

Chapter 54 - FLOODS

Footnotes:

--- (1) ---

Cross reference— *Building regulations, ch. 14; environment, ch. 46; marine structures, facilities and vehicles, ch. 66; beaches, § 82-436 et seq.; zoning districts and regulations, ch. 142.*

ARTICLE I. - IN GENERAL

Secs. 54-1—54-29. - Reserved.

Sec. 54-30. - Amendments to this chapter.

The adoption of any ordinance that would reduce, relax, diminish, or repeal the standards or requirements of this chapter shall require a five-sevenths vote of the city commission. Any proposed amendment to article II of this chapter shall first be submitted to the Florida Division of Emergency Management for review, to ensure the proposed amendments satisfy or exceed the minimum requirements of the National Flood Insurance Program.

(Ord. No. 2022-4483, § 1, 4-6-22)

ARTICLE II. - FLOODPLAIN MANAGEMENT

Footnotes:

--- (2) ---

Editor's note— *Section 1 of Ord. No. 2009-3656, adopted Oct. 14, 2009, deleted art. II, divs. 1—3, which consisted of §§ 54-31—54-42, 54-66—54-71, 54-91, and 54-92, pertained to the same subject matter and derived from Ord. No. 92-2822, adopted Dec. 2, 1992, and enacted new provisions to read as herein set out.*

DIVISION 1. - GENERALLY

Sec. 54-31. - Statutory authorization.

The Legislature of the State of Florida has authorized and delegated in F.S. ch. 166, the responsibility of local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the commission of the City of Miami Beach does hereby adopt the following floodplain management regulations.

(Ord. No. 2009-3656, § 1, 10-14-09)

Sec. 54-32. - Findings of fact.

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

(Ord. No. 2009-3656, § 1, 10-14-09)

Sec. 54-33. - Statement of purpose.

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

- (1) Restrict or prohibit uses which are dangerous to life, health, safety and property due to water or erosion hazards, which result in 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 throughout their intended life span;
- (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;
- (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.

(Ord. No. 2009-3656, § 1, 10-14-09)

Sec. 54-34. - Objectives.

The objectives of this article are to:

- (1) Protect human life, health and to eliminate or minimize property damage;
- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

- (4) Minimize prolonged business interruptions;
- (5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, roadways, and bridges and culverts located in floodplains;
- (6) Maintain a stable tax base by providing for the sound use and development of floodprone areas in such a manner as to minimize flood blight areas; and
- (7) Ensure that potential homebuyers are notified that property is in a flood hazard area.

(Ord. No. 2009-3656, § 1, 10-14-09)

Sec. 54-35. - Definitions.

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

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

Addition (to an existing building) means an extension or increase in floor area, number of stories, or height of a building or structure.

Appeal means a request for a review of the building director or his/her designee's interpretation of any provision of this article.

Area of shallow flooding means a designated AO or AH zone on the city'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 city subject to a one percent or greater chance of flooding in any given year. This term is synonymous with the phrase "special flood hazard area."

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" and the "regulatory flood"). Base flood is the term used throughout this article.

Base flood elevation means the elevation of the base flood, including wave height, relative to the datum on the FIRM. Notwithstanding the foregoing, in Zone AO, the elevation of the base flood shall be the depth number specified on the FIRM or two feet above grade where a depth number is not specified.

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

Board means the city's design review board, historic preservation board, or board of adjustment, whichever has jurisdiction over a particular land development application.

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: See "structure."

Coastal A zone means flood hazard areas that have been delineated as subject to wave heights between one and one-half feet (457 mm) and three feet (914 mm). Such areas are seaward of the limit of moderate wave action shown on the flood insurance rate map.

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, VE, or V.

Center line of roadway means a line running parallel with the roadway 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 the public works.

Critical facility means a facility designated as an essential facility including, but not limited to: hospitals, fire, rescue, ambulance and police stations and emergency vehicle garages, emergency shelters, designated emergency preparedness, communications, and operation centers and other facilities required for emergency response, power generating stations and other public utility facilities required in an emergency ancillary structures (including, but not limited to, communication towers, fuel storage tanks, cooling towers, electrical substation structure, fire water storage tanks, or other structures housing or supporting water, or other fire-suppression material or equipment, water storage facilities and pump structures required to maintain water pressure for fire suppression building and other structures (including, but not limited to, facilities that manufacture, process, handle, store, use, or dispose of such substances as hazardous fuels, hazardous chemicals, hazardous waste, or explosives) containing extremely hazardous materials.

Crown of road means the highest elevation of the roadway at a specific cross section.

Crown of road, future means the highest elevation of the crown of road as described in the adopted Miami Beach Stormwater Master Plan, located at exhibit X.

Datum means a reference surface used to ensure that all elevation records are properly related. The datum may be the National Geodetic Vertical Datum (NGVD) of 1929, the North American Vertical Datum (NAVD) of 1988, or the datum on the FIRM.

Development means any manmade 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 storage of materials or equipment.

Elevated building means a nonbasement building built to have the lowest floor elevated above the ground level by foundation walls, posts, piers, columns, pilings, or shear 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, for the purposes of floodplain management, structures for which "the start of construction" commenced before September 29, 1972. For the purposes of determining rates, existing construction shall mean structures for which the "start of construction" commenced before September 29, 1972. This term may also be referred to as "existing structures".

Flood or flooding means:

- (a) 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 the city, issued by FEMA, which delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Flood insurance study (FIS) means the official hydrology and hydraulics report provided by FEMA. The study contains an examination, evaluation, and determination of flood hazards, and, if appropriate, corresponding water surface elevations, or an examination, evaluation, and determination of mudslide (i.e., mudflow) and other flood-related erosion hazards. The study may also contain flood profiles, as well as the FIRM, FHBM (where applicable), and other related data and information.

Floodplain means any land area susceptible to being inundated by water from any source (see definition of "flooding").

Floodplain administrator means the individual appointed to administer and enforce the floodplain management regulations of the city.

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 regulations means this article and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain ordinance, grading ordinance, and erosion control ordinance), and other applications of police power which control

development in floodprone areas. This term describes federal, State of Florida, South Florida Water Management District (SFWMD), or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

Floodproofing means any combination of structural and nonstructural additions, changes, or adjustments to structures, which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

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, which could contribute to flood heights greater than the heights calculated for a selected frequency flood and floodway conditions. All new construction and substantial improvements shall meet the minimum freeboard requirement, and may exceed the minimum freeboard requirement up to the maximum freeboard without such height counting against the maximum height for construction in the applicable zoning district.

Freeboard, minimum equals one foot.

Freeboard, maximum equals five feet.

Free of obstruction means any type of lower area enclosure or other construction element will not obstruct the flow of velocity water and wave action beneath the lowest horizontal structural member of the lowest floor of an elevated building during a base flood event. This requirement applies to the structures in velocity zones (V-zones) and coastal A zones.

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

Hardship, as related to variances from this article, means the exceptional difficulty associated with the land that would result from a failure to grant the requested variance. The community 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 the start of construction, next to the proposed walls of a structure.

Historic structure means any structure that is:

- (a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; or
- (b) 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; or
- (c) Individually listed on the Florida Inventory of Historic Places, which has been approved by the Secretary of the Interior; or
- (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - 1. By the approved Florida program as determined by the Secretary of the Interior; or
 - 2. Directly by the Secretary of the Interior; or
- (e) Designated as an historic building, historic structure, or a contributing structure located within local designated historic district, by the City of Miami Beach.

Limit of moderate wave action means the line shown on FIRMs to indicate the inland limit of the one and one-half-foot (457 mm) breaking wave height during the base flood.

Lowest adjacent grade means the lowest elevation, after the completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

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 applicable nonelevation design standards of this article.

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*).

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.

Market value means the building value, actual cash value (like-kind replacement cost depreciated for age, wear and tear, neglect, and quality of construction of building) by an independent certified appraiser, or adjusted tax-assessed values.

National Geodetic Vertical Datum (NGVD) of 1929 means a vertical control used as a reference for establishing varying elevations within the floodplain.

New construction means, for floodplain management purposes, any structure for which the "start of construction" commenced on or after September 29, 1972. The term also includes any subsequent improvements to such structures. For flood insurance rates, structures for which the start of construction commenced on or after September 29, 1972, and includes any subsequent improvements to such structures.

North American Vertical Datum (NAVD) of 1988 means a vertical control used as a reference for establishing varying elevations within the floodplain.

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

Principally above ground means that at least 51 percent of the actual cash value of the structure is above ground.

Public safety and nuisance means anything which is injurious to safety or health of the entire community 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 that is:

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

Repetitive loss structure means a building that has incurred flood-related damages on two occasions during a ten-year period, on the average, equaled or exceeded 25 percent of the market value at the building at the time of each such flood event.

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

Special flood hazard area: See Area of special flood hazard. *Start of construction*, for other than new construction and 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, for floodplain management purposes, a walled and roofed building, 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. This term also includes "repetitive loss" structures as defined herein.

Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, taking place during a one-year period, in which the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. The term includes work determined to be "substantial structural alteration" and work determined to be Alteration Level 3. This term includes structures that have incurred "substantial damage" regardless of the actual repair work performed. This term does not, however, include any repair or improvement of a structure to correct existing violations of State of Florida or local health, sanitary, or safety code specifications, which have been identified by the local code enforcement official prior to the application for permit for improvement, and which are the minimum necessary to assure safe living conditions. This term does not include any alteration of an existing 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 article.

Violation means the failure of a structure or other development to be fully compliant with the requirements of this article. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this article 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 the North American Vertical Datum (NAVD) of 1988, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2013-3823, § 1, 10-16-13; Ord. No. 2014-3840, § 1, 2-12-14; Ord. No. 2016-4009, § 1, 5-11-16; Ord. No. 2022-4483, § 1, 4-6-22)

DIVISION 2. - GENERAL PROVISIONS

Sec. 54-36. - Lands to which this article applies.

This article shall apply to all areas within the jurisdiction of the City of Miami Beach.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2022-4483, § 1, 4-6-22)

Sec. 54-37. - 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 (FIS) for Miami-Dade County and Incorporated Areas, dated September 11, 2009, with the accompanying maps and other supporting data, and any subsequent amendments or revisions thereto, are adopted by reference and declared to be a part of this article. The flood insurance study and flood insurance rate map are on file at the City of Miami Beach.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2022-4483, § 1, 4-6-22)

Sec. 54-38. - Designation of floodplain administrator.

The commission of the City of Miami Beach hereby appoints the building official or his/her designee to administer and implement the provisions of this article and is herein referred to as the floodplain administrator.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2013-3823, § 2, 10-16-13)

Sec. 54-39. - Establishment of development permit.

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

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2017-4150, § 1, 10-31-17; Ord. No. 2022-4483, § 1, 4-6-22)

Sec. 54-40. - Compliance.

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

(Ord. No. 2009-3656, § 1, 10-14-09)

Sec. 54-41. - Abrogation and greater restrictions.

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

(Ord. No. 2009-3656, § 1, 10-14-09)

Sec. 54-42. - Interpretation.

In the interpretation and application of this article 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 of Florida statutes.

(Ord. No. 2009-3656, § 1, 10-14-09)

Sec. 54-43. - Warning and disclaimer of liability.

The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This article does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of the commission of the City of Miami Beach or by any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.

(Ord. No. 2009-3656, § 1, 10-14-09)

Sec. 54-44. - Penalties for violation.

Violation of the provisions of this article or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with the approval of a variance, shall be punishable for a noncriminal violation. Any person who violates this article or fails to comply with any of its requirements shall, upon adjudication therefore, be fined not more than \$500.00, 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.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2022-4483, § 1, 4-6-22)

DIVISION 3. - ADMINISTRATION

Sec. 54-45. - Permit procedures.

Application for a development permit shall be made to the floodplain administrator on forms furnished by him or her prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing and proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(1) Application stage:

- (a) Elevation in relation to the datum on the FIRM, of the proposed lowest floor (including basement) of all buildings;
- (b) Elevation in relation to the datum on the FIRM, to which any nonresidential building will be floodproofed;
- (c) Certificate from a registered professional engineer that the nonresidential floodproofed building will meet the floodproofing criteria in subsection 54-45(2), subsection 54-48(2), and the Florida Building Code;
- (d) Elevation in relation to the datum on the FIRM, of the bottom of the lowest horizontal structural member of the lowest floor and provide a certification from a registered engineer indicating that they have developed and/or reviewed the structural designs, specifications and plans of the construction and certified that [they] are in accordance with this chapter, the Florida Building Code, and, when applicable, the accepted standards of practice in coastal high and coastal A zones.
- (e) For new construction and substantial improvements, a stormwater management plan and site drainage calculations shall be prepared by a Florida licensed engineer in accordance with article IV of this chapter. The stormwater management plan, site drainage calculations, and site plan also shall:
 - (i) Demonstrate that grading and adequate surface drainage will be provided and surface run-off water will be diverted away from foundation walls to a storm conveyance or other approved point of collection, in accordance with Florida Building Code Sections 1804 and R401.3.
 - (ii)

Provide a wall to retain fill when of fill is proposed to be more than six inches above the grade of the adjoining property. The site plan shall demonstrate that the retaining wall does not obstruct drainage.

- (2) Construction stage: Upon placement of the lowest floor, or floodproofing by whatever construction means, or bottom of the lowest horizontal structural member, and prior to further vertical construction, it shall be the duty of the permit holder to submit to the floodplain administrator a certification of the NGVD or NAVD elevation of the lowest floor or floodproofed elevation, or bottom of the lowest horizontal structural member of the lowest floor as built, in relation to the datum on the FIRM. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When floodproofing is utilized for a particular building said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The floodplain administrator shall review the lowest floor and floodproofing elevation survey data submitted. The permit holder immediately and prior to further progressive work being permitted to proceed shall correct violations detected by such review. Failure to submit the survey or failure to make said corrections required hereby shall be cause to issue a stop-work order for the project.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2013-3823, § 3, 10-16-13; Ord. No. 2016-4009, § 2, 5-11-16; Ord. No. 2017-4150, § 1, 10-31-17; Ord. No. 2022-4483, § 1, 4-6-22)

Sec. 54-46. - Duties and responsibilities of the floodplain administrator.

Duties and responsibilities of the floodplain administrator shall include, but are not limited to:

- (1) Review permits to assure sites are reasonably safe from flooding;
- (2) Review all development permits to assure that the permit requirements of this article have been satisfied;
- (3) Require copies of additional federal, State of Florida, or local permits, especially as they relate to F.S. §§ 161.053, 320.8249, 320.8325, 373.036, 380.05, 381.0065, and ch. 553, pt. IV, be submitted along with the development permit application and maintain such permits on file with the development permit;
- (4) Verify and record the actual elevation (in relation to the datum on the FIRM) of the lowest floor (A-zones) or bottom of the lowest horizontal structural member of the lowest floor (V-zones and coastal A zones) of all new and substantially improved buildings, in accordance with subsections 54-48(1) and (2) and subsection 54-51(2), respectively;
- (5)

Verify and record the actual elevation (in relation to the datum on the FIRM) to which the new and substantially improved buildings have been floodproofed, in accordance with subsection 54-48(2);

- (6) Review certified plans and specifications for compliance. When floodproofing is utilized for a particular building, certification shall be obtained from a registered engineer certifying that all areas of the building, together with attendant utilities and sanitary facilities, below the required elevation are watertight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy in compliance with subsection 54-48(2) of this article. In coastal high hazard areas and coastal A zones, certification shall be obtained from a registered professional engineer that the building is designed and securely anchored to pilings or columns in order to withstand velocity waters and hurricane wave wash. Additionally, in coastal high hazard areas and coastal A zones, if the area below the lowest horizontal structural member of the lowest floor is enclosed, it may be done so with open wood lattice and insect screening or with nonsupporting breakaway walls that meet the standards of subsection 54-51(6) of this article;
- (7) Interpret the exact location of boundaries of the areas of special flood hazard. When there appears to be a conflict between a mapped boundary and actual field conditions, the floodplain 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 article;
- (8) Coordinate all change requests to the FIS and FIRM with the requester, State of Florida, Cooperating Technical Partner, and FEMA; and
- (9) Where base flood elevation is utilized, obtain and maintain records of lowest floor and floodproofing elevations for new construction and substantial improvements in accordance with subsections 54-48(1) and (2), respectively.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2013-3823, § 3, 10-16-13; Ord. No. 2022-4483, § 1, 4-6-22)

DIVISION 4. - PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 54-47. - General standards.

In all areas of special flood hazard, all development sites, including new construction and substantial improvements, shall be reasonably safe from flooding and meet the following provisions:

- (1) New construction and substantial improvements shall be designed or modified and adequately anchored to prevent flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

- (2) Manufactured homes shall be anchored to prevent flotation, collapse, and 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 of Florida 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 and 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, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- (6) Adequate drainage shall be provided so as to reduce the exposure of flood hazards;
- (7) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems;
- (8) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters;
- (9) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
- (10) Any alteration, repair, reconstruction or improvements to a building that is in compliance with the provisions of this article shall meet the requirements of "new construction" as contained in this division;
- (11) Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this article, shall be undertaken only if said nonconformity is not furthered, extended, or replaced;
- (12) All applicable additional federal, State of Florida, and local permits shall be obtained and submitted to the building director or designee along with the application for development permit. Copies of such permits shall be maintained on file with the development permit. State of Florida permits may include, but not be limited to, the following:
 - (a) South Florida Water Management District: in accordance with F.S. § 373.036(2)(a), flood protection and floodplain management;
 - (b) Department of community affairs: in accordance with F.S. § 380.05, areas of critical state concern, and F.S. ch. 553, pt. IV, Florida Building Code;
 - (c) Department of health: in accordance with F.S. § 381.0065, onsite sewage treatment and disposal systems;
 - (d)

Department of environmental protection, coastal construction control line: in accordance with F.S. § 161.053, coastal construction and excavation;

(e) Department of environmental protection: 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; and

(f) Federal permits and approvals.

(13) Standards for subdivision proposals and other new proposed development (including manufactured homes parks and subdivisions):

(a) Such proposals shall be consistent with the need to minimize flood damage;

(b) Such proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage; and

(c) Such proposals shall have adequate drainage provided to reduce exposure to flood hazards.

(14) When proposed new construction and substantial improvements are partially located in an area of special flood hazard, the entire structure shall meet the standards for new construction.

(15) When proposed new construction and substantial improvements are located in multiple flood hazard risk zones or in a flood hazard risk zone with multiple base flood elevations, the entire structure shall meet the standards for the most hazardous flood hazard risk zone and the highest base flood elevation.

(16) Installation of new septic sewage systems is prohibited in the City of Miami Beach Special Hazard Area.

(17) Hazardous materials shall be stored indoors in the City of Miami Beach Special Flood Hazard Area and shall be elevated no lower than base flood elevation plus minimum freeboard.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2013-3823, § 4, 10-16-13; Ord. No. 2016-4009, § 3, 5-11-16; Ord. No. 2022-4483, § 1, 4-6-22)

Sec. 54-48. - Specific standards.

In areas mapped as "Zone X" (shaded and unshaded) on the City of Miami Beach Flood Insurance Rate Map (FIRM), all new construction and substantial improvement of any buildings (including manufactured homes) shall construct the lowest floor at an elevation of at least one foot above the highest adjacent grade or above the crown of road of the nearest street whichever is higher.

Except seaward of the Coastal Construction Control Line and in Coastal A Zones, In all A-zones where base flood elevation data have been provided (zones AE, A1-30, A (with base flood elevation), AO and AH), as set forth in section 54-37, the following provisions, in addition to those set forth in section 54-47, shall apply:

(1) *Residential construction.*

- (a) All new construction and substantial improvement of any residential building (including manufactured homes) shall have the lowest floor including electrical, heating, ventilation, plumbing, air conditioning equipment, cable, telephone, and other service facilities, including duct work elevated to no lower than 9.0 ft. NGVD (7.44 ft. NAVD), the crown of road or sidewalk plus one foot, or the base flood elevation plus minimum freeboard, whichever is higher. Walls of enclosures and solid foundation perimeter walls shall meet the requirements of subsection 54-48(3).
- (b) Improvements determined to not be substantial improvements:
 - (i) If additions, shall be elevated no lower than the existing lowest floor elevation: and
 - (ii) If include new or replacement heating, ventilation, plumbing, air conditioning equipment, including duct work, shall have the electrical, heating, ventilation, plumbing, air conditioning equipment, including duct work elevated no lower than the existing lowest floor elevation.

(2) *Nonresidential construction.*

- (a) All new construction and substantial improvement of any commercial, industrial, or nonresidential building (including manufactured homes) shall have the lowest floor, including basement, electrical, heating, ventilation, plumbing, air conditioning equipment, cable, telephone, and other service facilities, including duct work, elevated to no lower than 9.0 ft. NGVD (7.44 ft. NAVD), the crown of road or sidewalk plus one foot, or the base flood elevation plus minimum freeboard, whichever is higher. All buildings located in A-zones may be floodproofed, in lieu of being elevated, provided that all areas of the building components, together with attendant utilities and sanitary facilities, below the base flood elevation, plus minimum freeboard are watertight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A registered professional engineer shall certify that the standards of this subsection are satisfied using the FEMA floodproofing certificate. Such certification along with the corresponding engineering data, and the operational and maintenance plans shall be provided to the floodplain administrator.
- (b) Improvements determined to not be substantial improvements:
 - (i) If additions, shall be elevated no lower than the existing lowest floor elevation; and
 - (ii) If include new or replacement heating, ventilation, plumbing, air conditioning equipment, including duct work, shall have the electrical, heating, ventilation, plumbing, air conditioning equipment, including duct work elevated no lower than the existing lowest floor elevation.

- (c) All new construction and substantial improvements to critical facilities shall have the lowest floor including electrical, heating, ventilation, plumbing, air conditioning equipment, cable, telephone, and other service facilities including duct work, elevated to no lower than the base flood elevation plus two feet or the elevation required by the Florida Building Code.
- (3) *Enclosures below the lowest floor.* New construction and substantial improvements that include fully enclosed areas formed by foundation and other exterior walls forming fully enclosed areas 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 meet or exceed the following minimum criteria:
 - (i) Provide a minimum of two openings on different sides of each enclosed area having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - (ii) The bottom of all openings shall be no higher than one foot above adjacent interior grade (which must be equal to or higher in elevation than the adjacent exterior grade); and
 - (iii) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they provide the required net area of the openings and permit the automatic flow of floodwaters in both directions.
 - (b) Fully enclosed areas below the lowest floor shall solely be used for parking of vehicles, storage, and building access. Access to the enclosed area shall be 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); and
 - (c) The interior portion of such enclosed area shall not be finished or partitioned into separate rooms.
- (4) *Standards for manufactured homes and recreational vehicles.*
- (a) All manufactured homes that are placed, or substantially improved shall be installed with the lowest floor elevated on a permanent foundation to no lower than the base flood elevation, plus minimum freeboard, and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
 - (b) All recreational vehicles must either:
 - (i) Be on the site for fewer than 180 consecutive days,
 - (ii)

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

(iii) Meet all the requirements for new construction, including anchoring and elevation standards in accordance with subsection 54-48(4)(a).

- (5) *Drainage paths.* Adequate drainage paths around structures shall be provided on slopes to guide water away from structures within zone AO and AH.
- (6) *Seaward structures.* Structures located seaward of the coastal construction control line (CCCL) and in A zones or the X zone shall be designed in accordance with the Florida Building Code, Section 3109, and the bottom of the lowest horizontal structural member of the lowest floor of all new construction and substantial improvements shall be elevated to no lower than the 100-year flood elevation established by the Florida Department of Environmental Protection or by the Florida Building Code or whichever is higher. All nonelevation design requirements of section 54-51 and the Florida Building Code, Section 3109, shall apply.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2013-3823, § 4, 10-16-13; Ord. No. 2016-4009, § 4, 5-11-16; Ord. No. 2022-4483, § 1, 4-6-22; Ord. No. 2023-4551, § 1, 4-28-23)

Sec. 54-49. - Accessory structures and garages.

- (1) *Accessory structures and detached garages.* Accessory structures and detached garages are permitted below the elevations required by section 54-48 provided the accessory structures and detached garages are used only for parking or storage and:
- (a) If located in special flood hazard areas (Zone A/AE) other than coastal high hazard areas, are one-story and not larger than 600 square feet and have flood openings in accordance with Section R322.2 of the Florida Building Code, Residential.
 - (b) If located in coastal high hazard areas (Zone VNE), are not located below elevated buildings and are not larger than 100 square feet.
 - (c) Are anchored to resist flotation, collapse or lateral movement resulting from flood loads.
 - (d) Have flood damage-resistant materials used below the base flood elevation plus one foot.
 - (e) Have mechanical, plumbing and electrical systems, including plumbing fixtures, elevated to or above the base flood elevation plus one foot.
- (2) *Single-family residential garages, floors and height.*
- (a) The floor of detached garages and attached garages shall be no lower than adjusted grade, as defined in section 114-1 of this Code.
 - (b)

The overall height and structural composition of the floor of detached garages and attached garages shall be designed and built to accommodate a future raised floor slab to meet the height of base flood elevation plus minimum freeboard, subject to the height limitations provided in chapter 142 of this Code.

- (c) When an enclosure under an elevated home is designed for parking, the driveway shall be sloped upward from the public right-of-way to a minimum elevation of adjusted grade, as defined in section 114-1 of this Code. and then may slope downward to the level of the garage floor.

(3) *Multifamily residential garage structures.*

- (a) The overall height and structural composition of the floor of multifamily residential garage structures shall be designed and built to accommodate a future raised floor slab to meet the height of base flood elevation plus minimum freeboard. subject to the height limitations provided in chapter 142 of this Code.
- (b) Access drives to multifamily residential garage structures shall be sloped upward from the public right-of-way to a minimum elevation of adjusted grade, as defined in section 114-1 of this Code, and then may slope downward to the level of the garage floor.

(Ord. No. 2022-4483, § 1, 4-6-22)

Editor's note— Ord. No. 2022-4483, adopted April 6, 2022, amended § 54-49 in its entirety to read as herein set out. Former § 54-49 pertained to specific standards for A-zones without base flood elevations and regulatory floodways, and derived from Ord. No. 2009-3656, adopted October 14, 2009; and Ord. No. 2013-3823, adopted October 16, 2013.

Sec. 54-50. - Reserved.

Sec. 54-51. - Standards for coastal high hazard areas (V-zones) and coastal A zones.

Located within areas of special flood hazard established in section 54-37 are coastal high hazard areas, designated as zones V1-V30, VE, or V (with BFE) and Coastal A Zones. The following provisions shall apply:

- (1) Meet the standards of section 54-45, and 54-48.
- (2) All new construction and substantial improvements in zones V1-V30, VE, and V (with BFE) and coastal A zones shall be elevated on pilings or columns so that:
 - (a) The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to no lower than eight feet NGVD (6.44 feet NAVD), the crown of road or sidewalk plus one foot, or the base flood elevation plus minimum freeboard whichever is higher; 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. Water loading will be those values associated with the base flood. Wind loading values will be those required by applicable State of Florida or local code, if more stringent than those of the State of Florida, building standards.

- (c) Structures located seaward of the coastal construction control line (CCCL), shall be designed in accordance with the Florida Building Code, Section 3109, and the bottom of the lowest horizontal structural member of the lowest floor of all new construction and substantial improvements of the habitable structures, as defined in Florida Building Code Section 3109, shall be elevated to the 100-year flood elevation established by the Florida Department of Environmental Protection or by the Florida Building Code, whichever is higher.
- (3) 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 for meeting the provisions of this section.
- (4) Obtain the elevation (in relation to the datum on the FIRM) of the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures. The floodplain administrator shall maintain a record of all such information.
- (5) All new construction shall be located landward of the reach of mean high tide.
- (6) Provide that all new construction and substantial improvements have 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. Breakaway walls shall have flood openings that meet the requirements of subsection 54-48(3)(a). 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 State of Florida or 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 water load less than that which would occur during the base flood.
 - (b)

The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). The water loading values shall be those values associated with the base flood. The wind loading values shall be those required by applicable Florida or local, if more stringent than those of the State of Florida, building standards.

- (c) Such enclosed space shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be finished, partitioned into multiple rooms, or temperature-controlled.
- (7) The use of fill for structural support is not permitted. No development permit shall be issued for development involving nonstructural fill in coastal high hazard areas and coastal A zones unless it has been demonstrated through appropriate engineering analyses that the subject fill does not cause any adverse impacts to the structure on site or other properties. The floodplain administrator may waive the requirement for analyses provided:
 - (a) Minor quantities of nonstructural fill are used for landscaping or drainage purposes under and around buildings and for support of parking slabs, pool decks, patios, and walkways: and
 - (b) The nonstructural fill is no more than two feet deep and has finished slopes that are not steeper than one unit vertical to five units horizontal.
- (8) Prohibit manmade alteration of sand dunes and mangrove stands that would increase potential flood damage.
- (9) Standards for manufactured homes. All manufactured homes to be placed, replaced, or substantially improved shall meet the standards of subsections 54-51(2) through (8).
- (10) Recreational vehicles placed on sites within zones VE, V1-V30, V (with base flood elevation) on the FIRM and coastal A zones are permitted only in existing recreational vehicle parks and shall either:
 - (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 subsection 54-51(9).

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2013-3823, § 5, 10-16-13; Ord. No. 2016-4009, § 5, 5-11-16; Ord. No. 2022-4483, § 1, 4-6-22)

DIVISION 5. - VARIANCE PROCEDURES

Sec. 54-52. - Designation of floodplain management board.

The city's design review board, historic preservation board, and board of adjustment, whichever has jurisdiction over a particular land development application, shall serve as the floodplain management board and shall hear and decide appeals and requests for variances from the requirements of this article.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2022-4483, § 1, 4-6-22)

Sec. 54-53. - Duties of floodplain management board.

Each respective board shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the floodplain administrator in the enforcement or administration of this article. Any person aggrieved by the decision of the board may appeal such decision to the circuit court by petition for writ of certiorari according to the rules of appellate procedure.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2013-3823, § 5, 10-16-13; Ord. No. 2022-4483, § 1, 4-6-22)

Sec. 54-54. - Variance procedures.

In acting upon such applications, each board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this article, and

- (1) The danger that materials may be swept onto other lands to the injury of others;
- (2) The danger of life and property due to flooding or erosion damage;
- (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (4) The importance of the services provided by the proposed facility to the community;
- (5) The necessity to the facility of a waterfront location, where applicable;
- (6) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
- (7) The compatibility of the proposed use with existing and anticipated development;
- (8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- (9) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- (10) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
- (11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2022-4483, § 1, 4-6-22)

Sec. 54-55. - 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 public expense, create nuisance, cause 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 deviation from the requirements of this article.
- (3) The floodplain administrator shall maintain the records of all variance actions, including justification for their issuance or denial, and report such variances upon request to FEMA and the State of Florida, Division of Emergency Management, NFIP coordinating office.
- (4) Applicant shall take all necessary steps to have a building permit issued by the building department within a period of 18 months from the date of issued variance or it shall become null and void.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2013-3823, § 5, 10-16-13; Ord. No. 2022-4483, § 1, 4-6-22)

Sec. 54-56. - Variance notification.

Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:

- (1) The issuance of a variance to construct a structure below the base flood elevation will result in increased premium rates for flood insurance up to amounts as high as \$25.00 for \$100.00 of insurance coverage, and
- (2) Such construction below the base flood level increases risks to life and property.

A copy of the notice shall be recorded by the floodplain administrator in the office of the clerk of court and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

(Ord. No. 2009-3656, § 1, 10-14-09; Ord. No. 2013-3823, § 5, 10-16-13)

Sec. 54-57. - Historic structures.

Variances may be issued for the repair or rehabilitation of "historic" structures, meeting the definition in this article, upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a "historic" structure and the variance is the minimum to preserve the historic

character and design of the structure.

(Ord. No. 2009-3656, § 1, 10-14-09)

Sec. 54-58. - Reserved.

Editor's note— Ord. No. 2022-4483, adopted April 6, 2022, deleted § 54-58, which pertained to structures in regulatory floodway, and derived from Ord. No. 2009-3656, adopted October 14, 2009.

ARTICLE III. - RESILIENCE STANDARDS FOR TIDAL FLOOD PROTECTION

Sec. 54-59. - Purpose and intent.

The purpose of this article is to protect the public's health, welfare and safety by establishing minimum standards to be used in the design, construction and maintenance of waterfront structures. This article establishes a minimum elevation for new seawalls and requires failing and low seawalls, bulkheads, living shorelines, or other shoreline protection structures that cause tidal surface water flooding to adjacent properties to be properly maintained, repaired or, if necessary, replaced. The physical seawall improvements ensure new seawalls, bulkheads, living shorelines, or other shoreline protection structures are designed to meet consistent standards that account for future tidal flood conditions and coastal water levels predicted with sea level rise, in accordance with current regional sea level rise projections, as updated and adopted by the city commission.

(Ord. No. 2021-4393, § 1, 1-13-21; Ord. No. 2025-4754, § 1, 7-23-25)

Sec. 54-60. - Applicability.

Mandatory compliance with the requirements of this article shall be required for the following types of building permit applications:

- (1) All new waterfront construction and substantial improvements;
- (2) All new seawalls; and
- (3) Substantial improvements, including repair or rehabilitation, to existing shorelines and shoreline structures.

Each applicant shall submit documentation including an itemized breakdown of the costs of construction specific to the seawall work to allow city staff to determine whether improvements are substantial and to evaluate compliance with the minimum elevation requirements.

Mandatory compliance with the requirements of this article shall be required for all low seawalls, bulkheads, living shorelines, or other shoreline protection structures that do not meet the minimum standards in this article, except as otherwise provided in this article; and any other existing condition that causes tidal surface water flooding onto adjacent properties and/or public right-of-way.

This article is not applicable to oceanfront beaches or shorelines seaward of the Coastal Construction Control Line.

(Ord. No. 2021-4393, § 1, 1-13-21; Ord. No. 2025-4754, § 1, 7-23-25)

Sec. 54-61. - Definitions.

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

Bulkhead means a vertical or near-vertical, substantially impermeable structure erected along waterbody or a waterway, designed and constructed in such manner as to be substantially impermeable and safely sustain any loads, both vertical and lateral, that may come upon it, such as earth fill, water, moving traffic, storage of materials alongside, and the like. Coastal bulkheads are most often referred to as seawalls. A bulkhead is intended to act as a shoreline stabilization structure that primarily retains soil and provides minimal protection from waves.

Green-grey infrastructure or materials means a combination of engineered and natural features that provide environmental qualities and ecosystem value.

Living shoreline means a green infrastructure technique using native vegetation alone or in combination with low sills (such as low elevation seawalls or bulkheads) to stabilize the shoreline as a natural alternative to "hard" shoreline stabilization methods like riprap or bulkheads. Living shorelines may be more resilient than bulkheads in protecting against the effects of hurricanes. A living shoreline may have its waterside face consist of plants and other natural elements that improve water quality, provide additional fish habitat, and fosters increased biodiversity. The landside interface may be located anywhere on an existing property fronting the living shoreline, as long as it is constructed in a manner and location that ensures any habitable structures on that property are protected from flooding from tidal waters and it prevents flooding of adjacent properties and the public right-of-way.

NAVD88 or the North American Vertical Datum ("NAVD 88") means the vertical control datum of orthometric height established for vertical control surveying in the United States of America based upon the General Adjustment of the North American Datum of 1988.

Public nuisance means injurious to the safety or health of the entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any public right-of-way.

Rip-rap means a foundation of unconsolidated boulders, stone, rubble, concrete without protruding rebar or similar materials placed on or near a shoreline to mitigate wave impacts and prevent erosion.

Seawall means the vertical or near vertical (often interlocking) structures placed between an upland area and a waterway or waterbody for erosion control.

Seawall cap means the concrete beam (usually cast-in-place and reinforced) which connects seawall panels, piles and anchoring system (if present) together at the top of the seawall structure.

Shoreline means the tidally influenced area where land meets water.

Substantial improvements (including repair or rehabilitation) means any improvement and/or repairs to an existing seawall with a cost of \$500.00 or more per linear foot.

Tidally influenced areas means a waterway with water level changes in response to the daily tide.

(Ord. No. 2021-4393, § 1, 1-13-21; Ord. No. 2025-4754, § 1, 7-23-25)

Sec. 54-62. - Minimum elevations and materials for new or substantially rehabilitated coastal infrastructure within tidally-influence areas.

- (a) All new seawalls or existing seawalls that require substantial improvements; shall have a minimum elevation of 5.7 feet NAVD88. All existing seawalls that require improvements that are considered less than substantial improvements shall have a minimum elevation of four feet NAVD88, but only if designed and constructed to accommodate a future minimum elevation of 5.7 feet NAVD88. Notwithstanding the foregoing sentence, limited maintenance work, such as the installation of rip-rap, shall be exempt from the minimum elevation requirement in this section, provided that an engineering report is submitted that demonstrates, to the satisfaction of the city, that the seawall is structurally sound. All existing seawalls constructed at a height that allows flooding to incur onto the upland property, an adjacent property, and/or public right-of-way shall have a minimum elevation of four feet NAVD88 if designed and constructed to accommodate a minimum elevation of 5.7 feet NAVD88.
- (b) To the extent practicable, seawalls shall be designed and constructed to adjoin immediately proximate seawalls to close gaps and prevent trespass of tidal surface water.
- (c) Property owners are encouraged to consider approaches and materials that enhance the biological value of traditional (flat surface) seawalls with the incorporation of living shoreline features, the use of materials that encourage biodiversity, and the use of biological forms, where practicable.
- (d) This section shall not be construed to require the installation of a seawall where other flood protection measures and living shorelines serve as an equally effective tidal flood barrier.

(Ord. No. 2021-4393, § 1, 1-13-21; Ord. No. 2025-4754, § 1, 7-23-25)

Sec. 54-63. - Coastal infrastructure maintenance requirements within tidally-influenced areas.

- (a) All property owners must maintain their seawalls, bulkheads, living shorelines, or other shoreline protection structures or elements in good repair. A shoreline protection structure is presumed to be in disrepair if it allows for upland erosion, transfer of material through the barrier/wall or allows tidal waters to flow unimpeded through and/or over the top of the barrier/wall to the upland property, adjacent properties, or public right-of-way. Property owners with seawalls, bulkheads, living shorelines, or other shoreline protection structures or elements below the minimum required finished elevation with permeable erosion barriers such as riprap, or land/water interface of another nature, are prohibited from allowing tidal waters to enter their property or to flow onto an adjacent property or public right-of-way. Failure to maintain flood mitigation infrastructure shall be a citable offense. The notice of violation shall require the property owner to initiate the seawall repair or improvement process and be able to demonstrate progress toward addressing the cited concern within 60 days of the issuance of the notice of violation. A demonstration of progress may include, but is not limited to, obtaining written proposals from seawall contractors, securing financing, and/or applying for permits. Within six months of the issuance of the notice of violation, the property owner shall submit a permit application to the City of Miami Beach Building Department and Miami-Dade County RER (DERM) for the necessary seawall repairs or improvements. If the required repair meets the substantial improvements threshold, the property owner must design, obtain permits, and cause to be constructed seawall improvements that meet the minimum elevation and design requirements within 730 days of receipt of the citation.
- (b) Property owners with seawalls below the minimum elevation set forth in subsection 54-62(a), or property owners with permeable erosion barriers such as rip-rap, living shorelines, or a land/water interface of another nature, shall not allow tidal waters to enter their property, adjacent properties, or public rights-of-way. Property owners failing to prevent tidal waters from flowing overland onto the upland property and/or leaving the subject property and entering an adjacent property or right-of-way may be issued a notice of violation shall require the property owner to initiate the seawall repair or improvement process and be able to demonstrate progress toward addressing the cited concern within 60 days of the issuance of the notice of violation. A demonstration of process may include, but is not limited to, obtaining written proposals from seawall contractors, securing financing, and/or applying for permits. Within six months of the issuance of the notice of violation, the property owner shall submit a permit application to the City of Miami Beach Building Department and Miami-Dade County RER (DERM) for the necessary seawall repairs or improvements. The property owner shall complete the proposed remedy within 730 days of citation.

(Ord. No. 2021-4393, § 1, 1-13-21; Ord. No. 2025-4754, § 1, 7-23-25)

Sec. 54-64. - As-built requirements and resilience standard certification.

- (a) Property owners are required to submit to the building department and public works department an as-built survey that is prepared by a professional surveyor to show elevation of seawall (NAVD88) at the commencement of construction.
- (b) property owners are required to submit to the building department and public works department certification by a professional engineer stating that shoreline protection structures have been designed and constructed in accordance with this article.

(Ord. No. 2021-4393, § 1, 1-13-21; Ord. No. 2025-4754, § 1, 7-23-25)

Sec. 54-65. - Enforcement; warnings; civil penalties.

- (a) Failure to maintain flood mitigation infrastructure as set forth in subsection 54-63(a) or to prevent tidal waters from flowing overland onto the upland property and/or leaving the subject property and entering an adjacent property or right-of-way as set forth in subsection 54-63(b) shall be enforced by a floodplain administrator or designee, a code compliance officer, or a police officer ("enforcement officer") in accordance with the procedures and penalties set forth in subsections 54-65(b) through (j).
- (b) Warning. The first notice of violation issued by an enforcement officer shall serve as a written warning to remedy the violation prior to issuing a subsequent notice of violation unless one written warning has been issued in the 12 months preceding the date of violation. The written warning shall require the property owner to initiate the seawall repair or improvement process and be able to demonstrate progress toward addressing the cited concern within 60 days of issuance of the written warning. A demonstration of progress may include, but is not limited to, obtaining written proposals from seawall contractors, securing financing, and/or applying for permits. Within six months of the issuance of the written warning, the property owner shall submit a permit application to the City of Miami Beach Building Department and Miami-Dade County RER (DERM) for the necessary seawall repairs or improvements. The property owner shall complete the proposed remedy within 730 days of citation of the written warning or notice of violation. The written warning shall be substantially in the same form as a notice of violation as identified in subsection 54-65(c). Failure to either demonstrate progress towards addressing the cited concern within 60 days of receiving notice from the city or upon failing to complete the proposed remedy within 730 days of the written warning or notice of violation shall result in subsequent violations set forth in this subsection. Each day such violation continues shall be considered a separate offense.

(c)

Penalties. If, subsequent to the initial written warning, an enforcement officer finds a violation, the officer shall issue a notice of violation to the violator as provided in chapter 30. The notice shall inform the violator of the nature of the violation, amount of fine for which the violator may be liable, instructions and due date for paying the fine, notice that the violation may be appealed by requesting an administrative hearing within ten days after service of the notice of violation, and that failure to do so shall constitute an admission of the violation and waiver of the right to a hearing.

(d) A violator who has been served with a notice of violation shall elect either to:

(1) Pay the civil-fine as follows for violations of subsections 54-63(a) and/or (b):

i. First offense\$250.00;

ii. Second and subsequent offenses\$500.00;

or

(2) Request an administrative hearing within ten days before a special magistrate appointed as provided in article II of chapter 30 to appeal the decision of the enforcement officer which resulted in the issuance of the notice of violation.

(e) If the named violator, after notice of violation, fails to pay the civil fine or fails to timely request an administrative hearing before a special magistrate, the special magistrate shall be informed of such failure by report from the enforcement officer. Failure of the named violator to appeal the decisions of the enforcement officer within the prescribed time period shall constitute a waiver of the violator's right to administrative hearing before the special magistrate. A waiver of the right to an administrative hearing shall be treated as an admission of the violation and penalties may be assessed accordingly. The special magistrate shall be prohibited from hearing the merits of the notice of violation or consideration of the timeliness of the request for an administrative hearing if the violator has failed to request an administrative hearing within ten days of the issuance of the notice of violation.

(f) A certified copy of an order imposing a fine may be recorded in the public records, and thereafter shall constitute a lien upon any real or personal property owned by the violator, which may be enforced in the same manner as a court judgment by the sheriffs of this state, including levy against the violator's real or personal property, but shall not be deemed to be a court judgment except for enforcement purposes.

(g) Any party aggrieved by the decision of the special magistrate may appeal the decision in accordance with law.

(h) The city may institute proceedings in a court of competent jurisdiction to compel payment of civil fines.

(i)

A certified copy of an order imposing a civil fine may be recorded in the public records and thereafter shall constitute a lien upon any other real or personal property owned by the violator and it may be enforced in the same manner as a court judgment by the sheriffs of this state, including levy against the personal property, but shall not be deemed to be a court judgment except for enforcement purposes. After two months from the filing of any such lien which remains unpaid, the city may foreclose or otherwise execute upon the lien.

- (j) The procedures for appeal of the notice of violation by administrative hearing shall be as set forth in sections 30-72 and 30-73.
- (k) Immediate mitigation requirements. In addition to the other fines and penalties prescribed in this section, and in the event that tidal flooding entering the upland property, adjacent property, and/or a public right-of-way is not mitigated by a property owner in a timely manner, the city shall be authorized to install a temporary flooding barrier on the upland property, adjacent property, or public right-of-way, at the expense of the owner. If feasible under the circumstances, a property owner may satisfy the requirement in this paragraph by implementing immediate mitigation efforts that do not require permitting, such as utilizing sandbags, within three days of the written warning or notice of violation or within such other period as may be required by the city manager or the manager's designee, while the owner pursues any required seawall permitting and improvements.

(Ord. No. 2021-4393, § 1, 1-13-21; Ord. No. 2021-4431, 7-28-21; Ord. No. 2025-4754, § 1, 7-23-25)

Secs. 54-66—54-69. - Reserved.

ARTICLE IV. - STORMWATER MANAGEMENT REQUIREMENTS

Sec. 54-70. - Statement of purpose.

The purpose of this article is to provide standards for management of stormwater. Adoption and enforcement of standards for management of stormwater will improve the city's stormwater management system performance, while taking into consideration potential sea level rise over the next 50 years and the impacts sea level rise would have on the city's stormwater infrastructure. ;nh0; (Ord. No. 2022-4483, § 2, 4-6-22)

Sec. 54-71. - Adoption and amendment of stormwater management master plan.

The Miami Beach Stormwater Management Master plan was adopted by the city commission on November 14, 2012, and subsequently amended by resolution of the city commission. A five-sevenths vote of the city commission shall be required to reduce, relax, diminish, or repeal the stormwater requirements

of the stormwater master plan.

(Ord. No. 2022-4483, § 2, 4-6-22)

Sec. 54-72. - Applicability.

The requirements of the stormwater master plan apply to development activities specified in the stormwater master plan.

(Ord. No. 2022-4483, § 2, 4-6-22)

Sec. 54-73. - Requirements for development.

Applicants for activities subject to the requirements of the stormwater master plan shall submit plans and calculations necessary to demonstrate compliance with the level-of-service standards of the stormwater master plan. The plans and drainage calculations shall be prepared by a Florida licensed engineer in accordance with the stormwater master plan.

(Ord. No. 2022-4483, § 2, 4-6-22)