CHAPTER 18. FLOODPLAIN MANAGEMENT

ARTICLE I. - ADMINISTRATION

DIVISION 1. - GENERALLY

Sec. 18-1. - Title. These regulations shall be known as the Floodplain Management Ordinance of Cutler Bay.

Sec. 18-2. - Scope. The provisions of this chapter 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; installation or replacement of tanks; placement of recreational vehicles; installation of swimming pools; and any other development, unless otherwise specified.

Sec. 18-3. - Intent. The purposes of this chapter 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:

- (1) Minimize unnecessary disruption of commerce, access and public service during times of flooding;
- (2) Require the use of appropriate construction practices in order to prevent or minimize future flood damage;
- (3) 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;
- (4) 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;
- (5) Minimize damage to public and private facilities and utilities;
- (6) Help maintain a stable tax base by providing for the sound use and development of flood hazard areas;
- (7) Minimize the need for future expenditure of public funds for flood control projects and response to and recovery from flood events;
- (8) Meet the requirements of the National Flood Insurance Program for Town participation as set forth in Title 44 Code of Federal Regulations, Section 59.22;
- (9) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, which result in damaging increases in erosion or in flood heights and velocities; and
- (10) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

Sec. 18-4. - Coordination with the Florida Building Code. This chapter 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. Pursuant to Chapter 553, Florida Statutes, this Chapter shall constitute and be interpreted as a local, technical amendment to the Florida Building Code with provisions more stringent requirements than those specified in the Florida Building Code.

Sec. 18-5. - Warning. The degree of flood protection required by this chapter and the Florida Building Code, as amended by the Town, 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 manmade or natural causes. This chapter 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 the Town 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 chapter.

Sec. 18-6. - Disclaimer of Liability. This chapter shall not create liability on the part of the Town, the Town Council, or by any officer or employee thereof for any flood damage that results from reliance on this chapter or any administrative decision lawfully made thereunder.

Sec. 18-7. - Definitions. Unless otherwise expressly stated, the following words and terms shall, for the purposes of this chapter, have the meanings shown in this section. Where terms are not defined in this chapter and are defined in the Florida Building Code ("FBC"), such terms shall have the meanings ascribed to them in the FBC. Where terms are not defined in this chapter or the FBC, such terms shall have ordinarily accepted meanings such as the context implies.

Accessory structure means a structure that is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure and limited to storage. Accessory structures should constitute a minimal investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

Alteration of a watercourse means 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 means a request for a review of the Floodplain Administrator's interpretation of any provision of this chapter.

Applicant means a property owner or owner's authorized agent.

ASCE 24 means 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.

Back of sidewalk means the elevation of the highest surface of the sidewalk abutting the property relative to the National Geodetic Vertical Datum (NGVD) or North American Vertical Datum (NAVD). Depending on site conditions, if there is a variation in a sidewalk's elevations abutting the property, the highest and lowest elevations may be averaged to obtain the regulatory sidewalk elevation provided the elevation is above base flood elevation.

Base flood means a flood having a one percent (1%) chance of being equaled or exceeded in any given year. The base flood is commonly referred to as the "100-year flood" or the "1-percent-annual chance flood."

Base flood elevation means the elevation of the base flood, including wave height, relative to the NGVD, NAVD or other datum specified on the Flood Insurance Rate Map (FIRM).

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

Coastal A zone means flood hazard areas that have been delineated as subject to wave heights between 1 ½ feet (457 mm) and 3 feet (914 mm). Such areas are seaward of the Limit of Moderate Wave Action shown on the Flood Insurance Rate Map or within six hundred (600) feet of the inland boundary of the Coastal High Hazard Area (Zone V) boundary, whichever is most landward.

Coastal construction control line means the line established by the State of Florida pursuant to section 161.053, F.S., and recorded in the official records of the Town, 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 means 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.

Crown of road (center line) means a line running parallel with the highway right-of-way which is half the distance between the extreme edges of the official right-of-way width as shown on a map approved by the department of public works.

Critical facility means a facility for which the impact of even a slight chance of flooding might be too great, including, but not limited to, hospitals, police, fire and emergency response installations, and installations which produce, use, or store hazardous materials or hazardous waste. The term includes buildings and structures assigned to Flood Design Class 3 and Flood Design Class 4 in accordance with ASCE 24.

Design flood means the flood associated with the greater of the following two areas:

- (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 Town's flood hazard map, or otherwise legally designated.

Design flood elevation means the elevation of the "design flood," including wave height, relative to the datum specified on the Town'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.

Development means 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 means 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** means any buildings and structures for which the "start of construction" commenced before August 31, 2006.

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

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

- (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 means any construction material capable of withstanding direct and prolonged contact with floodwaters without sustaining any damage that requires more than cosmetic repair.

Flood hazard area means the greater of the following two areas:

- (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 Town's flood hazard map, or otherwise legally designated.

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

Flood Insurance Study (FIS) means 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.

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

Floodplain development permit or approval means an official document or certificate issued by the Town, 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 chapter.

Florida Building Code means the family of codes adopted by the Florida Building Commission, as amended through the local technical amendments of Article III "Florida Building Code" of Chapter 8 "Building Code" of the Miami-Dade County Code of Ordinances, 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.

Freeboard means the additional height, usually expressed as a factor of safety in feet, above a flood level for purposes of floodplain management. Freeboard tends to compensate for many unknown factors, such as wave action, blockage of bridge or culvert openings and hydrological effect of urbanization of the watershed that could contribute to flood heights greater than the height calculated for a selected frequency flood.

Functionally dependent use means 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.

Hardship, as related to variances from this article, means the exceptional hardship associated with the land that would result from a failure to grant the requested variance. The Town requires that the variance is 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 construction next to the proposed walls or foundation of a structure.

Historic structure means 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) means 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:

- (1) 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.
- (2) 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.
- (3) 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 Town's floodplain management regulations.
- (4) 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 means, 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 means 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.

Mangrove stand means an assemblage of mangrove trees which are mostly low trees noted for a copious development of interlacing adventitious roots above 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).

Market value means 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 chapter, 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 means, or the purposes of administration of this chapter and the flood resistant construction requirements of the Florida Building Code, structures for which the "start of construction" commenced on or after August 31, 2006 and includes any subsequent improvements to such structures.

Park trailer means 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.

Public safety and nuisance means anything which is injurious to safety or health of the entire Town or a neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Recreational vehicle means a vehicle, including a park trailer, which is:

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

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

Special flood hazard area means 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.

Start of construction means 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 on a site, such as the pouring of slab or footings, the installation of piles, or 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.

Substantial damage means 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 44 percent of the market value of the building or structure before the damage occurred. The term also includes flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

Substantial improvement means any combination of repair, reconstruction, rehabilitation, alteration, addition, or other improvement of a building or structure taking place during a five (5) year period, the cumulative cost of which equals or exceeds 44 percent of the market value of the building or structure before the improvement or repair is started. The period of accumulation begins when the first improvement or repair of each building or structure is permitted subsequent to February 18, 2009. 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:

- (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.

Variance means a grant of relief from the requirements of this chapter, 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 chapter or the Florida Building Code.

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

Secs. 18-8—18-10. Reserved.

DIVISION 2. - APPLICABILITY

- **Sec. 18-11. Conflicts.** Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.
- **Sec. 18-12. Areas to which this chapter applies.** This chapter shall apply to all flood hazard areas within the Town of Cutler Bay, as established in Section 18-13 of this chapter.
- **Sec. 18-13. Basis for establishing flood hazard areas.** The Flood Insurance Study for Miami-Dade County, Florida and Incorporated Areas dated September 11, 2009, 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 chapter 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 Cutler Bay Town Hall, 10720 Caribbean Boulevard, Cutler Bay, FL.
- **Sec. 18-14. Submission of additional data to establish flood hazard areas.** To establish flood hazard areas and base flood elevations, pursuant to Division 5 of this chapter, 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 Town indicates that ground elevations:
 - 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 a flood hazard area and subject to the requirements of this chapter and, as applicable, the requirements of the Florida Building Code.
 - (2) Are above the closest applicable base flood elevation, the area shall be regulated as a special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the special flood hazard area.
- **Sec. 18-15. Other laws.** The provisions of this chapter shall not be deemed to nullify any provisions of local, state or federal law.
- **Sec. 18-16. Abrogation and greater restrictions.** This chapter 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 chapter and any other ordinance, the more restrictive shall govern. This chapter shall not impair any deed restriction, covenant or easement, but any land that is subject to such interests shall also be governed by this chapter.
- **Sec. 18-17. 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 or the Florida Constitution.

Secs. 18-18—18-20. Reserved.

DIVISION 3. - DUTIES AND POWERS OF THE FLOODPLAIN ADMINISTRATOR

Sec. 18-21. - Designation. The Town Manager, or his/her designee, is designated as the Floodplain Administrator. The Floodplain Administrator may delegate performance of certain duties to other employees.

Sec. 18-22. - General. The Floodplain Administrator is authorized and directed to administer and enforce the provisions of this chapter. The Floodplain Administrator shall have the authority to render interpretations of this chapter consistent with the intent and purpose of this chapter 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 chapter without the granting of a variance pursuant to Division 7 of this chapter.

Sec. 18-23. - Applications and permits. The Floodplain Administrator, in coordination with other pertinent offices of the Town, shall:

- (1) Review applications and plans to determine whether proposed new development will be located in flood hazard areas;
- (2) Review applications for modification of any existing development in flood hazard areas for compliance with the requirements of this chapter;
- (3) 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;
- (4) Provide available flood elevation and flood hazard information;
- (5) Determine whether additional flood hazard data shall be obtained from other sources or shall be developed by an applicant;
- (6) Review applications to determine whether proposed development will be reasonably safe from flooding;
- (7) 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 chapter is demonstrated, or disapprove the same in the event of noncompliance; and
- (8) 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 chapter.

Sec. 18-24. - 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:

- (1) 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;
- (2) Compare the cost of improvements, the cost to repair a damaged building to its predamaged condition, or the combined costs of improvements and costs of repairs, if applicable, to the market value of the building or structure; if the results of the comparison is greater than or equal to 30 percent a more precise market value may be required.
- (3) Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; the determination requires evaluation of previous permits issued for improvements and repairs as specified in the definition of "substantial improvement"; for proposed work to repair damage caused by flooding, the determination requires evaluation of previous permits issued to repair flood-related damage as specified in the definition of "substantial damage"; and
- (4) 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 chapter is required.
- **Sec. 18-25. 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 Division 7 of this chapter.
- **Sec. 18-26. 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 chapter.
- **Sec. 18-27. Inspections.** The Floodplain Administrator shall make the required inspections as specified in Division 6 of this chapter 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.
- **Sec. 18-27. Other duties of the Floodplain Administrator.** The Floodplain Administrator shall have other duties, including but not limited to:
 - (1) Establish, in coordination with the Building Official, procedures for administering and documenting determinations of substantial improvement and substantial damage made pursuant to Section 18-24 of this chapter;
 - (2) 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);

- (3) 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 or flood hazard area boundaries; such submissions shall be made within 6 months of such data becoming available;
- (4) Review required design certifications and documentation of elevations specified by this chapter and the Florida Building Code to determine that such certifications and documentations are complete;
- (5) Notify the Federal Emergency Management Agency when the corporate boundaries of the Town of Cutler Bay are modified; and
- (6) Advise applicants for new buildings and structures, including substantial improvements, which 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."

Sec. 18-29. - 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 chapter 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 chapter; 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 chapter and the flood resistant construction requirements of the Florida Building Code. These records shall be available for public inspection at the Cutler Bay Town Clerk's Office.

Secs. 18-30—18-40. Reserved.

DIVISION 4. - PERMITS

Sec. 18-41. - Permits required. Any applicant who intends to undertake any development activity within the scope of this chapter, 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 chapter and all other applicable codes and regulations has been satisfied.

Sec. 18-42. - Floodplain development permits or approvals. Floodplain development permits or approvals shall be issued pursuant to this chapter 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.

Sec. 18-43. - 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, as provided in section 553.73(10), F.S., as it may be amended, and any further exemptions provided by law, which are subject to the requirements of this chapter:

- (1) Railroads and ancillary facilities associated with the railroad.
- (2) Nonresidential farm buildings on farms, as provided in section 604.50, F.S.
- (3) Temporary buildings or sheds used exclusively for construction purposes.
- (4) Mobile or modular structures used as temporary offices.
- (5) 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.
- (6) 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.
- (7) 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.
- (8) Temporary housing provided by the Department of Corrections to any prisoner in the state correctional system.
- (9) 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

Sec. 18-44. - **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 Town. The information provided shall:

- (1) Identify and describe the development to be covered by the permit or approval.
- (2) 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.
- (3) Indicate the use and occupancy for which the proposed development is intended.
- (4) Be accompanied by a site plan or construction documents as specified in Division 5 of this chapter.
- (5) State the valuation of the proposed work.

- (6) Be signed by the applicant or the applicant's authorized agent.
- (7) Give such other data and information as required by the Floodplain Administrator.
- **Sec. 18-45. Validity of permit or approval.** The issuance of a floodplain development permit or approval pursuant to this chapter shall not be construed to be a permit for, or approval of, any violation of this chapter, the Florida Building Codes, or any other code provision of this Town. 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.
- **Sec. 18-46. 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.
- **Sec. 18-47. 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 chapter or any other ordinance, regulation or requirement of this Town.
- **Sec. 18-48. 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:
 - (1) The South Florida Water Management District; section 373.036, F.S.
 - (2) Florida Department of Health for onsite sewage treatment and disposal systems; Section 381.0065, F.S. and Chapter 64E-6, F.A.C.
 - (3) 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.
 - (4) Florida Department of Environmental Protection for activities subject to the Joint Coastal Permit; section 161.055, F.S.
 - (5) 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.
 - (6) Federal permits and approvals.

Secs. 18-49—18-50. Reserved.

DIVISION 5 - SITE PLANS AND CONSTRUCTION DOCUMENTS

Sec. 18-51. - Information for development in flood hazard areas. The site plan or construction documents for any development subject to the requirements of this chapter shall be drawn to scale and shall include, as applicable to the proposed development:

- (1) Delineation of flood hazard areas, and flood zone(s), base flood elevation(s), and ground elevations if necessary, for review of the proposed development.
- (2) 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.
- (3) Location, extent, amount, and proposed final grades of any filling, grading, or excavation.
- (4) 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.
- (5) Delineation of the Coastal Construction Control Line or notation that the site is seaward of the coastal construction control line, if applicable.
- (6) Extent of any proposed alteration of sand dunes or mangrove stands, provided such alteration is approved by the Florida Department of Environmental Protection.
- (7) 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 chapter 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 chapter.

Sec. 18-52. - Additional analyses and certifications. For activities that propose to alter sand dunes or mangrove stands in coastal high hazard areas (Zone V), the applicant shall have an engineering analysis that demonstrates that the proposed alteration will not increase the potential for flood damage signed and sealed by a Florida licensed engineer for submission with the site plan and construction documents.

Sec. 18-53. - 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 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.

Secs. 18-54—18-60. Reserved.

DIVISION 6. - INSPECTIONS

Sec. 18-61. - General. Development for which a floodplain development permit or approval is required shall be subject to inspection.

Sec. 18-62. - Development other than buildings and structures. The Floodplain Administrator shall inspect all development to determine compliance with the requirements of this chapter and the conditions of issued floodplain development permits or approvals.

- **Sec. 18-63. 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 chapter and the conditions of issued floodplain development permits or approvals.
- Sec. 18-64. 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 the certification of elevation of the lowest floor prepared and sealed by a Florida licensed professional surveyor.
- **Sec. 18-65. 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 Section 18-64 of this chapter.

Secs. 18-66—18-70. Reserved.

DIVISION 7. - VARIANCES AND APPEALS

- **Sec. 18-71. General.** The Town Council shall hear and decide on requests for appeals and requests for variances from the strict application of this chapter. Pursuant to section 553.73(5), F.S., the Town Council 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.
- **Sec. 18-72. Appeals.** The Town Council 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 chapter. Any person aggrieved by the decision may appeal such decision to the Circuit Court, as provided by Florida Statutes.
- **Sec. 18-73. Limitations on authority to grant variances.** The Town Council shall base its decisions on variances on technical justifications submitted by applicants, the considerations for issuance in Section 18-76 of this chapter, the conditions of issuance set forth in Section 18-77 of this chapter, and the comments and recommendations of the Floodplain Administrator and the Building Official. The Town Council has the right to attach such conditions as it deems necessary to further the purposes and objectives of this chapter.
- **Sec. 18-74. 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.

Sec. 18-75. - **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 chapter, provided the variance 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.

Sec. 18-76. - Considerations for issuance of variances. In reviewing requests for variances, the Town Council shall consider all technical evaluations, all relevant factors, all other applicable provisions of the Florida Building Code, this chapter, and the following:

- (1) The danger that materials and debris may be swept onto other lands resulting in further injury or damage;
- (2) The danger to life and property due to flooding or erosion damage;
- (3) The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners;
- (4) The importance of the services provided by the proposed development to the Town;
- (5) The availability of alternate locations for the proposed development that are subject to lower risk of flooding or erosion;
- (6) The compatibility of the proposed development with existing and anticipated development;
- (7) The relationship of the proposed development to the comprehensive plan and floodplain management program for the area;
- (8) The safety of access to the property in times of flooding for ordinary and emergency vehicles;
- (9) 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
- (10) 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.

Sec. 18-77. - Conditions for issuance of variances. Variances shall be issued only upon:

- (1) 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 chapter or the required elevation standards;
- (2) Determination by the Town Council that:
 - (a) 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;
 - (b) 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
 - (c) The variance is the minimum necessary, considering the flood hazard, to afford relief;

- (3) The variance, if granted, shall be recorded at the applicant's expense 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
- (4) 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.

Secs. 18-78—18-80. Reserved.

DIVISION 8. - VIOLATIONS

Sec. 18-81. - Violations. Any development that is not within the scope of the Florida Building Code but that is regulated by this chapter that is performed without an issued permit, that is in conflict with an issued permit, or that does not fully comply with this chapter, including a violation of conditions and safeguards established in connection with the grant of a variance, shall be deemed a violation of this chapter. 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 chapter or the Florida Building Code is presumed to be a violation until such time as that documentation is provided.

Sec. 18-82. - Authority. For development that is not within the scope of the Florida Building Code but that is regulated by this chapter 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.

Sec. 18-83. - Unlawful continuance; penalties. 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, upon adjudication therefore, be fined as provided in chapter 8 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 Floodplain Administrator from taking such other lawful actions as are necessary to prevent or remedy any violation.

Secs. 18-84—18-90. Reserved.

ARTICLE II. - FLOOD RESISTANT DEVELOPMENT

DIVISION 9. - BUILDINGS AND STRUCTURES

Sec. 18-91. - Design and construction of buildings, structures and facilities exempt from the Florida Building Code. Pursuant to Section 18-43 of this chapter, 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 Division 14 of this chapter.

Sec. 18-92. - 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:

- (1) 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.
- (2) 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 chapter and ASCE 24.

Sec. 18-93. - Specific methods of construction and requirements. Pursuant to Chapter 8 Article III of the Miami-Dade County Code, the following specific methods of construction and requirements and limitations apply:

- (1) Additional Elevation of Buildings (Freeboard).
 - a. For buildings and structures in flood hazard areas, the minimum elevation requirements are the elevations specified in the Florida Building Code, the back of the sidewalk elevation plus one (1) foot, or if there is no sidewalk, the elevation of the crown of road abutting the site plus one (1) foot, whichever is higher.
 - b. For buildings and structures outside of flood hazard areas (Zone X), the minimum elevation requirements are the back of the sidewalk elevation plus one (1) foot, or if there is no sidewalk, the elevation of the crown of road abutting the site plus one (1) foot, whichever is higher.
 - c. For critical facilities, the minimum elevation requirements shall be the elevation of the 0.2 percent (500-year) flood plus one (1) foot.
- (2) Cumulative Substantial Improvement. In Section 202 of the Florida Building Code, Building, and Section 202 of the Florida Building Code, Existing Building, definitions for the term" Substantial Improvement" shall be as follows:

SUBSTANTIAL IMPROVEMENT. For the purpose of determining compliance with the flood provisions of this code, any combination of repair, reconstruction, rehabilitation, alteration, addition or improvement of a building or structure taking place during a five (5) year period, the cumulative cost of which equals or exceeds 44 percent of the market value of the structure before the improvement or repair is started. The period of accumulation begins when the first improvement or repair of each building or structure is permitted subsequent to February 18, 2009. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

- a. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that is the minimum necessary to assure safe living conditions.
- b. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.
- (3) Flood Damage and Substantial Damage. In Section 202 of the Florida Building Code, Building, and Section 202 of the Florida Building Code, Existing Building, definitions for the term" Substantial Improvement" shall be as follows:

SUBSTANTIAL DAMAGE. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 44 percent of the market value of the structure before the damage occurred. The term also includes flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

- (4) Areas Under Elevated Buildings. Areas under elevated buildings shall not be enclosed by solid walls, breakaway walls, louvers, screening, lattice or other material. Areas under elevated buildings shall be used only for parking of vehicles, access to the buildings, and limited storage of materials used in connection with the building.
- (5) Attached and Detached Garages. The slab for attached garages and detached garages shall be at or above the base flood elevation plus one (1) foot.
- (6) Cost estimates for of work on existing buildings. Applicants shall provide estimates of costs of improvements for buildings and costs to repair damaged buildings. Cost estimates shall be prepared by a licensed general contractor of record or by a registered design professional using professional construction estimate software approved by the Floodplain Administrator or FEMA's substantial damage estimator software.

Sec. 18-94. – Detached accessory structures. Detached accessory structures shall be used only for storage accessory to the primary structures and shall be anchored to resist wind and flood loads. Accessory structures larger than 150 square feet shall:

- (1) In Zone A/AE flood hazard areas, meet the flood opening requirements of R322.2.
- (2) In coastal high hazard areas (Zone V) and Coastal A Zone, meet the breakaway wall requirements of R322.3.

DIVISION 10. - SUBDIVISIONS

Sec. 18-101. - Minimum requirements. Subdivision proposals, including proposals for subdivisions, shall be reviewed to determine that:

- (1) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;
- (2) 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
- (3) 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.

Sec. 18-102. - Subdivision plats. Where any portion of proposed subdivisions lies within a flood hazard area, the following shall be required:

- (1) Delineation of flood hazard areas, flood zones, and design flood elevations, as appropriate, shall be shown on preliminary plats; and
- (2) Compliance with the site improvement and utilities requirements of Division 11 of this chapter.

Secs. 18-103—18-110. Reserved.

DIVISION 11. - SITE IMPROVEMENTS, UTILITIES AND LIMITATIONS

Sec. 18-111. - Minimum requirements. All proposed new development shall be reviewed to determine that:

- (1) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;
- (2) 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
- (3) 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.
- **Sec. 18-112. 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.
- **Sec. 18-113. 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.

Sec. 18-114. - Limitations on placement of fill. Subject to the limitations of this chapter, 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.

Sec. 18-115. - 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 Section 18-52 of this chapter 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 Section 18-147(3) of this chapter.

Secs. 18-116—18-120. Reserved.

DIVISION 12. - RECREATIONAL VEHICLES AND PARK TRAILERS

Sec. 18-121. - Temporary placement. Permanent placement of recreational vehicles and park trailers in flood hazard areas is not permitted Recreational vehicles and park trailers placed temporarily in flood hazard areas shall:

- (1) Be on the site for fewer than 180 consecutive days; or
- (2) 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.

Secs. 18-122—18-130. Reserved.

DIVISION 13. - TANKS

Sec. 18-131. - 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.

Sec. 18-132. - Above-ground tanks, not elevated. Above-ground tanks that do not meet the elevation requirements of Section 18-133 of this chapter shall:

- (1) 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.
- (2) Not be permitted in coastal high hazard areas (Zone V).

Sec. 18-133. - Above-ground tanks, elevated. Above-ground tanks in flood hazard areas shall be elevated to or above the design flood elevation and attached to 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.

Sec. 18-134. - Tank inlets and vents. Tank inlets, fill openings, outlets and vents shall be:

- (1) 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
- (2) Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

Secs. 18-135—18-140. Reserved.

DIVISION 14. - OTHER DEVELOPMENT

Sec. 18-141. - General requirements for other development. All development, including manmade changes to improved or unimproved real estate for which specific provisions are not specified in this chapter or the Florida Building Code, shall:

- (1) Be located and constructed to minimize flood damage;
- Be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the design flood;
- (3) Be constructed of flood damage-resistant materials; and
- (4) 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.

Sec. 18-142. – **Canal encroachments.** It shall be unlawful and a violation of this chapter to encroach on or into secondary and private canals without the review and approval of the town's public works department. Submittals must provide proof that there will be no change in flood elevations and flow through the canal as result of the encroachment.

Sec. 18-143. – **Disposal of water and liquids.** It shall be unlawful and a violation of this chapter to dispose of any rainwater, stormwater runoff or other liquids by allowing or causing the same flow on, over or across any adjoining property, ROW, easement, and drainage canal, whether private or public. Exceptions to this condition may be allowed on a limited basis for necessary repairs to swimming pools, based on a case by case review and approval of the town's public works department provided the necessary treatment of the water meets the minimum standards established by Miami-Dade County DERM, SFWMD or the governing agency.

Sec. 18-144. - 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:

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

Sec. 18-145. - 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:

- (1) 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.
- (2) 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.
- (3) 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.
- (4) 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.

Sec. 18-146. - 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:

- (1) Bulkheads, seawalls, retaining walls, revetments, and similar erosion control structures;
- (2) 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
- On-site sewage treatment and disposal systems defined in 64E-6.002, F.A.C., as filled systems or mound systems.

Sec. 18-147. - Nonstructural fill in coastal high hazard areas (Zone V). In coastal high hazard areas:

- (1) Minor grading and the placement of minor quantities of nonstructural fill shall be permitted for landscaping and for drainage purposes under and around buildings.
- (2) 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.
- (3) 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 beachdune morphology and the vertical clearance is maintained between the top of the sand dune and the lowest horizontal structural member of the building.