

PLANNING COMMISSION
October 14, 2020

Virtual Meeting Due to COVID-19 Pandemic

The public may view the public meeting at:
www.youtube.com/user/cityofisleofpalms

Public Comment: Citizens may provide public comment here:
<https://www.iop.net/public-comment-form>

AGENDA

The Isle of Palms Planning Commission will hold its regular meeting on Wednesday, October 14, 2020 at **3:00 p.m.**

- A. Call to order and acknowledgment that the press and the public were duly notified in accordance with state law
- B. Approval of minutes September 9, 2020
- C. New business
- D. Old business 1. Review Community Facilities Element of Comprehensive Plan
<https://www.iop.net/comprehensive-plan>
2. Recommendation on zoning ordinance amendment to allow sewer lift stations in residential districts
3. Recommendation on adoption of new flood maps and associated ordinances
- E. Miscellaneous business 1. Update on drainage planning
2. Update on MOU with Water Sewer Commission
- F. Adjourn



Planning Commission
3:00pm, Wednesday, September 9, 2020
Virtual Meeting via Zoom call due to COVID-19 Pandemic
broadcasted live on YouTube: <https://www.youtube.com/user/cityofisleofpalms>

MINUTES

1. Call to Order

Present: Marty Brown, Scott Pierce, Ron Denton, William Mills, Vince DiGangi, Rick Ferencz, and Douglas Kerr, Director of Planning

Absent: Lisa Safford

2. Approval of Previous Meeting's Minutes – August 12, 2020

Mr. Mills made a motion to approve the minutes and Mr. Pierce seconded the motion. The minutes were approved unanimously.

3. Citizen's Comments -- none

4. New Business

A. Meeting with Stuart Day of Stantec and Chief Cornett regarding traffic

Director Kerr invited Stuart Day and Chief Cornett to answer questions and provide direction to the Commission regarding traffic concerns on the island. Mr. Day said that IOP has its own unique problems but noted that it's important to build consensus about "where we want to go and then we can try to develop the right tools and strategies to help achieve those goals." Mr. Day noted the benefit of hiring a consultant to complete the Transportation element of the Comprehensive Plan would be to help build that consensus among the residents and then provide goals and the necessary tools to achieve that consensus.

Committee members discussed available parking on the island and what is the minimum required of the City to provide in order to still receive renourishment funding.

Chief Cornett clarified that the limited parking on Palm Boulevard is currently as a result of the Emergency Ordinance. He also explained how paid parking currently works and will work after implementation.

4. Old Business

A. Review Comprehensive Plan: review of revisions Natural Resources Element; discussion Transportation Element

Director Kerr reviewed the changes made to the Natural Resources element during the August meeting.

Commissioners discussed whether or not to include the recommendations from the pollution study done for the City several years ago (page 11 of 34 in the Agenda packet). It was determined that these recommendations already appear in this element in some capacity or elsewhere in the Comprehensive Plan.

Commissioners engaged in a lengthy discussion about available parking on the island. Director Kerr shared information about the City's plan to move forward with paid parking across the island and its planned implementation for next Spring. The Planning Commission will wait to see what the Public Safety Committee and City Council does with parking over the next few months and include some or all of that in the Comprehensive Plan in support of those goals and strategies.

Discussion of the Community Facilities Element will occur at the October meeting.

B. Make recommendation on MOU with Water & Sewer Commission

Director Kerr noted one additional change to the MOU to the Commissioners. Commission attendance at the monthly Water & Sewer Commission meetings as well as General Manager Jordan's report will satisfy the Planning Commission's reporting requirement. Director Kerr said he will send the MOU to City Council along with the Planning Commission's recommendation.

5. Miscellaneous Business

A. Update on drainage planning

Mr. Ferencz noted that Thomas & Hutton "did a great job" on the RFP package for the smaller drainage projects. Director Kerr noted there will be one more RFP package when the permitting and design is finalized on Phase III. Staff and Wild Dunes are meeting to discuss final design issues at the golf course.

B. Update on short-term rental recommendations

Director Kerr stated all short-term rental recommendations have been approved and are now part of City ordinances.

7. Adjournment

Mr. Mills made a motion to adjourn and Mr. Denton seconded the motion. The meeting was adjourned at 5:14pm.

Respectfully submitted,

Nicole DeNeane
City Clerk

COMMUNITY FACILITIES

Public Safety

Isle of Palms is currently served by a police force of twenty sworn officers, eleven auxiliary staff, twenty-one patrol cars (five of which are four wheel drive SUVs for patrol supervisors) , one animal control truck, one all-terrain beach patrol truck, and one all-terrain golf cart for parking enforcement. Additionally the police department adds six part-time beach officers for the summer season for parking enforcement and beach patrol. The heavy volume of vehicular traffic, parking, and the safety of bicyclists and pedestrians are currently problems on the island. Also, as the numbers of boats and jet skis on waters around the island increase, regulatory measures may be necessary in the future to ensure that the City's waterways remain safe.

The island has two fire stations which house a total of five apparatus (two fire engines, two ladder trucks and one ladder service vehicle), four pickup trucks and four rescue boats. The Fire Department consists of thirty-five paid firefighters and ten volunteers. The City's current Insurance Service Organization classification is three.

In 2013 the City transitioned from handling emergency calls and dispatching services from within the City to the Charleston County Consolidated 9-1-1 Center (CCCD 9-1-1 Center). The CCCD 9-1-1 Center is a state-of-the-art facility located in North Charleston that handles emergency dispatch services for most of the municipalities in the Charleston area. When the City transitioned to the CCCD 9-1-1 Center, the response protocol changed from one dispatcher handling each call to a system of a call-taker, who focuses on the caller, and a dispatcher, who focuses on dispatching emergency personnel. The City continues to maintain public safety personnel to answer administrative phone lines, transferring emergency calls to the CCCD 9-1-1 Center and monitor radio transmissions

Currently there are no advance care Emergency Medical Service (EMS) vehicles stationed on the island; however, the EMS station is less than four miles away on the Isle of Palms Connector. More than 75 percent of the calls for assistance are medically and/or safety related, and the City has at least four trained first responders on duty each day. First responders are

emergency medical technicians who are authorized to provide basic life support services, including the use of an automated defibrillator. In contrast to County EMS paramedics, City first responders do not transport patients or administer drugs.

In an effort to provide immediate emergency medical response to City residents and visitors, the City will need to ensure that training and funding continues to be available to the Fire Department for this purpose.

Concurrently, the City must continue to work with the County EMS authorities to facilitate optimum response to medical emergencies.

An emergency preparedness plan was developed following Hurricane Hugo which requires annual review and assessment.

Water Sources

The public water on the island is provided by the Isle of Palms Water and Sewer Commission, which was established as a separate entity by City Council in 1992. Previously the utility was privately owned by The Beach Company; it subsequently was purchased by the City in 1991.

The Isle of Palms has developed a two-pronged approach to meet current and future needs for providing potable water that satisfies the Environmental Protection Agency's (EPA) drinking water standards: ground source water on the island is combined with surface water from the Charleston Commissioners of Public Works (CPW), the largest water and sewer utility in the area. Although abundant on the Isle of Palms, ground source water from wells has high, naturally occurring concentrations of fluoride and minerals. To improve ground source water quality to EPA standards, a reverse osmosis water treatment facility was constructed and placed into service in 1993. However, this facility provides only a portion of the potable water needed for the community. Therefore, in 1994 the Isle of Palms Water and Sewer Commission and the adjacent Town of Sullivan's Island initiated a project to buy potable surface water from the Charleston CPW.

A water main was constructed under Charleston Harbor from Fort Johnson to Sullivan's Island, across Sullivan's Island, and under Breach Inlet to connect with the Isle of Palms Water and Sewer Commission lines. In conjunction with this project, a new water main with fire hydrants was installed across Isle of Palms to enhance fire suppression capabilities and provide a major service connection between the two water systems on Isle of

Palms. Also, construction of a new ground storage tank to provide extra water storage capacity for the Wild Dunes area of the island was completed in 1997. The Water and Sewer Commission plans to continue upgrading older, small diameter lines with new, larger diameter pipes to increase water distribution capabilities for the entire island.

To encourage conservation of water, the Water and Sewer Commission uses a conservation rate structure. The Commission uses 300 gallons per day as the average amount used per household.

Wastewater Treatment

A significant portion of development on the Isle of Palms is served by septic tanks. Although all of the development in the gated section of Wild Dunes is served by a sewer treatment system, which incorporates spray irrigation of the golf courses, only some 40 percent of the development outside the boundaries of Wild Dunes is served by a sewer system. Over the years, septic tanks have been permitted in areas where the soils are only marginally suitable for this type of waste treatment.

Installation of public sewers in areas prone to flooding near the beach between 42nd and 53rd Avenues, adjacent to the Recreation Center from 26th to 29th Avenues, and other low areas of the island is supportable from a public health standpoint. Eliminating all septic tanks and replacing them with a public sewer system for the entire island is not a public health necessity at this time but should not be excluded from consideration as conditions and public health standards change. Since the number of residential units constructed in the Wild Dunes community is expected to be considerably less than the total number of units allowed by the original planned development agreement, there may be excess capacity available for extending sewer service to the problem areas on the island. The Forest Trail Wastewater Treatment Plant was replaced in 2014 and was designed to be expanded, if necessary.

To improve the accuracy of water quality monitoring at the Forest Trail Waste Water Treatment Plant, new monitoring equipment was installed in 1994 during a major rehabilitation of the plant. In 2000, a new blower building and new blowers were installed to reduce the amount of noise generated by the facility. The Water and Sewer Commission attempted to improve control of the noise and odors from both systems in recent years.

The City should continue to work closely with the Water and Sewer Commission to assess those areas of the island where the public good would be served by sewer service.

Electrical/ Telephone

Like most jurisdictions, the City is provided with satisfactory electrical power and telephone service by professional and responsive public utility companies. As with many older communities, the majority of these distribution systems are above ground and aging. Wild Dunes has successfully undertaken a project to place all of the utility lines within their community underground. In an effort to reduce outages due to storms and to provide for a more pleasing appearance for the City, those utility providers should be encouraged to replace above ground systems with underground distribution. The City should encourage other utility providers (cable, internet, etc.) to provide a full array of options to City residents.

In 2013, SCE&G installed a second transmission line from the mainland of Mount Pleasant to the Isle of Palms to increase reliability of service in inclement weather and times of high demand. The line was installed by burrowing under the marshes and waterways on the back side of the island.

Stormwater Drainage

During the spring of 1995, an engineering firm hired by the City conducted a comprehensive study of drainage problem areas and recommended how to best drain the areas in question. Cost estimates were also provided in anticipation of a bond referendum to fund these capital improvements. The areas studied included:

53rd Avenue
23rd Avenue and Waterway Boulevard
Sparrow and Waterway Boulevard
41st Avenue and Hartnett Boulevard
3rd Avenue and Charleston Boulevard
56th Avenue and Palm Boulevard

The drainage improvement project was estimated to cost in the vicinity of \$7 million. On November 7, 1995 the referendum to fund this project was

soundly defeated by a margin of 9 to 1. Without the authorization of funding, these major drainage improvements are not contemplated for the foreseeable future.

During 2001 Wild Dunes undertook a major drainage project to accommodate the run-off of an upcoming project. The City was able to work in conjunction with Wild Dunes and agreed to pay to upgrade the size of the drainage pipe to accommodate additional drainage from an abutting neighborhood.

In the fall of 2011, the City collaborated with Wild Dunes and completed a \$1.1M drainage project that alleviated many of the drainage problems between 53rd Avenue and 57th Avenue.

In addition to the routine maintenance of existing drainage facilities, which is done with the assistance of the Charleston County Public Works Department and the SC Department of Transportation (SCDOT), the City has been employing an innovative rehabilitation technique that utilizes a water jet and sewer vacuum truck to re-grade and re-sculpt ditches while simultaneously removing spoil material and vegetation. This process has been successful in shaping ditches that were previously difficult to access with heavy equipment. The City plans to continue funding for future maintenance using this same technique.

In 2007 the City developed a stormwater management program to satisfy the requirements of the federal Clean Water Act and participate in the National Pollutant Discharge Elimination System (NPDES). The program includes a series of regulations aimed at controlling stormwater runoff in an effort to reduce pollution and sedimentation. Charleston County is handling the compliance and administration of the program through an inter-governmental agreement with the City.

Parks and Recreation

In addition to the seven mile long public beach, Isle of Palms is served by a centrally located, 9.8 acre Recreation Center bounded by 27th and 29th Avenues, just north of Hartnett Boulevard. The site includes softball, baseball and soccer fields, tennis and basketball courts, a children's

playground, a dog park and a recreation building that was constructed in 2003, housing offices, large multipurpose rooms and a gymnasium.

The Charleston County Parks and Recreation Commission (PRC) owns and operates a regional park on a nine acre tract located between 14th Avenue and the Beachside residential community along the Atlantic Ocean. Like other PRC parks on Folly Beach and Kiawah Island, the Isle of Palms Park has 350 parking spaces with restroom, shower, changing, picnic and volleyball facilities, life guard services, children's play area and beach access for the handicapped. Limited food and beverages are available for sale and chairs and umbrellas can be rented. The Park site is buffered from the Beachside neighborhood by a landscaped berm and is accessible by car only from 14th Avenue. There is a parking fee.

Two 18-hole championship golf courses and a world-class tennis facility, which are available to the public for a fee, are located on the island within the Wild Dunes gated community.

In 2013, the City acquired a one acre tract of land at Palm Boulevard and 18th Avenue. The property is a passive park and has been named Carmen R. Bunch Park. A portion of the funding used to purchase the land came from the Charleston County Greenbelt Program, which dictates that the land always be used as a park.

Public Properties

In January 1999 as a result of a referendum, the City purchased the 5.5 acre marina site and facilities at the north end of 41st Avenue for \$4.25M. The City arranged financing for the purchase through a 20-year bond. The site is bordered by the Intracoastal Waterway and Morgan Creek, providing a premier location for marina, entertainment, and recreational activities. This complex offers a full service marina and overnight berthing, a convenience store, restaurant, boat storage area, a boat launching ramp and other privately operated water-sport businesses.

Prior to purchase, the City contracted for a complete inventory and facilities baseline assessment to ensure that the condition of the facilities was known. In general the facilities include the marina proper with docks, piers, headwalls, and boat refueling equipment; the convenience store that includes restrooms, offices, and gasoline pumps; the boat launching ramp with a

small utility building/restroom abreast of the ramp; and a large two-story restaurant with some built-in food service equipment. In recent years, the City has undertaken major maintenance projects on the marina site including bulkhead replacement, dredging and dock replacement and improvement.

Because of the timing and conditions of the purchase, leases to various businesses vary in length and circumstance. In general, turnover in the marina tenants is extremely rare and vacancies have been filled quickly. While lease revenue is stable, it is not sufficient to fund 100% of the marina cash needs including debt service on both the bond issued to purchase the marina and the subsequent bond issued to replace the bulkhead. The funding gap between marina revenues and expenditures has historically been filled using tourism revenues such as Municipal Accommodations Taxes, Hospitality Taxes and/or State Accommodations Taxes. Once the bonds are satisfied in 2019 and 2016, respectively, the marina is expected to be financially self-sustaining. Meanwhile, the marina has provided the desired marina-type facilities and services to the City population, which was the primary objective of the purchase.

In the short to mid-term, the marina is expected to provide the desired level of marina services to the population and operate on a fiscally sound basis from year to year. Over the longer term, services will continue but not without close attention to modernization and maintenance of the facilities and monitoring of the site's impact on neighboring residential areas. It should be anticipated that capital improvements and some major maintenance costs will surface in future years. These expected costs will be mitigated to a significant extent as the balance owed on the purchase bond decreases and is satisfied in 2019.

In addition to the Marina and recreation facilities, the City owns various buildings on the island. City Hall at 1207 Palm Boulevard is a two story-6,800 square foot building completed in December of 1991. At the base of the connector, a 3,500 square-foot Public Works building was finished in April of 1991, which replaced the original building that did not survive Hurricane Hugo. The City owns two vacant parcels behind the Public Works property. The City's two fire stations, #44-41st Avenue and 30 J.C. Long Boulevard, were built in 2007 and 2008 respectively. These stations replaced structures that were built in 1991, but had to be demolished because of extensive mold infestation. The Water and Sewer Commission's facilities

at 1300 Palm Boulevard were owned by the City; however, in 2014, the City transferred ownership of this and other properties with a contingency clause that the property would come back to the City if it ceased to be used for the provision of public water and sewer service. . The City constructed a public restroom facility at 1118 Ocean Boulevard in 1991 along with a walkway to the beach to ensure that the physically challenged have access to public restrooms and the beach. In future years, the renovation or replacement of this facility will need to be contemplated.

Water access

Public beach access is provided at 56 points between Breach Inlet and 53rd Avenue. Fifteen additional beach access points are provided within Wild Dunes community for residents and guests of Wild Dunes.

Public access to tidal creeks and marsh on the northwest side of the island is limited. At several locations, streets were originally platted to extend to the edge of the marsh but never constructed. The City has formally accepted The Beach Company's dedication of several of these streets to the public.

Five marinas are located on the island: two are located at Breach Inlet, and the remainder are on 41st Avenue- the Isle of Palms Marina, Wild Dunes Yacht Harbor and Dewees Island Marina. The Isle of Palms Marina has received approval by the Board of Zoning Appeals to construct a boat storage building with a 192 dry-stack storage capacity but no action on this approval is imminent.

Two City-owned boat ramps are located on the island: a boat ramp near Breach Inlet is available for an annual fee, and a boat ramp at the Isle of Palms Marina is available for either an annual fee or a fee per launch.

Key issues

- Maintenance and improvement of public safety
- Maintenance and improvement of water and sewer facilities
- Expansion of recreational opportunities for island residents
- Improvements of storm water management
- Continued operation and overall stewardship of the City marina facilities

Goals and Implementation Strategies

Goal 5.1: Improve public safety.

Strategy 5.1.1: The City should continue to work with County officials to ensure optimum EMS services on the island and maintain basic medical emergency services through the Fire Department. *(Ongoing; Fire Department)*

Strategy 5.1.2: Develop and implement a method of distribution for the Disaster Preparedness Plan. *(Ongoing; General Government and Fire Department)*

Goal 5.2: Support the installation of water and sewer services where required for public health.

Strategy 5.2.1: The City should meet periodically with the Water and Sewer Commission and strive for a “team approach” to addressing waste water and water issues that will arise in future years. *(Ongoing; General Government and City Council)*

Strategy 5.2.2: In conjunction with the Water and Sewer Commission, the City should take those steps appropriate to facilitate additional sewer service on the island where public health is benefited. *(Ongoing; General Government and City Council)*

Goal 5.4: Improve recreational opportunities for all island residents.

Strategy 5.4.1: Develop a plan to improve alternate modes of transportation on the island including bikeways

and sidewalks with an emphasis on installing sidewalks and improving pedestrian safety (see also Strategy 8.1.3). *(2008; Building Department and Recreation Department)*

Strategy 5.4.2: Inventory unimproved rights-of-way extending to the creeks or marsh for possible use as passive recreational sites not unlike the street ends in the Old Village of Mount Pleasant along the Harbor. *(2008; Building Department and Recreation Department)*

Strategy 5.4.3: Consider additional improvements to the Recreation Center to offer a wider spectrum of leisure activities for pre-school children to senior adults (see also Strategy 1.1.2). *(Ongoing; Recreation Department)*

Goal 5.5: Improve the appearance of the island.

Strategy 5.5.1: The City should continue to support tree-planting programs along streets and develop a long-term plan which prioritizes streets and identifies the types of trees to be used. *(Ongoing; General Government and Building Department)*

Strategy 5.5.2: Consider additional ways of reducing littering on the island. *(Ongoing; Police Department and City Council)*

Strategy 5.5.3: Consider ways of restricting the construction of structures at the ends of docks working in conjunction with the OCRM and the U.S. Corps of Engineers. *(Ongoing; Building Department, General Government and City Council)*

Strategy 5.5.4: Encourage new or replacement electrical distributing systems to be constructed underground. *(Ongoing)*

Strategy 5.5.5: Seek funding sources to place electrical distributing systems underground. *(Ongoing)*

Goal 5.6: The City should take initiatives to address drainage and storm water runoff on the island.

- Strategy 5.6.1: Continue to work closely with County and State agencies to properly maintain existing storm water and drainage systems. Clearly delineate the City's areas of responsibility and take appropriate action where feasible. *(Ongoing; General Government and City Council)*
- Strategy 5.6.2: Consider funding for a comprehensive drainage study that would isolate the highest priority areas and provide engineering options and costs. *(Ongoing; General Government, Public Works and City Council)*
- Strategy 5.6.3: Consider funding options, including special assessments, to address drainage problems. *(Ongoing; General Government and City Council)*
- Strategy 5.6.4: The City should continue to work to remain in compliance with the National Pollution Discharge Elimination System Phase II as a small MS4 community. *(Ongoing; Building Department, General Government and City Council)*

Goal 5.7: Provide comprehensive and reasonably priced marina services to the public consistent with considerations of the neighborhood location.

- Strategy 5.7.1: Ensure facilities are capable of the highest levels of professional service and provide services at competitive prices. *(Ongoing; General Government and City Council)*
- Strategy 5.7.2: Constantly assess potential improvements and changes to the Marina business make-up to expand Marina service consistent with the existing neighborhood environment. *(Ongoing; General Government and City Council)*

Goal 5.8: Protect and enhance the City's investment in real property.

- Strategy 5.8.1: Periodically review and update the Baseline Facilities Assessment of the Marina complex to ensure the conditions of the facilities are monitored for safety, physical condition, and utility. *(Ongoing; General Government and City Council)*
- Strategy 5.8.2: Make plans to set aside funds for future year maintenance and capital improvements that will be required to protect and maximize the City's investment. *(Ongoing; General Government and City Council)*
- Strategy 5.8.3: Aggressively pursue grants or other external funding sources that will enhance the safety, environmental conditions, facilities, or other features of the Marina. *(Ongoing; General Government and City Council)*
- Strategy 5.8.4: Develop plans for continuous maintenance/repair of various City buildings such as City Hall, the Public Safety building, Fire Station 2, the Recreation Center and the Public Works building. *(2008; General Government and City Council)*
- Strategy 5.8.5: Develop a beautification plan for the Marina complex and lower 41st Avenue corridor to include vegetation, signage, beautification, and architectural scheme. *(2008; General Government and City Council)*

Goal 5.9: Ensure maximum financial return on the Marina facilities consistent with Goals 5.7 and 5.8 above.

- Strategy 5.9.1: Encourage imaginative proposals from marina businesses that will enhance revenues to the City. *(Ongoing)*
- Strategy 5.9.2: Constantly review prevailing rates and fees to ensure revenues are consistent with comparable facilities. *(Ongoing; General Government and City Council)*

Sec. 5-4-32. - SR-1 single-family residential district.

In addition to all other applicable requirements of this chapter and other City ordinances, the requirements for the SR-1 district are as follows:

- (1) *Purpose.* The purpose of the SR-1 single-family residential district is:
 - a. To provide for quiet, low-density residential neighborhoods on comparatively large lots.
 - b. To discourage unwarranted encroachment by prohibiting commercial uses and to prohibit other uses which would interfere with the development or continuation of single-family use.
 - c. To encourage the cessation of nonconforming uses.
 - d. to discourage uses which would generate traffic on minor streets other than required to serve residences on those streets.
 - e. To maintain the integrity of established residential neighborhoods, and to minimize the disruption of existing residential patterns by the scattered development of comparatively large residential lots.
- (2) *Permitted uses.* Permitted uses in the SR-1 single-family residential district shall be:
 - a. Detached, single-family dwelling.
 - b. Residential accessory uses.
 - c. Sewer pump stations with a footprint of one thousand square feet (1,000 sq') or less.
- (3) *Permitted special exceptions.* Permitted special exceptions in the SR-1 single-family residential district shall be:
 - a. Elementary and secondary schools offering general education courses.
 - b. Church, synagogue, or other place of worship.
 - c. Group dwellings.
 - d. Golf courses.
 - e. Home occupations meeting the requirements of section 5-4-44.
 - f. Public utility and municipal uses satisfying the special exception requirements set forth in subsection (9) of this section.
- (4) *Conditional uses.* Public utility and municipal uses satisfying the conditional use requirements set forth in subsection (9) of this section shall be conditional uses in the SR-1 single-family residential district.
- (5) *Minimum lot requirements.* Minimum lot requirements in the SR-1 single-family residential district are as follows:
 - a. Lot area: thirty-five thousand (35,000) square feet of contiguous highland.
 - b. Lot width: seventy feet (70') measured at building line.
 - c. Lot depth: one hundred ten feet (110').
 - d. Lot frontage: sixty feet (60') on a public or private street; thirty feet (30') on a public or private cul-de-sac.

Vehicle access to the lot from a public or private street shall be provided within the required lot frontage.
- (6) *Minimum yard requirements.* Minimum yard requirements in the SR-1 single-family residential district are as follows:

- a. Front yard: thirty feet (30').
- b. Side yard: ten feet (10').
- c. Rear yard: thirty feet (30').

Exception: minimum yard requirements for lots with an area less than seventeen thousand five hundred (17,500) square feet.

- a. Front yard: twenty-four feet (24').
- b. Side yard: ten feet (10').
- c. Rear yard: twenty-four feet (24').

- (7) *Maximum height.* Maximum height in the SR-1 single-family residential district shall be forty feet (40').
- (8) *Double frontage lots.* Double frontage lots are prohibited in the SR-1 single-family residential district.
- (9) *Public utilities and municipal uses.*
 - a. *Public utility facilities and uses.* This subsection (9)a applies to wastewater treatment facilities, public works maintenance and storage facilities, and all other public utility facilities or uses.
 - (i) Construction or alteration of a public utility facility may be approved in a residential zoning district as a conditional use subject to a finding by the Zoning Administrator that the facility satisfies all of the following conditions:
 - 1. The facility is located on a lot that is at least one (1) acre in size;
 - 2. The overall lot coverage of the facility is less than fifty percent (50%);
 - 3. The minimum setback for any structure is thirty feet (30') from all property lines;
 - 4. The maximum overall height of any structure is thirty feet (30');
 - 5. The minimum buffer along all property lines is twenty feet (20') wide with at least six (6) canopy trees, twelve (12) understory trees, and one-hundred (100) three-gallon shrubs per one-hundred (100) linear feet of property line; with each species approved by the Zoning Administrator based on its ability to provide screening and drought tolerance;
 - (ii) The Board of Zoning Appeals may approve construction or alteration of a public utility facility in a residential zoning district as a special exception subject to the requirements of section 5-4-5(c) and upon a finding that the following additional conditions are met:
 - 1. The facility is located on a lot that is at least one-half (½) acre in size;
 - 2. The overall lot coverage of the facility is less than fifty percent (50%);
 - 3. The minimum setback for any structure is twenty feet (20') from all property lines;
 - 4. The maximum overall height of any structure is forty feet (40');
 - 5. The minimum buffer along all property lines is ten feet (10') wide with at least six (6) canopy trees, twelve (12) understory trees, and one-hundred (100) three-gallon shrubs per one-hundred (100) linear feet of property line; with each species approved by the Zoning Administrator based on its ability to provide screening and drought tolerance.
 - b. *Municipal facilities and uses.* This subsection (9)b applies to all municipal facilities, including but not limited to City halls, fire stations, police stations, public safety facilities,

and recreation centers, parks, playgrounds, and any other municipal use, but excludes public utility facilities or uses.

- (i) Construction or alteration of a municipal facility may be approved in a residential zoning district as a conditional use subject to a finding by the Zoning Administrator that the facility satisfies all of the following conditions:
 - 1. The facility is located on a lot that conforms in size to the applicable zoning district requirement;
 - 2. The overall lot coverage is less than forty percent (40%);
 - 3. The minimum building setback from the front or rear lot line is thirty feet (30');
 - 4. The minimum building setback from any side lot line is ten feet (10');
 - 5. The maximum overall height of any structure is forty feet (40');
 - 6. A buffer is installed that complies with section 5-4-71.

- (ii) The Board of Zoning Appeals may approve construction or alteration of a municipal facility in a residential zoning district as a special exception subject to the requirements of section 5-4-5(c) and upon a finding that the following additional conditions are met:
 - 1. The facility is located on a lot that conforms in size to the applicable zoning district requirement;
 - 2. The overall lot coverage is less than fifty percent (50%);
 - 3. The minimum building setback from the front or rear lot line is twenty feet (20');
 - 4. The minimum building setback from any side lot line is ten feet (10');
 - 5. The maximum overall height of any structure is forty feet (40');
 - 6. A buffer is installed that complies with section 5-4-71.

(Ord. No. 2015-15, § 1, 2-23-2016; Ord. No. 2019-07, 4-23-2019)

ARTICLE 8. - FLOOD DAMAGE PREVENTION⁴

Footnotes:

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Editor's note— Ord. No. 2017-07, § 1(Exh. A), adopted Apr. 24, 2018, amended Art. 8 in its entirety to read as herein set out. Former Art. 8, §§ 5-4-151—5-4-171, pertained to similar subject matter, and derived from Ord. No. 2015-12, § 1(Exh. A), adopted Oct. 27, 2015.

Sec. 5-4-151. - Statutory authorization.

Pursuant to S.C. Code 1976, § 6-29-710, as amended, the Legislature of the State has delegated the authority to local governments to adopt regulations designed to protect against and secure safety from floods. Therefore, the City Council hereby adopts the provisions set forth in this article.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-152. - Findings of fact.

- (a) The flood hazard areas of the City are subject to periodic inundation which can result in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affects the public health, safety and general welfare.
- (b) These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, floodproofed, or otherwise unprotected from flood damages.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-153. - Statement of purpose.

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

- (1) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; and
- (4) Regulate developments which may increase erosion or flood damage; and, regulate the construction of structures which will unnaturally divert floodwaters which may increase flood hazards to other lands.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-154. - Objectives.

The objectives of this article are:

- (1) To protect human life and health;
- (2) To minimize expenditure of public money for costly flood control projects;
- (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) To minimize prolonged business interruptions;
- (5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- (6) To help maintain a stable tax base by providing for the sound use and development of floodprone areas in such a manner as to minimize future flood blight areas;
- (7) To encourage notification to potential real property buyers that a property is located in a special flood hazard area.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-155. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Appeal means a request for a review of the Building Official's interpretation of any provisions of this chapter or a request for a variance.

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.
optional

Area of special flood hazard means the land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year.

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

Base flood elevation means the water surface elevations of the base flood as determined by the Federal Insurance Administrator of the National Flood Insurance Program (NFIP).

Basement means any area of the building having its floor subgrade (below ground level) on all sides.

Building means any structure built for support, shelter, or enclosure for any occupancy or storage.

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

Development means any manmade change to improved or unimproved real estate, including, but not limited to, building or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.

Existing construction means, for the purposes of determining rates, structures for which the start of construction commenced before January 1, 1975.

Expansion to an existing manufactured home park or manufactured home subdivision means 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, either final site grading or pouring of concrete pads, or the construction of streets). Any expansion is considered new construction.

Fair market value of a structure means:

- (1) The appraised value of the structure prior to the start of the initial repair or improvement; or
- (2) In the case of damage, the appraised value of the structure prior to the damage occurring.

Flood or *flooding* means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland or tidal waters;
- (2) The unusual and rapid accumulation of runoff of surface waters from any source.

Flood Hazard Boundary Map (FHBM) means an official map of a community, issued by the Federal Emergency Management Agency (FEMA), where the boundaries of the areas of special flood hazard have been defined as Zone A.

Flood Insurance Rate Map (FIRM) means an official map of a community, on which the Federal Emergency Management Agency (FEMA) has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

Flood Insurance Study means the official report provided by the Federal Emergency Management Agency (FEMA). The report contains flood profiles, as well as the Flood Boundary-Floodway Map and the water surface elevation of the base flood.

Freeboard means a factor of safety usually expressed in feet above a flood level for purposes of flood plain 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 means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term "functionally dependent use" includes only docking or port facilities necessary for the loading and unloading of cargo or passengers, shipbuilding and ship repair facilities. The term "functionally dependent use" does not include long-term storage, manufacture, sales, or service facilities.

Highest adjacent grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic structure means any structure that is:

- (a) Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of the Interior (DOI)) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (c) Individually listed on a state inventory of historic places;

- (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified:
 - (1) By an approved state program as determined by the Secretary of Interior, or
 - (2) Directly by the Secretary of Interior in states without approved programs.

Some structures or districts listed on the state or local inventories MAY NOT be "Historic" as cited above, but have been included on the inventories because it was believed that the structures or districts have the potential 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.

Lowest floor means 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 enclosure is not built so as to render the structure in violation of other provisions of this article.

Manufactured home means a structure, transportable in one (1) 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. It does not include recreational vehicles or travel trailers.

Mean sea level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this article, the term is synonymous with the National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD 88) of 1988, or other datum, to which the base flood elevations shown on a community's Flood Insurance Rate Maps (FIRM) are shown.

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

New construction means structures for which the start of construction commenced on or after the effective date of the ordinance from which this article is derived.

New manufactured home park or manufactured home subdivision means a parcel or contiguous parcels of land divided into two (2) or more manufactured home lots for rent or sale for which the construction of facilities for servicing the lot on which the manufactured home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed on or after the effective date of the ordinance from which this article is derived.

North American Vertical Datum of 1988 (NAVD 88), means a vertical control used as the reference datum on new flood insurance rate maps.

Primary frontal dune means 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 means a vehicle which is:

- (1) Built on a single chassis;
- (2) Four hundred (400) square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light duty truck; and
- (4) Designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel or seasonal use.

Sand dunes means naturally occurring or manmade accumulations of sand in ridges or mounds landward of the active beach.

Start of construction, for other than new construction and substantial improvements under the Coastal Barrier Resources Act, includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, 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 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 or walkways; nor does it include excavation for a basement, 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 building. For substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimension of the building.

Structure means a walled and roofed building that is principally above ground, a manufactured home or a gas or liquid storage tank.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its pre-damaged condition equals or exceeds fifty percent (50%) of the fair market value of the structure before the damage occurred.

Substantial improvement means any combination of repairs, reconstruction, alteration, additions or improvements to a structure in which the total cost equals or exceeds fifty percent (50%) of the fair market value of the structure before the start of construction. The term "substantial improvement" does not, however, include either:

- (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications identified by the Building Official which are the minimum necessary to ensure safe living conditions; or
- (2) Any alteration of a structure listed on a National Register of Historic Places or a State Inventory of Historic Places, provided that the alteration will not preclude the structure's continued designation as a historic structure.

Variance means a grant of relief to a property owner from the requirements of this article which permits construction in a manner otherwise prohibited by this article where specific enforcement would result in unnecessary hardship to the owner.

Violation means the failure of a structure or other development to be fully compliant with this article.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-156. - Areas in which this article applies.

This article applies to all property in the City identified as areas of special flood hazard by the Federal Emergency Management Agency (FEMA) in its Flood Insurance Study dated [January 29, 2021](#) ~~November 17, 2004~~ with accompanying maps and other supporting data.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-157. - Basis for establishing the areas of special flood hazard.

The special flood hazard areas identified by the Federal Emergency Management Agency (FEMA) in its Flood Insurance Rate Map (FIRM) and Flood Insurance Study dated [January 29, 2021](#)~~November 17, 2004~~, with all attachments thereto, are hereby adopted by reference and made a part of this article as fully and completely as if set forth herein verbatim.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-158. - Establishment of building and/or zoning permit.

A building/zoning permit shall be required in conformance with the provisions of this article prior to the commencement of any development activities.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-159. - Compliance.

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

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-160. - Abrogation and greater restrictions.

Where this article and any other provision of this Code conflict or overlap, whichever provision imposes the more stringent restrictions shall prevail. If two (2) or more flood zones or base flood elevations transect a structure, the structure shall conform to the most stringent zone and the highest base flood elevation.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-161. - Interpretation.

In the interpretation and application of this article, all provisions shall be:

- (1) Considered a minimum requirement;
- (2) Liberally construed in favor of the City Council; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-162. - Partial invalidity and severability.

In the event any section, subsection, sentence, clause or phrase contained in this article shall be declared or adjudicated to be invalid or unconstitutional by a court of competent jurisdiction, all the remaining provisions of this article shall be and remain in full force and effect.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-163. - Warning and disclaimer of liability.

The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur. Flood heights may be increased by manmade or natural causes. This article 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 damage. This article shall not create liability on the part of the City or by any officer or employee thereof for any flood damage that results from reliance on or compliance with this article or any administrative decision made hereunder.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-164. - Penalties for violation.

Violation of the provisions of this article 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 article or fails to comply with any of its requirements shall, upon conviction thereof, be punished as provided in section 1-3-66, and in addition shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City from taking such other lawful action as is necessary to prevent, enjoin or remedy any violation.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-165. - Administration; designation of Building Official.

The Building Official is hereby appointed to administer and implement the provisions of this article.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-166. - Adoption of letter of map revision (LOMR).

All LOMRs that are issued in the areas identified in section 5-4-156 are hereby adopted.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-167. - Permit procedures and certification requirements.

(a) *Permit:* Application for a building/zoning permit shall be made to the Building Official on forms provided by him, prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials; drainage facilities, and the location of the foregoing. Specifically, the following information is required:

- (1) Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all structures.
- (2) Elevation in relation to mean sea level to which any nonresidential structure will be floodproofed.
- (3) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure meets the floodproofing criteria in section 5-4-171(b).
- (4) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

(b) *Certifications:*

- (1) *During construction.* A floor elevation or floodproofing certification is required after the lowest floor is completed, or in instances where the structure is subject to the regulations applicable to coastal high hazard areas, after placement of the horizontal structural members of the lowest floor. Within twenty-one (21) calendar days of establishment of the lowest floor elevation, or floodproofing by whatever construction means, or upon placement of the horizontal structural members of the lowest floor, whichever is applicable, it shall be the duty of the permit holder to submit to the Building Official a certification of the elevation of the lowest floor, floodproofed elevation, or the elevation of the lowest habitable floor, whichever is applicable, as built, in relation to the 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. When floodproofing is utilized for a particular building, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work done within the twenty-one (21) calendar day period and prior to submission of the certification shall be at the permit holder's risk. The Building Official shall review the floor elevation survey date 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 may result in the issuance of a stop work order for the project from the Building Official.
- (2) *As-built certification.* Upon completion of the development a registered professional engineer, land surveyor or architect, in accordance with state law, shall certify according to the requirements section that the development is built in accordance with the submitted plans and previous pre-development certifications.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-168. - Duties and responsibilities of the Building Official.

Duties of the Building Official shall include, but not be limited to, the following:

- (1) Review all building and zoning permits to ensure compliance with this article.
- (2) Advise permittees that additional federal or state or city permits may be required, and, if specific federal or state or city permits are known to the Building Official, require that copies of such be provided and maintained on file with the building/zoning permit.
- (3) Notify adjacent communities and the State Coordinator, Flood Mitigation Program, S.C. Land, Water and Conservation Division of the South Carolina Department of Natural Resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
- (4) Ensure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- (5) Verify and record the actual elevation (in relation to mean seal level) of the lowest floor (including basement) of all new or substantially improved structures, in accordance with section 5-4-167(b).
- (6) Verify and record the actual elevation, in relation to mean sea level, to which the new or substantially improved structures have been floodproofed, in accordance with section 5-4-171(b).
- (7) In coastal high hazard areas, certification shall be obtained from a registered professional engineer or architect that the structure is securely anchored to adequately anchored pilings or columns in order to withstand the effects of wind and water loads acting simultaneously on the building.

- (8) In coastal high hazard areas, the Building Official shall review plans for adequacy of breakaway walls in accordance with section 5-4-171(e)8.
- (9) When floodproofing is utilized for a particular structure, require certification from a registered professional engineer or architect.
- (10) 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.
- (11) When base flood elevation data has not been provided in accordance with section 5-4-157, then the Building Official shall either:
 - a. Obtain, review, and utilize any base flood elevation data available from a federal, state or other source, in order to administer the provisions of sections 5-4-170 and 5-4-171; or
 - b. Require the applicant to obtain and reasonably utilize any base flood elevation data available from a federal, state or other source, and to determine the base flood elevation in accordance with accepted hydrologic and hydraulic engineering practices.
- (12) Before a certificate of occupancy is issued for a structure, inspect the premises to ensure that the requirements of this article have been met.
- (13) All records pertaining to the provisions of this article shall be maintained in the Office of the City Clerk and shall be made available for public inspection.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-169. - Variance procedures.

- (a) The City's Board of Zoning Appeals shall hear and decide appeals and requests for variances hereunder.
- (b) The Board of Zoning Appeals shall hear and decide appeals when it is alleged that there is an error in any requirements, decisions, or determinations made by the Building Official in the enforcement or administration of this article.
- (c) Any person aggrieved by the decision of the Board may appeal such decision to a court of competent jurisdiction as provided by law.
- (d) Notwithstanding any other provision in this article to the contrary, variances may be issued for repair or rehabilitation of historic structures listed on the National Register of Historic Places or the State Inventory of Historic Places upon a finding by the Board 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.
- (e) In considering appeals or request for variances, the Board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this article and:
 - (1) The danger that materials may be swept onto other lands to the injury of others;
 - (2) The danger to life and property due to flooding or erosion damage;
 - (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 to the community of the services provided by the proposed facility;
 - (5) The necessity to the facility of a waterfront location, where applicable;

- (6) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - (7) The compatibility of the proposed use with existing and anticipated development;
 - (8) The relationship of the proposed use to the comprehensive plan and flood plan management program for that area;
 - (9) The safety of access to the property during floods for emergency and nonemergency vehicles;
 - (10) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
 - (11) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- (f) The Board may attach such conditions to the granting of a variance hereunder as it deems necessary to further the purposes of this article.
 - (g) Variances shall not be issued within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.
 - (h) Requirements for variances:
 - (1) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - (2) Variances shall only be issued upon:
 - a. A showing of good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
 - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
 - (3) Any applicant to whom a variance is granted shall be given written notice by the Board that the issuance of a variance to construct a structure below the base flood level will result in substantially increased premium rates for the flood insurance as specified by the Federal law.
 - (4) The City Clerk shall maintain the records of all appeal actions ~~and report any variances to the Federal Emergency Management Agency (FEMA) as required by law.~~

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-170. - General standards.

In all areas of the City the following provisions are required:

~~(a) — Article IV.A.1. Reasonably Safe From Flooding—required - all permit applications shall be reviewed to determine whether proposed building sites will be reasonably safe from flooding.~~

(ba) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

- (cb) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (de) All new construction and substantial improvements shall be constructed by methods and practices that minimize flood damage.
- (ed) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (fe) 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.
- (gf) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (hg) Any alteration, repair, reconstruction, or improvements to an existing structure which has the lowest floor, including basement, elevated to the base flood elevation or fourteen (14) feet NGVD (thirteen (13) feet NAVD 88), whichever is higher, shall meet the requirements of new construction as contained in sections 5-4-171(a) and (c) of this article.
- (ih) Any alteration, repair, reconstruction, or improvements to an existing structure which has the lowest floor, including basement, below the base flood elevation or fourteen (14) feet NGVD (thirteen (13) feet NAVD 88), whichever is higher, shall meet the requirements contained in sections 5-4-171(b) and (d) of this article, provided that no new floor elevation shall be lower than the existing floor elevation.
- (ji) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during flooding.
- (kj) Public utilities and facilities are constructed so as to minimize flood damage and provide adequate drainage.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Sec. 5-4-171. - Specific standards.

In all areas of the City where base flood elevation data has been provided as set forth in section 5-4-157, or section 5-4-168(11), the following provisions are required:

- (a) *Residential new construction.* New construction, of any residential structure shall have the lowest floor, including basement, elevated no lower than the base flood elevation or fourteen (14) feet NGVD (thirteen (13) feet NAVD 88), whichever is higher. Where permitted, solid foundation perimeter walls used to elevate a structure shall have openings sufficient to facilitate the unimpeded movements of floodwater. The elevation of the lowest floor shall be documented and provided to the Building Official using an elevation certificate in accordance with section 5-4-167(b).
- (b) *Residential substantial improvement or the repair of substantial damage.* Substantial improvement or the repair of substantial damage of any residential structure shall have the lowest floor, including basement, elevated no lower than the base flood elevation. Where permitted, solid foundation perimeter walls used to elevate a structure shall have openings sufficient to facilitate the unimpeded movements of floodwater. The elevation of the lowest floor shall be documented and provided to the Building Official using an elevation certificate in accordance with section 5-4-167(b).
- (c) *Nonresidential new construction.* New construction, of any commercial, industrial, or nonresidential structure shall have the lowest floor, including basement, elevated no lower than the level of the base flood elevation or fourteen (14) feet NGVD (thirteen (13) feet NAVD 88),

whichever is higher. Structures 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. A registered professional engineer or architect shall document and certify to the Building Official that the standards of this subsection are satisfied, using a certificate in accordance with section 5-4-167(b).

- (d) *Nonresidential substantial improvement or the repair of substantial damage.* Substantial improvement or the repair of substantial damage of any commercial, industrial, or nonresidential structure shall have the lowest floor, including basement, elevated no lower than the level of the base flood elevation. 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. A registered professional engineer or architect shall document and certify to the Building Official that the standards of this subsection are satisfied, using a certificate in accordance with section 5-4-167(b).
- (e) *Enclosed areas below the base flood elevation or fourteen (14) feet NGVD (thirteen (13) feet NAVD 88), whichever is higher.* New construction and substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation that are usable solely for the parking of vehicles, building access, or storage shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
- (1) A minimum of two (2) openings having a total net area of not less than one (1) square inch per square foot of enclosed area subject to flooding shall be provided. For the purpose of compliance with this article, windows are not included.
 - (2) The bottom of all opening shall be no higher than one foot (1') above grade.
 - (3) Openings may be equipped with screens, louvers, valves or other coverings or devices, provided they permit the unimpeded entry and exit of floodwaters.
 - (4) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
 - (5) Only the portions of openings that are below the base flood elevation (BFE) can be counted towards the required net open area.
 - (6) Fill placed around foundation walls must be graded so that the grade inside the enclosed area is equal to or higher than the adjacent grade outside the building on at least one (1) side of the building.
- (f) *Temporary structure.* No temporary structures shall be placed in a floodway or coastal high hazard area, or in any area of special flood hazard within the corporate limits of the City unless a permit is obtained from the Zoning Administrator. No such permit shall be issued unless the latest FEMA guidelines regarding such structures are met.

(g) *Shallow Flooding (AO Zones) - Located within the areas of special flood hazard established in Article 1.D, are areas designated as shallow flooding. The following provisions shall apply within such areas:*

(1) 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.

(2) All new construction and substantial improvements of non-residential structures shall:

(i) 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,

(ii) Be completely flood-proofed together with attendant utility and sanitary facilities to or above that 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 Article III.D.

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

(hg) *Coastal high hazard areas (V zones).* Located within the areas of special flood hazard established in section 5-4-157 are areas designated as coastal high hazard areas. These areas have special flood hazards associated with wave-wash; therefore, the following provisions shall apply:

- (1) All new construction and substantial improvement shall be located landward of the reach of the 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 shall be elevated so that the bottom of the lowest horizontal structural member supporting the lowest floor (excluding pilings or columns) is located no lower than the base flood elevation level or fourteen (14) feet NGVD (thirteen (13) feet NAVD 88), whichever is higher, with all space below the lowest supporting member open so as not to impede the flow of water. Open lattice work or decorative screening may be permitted for aesthetic purposes only and must be designed to wash away in the event of flood and wave action and in accordance with subsection (e)(9) of this section.
- (3) All substantial improvements and repairs to substantial damage of any structure shall be elevated so that the bottom of the lowest horizontal structural member supporting the lowest floor (excluding pilings or columns) is located no lower than the base flood elevation with all space below the lowest supporting member open so as not to impede the flow of water. Open lattice work or decorative screening may be permitted for aesthetic purposes only and must be designed to wash away in the event of flood and wave action and in accordance with subsection (e)(9) of this section.
- (4) All new construction and substantial improvement shall be securely anchored on pilings or columns.
- (5) All pile and column foundations and structures attached thereto shall be anchored to resist flotation, collapse, and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. Water loading values shall equal or exceed the base flood. Wind loading values shall be in accordance with the latest edition of the building code or One- and Two-Family Dwelling Code adopted by the City.
- (6) Compliance with provisions contained in subsection (e)(2), (3) and (5) of this section shall be certified by a licensed professional engineer or architect.
- (7) There shall be no fill used as structural support.

- (8) There shall be no alteration of sand dunes, which would increase potential flood damage.
 - (9) Lattice work or decorative screening shall be allowed below the base flood elevation provided they are not part of the structural support of the building and are designed so as to break away, under base flood or lesser conditions, without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system and provided the following design specifications are met:
 - a. No solid walls are allowed; and
 - b. Materials shall consist of open wooden lattice or insect screening.
 - (10) Space enclosed by lattice or screening shall not be used for human habitation.
 - (11) Prior to construction, plans for any structure that will have lattice work or decorative screening must be submitted to the Building Official for approval.
 - (12) Any alteration, repair, reconstruction or improvement to a structure shall not enclose the space below the lowest floor except for lattice work or decorative screening, as provided for in subsection (e)(9) and (10) of this section.
- (f) *Recreational vehicles.* Recreational vehicles placed on lots shall be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on wheels or jacking system, attached to the site only by quick-disconnect-type utilities and security devices, and has no permanently attached additions.

(Ord. No. 2017-07, § 1(Exh. A), 4-24-2018)

Secs. 5-4-172—5-4-200. - Reserved.