ORDINANCE NO._____

AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING CHAPTER 54 OF THE MIAMI BEACH CITY CODE, ENTITLED "FLOODS," BY AMENDING ARTICLE I, ENTITLED "IN GENERAL," AND ARTICLE II, ENTITLED "FLOODPLAIN MANAGEMENT," DIVISION 1, ENTITLED "GENERALLY," DIVISION 2, ENTITLED "GENERAL PROVISIONS," DIVISION 3, ENTITLED "ADMINISTRATION," DIVISION 4, ENTITLED "PROVISIONS FOR FLOOD HAZARD REDUCTION," DIVISION 5, "VARIANCE PROCEDURES," AND ARTICLE IV, ENTITLED "STORMWATER MANAGEMENT REQUIREMENTS," IN ORDER TO CONFORM EXISTING PROVISIONS WITH THE REQUIREMENTS OF THE NATIONAL FLOOD INSURANCE PROGRAM, MANAGED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, AND THE FLORIDA BUILDING CODE, INCLUDING BY ADOPTING THE FOLLOWING AMENDMENTS: 1) APPLY THE STANDARDS FOR COASTAL HIGH HAZARD AREAS TO COASTAL A ZONES; 2) MODIFY THE DEFINITION OF SUBSTANTIAL IMPROVEMENT TO INCLUDE SUBSTANTIAL STRUCTURAL ALTERATIONS AND WORK DETERMINED TO BE A LEVEL 3 ALTERATION UNDER THE FLORIDA BUILDING CODE, AND MODIFY OTHER RELATED DEFINITIONS; AND 3) ADOPT REQUIREMENTS FOR CERTAIN IMPROVEMENTS THAT ARE NOT SUBSTANTIAL IMPROVEMENTS, AND FOR BUILDINGS AND STRUCTURES IN FLOOD AREAS; AND BY ADOPTING OTHER RELATED AMENDMENTS; AND PROVIDING FOR REPEALER, SEVERABILITY, CODIFICATION, AND AN EFFECTIVE DATE.

WHEREAS, the City has the authority to adopt regulations to promote the public health, safety, and general welfare of its citizens; and

WHEREAS, the Florida Department of Emergency Management, State Floodplain Management Office, has conducted a review of Chapter 54 of the City Code, identifying clarifications and corrections necessary to satisfy the requirements of the National Flood Insurance Program and achieve consistency with the Florida Building Code; and

WHEREAS, the City of Miami Beach participates in the National Flood Insurance Program ("NFIP") and has achieved a Class 5 rating in the NFIP's Community Rating System, a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum program requirements; and

WHEREAS, in 2020 the NFIP Community Rating System established certain minimum prerequisites for communities to qualify for or maintain class ratings of Class 8 or better; and

WHEREAS, to satisfy the prerequisite, and for the City of Miami Beach to maintain the current CRS rating, all manufactured homes installed or replaced in special flood hazard areas must be elevated such that the lowest floors are at or above at least the base flood elevation plus 1 foot, which necessitates modification of the existing requirements; and

WHEREAS, the Federal Emergency Management Agency released FEMA Policy #104-008-03 Floodplain Management Requirements for Agricultural Structures and Accessory Structures, and the City Commission has determined that it is appropriate to adopt regulations that are consistent with the FEMA Policy to allow issuance of permits for at-grade wet floodproofed accessory structures that are not larger than the sizes specified in the FEMA Policy; and

WHEREAS, Chapter 553, Florida Statutes, was adopted by the Florida Legislature to provide a mechanism for the uniform adoption, updating, amendment, interpretation and enforcement of the Florida Building Code; and

WHEREAS, the Mayor and City Commission previously adopted requirements to: 1) adopt requirements for critical facilities; 2) require buildings that sustain repetitive flood damage over a 10-year period to be determined substantially damaged; and 3) require accumulation of costs of improvements and repairs of buildings, based on issued building permits, over a one year period, for buildings and structures in flood areas for the purpose of the NFIP Community Rating System and, pursuant to Chapter 8 Article III of the Miami-Dade County Code and section 553.7(5). F.S., formatting that requirement to coordinate with the Florida building Code; and

WHEREAS, the Mayor and City Commission are adopting new requirements contained in this Ordinance to: 1) amend designated Coastal A Zones to the same standards as Coastal High Hazard Areas; 2) modify the definition of substantial improvement to include substantial structural alterations and work determined to be alteration level 3 in accordance with the Florida Building Code; and 3) adopt requirements for certain improvements that are not substantial improvements, for buildings and structures in flood areas for the purposes of the NFIP Community Rating System and, pursuant to Chapter 8 Article III of the Miami-Dade County Code and section 553.7(5). F.S., formatting that requirement to coordinate with the Florida Building Code; and

WHEREAS, furthermore, the Ordinance will create a new Article IV under Chapter 54, entitled "Stormwater Management Requirements," to provide standards for management of stormwater in order to 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.

NOW THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA:

SECTION 1. That Chapter 54 the Code of the City Miami Beach, entitled Floods," are hereby amended as follows:

Chapter 54 - FLOODS

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. **[NOTE: Not new language. Moved from Section 54-39]**

ARTICLE II. - FLOODPLAIN MANAGEMENT

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.

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.

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.

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 flood prone 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.

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. ~~any walled and roofed expansion to the perimeter or height of a building.~~

~~Any walled and roofed addition which is connected by a firewall or is separated by independent perimeter load-bearing walls is new construction.~~

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

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 (2) feet above grade where a depth number is not specified. ~~regulatory elevation associated with building elevation, floodproofing, protection of building systems and utilities and other flood protection provisions as identified in current FEMA flood insurance rate map (FIRM) panels. This elevation shall not be less than 8.0 ft. NGVD (6.44 ft. NAVD) in the City of Miami Beach.~~

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

Board means the city's ~~floodplain management~~ 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 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.

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 ~~current national~~ datum may be ~~is~~ the National Geodetic Vertical Datum (NGVD) of 1929, ~~which is expressed in relation to mean sea level, or~~ 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".

~~*Existing manufactured home park or subdivision* means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before September 29, 1972.~~

~~*Expansion to an existing manufactured home park or subdivision* means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).~~

Flood or *flooding* means:

(a) 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.

~~(3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surface of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.~~

~~(b) The collapse or subsidence of land along a shore of a lake or other body of water as the result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm or by an unanticipated force of nature, such as a flash flood or an abnormal tidal surge or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.~~

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 is 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.

~~*Floodway* means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.~~

~~*Floodway fringe* means that area of the one-percent (base or 100-year) floodplain on either side of the regulatory floodway.~~

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 ~~to existing construction~~ 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 (1) foot.

Freeboard, maximum equals five (5) 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 ~~such as~~ 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.

~~*Green infrastructure* means natural vegetation, landscape design and engineered techniques that retain, absorb, and often cleanse stormwater runoff.~~

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 1 ½-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.

~~*Low-impact development (LID)* means techniques that mimic natural processes to manage stormwater, and are frequently cheaper and more attractive than traditional stormwater management techniques.~~

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.

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

Market value means the building value~~, which is the property value excluding the land value and that of the detached accessory structures and other improvements on site (as agreed to between a willing buyer and seller) as established by what the local real estate market will bear. Market value can be~~ established by ~~an independent certified appraisal (other than a limited or curbside appraisal, or one based on income approach),~~ actual cash value (<u>like-kind</u> replacement cost depreciated for age<u>, wear and tear, neglect,</u> and quality of construction of building) <u>by an independent certified appraiser</u>, or adjusted tax-assessed values.

~~*Mean sea level* means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this article, the term is synonymous with National Geodetic Vertical Datum (NGVD) of 1929, or North American Vertical Datum (NAVD) of 1988.~~

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.

~~*New manufactured home park or subdivision* means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the first floodplain management code, ordinance or standard.~~

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.

~~*Program deficiency* means a defect in the community's floodplain management regulations or administrative procedures that impairs effective implementation of those floodplain management regulations or of the standards required by the National Flood Insurance Program.~~

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.

~~*Reasonably safe from flooding* means base floodwaters will not inundate the land or damage structures to be removed from the SFHA and that any subsurface waters related to the base flood will not damage existing or proposed buildings.~~

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.

~~*Regulatory floodway* means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.~~

~~*Remedy a deficiency or violation* means to bring the regulation, procedure, structure or other development into compliance with State of Florida, federal, or local floodplain management regulations; or if this is not possible, to reduce the impacts of its noncompliance. Ways the impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of this article or otherwise deterring future similar violations, or reducing federal financial exposure with regard to the structure or other development.~~

Repetitive loss structure means a building that has incurred flood-related damages on two occasions during a ten-year period ~~ending on the date of the event for which claim is made~~, on the average, equaled or exceeded 25 percent of the market value of the building <u>at</u> the time of each such flood event.

~~*Riverine* means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.~~

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

~~*Shallow flooding:* See Area of shallow flooding.~~

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.

~~*Storm cellar* means a place below grade used to accommodate occupants of the structure and emergency supplies as a means of temporary shelter against severe tornadoes or similar windstorm activity.~~

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. <u>The term includes work determined to be "substantial structural alteration" and work determined to be Alteration Level 3.</u> 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.

~~*Substantially improved existing manufactured home parks or subdivisions* is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.~~

~~*Surface stormwater shallow conveyance* means vegetated swales, permeable pavement, rain gardens, and rainwater/stormwater capture and infiltration devices.~~

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.

~~*Watercourse* means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.~~

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.

DIVISION 2. GENERAL PROVISIONS

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

This article shall apply to all areas ~~of special flood hazard~~ within the jurisdiction of the City of Miami Beach.

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 ~~the City of Miami Beach~~, dated September 11, 2009 ~~November 4, 1987~~, 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.

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.

Sec. 54-39. Establishment of development permit ~~adoption of the city's stormwater master plan; and requiring five-sevenths vote of the full city commission to lessen~~

~~any of the stormwater requirements contained in this chapter 54. Repeal or modification of this five-sevenths voting requirement shall require a five-sevenths vote of the full city commission.~~

A development permit shall be required in conformance with the provisions of this article prior to the commencement of any development activities. ~~All developments or applications for development permits shall comply with the city's stormwater master plan, as may be amended. The adoption of any ordinance that would reduce, relax, diminish, or repeal the requirements of this chapter 54, shall require a five-sevenths vote of the city commission.~~

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. Where the terms of this article differ from the requirements of the Florida Building Code, the most restrictive-shall govern.

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.

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.

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.

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 ~~grants~~ the approval of a variance ~~or special exceptions~~, 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.

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 ~~mean sea level~~ the datum on the FIRM, of the proposed lowest floor (including basement) of all buildings;

(b) Elevation in relation to ~~mean sea level~~ the datum on the FIRM, to which any nonresidential building will be floodproofed;

(c) Certificate from a registered professional engineer ~~or architect~~ that the nonresidential floodproofed building will meet the floodproofing criteria in subsection 54-45(2), ~~and~~ subsection 54-48(2), and the Florida Building Code;

~~(d) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development; and~~

(d) ~~(e)~~ Elevation in relation to ~~mean sea level~~ 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 ~~or architect~~ 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) ~~(f) A stormwater management plan and site drainage calculations, for new constructions and substantial improvement, shall be prepared by a Florida licensed engineer in accordance with the city's stormwater master plan, as may be amended, to demonstrate that adequate surface drainage shall be provided and surface run-off water shall be diverted to a storm conveyance or other approved point of collection, in accordance with Florida Building Code Sections 1804 and R401.3. The site shall be graded in manner to drain surface water away from foundation walls in accordance with Florida Building~~

~~Code Sections 1804 and R401.3. All site drainage for new construction shall be designed and constructed in such a manner as to provide runoff rates, volume and pollutant loads not exceeding predevelopment conditions and prevent flooding adjacent properties.~~ 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 (6) 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 ~~mean sea level~~ 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.

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) Notify adjacent communities, the Florida Department of Economic Opportunity - Division of Emergency Management - NFIP Coordinating Office, South Florida Water Management District, the Federal Emergency Management Agency (FEMA), and other federal and/or State of Florida agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse;~~

~~(5) Assure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained;~~

(4) ~~(6)~~ Verify and record the actual elevation (in relation to ~~mean sea level~~ 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) ~~(7)~~ Verify and record the actual elevation (in relation to ~~mean sea level~~ the datum on the FIRM) to which the new and substantially improved buildings have been floodproofed, in accordance with subsection ~~54-47(2)~~ 54-48(2);

(6) ~~(8)~~ Review certified plans and specifications for compliance. When floodproofing is utilized for a particular building, certification shall be obtained from a registered engineer ~~or architect~~ 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 ~~54-47(2)~~ 54-48(2) of this article. In coastal high hazard areas and Coastal A Zones, certification shall be obtained from a registered professional engineer ~~or architect~~ 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) ~~(9)~~ 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;

~~(10) When base flood elevation data and floodway data have not been provided in accordance with section 54-37, the floodplain administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, State of Florida, or any other source, in order to administer the provisions of division 4;~~

(8) ~~(11)~~ Coordinate all change requests to the FIS and FIRM with the requester, State of Florida, Cooperating Technical Partner, and FEMA; and

(9) ~~(12)~~ 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.

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; and

(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.

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 sections 54-47 ~~54-47 and 54-49~~ 54-49, shall apply:

(1) *Residential construction.*

(a) All new construction and substantial improvement of any residential building (including manufactured homes) shall have the lowest ~~finished~~ floor including electrical, heating, ventilation, plumbing, air conditioning equipment, cable, telephone, and other service facilities, including duct work elevated to no lower than 8.0 ft. NGVD (6.44 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 ~~Should~~ solid foundation perimeter walls shall meet the requirements ~~be used to elevate a structure, there must be a minimum of two openings on different sides of each enclosed area sufficient to facilitate automatic equalization of flood hydrostatic forces in accordance with standards~~ of subsection 54-48(3). ~~The following shall apply for single family residential garage structures:~~

~~When constructed as part of a detached or attached garage structure to the main home, garages shall be constructed no lower than adjusted grade, as defined in Section 114.1. Further, the overall height and structural composition of the first floor garage structure 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 Section 142-105.~~

~~When constructed under the main home the associated driveway shall be sloped upward from the public right-of-way to a minimum elevation of adjusted grade, as defined in Section 114.1, and then may slope downward to a lower garage elevation.~~

~~The following shall apply to multifamily residential garage structures:~~

~~Access drives to 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, and then may slope downward to a lower garage elevation. Further, the overall height and structural composition of the first floor garage structure shall be designed and built to accommodate a future raised floor slab to meet the height of base flood elevation plus minimum freeboard.~~

(b) ~~The lowest floor of an addition to the nonsubstantial improvement of a residential structure shall be elevated to no lower than the existing lowest finished floor elevation.~~ 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 8.0 ft. NGVD (6.44 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 ~~or architect~~ 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) ~~The lowest floor of an addition to the nonsubstantial improvement of a commercial structure shall be elevated to no lower than the existing lowest finished floor elevation.~~ 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 (2) 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 architect~~ 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 ~~within zones A1-30, AH, and AE, on sites (i) outside of an existing manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood,~~ the lowest floor ~~be~~ elevated on a permanent foundation to no lower than the base flood elevation, plus minimum freeboard, and shall ~~and~~ be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

~~(b) All manufactured homes to be placed or substantially improved in an existing manufactured home park or subdivision that are not subject to the provisions of paragraph (4)(a) of this subsection, must be elevated so that either:~~

~~(i) The lowest floor of the manufactured home is elevated to no lower than one foot above the base flood elevation, or~~

~~(ii) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength that are no less than 36 inches in height above the grade and securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.~~

~~(c) Placement of manufactured homes is prohibited within the regulatory floodway, except in an existing manufactured home park or subdivision. A placement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of subsection 54-47(2), the elevation standards of subsections 54-48(1) and (2), and the encroachment standard of subsection 54-48(7)(a), are met.~~

(b) ~~(d)~~ 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 subsections 54-48(4)(a) ~~and (b)~~.

(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) *Standards for waterways with established base flood elevations, but without regulatory floodways.* Located within the areas of special flood hazard established in section 54-37, where streams exist for which base flood elevation data has been provided by FEMA without the delineation of the regulatory floodway (zones AE and A1-30), the following provisions, in addition to those set forth in subsections 54-48(1) through (5), shall apply:~~

~~(a) Until a regulatory floodway is designated, no new construction, substantial improvements, or other development including fill shall be permitted within the areas of special flood hazard, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one foot at any point within the community.~~

~~(b) Development activities which increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the developer or applicant first applies, with the community's endorsement, for a conditional FIRM revision, and receives the approval of FEMA.~~

~~(7) *Standards for waterways with established base flood elevations and floodways.* Located within areas of special flood hazard established in section 54-37, are~~

~~areas designated as floodways. Since the floodway is an extremely hazardous area due to the high velocity of floodwaters which carry debris, potential projectiles and have significant erosion potential, the following provisions, in addition to those set forth in subsections 54-48(1) through (5), shall apply:~~

~~(a) Prohibit encroachments, including fill, new construction, substantial improvements and other developments within the regulatory floodway unless certification (with supporting technical data) by a registered professional engineer is provided through hydrologic and hydraulic analyses performed in accordance with standard engineering practice demonstrating that encroachments would not result in any increase in flood levels during occurrence of the base flood discharge.~~

~~(b) Placement of manufactured homes is prohibited within the regulatory floodway, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of subsection 54-47(2), the elevation standards of subsections 54-48(1) and (2), and the encroachment standard of subsection 54-48(7)(a), are met.~~

~~(c) Development activities, including new construction and substantial improvements within the regulatory floodway, that increase the base flood elevation may be allowed, provided that the developer or applicant first applies, with the community's endorsement, for a conditional FIRM revision, and receives the approval of FEMA.~~

~~(d) When fill is proposed, in accordance with the permit issued by the Florida Department of Health, within the regulatory floodway, the development permit shall be issued only upon demonstration by appropriate engineering analyses that the proposed fill will not increase the water surface elevation of the base flood in accordance with subsection 54-48(7)(a).~~

(6) ~~(8)~~ *Seaward structures.* ~~For all 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 ~~FEMA in accordance with section 54-37~~, whichever is higher. All nonelevation design requirements of section 54-51 and the Florida Building Code, Section 3109, shall apply.

Sec. 54-49. Accessory Structures and Garages. ~~Specific standards for A-zones without base flood elevations and regulatory floodways.~~

(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 sq. ft. 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 V/VE), are not located below elevated buildings and are not larger than 100 sq. ft.

(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 (1) foot.

(e) Have mechanical, plumbing and electrical systems, including plumbing fixtures, elevated to or above the base flood elevation plus one (1) 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.

~~Located within the areas of special flood hazard established in section 54-37, where there exist A-zones for which no base flood elevation data and regulatory floodway have been provided or designated by FEMA, the following provisions shall apply:~~

~~(1) Require standards of section 54-47.~~

~~(2) Require that all new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or five acres, whichever is the lesser, include within such proposals base flood elevation data. Standards set forth in section 54-48 shall apply.~~

~~(3) The floodplain administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, State of Florida, or any other source, in order to administer the provisions of this article. When such data is utilized, provisions of section 54-48 shall apply. The floodplain administrator shall:~~

~~(a) Obtain the elevation (in relation to the mean sea level of the lowest floor (including the basement) of all new and substantially improved structures,~~

~~(b) Obtain, if the structure has been floodproofed in accordance with the requirements of subsection 54-48(2), the elevation in relation to the mean sea level to which the structure has been floodproofed, and~~

~~(c) Maintain a record of all such information.~~

~~(4) Notify, in riverine situations, adjacent communities, the Florida Department of Community Affairs - NFIP Coordinating Office, and the SFWMD prior to any alteration or relocation of a watercourse, and submit copies of such notifications to FEMA.~~

~~(5) Assure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained.~~

~~(6) Manufactured homes shall be installed using methods and practices that minimize flood damage. They must be elevated and 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 requirement is in addition to applicable State of Florida and local anchoring requirement for resisting wind forces.~~

~~(7) When the data is not available from any source, in accordance with standards set forth in subsection 54-49(2) of this section, the lowest floor of the structure shall be elevated to no lower than three feet above the highest adjacent grade. Standards set forth in section 54-48 shall apply.~~

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 sections~~ 54-47, and 54-48 ~~(except 54-48(7))~~ ~~and 54-49~~.

(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 8.0 ft. NGVD (6.44 ft. NAVD), the crown of road or sidewalk plus one foot, or the base flood elevation plus minimum freeboard, whichever is higher ~~whether or not the structure contains a basement~~; 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) ~~For all structures~~ 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 ~~plus freeboard or the base flood elevation, plus freeboard~~, whichever is the 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 ~~mean sea level~~ 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 ~~and substantial improvements~~ 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. ~~; and~~

(b) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). 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) ~~Prohibit the~~ 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.

~~(a)~~ All manufactured homes to be placed, replaced, or substantially improved shall ~~on sites: (i) outside a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision in which a manufactured home has incurred "substantial damage" as the result of a flood, must~~ meet the standards of subsections 54-51(2) through (8). ~~, or~~

~~(b) All manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision shall meet the requirements of subsection 54-48(4)(b).~~

(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) ~~subsections 54-51(2) through (8)~~.

~~(d) Prohibit the placement of recreational vehicles, except in an existing recreational vehicle park. Recreational vehicles placed on other sites in an existing recreational park must be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use (on its wheels or jacking system, is attached to the site by quick disconnect type utilities and security devices, and has no permanently attached additions). They shall also have a plan for removal in case of a threat at least four hours prior to the arrival of the threat.~~

~~(11) For all structures located seaward of the coastal construction control line (CCCL), 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 flood elevation established by the Florida Department of Environmental Protection, plus freeboard, or the base flood elevation, plus freeboard, whichever is higher. All non-elevation design requirements subsections 54-51(2) through (10) shall apply.~~

~~(12) When fill is proposed, in accordance with the permit issued by the Florida Department of Health, in coastal high hazard areas, the development permit shall be issued only upon demonstration by appropriate engineering analyses that the proposed fill will not increase the water surface elevation of the base flood nor cause any adverse impacts to the structure on site or other properties by wave ramping or deflection.~~

DIVISION 5. VARIANCE PROCEDURES

Sec. 54-52. Designation of ~~variance and appeals~~ 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.

Sec. 54-53. Duties of ~~variance and appeals~~ 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.

Sec. 54-54. Variance procedures.

In acting upon such applications, ~~the city's floodplain management~~ 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 ~~of~~ 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.

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 ~~Department of Economic Opportunity~~, 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.

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.

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.

Secs. 54-58-54-69. Reserved.

~~**Sec. 54-58. - Structures in regulatory floodway.**~~

~~Variances shall not be issued within any designated floodway if any impact in flood conditions or increase in flood levels during the base flood discharge would result.~~

SECTION 2. Article IV of Chapter 54 of the Code of the City Miami Beach is hereby created as follows:

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.

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.

Sec. 54-72. Applicability.

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

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.

SECTION 3. REPEALER.

All ordinances or parts of ordinances in conflict herewith be and the same are hereby repealed.

SECTION 4. SEVERABILITY.

If any section, subsection, clause or provision of this Ordinance is held invalid, the remainder shall not be affected by such invalidity.

SECTION 5. CODIFICATION.

It is the intention of the Mayor and City Commission of the City of Miami Beach, and it is hereby ordained that the provisions of this ordinance shall become and be made part of the Miami Beach City Code. The sections of this ordinance may be renumbered or relettered to accomplish such intention, and the word "ordinance" may be changed to "section," "article," or other appropriate word.

SECTION 6. EFFECTIVE DATE.

This Ordinance shall take effect on the _____ day of _____, 202__.

PASSED AND ADOPTED this ____ day of _____, 202___.

ATTEST:

_____
Dan Gelber, Mayor

_____
Rafael E. Granado, City Clerk

Underline denotes additions
~~Strikethrough~~ denotes deletions

(Sponsored by Commissioner Alex J. Fernandez)

APPROVED AS TO
FORM & LANGUAGE
& FOR EXECUTION

City Attorney

3-2-22
Date