with elevations established in accordance with section 5-4023(9).
- (d) Data from preliminary, draft, and final flood insurance studies constitutes best available data. If an appeal is pending on the study in accordance with 44 CFR Chapter 1, Part 67.5 and 67.6, the data does not have to be used.
- (e) When base flood elevation data is not available from a federal, state, or other source, one of the following methods may be used to determine a BFE. For further

information regarding the methods for determining BFE's listed below, refer to FEMA's manual Managing Floodplain Development in Approximate Zone A Areas:

1- Contour Interpolation

- a. Superimpose approximate Zone A boundaries onto a topographic map and estimate a BFE.
- b. Add one-half of the contour interval of the topographic map that is used to the BFE.

2-Data Extrapolation. A BFE can be determined if a site within 500 feet upstream of a reach of a stream reach for which a 100-year profile has been computed by detailed methods, and the floodplain and channel bottom slope characteristics are relatively similar to the downstream reaches. No hydraulic structures shall be present.

3-Hydrologic and Hydraulic calculations. Perform hydrologic and hydraulic calculations to determine BFE's using FEMA approved methods and software.

**(2)- Standards for streams with Established Base Flood Elevations but without floodways**

Along rivers and streams where Base Flood Elevation (BFE) data is provided but no floodway is identified for a Special Flood Hazard Area on the FIRM or the FIS.

- a. No encroachments including fill, new construction, substantial improvements, or other development shall be permitted unless certification will support technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.

**(3)- Standards for Areas of Shallow flooding (AO Zones)**

Located within the areas of special flood hazard established in section 5-4004, are areas designated as shallow flooding. The following provisions shall apply within such areas:

- a) All new construction 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.
- b) All new construction and substantial improvements of non-residential structures shall:
  - a) 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

- b) Be completely flood-proofed together with attendant utility and sanitary facilities to or above the level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required as stated in section 5-4023.
- c) All structures on slopes must have drainage paths around them to guide water away from the structures.

**(4) - Coastal High Hazard Areas (V-Zones) -**

Located within the areas of special flood hazard established in sections 5-4004 or 5-4024(11) are areas designated as coastal high hazard areas. These areas have special flood hazards associated with wave wash. The following provisions shall apply within such areas:

1. All new construction and substantial improvements shall be located landward of the reach of mean high tide, first line of stable natural vegetation and comply with all applicable Department of Health and Environmental Control (DHEC) Ocean and Coastal Resource Management (OCRM) setback requirements.
2. All new construction and substantial improvements shall be elevated so that the bottom of the lowest supporting horizontal structural member (excluding pilings or columns) of the lowest floor is elevated to the most restrictive of the design flood elevation of 13 feet or the base flood elevation plus 1 foot of freeboard.
3. All buildings or structures shall be securely anchored on pilings or columns, extending vertically below a grade of sufficient depth and the zone of potential scour, and securely anchored to the subsoil strata.
4. All pilings and columns and the attached structures shall be anchored to resist flotation, collapse, lateral movement and scour due to the effect of wind and water loads acting simultaneously on all building components.
5. A registered professional engineer or architect shall certify that the design, specifications and plans for construction are in compliance with the provisions contained in section 5-4033. (3), (4), (6) and (9) of this ordinance.
6. There shall be no fill used as structural support. Non-compacted 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. Only beach compatible sand may be used. The local floodplain administrator shall approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by an engineer, architect, and/or soil scientist that 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.
7. There shall be no alteration of sand dunes that would increase potential flood damage.
8. All new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Breakaway wall enclosures shall not exceed 299 square feet. Only flood resistant materials shall be used below the required flood elevation specified in section 5-4032. One wet location switch and/or outlet connected to a ground fault interrupt breaker may be installed below the required lowest floor elevation specified in section 5-4032.

Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

- a) Breakaway wall collapse shall result from water load less than that which would occur during the base flood.
  - b) 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 nonstructural). The water loading shall be those values associated with the base flood. The wind loading values shall be those required by applicable IBC International Building Code.
  - c) Such enclosed space shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation, finished or partitioned into multiple rooms, or temperature controlled.
9. 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 of section 5-4032(3).

10. Recreational vehicles shall be permitted in Coastal High Hazard Areas provided that they meet the Recreational Vehicle criteria of section 5-4032 (6), and the Temporary Structure provisions of section 5-4033(4).
11. Accessory structures below the required lowest floor elevation specified in section 5-4033(4), are prohibited except for the following:

- a) Structures 100 square feet or less and in accordance with section 5-4032(8).

- b) Swimming Pools

- (1) They are installed at-grade or elevated so long as the pool will not act as an obstruction.

- (2) They must be structurally independent of the building and its foundation.

- (3) They may be placed beneath a coastal building only if the top of the pool and any accompanying decking or walkway are flush with the existing grade and only if the lower area remains unenclosed.

- (4) As part of the certification process for V-zone buildings the design professional must consider the effects that any of these elements will have on the building in question and any nearby buildings.

- c) Access Stairs Attached to or Beneath an Elevated Building:

- (1) Must be constructed of flood-resistant materials.

- (2) Must be constructed as open staircases so they do not block flow under the structure in accordance with section 5 4033(2).

- d) Decks

- (1) If the deck is structurally attached to a building, then the bottom of the lowest horizontal member must be at or above the elevation of the buildings lowest horizontal member.

- (2) If the deck is to be built below the BFE then it must be structurally independent of the main building and must not cause an obstruction.

- (3) If an at-grade, structurally independent deck is proposed then a design professional must evaluate the design to determine if it will adversely affect the building and nearby buildings.

12. Parking areas should be located on a stable grade under or landward of a structure. Any parking surface shall consist of gravel or aggregate.
13. Electrical, ventilation, plumbing, heating and air conditioning equipment (including ductwork), and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during a flood event. The equipment shall be elevated to the most restrictive of the design flood elevation of 13 feet **or** the base flood elevation plus 1 foot. This requirement does not exclude the installation of outdoor faucets for shower heads, sinks, hoses, etc., as long as cut off devices and back flow prevention devices are installed to prevent contamination to the service components and thereby minimize any flood damages to the building. No utilities or components shall be attached to breakaway walls.

**Secs.5-4034—5-4040.Reserved.**

## **ARTICLE V. - VARIANCE PROCEDURES**

### **Sec. 5-4041. - Establishment of appeal board.**

The zoning board of appeals (ZBOA) as established by city council shall hear and decide requests for variances from the requirements of this ordinance.

### **Sec. 5-4042. - Right to appeal.**

Any person aggrieved by the decision of the appeal board or any taxpayer may appeal such decision to the court.

### **Sec. 5-4043. - Historic structures.**

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.

### **Sec. 5-4044. – Functionally Dependent Uses –**

Variances may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria of this Article are met, no reasonable alternative exists, and the development is protected by methods that minimize flood damage and create no additional threat to public safety.

**Sec. 5-4045. – Accessory Structures and Agricultural structures.** A variance is authorized to be issued for the construction or substantial improvement of accessory structures and agricultural structures provided the requirements of this section and the following are satisfied:

- (1) **Accessory structures.** A determination that the proposed accessory structure:
  - a) Represents a minimal investment and has low damage potential

(amount of physical damage, contents damage, and loss of function).

b) Is larger than the size limits specified in section 5-4032(8).

c) Complies with the wet floodproofing construction requirement of section 5-4045(3) below.

**(2) Agricultural structures.** A determination that the proposed agricultural structure:

a) Is used exclusively in connection with the production, harvesting, storage, raising, or drying of agricultural commodities and livestock, or storage of tools or equipment used in connection with these purposes or uses, and will be restricted to such exclusive uses.

b) Has low damage potential (amount of physical damage, contents damage, and loss of function).

c) Does not increase risks and pose a danger to public health, safety, and welfare if flooded and contents are released, including but not limited to the effects of flooding on manure storage, livestock confinement operations, liquified natural gas terminals, and production and storage of highly volatile, toxic, or water-reactive materials.

d) Complies with the wet floodproofing construction requirements of section 5-4045(3) below.

**(3) Wet floodproofing construction requirements.** Wet floodproofed structures shall:

a) Be anchored to resist flotation, collapse, and lateral movement.

b) Have flood damage resistant materials below the base flood elevation built in accordance with Technical Bulletin 2, Flood Damage Resistant Materials Requirement.

c) Have mechanical, electrical, and utility equipment in compliance with the requirements of section 5-4031(6).

d) In special flood hazards area, have flood openings in compliance with the requirements of section 5-4032(4).

**(4) Variances shall not be allowed in Coastal High Hazard Areas**

**Sec. 5-4046. - Considerations.**

In passing upon such applications, the appeal board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, 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 on the individual owner.
- (4) The importance of the services provided by the proposed facility to the community.
- (5) The necessity to the facility of a waterfront location, 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 flood waters 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.

**Sec. 5-4047. - 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, water and conservation division, state coordinator's office, must be taken into account and included in the permit file.

**Sec. 5-4048. - Floodways.**

Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result unless a CLOMR is obtained prior to issuance of the variance. In order to ensure the project is built in compliance with the CLOMR for which the variance is granted, the applicant must provide a bond for 100% of the cost to perform the development.

**Sec. 5-4049. - Conditions.**

Upon consideration of the factors listed above and the purposes of this ordinance, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance. 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 nuisance, cause fraud on or victimization of the public, or conflict with existing local 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. 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 unpermitted development or other development that is not in compliance with the provisions of this ordinance. Violations must be corrected in accordance with section 5-4024(5) of this ordinance.

**Sec.5-4050.Reserved.**

**ARTICLE F. - LEGAL STATUS PROVISIONS**

**Sec. 5-4051. - Effect on rights and liabilities under the existing flood damage prevention ordinance.**

This ordinance in part comes forward by reenactment of some of the provisions of the flood damage prevention ordinance enacted April 26, 1977, as amended, and it is not the intention to repeal but rather to reenact and continue to enforce without interruption of such existing provisions, so that all rights and liabilities that have accrued thereunder 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 the City of Beaufort enacted on April 26, 1977, as amended, which are not reenacted herein are repealed.

**Sec. 5-4052. - 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 ordinance; provided, however, that when construction is not begun under such outstanding permit within a period of sixty (60) days subsequent to passage of this ordinance, construction or use shall be in conformity with the provisions of this ordinance.

**Sec. 5-4053 -This ordinance shall become effective upon adoption.**

PASSED:

1<sup>st</sup> Reading: \_\_\_\_\_  
2<sup>nd</sup> Reading: \_\_\_\_\_

WITNESS my hand and the official seal of \_\_\_\_\_ this the  
\_\_\_\_\_ day of \_\_\_\_\_ 202\_\_.

Here.

Affix local Seal

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title.





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**CITY OF BEAUFORT**  
DEPARTMENT REQUEST FOR CITY COUNCIL AGENDA ITEM

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**TO:** CITY COUNCIL **DATE:** 2/2/2021  
**FROM:** David Prichard, Community and Economic Development Director  
**AGENDA ITEM**  
**TITLE:** Preservation Manual Update  
**MEETING**  
**DATE:** 2/9/2021  
**DEPARTMENT:** Community and Economic Development

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*BACKGROUND INFORMATION:*

Kickoff Meeting was January 29, 2021  
- Public Meetings

Next Steps: Work Plan and Schedule

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*PLACED ON AGENDA FOR:*

*REMARKS:*

**ATTACHMENTS:**

Description	Type	Upload Date
Preservation Manual Update Statement of Work	Backup Material	2/3/2021



**STATEMENT OF WORK**  
**Historic Preservation Manuals Update**  
**December 10, 2020**

**1.0 PURPOSE.**

- 1.1 This Statement of Work (SOW) is for the consultant to:
  - 1.1.1 Update and consolidate:
    - 1.1.1.1 *The Beaufort Preservation Manual (August 1979)*
    - 1.1.1.2 *The Beaufort Preservation Manual Supplement August 1990*
    - 1.1.1.3 *Northwest Quadrant Design Principles, May 1999*
  - 1.1.2 Evaluate and report disagreements between the preservation manuals and *The Beaufort Development Code*
  - 1.1.3 Enable preservation manual to be accessed, printed and searched electronically
- 1.2 Management. The consultant shall take technical and administrative guidance from the Department of Community & Economic Development.

**2.0 BACKGROUND.**

- 2.1 In order to provide guidance and insight into how the Beaufort historic districts should develop, modify, and rehabilitate, the Historic Review Board and staff reference:
  - 2.1.1 *The Beaufort Preservation Manual* and *The Beaufort Preservation Manual Supplement* when reviewing projects located in the Beaufort Preservation Neighborhood.
  - 2.1.2 *The Northwest Quadrant Design Principles* when reviewing projects located in the Beaufort Conservation Neighborhood.
  - 2.1.3 *The Secretary of Interior's Standards for Rehabilitation* when reviewing projects modifying a contributing structure.
  - 2.1.4 *The Beaufort Development Code Article 4 – Building Design Standards* when reviewing new-construction projects.
  - 2.1.5 Civic Master Plan
  - 2.1.6 Above Ground Historic Resources Survey  
<http://www.cityofbeaufort.org/DocumentCenter/View/948/National-Register-of-Historic-Places-Continuation-Sheet-Section-7-Page-14?bidId=>

- 2.2 The Department of Community & Economic Development facilitates the coordination of all planning and development activities within the City. All services are designed to support balanced and innovative development within the City and provide for future growth. The main goal of the department is to protect and strengthen the community and neighborhoods while also encouraging business and real estate development that will enlarge our tax base, create and retain jobs, and provide for high quality developments that will enhance the quality of life for the citizens of Beaufort. The department provides professional staff-support to the HRB.

### **3.0 SCOPE OF SERVICES.**

- 3.1 The consultant shall visit applicable sites and Federal, state, and local governmental agencies, as well as non-governmental organizations (NGOs) necessary to complete the work required. Such visits will be coordinated with the designated point-of-contact in advance to assure proper government clearances are established for the consultant.
- 3.2 The geographical scope of this effort covers all relevant areas within the municipal boundary of the City of Beaufort, SC.
- 3.3 This planning work shall be accomplished in accordance with all applicable federal, state, and local laws, rules and regulations.

### **4.0 SERVICES REQUIRED.**

- 4.1 Task 1. Review existing manuals
- 4.2 Task 2. Assess the existing manuals for:
  - 4.2.1 Currency
  - 4.2.2 Clarity
  - 4.2.3 Appropriateness of methods
  - 4.2.4 Acceptable materials
  - 4.2.5 Organization
- 4.3 Task 3. Meet with oversight team (client) to discuss assessment
- 4.4 Task 4. Create framework for update and consolidation
- 4.5 Task 5. Meet with oversight team to discuss framework
- 4.6 Task 6. Create draft preservation manual (update)
- 4.7 Task 7. Evaluate compatibility of the Beaufort Development Code and the preservation manual (draft)

- 4.8 Task 8. Meet with oversight team to discuss draft and compatibility issues with the zoning ordinance [BDC]
- 4.9 Task 9. Create final preservation manual.
- 4.10 Task 10. Create report of remaining incompatibilities between the preservation manual and the zoning ordinance.
- 4.11 Task 11. Train city staff and HRB members on how to best use the new manual.

## **5.0 PROJECT MANAGEMENT AND REPORTING.**

- 5.1 Kick-off Conference Call/Meeting. Immediately following the execution of a signed contract, a Kick-off Conference Call/Meeting will be held between the City of Beaufort and the consultant to consider a variety of issues: scheduling; security; access to the installation; deliverables; word processing software that will be used (i.e., Microsoft Word); points-of-contact; maps; etc. The consultant shall arrange the Conference Call/Meeting and shall be responsible for setting the agenda, preparing minutes of the call/meeting, and submitting the minutes to the Department of Community & Economic Development within five (5) working days following the call.
- 5.2 Overall Project Work Plan. Within thirty (3) days of notice to proceed (NTP), the consultant shall deliver an overall project work plan that includes a specific Work Breakdown Structure (WBS) for the initiative. The WBS will be used to report the cost and schedule status of the SOW. All tasks required under this SOW shall be included in the WBS.
- 5.3 Initial Public Meeting. Hold a public meeting at a city council work session to inform the council and the public of the project's purpose, schedule, and the methodology to be used for the update.
- 5.4 Integrated Schedule. The consultant shall establish, update and maintain an integrated schedule which reflects all work being accomplished under this agreement to ensure on-time successful completion of the effort. The schedule will specify the dates that specific milestones will be met and specify the dates on which all deliverables are to be submitted to the City of Beaufort. It shall be updated every month and submitted with the monthly progress report. The monthly update shall provide information as to the reasons for any changes that may occur. Delays presented in the schedule that are due to the consultant's performance must be discussed with the City of Beaufort prior to acceptance.
- 5.5 Monthly Progress Report (MPR). The consultant shall meet with the government technical representative (GTR) as required to review status of work and shall provide the GTR a monthly written report showing progress accomplished, problems encountered or anticipated, and any revisions to the project work plan and/or schedule. The MPR shall include summary of events and discussion of performance and shall identify meetings and teleconferences as required.

- 5.6 Final public presentation. Hold a public meeting at a city council work session to present the final deliverables to the council and the public.

**6.0 DELIVERABLES.**

- 6.1 Current assessment of preservation manuals (currently in use)
- 6.2 Framework for update and consolidation
- 6.3 Draft preservation manual (update)
- 6.4 Initial report of incompatibilities between preservation manual and the zoning ordinance
- 6.5 Final preservation manual (electronic/website compatible/printable)
- 6.6 Final report of incompatibilities between preservation manual and the zoning ordinance with links to the relevant code and preservation manual sections.

**7.0 PERIOD OF PERFORMANCE.** All work performed under this agreement shall be completed by September 30, 2021.

**8.0 PAYMENT SCHEDULE.** By work completed

**9.0 MATERIALS AND LABOR, INSTALLATION SUPPORT.** The City of Beaufort will provide access to government facilities for use by the consultant to accomplish the tasks assigned.

**10.0 MISCELLANEOUS REQUIREMENTS.**

- 10.1 Memoranda/Action Item List. The consultant shall furnish the City a memorandum of each meeting held, summarizing the agreements reached along with an updated Action Item List. All memoranda shall be provided within five (5) working days of the meetings.
- 10.2 Editorial Requirements. The size of pages shall be 8.5 by 11 inches, except for foldout maps, charts, or other illustrative material. Type size and the font used must be approved by the Government prior to printing. The document is to be written in non-technical language wherever possible to facilitate understanding by the general public; shall include a glossary and “dos and don’ts”; shall follow best practices for historic preservation; and be user friendly.
- 10.3 Computer Software. Documents shall be placed on jump drive and provided to the Government in the word processing format agreed upon at the Kick-off Conference Call/Meeting.
- 10.4 Release of Data. All data, reports, and materials contained or developed for this project shall not be released or discussed without written approval of the Government.
- 10.5 Distribution. The consultant is responsible for reproducing all document deliverables.

- 10.6 Cover Letters. The consultant shall insert a cover letter with each document submittal and indicate the project, project phase, the date the comments are due, to whom comments are to be submitted, the date and location of the review conference, etc., as appropriate. (NOTE: depending on the recipient, not all letters will contain the same information.) The contents of the cover letters shall be coordinated with the City of Beaufort prior to the submittal date.
- 10.7 Submittals. All submittals shall be coordinated through the Department of Community & Economic Development for this project.
- 10.8 Points-of-Contact: GTR  
David Prichard  
Director of Community & Economic Development  
1911 Boundary St., Beaufort, SC 29901  
(843) 525-7011 [dprichard@cityofbeaufort.org](mailto:dprichard@cityofbeaufort.org)