

## Chapter 9

### FLOODPLAIN AND STORMWATER MANAGEMENT\*

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\* **Editors Note:** Ord. No. 1459, adopted Mar. 31, 1987, has been treated as superseding Arts. I--III of this chapter, concerning floodplain management, in their territory, and has been set out as new Arts. I--III hereof, at the editor's discretion, with the exception of the following nonsubstantive sections of said ordinance, which have been omitted: Art. 1, § B(3); Art. 5, § B(5); Art. 5, § C; and Art. 6. Former Arts. I--III hereof derived from Ch. 11A of the 1964 Code. Ord. No. 2264, § 1, adopted Nov. 28, 2001, provided that Ch. 9 be retitled Stormwater and Floodplain Management. In order to preserve the alphabetical sequence of chapter titles within the Code, the chapter was retitled as shown above. Formerly, such chapter was titled Flood Prevention.

**Cross References:** Administration, Ch. 2; buildings and building regulations, Ch. 5; building standards, § 5-41 et seq.; building slab elevation, § 5-43; code enforcement, Ch. 6; fire prevention, Ch. 8; health and sanitation, Ch. 11; landscaping, Ch. 13; marine structures, wharfs and activities, Ch. 15; planning and development, Ch. 19; drainage facilities, § 20-176 et seq.; streets, § 23-21 et seq.; utilities, Ch. 26; zoning, Ch. 27.

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**Art. I. In General, §§ 9-1--9-25**

**Art. II. Administration, §§ 9-26--9-40**

**Art. III. Provisions For Flood Hazard Reduction, §§ 9-41--9-55**

**Art. IV. Drainage, §§ 9-56--9-70**

**Art. V. Flood Insurance, §§ 9-71--9-73**

**Art. VI. Administration and Enforcement Concerning Stormwater System, §§ 9-74--9-79**

#### ARTICLE I.

#### IN GENERAL

##### **Sec. 9-1. Statutory authorization.**

The legislature of the state has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the city council of Plantation, Florida, does ordain the provisions of Articles I through III of this chapter. (Ord. No. 1459, Art. 1, § A, 3-31-87; Ord. No. 1857, § 1, 7-29-92)

##### **Sec. 9-2. Definitions.**

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

*Abatement* means any action taken to remedy, correct, or eliminate a deleterious condition within, or impacting a drainage system.

*Accessory structures* are structures located on the same parcel of land as the principal structure, where:

- (1) Their uses are incidental to the principal structure;
- (2) They are not used for human habitation;
- (3) They represent a minimal investment;
- (4) They are detached from the principal structure.

*Addition* (to an existing building) means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common loadbearing wall other than a fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter loadbearing walls is new construction.

*Adjacent roadway elevation* is the elevation of the centerline of the roadway at the lowest point of access to a site.

*Allowable discharge* is the discharge that is consistent with the allowable discharge of the OPWCD, PAID, and SFWMD Master Drainage permits as indicated in OPWCD's Stormwater Management Design Criteria Manual, PAID's Policies and Procedures Manual or the SFWMD Environmental Resources Permitting Manual and as may be subsequently amended, modified or replaced. (Please see the definition of "Drainage district" for the meaning of "PAID", "OPWCD", and "SFWMD".)

*Appeal* means a request for a review of the city engineer's interpretation of any provision of this chapter, which is considered by the City of Plantation Board of Adjustment.

*Approved plans* are plans approved by the city.

*Area of shallow flooding* means a designated AH zone on a community's flood insurance rate map (FIRM) with base flood depths from one (1) to three (3) 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.

*Authorized official* means any employee or agent of the city authorized to administer or enforce the provisions of this chapter and chapter 20.

*Base flood* means the flood having a one-percent chance of being equaled or exceeded in any given year according to a flood insurance study and as indicated on the flood insurance rate map (FIRM).

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

*Best management practices (BMPs)* means management techniques recognized to best minimize pollutant and sediment loadings from stormwater runoff.

*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.

*Broward County* means the charter government of Broward County.

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

*Class A accessory structures* are garages and carports which are also accessory structures.

*Class B accessory structures* are accessory structures such as open barns, haysheds, storage sheds, greenhouses (shadehouses) gazebos, and other accessory structures that are not principal structures or Class A accessory.

*Critical facilities* shall be classified by the city engineer and shall include:

- (1) Structures or facilities that produce, use, or store highly volatile, flammable, explosive, toxic or water-reactive materials;
- (2) Such as hospitals, nursing homes, and housing likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a flood;
- (3) Evacuation shelters, police stations, fire stations, emergency vehicle and equipment storage facilities;
- (4) Emergency operations centers that are needed for flood response activities before, during, and after a flood; and
- (5) Public and private utility facilities that are vital to maintaining or restoring normal services to flooded areas before, during, and after a flood.

*Detached A* structure is "detached" when it does not share a loadbearing wall or structural roof or foundation component with another structure.

*Detention* means the collection and temporary storage of stormwater in such a manner as to provide treatment through physical, chemical or biological processes with subsequent gradual release of the stormwater.

*Developer* is a person, firm, partnership, corporation, or other business entity that excavates, fills, or builds structures, with the ostensible purpose of improving land or otherwise developing land, regardless of motive. "Improving land" means altering the contour of the real property elevation in a manner that is inconsistent with approved management design or in a manner that materially and adversely affects contiguous or nearby property.

*Development* means any manmade change to improved or unimproved real estate by a developer, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or storage of equipment or materials.

*Director* means the city engineer for the City of Plantation, or his or her designee. City engineer means

the city engineer for the City of Plantation, or his or her designee.

*Discharge* means any direct or indirect entry or exit of any solid, liquid or gaseous matter.

*Drainage district* means a governmental entity other than the City of Plantation that has jurisdiction over drainage over some or all of the land within Plantation. This could mean the South Florida Water Management District (SFWMD), Broward County (BC), Plantation Acres Improvement District PAID), or the Old Plantation Water Control District (OPWCD), or such other governmental entity as is from time to time duly created by law.

*Drive aisle* is a road immediately adjacent to perpendicular or angled parking spaces that provides direct access to those spaces that is not a required accessway for fire protection for a building.

*Driveway* means a road that leads to one (1) residential unit with one (1) residential address.

*Equipment* means air conditioner condensers, compressors, or coolers; water tanks, heaters, or treatment facilities; washers and dryers; pumps; pool filters; electrical or mechanical service gear; etc.

*Elevated building* means a nonbasement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.

*Emergency access roadways* are road segments which are primary emergency routes that provide access to and from police stations, fire stations, city utility and public works complexes, hospitals, emergency shelters and emergency operations centers and which are identified in the stormwater and floodplain management plan, as may be subsequently amended.

*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, roads and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by drainage district seeking to enforce same, or before October 1, 2001 with respect to the city's enforcement of its land development regulations.

*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).

*Facilities* means various utility and drainage works, including but not limited to inlets, conduits, wire, pipe, manholes, channels, retention or detention basins, outlets and other structural components of this nature.

*500-year flood* is the flood that will occur based on the analysis in the flood insurance study, the City of Plantation Stormwater and Floodplain Management Plan, or subsequent analyses that have been reviewed and approved by the City of Plantation Engineering Department.

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

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

*Flood insurance rate map (FIRM)* means an official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated both the SFHA's, the risk premium (flood) zones and the base flood elevations applicable to the community.

*Flood insurance study* is the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the flood boundary floodway map and the water surface elevation of the base flood.

*Flood resistant materials* are U.S. Army Corps of Engineers Class 3 materials, as presently contained in the FEMA Technical Bulletin 2-93, and as may be so designated by the U.S. Army Corps of Engineers in the future.

*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 one (1) foot as indicated on the FIRM (there are no designated floodways in the City of Plantation as of October 1, 2001).

*Floor* means the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction.

*Highest adjacent grade* means the highest natural elevation of the ground surface outside the structure and adjacent to the foundation.

*Historic structure* means any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs that have been approved by the Secretary of Interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

- a. By an approved state program as determined by the Secretary of the Interior; or
- b. Directly by the Secretary of the Interior in states without approved programs.

*Illicit connections* means either of the following:

- (1) Any drain or connection or other conveyance, whether on the surface or subsurface, which allows an illegal discharge (as determined by this chapter) to enter the storm drain system, including but not limited to any conveyances that allow any non-stormwater discharge including sewage, processed wastewater and washwater, to enter the storm drain system and any connections to the storm drain system from indoor drains or sinks, regardless of whether said drain or connection had been previously allowed, permitted or approved by a government agency; or
- (2) Any drain or conveyance connected from a commercial or industrial land use to the storm drain system that has not been documented in plans, maps or equivalent records and approved by the city.

*Illicit discharge* means any discharge that is not composed entirely of stormwater into either a separate storm sewer or a receiving water body.

*Imperviousness* means the relative incapability of a surface area to be penetrated by stormwater. Imperviousness shall be calculated for hydrologic/hydraulics in a manner that is consistent with the design examples in the SFWMD Environmental Resource Information Manual Volume IV as it may be subsequently amended or replaced (water surfaces and roofs are excluded). Imperviousness percentage calculations for lot or site coverage (65% rule) shall consider the roof area as impervious and natural water surface area as pervious (pools and tanks are impervious).

*Lowest adjacent grade* means the lowest natural elevation of the ground surface outside the structure and adjacent to the foundation.

*Lowest floor* means the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or passive storage in an area other than a basement area is not considered a building's lowest floor; provided, such enclosure is constructed of flood resistant materials and is designed to automatically allow for entry and exit of floodwater in AH and AE zones. Elevator shafts that are protected from inflow are not considered the building lowest floor.

*Mangrove stand* means an assemblage of mangrove trees which is mostly low trees noted for a copious development of interlacing adventitious roots above the ground and which contain one (1) 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 structure, transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a vehicle designed to be self-propelled or permanently towable by a light duty truck, and which is not designed primarily for use as a permanent dwelling, but instead

for use as temporary living quarters for recreational, travel, or camping use.

*Master drainage permit* mean permits issued by the South Florida Water Management Permit (SFWMD), Broward County (as delegatee of SFWMD), PAID, City of Plantation, a drainage district, and OPWCD, each in accordance with their respective jurisdiction, which permit covers a large geographic area not limited to a single lot or parcel of property.

*Mean sea level* means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this chapter, the term is synonymous with national geodetic vertical datum (NGVD).

*National geodetic vertical datum (NGVD)* as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.

*National pollutant discharge elimination system (NPDES) permit* means a general, group and individual stormwater discharge permit that regulates facilities defined in Federal NPDES Regulations pursuant to the Code of Federal Regulations, the Clean Water Act, and such implementing regulations to be adopted by the State of Florida (or one of its agencies or districts) in the future.

*New construction* means, for the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after July 9, 1992 and includes any subsequent improvements to such structures. For purposes of the application of the land development regulations contained in this chapter or incorporated into same by reference, which became hereby effective on October 1, 2001, "new construction" means construction for which the "start of construction" commenced on or after October 1, 2001, 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 July 9, 1992.

*Notice* means a written printed communication conveying information or warning.

*OPWCD* is the Old Plantation Water Control District. This drainage district consists of approximately ten thousand (10,000) acres bounded on the north by the City of Plantation corporate limits, bounded on the south by the North New River Canal, bounded on the west by the C-42 Canal and bounded on the east by the west right-of-way line of the Florida Turnpike.

*100-year flood* is the flood that will occur based on the analysis in the flood insurance study (the FIRM), the City of Plantation Stormwater and Floodplain Management Plan (the City of Plantation 100-year 3-day and 100-year 1-day Peak Stage Elevation Maps), analyses performed by the Broward County Water Resources Management Division (Public Works Department 100-year Elevation Map) and other analyses that have been reviewed and approved by the City of Plantation Engineering Department.

*Order* means the whole (or any part) of the final disposition of the city or of another drainage district before administrative or judicial review (whether affirmative, negative, injunctive, or declaratory in form).

*PAID* is the Plantation Acres Improvement District. This drainage district consists of approximately two thousand sixty-five (2,065) acres bounded on the north by the City of Plantation corporate limits, bounded on the south by the SFWMD's North New River Canal, bounded on the west by the east right-of-way line of New Flamingo Road and bounded on the east by the C-42 Canal.

*Parking lot* is an area used or designated for parking spaces and accompanying drive aisle that provides direct access to the parking spaces.

*Person* means any natural individual, corporation, partnership, limited partnership, or other legally organized business entity.

*Pollution* means the contamination or other alteration of physical, chemical, or biological properties of any natural waters of the city or drainage district, including change in temperature, taste, color, turbidity, or odor of the waters, or the discharge of any liquid, gaseous, solid, radioactive, or other substance into any such waters as will or is likely to create a nuisance or render such waters harmful, detrimental, or injurious to the public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life according to the city engineer or the drainage district's engineer.

*Premises* means the lot, buildings, and appurtenances situated thereon.

*Principal structures* means:

- (1) Structures intended to be used for human habitation or occupancy (i.e., homes, multifamily residential structures, retail stores, hospitals, fire stations, city halls, office buildings); or
- (2) Structures which are designed or used directly for the same purpose as the primary or predominate use of the land as established in the zoning laws of the city (For example, in Plantation Acres, there are single-family homes on large tracts of land where there also may exist detached gazebos, greenhouses, shadehouses, barns, crop storage bins, machine shops, stables, enclosed animal buildings, and the like. These detached farming related structures are not intended to be principal structures as the city views the primary and predominate use of the land as established in the zoning code to be the residential home. As a further example, detached servant or guest quarters in the above scenario would be deemed a principal structure as it is intended to be used directly for residential purposes); or
- (3) Structures which are not Class A or B accessory structures.

*Private property* means that property or facilities that are not owned by a city, county, state, federal, or other public governmental agency or entity. As an example, an office building leased by a public governmental agency and not owned by a public governmental agency is "private property".

*Public property* means that property or facilities owned by a city, county, state, federal, or other public governmental agency or entity.

*Receiving water* means all surface and ground water bodies; all wetlands, lakes, rivers, streams, canals, sloughs, natural or unnatural water bodies; and all territorial waters and the ocean into which stormwater runoff directly or indirectly discharges.

*Retention* means the prevention of stormwater runoff from direct discharge into receiving waters by utilizing discharge systems such as percolation, exfiltration, and evaporation processes.

*Road/roadway* means any surface used for motorized transportation whether it was intended for that purpose or not; excludes permitted parking spaces and drive aisles that are not a required accessway for fire protection for a building.

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

*Site* is an area under development. In reference to perimeter grade and allowable discharge, the site may be described in accordance with boundaries described by a master drainage permit.

*Site of industrial activity* means any land or improvement used for manufacturing, processing or raw material storage, as defined under 40 CFR section 122.26(a)(14), or regulations of the U.S. Environmental Protection Agency, as amended.

*Special flood hazard area (SFHA)* is the land in the floodplain within a community subject to a one-percent or greater chance of flooding in any given year according to the community's flood insurance study report and as indicated on the flood insurance rate map (FIRM) provided by the National Flood Insurance Program (NFIP). The SFHA's in the City of Plantation as of October 1, 2001, are the AE and AH zones as indicated on the FIRM.

*Start of construction* (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348)) means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition or improvement was within one hundred eighty (180) days of the permit date. The actual start means the first placement of permanent construction of a structure (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 the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garage or sheds, not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

*Stormwater* means any stormwater runoff, surface runoff or drainage.

*Stormwater management plan* means a plan for receiving, handling, treating and transporting stormwater, which has been approved by virtue of the enactment of the city's land development regulations and which may be subsequently amended or approved by resolution.

*Stormwater runoff* means that part of precipitation that travels over natural, altered or improved surfaces to any receiving water or to a storm sewer and is thereby discharged to any receiving water.

*Stormwater system* means the system of conveyances used for collecting, storing and transporting stormwater, owned by the city or outfalling into public or district waters, but not including any facilities intended to be used in accordance with applicable law for collecting and transporting sanitary or other wastewater.

*Structure* means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank, or other man-made improvement facilities or infrastructures.

*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 fifty (50) percent of the replacement cost of the structure before the damage occurred.

*Substantial improvement* means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the replacement value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed.

The term does not, however, include either (1) any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or (2) any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

*10-year flood* is the maximum flood that will occur based on the 10-year 1-day analysis in the City of Plantation Stormwater and Floodplain Management Plan or as amended (the City of Plantation's 10-year 1-day Peak Stage Elevation Map), the Broward County Water Resources Management Division 10-year flood elevation map, or analyses that have been reviewed and approved by the City of Plantation Engineering Department.

*Variance* is a grant of relief from the requirements of this chapter by the board of adjustment which permits construction in a manner otherwise prohibited by this chapter where specific enforcement would result in unnecessary hardship.

*X Zones* are areas that are not within the SFHA; areas that are outside the 100-year flood (some areas may also be outside the 500-year flood) according to the FIRM. (Ord. No. 1459, Art. 2, 3-31-87; Ord. No. 1857, § 1, 7-29-92; Ord. No. 2264, § 4, 2001)

### **Sec. 9-3. Findings of fact and local conditions.**

- (a) The city is susceptible to rainfall values that exceed most other areas of the state.
- (b) The city has large deposits of muck and soils that generally have worse than average porosities or drainage characteristics.
- (c) The city does not have a geological ridge such as the Pine Island Ridge that may act as a barrier or high ground to protect the city from flooding.
- (d) The elevation of the city is only a few to several feet above the ground water table.
- (e) The ground water table cannot be significantly altered due to the threat of salt-water intrusion and the potential contamination of the water supply.
- (f) The city is in a hurricane prone area of the state.
- (g) Areas of the city are subject to periodic inundation which results or may result 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.
- (h) These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights, velocities, or by the occupancy in areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, floodproofed or otherwise unprotected from flood damage.
- (i) Uncontrolled stormwater runoff and development of land has a significant adverse impact upon the health, safety and welfare of the community; more specifically:
  - (1) Stormwater runoff is capable of carrying pollutants into receiving water bodies, thereby degrading water quality;
  - (2) Stormwater runoff is capable of carrying nutrients into receiving water bodies, and the increase in nutrients, such as phosphorus and nitrogen, accelerates eutrophication of receiving water bodies, thereby adversely affecting flora and fauna;
  - (3) Improperly channeling water alters the velocity of stormwater runoff, thereby potentially increasing erosion and sedimentation;
  - (4) Construction requiring the alteration of natural topography and removal of vegetation tends to increase erosion;
  - (5) Siltation of water bodies resulting from increased erosion decreases the capacity of said water bodies to hold and transport water, interferes with navigation and harms flora and fauna;
  - (6) Impervious surfaces increase the volume and rate of stormwater runoff and allow less water to percolate into the soil, thereby potentially decreasing groundwater recharge.

- (7) Improperly managed stormwater runoff may increase the incidents of flooding and the levels of floods that occur thereby endangering property and human safety; and
- (8) Sound stormwater management practices result in the reduction of adverse effects associated with unmanaged stormwater runoff.

(Ord. No. 1459, Art. 1, § B, 3-31-87; Ord. No. 1857, § 1, 7-29-92; Ord. No. 2265, § 5, 11-28-2001)

#### **Sec. 9-4. Statement of purpose.**

It is the purpose of this chapter to protect the environment and water resources, to promote the immediate and long term public health, safety and general welfare of the city residents, to protect property, and to minimize public and private losses due to flood conditions by provisions designed to:

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

(Ord. No. 1459, Art. 1, § C, 3-31-87; Ord. No. 1857, § 1, 7-29-92; Ord. No. 2264, § 6, 11-28-2001)

#### **Sec. 9-5. Objectives.**

The objectives of this chapter are:

- (1) To protect human life and health;
- (2) To minimize expenditure of public money for costly flood control projects;
- (3) To minimize the need for rescue and relief efforts associated with flooding;
- (4) To minimize prolonged business interruptions;
- (5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- (6) To help maintain a stable tax base by providing for the sound use and development of floodprone areas in such a manner as to minimize flood blight areas;

- (7) To ensure that potential home buyers are notified that property is in a flood area;
- (8) To establish a city-wide stormwater management program that is mutually compatible with those developed by the Florida Department of Environmental Protection (FDEP), the South Florida Water Management District (SFWMD), and other local governmental entities;
- (9) To provide for a minimum city-wide level of service for stormwater management;
- (10) To protect, restore and maintain the chemical, physical and biological integrity of community waters;
- (11) To prevent individuals, business organizations and governments from adversely affecting water resources;
- (12) To minimize the transport of pollutants to community waters;
- (13) To control groundwater levels;
- (14) To minimize erosion and sedimentation;
- (15) To prevent damage from flooding, while recognizing that natural fluctuations in water levels are beneficial; and
- (16) To protect property.

(Ord. No. 1459, Art. 1, § D, 3-31-87; Ord. No. 2264, § 7, 11-28-2001)

#### **Sec. 9-6. Scope, jurisdiction, and conflicts.**

(a) This chapter shall apply to all areas within the municipal boundaries of the city as amended from time to time.

(b) The city is privileged to have within its boundaries the Plantation Acres Improvement District and the Old Plantation Water Control District. Each of these governmental entities may have land development rules and regulations that are specific to the special needs, purposes and geological characteristics of land within their jurisdiction. The city wishes to coordinate this legislation with the rules and regulations of PAID and OPWCD so as to minimize conflicts. To the extent the city stormwater and floodplain management land development regulations contained within this Code expressly conflict with the written rules or regulations of PAID or OPWCD (hereinafter, "district"), the district may issue a site specific conflict determination. The conflict determination must: (1) be in writing, signed by the district (or its engineer), and delivered to the city engineer; (2) identify the written rule or regulation of the district; (3) state how the district wishes to resolve the matter; and (4) state that the district proposed resolution is consistent with the master drainage permit for the district. When the city engineer receives a conflict determination meeting the above requirements, he or she shall issue a limited exception to the otherwise applicable city regulations and shall permit the proposed district resolution, unless the proposed solution affects the elevation of emergency access roads (as defined by the city) or affects police and fire and paramedic stations or outposts, emergency health care facilities, public emergency

operations or support centers, or publicly owned or leased hurricane storm shelters (hereinafter, "emergency facilities"). The city engineer's review of a conflict determination shall be facially limited to whether it contains the statements required in (2), (3), and (4) above (put differently, the city engineer shall not be able to substantively evaluate or disagree with the district's conclusions with respect to items (2), (3), or (4)), and whether the conflict determination affects an emergency access road or affects emergency facilities. When the city engineer receives a conflict determination that the city engineer determines affects the elevation of an emergency access road or affects an emergency facility, the district and city engineer may resolve the conflict by an agreement, appropriate to the circumstances, and upon such agreement being made the city engineer shall issue a limited exception to these land development regulations so as to implement the agreement. Where no agreement can be reached, the city engineer shall apply the Code provision that the city engineer determines best protects or furthers the interests of life safety.

(c) The city recognizes that enacting a stormwater and floodplain management ordinance will have an effect on how buildings and structures within Plantation are constructed; however, this land development regulation is not intended to be an amendment to the adopted state minimum building code. Instead, this legislation and the state minimum building code are intended to be independent pieces of legislation that are enacted for different reasons and which have different spheres of operation, but whose influence may sometimes embrace. Where there is a conflict between the adopted state minimum building code and a requirement of this land development regulation, the building official and city engineer may resolve the conflict by an agreement, appropriate to the circumstances, and by granting an administrative waiver or exception to the conflicting provision that will not be applied. Where no agreement can be reached, the Code provision that best protects life safety shall apply. This subsection 9-6(b) shall control in the event of conflict with any provision to the contrary in section 9-8 or 9-9 of this Code.

(Ord. No. 1459, Art. 3, § A, 3-31-87; Ord. No. 1857, § 1, 7-29-92; Ord. No. 2264, § 8, 11-28-2001)

### **Sec. 9-7. Basis for establishing special flood hazard areas (SFHA's).**

The special flood hazard areas identified by the Federal Emergency Management Agency in its Flood Insurance Study, dated August 18, 1992, with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this chapter.

(Ord. No. 1459, Art. 3, § B, 3-31-87; Ord. No. 1857, § 1, 7-29-92; Ord. No. 2264, § 9, 11-28-2001)

### **Sec. 9-8. Compliance mandatory.**

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

(Ord. No. 1459, Art. 3, § D, 3-31-87; Ord. No. 1857, § 1, 7-29-92)

**Cross References:** Buildings and building regulations, Ch. 5; planning and development, Ch. 19; zoning, Ch. 27.

### **Sec. 9-9. Abrogation and greater restrictions.**

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

(Ord. No. 1459, Art. 3, § E, 3-31-87; Ord. No. 1857, § 1, 7-29-92)

### **Sec. 9-10. Interpretation.**

- (a) In the interpretation and application of this chapter, all provisions shall be:
- (1) Considered as minimum requirements;
  - (2) Liberally construed in favor of the governing body; and
  - (3) Deemed neither to limit nor repeal any other powers granted under state statutes or municipal home rule.

(b) The city engineer shall be the city official empowered to interpret and apply the regulations set forth in this chapter. An adversely affected person may appeal an interpretation of the city engineer to the board of adjustment.

(Ord. No. 1459, Art. 3, § F, 3-31-87; Ord. No. 1857, § 1, 7-29-92; Ord. No. 2264, § 10, 11-28-2001)

### **Sec. 9-11. Warning and disclaimer of liability.**

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter 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 chapter shall not create liability on the part of the city or by any officer or employee thereof for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

(Ord. No. 1459, Art. 3, § G, 3-31-87; Ord. No. 1857, § 1, 7-29-92)

### **Secs. 9-12--9-25. Reserved.**

**Editors Note:** Ord. No. 2264, § 11, adopted Nov. 28, 2001, repealed § 9-12, Penalties for violation, as derived from Ord. No. 1459, Art. 3, § H, adopted Mar. 31, 1987; and Ord. No. 1857, § 1, adopted July 29, 1992.

## **ARTICLE II.**

### **ADMINISTRATION\***

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\* **Cross References:** Buildings and building regulations, Ch. 5.

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### **Sec. 9-26. Enforcing official designated administrator.**

Except where the city engineer's or city building official's duties are otherwise established in this chapter, the city engineer and city building official shall have co-jurisdiction to enforce each and every provision of this chapter, and they shall meet and mutually agree how each department shall administer and implement the provisions of this chapter, and they shall prepare a memorandum of understanding concerning same which will, upon being approved by mayoral executive order, be binding upon each department until amended by future mayoral executive order. The words "chief building official" as they appear in sections 9-27, 9-29, 9-30, and 9-31 shall be construed to mean either the city engineer, the city building official, or both, as determined by the approved executive order of the mayor.

(Ord. No. 1459, Art. 4, § A, 3-31-87; Ord. No. 1857, § 1, 7-29-92; Ord. No. 2264, § 12, 11-28-2001)

**Sec. 9-27. Duties and responsibilities of chief building official.**

- (a) Duties of the chief building official shall include, but not be limited to those enumerated in this section. The chief building official shall:
- (1) Review all development permits to ensure that the permit requirements of this chapter have been satisfied;
  - (2) Advise permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit;
  - (3) Notify adjacent communities and the Florida Department of Natural Resources prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Emergency Management Agency;
  - (4) Ensure that maintenance is provided within the altered or relocated portion of the watercourse so that the flood-carrying capacity is not diminished;
  - (5) Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures in accordance with subsection 9-29(2);
  - (6) Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved structures have been floodproofed, in accordance with subsection 9-29(2);
  - (7) In coastal hazard areas, certification shall be obtained from a registered professional engineer or architect that the structure is designed to be securely anchored to adequately anchored pilings or columns in order to withstand velocity waters and hurricane wave wash;
  - (8) In coastal high hazard areas, the chief building official shall review plans for adequacy of breakaway walls;
  - (9) Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) make the necessary interpretation. 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 or floodway data have not been provided in accordance with section 9-7, the chief building official shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer the provisions of articles I, II and III of this chapter.

(b) All records pertaining to the provisions of this chapter shall be maintained in the office of the chief building official and shall be open for public inspection.

(Ord. No. 1459, Art. 4, § C, 3-31-87; Ord. No. 1857, § 1, 7-29-92)

### **Sec. 9-28. Development permit--Required.**

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

(Ord. No. 1459, Art. 3, § C, 3-31-87; Ord. No. 1857, § 1, 7-29-92)

### **Sec. 9-29. Same--Application procedure.**

Application for a development permit shall be made to the chief building official 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 or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(1) *Application stage:*

- a. Elevation in relation to national geodetic vertical datum (NGVD) of the proposed lowest floor or elevated floors (including basement) of all structures; calculations that exclude a floor from being considered the lowest floor or for elevated floors, signed and sealed by a professional engineer or architect licensed in the state in accordance with section 9-42.
- b. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

- (2) *Construction stage.* Provide a floor elevation or floodproofing certification after the lowest floor is completed, or in instances where the structure is subject to the regulations applicable to coastal high hazard areas, after placement of the horizontal structural members of the lowest floor. Upon placement of the lowest floor, or floodproofing by whatever construction means, or upon placement of the horizontal structural members of the lowest floor, whichever is applicable, it shall be the duty of the permit holder to submit to the chief building official a certification of the elevation of the lowest floor, floodproofed elevation, or the elevation of the lowest portion of the horizontal structural members of the lowest floor, whichever is applicable, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When 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 chief building official shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make said corrections required hereby shall be cause to issue a stop-work order for the project.

(Ord. No. 1459, Art. 4, § B, 3-31-87; Ord. No. 1857, § 1, 7-29-92; Ord. No. 2264, § 13, 11-28-2001)

**Sec. 9-30. Variance procedures.**

(a) The board of adjustment shall hear and decide appeals and requests for variances from the requirements of this chapter.

(b) The board of adjustment shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the chief building official in the enforcement or administration of this chapter.

(c) The issuance of a variance is for floodplain management purposes only. Insurance premium rates are determined by statute according to actuarial risk and will not be modified by the granting of a variance. The board of adjustment, after examining the applicant's hardships, shall approve or disapprove a request, in accordance with this section. While the granting of variances generally is limited to a lot size less than one-half acre deviations from that limitation may occur. However, as the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases.

(d) Any person aggrieved by the decision of the board of adjustment or any taxpayer may seek judicial review of such decision to the Broward County Circuit Court, as provided by statute.

(e) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the state inventory of historic places without regard to the procedures set forth in the remainder of this section, except for paragraphs 9-30(h)(1) and (4), and provided the proposed reconstruction, rehabilitation or restoration will not result in the structure losing its historical designation.

(f) In passing upon such applications, the board of adjustment shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this chapter, and:

- (1) The danger that materials may be swept onto other lands to the injury of others;
- (2) The danger to life and property due to flooding or erosion damage;
- (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (4) The importance of the services provided by the proposed facility to the community;
- (5) The susceptibility of the proposed site or building or structure (and their contents) to flood damage and the effect of such damage on surrounding land or property;
- (6) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- (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.

(g) Upon consideration of the factors listed in this section, and the purposes of this chapter, the board of adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.

(h) Variances shall not be issued within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.

(i) Conditions for variances:

- (1) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and in the instance of a historical building, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.
- (2) Variances shall only be issued upon (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship, and (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- (3) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (4) The chief building official shall (i) maintain a record of all variance actions, including justification for their issuance, and (ii) report such variances issued in Plantation's annual or biennial report submitted to the FEMA administrator.
- (5) No variances shall be issued by the board within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.
- (6) Variances may be issued by the board for new construction and substantial improvements to be

erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the substantive requirements of paragraphs (i)(1), (2), (4), and (7) of this section.

- (7) The chief building official shall notify the applicant for a variance in writing that (i) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as twenty-five dollars (\$25.00) for one hundred dollars (\$100.00) of insurance coverage and (ii) such construction below the base flood level increases risks to life and property. Such notification shall be maintained with a record of all variance actions as required in paragraph (i)(4) of this section.
- (8) Variances may be issued by the board for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria of paragraph (h) and subparagraphs (i)(1), (2) and (6) of this section are met, and provided that the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

(Ord. No. 1459, Art. 4, § D, 3-31-87; Ord. No. 1857, § 1, 7-29-92; Ord. No. 2264, § 14, 11-28-2001)

**Sec. 9-31. Floodplain management criteria for floodprone areas.**

The FEMA administrator will provide the data upon which floodplain management regulations shall be based. If the administrator has not provided sufficient data to furnish a basis for these regulations for Plantation, the chief building official shall obtain, review and reasonably utilize data available from other federal, state or other sources pending receipt of data from the FEMA administrator. However, when special flood hazard area designations and water surface elevations have been furnished by the FEMA administrator, they shall apply. (Ord. No. 1857, § 1, 7-29-92)

**Sec. 9-32. Flood insurance maps.**

(a) The following maps may be prepared by the FEMA administrator for use in connection with the sale of flood insurance:

(1) *Flood insurance rate map (FIRM)*: This map will be prepared after the risk study for Plantation has been completed and the risk premium rates have been established. It indicates the risk premium rate zones (which define special flood hazard designations) applicable in the community and when those rates are effective. The symbols used to designate these zones are as follows:

Zone symbol:	
A	Area of special flood hazard without water surface elevations determined.
A1--A30 AE	Area of special flood hazard with water surface elevations determined.

AO	Area of special flood hazards having shallow water depths and/or unpredictable flow paths between one (1) and three (3) feet.
A99	Area of special flood hazard where enough progress has been made on a protective system, such as dikes, dams, and levees, to consider it complete for insurance rating purposes.
AH	Areas of special flood hazards having shallow water depths and/or unpredictable flow paths between one (1) and three (3) feet, with water surface elevations determined.
V	Area of special flood hazards without water surface elevations determined, and with velocity, that is inundated by tidal floods (coastal high hazard area).
V1--30 VE	Area of special flood hazards, with water surface elevations determined and with velocity, that is inundated by tidal floods (coastal high hazard area).
VO	Area of special flood hazards having shallow water depths and/or unpredictable flow paths between one (1) and three (3) feet and with velocity.
B, X	Area of moderate flood hazards.
C, X	Area of minimal hazards.
D	Area of undetermined, but possible, flood hazards.
M	Area of special mudslide (i.e., mudflow) hazards.
N	Area of moderate mudslide (i.e., mudflow) hazards.
P	Area of undetermined, but possible mudslide hazards.
E	Area of special flood-related erosion hazards.

Areas identified as subject to more than one (1) hazard (flood, mudslide (i.e., mudflow), flood-related erosion) will be designated by use of the proper symbols in combination.

- (2) *Flood hazard boundary map (FHBM)*. This map is issued by the FEMA administrator delineating zones A, M, and E within a community.

(b) Notice of the issuance of new or revised FHBM's or FIRM's is given in Chapter 65 of the National Insurance Development Program, Subchapter B, Insurance and Hazard Mitigation. The mandatory purchase of insurance is required within designated zones A, A1--30, AE, A99, AO, V1--30, VE, V, VO, M, and E.

(c) The FHBM or FIRM shall be maintained for public inspection at the office of the city engineer. (Ord. No. 1857, § 1, 7-29-92)

### **Sec. 9-33. Substantive criteria for floodplain management.**

The minimum requirements governing the adequacy of the floodplain management regulations for flood-prone areas in Plantation shall depend on the technical data formally provided to Plantation by the FEMA administrator. Minimum standards for the city are as follows:

- (a) When the FEMA administrator has not defined the special flood hazard areas within Plantation, has not provided water surface elevation data, and has not provided sufficient data to identify the floodway or coastal high hazard area, but Plantation has indicated the presence of such hazards by submitting an application to participate in the program:
  - (1) Development permits shall be required for all proposed construction or other development in Plantation, including the placement of manufactured homes, so that the chief building official may determine whether such construction or other development is proposed within flood-prone areas:
  - (2) All proposed development shall be reviewed to assure that all necessary permits have been received from those governmental agencies from which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334 (a certification to such effect from a Florida civil engineer shall suffice);
  - (3) All permit applications shall be reviewed to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall (i) be designed (or modified) and adequately anchored to proven flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, (ii) be constructed with materials resistant to flood damage, (iii) be constructed by methods and practices that minimize flood damages, and (iv) be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
  - (4) All subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, shall be reviewed to determine whether such proposals will be reasonably safe from flooding. If a subdivision proposal or other proposed new development is in a flood-prone area, any such proposals shall be reviewed to assure that

- (i) all such proposals are consistent with the need to minimize flood damage within the flood-prone area, (ii) all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage, and (iii) adequate drainage is provided to reduce exposure to flood hazards;
  - (5) New and replacement water supply systems within flood-prone areas shall be designed to minimize or eliminate infiltration of floodwaters into the systems; and
  - (6) New and replacement sanitary sewage systems within flood-prone areas shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters. Onsite waste disposal systems within flood-prone areas shall be located to avoid impairment to them or contamination from them during flooding.
- (b) When the administrator has designated areas of special flood hazards (A zones) by the publication of a FHBM or FIRM for Plantation, but has neither produced water surface elevation data nor identified a floodway or coastal high hazard area, the city shall:
- (1) Require permits for all proposed construction and other developments including the placement of manufactured homes, within zone A on Plantation's FHBM or FIRM;
  - (2) Require the application of the standards in paragraphs (a)(2), (3), (4), (5), and (6) of this section to development within zone A on Plantation's FHBM or FIRM;
  - (3) Require that all new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions greater than fifty (50) lots or five (5) acres, whichever is the lesser), to include within such proposals base flood elevation data;
  - (4) Obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, including data developed pursuant to paragraph (b)(3) of this section, as criteria for requiring that new construction, substantial improvements, or other development in zone A on Plantation's FHBM or FIRM meet the standards in paragraphs (c)(2), (c)(3), (c)(5), (c)(6), (c)(12), (c)(14), (d)(2), and (d)(3) of this section.
  - (5) Where base flood elevation data are utilized, within zone A on Plantation's FHBM or FIRM;
    - (i) Obtain the elevation (in relation to mean sea level) of the lowest floor (including basement) of all new and substantially improved structures, and
    - (ii) Obtain, if the structure has been floodproofed in accordance with paragraph (c)(3)(ii) of this section, the elevation (in relation to mean sea level) to which the structure was floodproofed, and

- (iii) Maintain a record of all such information with the building official (the city official designated under Chapter 59 of the National Insurance Development Program, Subchapter B, "Insurance and Hazard Mitigation").
- (6) Notify, in riverine situations, adjacent communities and the state coordinating office prior to any alteration or relocation of a watercourse and submit copies of such notifications to the FEMA administrator.
  - (7) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
  - (8) Require that all manufactured homes to be placed within zone A on Plantation's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
- (c) When the FEMA administrator has provided a notice of final flood elevations for one (1) or more special flood hazard areas on Plantation's FIRM and, if appropriate, has designated other special flood hazard areas without base flood elevations on Plantation's FIRM, but has not identified a regulatory floodway or coastal high hazard area, the city shall:
- (1) Require the standards of paragraph (b) of this section within all A1--30 zones, AE zones, A zones, AH zones, and AO zones, on Plantation's FIRM;
  - (2) Require that all new construction and substantial improvements of residential structures within zones A1--30, AE and AH zones on Plantation's FIRM have the lowest floor (including basement) elevated to or above the base flood level, unless Plantation is granted an exception by the FEMA administrator for the allowance of basements in accordance with this section or applicable federal regulations.
  - (3) Require that all new construction and substantial improvements of nonresidential structures within zones A1--30, AE, and AH zones on Plantation's FIRM (i) have the lowest floor (including basement) elevated to or above the base flood level, or (ii) together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
  - (4) Provide that where a nonresidential structure is intended to be made watertight below the base flood level, (i) a registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the applicable provisions of paragraph (c)(3)(ii) or (c)(8)(ii) of this

section, and (ii) a record of such certificates which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained with the building official (the city official designated under Chapter 59 of the National Insurance Development Program, Subchapter B, "Insurance and Hazard Mitigation").

- (5) Require, for all new construction and substantial improvements, that fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria; a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (6) Require that all manufactured homes to be placed or substantially improved within zones A1--30, AH, and AE on Plantation's FIRM to be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation; and be securely anchored to an adequately anchored foundation system in accordance with the provisions of paragraph (b)(8) of this section.
- (7) Require within any AO zone on Plantation's FIRM that all new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on Plantation's FIRM (at least two (2) feet if no depth number is specified).
- (8) Require within any AO zone on Plantation's FIRM that all new construction and substantial improvements of nonresidential structures (i) have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on Plantation's FIRM (at least two (2) feet if no depth number is specified), or (ii) together with attendant utility and sanitary facilities be completely floodproofed to that level to meet the floodproofing standard specified in this section.
- (9) Require within any A99 zones on Plantation's FIRM the standards of paragraphs (a)(1) through (a)(4)(i) and (b)(5) through (b)(9) of this section.
- (10) Require until a regulatory floodway is designated, that no new construction, substantial improvements, or other development (including fill) shall be permitted within zones A1--30 and AE on Plantation's FIRM, 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 (1) foot at any point within the city.

- (11) Require within zones AH and AO, adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.
  - (12) Require that all manufactured homes to be placed or substantially improved within Zones A1--30, AH, and AE on Plantation's FIRM be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation; and be securely anchored to an adequately anchored foundation system in accordance with the provisions of paragraph (b)(8) of this section. This paragraph applies to manufactured homes to be placed or substantially improved in an expansion to an existing manufactured home park or subdivision. This paragraph does not apply to manufactured homes to be placed or substantially improved in an existing manufactured home park or subdivision except where the repair, reconstruction, or improvement of the streets, utilities and pads equals or exceeds fifty (50) percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced.
  - (13) Notwithstanding any other provisions of article II, the city may approve certain development on zones A1--30, AE, and AH, on Plantation's FIRM which increases the water surface elevation of the base flood by more than one (1) foot, provided that Plantation first applies for a conditional FIRM revision, fulfills the requirements for such a revision as established under the provisions of Chapter 65 of the National Insurance Development Program, Subchapter B, "Insurance and Hazard Mitigation," and receives the approval of the FEMA administrator.
- (d) When the FEMA administrator has provided a notice of final base flood elevations within zones A1--30 and/or AE on Plantation's FIRM and, if appropriate, has designated AO zones, AH zones, A99 zones, and A zones on Plantation's FIRM, and has provided the data from which Plantation shall designate its regulatory floodway, the city shall:
- (1) Meet the requirements of paragraphs (c)(1) through (14) of this section;
  - (2) Select and adopt a regulatory floodway based on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base flood, without increasing the water surface elevation of that flood more than one (1) foot at any point;
  - (3) Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the city during the occurrence of the base flood discharge;
  - (4) Notwithstanding any other provisions of article II, the city may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that Plantation first applies for a conditional FIRM and floodway revision, fulfills the requirements for such revisions as established under the provisions of article II, and receives the approval of the FEMA administrator.

- (e) When the FEMA administrator has provided a notice of final base flood elevations within zones A1--30 and/or AE on Plantation's FIRM and, if appropriate, has designated AH zones, AO zones, A99 zones, and A zones on Plantation's FIRM, and has identified on Plantation's FIRM coastal high hazard areas by designating zones V1--30, VE, and/or V, the city shall:
- (1) Meet the requirements of paragraphs (c)(1) through (14) of this section.
  - (2) Within zones V1--30, VE and V on a Plantation's FIRM, (i) obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures, and whether or not such structures contain a basement, and (ii) maintain a record of all such information with the building official (the city official designated under Chapter 59, of the National Insurance Development Program, Subchapter B, "Insurance and Mitigation").
  - (3) Provide that all new construction within zones V1--30, VE, and V on Plantation's FIRM is located landward of the reach of mean high tide.
  - (4) Provide that all new construction and substantial improvements in zones V1--30 and VE, and also Zone V if base flood elevation data is available, on Plantation's FIRM, are elevated on pilings and columns so that (i) the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood level; and (ii) 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 values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable state or local building standards. 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 paragraphs (e)(4)(i) and (ii) of this section.
  - (5) Provide that all new construction and substantial improvements within zones V1--30, VE and V on Plantation's FIRM 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. For the purposes of this section, a breakaway wall shall have a design safe loading resistance of not less than ten (10) and no more than twenty (20) pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of twenty (20) pounds per square foot (either by design or so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:
    - (i) Breakaway wall collapse shall result from a water load less than that which would

occur during the base flood; and,

- (ii) 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). Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable state or local building standards. Such enclosed space shall be usable solely for parking of vehicles, building access, or storage.

- (6) Prohibit the use of fill for structural support of buildings, within zones V1--30, VE, and V on Plantation's FIRM;

- (7) Prohibit man-made alteration of sand dunes and mangrove stands within zones V1--30, VE, and V on Plantation's FIRM which would increase potential flood damage.

(Ord. No. 1857, § 1, 7-29-92; Ord. No. 2264, § 15, 11-28-2001)

**Secs. 9-34--9-40. Reserved.**

### **ARTICLE III.**

#### **PROVISIONS FOR STORMWATER HAZARD REDUCTION**

**Sec. 9-41. For all areas within the corporate limits of the city.**

(a) In all areas within the corporate limits of the city, the following are required for new construction whose start of construction is after October 1, 2001, in addition to all other requirements of this chapter:

- (1) New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- (2) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces;
- (3) New construction, substantial improvements and utility facilities shall utilize flood resistant materials if the materials are located at or below the 100-year flood elevation;
- (4) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (5) Electrical and mechanical, plumbing and other service equipment shall be designed and located so as to prevent water from entering or accumulating within the components during conditions of flooding. Electrical, plumbing, and other utility equipment are prohibited below the 100-year

flood elevation unless they are flood-proofed. Electrical outlets and switches below the 100-year flood elevation are subject to the use of ground-fault interrupt (GFI) circuits;

- (6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system. Potable, non-submersible well pumps shall be located above the 100-year flood elevation;
- (7) 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. Floor drains or other plumbing service connections shall not be below the 100-year flood elevation. Non-submersible wastewater pumps and the finished floor of lift station structures shall be located above the 500-year flood elevation. Dumpster enclosure pads shall meet the level of service standards for parking lots, unless they are otherwise required to have a pad floor drain in which event the drain must be at the 100-year flood elevation;
- (8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
- (9) If accessory structures are heated or air conditioned the floor must be above the 100-year flood elevation. Except as provided in the next sentence, all utility systems (except electrical) and equipment that service or are stored in the accessory structure must be above the 100-year flood elevation. Electrical outlets, switches and services below the 100-year flood elevation are required to use ground-fault interrupt (GFI) circuits;
- (10) Electrical, mechanical, heating, ventilation, plumbing, air conditioning and other service equipment shall be located above the 100-year flood elevation;
- (11) Structures that are heated or air conditioned must have the floor above the 100-year flood elevation;
- (12) Any building enclosures, including breakaway walls, below the base flood elevation are prohibited;
- (13) All building foundations shall meet the minimum requirements of ASTM D-698 or equal and the provisions of section 5-41;
- (14) All developments must be in compliance with all South Florida Water Management District, Old Plantation Water Control District, and Plantation Acres Improvement District requirements, permits and permit modifications;
- (15) All developments must meet and update the requirements of chapter 20 and provide documentation that the level of service standards have been met at the time of development or permit review; documentation shall be required and/or reviewed at the discretion of the city engineer or his or her representative;
- (16) Drainage level of service standards:

- a. Critical facilities shall be built with finished floor elevations at or above the expected 500-year flood elevation or elevation nine (9.0) feet whichever is greater.
  - b. Primary structures and equipment that services the primary structure. The elevation of the lowest floor shall be set above the 100-year flood elevation, eighteen (18) inches above the 10-year flood elevation, eighteen (18) inches above the adjacent roadway, six (6) inches above the base flood elevation or at elevation eight and one-half (8.5) feet whichever is greater. The city engineer may waive the required floor elevation offset of eighteen (18) inches with supporting analyses and documentation from the engineer of record.
  - c. Class A accessory structures. The elevation of the lowest floor shall be set twelve (12) inches above the 10-year flood elevation, twelve (12) above the adjacent roadway, elevation eight and one-tenth (8.1) feet or above the base flood elevation whichever is greater.
  - d. Class B accessory structures. The elevation of the lowest floor shall be set six (6) inches above the 10-year flood elevation, six (6) inches above the adjacent roadway, elevation eight and one-tenth (8.1) feet, or above the base flood elevation whichever is greater.
  - e. Site perimeter grade. The site perimeter grade shall be designed to allow zero discharge during a 25-year, 3-day storm event, and pre-development discharge shall be less than or equal to post-development discharge for the 100-year storm event.
  - f. Site discharge. The site discharge shall be the allowable discharge during a 25-year, 3-day storm event;
  - g. Emergency access roadways. These shall have their total width above the flood elevation of the 10-year 1-day storm event, eighteen (18) inches below the 100-year flood elevation, or at an elevation of seven (7.0) feet, whichever is greater;
  - h. Roads/roadways. Except for emergency access roadways these shall have one-half ( 1/2) of their total width above the flood elevation of the 10-year, 1-day storm event, or at an elevation of seven (7.0) feet, whichever is greater.
  - (i) Parking lots/drive aisles/dumpster enclosure pads without floor drains. These shall be above the flood elevation of the 5-year 1-day storm event, or six (6) inches below the 10-year 1-day storm event, or at an elevation of six and three-quarters (6.75) feet, whichever is greater.
  - j. Water quality requirements contained in section 9-44 of this Code and stage storage requirements of the drainage districts or other governmental entities.
- (17) Development shall restrict the percentage of site area that is impervious (including roofs and pools) to sixty-five (65) percent and to the assumptions or other limitations of the master

drainage permit. The site shall be graded or a stormwater system installed in a manner to restrict discharge onto adjacent properties or in compliance with the master drainage permit.

- (18) Base flood data must be supplied on all plats, site data records, surveys and elevation certificates in accordance with the NFIP and this chapter.
- (19) Structures may be elevated provided they meet the requirement of section 9-42; however, the lowest adjacent grade shall be eight and one-tenth (8.1) feet or greater.
- (20) The highest adjacent grade elevation must be lower than the adjacent finished floor elevation. The location of the point of highest adjacent grade and its elevation must be indicated on the survey.
- (21) The lowest adjacent grade elevation must be above the base flood elevation for the structure to be eligible to be in an X zone. The location of the lowest adjacent grade and its elevation must be indicated on the survey.

(b) Any alteration, repair, addition, or reconstructed portion of a building or structure or site which has a start of construction after October 1, 2001, must comply with the requirements of this chapter.

(c) For portions of buildings, structures, or sites existing on October 1, 2001, which are not altered, repaired, or reconstructed, they shall be made compliant with the requirements of this chapter when, at such time after October 1, 2001, and measured cumulatively after a period of time five (5) years or less in length, the value of additions, modifications, alterations, or reconstruction exceed more than fifty (50) percent of the replacement value of the entire building or structure. When this occurs, the entire building, structure and site must be made compliant with the terms of this chapter.

(Ord. No. 1459, Art. 5, § A, 3-31-87; Ord. No. 1857, § 1, 7-29-92; Ord. No. 2264, § 16, 11-28-2001)

#### **Sec. 9-42. Structures to meet hydrostatic forces.**

(a) Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of this section.

(b) Structures may be elevated provided that all areas of the structure 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. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in paragraph 9-29(1).

(c) New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation 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.

(d) For a floor to be excluded as the lowest floor. An unfinished or flood resistant enclosure, usable

solely for parking of vehicles, building access, or passive storage in an area other than a basement area is not considered a building's lowest floor provided that such enclosure is constructed of flood resistant materials and is designed to automatically allow for entry and exit of floodwater in accordance with the provisions of this section. Elevator shafts that are protected from inflow are not considered the building's lowest floor.

(e) Designs for complying with these requirements must either be certified by a professional engineer or architect or meet the following minimum criteria:

- (1) Provide a minimum of two (2) openings, each on a separate wall, having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;
- (2) The bottom of all openings shall be no higher than one (1) foot above grade; and
- (3) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both direction(s); however, they must be considered in the calculation.
- (4) Electrical, plumbing, and other utility connections are prohibited below the base flood elevation.
- (5) Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator).
- (6) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

(Ord. No. 1459, Art. 5, § B, 3-31-87; Ord. No. 1857, § 1, 7-29-92; Ord. No. 2264, § 17, 11-28-2001)

**Cross References:** Minimum floor elevations, §§ 5-42, 5-43.

#### **Sec. 9-43. Standards for subdivision proposals.**

(a) All subdivision proposals shall be consistent with the need to minimize flood damage.

(b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

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

(Ord. No. 1459, Art. 5, § D, 3-31-87; Ord. No. 1857, § 1, 7-29-92; Ord. No. 2264, § 18, 11-28-2001)

#### **Sec. 9-44. Water quality/quantity requirements.**

(a) *General.* Any construction, alteration, operation, maintenance, removal or abandonment affecting surface water management within the city requires approval from the city engineering department and the appropriate drainage district. Such activities shall not cause violations of state water quality standards, including any antidegradation provisions of sections 62-4.242(1)(a) and (b), 62-4.242(2) and (3), and 62-302.300 F.A.C. obtaining city approval shall not eliminate the necessity to obtain any other required federal, state, local, drainage district, or special district authorizations or permits. Likewise, obtaining such other

approvals shall not eliminate the requirement to obtain city approval.

(b) *Water quality.* Retention, detention, or some combination thereof, must be provided for water quality treatment that is consistent with the requirements of the SFWMD and as may be subsequently amended, as follows:

- (1) Retention, detention, or both shall be provided for one of the three (3) following criteria or equivalent combinations thereof:
  - a. Wet detention volume shall be provided for the first inch of runoff from the developed project, or the total runoff of two and one-half (2.5) inches times the percentage of imperviousness, whichever is greater.
  - b. Dry detention volume shall be provided equal to seventy-five(75) percent of the above amounts computed for wet detention.
  - c. Retention volume shall be provided equal to fifty (50) percent to the above amounts computed for wet detention. Retention volume included in flood protection calculations requires a guarantee of long term system bleed-down ability.
- (2) Commercial or industrial zoned projects shall provide at least one-half-inch of dry detention or retention pretreatment as part of the required retention/detention unless a waiver is granted by the SFWMD and the city engineer.
- (3) In cases of raising existing public roadway projects for flood protection, the city engineer may reduce the requirements of this article, if the governmental entity or agency raising the road provides documentation which demonstrates that all reasonable design alternatives have been considered, and which provides evidence that the alternatives are all cost-prohibitive. Any reduction may impose conditions which are designed to improve water quality and drainage.
- (4) Projects located within cones of depression retention/detention area locations shall not reduce hydraulic recharge distances to public water supply wells in excess of two (2) percent, nor shall wet retention/detention areas be closer to public water supply wells than three hundred (300) feet.
- (5) Exfiltration systems shall be designed for the retention volumes specified in section 9-44(2)(a) for retention systems, exfiltrated over one (1) hour for retention purposes, prior to overflow, and based on test data for the site. A safety factor of two (2) or more shall be applied to the design to allow for geological uncertainties. A dry system is one with the pipe invert at or above the average wet season water table.
- (6) Impervious areas. Runoff shall be discharged from impervious surfaces through retention areas, detention devices, filtering and cleansing devices, or subjected to some other type of best management practice (BMP) prior to discharge from the project site. For projects which include substantial paved areas, such as shopping centers, large highway intersections with frequent stopped traffic, and high density developments, provisions shall be made for the removal of oil,

grease and sediment from stormwater discharges.

(c) *Offsite discharges and required on-site stage/storage.* Off-site discharge rate is limited to rates as specified to meet:

- (1) Levels of service;
- (2) Permits;
- (3) Special basin criteria; and
- (4) Values that do not hinder existing off-site properties from meeting their levels of service; and:
  - a. Unless otherwise specified by previous permits or criteria, a storm event of 3-day duration and 25-year return frequency shall be used in computing off-site discharge rates. Allowable discharge rates shall conform to the applicable criteria for the appropriate receiving water. These rates and stage/storage requirements are established by the South Florida Water Management District, Old Plantation Water Control District and the Plantation Acres Improvement District for their respective systems.
  - b. Discharge structures shall be fixed so that discharge cannot be made below the control elevation, except that emergency devices may be installed with secure locking devices. Use of emergency devices must be coordinated with city and the drainage districts prior to opening.
  - c. Discharge structures must be built and operated in accordance with their permits or this Code.
  - d. Discharge structures shall include a baffle system to encourage discharge from other than the top or bottom of the water column. Discharge structures from areas with greater than fifty (50) percent impervious area or from systems with inlets in paved areas shall include a baffle, skimmer, or other mechanism suitable for preventing oil and grease from discharging to or from retention/detention areas.
  - e. Gravity control devices shall be sized based upon a maximum design discharge of one-half-inch of the required detention volume in twenty-four (24) hours.
  - f. Dry retention/detention areas shall have mechanisms or the ability to return the groundwater level in the area to the control elevation.

(Ord. No. 2264, § 19, 11-28-2001)

#### **Sec. 9-45. Submittals.**

For the purpose of documenting that the provisions of this chapter and chapter 20 are met, the permit applicant shall submit:

- (1) Permits and calculations from all other regulatory agencies.
- (2) Plans and specifications meeting all city requirements.
- (3) Geotechnical/soils test data and reports.
- (4) Calculations, signed, dated and sealed by a Florida registered professional engineer. Said calculations shall conform to standard accepted engineering principles and methods and be approved by the city engineer or his or her designee.

Prior to the issuance of a certificate of occupancy or a certificate of completion the applicant shall obtain:

- (1) Letters of approval from all regulatory agencies.
- (2) Approval from the city engineer or his or her designee.
- (3) Approval from the chief building official or his or her designee.

(Ord. No. 2264, § 20, 11-28-2001)

**Secs. 9-46--9-55. Reserved.**

#### **ARTICLE IV.**

#### **DRAINAGE\***

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\* **Cross References:** Buildings and building regulations, Ch. 5; code enforcement, Ch. 6; landscaping, Ch. 13; planning and development, Ch. 19; platting, Ch. 20; streets, sidewalks, bridges and other public places, Ch. 23; utilities, Ch. 26; zoning, Ch. 27; drainage in subdivisions, § 20-65; catch basins in subdivisions, § 20-180; canals, ditches and swales in subdivisions, § 20-181.

**State Law References:** Plantation drainage, irrigation, improvement, district, created, Laws of Fla., 1927, Ch. 11863.

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#### **Sec. 9-56. City to supervise facilities, pumping stations, etc.**

The city shall supervise and control all surface drainage facilities, ditches, culverts, pumps, pumping stations and any and all other drainage facilities and equipment within the city limits in all platted areas to the extent that the jurisdiction of the city is effected.

(Code 1964, § 8-1)

#### **Sec. 9-57. Plats cannot be approved without submission and approval of drainage plan.**

Prior to the approval of any plat there shall be presented to the city council by the owner of the lands which have been platted a plan showing the manner in which surface drainage is to be effected in the platted areas. In areas in which Federal Housing Administration approval is sought such plan must show an adequate surface drainage system as would be sufficient to meet the requirements and present standards of the Federal Housing Administration, and if such is not done, neither the plat of the subdivision shall be approved by the city nor shall the chief building official issue any building permits for construction on the platted area.

(Code 1964, § 8-2)

**Cross References:** Buildings and building regulations, Ch. 5; planning and development, Ch. 19; platting, Ch. 20; zoning, Ch. 27.

**Sec. 9-58. Duties of city engineer, chief building official.**

(a) The city engineer and the chief building official shall require that the proposed drainage plan be carried out by the construction of such ditches, drains, canals, culverts, pumps and pumping stations and other drainage facilities as are necessary.

(b) The city engineer shall enforce the provisions of this chapter in the public rights-of-way and easements. The chief building official shall enforce the provisions of this chapter in all other instances.  
(Code 1964, § 8-3)

**Sec. 9-59. Accepted drainage programs to be maintained by city.**

Upon the installation and completion and acceptance of such a drainage program, the city shall exercise full control and jurisdiction over the maintenance of the same so as to be assured that the drainage program is made effectual and accomplishes the proper ends. The cost of such maintenance shall be met either by special assessments or other forms of financing as the city may deem advisable.  
(Code 1964, § 8-4)

**Sec. 9-60. Specifications adopted.**

Except as otherwise provided herein, "The Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways" and the Florida Department of Transportation's "Standard Specifications for Road and Bridge Construction, 1982 Edition" are the minimum standards for the city.

**Sec. 9-61. Storm sewers.**

The specifications for storm sewers are as follows:

- (1) *Pipe material:*
  - a. Concrete pipe. All concrete pipe shall conform to ASTM Designation C-76, Class III.
  - b. Corrugated metal pipe (steel). Corrugated metal pipe (steel) shall conform to AASHTO Specification M-36 and shall be asphalt coated 0.05 inch unless otherwise specified. The gauges used shall meet AASHTO specifications.
  - c. Corrugated metal pipe (aluminum alloy). Corrugated metal pipe (aluminum alloy) shall conform to the specifications of AASHTO M-196 and section 945 of the Florida Department of Transportation's "Standard Specifications for Road and Bridge Construction."
- (2) *Excavation and foundation:* Trenches shall be excavated in sand to the required depth and where trench conditions permit, the bottom shall be shaped to fit the lower ninety (90) degrees of pipe.

Where trench conditions do not permit this shaping, the trench width shall be not less than twice the pipe diameter to permit thorough compaction of the backfill beneath the pipe.

Where rock is encountered, the trench shall be excavated eight (8) inches below grade and backfilled to grade with well compacted sand, pea rock or gravel. Where unstable foundation material is encountered it shall be replaced with sand or crushed rock of approved quality or cradles of approved design shall be used.

(3) *Pipe laying.* All pipe shall be carefully laid commencing at the lower end and proceeding upgrade, unless otherwise directed by the city engineer. All pipe shall be laid true to the lines and grades given. Any pipe which is not in true alignment or which shows any settlement after laying shall be taken up and relaid. Variation from true grade or alignment greater than one-half inch shall be considered sufficient to require relaying of the pipe.

- a. Concrete pipe shall be laid hubs upgrade with spigot end fully entered and carefully centered into the adjacent hub.
- b. Corrugated metal pipe shall be laid with the inside laps of circumferential joints facing downstream and with longitudinal laps on the sides.

(4) *Jointing:*

- a. Concrete pipe. Concrete pipe joints shall be sealed by using a rubber gasket conforming to article 5.9 of ASTM C-361 and shall fit the space provided in the pipe joint used. The gasket shall be stored in as cool a place as practical.
- b. Corrugated metal pipe. The joints for corrugated metal pipe shall follow the Florida Department of Transportation "Standard Specifications for Road and Bridge Construction."
- c. Aluminum pipe. The joints for aluminum pipe shall follow the Florida Department of Transportation "Standard Specifications for Road and Bridge Construction."

(5) *Backfilling:* The trench shall be backfilled to a point twelve (12) inches above the top of the pipe in lifts not exceeding twelve (12) inches, each lift being thoroughly compacted by hand or mechanical tamping. Backfill shall be placed on each side of the pipe in equal depths to prevent wedging the pipe out of alignment. The remainder of the trench shall then be filled in an approved manner. Backfill shall be carried to a sufficient elevation to offset settlement. The backfill material shall be approved by the engineer and shall be free from boulders, organic material or other deleterious material.

(Code 1964, § 8-5)

#### **Sec. 9-62. Catch basins.**

(a) Catch basins shall be constructed to the dimensions shown by the plans and of the materials called for. Catch basins constructed of concrete blocks shall have a one-half-inch exterior coating of mortar.

The base of all catch basins shall be a minimum eight-inch depth reinforced concrete pad.

(b) All catch basins shall be fitted with cast-iron grates and frames of size and material conforming to the approved plans.

(c) Aprons shall be constructed as shown by the plans and shall consist of a one-inch layer of asphaltic concrete over a six-inch compacted depth of limerock constructed in conformance with the specifications for road construction.

(Code 1964, § 8-5)

**Sec. 9-63. Obstructing, tampering with canals, ditches, etc.**

(a) No person shall wilfully or otherwise obstruct any canal, drain, ditch or watercourse, or damage or destroy any drainage works, or impede or obstruct the flow of water therein, constructed or maintained by the city.

(b) No person shall wilfully or otherwise cut into, excavate, dig into or in any way dig a ditch into or arrange for the discharge of water into any canals, ditches, drains or watercourses of the city without having first obtained a written consent from the city engineer.

(Code 1964, § 8-6)

**Sec. 9-64. Specifications for plantings on roadside swales.**

(a) Roadside swales may be utilized for the planting of trees, and of other plant material approved by the city landscape architect, to be planted in accordance with a street tree program accepted by the city council. Such plantings in the roadside swale areas shall be subject to planting plans submitted by a Florida registered landscape architect receiving the approval of the city landscape architect, city engineer, the applicable drainage district and the city council. The proposed plans shall:

- (1) Indicate the kinds of trees to be planted, the number of trees to be planted, the distance between the plantings and the location of the plantings; and
- (2) Indicate a consistency of species with existing street trees; the city landscape architect shall determine if a mix of species is appropriate for conditions that prevail.
- (3) Show required site triangles and clear zones.
- (4) Show existing drainage, grades and flow arrows.
- (5) Include proposed engineering plans for the drainage modifications approved by the city engineer and the respective drainage district.

Projects proposing planting within the swale portion of the road right-of-way shall not utilize swale drainage that requires use of the same area. Areas proposed for such landscaping shall require curb and gutter drainage (or an alternative approved by the city engineer).

(b) Once so planted, such trees and plantings shall be maintained by the adjacent property owners under the direction of the city. It shall be the duty of such property owners to give all trees opposite their real estate proper care and to do any and all things necessary to preserve and protect such approved trees and plantings. From and after the effective date of the ordinance from which this section is derived, no additional plantings shall be permitted on roadside swales other than those envisioned by the street system planting plan of the landscape architect as same exists when such plantings are done.

(c) All such trees and plantings installed in conformity with the street planting plans of the landscape architect shall be pruned under the direction and supervision of the landscape architect by city forces.

(d) No plantings in roadside swales may occur unless the right-of-way in the area is fifty (50) feet or more, and all such plantings in accordance with such plan shall be not more than eight (8) feet from the adjacent property owners' line unless a variance is justified by existing conditions and is permitted by the council. Any adjacent property owner wishing to implement the planting of approved trees or plants in the roadside swales adjacent to his property prior to the road being planted on a priority system to be determined by the city, may do so, so long as such tree or plant is placed at the distance from other contemplated trees and dug no deeper than the indicated depth for such tree or plant as specified by the landscape architect.

(e) It shall be unlawful for any person to cut, tear up, bruise or otherwise injure any tree or planting within the corporate limits of the city on property not owned by them, except under a permit to be issued by the city clerk.

(f) Final surveys submitted to the city building official shall include grade elevations for the roadside swale, including but not limited to that portion of the unpaved area lying between the paved roadway and the sidewalk, or, in the absence of sidewalk, that portion of the right-of-way where such sidewalk would normally be located. At the time of submission of the survey, such area shall be fully sodded in accordance with requirements of chapter 13. If more than twenty (20) percent of such swale area is paved, a drainage plan for such area shall be submitted and approved by the city engineer prior to issuance of a paving permit and confirmed as being properly built on such final survey.

(Code 1964, § 8-6.1; Ord. No. 2264, § 21, 11-28-2001)

**Cross References:** Landscaping, Ch. 13.

### **Sec. 9-65. Improper planting on or alteration of swales; correction; creation of lien.**

(a) Whenever any swale is shown to differ from the criteria approved by the office of the city engineer when such swale was originally installed or constructed and such difference is shown by the city engineer to adversely affect the intended watercourse function of the swale drainage of surface water from both the adjacent pavement of the road and of the adjacent private property, and otherwise is shown to create ponding of water for more than seventy-two (72) hours so as to create potential health hazards for citizens, the adjacent property owner shall be notified to reconstruct the swale to its originally approved design criteria. Upon the failure of the property owner to do so, the city shall be authorized to so reconstruct the swale area and place a lien upon the adjacent property for the costs involved therewith whenever the city can demonstrate that the driveway through the swale area serving the adjacent property has been reconstructed or the swale area itself has been so rebuilt through sanding or resodding as to have substantially contributed to the loss of functional use as a watercourse of the swale area and thus cause an undue ponding area.

(b) The city has adopted a street tree program and it shall be followed in every respect insofar as the

placement and species of trees planted and maintained within swale areas. If any unauthorized tree, undesirable species of tree, or other tree, is found within a swale which, due to such species or the location of its planting, or its method of growth creates root systems that impede the proper functioning of such swales (upon a finding by the city landscape architect and city engineer that such trees are so planted or maintained as to create disfunctions of the swale area insofar as surface water drainage is concerned), the adjacent property owner maintaining the swale area shall be required to remove the offending trees. If the owner fails to do so, the city shall be authorized to remove such plantings and reconstruct the swale area and place a lien upon the adjacent property for the costs involved therewith as contemplated by subsection (c) of this section.

If the tree(s) and/or planting are a desirable species and the city landscape architect determines that their preservation would benefit the street tree program and its purpose, the drainage system shall be modified or replaced consistent with section 9-59.

(c) This section shall be enforced and the lien rights imposed hereunder similar to the lot mowing ordinance now in force and effect within the city, and shall apply to all swales within the city on which original construction criteria was submitted and approved by the city engineer at the time of construction of the swales. (Code 1964, § 8-6.2; Ord. No. 2264, § 22, 11-28-2001)

**Sec. 9-66. Placement of survey stakes in designated drainage areas; city not liable for damage.**

(a) No person shall place or establish or allow to remain a lot boundary line survey stake in any area in the city which is designated on any recorded plat, or in any way dedicated to the city or the public as an easement for drainage purposes, or in any such designated or dedicated easement area wherein such easement area the city or any other governmental agency has the right and privilege to excavate or traverse or engage in any activity which would have the effect of covering up, digging out, or in any other way destroying such lot boundary line survey stakes.

(b) Any person violating subsection (a) shall have no recourse against the city with whom the city or any person with whom the city or the drainage district contracts, or any duly authorized representative of the city if such lot boundary survey stakes are in any way damaged or destroyed. (Code 1964, §§ 8-7, 8-8)

**Cross References:** Plat planning and development, Ch. 19; platting, Ch. 20.

**Secs. 9-67--9-70. Reserved.**

**ARTICLE V.**

**FLOOD INSURANCE\***

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\* **Editors Note:** Ord. No. 2104, § 4, adopted Sept. 18, 1996, enacted provisions pertaining to a fee for the elevation certificate used, in obtaining flood insurance. Such ordinance did not specify manner of codification; hence, designation as Art. V, § 9-71 has been at the discretion of the editor.

**Cross References:** Building permit fees, § 5-21 et seq.

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**Sec. 9-71. Elevation certificate fee.**

A fee of thirty dollars (\$30.00) shall be charged by the engineering department for providing an elevation certificate used in obtaining flood insurance.  
(Ord. No. 2104, § 4, 9-18-96)

**Secs. 9-72, 9-73. Reserved.**

## ARTICLE VI.

### ADMINISTRATION AND ENFORCEMENT CONCERNING STORMWATER SYSTEM\*

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\* **Editors Note:** Ord. No. 2264, §§ 23--26, adopted Nov. 28, 2001, added substantive provisions designated as §§ 9-74, 9-77--9-79. Such sections were included herein as an Art. VI, by the editor, for purposes of indexing and reference.

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#### **Sec. 9-74. Prohibitions, general.**

- (a) *Prohibited acts.* The following shall be violations of this Code:
- (1) Any discharge into the stormwater system of the city or drainage district without a city engineering permit and the appropriate drainage district permit(s).
  - (2) Any discharge into the stormwater system of the city or drainage district in violation of any city, federal, state, county, municipal or other governmental law, regulation or permit is prohibited, except those discharges authorized by a valid NPDES permit.
  - (3) Any discharge to the stormwater system that is not composed entirely of stormwater is prohibited, except as authorized by a valid NPDES permit.
  - (4) Blocking, filling, altering or obstructing any drainage course, swale, canal, ditch or any type of stormwater management facility in a manner which alters the intended use of the facility, whether the facility is located on public right-of-way, dedicated easement, or private property is strictly prohibited unless specifically authorized by the city and the appropriate drainage districts.
  - (5) Development of a parcel of land shall be prohibited from non-permitted discharges onto adjacent parcels of land.
  - (6) Failure to properly maintain a stormwater management facility so that it operates as originally designed or permitted is strictly prohibited. If a stormwater system ceases to fully function as intended, the property owner may be required to replace or rebuild said system.
  - (7) A failure to fulfill the requirements of section 9-78 of this Code.
  - (8) A violation of any other mandatory provision of this chapter.

(b) *Authority to issue cease and desist orders for prohibited activities.* Whenever the city engineer determines that conditions or activities exist which require immediate action to protect the public health, safety,

or welfare, the city engineer or his or her designee is hereby authorized to take all actions reasonably necessary to preserve the public health, safety and general welfare, including to enter upon any property within the city at such reasonable times as the city engineer deems necessary for the purposes of testing, inspecting, investigating, measuring, and sampling the property where prohibited activities may exist. The city engineer may issue cease and desist orders to effectuate the immediate discontinuance of any activity that the city engineer determines causes or tends to cause a prohibited activity or condition. Failure to comply with such order shall constitute a separate violation of this Code for each day the activity continues. This order may be made orally provided written notice of such order is subsequently issued in a prompt fashion.

(c) *Liability for pollution abatement.* Any person, entity or property owner who discharges pollutants into any waters of the state or stormwater systems or who fails to correct any prohibited condition or discontinue any prohibited activity at the city engineer's request, shall be responsible to pay the necessary expenses incurred by the city in carrying out any pollution abatement activities undertaken by the city to preserve the public's health, safety and general welfare, including any expenses incurred in testing, measuring, sampling, collecting, removing, containing, treating, and disposing of the pollutant materials in addition to assessed fines and legal fees.

(Ord. No. 2264, § 23, 11-28-01)

**Secs. 9-75, 9-76. Reserved.**

**Sec. 9-77. Permits, plan reviews, inspections and administrative fees.**

It shall be unlawful for any person or organization to construct, enlarge, alter, repair, relocate, or demolish a storm sewer, natural watercourse or other drainage facility, without first filing an application and obtaining a proper permit from the city's engineering department.

The city shall require the payment of administrative fees to defray certain administrative costs incurred by the city's engineering department, including but not limited to permit application and plan review, inspection and engineering review for each project. Payment shall be due upon submission of the permit application. The administrative fee shall equal five (5) percent of the estimated costs of drainage infrastructure improvements to be constructed as certified by the developer's professional engineer.

All private persons which own or operate surface water management systems within the city shall be required to have an annual inspection of their system by a professional engineer licensed in Florida. The owner or operator shall pay an annual administrative fee of twenty-five dollars (\$25.00) and any required inspection fees that may be applicable. Their engineer shall fill out a questionnaire and certify in a manner acceptable to the city engineer whether the system is in compliance with permits for the system on an annual basis. Every five (5) years, the entity shall submit a report to the city, which includes the annual certifications for each of the preceding five (5) years. If at the end of any year, there is found to be a problem with the system, it shall be brought to the attention of the city engineer and corrective action taken.

(Ord. No. 2264, § 24, 11-28-01)

**Sec. 9-78. Administrative policies.**

(a) In order to accomplish the purposes of this article, the city engineer may establish or amend such administrative policies as are necessary and reasonable to protect the drainage facilities, improvements and

properties of the city's stormwater system, and to prescribe the manner of their use by any person. Official copies of said administrative policies shall be maintained in the offices of the city engineer. The authority to establish or amend policies shall also include the establishment and maintenance of design and construction standards, details and specifications for all stormwater management facilities constructed within the city.

(b) The City of Plantation's Stormwater and Floodplain Management Plan, the guidelines and requirements of the South Florida Water Management District's Environmental Resource Permit Information Manual IV, the Old Plantation Water Control District Minimum Requirements and Standards of Construction and Stormwater Management Design Criteria and the Plantation Acres Improvement District Policies and Procedures Manual, and periodic updates of each, and official copies of the foregoing shall be maintained in the offices of the city engineer.

(c) The City of Plantation Stormwater and Floodplain Management Plan is hereby approved and incorporated into this Code by reference. This plan may be amended from time to time by city resolution. (Ord. No. 2264, § 24, 11-28-01)

### **Sec. 9-79. Discharges into the municipal stormwater management system.**

- (a) *Construction sites and construction activities.*
- (1) Construction sites and operations shall be required to maintain during and after all construction, development excavation or alteration operations, structural and non-structural best management practices with the intent to reduce pollutants and sediment in stormwater runoff.
  - (2) NPDES permit requirements for industrial activity: Any person subject to an industrial facility NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the director as a condition to obtaining and maintaining a local business tax receipt, building permit, upon inspection of facility, during any enforcement proceeding or action, or at any other time.
  - (3) Construction and operations site plans and permits shall be required and reviewed by the director prior to the initiation of construction operations. Site plans shall include descriptions of structures, procedures, or control measures designed to reduce and control sediment and pollutant loadings.
  - (4) Construction or construction operations over any existing or planned stormwater management system or any operations causing interference with any stormwater management system shall not be permitted.
  - (5) Inspections for monitoring shall be developed to be carried out during and after the construction (as conditions to the permit) to determine and verify compliance with this section.
- (b) *Industrial sites and industrial activities.*
- (1) Industrial sites and industrial activities determined by the director to contribute pollutant loadings to stormwater or the stormwater management system shall be inspected and monitored

by the director to verify compliance with this section.

- (2) NPDES permit requirements for industrial activity: Any person subject to an industrial facility NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the director as a condition to obtaining and maintaining a local business tax receipt, building permit, upon inspection of facility, during any enforcement proceeding or action, or at any other time.
  - (3) It shall be unlawful to deposit, spill, dump, or introduce any material or pollutants that may contribute contamination to any surface area, storm sewer system, or stormwater runoff. It shall be unlawful to deposit, spill dump or introduce to any surface area, storm sewer system, or stormwater runoff:
    - a. Substances that settle to form sludge or sedimentation deposits.
    - b. Floatable or suspended substances such as debris, oil, scum, and other materials.
    - c. Any petroleum produce, infectious matter, toxic or hazardous substance or hazardous material onto surface areas or to stormwater management systems.
    - d. Industrial wastewater, domestic cooling, or any other wastewater into any sewer designated to carry stormwater without prior approval by the city engineer.
  - (4) Any site and or activity identified as contributing any material and or pollutants to any surface area, storm sewer system, or stormwater runoff shall be required:
    1. To develop and initiate structural systems and or non-structural management practices designed to reduce and control the contribution or pollutants to stormwater, surface areas or to stormwater management systems.
    2. To be inspected and monitored by the director in order to verify compliance with this section.
- (c) *Illicit discharges and illicit connections.*
- (1) Prohibition of illicit discharges. Any dumping, spilling, or discharging of any non-stormwater material to any surface area or stormwater management system shall be prohibited unless allowed by prior written approval from the city engineer. Prohibited illicit discharges shall require spill response, spill control, and spill clean up as designated and prescribed by the city engineer.
  - (2) Prohibition of illicit connections:
    - a. The construction, use, maintenance or continued existence of connections to a storm drain system that is not permitted under this Code.

- b. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(d) *Litter, littering material.* The accumulation, placing, sweeping, scattering, throwing, or dumping of litter, or littering material such as dead plants, yard clippings, stagnant water, rubbish, debris, trash, refuse, including any wrecked derelict or partially dismantled motor vehicle, trailer, boats, machinery, appliances, furniture or similar article, or any unsanitary, hazardous or significant material or other noxious matter upon any surface area, stormwater management system or waterbody within the city is hereby prohibited.

(e) *Water management works, erosion control.* The city is hereby authorized and empowered to exercise jurisdiction, to control, and to require, construct, reconstruct or improve stormwater management works which provide for the collection, storage, treatment, and conveyance of stormwater including systems such as structural controls, erosion prevention facilities and flood control and management systems within the jurisdiction of the city in compliance with the stormwater management regulations as outlined in this article.

(f) *Enforcement procedures.* It shall be unlawful for any person to violate any of the provisions of this article, or any lawful order of the city engineer, or his or her designee.

(g) *Determination of compliance or noncompliance.* The director, or his or her designee, shall be granted the authority to determine the compliance or noncompliance with this article of a stormwater management system or non-stormwater discharge to a stormwater system, water body or surface area. This determination shall not need to be based on investigation, surveillance, monitoring, sampling, testing.

(h) *Notice of violation.*

(1) Whenever the city engineer, or his or her designee, finds that a person has violated a prohibition or failed to meet a requirement of this article, the director may order compliance by written notice of violation to the responsible person such notice may require without limitation:

- a. The performance of monitoring, analysis and reporting;
- b. The elimination of illicit connections or discharges;
- c. That violating discharges, practices or operations shall cease and desist;
- d. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
- e. The implementation of source control or treatment BMPs.

(2) If abatement of a violation or restoration of affected property is required the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that should the violator fail to remediate or restore within the established designated by the city engineer and the expense thereof shall be charged to the violator.

(i) *Remedy for noncompliance.*

- (1) Upon determination of a violation of this article, the city may seek a fine in the maximum amount permitted by law.
- (2) Additional charges against the violator may be assessed in an enforcement action in an amount needed to reimburse the city for any environmental damage, mitigation, any cost of remediation and enforcement costs.
- (3) Upon determination of a violation of this article, the violator shall bear all costs incurred for cleanup, enforcement action and remediation.
- (4) Each day during any portion of which a violation occurs constitutes a separate violation.
- (5) The city may seek injunctive or other relief to enforce this article.
- (6) The enumeration of any rights, fines, relief, or causes of action to enforce this article shall be supplemental and cumulative to any other rights, remedies, rights to seek fines and imprisonment, or other remedies of the city to enforce its law.

(j) *Stormwater inspections and monitoring procedures.* The city may enter, perform inspections, surveillance and monitoring procedures, within reasonable hours, on and of all structures and premises, and shall have free access to copying or reviewing pertinent records of a facility, system or premises, to ascertain the state of compliance with the laws, rules and regulations of the city, state and federal government regarding compliance as outlined in this article.

- (1) The compliance personnel of the enforcing agency shall be provided with official identification and shall exhibit such identification when performing inspections.
- (2) The owner, operator, lessees, occupant or person in charge of the structure or premises shall give the inspecting officer free access for the purpose of making such inspections without hampering, obstructing, or interfering with such obstruction.

(Ord. No. 2264, § 26, 11-28-01; Ord. No. 2379, § 4, 12-13-2006)