

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA, REPEALING CHAPTER 25 OF THE CITY'S CODE OF ORDINANCES ENTITLED "FLOOD PREVENTION AND PROTECTION", AND ENACTING A NEW CHAPTER 25, ENTITLED "FLOODPLAIN MANAGEMENT", IN ORDER TO PROVIDE FOR CURRENT PROCEDURES AND CRITERIA FOR DEVELOPMENT IN FLOOD HAZARD AREAS, TO PROVIDE FOR ADMINISTRATION OF SAID CHAPTER, TO PROVIDE DEFINITIONS, TO PROVIDE FLOOD RESISTANT DEVELOPMENT STANDARDS, AND TO ADOPT CURRENT FLOOD HAZARD MAPS; PROVIDING FOR CONFLICTS, SEVERABILITY AND CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Community Rating System (hereinafter "CRS") is a voluntary program for communities participating in the National Flood Insurance Program (Hereinafter "NFIP"); and

WHEREAS, the goals of the CRS are to reduce flood damages to insurable property, strengthen and support the insurance aspects of the NFIP, and to encourage a comprehensive approach to floodplain management; and

WHEREAS, the City of Riviera Beach currently participates in the CRS program, which provides the opportunity for discounts on flood insurance premiums; and

WHEREAS, Chapter 25 of the City's Code of Ordinances, entitled, "Flood Prevention and Protection" was approved in 2002 by Ordinance No. 2929; and

WHEREAS, in order for the City to continue to be eligible to participate in the CRS program, Chapter 25 of the City's Code of Ordinances must be amended to implement the Florida Division of Emergency Management's model floodplain management ordinance; and

WHEREAS, on October 27, 2016, the Planning and Zoning Board reviewed and unanimously recommended approval of this code amendment to the City Council; and

WHEREAS, the City Council has determined that the adoption of this code amendment would benefit the health, safety and welfare of the City's residents and stakeholders.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA, AS FOLLOWS:

SECTION 1. The foregoing recitals are ratified and confirmed as being true and correct and are made a specific part of this Ordinance.

SECTION 2. Chapter 25 of the Code of Ordinances of the City of Riviera Beach, entitled, "Flood Prevention and Protection", is repealed in its entirety and replaced with a new Chapter 25, entitled, "Floodplain Management"; providing that Chapter 25 shall hereafter read as follows (additions are underlined and deletions appear in ~~striketthrough~~ format):

Chapter 25 — FLOOD PREVENTION AND PROTECTION

ARTICLE I. — STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES

Sec. 25-1. — Statutory authorization.

~~The Legislature of the State of Florida has delegated the responsibility to local governmental units to adopt regulations designed to promote the health, safety, and general welfare of its citizenry. Therefore, the City Council of the City of Riviera Beach does hereby adopt the following floodplain management ordinance.~~

Sec. 25-2. — Findings of fact.

- ~~(a) The flood hazard areas of the city are subject to periodic inundation, which results in loss of life and property, poses health and safety hazards, disrupts commerce and governmental services, requires extraordinary public expenditures for flood protection and relief, and impairs the tax base, all of which adversely affect the public health, safety and general welfare.~~
- ~~(b) These flood losses and resulting problems are caused by the cumulative effect of obstructions in floodplains which increase flood heights and velocities, by occupancy of flood hazard areas, by uses vulnerable to floods and hazardous to other lands or that are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages.~~

Sec. 25-3. — Statement of purpose.

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

- ~~(1) Restrict or prohibit uses which result in water or erosion hazards and damaging increases in erosion or in flood heights and 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, damage or destruction of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;~~

- ~~(4) Control filling, grading, dredging and other development which may increase erosion or flood damage; and~~
- ~~(5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.~~

~~Sec. 25-4. Objectives.~~

~~The objectives of this chapter are:~~

- ~~(1) To protect human life, health and property;~~
- ~~(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 that are usually 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, and street and bridges located in floodplains;~~
- ~~(6) 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~~
- ~~(7) To ensure that potential homebuyers are notified that property is in an area of special flood hazard.~~

~~Secs. 25-5—25-20. Reserved.~~

ARTICLE II. DEFINITIONS

~~Sec. 25-21. Definitions.~~

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

~~Accessory structure (appurtenant structure) means a structure which is located on the same parcel of property as the principle structure and the use of which is incidental to the use of the principle structure. Accessory structures should constitute a minimal initial 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) means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls, is new construction.~~

~~Appeal means a request for a review of the floodplain administrator's interpretation of any provision of this chapter or a request for a variance.~~

~~Area of shallow flooding means a designated AO or AH Zone on the community's flood insurance rate map (firm) with base flood depths from 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. Such flooding is characterized by ponding or sheet flow.~~

~~Area of special flood hazard is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.~~

~~Base flood means the flood having a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood"). Base flood is the term used throughout this chapter.~~

~~Basement means that portion of a building having its floor sub-grade (below ground level) on all sides.~~

~~Breakaway wall means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.~~

~~Building means any structure built for support, shelter or enclosure for occupancy or storage (Also see structure).~~

~~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. The area is designated on the FIRM as Zone V1—V30, or VE or V.~~

~~Critical facility means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, and installations which produce, use or store hazardous materials or hazardous waste.~~

~~Development means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or permanent storage of materials or equipment.~~

~~Elevated building means 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 (posts and piers), shear walls, or breakaway walls.~~

~~Encroachment means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.~~

~~Existing construction [means] any structure for which the "start of construction" commenced before the effective date of the floodplain management ordinance adopted by the city.~~

~~Existing manufactured home park or subdivision means 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 the effective date of the floodplain management ordinance adopted by the city.~~

~~Expansion to an existing manufactured home park or 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, the construction of streets, and either final site grading or the pouring of concrete pads).~~

~~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 or runoff of surface waters from any source.~~

~~Flood insurance rate map (FIRM) means an official map of a community, on which FEMA has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.~~

~~Flood insurance study (FIS) is the official hydraulic and hydrologic report provided by FEMA. The report contains flood profiles, flood data tables, and floodway data tables.~~

~~Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.~~

~~Floodplain management administrator is the individual appointed to administer and enforce the floodplain management ordinance.~~

~~Floodplain management regulations means this chapter and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power which control development in flood-prone areas. This term describes federal, state or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.~~

~~Floodway see regulatory floodway.~~

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

~~Hardship (as related to variances of this chapter) means the exceptional hardship that would result from a failure to grant the requested variance. The city requires that the variance be exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is NOT exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.~~

~~Highest adjacent grade means the highest natural elevation of the ground surface, prior to the start of construction, next to the proposed walls of a building.~~

~~Historic structure means any structure that is:~~

- ~~(1) Listed individually in the National Register of Historic Places (a listing maintained by the department of interior) 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 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 in states with historic preservation programs which have been approved by the secretary of the interior; or~~
- ~~(4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - ~~a. By an approved state program as determined by the secretary of the interior; or~~
 - ~~b. Directly by the secretary of the interior in states without approved programs.~~~~

~~Increased cost of compliance (ICC) means the cost to repair a substantially damaged building that exceeds the minimal repair cost and that is required to bring a substantially damaged building into compliance with the local flood damage prevention ordinance. ICC insurance coverage is provided in a standard (NFIP) flood insurance policy.~~

~~Lowest floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the nonelevation design standards of this chapter.~~

~~Mangrove stand means an assemblage of mangrove trees which is mostly low trees noted for a copious development of interlacing adventitious roots above the ground and which contain one or more of the following species: Black mangrove (*Avicennia nitida*); red mangrove (*Rhizophora mangle*); white mangrove (*Languncularia racemosa*); and buttonwood (*Conocarpus erecta*).~~

~~Manufactured home means a building, 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 also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.~~

~~Manufactured home park or subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.~~

~~Market value means the building value, excluding the land (as agreed to between a willing buyer and seller), as established by what the local real estate market will bear. Market value can be established by independent certified appraisal, replacement cost depreciated by age of building (actual cash value) or adjusted assessed values.~~

~~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 chapter, the term is synonymous with National Geodetic Vertical Datum (NGVD).~~

~~New construction means any structure for which the "start of construction" commenced on or after the effective date of the floodplain management ordinance adopted by the city. The term also includes any subsequent improvements to such structures.~~

~~New manufactured home park or subdivision means 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 on or after the effective date of the floodplain management ordinance adopted by the city.~~

~~Recreational vehicle means a vehicle that is:~~

- ~~(1) Built on a single chassis;~~
- ~~(2) Four hundred 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 a temporary living quarters for recreational, camping, travel, or seasonal use.~~

~~Regulatory floodway means 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 a designated height (generally one foot).~~

~~Repetitive loss means flood related damages sustained by a structure on two separate occasions during a ten year period ending on the date of the event for which the second claim is made, in which the cost of repairing the flood damage, on the average, equaled or exceeded 25 percent of the market value of the building at the time of each such flood event.~~

~~Special flood hazard area (SFHA) (see area of special flood hazard) means an area having special flood hazard and shown on a FHBM or FIRM as Zone A, AO, A1 A30, AE, A99, AH, V1-30, or VE.~~

~~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, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a building (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 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 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 dimensions of the building.~~

~~Structure means all walled and roofed buildings, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.~~

~~Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. Substantial damage also means flood related damages sustained by a structure on two separate occasions during a ten year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred (also referred to as repetitive loss).~~

~~Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 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. This term also includes any combination of repairs, reconstruction, alteration, or improvements to a building taking place during a ten-year period in which the cumulative cost equals or exceeds 50 percent of the market value of the building (also referred to as cumulative substantial improvement).~~

~~For the purposes of this definition, substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. The term does not, however, include:~~

- ~~(1) Any project for improvement of a building required to comply with existing health, sanitary, or safety code violations which have been identified prior to permit issuance by the code enforcement official and which are solely necessary to assure safe living conditions; or~~
- ~~(2) Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.~~

~~Variance is a grant of relief from the requirements of this chapter, which permits construction in a manner otherwise prohibited by this chapter where specific enforcement would result in unnecessary and exceptional hardship.~~

~~Violation means the failure of a structure or other development to be fully compliant with this chapter. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this chapter is presumed to be in violation until such time as that documentation is provided.~~

~~Water surface elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.~~

~~**Secs. 25-22—25-35. — Reserved.**~~

ARTICLE III. — GENERAL PROVISIONS

~~**Sec. 25-36. — Lands to which this chapter applies.**~~

~~This chapter shall apply to all areas of special flood hazard within the zoning and building code jurisdiction of the city.~~

~~**Sec. 25-37. — Basis for establishing the areas of special flood hazard.**~~

~~The areas of special flood hazard identified by the Federal Emergency Management Agency in the flood insurance study for the City of Riviera Beach, dated September 30, 1982, with accompanying flood insurance rate map (FIRM) and other supporting data, and any revisions thereto, are adopted by reference and declared to be a part of this chapter. The flood insurance study and FIRM are on file at the office of the city clerk.~~

~~**Sec. 25-38. — Establishment of development permit.**~~

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

~~Sec. 25-39. -- Compliance.~~

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

~~Sec. 25-40. -- Abrogation and greater restrictions.~~

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

~~Sec. 25-41. -- Interpretation.~~

~~In the interpretation and application of this chapter all provisions shall be:~~

- ~~(1) Considered as minimum requirements;~~
- ~~(2) Liberally construed in favor of the governing body; and~~
- ~~(3) Deemed neither to limit nor repeal any other powers granted under state statutes.~~

~~Sec. 25-42. -- Warning and disclaimer of liability.~~

~~The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter makes no representation that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city or by any officer or employee thereof for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.~~

~~Sec. 25-43. -- Penalties for violation.~~

~~Violation of the provisions of this chapter or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$1,000.00 or imprisoned for not more than 60 days, or both, 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 building official from taking such other lawful actions as is necessary to prevent or remedy any violation.~~

~~Secs. 25-44 -- 25-60. -- Reserved.~~

~~ARTICLE IV. -- ADMINISTRATION~~

~~Sec. 25-61. -- Designation of flood damage prevention ordinance administrator.~~

~~The City Council of the City of Riviera Beach hereby appoints the building official to administer and implement the provisions of this chapter and is herein also referred to as the "floodplain ordinance administrator", the "floodplain management administrator" and/or the "administrator".~~

~~Sec. 25-62. -- Duties and responsibilities of the floodplain management administrator.~~

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

- ~~(1) Review all development permits to assure that the requirements of this chapter have been satisfied.~~
- ~~(2) Advise permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.~~
- ~~(3) Notify adjacent communities, the state floodplain coordinator, and other federal and/or state agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse. Data must be submitted to FEMA for map revision.~~
- ~~(4) Assure 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 sea level) of the lowest floor (including basement) of all new or substantially improved buildings, in accordance with subsection 25-81(2).~~
- ~~(6) Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved buildings have been flood-proofed, in accordance with subsection 25-82(2).~~
- ~~(7) Review certified plans and specifications for compliance.~~
- ~~(8) Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the floodplain management administrator shall 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 chapter.~~
- ~~(9) When base flood elevation data or floodway data have not been provided in accordance with section 25-37, then the floodplain management administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer the provisions of Article V.~~

~~**Secs. 25-63—25-80. — Reserved.**~~

~~**ARTICLE V. — PERMIT PROCEDURES**~~

~~**Sec. 25-81. — Application.**~~

~~Application for a development permit shall be made to the floodplain management administrator on forms furnished by the administrator prior to any development activities, and may include, but not necessarily 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, earthen fill, storage of materials or equipment, drainage facilities, and the location of any of the former. Notwithstanding the foregoing, the following information shall be furnished to the administrator:~~

- ~~(1) Application stage:~~

- a. ~~Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all buildings;~~
- b. ~~Elevation in relation to mean sea level to which any non-residential building will be flood-proofed;~~
- c. ~~Certificate from a registered professional engineer or architect that the non-residential flood-proofed building will meet the flood-proofing criteria in subsections 25-122(2) and 25-125(2); and~~
- d. ~~Description of the extent to which any watercourse will be altered or relocated as result of proposed development.~~

~~(2) Construction stage:~~

~~Upon placement of the lowest floor or flood-proofing by whatever construction means, it shall be the duty of the permit holder to submit to the floodplain management administrator a certification of the elevation of the lowest floor or flood-proofed elevation, 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. When flood-proofing 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 undertaken prior to submission, review, and acceptance of the certification by the floodplain management administrator shall be at the permit holder's sole risk. (The administrator shall review the lowest floor and flood-proofing elevation survey data submitted.) The permit holder, immediately and prior to any further work being performed, shall correct any and all deficiencies noted by such review. Failure to submit the survey or failure to make required corrections, shall be cause to issue a stop work order for the project.~~

~~Secs. 25-82—25-100. — Reserved.~~

~~ARTICLE VI. — VARIANCE PROCEDURES~~

~~Sec. 25-101. — Designation of variance and appeals board.~~

~~The city council of the City of Riviera Beach shall serve as the variance and appeals board.~~

~~Sec. 25-102. — Duties of variance and appeals board.~~

~~The city council shall hear requests for variances from the requirements of this chapter and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the floodplain management administrator in the enforcement or administration of this chapter. Any person aggrieved by the decision of the council may appeal such decision to the Circuit Court of Palm Beach County, as provided in Florida Statutes.~~

~~Sec. 25-103. — Variance review.~~

~~In passing upon such applications, the city council shall consider:~~

- ~~(1) All technical evaluations, relevant factors, and standards as specified in this and other sections of this chapter;~~
- ~~(2) The danger that materials may be swept onto other lands resulting in injury to others;~~

- ~~(3) The danger posed to life and property due to flooding or erosion damage;~~
- ~~(4) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;~~
- ~~(5) The importance of the services provided by the proposed facility to the community;~~
- ~~(6) The necessity to the facility of a waterfront location, where applicable;~~
- ~~(7) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;~~
- ~~(8) The compatibility of the proposed use with existing and anticipated development;~~
- ~~(9) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;~~
- ~~(10) The safety of access to the property in times of flood for ordinary and emergency vehicles;~~
- ~~(11) The expected heights, velocity, duration, rate of rise, and sediment of transport of the flood waters and the effects of wave action, if applicable, expected at the site; and~~
- ~~(12) 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.~~

~~Sec. 25-104. – Conditions for variances.~~

- ~~(1) Variances shall only be issued when there is:
 - ~~a. A showing of good and sufficient cause;~~
 - ~~b. A determination that failure to grant the variance would result in exceptional hardship; and~~
 - ~~c. A determination that the granting of a variance will not result in increased flood heights, additional threats to the health, safety and welfare of the public, expense, nuisance, fraud on or victimization of the public, or conflict with existing local laws 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; and in the instance of a "historic structure," a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.~~
- ~~(3) Upon consideration of the factors listed in article VI and the purposes of this chapter, the city council may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.~~
- ~~(4) The floodplain management administrator shall maintain the records of all appeal actions and variance actions, including justification for their issuance, and report such variances issued in the community's biennial report submission to the Federal Emergency Management Agency.~~

~~Sec. 25-105. – Variance notification.~~

~~Any applicant to whom a variance is granted shall be given written notice signed by the building official said notice to include:~~

- ~~(1) The difference between the base flood elevation and the elevation to which the lowest floor is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation and may be increased as much as \$25.00 for \$100.00 of insurance coverage; and~~
- ~~(2) Warning that such construction below the base flood level increases risks to life and property.~~

~~A copy of the notice shall be recorded by the floodplain management administrator in the office of the Clerk of the Circuit Court of Palm Beach County and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.~~

~~Secs. 25-106—25-120.—Reserved.~~

~~ARTICLE VII.—PROVISIONS FOR FLOOD HAZARD REDUCTION~~

~~Sec. 25-121.—General standards.~~

~~In all areas of special flood hazard the following provisions are required:~~

- ~~(1) New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;~~
- ~~(2) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces;~~
- ~~(3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;~~
- ~~(4) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;~~
- ~~(5) Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;~~
- ~~(6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;~~
- ~~(7) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood waters;~~
- ~~(8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;~~
- ~~(9) Any alteration, repair, reconstruction or improvements to a building that is in compliance with the provisions of this chapter shall meet the requirements of "new construction" as contained in this chapter; and~~

~~(10) Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this chapter, shall be undertaken only if said non-conformity is not furthered, extended, or replaced.~~

~~Sec. 25-122. Specific standards.~~

~~In areas of special flood hazard, zones AE, A1-30, and/or AH, where base flood elevation data have been provided as set forth in section 25-37, the following provisions are also required:~~

- ~~(1) Residential construction. New construction or substantial improvement of any residential building (or manufactured home) shall have the lowest floor, including basement, elevated to one foot above the base flood elevation. 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 standards of subsection 25-122(3).~~
- ~~(2) Non-residential construction. New construction or substantial improvement of any commercial, industrial, or other non-residential building (or manufactured home) shall have the lowest floor, including basement, elevated to one foot above the level of the base flood elevation. Non-residential buildings may be floodproofed in lieu of being elevated provided that all areas of the building below the required elevation are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in article IV.~~
- ~~(3) Elevated buildings. New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the lowest floor shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.
 - ~~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 openings 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 foundation interior grade (which must be equal to in elevation or higher than the exterior foundation grade); and~~
 - ~~3. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.~~~~
 - ~~b. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door), limited storage of maintenance equipment used in connection with the premises (standard exterior door), or entry to the living area (stairway or elevator).~~
 - ~~c. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.~~~~

- d. ~~Where elevation requirements exceed six feet above the highest adjacent grade, a copy of the legally recorded deed restriction prohibiting the conversion of the area below the lowest floor to a use or dimension contrary to the building's originally approved design, shall be presented as a condition of issuance of the final certificate of occupancy.~~
- (4) ~~Standards for manufactured homes and recreational vehicles.~~
- a. ~~All manufactured homes placed or substantially improved, on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, in new manufactured home parks or subdivisions or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new construction, including elevation and anchoring.~~
- b. ~~All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:~~
1. ~~The lowest floor of the manufactured home is at least one foot above the base flood elevation or the manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than 36 inches in height above the ground; and~~
 2. ~~The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.~~
 3. ~~In an existing manufactured home park or subdivision in which any manufactured home has incurred "substantial damage" as the result of a flood, any manufactured home placed or substantially improved thereafter must meet the standards of subsection 25-122(4)b.1. and 2. above.~~
- c. ~~All recreational vehicles placed on sites must either:~~
1. ~~Be on the site for fewer than 180 consecutive days;~~
 2. ~~Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions); or~~
 3. ~~Meet all the requirements for new construction, including anchoring and elevation requirements of section 22-122(4)a. or b.1., 2. and 3., above.~~
- (5) ~~Floodways. Areas located within the special flood hazard areas as established in section 25-37, are designated as floodways. Since floodways are extremely hazardous areas due to the velocity of flood waters which carry debris, potential projectiles and have severe erosion potential, the following provisions shall apply:~~
- a. ~~Encroachments, including fill, new construction, substantial improvements and other developments are prohibited unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that the encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge; and~~
- b. ~~All new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of article VII.~~

- ~~c. The placement of manufactured homes (mobile homes), except in an existing manufactured homes (mobile homes) park or subdivision is prohibited. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of section 25-121(2), and the elevation standards of section 25-121(1) and the encroachment standards of section 25-122(5)a., are met.~~

~~Sec. 25-123. – Standards for streams without established base flood elevation and/or floodways.~~

~~Located within the areas of special flood hazard established in section 25-37 are areas where streams exist but where no base flood data has been provided, or where base flood data has been provided without floodways, the following provisions apply:~~

- ~~(1) The administrator shall act in accordance with the provisions of section 25-62(9) in order to administer the provisions of this article.~~
- ~~(2) In special flood hazard areas with base flood elevations (zones AE and A1-30) but without floodways, no encroachments, including fill material or structures, shall be permitted unless certification by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.~~
- ~~(3) If base flood elevations and floodway data are not available from outside sources, then in special flood hazard areas without base flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than four feet above the highest adjacent grade at the building site.~~

~~Sec. 25-124. – Standards for subdivision proposals.~~

- ~~(1) All subdivision proposals shall be consistent with the need to minimize flood damage;~~
- ~~(2) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;~~
- ~~(3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards; and~~
- ~~(4) Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) greater than the 50 lots or five acres, whichever is the lesser.~~

~~Sec. 25-125. – Standards for subdivision proposals (AO zones).~~

~~Located within the areas of special flood hazard established in section 25-37, are areas designated as shallow flooding areas. These areas have flood hazards associated with base flood depths of one to three feet where a clearly defined channel does not exist and the water path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:~~

- ~~(1) All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to at least the flood depth number~~

~~specified on the flood insurance rate map, above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least three feet above the highest adjacent grade.~~

- ~~(2) All new construction and substantial improvements of non-residential structures shall:~~
- ~~a. Have the lowest floor, including basement, elevated to at least the flood depth number specified on the flood insurance rate map above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least three feet above the highest adjacent grade; or~~
 - ~~b. Together with attendant utility and sanitary facilities, be completely floodproofed to the specified flood 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 per section 25-122(2).~~

~~Sec. 25-126. Coastal high hazard areas.~~

~~Located within areas of special flood hazard areas established in 25-37 are coastal high hazard areas, designated as zones V1-V30, VE and/or V. These areas have special flood hazards associated with high velocity waters from surges and, therefore, in addition to meeting all provisions in this chapter, the following provisions shall also apply:~~

- ~~(1) All new construction and substantial improvements in zones V1-V30 and VE (V also if base flood elevation is available) shall be elevated on pilings and columns so that:~~
 - ~~a. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated one foot above the base flood elevation level; and~~
 - ~~b. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).~~
- ~~(2) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice and meet the provisions of subsections (1)a. and b. of this section.~~
- ~~(3) The floodplain management administrator shall obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures in zones V1-V30 and VE and maintain a record of all such information.~~
- ~~(4) All new construction shall be located landward of the reach of mean high tide.~~
- ~~(5) All new construction and substantial improvements shall leave the space below the lowest floor either free of obstruction or constructed with nonsupporting 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 ten and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local codes) 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 a water load less than that which would occur during the base flood; and~~
 - ~~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). Maximum wind and water loading values to be used in this determination shall each have a one percent chance of being equaled or exceeded in any [given] year.~~
- ~~(6) If breakaway walls are utilized, such enclosed space shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation.~~
- ~~(7) The use of fill for structural support of buildings shall be prohibited.~~
- ~~(8) Alteration of sand dunes and mangrove stands that would increase potential flood damage is prohibited.~~
- ~~(9) All manufactured homes to be placed or substantially improved within zones V1—V30, V and VE including sites:~~
- ~~a. Outside of a manufactured home park or subdivision;~~
 - ~~b. In a new manufactured home park or subdivision;~~
 - ~~c. In an expansion to an existing manufactured home park or subdivision; or~~
 - ~~d. In an existing manufactured home park or subdivision in which a manufactured home has incurred "substantial damage" as the result of a flood;~~
- ~~shall meet the standards of subsections 25-126(1) through (8) and that manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision with zones V1—V30, V, and VE on the FIRM meet the requirements of subsections 25-122(4)a. and b.~~
- ~~(10) Recreational vehicles placed on sites within zones V1—V30, V, and VE on the community's FIRM must:~~
- ~~a. Be on the site for fewer than 180 consecutive days;~~
 - ~~b. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or~~
 - ~~c. Meet the requirements of sections 25-81, 25-122 and 25-126.~~

Chapter 25 – FLOODPLAIN MANAGEMENT

ARTICLE I ADMINISTRATION

Sec. 25-1. General.

(1) Title. These regulations shall be known as the *Floodplain Management Ordinance* of City of Riviera Beach hereinafter referred to as “this ordinance.”

(2) Scope. The provisions of this ordinance shall apply to all development that is wholly within or partially within any flood hazard area, including but not limited to the subdivision of land; filling, grading, and other site improvements and utility installations; construction, alteration, remodeling, enlargement, improvement, replacement, repair, relocation or demolition of buildings, structures, and facilities that are exempt from the *Florida Building Code*; placement, installation, or replacement of manufactured homes and manufactured buildings; installation or replacement of tanks; placement of recreational vehicles; installation of swimming pools; and any other development.

(3) Intent. The purposes of this ordinance and the flood load and flood resistant construction requirements of the *Florida Building Code* are to establish minimum requirements to safeguard the public health, safety, and general welfare and to minimize public and private losses due to flooding through regulation of development in flood hazard areas to:

- a. Minimize unnecessary disruption of commerce, access and public service during times of flooding;
- b. Require the use of appropriate construction practices in order to prevent or minimize future flood damage;
- c. Manage filling, grading, dredging, mining, paving, excavation, drilling operations, storage of equipment or materials, and other development which may increase flood damage or erosion potential;
- d. Manage the alteration of flood hazard areas, watercourses, and shorelines to minimize the impact of development on the natural and beneficial functions of the floodplain;
- e. Minimize damage to public and private facilities and utilities;
- f. Help maintain a stable tax base by providing for the sound use and development of flood hazard areas;
- g. Minimize the need for future expenditure of public funds for flood control projects and response to and recovery from flood events; and
- h. Meet the requirements of the National Flood Insurance Program for community participation as set forth in the Title 44 Code of Federal Regulations, Section 59.22.

(4) Coordination with the Florida Building Code. This ordinance is intended to be administered and enforced in conjunction with the *Florida Building Code*. Where cited, ASCE 24 refers to the edition of the standard that is referenced by the *Florida Building Code*.

(5) Warning. The degree of flood protection required by this ordinance and the *Florida Building Code*, as amended by this community, is considered the minimum reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside of mapped special flood hazard areas, or that uses permitted within such flood hazard areas, will be free from flooding or flood damage. The flood hazard areas and base flood elevations contained in the Flood Insurance Study and shown on Flood Insurance Rate Maps and the requirements of Title 44 Code of Federal Regulations, Sections 59 and 60 may be revised by the Federal Emergency Management Agency, requiring this community to revise these regulations to remain eligible for participation in the National Flood Insurance Program. No guaranty of vested use, existing use, or future use is implied or expressed by compliance with this ordinance.

(6) Disclaimer of Liability. This ordinance shall not create liability on the part of City Council of Riviera Beach or by any officer or employee thereof for any flood damage that results from reliance on this ordinance or any administrative decision lawfully made thereunder.

Sec. 25-2. APPLICABILITY

(1) General. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

(2) Areas to which this ordinance applies. This ordinance shall apply to all flood hazard areas within the Riviera Beach as established in subsection 25-2(3).

(3) Basis for establishing flood hazard areas. The Flood Insurance Study, Wave Height Analysis, City of Riviera Beach, FL dated March 31, 1982, and all subsequent amendments and revisions, and the accompanying Flood Insurance Rate Maps (FIRM), and all subsequent amendments and revisions to such maps, are adopted by reference as a part of this ordinance and shall serve as the minimum basis for establishing flood hazard areas. Studies and maps that establish flood hazard areas are on file at the Building Department at 600 W Blue Heron Blvd, Riviera Beach, FL 33404.

(4) Submission of additional data to establish flood hazard areas. To establish flood hazard areas and base flood elevations, pursuant to subsection 25-5 the Floodplain Administrator may require submission of additional data. Where field surveyed topography prepared by a Florida licensed professional surveyor or digital topography accepted by the community indicates that ground elevations:

- a. Are below the closest applicable base flood elevation, even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as flood hazard area and subject to the requirements of this ordinance and, as applicable, the requirements of the *Florida Building Code*.
- b. Are above the closest applicable base flood elevation, the area shall be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the special flood hazard area.

(5) Other laws. The provisions of this ordinance shall not be deemed to nullify any provisions of local, state or federal law.

(6) Abrogation and greater restrictions. This ordinance supersedes any ordinance in effect for management of development in flood hazard areas. However, it is not intended to repeal or abrogate any existing ordinances including but not limited to land development regulations, zoning ordinances, stormwater management regulations, or the *Florida Building Code*. In the event of a conflict between this ordinance and any other ordinance, the more restrictive shall govern. This ordinance shall not impair any deed restriction, covenant or easement, but any land that is subject to such interests shall also be governed by this ordinance.

(7) Interpretation. In the interpretation and application of this ordinance, all provisions shall be:

- a. Considered as minimum requirements;
- b. Liberally construed in favor of the governing body; and
- c. Deemed neither to limit nor repeal any other powers granted under state statutes.

Sec. 25-1. DUTIES AND POWERS OF THE FLOODPLAIN ADMINISTRATOR

(1) Designation. The City Manager or Designee is designated as the Floodplain Administrator. The Floodplain Administrator may delegate performance of certain duties to other employees.

(2) General. The Floodplain Administrator is authorized and directed to administer and enforce the provisions of this ordinance. The Floodplain Administrator shall have the authority to render interpretations of this ordinance consistent with the intent and purpose of this ordinance and may establish policies and procedures in order to clarify the application of its provisions. Such interpretations, policies, and procedures shall not have the effect of waiving requirements specifically provided in this ordinance without the granting of a variance pursuant to subsection 25-7.

(3) Applications and permits. The Floodplain Administrator, in coordination with other pertinent offices of the community, shall:

- a. Review applications and plans to determine whether proposed new development will be located in flood hazard areas;
- b. Review applications for modification of any existing development in flood hazard areas for compliance with the requirements of this ordinance;

- c. Interpret flood hazard area boundaries where such interpretation is necessary to determine the exact location of boundaries; a person contesting the determination shall have the opportunity to appeal the interpretation;
- d. Provide available flood elevation and flood hazard information;
- e. Determine whether additional flood hazard data shall be obtained from other sources or shall be developed by an applicant;
- f. Review applications to determine whether proposed development will be reasonably safe from flooding;
- g. Issue floodplain development permits or approvals for development other than buildings and structures that are subject to the *Florida Building Code*, including buildings, structures and facilities exempt from the *Florida Building Code*, when compliance with this ordinance is demonstrated, or disapprove the same in the event of noncompliance; and
- h. Coordinate with and provide comments to the Building Official to assure that applications, plan reviews, and inspections for buildings and structures in flood hazard areas comply with the applicable provisions of this ordinance.

(4) Substantial improvement and substantial damage determinations. For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:

- a. Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;
- b. Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;
- c. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and
- d. Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the *Florida Building Code* and this ordinance is required.

(5) Modifications of the strict application of the requirements of the *Florida Building Code*. The Floodplain Administrator shall review requests submitted to the Building Official that seek approval to modify the strict application of the flood load and flood resistant construction requirements of the *Florida Building Code* to determine whether such requests require the granting of a variance pursuant to subsection 25-7.

(6) Notices and orders. The Floodplain Administrator shall coordinate with appropriate local agencies for the issuance of all necessary notices or orders to ensure compliance with this ordinance.

(7) Inspections. The Floodplain Administrator shall make the required inspections as specified in subsection 25-6 for development that is not subject to the *Florida Building Code*, including buildings, structures and facilities exempt from the *Florida Building Code*. The Floodplain Administrator shall inspect flood hazard areas to determine if development is undertaken without issuance of a permit.

(8) Other duties of the Floodplain Administrator. The Floodplain Administrator shall have other duties, including but not limited to:

- a. Establish, in coordination with the Building Official, procedures for administering and documenting determinations of substantial improvement and substantial damage made pursuant to subsection 25-3(4);
- b. Require that applicants proposing alteration of a watercourse notify adjacent communities and the Florida Division of Emergency Management, State Floodplain Management Office, and submit copies of such notifications to the Federal Emergency Management Agency (FEMA);
- c. Require applicants who submit hydrologic and hydraulic engineering analyses to support permit applications to submit to FEMA the data and information necessary to maintain the Flood Insurance Rate Maps if the analyses propose to change base flood elevations, flood hazard area boundaries, or floodway designations; such submissions shall be made within 6 months of such data becoming available;
- d. Review required design certifications and documentation of elevations specified by this ordinance and the *Florida Building Code* to determine that such certifications and documentations are complete;
- e. Notify the Federal Emergency Management Agency when the corporate boundaries of Riviera Beach are modified; and
- f. Advise applicants for new buildings and structures, including substantial improvements, that are located in any unit of the Coastal Barrier Resources System established by the Coastal Barrier Resources Act (Pub. L. 97-348) and the Coastal Barrier Improvement Act of 1990 (Pub. L. 101-591) that federal flood insurance is not available on such construction; areas subject to this limitation are identified on Flood Insurance Rate Maps as “Coastal Barrier Resource System Areas” and “Otherwise Protected Areas.”

(9) Floodplain management records. Regardless of any limitation on the period required for retention of public records, the Floodplain Administrator shall maintain and permanently keep and make available for public inspection all records that are necessary for the administration of this ordinance and the flood resistant construction requirements of the *Florida Building Code*, including Flood Insurance Rate Maps; Letters of Map Change; records of issuance of permits and denial of permits; determinations of whether proposed work constitutes substantial improvement or repair of substantial damage; required design certifications and documentation of elevations specified by the *Florida Building Code* and this ordinance; notifications to adjacent

communities, FEMA, and the state related to alterations of watercourses; assurances that the flood carrying capacity of altered watercourses will be maintained; documentation related to appeals and variances, including justification for issuance or denial; and records of enforcement actions taken pursuant to this ordinance and the flood resistant construction requirements of the Florida Building Code. These records shall be available for public inspection at Building Department.

Sec. 25-4. PERMITS

(1) Permits required. Any owner or owner's authorized agent (hereinafter "applicant") who intends to undertake any development activity within the scope of this ordinance, including buildings, structures and facilities exempt from the Florida Building Code, which is wholly within or partially within any flood hazard area shall first make application to the Floodplain Administrator, and the Building Official if applicable, and shall obtain the required permit(s) and approval(s). No such permit or approval shall be issued until compliance with the requirements of this ordinance and all other applicable codes and regulations has been satisfied.

(2) Floodplain development permits or approvals. Floodplain development permits or approvals shall be issued pursuant to this ordinance for any development activities not subject to the requirements of the Florida Building Code, including buildings, structures and facilities exempt from the Florida Building Code. Depending on the nature and extent of proposed development that includes a building or structure, the Floodplain Administrator may determine that a floodplain development permit or approval is required in addition to a building permit.

(3) Buildings, structures and facilities exempt from the Florida Building Code. Pursuant to the requirements of federal regulation for participation in the National Flood Insurance Program (44 C.F.R. Sections 59 and 60), floodplain development permits or approvals shall be required for the following buildings, structures and facilities that are exempt from the Florida Building Code and any further exemptions provided by law, which are subject to the requirements of this ordinance:

- a. Railroads and ancillary facilities associated with the railroad.
- b. Nonresidential farm buildings on farms, as provided in section 604.50, F.S.
- c. Temporary buildings or sheds used exclusively for construction purposes.
- d. Mobile or modular structures used as temporary offices.
- e. Those structures or facilities of electric utilities, as defined in section 366.02, F.S., which are directly involved in the generation, transmission, or distribution of electricity.
- f. Chickees constructed by the Miccosukee Tribe of Indians of Florida or the Seminole Tribe of Florida. As used in this paragraph, the term "chickee" means an open-sided wooden hut that has a thatched roof of palm or palmetto or other traditional materials, and that does not incorporate any electrical, plumbing, or other non-wood features.
- g. Family mausoleums not exceeding 250 square feet in area which are prefabricated and assembled on site or preassembled and delivered on site and have walls, roofs, and a floor constructed of granite, marble, or reinforced concrete.

- h. Temporary housing provided by the Department of Corrections to any prisoner in the state correctional system.
- i. Structures identified in section 553.73(10)(k), F.S., are not exempt from the *Florida Building Code* if such structures are located in flood hazard areas established on Flood Insurance Rate Maps

(4) Application for a permit or approval. To obtain a floodplain development permit or approval the applicant shall first file an application in writing on a form furnished by the community. The information provided shall:

- a. Identify and describe the development to be covered by the permit or approval.
- b. Describe the land on which the proposed development is to be conducted by legal description, street address or similar description that will readily identify and definitively locate the site.
- c. Indicate the use and occupancy for which the proposed development is intended.
- d. Be accompanied by a site plan or construction documents as specified in subsection 25-5.
- e. State the valuation of the proposed work.
- f. Be signed by the applicant or the applicant's authorized agent.
- g. Give such other data and information as required by the Floodplain Administrator.

(5) Validity of permit or approval. The issuance of a floodplain development permit or approval pursuant to this ordinance shall not be construed to be a permit for, or approval of, any violation of this ordinance, the *Florida Building Codes*, or any other ordinance of this community. The issuance of permits based on submitted applications, construction documents, and information shall not prevent the Floodplain Administrator from requiring the correction of errors and omissions.

(6) Expiration. A floodplain development permit or approval shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized is suspended or abandoned for a period of 180 days after the work commences. Extensions for periods of not more than 180 days each shall be requested in writing and justifiable cause shall be demonstrated.

(7) Suspension or revocation. The Floodplain Administrator is authorized to suspend or revoke a floodplain development permit or approval if the permit was issued in error, on the basis of incorrect, inaccurate or incomplete information, or in violation of this ordinance or any other ordinance, regulation or requirement of this community.

(8) Other permits required. Floodplain development permits and building permits shall include a condition that all other applicable state or federal permits be obtained before commencement of the permitted development, including but not limited to the following:

- a. The South Florida Water Management District; section 373.036, F.S.

- b. Florida Department of Health for onsite sewage treatment and disposal systems; section 381.0065, F.S. and Chapter 64E-6, F.A.C.
- c. Florida Department of Environmental Protection for construction, reconstruction, changes, or physical activities for shore protection or other activities seaward of the coastal construction control line; section 161.141, F.S.
- d. Florida Department of Environmental Protection for activities subject to the Joint Coastal Permit; section 161.055, F.S.
- e. Florida Department of Environmental Protection for activities that affect wetlands and alter surface water flows, in conjunction with the U.S. Army Corps of Engineers; Section 404 of the Clean Water Act.
- f. Federal permits and approvals.

Sec. 25-5. SITE PLANS AND CONSTRUCTION DOCUMENTS

(1) Information for development in flood hazard areas. The site plan or construction documents for any development subject to the requirements of this ordinance shall be drawn to scale and shall include, as applicable to the proposed development:

- a. Delineation of flood hazard areas, floodway boundaries and flood zone(s), base flood elevation(s), and ground elevations if necessary for review of the proposed development.
- b. Where base flood elevations or floodway data are not included on the FIRM or in the Flood Insurance Study, they shall be established in accordance with subsection 25-5(2)b or c.
- c. Where the parcel on which the proposed development will take place will have more than 50 lots or is larger than 5 acres and the base flood elevations are not included on the FIRM or in the Flood Insurance Study, such elevations shall be established in accordance with subsection 25-5(2)a.
- d. Location of the proposed activity and proposed structures, and locations of existing buildings and structures; in coastal high hazard areas, new buildings shall be located landward of the reach of mean high tide.
- e. Location, extent, amount, and proposed final grades of any filling, grading, or excavation.
- f. Where the placement of fill is proposed, the amount, type, and source of fill material; compaction specifications; a description of the intended purpose of the fill areas; and evidence that the proposed fill areas are the minimum necessary to achieve the intended purpose.
- g. Delineation of the Coastal Construction Control Line or notation that the site is seaward of the coastal construction control line, if applicable.
- h. Extent of any proposed alteration of sand dunes or mangrove stands, provided such alteration is approved by the Florida Department of Environmental Protection.
- i. Existing and proposed alignment of any proposed alteration of a watercourse.

The Floodplain Administrator is authorized to waive the submission of site plans, construction documents, and other data that are required by this ordinance but that are not required to be prepared by a registered design professional if it is found that the nature of the proposed development is such that the review of such submissions is not necessary to ascertain compliance with this ordinance.

(2) Information in flood hazard areas without base flood elevations (approximate Zone A).

Where flood hazard areas are delineated on the FIRM and base flood elevation data have not been provided, the Floodplain Administrator shall:

- a. Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices.
- b. Obtain, review, and provide to applicants base flood elevation and floodway data available from a federal or state agency or other source or require the applicant to obtain and use base flood elevation and floodway data available from a federal or state agency or other source.
- c. Where base flood elevation and floodway data are not available from another source, where the available data are deemed by the Floodplain Administrator to not reasonably reflect flooding conditions, or where the available data are known to be scientifically or technically incorrect or otherwise inadequate:
 - i. Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices; or
 - ii. Specify that the base flood elevation is two (2) feet above the highest adjacent grade at the location of the development, provided there is no evidence indicating flood depths have been or may be greater than two (2) feet.
- d. Where the base flood elevation data are to be used to support a Letter of Map Change from FEMA, advise the applicant that the analyses shall be prepared by a Florida licensed engineer in a format required by FEMA, and that it shall be the responsibility of the applicant to satisfy the submittal requirements and pay the processing fees.

(3) Additional analyses and certifications. As applicable to the location and nature of the proposed development activity, and in addition to the requirements of this section, the applicant shall have the following analyses signed and sealed by a Florida licensed engineer for submission with the site plan and construction documents:

- a. For development activities proposed to be located in a regulatory floodway, a floodway encroachment analysis that demonstrates that the encroachment of the proposed development will not cause any increase in base flood elevations; where the applicant proposes to undertake development activities that do increase base flood elevations, the applicant shall submit such analysis to FEMA as specified in subsection 25-5(4) and shall submit the Conditional Letter of Map Revision, if issued by FEMA, with the site plan and construction documents.
- b. For development activities proposed to be located in a riverine flood hazard area for which base flood elevations are included in the Flood Insurance Study or on the FIRM and floodways have not been designated, hydrologic and hydraulic analyses that

demonstrate that the cumulative effect of the proposed development, when combined with all other existing and anticipated flood hazard area encroachments, will not increase the base flood elevation more than one (1) foot at any point within the community. This requirement does not apply in isolated flood hazard areas not connected to a riverine flood hazard area or in flood hazard areas identified as Zone AO or Zone AH.

- c. For alteration of a watercourse, an engineering analysis prepared in accordance with standard engineering practices which demonstrates that the flood-carrying capacity of the altered or relocated portion of the watercourse will not be decreased, and certification that the altered watercourse shall be maintained in a manner which preserves the channel's flood-carrying capacity; the applicant shall submit the analysis to FEMA as specified in subsection 25-5(4).
- d. For activities that propose to alter sand dunes or mangrove stands in coastal high hazard areas (Zone V), an engineering analysis that demonstrates that the proposed alteration will not increase the potential for flood damage.

(4) Submission of additional data. When additional hydrologic, hydraulic or other engineering data, studies, and additional analyses are submitted to support an application, the applicant has the right to seek a Letter of Map Change from FEMA to change the base flood elevations, change floodway boundaries, or change boundaries of flood hazard areas shown on FIRMs, and to submit such data to FEMA for such purposes. The analyses shall be prepared by a Florida licensed engineer in a format required by FEMA. Submittal requirements and processing fees shall be the responsibility of the applicant.

Sec. 25-6. INSPECTIONS

(1) General. Development for which a floodplain development permit or approval is required shall be subject to inspection.

(2) Development other than buildings and structures. The Floodplain Administrator shall inspect all development to determine compliance with the requirements of this ordinance and the conditions of issued floodplain development permits or approvals.

(3) Buildings, structures and facilities exempt from the Florida Building Code. The Floodplain Administrator shall inspect buildings, structures and facilities exempt from the *Florida Building Code* to determine compliance with the requirements of this ordinance and the conditions of issued floodplain development permits or approvals.

(4) Buildings, structures and facilities exempt from the Florida Building Code, lowest floor inspection. Upon placement of the lowest floor, including basement, and prior to further vertical construction, the owner of a building, structure or facility exempt from the *Florida Building Code*, or the owner's authorized agent, shall submit to the Floodplain Administrator:

- a. If a design flood elevation was used to determine the required elevation of the lowest floor, the certification of elevation of the lowest floor prepared and sealed by a Florida licensed professional surveyor; or

- b. If the elevation used to determine the required elevation of the lowest floor was determined in accordance with subsection 25-(5)2.b, the documentation of height of the lowest floor above highest adjacent grade, prepared by the owner or the owner's authorized agent.

(5) Buildings, structures and facilities exempt from the Florida Building Code, final inspection. As part of the final inspection, the owner or owner's authorized agent shall submit to the Floodplain Administrator a final certification of elevation of the lowest floor or final documentation of the height of the lowest floor above the highest adjacent grade; such certifications and documentations shall be prepared as specified in subsection 25-6(4).

(6) Manufactured homes. The Floodplain Administrator shall inspect manufactured homes that are installed or replaced in flood hazard areas to determine compliance with the requirements of this ordinance and the conditions of the issued permit. Upon placement of a manufactured home, certification of the elevation of the lowest floor shall be submitted to the Floodplain Administrator.

Sec. 25-7. VARIANCES AND APPEALS

(1) General. The Development Special Magistrate shall hear and decide on requests for appeals and requests for variances from the strict application of this ordinance. Pursuant to section 553.73(5), F.S., the Development Special Magistrate shall hear and decide on requests for appeals and requests for variances from the strict application of the flood resistant construction requirements of the *Florida Building Code*. This section does not apply to Section 3109 of the *Florida Building Code, Building*.

(2) Appeals. The Development Special Magistrate shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the administration and enforcement of this ordinance. Any person aggrieved by the decision may appeal such decision to the Circuit Court, as provided by Florida Statutes.

(3) Limitations on authority to grant variances. The Development Special Magistrate shall base its decisions on variances on technical justifications submitted by applicants, the considerations for issuance in subsection 25-7(&0, the conditions of issuance set forth in subsection 25-7(8), and the comments and recommendations of the Floodplain Administrator and the Building Official. The Development Special Magistrate has the right to attach such conditions as it deems necessary to further the purposes and objectives of this ordinance.

(4) Restrictions in floodways. A variance shall not be issued for any proposed development in a floodway if any increase in base flood elevations would result, as evidenced by the applicable analyses and certifications required in subsection 25-5(3).

(5) Historic buildings. A variance is authorized to be issued for the repair, improvement, or rehabilitation of a historic building that is determined eligible for the exception to the flood resistant construction requirements of the *Florida Building Code, Existing Building, Chapter 12 Historic Buildings*, upon a determination that the proposed repair, improvement, or rehabilitation will not preclude the building's continued designation as a historic building and the variance is

the minimum necessary to preserve the historic character and design of the building. If the proposed work precludes the building's continued designation as a historic building, a variance shall not be granted and the building and any repair, improvement, and rehabilitation shall be subject to the requirements of the *Florida Building Code*.

(6) Functionally dependent uses. A variance is authorized to be issued for the construction or substantial improvement necessary for the conduct of a functionally dependent use, as defined in this ordinance, provided the variance meets the requirements of subsection 25- 107.4, is the minimum necessary considering the flood hazard, and all due consideration has been given to use of methods and materials that minimize flood damage during occurrence of the base flood.

(7) Considerations for issuance of variances. In reviewing requests for variances, the Development Special Magistrate shall consider all technical evaluations, all relevant factors, all other applicable provisions of the *Florida Building Code*, this ordinance, and the following:

- a. The danger that materials and debris may be swept onto other lands resulting in further injury or damage;
- b. The danger to life and property due to flooding or erosion damage;
- c. The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners;
- d. The importance of the services provided by the proposed development to the community;
- e. The availability of alternate locations for the proposed development that are subject to lower risk of flooding or erosion;
- f. The compatibility of the proposed development with existing and anticipated development;
- g. The relationship of the proposed development to the comprehensive plan and floodplain management program for the area;
- h. The safety of access to the property in times of flooding for ordinary and emergency vehicles;
- i. The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
- j. 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, streets and bridges.

(8) Conditions for issuance of variances. Variances shall be issued only upon:

- a. Submission by the applicant, of a showing of good and sufficient cause that the unique characteristics of the size, configuration, or topography of the site limit compliance with any provision of this ordinance or the required elevation standards;
- b. Determination by the Development Special Magistrate that:

- i. Failure to grant the variance would result in exceptional hardship due to the physical characteristics of the land that render the lot undevelopable; increased costs to satisfy the requirements or inconvenience do not constitute hardship;
 - ii. The granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nor create nuisances, cause fraud on or victimization of the public or conflict with existing local laws and ordinances; and
 - iii. The variance is the minimum necessary, considering the flood hazard, to afford relief;
- c. Receipt of a signed statement by the applicant that the variance, if granted, shall be recorded in the Office of the Clerk of the Court in such a manner that it appears in the chain of title of the affected parcel of land; and
 - d. If the request is for a variance to allow construction of the lowest floor of a new building, or substantial improvement of a building, below the required elevation, a copy in the record of a written notice from the Floodplain Administrator to the applicant for the variance, specifying the difference between the base flood elevation and the proposed elevation of the lowest floor, stating that the cost of federal flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation (up to amounts as high as \$25 for \$100 of insurance coverage), and stating that construction below the base flood elevation increases risks to life and property.

Sec. 25-8. VIOLATIONS

(1) Violations. Any development that is not within the scope of the *Florida Building Code* but that is regulated by this ordinance that is performed without an issued permit, that is in conflict with an issued permit, or that does not fully comply with this ordinance, shall be deemed a violation of this ordinance. A building or structure without the documentation of elevation of the lowest floor, other required design certifications, or other evidence of compliance required by this ordinance or the *Florida Building Code* is presumed to be a violation until such time as that documentation is provided.

(2) Authority. For development that is not within the scope of the *Florida Building Code* but that is regulated by this ordinance and that is determined to be a violation, the Floodplain Administrator is authorized to serve notices of violation or stop work orders to owners of the property involved, to the owner's agent, or to the person or persons performing the work.

(3) Unlawful continuance. Any person who shall continue any work after having been served with a notice of violation or a stop work order, except such work as that person is directed to perform to remove or remedy a violation or unsafe condition, shall be subject to penalties as prescribed by Chapter 22, section 109.4 of the Code of Ordinances.

Secs. 25-9—25-20. – Reserved.

ARTICLE II. DEFINITIONS

Sec. 25-21. GENERAL

(1) Scope. Unless otherwise expressly stated, the following words and terms shall, for the purposes of this ordinance, have the meanings shown in this section.

(2) Terms defined in the *Florida Building Code*. Where terms are not defined in this ordinance and are defined in the *Florida Building Code*, such terms shall have the meanings ascribed to them in that code.

(3) Terms not defined. Where terms are not defined in this ordinance or the *Florida Building Code*, such terms shall have ordinarily accepted meanings such as the context implies.

(4) Definitions.

Alteration of a watercourse. A dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other form of modification which may alter, impede, retard or change the direction and/or velocity of the riverine flow of water during conditions of the base flood.

Appeal. A request for a review of the Floodplain Administrator's interpretation of any provision of this ordinance.

ASCE 24. A standard titled *Flood Resistant Design and Construction* that is referenced by the *Florida Building Code*. ASCE 24 is developed and published by the American Society of Civil Engineers, Reston, VA.

Base flood. A flood having a 1-percent chance of being equaled or exceeded in any given year. [Also defined in FBC, B, Section 202.] The base flood is commonly referred to as the "100-year flood" or the "1-percent-annual chance flood."

Base flood elevation. The elevation of the base flood, including wave height, relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the Flood Insurance Rate Map (FIRM). [Also defined in FBC, B, Section 202.]

Basement. The portion of a building having its floor subgrade (below ground level) on all sides. [Also defined in FBC, B, Section 202; see "Basement (for flood loads)".]

Coastal construction control line. The line established by the State of Florida pursuant to section 161.053, F.S., and recorded in the official records of the community, which defines that

portion of the beach-dune system subject to severe fluctuations based on a 100-year storm surge, storm waves or other predictable weather conditions.

Coastal high hazard area. A special flood hazard area 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. Coastal high hazard areas are also referred to as “high hazard areas subject to high velocity wave action” or “V Zones” and are designated on Flood Insurance Rate Maps (FIRM) as Zone V1-V30, VE, or V.

Critical facility. A facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste. The term includes facilities that are assigned Risk Category III and Risk Category IV pursuant to the Florida Building Code, Building.

Design flood. The flood associated with the greater of the following two areas: [Also defined in FBC, B, Section 202.]

- (1) Area with a floodplain subject to a 1-percent or greater chance of flooding in any year; or
- (2) Area designated as a flood hazard area on the community’s flood hazard map, or otherwise legally designated.

Design flood elevation. The elevation of the “design flood,” including wave height, relative to the datum specified on the community’s legally designated flood hazard map. In areas designated as Zone AO, the design flood elevation shall be the elevation of the highest existing grade of the building’s perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as Zone AO where the depth number is not specified on the map, the depth number shall be taken as being equal to 2 feet. [Also defined in FBC, B, Section 202.]

Development. Any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, tanks, temporary structures, temporary or permanent storage of equipment or materials, mining, dredging, filling, grading, paving, excavations, drilling operations or any other land disturbing activities.

Encroachment. The placement of fill, excavation, buildings, permanent structures or other development into a flood hazard area which may impede or alter the flow capacity of riverine flood hazard areas.

Existing building and existing structure. Any buildings and structures for which the “start of construction” commenced before September 22, 1972. Also defined in FBC, B, Section 202.]

Existing 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 pads) is completed before September 22, 1972.

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 pads).

Federal Emergency Management Agency (FEMA). The federal agency that, in addition to carrying out other functions, administers the National Flood Insurance Program.

Flood or flooding. A general and temporary condition of partial or complete inundation of normally dry land from: [Also defined in FBC, B, Section 202.]

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

Flood damage-resistant materials. Any construction material capable of withstanding direct and prolonged contact with floodwaters without sustaining any damage that requires more than cosmetic repair. [Also defined in FBC, B, Section 202.]

Flood hazard area. The greater of the following two areas: [Also defined in FBC, B, Section 202.]

- (1) The area within a floodplain subject to a 1-percent or greater chance of flooding in any year.
- (2) The area designated as a flood hazard area on the community's flood hazard map, or otherwise legally designated.

Flood Insurance Rate Map (FIRM). The official map of the community on which the Federal Emergency Management Agency has delineated both special flood hazard areas and the risk premium zones applicable to the community. [Also defined in FBC, B, Section 202.]

Flood Insurance Study (FIS). The official report provided by the Federal Emergency Management Agency that contains the Flood Insurance Rate Map, the Flood Boundary and Floodway Map (if applicable), the water surface elevations of the base flood, and supporting technical data. [Also defined in FBC, B, Section 202.]

Floodplain Administrator. The office or position designated and charged with the administration and enforcement of this ordinance (may be referred to as the Floodplain Manager).

Floodplain development permit or approval. An official document or certificate issued by the community, or other evidence of approval or concurrence, which authorizes performance of specific development activities that are located in flood hazard areas and that are determined to be compliant with this ordinance.

Floodway. The channel of a river or other riverine watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. [Also defined in FBC, B, Section 202.]

Floodway encroachment analysis. An engineering analysis of the impact that a proposed encroachment into a floodway is expected to have on the floodway boundaries and base flood elevations; the evaluation shall be prepared by a qualified Florida licensed engineer using standard engineering methods and models.

Florida Building Code. The family of codes adopted by the Florida Building Commission, including: *Florida Building Code, Building*; *Florida Building Code, Residential*; *Florida Building Code, Existing Building*; *Florida Building Code, Mechanical*; *Florida Building Code, Plumbing*; *Florida Building Code, Fuel Gas*.

Functionally dependent use. A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water, including only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities; the term 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 or foundation of a structure.

Historic structure. Any structure that is determined eligible for the exception to the flood hazard area requirements of the *Florida Building Code, Existing Building*, Chapter 12 Historic Buildings.

Letter of Map Change (LOMC). An official determination issued by FEMA that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. Letters of Map Change include:

Letter of Map Amendment (LOMA): An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.

Letter of Map Revision (LOMR): A revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.

Letter of Map Revision Based on Fill (LOMR-F): A determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

Conditional Letter of Map Revision (CLOMR): A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard

areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study; upon submission and approval of certified as-built documentation, a Letter of Map Revision may be issued by FEMA to revise the effective FIRM.

Light-duty truck. As defined in 40 C.F.R. 86.082-2, any motor vehicle rated at 8,500 pounds Gross Vehicular Weight Rating or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less, which is:

- (1) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle, or
- (2) Designed primarily for transportation of persons and has a capacity of more than 12 persons; or
- (3) Available with special features enabling off-street or off-highway operation and use.

Lowest floor. The lowest floor of the lowest enclosed area of a building or structure, including basement, but excluding any unfinished or flood-resistant enclosure, other than a basement, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure in violation of the non-elevation requirements of the *Florida Building Code* or ASCE 24. [Also defined in FBC, B, Section 202.]

Manufactured home. A structure, transportable in one or more sections, which is eight (8) feet or more in width and greater than four hundred (400) square feet, and which is built on a permanent, integral chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle" or "park trailer." [Also defined in 15C-1.0101, F.A.C.]

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

Market value. The price at which a property will change hands between a willing buyer and a willing seller, neither party being under compulsion to buy or sell and both having reasonable knowledge of relevant facts. As used in this ordinance, the term refers to the market value of buildings and structures, excluding the land and other improvements on the parcel. Market value may be established by a qualified independent appraiser, Actual Cash Value (replacement cost depreciated for age and quality of construction), or tax assessment value adjusted to approximate market value by a factor provided by the Property Appraiser.

New construction. For the purposes of administration of this ordinance and the flood resistant construction requirements of the *Florida Building Code*, structures for which the "start of construction" commenced on or after September 22, 1972 and includes any subsequent improvements to such structures.

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 pads) is completed on or after September 22, 1972.

Park trailer. A transportable unit which has a body width not exceeding fourteen (14) feet and which is built on a single chassis and is designed to provide seasonal or temporary living quarters when connected to utilities necessary for operation of installed fixtures and appliances. [Defined in section 320.01, F.S.]

Recreational vehicle. A vehicle, including a park trailer, which is: [See section 320.01, F.S.]

- (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. Naturally occurring accumulations of sand in ridges or mounds landward of the beach.

Special flood hazard area. An area in the floodplain subject to a 1 percent or greater chance of flooding in any given year. Special flood hazard areas are shown on FIRMs as Zone A, AO, A1-A30, AE, A99, AH, V1-V30, VE or V. [Also defined in FBC, B Section 202.]

Start of construction. The date of issuance of permits for new construction and substantial improvements, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement is within 180 days of the date of the issuance. The actual start of construction means either the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns.

Permanent construction does not include land preparation (such as clearing, grading, or filling), the installation of streets or walkways, excavation for a basement, footings, piers, or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main buildings. For a 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 dimensions of the building. [Also defined in FBC, B Section 202.]

Substantial damage. Damage of any origin sustained by a building or structure whereby the cost of restoring the building or structure to its before-damaged condition would equal or exceed 50 percent of the market value of the building or structure before the damage occurred. [Also defined in FBC, B Section 202.]

Substantial improvement. Any repair, reconstruction, rehabilitation, addition, or other improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the building or structure before the improvement or repair is started. If the structure has incurred "substantial damage," any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either: [Also defined in FBC, B, Section 202.]

- (1) Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions.
- (2) Any alteration of a historic structure provided the alteration will not preclude the structure's continued designation as a historic structure. [See Instructions and Notes]

Variance. A grant of relief from the requirements of this ordinance, or the flood resistant construction requirements of the *Florida Building Code*, which permits construction in a manner that would not otherwise be permitted by this ordinance or the *Florida Building Code*.

Watercourse. A river, creek, stream, channel or other topographic feature in, on, through, or over which water flows at least periodically.

Secs. 25-22—25-30. – Reserved.

ARTICLE III. FLOOD RESISTANT DEVELOPMENT

Sec. 25-31 BUILDINGS AND STRUCTURES

(1) Design and construction of buildings, structures and facilities exempt from the Florida Building Code. Pursuant to subsection 25-4(3), buildings, structures, and facilities that are exempt from the *Florida Building Code*, including substantial improvement or repair of substantial damage of such buildings, structures and facilities, shall be designed and constructed in accordance with the flood load and flood resistant construction requirements of ASCE 24. Structures exempt from the *Florida Building Code* that are not walled and roofed buildings shall comply with the requirements of subsection 25-37.

(2) Buildings and structures seaward of the coastal construction control line. If extending, in whole or in part, seaward of the coastal construction control line and also located, in whole or in part, in a flood hazard area:

- a. Buildings and structures shall be designed and constructed to comply with the more restrictive applicable requirements of the *Florida Building Code*, Building Section 3109 and Section 1612 or *Florida Building Code*, Residential Section R322.
- b. Minor structures and non-habitable major structures as defined in section 161.54, F.S., shall be designed and constructed to comply with the intent and applicable provisions of this ordinance and ASCE 24.

(3) Critical facilities. New critical facilities shall, to the extent feasible, be located outside of the special flood hazard area and outside of the 0.2% annual chance flood hazard area (500-year floodplain). If documentation is provided that feasible sites outside of the special flood hazard area are not available that satisfy the objectives of a proposed critical facility, then the critical facility shall have the lowest floor elevated to the base flood elevation plus 3 feet. Floodproofing and sealing measures shall ensure that toxic substances will not be displaced or released into

floodwater. Access routes that are elevated to or above the base flood elevation shall be provided to the extent feasible.

Sec. 25-32. SUBDIVISIONS

(1) Minimum requirements. Subdivision proposals, including proposals for manufactured home parks and subdivisions, shall be reviewed to determine that:

- a. Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;
- b. All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and
- c. Adequate drainage is provided to reduce exposure to flood hazards; in Zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

(2) Subdivision plats. Where any portion of proposed subdivisions, including manufactured home parks and subdivisions, lies within a flood hazard area, the following shall be required:

- a. Delineation of flood hazard areas, floodway boundaries and flood zones, and design flood elevations, as appropriate, shall be shown on preliminary plats;
- b. Where the subdivision has more than 50 lots or is larger than 5 acres and base flood elevations are not included on the FIRM, the base flood elevations determined in accordance with subsection 25-5(2)a; and
- c. Compliance with the site improvement and utilities requirements of subsection 25-33.

Sec. 25-33. SITE IMPROVEMENTS, UTILITIES AND LIMITATIONS

(1) Minimum requirements. All proposed new development shall be reviewed to determine that:

- a. Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;
- b. All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and
- c. Adequate drainage is provided to reduce exposure to flood hazards; in Zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

(2) Sanitary sewage facilities. All new and replacement sanitary sewage facilities, private sewage treatment plants (including all pumping stations and collector systems), and on-site

waste disposal systems shall be designed in accordance with the standards for onsite sewage treatment and disposal systems in Chapter 64E-6, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the facilities and discharge from the facilities into flood waters, and impairment of the facilities and systems.

(3) Water supply facilities. All new and replacement water supply facilities shall be designed in accordance with the water well construction standards in Chapter 62-532.500, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the systems.

(4) Limitations on sites in regulatory floodways. No development, including but not limited to site improvements, and land disturbing activity involving fill or regrading, shall be authorized in the regulatory floodway unless the floodway encroachment analysis required in subsection 25-5(3)a demonstrates that the proposed development or land disturbing activity will not result in any increase in the base flood elevation.

(5) Limitations on placement of fill. Subject to the limitations of this ordinance, fill shall be designed to be stable under conditions of flooding including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and protection against flood-related erosion and scour. In addition to these requirements, if intended to support buildings and structures (Zone A only), fill shall comply with the requirements of the *Florida Building Code*.

(6) Limitations on sites in coastal high hazard areas (Zone V). In coastal high hazard areas, alteration of sand dunes and mangrove stands shall be permitted only if such alteration is approved by the Florida Department of Environmental Protection and only if the engineering analysis required by subsection 25-5(3)d demonstrates that the proposed alteration will not increase the potential for flood damage. Construction or restoration of dunes under or around elevated buildings and structures shall comply with subsection 25-37(8)c.

Sec. 25-34. MANUFACTURED HOMES

(1) General. All manufactured homes installed in flood hazard areas shall be installed by an installer that is licensed pursuant to section 320.8249, F.S., and shall comply with the requirements of Chapter 15C-1, F.A.C. and the requirements of this ordinance. If located seaward of the coastal construction control line, all manufactured homes shall comply with the more restrictive of the applicable requirements.

(2) Foundations. All new manufactured homes and replacement manufactured homes installed in flood hazard areas shall be installed on permanent, reinforced foundations that:

- a. In flood hazard areas (Zone A) other than coastal high hazard areas, are designed in accordance with the foundation requirements of the *Florida Building Code, Residential Section R322.2* and this ordinance. Foundations for manufactured homes subject to subsection 25- 304.6 are permitted to be reinforced piers or other foundation elements of at least equivalent strength.

- b. In coastal high hazard areas (Zone V), are designed in accordance with the foundation requirements of the *Florida Building Code, Residential* Section R322.3 and this ordinance.

(3) Anchoring. All new manufactured homes and replacement manufactured homes shall be installed using methods and practices which minimize flood damage and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Methods of anchoring include, but are not limited to, use of over-the-top or frame ties to ground anchors. This anchoring requirement is in addition to applicable state and local anchoring requirements for wind resistance.

(4) Elevation. Manufactured homes that are placed, replaced, or substantially improved shall comply with subsection 25-34(5) or (6), as applicable.

(5) General elevation requirement. Unless subject to the requirements of subsection 25-34(6), all manufactured homes that are placed, replaced, or substantially improved on sites located: (a) outside of a manufactured home park or subdivision; (b) in a new manufactured home park or subdivision; (c) in an expansion to an existing manufactured home park or subdivision; or (d) in an existing manufactured home park or subdivision upon which a manufactured home has incurred "substantial damage" as the result of a flood, shall be elevated such that the bottom of the frame is at or above the elevation required, as applicable to the flood hazard area, in the *Florida Building Code, Residential* Section R322.2 (Zone A) or Section R322.3 (Zone V).

(6) Elevation requirement for certain existing manufactured home parks and subdivisions. Manufactured homes that are not subject to subsection 25-34(5), including manufactured homes that are placed, replaced, or substantially improved on sites located in an existing manufactured home park or subdivision, unless on a site where substantial damage as result of flooding has occurred, shall be elevated such that either the:

- a. Bottom of the frame of the manufactured home is at or above the elevation required, as applicable to the flood hazard area, in the *Florida Building Code, Residential* Section R322.2 (Zone A) or Section R322.3 (Zone V); or
- b. Bottom of the frame is supported by reinforced piers or other foundation elements of at least equivalent strength that are not less than 36 inches in height above grade.

(7) Enclosures. Enclosed areas below elevated manufactured homes shall comply with the requirements of the *Florida Building Code, Residential* Section R322.2 or R322.3 for such enclosed areas, as applicable to the flood hazard area.

(8) Utility equipment. Utility equipment that serves manufactured homes, including electric, heating, ventilation, plumbing, and air conditioning equipment and other service facilities, shall comply with the requirements of the *Florida Building Code, Residential* Section R322, as applicable to the flood hazard area.

Sec. 25-35. RECREATIONAL VEHICLES AND PARK TRAILERS

(1) Temporary placement. Recreational vehicles and park trailers placed temporarily in flood hazard areas shall:

- a. Be on the site for fewer than 180 consecutive days; or
- b. Be fully licensed and ready for highway use, which means the recreational vehicle or park model is on wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanent attachments such as additions, rooms, stairs, decks and porches.

(2) Permanent placement. Recreational vehicles and park trailers that do not meet the limitations in subsection 25-35(1) for temporary placement shall meet the requirements of subsection 25-34 for manufactured homes.

Sec. 25-36. TANKS

(1) Underground tanks. Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty.

(2) Above-ground tanks, not elevated. Above-ground tanks that do not meet the elevation requirements of subsection 25-36(3) shall:

- a. Be permitted in flood hazard areas (Zone A) other than coastal high hazard areas, provided the tanks are anchored or otherwise designed and constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty and the effects of flood-borne debris.
- b. Not be permitted in coastal high hazard areas (Zone V).

(3) Above-ground tanks, elevated. Above-ground tanks in flood hazard areas shall be attached to and elevated to or above the design flood elevation on a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area.

(4) Tank inlets and vents. Tank inlets, fill openings, outlets and vents shall be:

- a. At or above the design flood elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and
- b. Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

Sec. 25-37. OTHER DEVELOPMENT

(1) General requirements for other development. All development, including man-made changes to improved or unimproved real estate for which specific provisions are not specified in this ordinance or the *Florida Building Code*, shall:

- a. Be located and constructed to minimize flood damage;
- b. Meet the limitations of subsection 25-33(4) if located in a regulated floodway;
- c. Be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the design flood;
- d. Be constructed of flood damage-resistant materials; and
- e. Have mechanical, plumbing, and electrical systems above the design flood elevation or meet the requirements of ASCE 24, except that minimum electric service required to address life safety and electric code requirements is permitted below the design flood elevation provided it conforms to the provisions of the electrical part of building code for wet locations.

(2) Fences in regulated floodways. Fences in regulated floodways that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of subsection 25-33(4).

(3) Retaining walls, sidewalks and driveways in regulated floodways. Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways shall meet the limitations of subsection 25-33(4).

(4) Roads and watercourse crossings in regulated floodways. Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated floodways shall meet the limitations of subsection 25-33(4). Alteration of a watercourse that is part of a road or watercourse crossing shall meet the requirements of subsection 25-5(3)c.

(5) Concrete slabs used as parking pads, enclosure floors, landings, decks, walkways, patios and similar nonstructural uses in coastal high hazard areas (Zone V). In coastal high hazard areas, concrete slabs used as parking pads, enclosure floors, landings, decks, walkways, patios and similar nonstructural uses are permitted beneath or adjacent to buildings and structures provided the concrete slabs are designed and constructed to be:

- a. Structurally independent of the foundation system of the building or structure;
- b. Frangible and not reinforced, so as to minimize debris during flooding that is capable of causing significant damage to any structure; and
- c. Have a maximum slab thickness of not more than four (4) inches.

(6) Decks and patios in coastal high hazard areas (Zone V). In addition to the requirements of the *Florida Building Code*, in coastal high hazard areas decks and patios shall be located, designed, and constructed in compliance with the following:

- a. A deck that is structurally attached to a building or structure shall have the bottom of the lowest horizontal structural member at or above the design flood elevation and any supporting members that extend below the design flood elevation shall comply with the foundation requirements that apply to the building or structure, which shall be designed to accommodate any increased loads resulting from the attached deck.
- b. A deck or patio that is located below the design flood elevation shall be structurally independent from buildings or structures and their foundation systems, and shall be designed and constructed either to remain intact and in place during design flood conditions or to break apart into small pieces to minimize debris during flooding that is capable of causing structural damage to the building or structure or to adjacent buildings and structures.
- c. A deck or patio that has a vertical thickness of more than twelve (12) inches or that is constructed with more than the minimum amount of fill necessary for site drainage shall not be approved unless an analysis prepared by a qualified registered design professional demonstrates no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to the building or structure or to adjacent buildings and structures.
- d. A deck or patio that has a vertical thickness of twelve (12) inches or less and that is at natural grade or on nonstructural fill material that is similar to and compatible with local soils and is the minimum amount necessary for site drainage may be approved without requiring analysis of the impact on diversion of floodwaters or wave runup and wave reflection.

(7) Other development in coastal high hazard areas (Zone V). In coastal high hazard areas, development activities other than buildings and structures shall be permitted only if also authorized by the appropriate federal, state or local authority; if located outside the footprint of, and not structurally attached to, buildings and structures; and if analyses prepared by qualified registered design professionals demonstrate no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to adjacent buildings and structures. Such other development activities include but are not limited to:

- a. Bulkheads, seawalls, retaining walls, revetments, and similar erosion control structures;
- b. Solid fences and privacy walls, and fences prone to trapping debris, unless designed and constructed to fail under flood conditions less than the design flood or otherwise function to avoid obstruction of floodwaters; and
- c. On-site sewage treatment and disposal systems defined in 64E-6.002, F.A.C., as filled systems or mound systems.

(8) Nonstructural fill in coastal high hazard areas (Zone V). In coastal high hazard areas:

- a. Minor grading and the placement of minor quantities of nonstructural fill shall be permitted for landscaping and for drainage purposes under and around buildings.

- b. Nonstructural fill with finished slopes that are steeper than one unit vertical to five units horizontal shall be permitted only if an analysis prepared by a qualified registered design professional demonstrates no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to adjacent buildings and structures.
- c. Where authorized by the Florida Department of Environmental Protection or applicable local approval, sand dune construction and restoration of sand dunes under or around elevated buildings are permitted without additional engineering analysis or certification of the diversion of floodwater or wave runup and wave reflection if the scale and location of the dune work is consistent with local beach-dune morphology and the vertical clearance is maintained between the top of the sand dune and the lowest horizontal structural member of the building.

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EXHIBIT A – Technical Amendments to the Florida Building Code, “Residential”.

R322.2.1 Elevation requirements.

1. *Buildings and structures in flood hazard areas not designated as Coastal A Zones shall have the lowest floors elevated to or above the base flood elevation plus 1 foot or the design flood elevation, whichever is higher.*
2. *Buildings and structures in flood hazard areas designated as Coastal A Zones shall have the lowest floors elevated to or above the base flood elevation plus 1 foot (305 mm), or to the design flood elevation, whichever is higher.*
3. *In areas of shallow flooding (AO Zones), buildings and structures shall have the lowest floor (including basement) elevated at least as high above the highest adjacent grade as the depth number specified in feet on the FIRM plus 1 foot, or at least 3 feet ~~2 feet~~ (610 mm) if a depth number is not specified.*
4. *Basement floors that are below grade on all sides shall be elevated to or above the base flood elevation plus 1 foot or the design flood elevation, whichever is higher.*

Exception: *Enclosed areas below the design flood elevation, including basements whose floors are not below grade on all sides, shall meet the requirements of Section R322.2.2.*

R322.3.2 Elevation requirements.

1. *All buildings and structures erected within coastal high-hazard areas shall be elevated so that the lowest portion of all structural members supporting the*

lowest floor, with the exception of piling, pile caps, columns, grade beams and bracing, is elevated to or above the base flood elevation plus 1 foot or the design flood elevation, whichever is higher.

2. *Basement floors that are below grade on all sides are prohibited.*
3. *The use of fill for structural support is prohibited.*
4. *Minor grading, and the placement of minor quantities of fill, shall be permitted for landscaping and for drainage purposes under and around buildings and for support of parking slabs, pool decks, patios and walkways.*

Exception: *Walls and partitions enclosing areas below the design flood elevation shall meet the requirements of Sections R322.3.4 and R322.3.5.*

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SECTION 3. The various parts, sections and clauses of this Ordinance are hereby declared to be severable. If any part, sentence, paragraph, Section or clause is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of the Ordinance shall not be affected thereby. In the event of a subsequent change in applicable law, so the provision which had been held invalid is no longer invalid, the provision shall thereupon return to full force and effect without further action by the City and shall thereafter be binding under this Ordinance.

SECTION 4. All Ordinances or parts of Ordinances in conflict herewith or to the extent of such conflict shall be repealed.

SECTION 5. Specific authority is hereby granted to codify this Ordinance as it is the intention of the City Council and it is hereby ordained that the provisions of this Ordinance shall become and be made a part of the Code of Ordinances of the City of Riviera Beach, and the sections of this Ordinance may be renumbered to accomplish such intentions.

SECTION 6. This Ordinance shall take effect upon its final approval and adoption by the City Council.

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PASSED AND APPROVED on the first reading this _____ day of
_____, 20_____.

PASSED AND ADOPTED on second and final reading this _____ day of
_____, 20_____.

APPROVED:

THOMAS A. MASTERS
MAYOR

TERENCE D. DAVIS
CHAIRPERSON

ATTEST:

CLAUDENE L. ANTHONY
CERTIFIED MUNICIPAL CLERK
CITY CLERK

KASHAMBA MILLER-ANDERSON
CHAIR PRO TEM

ORDINANCE NO. _____
PAGE 48 of 48

LYNNE L. HUBBARD
COUNCILPERSON

TONYA DAVIS JOHNSON
COUNCILPERSON

DAWN S. PARDO
COUNCILPERSON

1ST READING

MOTIONED BY: _____

SECONDED BY: _____

L. HUBBARD _____

K. MILLER-ANDERSON _____

T. DAVIS JOHNSON _____

D. PARDO _____

T. DAVIS _____

2ND & FINAL READING

MOTIONED BY: _____

SECONDED BY: _____

L. HUBBARD _____

K. MILLER-ANDERSON _____

T. DAVIS JOHNSON _____

D. PARDO _____

T. DAVIS _____

REVIEWED AS TO LEGAL SUFFICIENCY

ANDREW DEGRAFFENREIDT, ESQ.

CITY ATTORNEY

DATE: _____