

ORDINANCE NO. 2024-O-05

AN ORDINANCE OF THE CITY OF EDGEWATER, FLORIDA, AMENDING ARTICLE II (DEFINITIONS), OF CHAPTER 21 (LAND DEVELOPMENT CODE); PROVIDING FOR CONFLICTING PROVISIONS, SEVERABILITY AND APPLICABILITY; PROVIDING FOR AN EFFECTIVE DATE, ADOPTION AND CODIFICATION.

WHEREAS, the City Council of the City of Edgewater, Florida, has made the following determinations:

1. On July 10, 2000, City Council adopted Ordinance #2000-O-12 which enacted Chapter 21 (Land Development Code) of the City of Edgewater Code of Ordinances.
2. On June 5, 2017, City Council adopted Ordinance # 2017-O-16 which amended and restated Chapter 21 (Land Development Code), Article II (Definitions), Article III (Permitted, Conditional, Accessory and Prohibited Uses), Article V (Site Design Regulations), and Article VI (Sign Regulations).
3. Adoption of this Ordinance will modify the above-referenced Articles of Chapter 21 (Land Development Code).

NOW, THEREFORE, BE IT ENACTED by the People of the City of Edgewater, Florida:

PART A. AN ORDINANCE OF THE CITY OF EDGEWATER, FLORIDA, AMENDING ARTICLE IV (RESOURCE PROTECTION STANDARDS) AND ARTICLE V (SITE DESIGN) OF CHAPTER 21 (LAND DEVELOPMENT CODE); PROVIDING FOR CONFLICTING PROVISIONS, SEVERABILITY AND APPLICABILITY; PROVIDING FOR AN EFFECTIVE DATE, ADOPTION AND CODIFICATION.

Amend Chapter 21 (Land Development Code) of the City of Edgewater, Florida by amending Article IV (Resource Protection Standards) and Article V (Site Design) as set forth in **Exhibit “A”**, which is attached hereto and incorporated herein.

PART B. CONFLICTING PROVISIONS.

All conflicting ordinances and resolutions, or parts thereof, in conflict with this ordinance, are hereby superseded by this ordinance to the extent of such conflict.

PART C. SEVERABILITY AND APPLICABILITY.

If any portion of this ordinance is for any reason held or declared to be unconstitutional, inoperative, or void by a court of competent jurisdiction, such holding shall not affect the remaining portions of this ordinance. If this ordinance or any provisions thereof shall be held to be inapplicable to any person, property, or circumstances by a court of competent jurisdiction, such holding shall not affect its applicability to any other person, property, or circumstance.

PART D. CODIFICATION.

Provisions of this ordinance shall be incorporated in the Code of Ordinances of the City of Edgewater, Florida, and the word “ordinance”, may be changed to “section”, “article”, or other appropriate word, and the sections of this ordinance may be renumbered or re-lettered to accomplished such intention; provided, however, that Parts B through F shall not be codified.

PART E. EFFECTIVE DATE.

This Ordinance shall take place upon adoption.

PASSED AND DULY ADOPTED this ____ day of _____, 2024.

Diezel DePew, Mayor

ATTEST:

Bonnie Zlotnik, CMC, City Clerk

Passed on first reading on the ____ day of _____, 2024

REVIEWED AND APPROVED: _____
Aaron R. Wolfe, City Attorney

EXHIBIT “A”

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ARTICLE IV

RESOURCE PROTECTION STANDARDS

SECTION 21-40 - GENERAL PROVISIONS

21-40.01 - Purpose

The purpose of this Article is to establish the criteria for the protection, maintenance, enhancement and utilization of natural resources within the City of Edgewater in accordance with the adopted Comprehensive Plan. In conformance with the requirements of the Comprehensive Plan, standards and criteria contained herein implement the specific Comprehensive Plan.

In addition to City-wide resource protection standards contained in this Article, the City of Edgewater has adopted the Indian River Boulevard Corridor Design Regulations and the Ridgewood Avenue Corridor Design Regulations which are incorporated as Article XVIII and Article XX respectively in this Land Development Code. Requirements contained in Article XVIII, Indian River Boulevard Corridor Standards and Article XX, Ridgewood Avenue Corridor Design Regulations include specific treatment for conservation lands located adjacent to Indian River Boulevard and Ridgewood Avenue. While Article XVIII shall generally supersede the requirements set forth in Article IV, Resource Protection Standards, the intent and purpose of resource protection standards plus all applicable comprehensive plan policies for conservation areas shall be adhered to for development within the designated Indian River Boulevard Corridor and Ridgewood Avenue Corridor.

SECTION 21-41 - WETLANDS

21-41.01 - Comprehensive Plan Reference

The provisions of Section 21-41 - Wetlands are consistent with and implement the Comprehensive Plan contained in the Future Land Use Element, Utilities Element, Coastal Element and Conservation Element.

It is the intent of this Article to provide for the protection, maintenance, enhancement and utilization of wetlands within the City recognizing the rights of property owners to use their lands in a reasonable manner as well as the right of all citizens for the protection and purity of the waters of the City. It is the policy of the City to minimize the disturbances of wetlands and to encourage their use only for the purposes that are compatible with their natural functions and environmental benefits.

21-41.02 - Wetland Identification

Wetlands are defined in Section 21-20. Where the natural boundary of wetland vegetation is unclear, the line of demarcation may be approximated at a surveyed elevation measured at a location in the same wetland where the natural line is clear. In the event an undeveloped area

has been recently cleared of all vegetation, the wetland boundary may be determined by soil type, aerial mapping, photography, hydrology or other historical information as appropriate and approved by the City. The most restrictive wetland boundary as determined by authorized regulatory agencies shall be accepted.

21-41.03 - Permit Requirements

It is hereby unlawful for any person to engage in any activity which will remove, fill, drain, dredge, clear, destroy or alter any wetland or wetland buffer as defined in Article II on any lot or portion thereof without obtaining a wetland alteration permit in accordance with the provisions of this Article. An applicant must obtain all other required permits from all appropriate agencies. Unless proper Federal/State approval has been granted a Wetland Alteration Permit must be obtained from the City and/or Volusia County. Wetland Alteration Permits may be issued concurrent or in conjunction with other land development permits. It is the intent of this Section that construction of a single-family dwelling on upland areas which do not alter by removing, filling, draining, dredging, clearing or destroying any wetland or wetland buffer shall not require a separate wetland alteration permit pursuant to this Section.

21-41.04 - Buffer Requirements

- a. A minimum buffer of fifty feet (50') upland from the mean high water line and a minimum of twenty-five feet (25') upland from the wetland boundary shall be established adjacent to and surrounding all wetlands. The buffer may coincide with the required setback on a lot pursuant to Article V. There shall be no development activities in the buffer, except for direct access to water bodies.
- b. Maintenance activities which do not have a significant adverse effect on the natural function of the buffer may be allowed within the buffer. The activities which may be permitted include but are not limited to pruning, planting of suitable native vegetation, removal of exotic and nuisance pioneer plant species and the creation and maintenance of walking trails. See Section 21-53.07 for shoreline protection standards.

SECTION 21-42 - FLOOD PLAINS

21-42.01 - Comprehensive Plan Reference

The provisions of Section 21-42 - Flood Plains are consistent with and implement the Comprehensive Plan contained in the Future Land Use Element, Coastal Element and Conservation Element.

21-42.02 – Administration

a. General

1. Title - These regulations shall be known as the *Floodplain Management Ordinance* of the City of Edgewater, hereinafter referred to as “this Section.”

2. Scope - The provisions of this Section shall apply to all development that is wholly within or partially within any flood hazard area, including but not limited to the subdivision of land; filling, grading, and other site improvements and utility installations; construction, alteration, remodeling, enlargement, improvement, replacement, repair, relocation or demolition of buildings, structures, and facilities that are exempt from the *Florida Building Code*; placement, installation, or replacement of manufactured homes and manufactured buildings; installation or replacement of tanks; placement of recreational vehicles; installation of swimming pools; and any other development.
3. Intent – Development within flood prone areas is strongly discouraged. The purposes of this Section and the flood load and flood resistant construction requirements of the *Florida Building Code* are to establish minimum requirements to safeguard the public health, safety, and general welfare and to minimize public and private losses due to flooding through regulation of development in flood hazard areas to:
 - (a) Minimize unnecessary disruption of commerce, access and public service during times of flooding;
 - (b) Require the use of appropriate construction practices in order to prevent or minimize future flood damage;
 - (c) Manage filling, grading, dredging, mining, paving, excavation, drilling operations, storage of equipment or materials, and other development which may increase flood damage or erosion potential;
 - (d) Manage the alteration of flood hazard areas, watercourses, and shorelines to minimize the impact of development on the natural and beneficial functions of the floodplain;
 - (e) Minimize damage to public and private facilities and utilities;
 - (f) Help maintain a stable tax base by providing for the sound use and development of flood hazard areas;
 - (g) Minimize the need for future expenditure of public funds for flood control projects and response to and recovery from flood events; and
 - (h) Meet the requirements of the National Flood Insurance Program for community participation as set forth in the Title 44 Code of Federal Regulations, Section 59.22.
4. Coordination with the *Florida Building Code* - This Section is intended to be administered and enforced in conjunction with the *Florida Building Code*. Where cited, ASCE 24 refers to the edition of the standard that is referenced by the *Florida Building Code*.

5. Warning - The degree of flood protection required by this Section and the *Florida Building Code*, as amended by the City, is considered the minimum reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur. Flood heights may be increased by man-made or natural causes. This Section does not imply that land outside of mapped special flood hazard areas, or that uses permitted within such flood hazard areas, will be free from flooding or flood damage. The flood hazard areas and base flood elevations contained in the Flood Insurance Study and shown on Flood Insurance Rate Maps and the requirements of Title 44 Code of Federal Regulations, Sections 59 and 60 may be revised by the Federal Emergency Management Agency, requiring the City to revise these regulations to remain eligible for participation in the National Flood Insurance Program. No guarantee of vested use, existing use, or future use is implied or expressed by compliance with this Section.
6. Disclaimer of Liability - This Section shall not create liability on the part of the City Council of the City of Edgewater or by any officer or employee thereof for any flood damage that results from reliance on this Section or any administrative decision lawfully made there under.

b. Applicability

1. General - Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.
2. Areas to which this Section applies - This Section shall apply to all flood hazard areas within the City of Edgewater, as established in Section 21-42.02b.3 of this Section. No structure or land shall hereafter be located, extended, converted, or structurally altered within identified special flood hazard areas without compliance with the terms of this Section and all other applicable regulations. Provisions for flood hazard reduction shall be enforced upon all proposed development and re-development located within the City independent of proposed land use. No grandfathering provisions will be allowed for lots of record, platted subdivisions, etc.
3. Basis for establishing flood hazard areas - The “Flood Insurance Study for Volusia County, Florida and Incorporated Areas” dated September 29, 2017, and all subsequent amendments and revisions, and the accompanying Flood Insurance Rate Maps (FIRM), and all subsequent amendments and revisions to such maps, are adopted by reference as a part of this Section and shall serve as the minimum basis for establishing flood hazard areas. Studies and maps that establish flood hazard areas are on file at the City Development Services Department, 104 North Riverside Drive, Edgewater, FL 32132.
 - (a) Submission of additional data to establish flood hazard areas - To establish flood hazard areas and base flood elevations, pursuant to Section 21-

42.02e. of this Section the Floodplain Administrator may require submission of additional data. Where field surveyed topography prepared by a Florida licensed professional surveyor or digital topography accepted by the community indicates that ground elevations:

- (1) Are below the closest applicable base flood elevation, even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as flood hazard area and subject to the requirements of this Section and, as applicable, the requirements of the *Florida Building Code*.
 - (2) Are above the closest applicable base flood elevation, the area shall be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the special flood hazard area.
4. Other laws - The provisions of this Section shall not be deemed to nullify any provisions of local, state or federal law.
5. Abrogation and greater restrictions - This Section supersedes any ordinance in effect for management of development in flood hazard areas. However, it is not intended to repeal or abrogate any existing ordinances including but not limited to land development regulations, zoning ordinances, stormwater management regulations, or the *Florida Building Code*. In the event of a conflict between this Section and any other ordinance, the more restrictive shall govern. This Section shall not impair any deed restriction, covenant or easement, but any land that is subject to such interests shall also be governed by this Section.
6. Interpretation - In the interpretation and application of this Section, all provisions shall be:
 - (a) Considered as minimum requirements;
 - (b) Liberally construed in favor of the governing body; and
 - (c) Deemed neither to limit nor repeal any other powers granted under state statutes.

c. Duties and Powers of the Floodplain Administrator

1. Designation - The Development Services Director and/or the designee thereof is designated as the Floodplain Administrator. The Floodplain Administrator may delegate performance of certain duties to other employees.
2. General - The Floodplain Administrator is authorized and directed to administer and enforce the provisions of this Section. The Floodplain Administrator shall have the authority to render interpretations of this Section consistent with the

intent and purpose of this Section and may establish policies and procedures in order to clarify the application of its provisions. Such interpretations, policies, and procedures shall not have the effect of waiving requirements specifically provided in this Section without the granting of a variance pursuant to Section 107 of this Section.

3. Applications and permits - The Floodplain Administrator, in coordination with other pertinent offices of the City, shall:
 - (a) Review applications and plans to determine whether proposed new development will be located in flood hazard areas;
 - (b) Review applications for modification of any existing development in flood hazard areas for compliance with the requirements of this Section;
 - (c) Interpret flood hazard area boundaries where such interpretation is necessary to determine the exact location of boundaries; a person contesting the determination shall have the opportunity to appeal the interpretation;
 - (d) Provide available flood elevation and flood hazard information;
 - (e) Determine whether additional flood hazard data shall be obtained from other sources or shall be developed by an applicant;
 - (f) Review applications to determine whether proposed development will be reasonably safe from flooding;
 - (g) Issue floodplain development permits or approvals for development other than buildings and structures that are subject to the *Florida Building Code*, including buildings, structures and facilities exempt from the *Florida Building Code*, when compliance with this Section is demonstrated, or disapprove the same in the event of noncompliance; and
 - (h) Coordinate with and provide comments to the Building Official to assure that applications, plan reviews, and inspections for buildings and structures in flood hazard areas comply with the applicable provisions of this Section.
4. Substantial improvement and substantial damage determinations - For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:
 - (a) Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the

building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;

- (b) Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;
 - (c) Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and
 - (d) Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the *Florida Building Code* and this Section is required.
- 5. Modifications of the strict application of the requirements of the *Florida Building Code* - The Floodplain Administrator shall review requests submitted to the Building Official that seek approval to modify the strict application of the flood load and flood resistant construction requirements of the *Florida Building Code* to determine whether such requests require the granting of a variance pursuant to Section 21-42.02g of this Section.
- 6. Notices and orders - The Floodplain Administrator shall coordinate with appropriate local agencies for the issuance of all necessary notices or orders to ensure compliance with this Section.
- 7. Inspections - The Floodplain Administrator shall make the required inspections as specified in Section 21-42.02f of this Section for development that is not subject to the *Florida Building Code*, including buildings, structures and facilities exempt from the *Florida Building Code*. The Floodplain Administrator shall inspect flood hazard areas to determine if development is undertaken without issuance of a permit.
- 8. Other duties of the Floodplain Administrator - The Floodplain Administrator shall have other duties, including but not limited to:
 - (a) Establish, in coordination with the Building Official, procedures for administering and documenting determinations of substantial improvement and substantial damage made pursuant to Section 21-42.02c.4 of this Section;
 - (b) Require that applicants proposing alteration of a watercourse notify adjacent communities and the Florida Division of Emergency

Management, State Floodplain Management Office, and submit copies of such notifications to the Federal Emergency Management Agency (FEMA);

- (c) Require applicants who submit hydrologic and hydraulic engineering analyses to support permit applications to submit to FEMA the data and information necessary to maintain the Flood Insurance Rate Maps if the analyses propose to change base flood elevations, flood hazard area boundaries, or floodway designations; such submissions shall be made within 6 months of such data becoming available;
 - (d) Review required design certifications and documentation of elevations specified by this Section and the *Florida Building Code* and this Section to determine that such certifications and documentations are complete; and
 - (e) Notify the Federal Emergency Management Agency when the corporate boundaries of the City are modified.
9. Floodplain management records - Regardless of any limitation on the period required for retention of public records, the Floodplain Administrator shall maintain and permanently keep and make available for public inspection all records that are necessary for the administration of this Section and the flood resistant construction requirements of the *Florida Building Code*, including Flood Insurance Rate Maps; Letters of Change; records of issuance of permits and denial of permits; determinations of whether proposed work constitutes substantial improvement or repair of substantial damage; required design certifications and documentation of elevations specified by the *Florida Building Code* and this Section; notifications to adjacent communities, FEMA, and the state related to alterations of watercourses; assurances that the flood carrying capacity of altered watercourses will be maintained; documentation related to appeals and variances, including justification for issuance or denial; and records of enforcement actions taken pursuant to this Section and the flood resistant construction requirements of the *Florida Building Code*. These records shall be available for public inspection at the City Development Services Department, 104 North Riverside Drive, Edgewater, FL 32132.

d. Permits

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

Section and all other applicable codes and regulations has been satisfied. The standards for issuing development permits shall comply with Title 44 Code of Federal Regulations Chapter 1, Section 60.3 Parts (A), (B), and (C), and are described in this Section.

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

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

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

(9) Structures identified in section 553.73(10)(k), F.S., are not exempt from the *Florida Building Code* if such structures are located in flood hazard areas established on Flood Insurance Rate Maps

3. Application for a permit or approval - To obtain a floodplain development permit or approval the applicant shall first file an application in writing on a form furnished by the community. The information provided shall:
 - (a) Identify and describe the development to be covered by the permit or approval.
 - (b) Describe the land on which the proposed development is to be conducted by legal description, street address or similar description that will readily identify and definitively locate the site.
 - (c) Indicate the use and occupancy for which the proposed development is intended.
 - (d) Be accompanied by a site plan or construction documents as specified in Section 105 of this Section.
 - (e) State the valuation of the proposed work.
 - (f) Be signed by the applicant or the applicant's authorized agent.
 - (g) Give such other data and information as required by the Floodplain Administrator.
4. Validity of permit or approval - The issuance of a floodplain development permit or approval pursuant to this Section shall not be construed to be a permit for, or approval of, any violation of this Section, the *Florida Building Codes*, or any other ordinance of the City. The issuance of permits based on submitted applications, construction documents, and information shall not prevent the Floodplain Administrator from requiring the correction of errors and omissions.
5. Expiration - A floodplain development permit or approval shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized is suspended or abandoned for a period of 180 days after the work commences. Extensions for periods of not more than 180 days each shall be requested in writing and justifiable cause shall be demonstrated.
6. Suspension or revocation - The Floodplain Administrator is authorized to suspend or revoke a floodplain development permit or approval if the permit was issued in error, on the basis of incorrect, inaccurate or incomplete information, or in violation of this Section or any other ordinance, regulation or requirement of the City.

7. Other permits required - Floodplain development permits and building permits shall include a condition that all other applicable state or federal permits be obtained before commencement of the permitted development, including but not limited to the following:
 - (a) The St. Johns River Water Management District; section 373.036, F.S.
 - (b) Florida Department of Health for onsite sewage treatment and disposal systems; section 381.0065, F.S. and Chapter 64E-6, F.A.C.
 - (c) Florida Department of Environmental Protection for activities subject to the Joint Coastal Permit; section 161.055, F.S.
 - (d) Florida Department of Environmental Protection for activities that affect wetlands and alter surface water flows, in conjunction with the U.S. Army Corps of Engineers; Section 404 of the Clean Water Act.
 - (e) Federal permits and approvals.

e. Site Plans and Construction Documents

1. Information for development in flood hazard areas - The site plan or construction documents for any development subject to the requirements of this Section shall be drawn to scale and shall include, as applicable to the proposed development:
 - (a) Delineation of flood hazard areas, floodway boundaries and flood zone(s), base flood elevation(s), and ground elevations if necessary for review of the proposed development. Topographic and special flood hazard area mapping shall provide a minimum accuracy to a tenth of a foot (i.e. 1-foot topographic contour interval and base flood elevation to one decimal accuracy). USGS Quadrangle maps depicting 5-foot topographic contours are not adequate to comply with these design standards.
 - (b) Where base flood elevations, or floodway data are not included on the FIRM or in the Flood Insurance Study, they shall be established in accordance with Section 21-42.02e.2(b) or (c) of this Section.
 - (c) Where the parcel on which the proposed development will take place will have more than 50 lots or is larger than 5 acres and the base flood elevations are not included on the FIRM or in the Flood Insurance Study, such elevations shall be established in accordance with Section 21-42.02e.2(a) of this Section.
 - (d) Location of the proposed activity and proposed structures, and locations of existing buildings and structures.
 - (e) Location, extent, amount, and proposed final grades of any filling, grading, or excavation.
 - (f) Where the placement of fill is proposed, the amount, type, and source of

fill material; compaction specifications; a description of the intended purpose of the fill areas; and evidence that the proposed fill areas are the minimum necessary to achieve the intended purpose.

- (g) Existing and proposed alignment of any proposed alteration of a watercourse.
- (h) The SHGWT shall be established by drilling a sufficient number of geotechnical borings whereas the SHWL shall be determined by an ecological assessment of hydric soils, vegetative cover, wetland species, lichen lines, etc. The SHWL and/or SHGWT shall be determined for all wetlands, depressions, and any other low areas within the property boundary that are capable of impounding stormwater runoff on the undeveloped property.

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

2. Information in flood hazard areas without base flood elevations (approximate Zone A) - Where flood hazard areas are delineated on the FIRM and base flood elevation data have not been provided, the Floodplain Administrator shall:
 - (a) Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices.
 - (b) Obtain, review, and provide to applicants base flood elevation and floodway data available from a federal or state agency or other source or require the applicant to obtain and use base flood elevation and floodway data available from a federal or state agency or other source.
 - (c) Where base flood elevation and floodway data are not available from another source, where the available data are deemed by the Floodplain Administrator to not reasonably reflect flooding conditions, or where the available data are known to be scientifically or technically incorrect or otherwise inadequate:
 - (1) Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices; or
 - (2) Specify that the base flood elevation is three (3) feet above the highest adjacent grade at the location of the development, provided there is no evidence indicating flood depths have been or may be greater than three (3) feet.
 - (d) Where the base flood elevation data are to be used to support a Letter of Map Change from FEMA, advise the applicant that the analyses shall be

prepared by a Florida licensed engineer in a format required by FEMA, and that it shall be the responsibility of the applicant to satisfy the submittal requirements and pay the processing fees.

3. Additional analyses and certifications - As applicable to the location and nature of the proposed development activity, and in addition to the requirements of this section, the applicant shall have the following analyses signed and sealed by a Florida licensed engineer for submission with the site plan and construction documents:
 - (a) For development activities proposed to be located in a regulatory floodway, a floodway encroachment analysis that demonstrates that the encroachment of the proposed development will not cause any increase in base flood elevations; where the applicant proposes to undertake development activities that do increase base flood elevations, the applicant shall submit such analysis to FEMA as specified in Section 21-42.02e.4 of this Section and shall submit the Conditional Letter of Map Revision, if issued by FEMA, with the site plan and construction documents.
 - (b) For development activities proposed to be located in a riverine flood hazard area for which base flood elevations are included in the Flood Insurance Study or on the FIRM and floodways have not been designated, hydrologic and hydraulic analyses that demonstrate that the cumulative effect of the proposed development, when combined with all other existing and anticipated flood hazard area encroachments, will not increase the base flood elevation more than ~~one-four~~ (14) ~~foot-inches~~ at any point within the community. This requirement does not apply in isolated flood hazard areas not connected to a riverine flood hazard area or in flood hazard areas identified as Zone AO or Zone AH.
 - (c) For alteration of a watercourse, an engineering analysis prepared in accordance with standard engineering practices which demonstrates that the flood-carrying capacity of the altered or relocated portion of the watercourse will not be decreased, and certification that the altered watercourse shall be maintained in a manner which preserves the channel's flood-carrying capacity; the applicant shall submit the analysis to FEMA as specified in Section 21-42.02e.4 of this Section.
4. Submission of additional data - When additional hydrologic, hydraulic or other engineering data, studies, and additional analyses are submitted to support an application, the applicant has the right to seek a Letter of Map Change from FEMA to change the base flood elevations, change floodway boundaries, or change boundaries of flood hazard areas shown on FIRMs, and to submit such data to FEMA for such purposes. The analyses shall be prepared by a Florida

licensed engineer in a format required by FEMA. Submittal requirements and processing fees shall be the responsibility of the applicant.

f. Inspections

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

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

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

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

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

(b) If the elevation used to determine the required elevation of the lowest floor was determined in accordance with Section 21-42.02e.2.(c)(2) of this Section, the documentation of height of the lowest floor above highest adjacent grade, prepared by the owner or the owner's authorized agent.

(2) Buildings, structures and facilities exempt from the *Florida Building Code*, final inspection - As part of the final inspection, the owner or owner's authorized agent shall submit to the Floodplain Administrator a final certification of elevation of the lowest floor or final documentation of the height of the lowest floor above the highest adjacent grade; such certifications and documentations shall be prepared as specified in Section 21-42.02f.1.(b)(1) of this Section.

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

g. Variances and Appeals

1. General - Any Variances to the requirements of this Section shall be administered pursuant to the requirements of Section 21-100. Any appeals of the decisions of any City officials shall be in accordance with the procedure contained in Article I of the Land Development Code..
2. Restrictions in floodways - A variance shall not be issued for any proposed development in a floodway if any increase in base flood elevations would result, as evidenced by the applicable analyses and certifications required in Section 21-42.02e.3 of this Section.
3. Historic buildings - A variance is authorized to be issued for the repair, improvement, or rehabilitation of a historic building that is determined eligible for the exception to the flood resistant construction requirements of the *Florida Building Code, Existing Building*, Chapter 12 Historic Buildings, upon a determination that the proposed repair, improvement, or rehabilitation will not preclude the building's continued designation as a historic building and the variance is the minimum necessary to preserve the historic character and design of the building. If the proposed work precludes the building's continued designation as a historic building, a variance shall not be granted and the building and any repair, improvement, and rehabilitation shall be subject to the requirements of the *Florida Building Code*.
4. Functionally dependent uses - A variance is authorized to be issued for the construction or substantial improvement necessary for the conduct of a functionally dependent use, as defined in this Section, provided the variance meets the requirements of Section 21-42.02g.2, is the minimum necessary considering the flood hazard, and all due consideration has been given to use of methods and materials that minimize flood damage during occurrence of the base flood.
5. Considerations for issuance of variances - In reviewing requests for variances, Consideration shall be given to all relevant factors, all other applicable provisions of the *Florida Building Code*, this Section, and the following:

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

6. Conditions for issuance of variances - Variances shall be issued only upon:

- (a) Submission by the applicant, of a showing of good and sufficient cause that the unique characteristics of the size, configuration, or topography of the site limit compliance with any provision of this Section or the required elevation standards;
- (b) Determination by the Planning and Zoning Board that:
 - (1) Failure to grant the variance would result in exceptional hardship due to the physical characteristics of the land that render the lot undevelopable; increased costs to satisfy the requirements or inconvenience do not constitute hardship;
 - (2) The granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nor create nuisances, cause fraud on or victimization of the public or conflict with existing local laws and ordinances; and
 - (3) The variance is the minimum necessary, considering the flood

hazard, to afford relief;

- (c) Receipt of a signed statement by the applicant that the variance, if granted, shall be recorded in the Office of the Clerk of the Court in such a manner that it appears in the chain of title of the affected parcel of land; and
- (d) If the request is for a variance to allow construction of the lowest floor of a new building, or substantial improvement of a building, below the required elevation, a copy in the record of a written notice from the Floodplain Administrator to the applicant for the variance, specifying the difference between the base flood elevation and the proposed elevation of the lowest floor, stating that the cost of federal flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation (up to amounts as high as \$25 for \$100 of insurance coverage), and stating that construction below the base flood elevation increases risks to life and property.

h. Violations

- 1. Violations - Any development that is not within the scope of the *Florida Building Code* but that is regulated by this Section that is performed without an issued permit, that is in conflict with an issued permit, or that does not fully comply with this Section, shall be deemed a violation of this Section. A building or structure without the documentation of elevation of the lowest floor, other required design certifications, or other evidence of compliance required by this Section or the *Florida Building Code* is presumed to be a violation until such time as that documentation is provided.
- 2. Authority - For development that is not within the scope of the *Florida Building Code* but that is regulated by this Section and that is determined to be a violation, the Floodplain Administrator is authorized to serve notices of violation or stop work orders to owners of the property involved, to the owner's agent, or to the person or persons performing the work.
- 3. Unlawful continuance - Any person who shall continue any work after having been served with a notice of violation or a stop work order, except such work as that person is directed to perform to remove or remedy a violation or unsafe condition, shall be subject to penalties as prescribed in Section 1-8 of the City Code of ordinances regarding "General Penalty, continuing violations".

21-42.03 – Definitions

a. General

1. Scope - Unless otherwise expressly stated, the following words and terms shall, for the purposes of this Section, have the meanings shown in this section.
2. Terms defined in the *Florida Building Code* - Where terms are not defined in this Section and are defined in the *Florida Building Code*, such terms shall have the meanings ascribed to them in that code.
3. Terms not defined - Where terms are not defined in this Section or the *Florida Building Code*, such terms shall have ordinarily accepted meanings such as the context implies.

b. Definitions

Accessory structure - A structure on the same parcel of property as a principal structure and the use of which is limited to parking and storage incidental to the use of the principal structure.

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

Appeal - A request for a review of the Floodplain Administrator's interpretation of any provision of this Section or a request for a variance.

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

Base flood - A flood having a 1-percent chance of being equaled or exceeded in any given year. [Also defined in FBC, B, Section 1612.2.] The base flood is commonly referred to as the "100-year flood" or the "1-percent-annual chance flood."

Base flood elevation - The elevation of the base flood, including wave height, relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the Flood Insurance Rate Map (FIRM). [Also defined in FBC, B, Section 1612.2.]

Basement - The portion of a building having its floor subgrade (below ground level) on all sides. [Also defined in FBC, B, Section 1612.2.]

Design flood - The flood associated with the greater of the following two areas: [Also defined in FBC, B, Section 1612.2.]

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

otherwise legally designated.

Design flood elevation - The elevation of the “design flood,” including wave height, relative to the datum specified on the community’s legally designated flood hazard map. In areas designated as Zone AO, the design flood elevation shall be the elevation of the highest existing grade of the building’s perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as Zone AO where the depth number is not specified on the map, the depth number shall be taken as being equal to 2 feet. [Also defined in FBC, B, Section 1612.2.]

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

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

Existing building and existing structure - Any buildings and structures for which the “start of construction” commenced before September 3, 1980. [Also defined in FBC, B, Section 1612.2.]

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

Flood or flooding - A general and temporary condition of partial or complete inundation of normally dry land from: [Also defined in FBC, B, Section 1612.2.]

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

Flood damage-resistant materials - Any construction material capable of withstanding direct and prolonged contact with floodwaters without sustaining any damage that requires more than cosmetic repair. [Also defined in FBC, B, Section 1612.2.]

Flood hazard area - The greater of the following two areas: [Also defined in FBC, B, Section 1612.2.]

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

Flood Insurance Rate Map (FIRM) - The official map of the community on which the Federal Emergency Management Agency has delineated both special flood hazard areas and the risk premium zones applicable to the community. [Also defined in FBC, B, Section 1612.2.]

Flood Insurance Study (FIS) - The official report provided by the Federal Emergency Management Agency that contains the Flood Insurance Rate Map, the Flood Boundary and Floodway Map (if applicable), the water surface elevations of the base flood, and supporting technical data. [Also defined in FBC, B, Section 1612.2.]

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

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

Floodway - The channel of a river or other riverine watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. [Also defined in FBC, B, Section 1612.2.]

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

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

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

Highest adjacent grade - The highest natural elevation of the ground surface prior to construction next to the proposed walls or foundation of a structure.

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

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

1. Letter of Map Amendment (LOMA): An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.
2. Letter of Map Revision (LOMR): A revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.
3. Letter of Map Revision Based on Fill (LOMR-F): A determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.
4. Conditional Letter of Map Revision (CLOMR): A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study; upon submission and approval of certified as-built documentation, a Letter of Map Revision may be issued by FEMA to revise the effective FIRM.

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

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

Lowest floor - The lowest floor of the lowest enclosed area of a building or structure, including basement, but excluding any unfinished or flood-resistant enclosure, other than a basement, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure in violation of the non-elevation requirements of the *Florida Building Code* or ASCE 24. [Also defined in FBC, B, Section 1612.2.]

Manufactured home - A structure, transportable in one or more sections, which is eight (8) feet or more in width and greater than four hundred (400) square feet, and which is built on a permanent, integral chassis and is designed for use with or without a permanent foundation when

attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle" or "park trailer." [Also defined in 15C-1.0101, F.A.C.]

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

Market value - The value of buildings and structures, excluding the land and other improvements on the parcel. Market value is the Actual Cash Value (in-kind replacement cost depreciated for age, wear and tear, neglect, and quality of construction) determined by a qualified independent appraiser, or tax assessment value adjusted to approximate market value by a factor provided by the Property Appraiser.

New construction - For the purposes of administration of this Section and the flood resistant construction requirements of the *Florida Building Code*, structures for which the "start of construction" commenced on or after September 3, 1980 and includes any subsequent improvements to such structures.

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

Recreational vehicle - A vehicle, including a park trailer, which is: [see in section 320.01, F.S.)

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

Special flood hazard area - An area in the floodplain subject to a 1 percent or greater chance of flooding in any given year. Special flood hazard areas are shown on FIRMs as Zone A, AO, A1-A30, AE, A99, AH, V1-V30, VE or V. [Also defined in FBC, B Section 1612.2.]

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

Permanent construction does not include land preparation (such as clearing, grading, or filling), the installation of streets or walkways, excavation for a basement, footings, piers, or foundations, the erection of temporary forms or the installation of accessory buildings such as

garages or sheds not occupied as dwelling units or not part of the main buildings. For a substantial improvement, the actual “start of construction” means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building. [Also defined in FBC, B Section 1612.2.]

Substantial damage - Damage of any origin sustained by a building or structure whereby the cost of restoring the building or structure to its before-damaged condition would equal or exceed 50 percent of the market value of the building or structure before the damage occurred. [Also defined in FBC, B Section 1612.2.]

Substantial improvement - Any repair, reconstruction, rehabilitation, addition, or other improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the building or structure before the improvement or repair is started. If the structure has incurred "substantial damage," any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either: [Also defined in FBC, B, Section 1612.2.]

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

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

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

21-42.04 – Flood Resistant Development

- a. Compensatory Storage – Compensatory storage for encroachments to the special flood hazard area shall be provided in accordance with the following methodology:
 1. Encroachment to the special flood hazard area shall be computed for all fill placed within the special flood hazard area below the base flood elevation and above the predicted SHGWT or SHWL
 2. Compliance will be based upon a volume for volume (cup for cup) methodology, with the volume of compensation equal to the volume of encroachment at each and every elevation (1-foot contour interval). Providing compensating storage equal to the volume of encroachment at each elevation will provide equivalent flood plain management for all storm events of magnitude less than the base flood event and is intended to prevent cumulative water quantity impacts.

3. Storage creation must occur below the existing base flood elevation and above the predicted SHGWT and/or SHWL.
4. Compensation must occur within dedicated storage areas excavated contiguous to the existing special flood hazard area.
5. Under no circumstances will compensatory flood storage be allowed within ponds that also provide stormwater management (retention and/or detention) for the proposed development.
6. The City may approve the creation of off-site compensatory storage areas located outside the property boundary on a case-by-case basis.
7. The City reserves the right to enforce additional criteria upon any project that is located within what the City considers a special flood hazard area. At the City's discretion, additional flood control measures may be required to adequately protect upstream systems, downstream systems and/or off-site properties.

b. Buildings and Structures

1. Design and construction of buildings, structures and facilities exempt from the *Florida Building Code* - Pursuant to Section 21-42.02d.2.(a) of this Section, buildings, structures, and facilities that are exempt from the *Florida Building Code*, including substantial improvement or repair of substantial damage of such buildings, structures and facilities, shall be designed and constructed in accordance with the flood load and flood resistant construction requirements of ASCE 24. Structures exempt from the *Florida Building Code* that are not walled and roofed buildings shall comply with the requirements of Section 21-42.04h of this Section.
2. Non-elevated accessory structures - Accessory structures are permitted below elevations required by the *Florida Building Code* provided the accessory structures are used only for parking or storage and:
 - a. Are one-story and not larger than 600 sq. ft.
 - b. Have flood openings in accordance with Section R322.2 of the *Florida Building Code, Residential*.
 - c. Are anchored to resist flotation, collapse or lateral movement resulting from flood loads.
 - d. Have flood damage-resistant materials used below the base flood elevation plus one (1) foot.
 - e. Have mechanical, plumbing, and electrical systems, including plumbing fixtures, elevated to or above the base flood elevation plus one (1) foot.

c. Subdivisions

1. Minimum requirements - Subdivision proposals, including proposals for manufactured home parks and subdivisions, shall be reviewed to determine that:
 - (a) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;

(b) All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and

(c) Adequate drainage is provided to reduce exposure to flood hazards; No construction shall result in the creation of disconnected or isolated portions of a flood hazard area (Zone A, AE, and other A-series Zones) which increases the stage at which discharge occurs to less than one (1) foot below any existing or proposed finished-floor elevation of a habitable structure nor of the centerline elevation of any publicly-owned roadway that is within or adjacent to the flood hazard area.

~~(c)~~(d) ~~i~~In Zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

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

(a) Delineation of flood hazard areas, floodway boundaries and flood zones, and design flood elevations, as appropriate, shall be shown on preliminary plats;

(b) Where the subdivision has more than 50 lots or is larger than 5 acres and base flood elevations are not included on the FIRM, the base flood elevations determined in accordance with Section 21-42.02e.2.(a) of this Section; and

(c) Compliance with the site improvement and utilities requirements of Section 21-42.04d of this Section.

d. Site Improvements, Utilities and Limitations

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

(a) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;

(b) All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and

(c) Adequate drainage is provided to reduce exposure to flood hazards; in Zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

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

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

3. Water supply facilities - All new and replacement water supply facilities shall be designed in accordance with the water well construction standards in Chapter 62-532.500, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the systems.
4. Limitations on sites in regulatory floodways - No development, including but not limited to site improvements, and land disturbing activity involving fill or regrading, shall be authorized in the regulatory floodway unless the floodway encroachment analysis required in Section 21-42.02e.3.(a) of this Section demonstrates that the proposed development or land disturbing activity will not result in any increase in the base flood elevation.
5. Limitations on placement of fill - Subject to the limitations of this Section, fill shall be designed to be stable under conditions of flooding including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and protection against flood-related erosion and scour. In addition to these requirements, if intended to support buildings and structures (Zone A only), fill shall comply with the requirements of the *Florida Building Code*.

e. Manufactured Homes

1. General - All manufactured homes installed in flood hazard areas shall be installed by an installer that is licensed pursuant to section 320.8249, F.S., and shall comply with the requirements of Chapter 15C-1, F.A.C. and the requirements of this Section.
 - (a) Limitations on installation in floodways - New installations of manufactured homes shall not be permitted in floodways.
2. Foundations - All new manufactured homes and replacement manufactured homes installed in flood hazard areas shall be installed on permanent, reinforced foundations that are designed in accordance with the foundation requirements of the *Florida Building Code Residential* Section R322.2 and this Section.
3. Anchoring - All new manufactured homes and replacement manufactured homes shall be installed using methods and practices which minimize flood damage and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Methods of anchoring include, but are not

limited to, use of over-the-top or frame ties to ground anchors. This anchoring requirement is in addition to applicable state and local anchoring requirements for wind resistance.

4. Elevation - All manufactured homes that are placed, replaced, or substantially improved in flood hazard areas shall be elevated such that the bottom of the frame is at or above the elevation required in the *Florida Building Code, Residential* Section R322.2 (Zone A).
5. Enclosures - Enclosed areas below elevated manufactured homes shall comply with the requirements of the *Florida Building Code, Residential* Section R322 for such enclosed areas.
6. Utility equipment - Utility equipment that serves manufactured homes, including electric, heating, ventilation, plumbing, and air conditioning equipment and other service facilities, shall comply with the requirements of the *Florida Building Code, Residential* Section R322.

f. Recreational Vehicles and Park Trailers

1. Temporary placement - Recreational vehicles and park trailers placed temporarily in flood hazard areas shall:
 - (a) Be on the site for fewer than 180 consecutive days; or
 - (b) Be fully licensed and ready for highway use, which means the recreational vehicle or park model is on wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanent attachments such as additions, rooms, stairs, decks and porches.
2. Permanent placement - Recreational vehicles and park trailers that do not meet the limitations in Section 21-42.04f.1 of this Section for temporary placement shall meet the requirements of Section 21-42.04e of this Section for manufactured homes.

g. Tanks

1. Underground tanks - Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty.
2. Above-ground tanks, not elevated - Above-ground tanks that do not meet the elevation requirements of Section 21-42.04g.3 of this Section shall be permitted in flood hazard areas provided the tanks are anchored or otherwise designed and

constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty and the effects of flood-borne debris.

3. Above-ground tanks, elevated - Above-ground tanks in flood hazard areas shall be attached to and elevated to or above the design flood elevation on a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area.
4. Tank inlets and vents - Tank inlets, fill openings, outlets and vents shall be:
 - (a) At or above the design flood elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and
 - (b) Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

h. Other Development

1. General requirements for other development - All development, including man-made changes to improved or unimproved real estate for which specific provisions are not specified in this Section or the *Florida Building Code*, shall:
 - (a) Be located and constructed to minimize flood damage;
 - (b) Meet the limitations of Section 21-42.04d.4 of this Section if located in a regulated floodway;
 - (c) Be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the design flood;
 - (d) Be constructed of flood damage-resistant materials; and
 - (e) Have mechanical, plumbing, and electrical systems above the design flood elevation, except that minimum electric service required to address life safety and electric code requirements is permitted below the design flood elevation provided it conforms to the provisions of the electrical part of building code for wet locations.
2. Fences in regulated floodways - Fences in regulated floodways that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of Section 21-42.04d.4 of this Section.

3. Retaining walls, sidewalks and driveways in regulated floodways - Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways shall meet the limitations of Section 21-42.04d.4 of this Section.
4. Roads and watercourse crossings in regulated floodways - Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated floodways shall meet the limitations of Section 303.4 of this Section. Alteration of a watercourse that is part of a road or watercourse crossing shall meet the requirements of Section 21-42.02e.3.(c) of this Section.

SECTION 21-43 - WELLFIELD PROTECTION

21-43.01 - Comprehensive Plan Reference

The City finds there is need to protect the existing and future water supplies from adverse impacts of contamination. The City also finds that its potable water wellfields are a resource that may be subject to irreversible degradation if not adequately protected.

The provisions of Section 21-43 – Wellfield Protection Areas are consistent with and implement the Comprehensive Plan contained in the Future Land Use Element, Utilities Element, Coastal Element, Conservation Element and Intergovernmental Coordination Element.

21-43.02 - Designation of Wellfield Protection Zones (WPZ)

The primary and secondary potable water wellfield Protection Zones are hereby established as five hundred feet (500') radius from the well as the primary zone and one thousand feet (1,000') radius from the well as the secondary zone. These zones, and the regulations that follow, are established to protect the potable water supply from possible contamination. A permit is required for any development or occupational use within the wellfield protection zone.

- a. Except as otherwise provided in this Section, any use, handling, production or storage of hazardous materials shall be prohibited in the primary protection zone. Any existing use, or handling, production or storage of hazardous materials shall be considered a nonconforming use and shall apply for a wellfield protection permit as provided in Section 21-43.03 and be subject to the containment standards in Section 21-43.04.
- b. Except as otherwise provided in this Section, any new or existing nonresidential use, or the handling, production or storage of hazardous substances in the secondary protection zone shall apply for a wellfield protection permit as provided in Section 21-43.03.

21-43.03 - Wellfield Protection Zone Permits

- a. The Director of Environmental Services shall be responsible to administer the wellfield protection zone permit program.

- b. Application for a wellfield protection permit shall be signed by the applicable owner or agent.
- c. The City shall issue, or renew such permit, upon the applicant's satisfactory demonstration that all standards required by this Section and other applicable regulations have been met and the appropriate fee as established by resolution have been paid.
- d. A potential applicant is required to arrange a pre-application conference with the Director of Environmental Services to discuss the permit application criteria and process.
- e. The City shall review applications, for compliance with the requirements of this Section and no application shall be approved unless compliance is demonstrated. Permits or business tax receipts issued in violation of this Section confer no right or privilege to the grantee.
- f. The following information shall be submitted by the applicant seeking a wellfield protection zone permit:
 - 1. A current survey signed and sealed by a licensed surveyor that, at a minimum, depicts all existing structures, adjacent streets, water bodies and public water supply wells.
 - 2. A legal description of the subject property.
 - 3. A description of the proposed activity at the proposed location, including a list of all known hazardous substances that may be utilized, generated and/or stored at the subject property.
 - 4. Construction plans and specifications for hazardous substance storage system, including but not limited to, details of tanks, conveyance and pumping systems, secondary containment, leak protection, overfill protection and access and an operating plan.
- g. Any person owning or operating a non-residential activity regulated by this Section at the time of adoption of this Article shall apply for a wellfield protection zone permit within one year and shall thereafter come into full compliance with the requirements of this Section.

21-43.04 - Wellfield Protection Zone Standards

- a. A proposed project, construction activity or business tax receipt use shall not adversely affect the quality and quantity of the potable water supply within the primary and secondary wellfield protection zone. In assessing the impacts of a proposed activity, the City shall consider the cumulative impacts of other projects or uses permitted in, or adjacent to, the Secondary Protection Zone.
- b. No discharge or disposal of hazardous substances into the soils, groundwater or surface water within either the Primary or Secondary Protection Zone will be allowed.
- c. Hazardous substance storage tanks are prohibited in the Primary Protection Zone.

- d. Hazardous substance storage tanks in the Secondary Protection Zone shall be constructed and operated in compliance with 17-762 Florida Administrative Code.
- e. The commercial and residential application of certain regulated substances such as pesticides, herbicides, rodenticides and fungicides shall be permitted in the protection zones subject to the following conditions:
 - 1. The application is in compliance with the use requirements on the EPA substances list and as indicated on the containers in which the substances are sold.
 - 2. The application is in compliance with the requirements of Chapters 482 and 487, Florida Statutes and Chapters 5E-2 and 5E-9, Florida Administrative Code.
 - 3. The application of any of the pesticides, herbicides, fungicides and rodenticides shall be noticed in the records of the certified operator of the use. The certified operator shall provide specific notification to the applicators that special care is required. Said public records shall include, at a minimum, the amount of substances used, the location of use and the date of the application.
 - 4. Septic disposal systems are prohibited in both protection zones.
 - 5. Existing underground storage facilities in either protection zone shall meet the construction retrofit standards of Chapter 17-761, F.A.C.

21-43.05 - Exemptions

The following activities or uses are exempt from the provision of this Article:

- a. The transportation of any hazardous substance through either the primary or secondary well field protection zone, provided the transporting vehicle is in transit.
- b. Agricultural uses, including mosquito control, except that said uses shall comply with Florida Statutes Chapter 487, Section 487.011 et seq., the Florida Pesticide Law, and the Florida Pesticide Application Act of 1974 and Rule 5E 2.001 et seq., and Rule 5E-9.001 et seq., F.A.C.
- c. The use of any hazardous substance solely as fuel in a vehicle fuel tank or as lubricant in a vehicle.
- d. Storage tanks which are constructed and operated in accordance with the storage tank regulations as set forth in the Florida Administrative Code.
- e. Geotechnical borings.

21-43.06 - Enforcement and Appeals

- a. Any violation of the provisions of this Section may subject the property owner, and/or facility operator, to the enforcement provisions of Article X.

- b. The appeals process is described in Article I.

SECTION 21-44 - GROUNDWATER RECHARGE AREAS

21-44.01 - Comprehensive Plan Reference

Chapter 373, F.S. declares that the protection of groundwater is necessary to protect future potable water supplies. Chapter 163, Part II, F.S. requires each local government to protect identified recharge areas. The provisions of Section 21-44 – Groundwater Recharge Areas are consistent with and implement the City’s Comprehensive Plan contained in the Future Land Use Element, Utilities Element, Coastal Element and Intergovernmental Coordination Element.

21-44.02 - Designation of Recharge Areas

The mapped recharge areas subject to the regulations herein are designated by the St. Johns River Water Management District and are available for review at City Hall.

21-44.03 - Recharge Area Development Standards

The following standards are required for development projects within the Recharge Area.

- a. All stormwater runoff shall be retained on-site in compliance with all applicable state and local regulations.
- b. Any use that manufactures or stores hazardous materials/substances as defined in Section 21-20 shall be prohibited.
- c. Landfills, sludge disposal and incinerators shall be prohibited.
- d. Spray irrigation of treated sewage effluent may be permitted in compliance with applicable Florida Department of Environmental Protection permit criteria.
- e. All agricultural and/or silvicultural uses, shall employ the latest applicable Best Management Practices and Integrated pest Management Plans available from either the Soil Conservation Service and/or the Florida Department of Agriculture and Consumer Services.
- f. All underground storage tanks shall comply with the requirements of Chapters 62-761 and 62-762, F.A.C and shall be triple walled with impervious material and designed for one hundred twenty percent (120%) of the proposed capacity.
- g. All uses existing at the time of adoption of this Code shall come into compliance with these requirements by January 1, 2003.

SECTION 21-45 - SENSITIVE HABITAT AREAS

21-45.01 - Comprehensive Plan Reference

The purpose of this Section is to protect the City's significant natural resources. These regulations are supplemental to and do not supercede applicable State and/or Federal regulations. The provisions of Section 21-45 - Sensitive Habitat Areas are consistent with and implement the Comprehensive Plan contained in the Utilities Element, Coastal Element, Conservation Element and Intergovernmental Coordination Element.

21-45.02 - Development Thresholds & Exemptions

- a. The Listed Species requiring protection are those described as endangered or threatened by Federal and State regulatory agencies.
- b. Nothing in this Section exempts any proposed development activity from complying with all appropriate State and Federal regulations.

21-45.03 - Listed Species Assessment Procedures

- a. When the pre-application conference for a proposed project determines the possibility of one or more listed species inhabiting a site, the applicant shall submit an assessment to the Development Services Department on the forms provided by the Department. This application shall be completed by a qualified professional and include the following:
 1. The name, address and signature of the property owner;
 2. The name, address and signature of the applicant;
 3. A legal description of the subject property;
 4. A recent property survey;
 5. A description and location of the listed species found on the proposed site;
 6. A description of the field surveying techniques used; and
 7. Other material as may be deemed appropriate by the Development Services Director.
- b. When a listed species is found, the applicant may be required to submit a mitigation program to protect the listed species. The mitigation program shall be evaluated as follows:
 1. Approval by Florida Fish and Wildlife Commission;
 2. Provision of any permits needed from State and/or Federal agencies;
 3. The dedication of a conservation easement to the City and/or any other applicable agencies.

SECTION 21-46 – OPEN SPACE

21-46.01 - Comprehensive Plan Reference

The purpose of this Section is to protect the City's designated open space. These regulations are supplemented to and do not supercede applicable State and/or Federal regulations. The provisions of Section 21-46, Open Space, are consistent with and implement the Comprehensive Plan in the Future Land Use Element and the Recreation and Open Space Element.

21-46.02 - Open Space Standards

- a. All proposed development/redevelopment shall be designed to ensure the protection of existing designated open space areas.
- b. All proposed residential development/redevelopment shall provide a minimum of twenty five percent (25%) common open space as defined in Article II.

Sections 21-47 through 21-48 reserved for future use.

ARTICLE V

SITE DESIGN CRITERIA

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ARTICLE V

SITE DESIGN CRITERIA

SECTION 21-50 - GENERAL PROVISIONS

21-50.01 - Purpose

The purpose of this Section is to establish site design and development criteria for all public/private development and redevelopment. Pursuant to the requirements of Florida Statutes, all plans submitted for review by the City shall be signed and sealed by the appropriate professional person.

In addition to City-wide site design criteria contained in this Article, the City of Edgewater has adopted the Indian River Boulevard-S.R. 442 Corridor Design Regulations and the Ridgewood Avenue Corridor Design Regulations, which are incorporated as Article XVIII and Article XX respectively in this Land Development Code. Requirements contained in Article XVIII, Indian River Boulevard-S.R. 442 Corridor Design Regulations and Article XX, Ridgewood Avenue Corridor Design Regulations, are applicable to properties within each respective design overlay district and include site design and architectural design criteria that supersede the requirements set forth in this Article. A copy of these regulations and illustrations for design are available for purchase at City Hall. It is the Developer's responsibility to obtain a copy of the regulations for the Overlays prior to conceptual design layout.

21-50.02 - Minimum Site Dimensions

Table V-1 depicts the minimum lot size, setbacks, height, building coverage and floor area requirements for each zoning category.

Minimum site dimensions may be administratively waived if non-conforming sites are created by eminent domain activities (State, County or City).

**TABLE V-1
SITE DIMENSIONS**

Zoning Category	Min. Lot Sq.Ft. (12)	Min. Lot Width Ft.	Min. Lot Depth Ft.	Min. Front Yard Ft. (1) (4) (15)	Min. Rear Yard Ft. (1) (4)	Min. Side Yard Ft. (1) (4) (8) (10) (11) (15)	Max. Height Ft.	Max % Bldg Coverage	Max. % Imp. Coverage	Min. Floor Area Sq. Ft.
AG, Agriculture	2.5 acres	200	N/A	50	50	25	35	15	N/A	1,200
CN, Conservation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P/SP, Public/Semi-Public	N/A	N/A	N/A	30	20	10	35	40	60	NA
R T, Rural Transitional	1 acre	100	N/A	40	40	25	35	25	60	1,200
R-1, Single Family Residential	12,000	100	120	40	30	(5) 10	26	30	60	1,300
R-2, Single Family Residential (13)	10,000	80	125	30	20	10	26	30	60	1,200
R-3, Single Family Residential	8,625	75	115	30	20	10	26	30	60	1,000
R-4, Multifamily Residential (9)	N/A	(14)	(14)	(2) 40	(2) 25	(2) 10	35	30	60	1,000
R-5, Multifamily Residential (9)	N/A	(14)	(14)	(2) 35	(2) 25	(2) 10	35	35	60	850
RPUD, Residential PUD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RP, Residential Professional	10,000	80	125	N/A	N/A	N/A	26	N/A	60	N/A
MH-1, Mobile Home Park - 5 acres	N/A	N/A	N/A	15	10	10 (between units)	N/A	N/A	60	N/A
MH-2, Manuf. Home Sub.50 acres	N/A	60	110	25 (6)	10	8	15	30	60	N/A
B-2, Neighborhood Business	10,000	80	125	40	20 (3)	10 (3)	26	30	75	N/A
B-3, Highway Commercial	N/A	150	N/A	40	25 (3)	25 (3)	45	30	75	N/A
B-4, Tourist Commercial - 2 acres	N/A	100	N/A	40	40(3)(5)	25	50	40	75	N/A
BPUD, Business PUD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
I-1, Light Industrial	N/A	75	N/A	25	20 (3) (7)	10 (3)	45	50	80	N/A
I-2, Heavy Industrial	N/A	N/A	N/A	25	20 (3) (7)	10 (3)	45	60	80	N/A
IPUD, Industrial PUD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MUPUD, Mixed Use PUD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SCD/PUD, Sustainable Community Development PUD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TABLE V-1 FOOTNOTES

- (1) 50 feet upland from mean high water line.
- (2) Setbacks for single family homes in multifamily zoning districts shall be the same as the R-2 District.
- (3) 50 feet when adjacent to residential zoning/use.
- (4) 25 feet upland from wetlands vegetation.
- (5) 2 story dwellings shall increase side setback additional 5 feet on river, lakes, golf course & common open space.
- (6) From cartway.
- (7) Zero setback abutting RR.
- (8) Abandoned/non-developed streets in Florida Shores require a ten (10) feet side corner setback.
- (9) 3 or more units shall comply with density and other requirements for site plan approval.
- (10) Side corner lots shall have two (2) side yard setbacks, no rear.
- (11) Side corner setbacks shall be the same as front yard.
- (12) Minimum lot square footage shall be calculated based on the minimum lot width, minimum lot depth, and/or uplands area.
- (13) All properties located on SR 442 shall have a forty foot (40') setback from the new right-of-way lines.
- (14) Single family or duplex uses in the R-4 and R-5 district shall have a minimum lot size of 75 feet by 115 feet.
- (15) Commercial gasoline pump island canopies setbacks shall be at least 20-feet from the front property line and five (5)-feet from the side property line.

SECTION 21-51 - UTILITIES

21-51.01 - Comprehensive Plan Reference

The provisions of Section 21-51 - Utilities are consistent with and implement the Comprehensive Plan contained in the Future Land Use Element and Utilities Element.

21-51.02 - General Requirements

- a. All development shall comply with the appropriate sections of Article XI (Concurrency Management System).
- b. All new development shall connect to the City's water and sewer system. Temporary package plants may be permitted if City-owned water and sewer collection and distribution system improvements are planned.
- c. All new development shall be required to connect to the reclaimed water system, if available. Drylines may be required for future reclaimed water system service.
- d. All groundwater used in water-to-air heating and air conditioning systems must be directed to landscape irrigation systems, groundwater injection or exfiltration systems.
- e. All development shall comply with the current SJRWMD water conservation requirements.
- f. All development shall pay the adopted City and County impact and development fees.
- g. All multifamily, commercial and industrial development shall be required to install backflow preventers.
- h. All multifamily, commercial and industrial development shall be required to locate and install fire protection appliances pursuant to the criteria established in Article XVI.
- i. The developer shall obtain approved plans from appropriate electrical utility provider for street light design. All new developments shall be required to create a streetlight assessment district to fund installation and operation/maintenance expenses. The streetlight district will be under the control of the homeowner's association. Streetlights shall be generally provided at all intersections and at intervals of no more than 300 feet apart along each street.
- j. All utility lines including wastewater, potable water, reclaim water, gas, electrical power, telephone, television, telecommunications, video, internet, broadband and similar services (collectively used herein as "utility facilities") in new residential developments shall be installed underground.
- k. All utility facilities for new non-residential developments shall be placed underground from the property line to the structure.

- l. Substantial improvements, additions or renovations to structures on non-residential properties that exceed 50 percent of the structure's assessed value and require upgraded or relocated utility facility service shall relocate existing overhead utility facility service to an underground service.
- m. Existing overhead electrical service lines shall be relocated underground for any electrical service upgrades equal to or exceeding 250 amps for non-residential properties.
- n. Non-residential developments may be exempt from placing all or a portion of utility services underground if such initiative will require the addition of utility poles outside of the property line. The Technical Review Committee (TRC) shall make the final determination.
- k. The City may require the oversizing of a utility line to serve future customers. The City shall be responsible for payment of the oversizing of the utility line.
- l. Valves shall be spaced at a maximum of 1,000 feet along all water mains.
- m. All water mains shall be looped to provide adequate pressure and system redundancy.
- n. All water systems designs shall maintain 20 psi residual pressure during maximum demand on the system.
- o. Manholes shall be spaced at all change in pipe slope and direction and at intervals no greater than 400 feet.
- p. Fire hydrants shall be installed only on a water main of six (6) inch and larger.
- q. All construction shall comply with the City's Standard Construction Details.

21-51.03 - Utility Easements

- a. All new electric, telephone, fiber optics, cable television and other such lines (exclusive of transformers or enclosures containing electrical equipment) and gas distribution lines shall be placed underground within easements or public rights-of-way
- b. Lots abutting existing easements or public rights-of-way where overhead electric, telephone or cable television distribution supply lines and service connections have previously been installed may continue to be supplied with such services using the overhead facilities.
- c. When a developer installs or causes the installation of water, sewer, gas, electrical power, telephone or cable television facilities and intends that such facilities shall be owned, operated or maintained by a public utility, the developer shall transfer to such utility the necessary ownership or easement rights to enable the utility or entity to operate and maintain such facilities.

SECTION 21-52 - VEHICLE/PEDESTRIAN CIRCULATION REQUIREMENTS

21-52.01 - Comprehensive Plan Reference

The arrangement, character, extent, width, grade and location of all streets shall be considered in their relation to existing and planned streets, topographical conditions, public convenience and safety and in their appropriate relation to the proposed uses of the land to be served by such streets. The provisions of Section 21-52 - Vehicle/Pedestrian Circulation are consistent with and implement the Comprehensive Plan contained in the Future Land Use Element and Transportation Element.

The regulations and requirements as herein set forth are intended to provide legal access to all parcels of land or development within the City and to control vehicular movements thereof to facilitate safe vehicle and pedestrian patterns.

21-52.02 - Access/Driveways

- a. Prior to issuance of a building permit, all parcels, lots or new development shall have access to an improved public road or private road.
- b. Driveway access to any corner lot located on a local street (City maintained) shall be located or relocated a minimum of forty feet (40') from the intersection of right-of-way lines of other local streets and a minimum of one hundred feet (100') from the intersection of right-of-way lines on all other functionally classified streets.
- c. New driveway connections on arterial and collector roads shall adhere to FDOT access management standards in Section 14-97 Florida Administrative Code. Driveways shall conform to current FDOT turning radius standards.
- d. The City shall have the authority to require the creation, use and maintenance of common, joint-use driveways or other common ingress/egress facilities which provide access to two (2) or more lots, parcels or developments, when such joint use driveways are needed to protect, maintain or improve public traffic safety (see 21-57.04). Creation of joint use driveways shall be by recorded legal agreement provided that in all cases the agreement must:
 1. Hold the City harmless from any and all claims or potential liability; and
 2. Be recorded in the public records of Volusia County, Florida prior to issuance of a building permit; and
 3. Must run with the lands involved and be binding on the parties to agreement, their successors or assigns.
- e. Adjacent (same side of the roadway) single family and duplex residential driveways shall be paved with materials approved by the City including the apron and separated by a minimum of ten feet (10') as measured driveway edge to driveway edge. No driveway shall be closer than five feet (5') to any lot line or encroach into any side or rear easement. At a minimum,

access driveways to vacant lots shall be paved in the right-of-way from existing pavement to the lot line.

- f. Adjacent nonresidential driveways shall be separated by a minimum of forty feet (40') as measured driveway edge to driveway edge, unless there is a recorded joint access agreement.
- g. To the extent reasonably possible, driveway access to nonresidential land uses shall line up with driveways across the street.
- h. All non-residential parcels shall be limited to one access point per street.
- i. Non-residential land uses or developments (including parking lots) shall not connect to, have access to or primarily use any local residential street, unless:
 - 1. No other site access (including joint use driveways with other parcels) is possible.
 - 2. All traffic, site, and environmental conditions of the subject site, street, and neighborhood are, or will be suitable and compatible to accommodate the anticipated traffic, environmental and aesthetic impacts of the proposed nonresidential use or development without significant adverse impacts to neighborhood and the City as a whole. The site evaluation/traffic analysis report shall be submitted by the project applicant for the City's review and approval.
- j. The City may require dedication of access rights to the City to control future ingress and egress.
- k. Driveways shall have a minimum width of nine feet (9') for access way serving residential uses, a minimum width of twenty feet (20') for double access ways and twelve feet (12') for single access ways serving multi-family or non-residential areas.
- l. The City shall have the authority to require the reduction of the number of or width of existing driveways for any modifications to an existing structure, parking area or current property uses.
- m. Driveways for single-family residential properties equal to or greater than one (1) acre shall be paved from the access point to the minimum front yard setback for the property's respective zoning district.
- n. Driveways for single-family residential and two-family residential properties less than one (1) acre shall be paved from the access point and extend into an enclosed area for the primary garage or carport. In the absence of a garage or carport, the driveway shall be paved from the access point and extend to the primary building frontage line.
- o. All additional and/or secondary garages and/or carports located on single-family residential and two-family residential properties less than one (1) acre shall require an apron paved from the access point extending at least three feet (3') into the property and a stabilized pathway and/or wheel path to the enclosed area of said garage and/or carport.

- p. All construction shall comply with the City's Standard Construction Details.

21-52.03 - Drive-Up Facilities Standards

All facilities providing drive-up or drive-through service shall provide on-site stacking lanes in accordance with the following standards:

- a. The facilities and stacking lanes shall be located and designed to minimize turning movements in adjacent streets and intersections.
- b. The facilities and stacking lanes shall be located and designed to minimize or avoid conflicts between vehicular traffic and pedestrian areas such as sidewalks, crosswalks or other pedestrian access ways.
- c. A by-pass lane shall be provided so that the full aisle width is provided for parking maneuvers.
- d. Stacking lane distance shall be measured from the point of entry nearest the drive-through area to the center of the farthest drive-through services window area.
- e. Minimum stacking lane distance shall be as follows:
 - 1. Financial institutions shall have a minimum of one stacking lane with a minimum distance of one hundred seventy five feet (175') per lane.
 - 2. Restaurants, full service car washes and day care facilities shall have minimum stacking distance of two hundred feet (200').
 - 3. Self service car washes (per bay) and dry cleaners shall have a minimum stacking distance of sixty-five feet (65').
 - 4. Other uses may require the City to determine the stacking distance on a case-by-case basis.
 - 5. Facilities not listed above with more than one (1) drive-through lane shall provide one hundred feet (100') of stacking distance per lane measured from the point of entry to the center of the furthest service window area.
 - 6. Drive-Through Separate from Other Circulation: The drive-through lane shall be a separate lane from the circulation routes and aisles necessary for ingress and egress from the property or access to any off-street parking spaces.
- f. Alleys or driveways in or abutting areas designed, zoned, or developed for residential use shall not be used for circulation of traffic for drive-up facilities.
- g. Where turns are required in the exit lane, the minimum distance from any drive-up station to the beginning point of the curve shall be thirty-four feet (34'). The minimum inside turning radius shall be twenty-five feet (25').

21-52.04 - Sidewalks

A system of sidewalks shall be provided by the developer to provide safe movement of pedestrians separately from motor vehicles.

- a. Sidewalks shall be required on both sides of streets in all new development projects and redevelopment projects. In lieu of sidewalk installation, funds may be paid to the Pedestrian System Development Fund. Installation of the sidewalk or payment into the above referenced Fund shall be at the discretion of the TRC.
- b. The sidewalk shall be constructed in the dedicated right-of-way.
- c. All sidewalks shall have a minimum width of four feet (4') and be separated by at least four feet (4') from the road edge and comply with the City's Standard Construction Details.
- d. As an alternative in residential areas, sidewalks may be provided within rear lot easements or common open space areas as part of an approved development plan.
- e. Sidewalks shall connect to existing pedestrian circulation facilities for all projects within a distance and/or radius of 1,000-feet.

21-52.05 - Street Design Standards

- a. The arrangement, character, extent, width, grade and location of all new and improved streets shall conform to the adopted Comprehensive Plan now in existence or as may hereafter be adopted and shall be considered in their relation to existing and planned streets, to topographical conditions, to public convenience and safety and in their appropriate relation to the proposed uses of the land to be served by such streets.

Where such is not shown in the Comprehensive Plan now in existence or as may hereafter be adopted, the arrangement of streets in a subdivision shall either:

1. Provide for the continuation or appropriate projection of existing major streets in surrounding areas, or
 2. Conform to a plan for the neighborhood or be aligned to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical.
- b. All new streets to be established within a subdivision shall meet the following minimum design standards.
 1. *Local streets.* Local streets shall be laid out so that use by through traffic will be discouraged.
 2. *Subdivisions on arterial streets.* Where a subdivision abuts or contains an existing or proposed arterial street, the subdivider shall provide reverse frontage lots with a planting screen contained in a non-access reservation along the rear property lines or such other treatment as may be necessary for adequate protection of

residential properties and to afford separation of through and local traffic.

3. *Intersection designs.* Streets shall be laid out and aligned to intersect as nearly as possible at right angles and no street shall intersect at less than sixty (60) degrees. Street jogs and intersections with centerline offsets of less than one hundred fifty feet (150') shall be prohibited. Multiple intersections involving the juncture of more than two (2) streets shall be prohibited. A minimum sight distance of two hundred feet (200') from any intersection shall be maintained on intersecting streets; however, this requirement shall not be construed as requiring an increase in the minimum allowable intersection separation of one hundred fifty feet (150').
4. Proposed streets shall be designed to provide access to adjoining unsubdivided tracts at logical locations for future subdivisions.
5. A minimum of two points of access shall be provided into each subdivision of twenty-five (25) lots or more. Where adjoining existing development and code requirements preclude the development of two public street access points, an unobstructed driveable access way may be substituted.
6. Right-of-way line intersections shall be rounded with a minimum radius of twenty-five feet (25'). A greater radius may be required on collector or arterial roads, or where road construction details require.
7. *Minimum street design specifications.* All streets to be established in a subdivision shall be graded to their full required right-of-way width and designed in accordance with the following minimum right-of-way specifications:

Arterial	150 ft.
Collector	100 ft.
Local	60 ft. (open drainage) 50 ft. (curb and gutter)

8. *Cul-de-sac.* All cul-de-sacs shall comply with the requirements contained in the Standard Construction Details.
9. *Street access to adjoining property.* Street stubs to adjoining unplatted areas shall be provided when required to give access to such areas or to provide for proper traffic circulation. Street stubs in excess of two hundred fifty feet (250') shall be provided with a temporary cul-de-sac turnaround. The developer of the adjoining area shall pay the cost of restoring the street to its original design cross-section and extending the street.
10. *Street names.* Street names shall not be used which will duplicate, be phonetically similar or be confused with the names of existing or other proposed streets, except that new streets which are an extension or in alignment with existing streets shall bear the same name as that borne by such existing streets. All courts and circles shall have one name only. All street names shall be submitted with the preliminary plat to the County of Volusia prior to final plat approval for 911 verification.
11. *Street name signs, pavement markings and regulatory signs.* Required signs shall be in place prior to acceptance by the City. All signing and pavement markings shall be in accordance with "USDOT Manual on Uniform Traffic Control

Devices". All pavement markings shall be thermoplast. Street name signs shall be a minimum of six inches (6") in height with letters four inches (4") in height. At cross-section intersections, two (2) street signposts shall be located diagonally across the intersection from each other. Only one street signpost shall be required at T-street intersections. Thirty inch (30") "STOP" signs shall be required at each street intersection unless otherwise approved or required by the TRC.

c. *Construction*

Basic construction requirements for roads are as follows:

1. Residential roadway pavement shall consist of 1-1/4 inches of compacted Type S-I asphalt over an eight inch (8") soil cement or limerock base, over an eight inch (8") compacted subbase. Alternative concrete pavements may be approved.
2. Commercial roadway pavement shall consist of two inches (2") of compacted Type S-I or S-III asphalt, over an eight (8") compacted limerock or six inch (6") compacted soil cement base over a twelve inch (12") compacted shellrock stabilized subbase.
3. All new roads shall have concrete curbs. Miami curbs are required on local streets with vertical curbs for enclosed drainage on major collector and arterial roads.
4. The remainder of the right-of-way shall be cleared, graded and sodded.
5. Signs for street identification and traffic control shall be installed by the City at the developer's expense. Signs shall be based on the requirements of the Federal Highway Administration Manual of Uniform Traffic Control Devices, current edition or other City specifications.

- d. *Alleys*. In single-family residential districts alleys shall be discouraged, but may be required in other than residential districts to provide for proper traffic circulation. When provided in any district, alleys shall have a minimum right-of-way width of thirty feet (30').

- e. *Easements*. Easements for utilities, including water, wastewater, electric, cable, telephone and gas and drainage easements, shall be provided as follows:

1. *Utilities*. Utility easements centered on side or rear lot lines shall be provided where deemed necessary and shall be at least fifteen feet (15') in width. Additional width may be required for wastewater and/or drainage easements. Side lot line easements may be decreased to ten feet (10') in width when serving a single electric or telephone utility.
2. *Drainage*. Where a proposed subdivision is transversed (traversed) by or abuts a watercourse, drainage way or stream, a conservation and stormwater easement or drainage way, canal or stream and such further width or construction or both as will be adequate for the purpose shall be provided. Where a drainage way or canal exists or is proposed, a maintenance easement approved by the City shall be provided.
3. *Access waterways*. Waterways which are constructed or improved for the purpose of providing access by the water to lots within a subdivision shall have a minimum easement or right-of-way width of one hundred feet (100'), except

where adequate shoreline protection is provided, the minimum right-of-way may be reduced to sixty feet (60').

- f. *Turn lanes* - A left turn lane shall be provided at each access point with an average daily trip end of 1,000 vehicles and/or more than 25 peak hour left turn movements. A right turn/deceleration lane shall be provided when the posted speed limit equals or exceeds 35 miles per hour or if the proposed development will generate 100 or more peak hour right turn movements. Turn lane requirements shall be provided on all immediately adjacent roadways affected by any development/redevelopment project unless deemed unfeasible/impractical by the TRC.

21-52.06 - Public Recreation

- a. *Requirements.* If a proposed development exceeds the required Level of Service standards for Public Recreation, as set forth in Section 21-46 and 21-135, the developer shall deed said land to the City or Homeowner's Association, pay a fee in lieu thereof or provide a combination of the above at the option of the City Council. This condition shall be met prior to final plan approval.
- b. *General Standard*
Recreation impacts of proposed development shall be based on the anticipated population within said development and is calculated by the following formula:

Unit Type	Pop./Unit
Single Family Residential	2.5
Duplex	2.3
Multi-Family Residential	2.0
Mobile/Manufactured Home	2.0

- c. *Formula for fees in (lieu of) land conveyance.*
 - 1. If it is determined that the proposed development does not include any land designated by the Edgewater Comprehensive Plan as Recreation, to serve the immediate and future needs of the city residents and the developers are unable to provide Recreation lands outside the proposed development that are so designated and is required by Section 21-135, then the developer shall, in lieu of conveying land, pay a fee to the city equal to the value of land acreage as provided by the current Volusia County Property Appraiser's assessed value for the nearest park or land deemed open space.
- d. *Use of Fees.* The fees collected hereunder shall be paid to the City of Edgewater. All such fees shall be placed in a reserve account in trust with the general fund and shall be known as the reserve trust for lands for parks and open space. Moneys within the reserve account shall be used and expended solely for the acquisition, improvement, expansion of city parks and open space land and to provide recreational equipment, facilities and land improvements as determined by the City Council. (Ord. No. 84-O-37, FS, 1-7-85).
- e. *Criteria for requiring both conveyance and fee.* In any development of over twenty-five (25)

dwelling units, the developer may be required to convey the land and pay a fee in accordance with the following formula:

1. When only a portion of the land which the developer is required to convey for parks is to be conveyed, such portion shall be conveyed for parks or a fee computed pursuant to the provisions set out herein shall be paid to the City for any additional land that the developer would otherwise have been required to convey hereunder.
 2. When most of the land designated as parks in the vicinity of the proposed development is needed to complete the site, such remaining portion shall be conveyed by the developer and a fee shall be paid by the developer in lieu of conveying the additional land which the developer would otherwise be required to convey and such fees to be used for the improvements of other city park land in the area serving the development.
- f. *Determination of land or fee.* The City Council shall determine whether to accept land or require payment of the fee in lieu thereof, after consideration of the following:
1. Topography, geology access and location of land in the development available for dedication;
 2. Size and shape of the development and land available;
 3. The feasibility of conveyance;
 4. Availability of previously acquired parks property;
 5. Whether the developer owns or controls other land designated in the Edgewater Comprehensive Plan or other lands; and
 6. Accessibility.
- g. *Procedure.* In subdivisions requiring plat approval, the developer shall agree in writing to convey land for parks or pay a fee in lieu thereof or a combination of both. The City Council shall consider the request after a recommendation from the Leisure Services Department and the Planning and Zoning Board at the time of approval of the preliminary plat. At the time of approval of the final subdivision plat the developer shall convey the land and pay the fees as previously determined by the City Council, but not later than issuance of a building permit.

SECTION 21-53 - STORMWATER MANAGEMENT REQUIREMENTS

21-53.01 - Comprehensive Plan Reference

The intent of this Section is to provide regulations that ensure post-development stormwater runoff rates/volumes that do not exceed the pre-development rates/volumes and to prevent erosion, sedimentation and flooding to the maximum extent possible, and to prevent illicit discharge and/or illicit connections to the stormwater system. The provisions of Section 21-53-Stormwater Management are consistent with and implement the Comprehensive Plan contained in the Future Land Use Element, Utilities Element, Coastal Element, Conservation Element and the National Pollutant Discharge Elimination System Permit (NPDES).

21-53.02 - Permit Authority

No development activity can occur without obtaining a stormwater permit from the City and any similar permit issued by State or Federal regulating agencies having jurisdiction, to include but not be limited to the following examples: and/or the St. Johns River Water Management District (SJRWMD) as provided herein, Florida Department of Environmental Protection (FDEP), United States Environmental Protection Agency (USEPA), United States Army Corps of Engineers (USACOE). In some cases, at the sole discretion of the City Manager, the City may elect to accept alternative criteria as satisfying the requirements and standards necessary to obtain a City-issued stormwater permit. Such alternative criteria shall be at least equal to, or more protective than City standards, and may be equal to the standards promulgated by or recommended by SJRWMD, FDEP, USEPA, or USACOE. ~~It is the intent of the City to accept stormwater permits issued by the SJRWMD in lieu of a City required permit.~~ Development below thresholds of the SJRWMD shall require a City stormwater permit.

The following activities may potentially alter or disrupt existing stormwater runoff patterns and shall require a permit prior to the initiation of any project:

- a. Clearance and/or draining of land as an adjunct to construction;
- b. Clearance and/or draining of nonagricultural lands for agricultural purposes;
- c. Subdivision of land;
- d. Replatting of recorded subdivisions;
- e. Changing the use of land, or construction of a structure or a change in the size of one or more structures;
- f. Filling of depression areas;
- g. Construction of a driveway that crosses a public swale or ditch.
- h. Altering the shoreline or bank of any surface water body.

21-53.03 – Exemptions to Permit Requirements

The following activities shall be exempt from the formal stormwater permitting procedures of this article unless found by the City to cause or contribute to deficiencies or violations of other portions of this Article:

- a. Maintenance work on utility or transportation systems, if performed on established rights-of-way or easements; provided such maintenance work does not alter the purpose and intent of the system as constructed.
- b. Maintenance work performed on mosquito control drainage canals.
- c. Any maintenance, alteration, renewal, use or improvement to any existing structure not changing or affecting the rate or volume of runoff or the impervious surface area.
- d. The acceptance of a plat by the City Council in accordance with the subdivision regulations or approval of a site plan, shall be construed to include an approval of the stormwater management system and a separate permit under this Section is not required. Subsequent changes or additions not reflected by the accepted plat, or site plan, however shall be subject

to the terms of this Article.

- e. Any maintenance, alteration, renewal, use or improvement to an existing structure that does not increase the rate or volume of stormwater runoff. The City will recognize exemptions given by the SJRWMD, provided the exemption and design standards comply with the City Land Development Code and/or Standard Construction Details.
- f. Construction of any new structure that consumes less than 1,000 square feet of impervious surface per parcel, provided that no fill or excavation is performed which would adversely alter the existing runoff patterns for the subject property or of adjacent properties. The total impervious surface on the subject ~~per~~-parcel shall not exceed 1,000 square feet to qualify for this exemption.

21-53.04 - General Design Standards

- a. In general, the latest revision of the U.S. Department of Agriculture, Soil Conservation Service's Technical Release No. 55 entitled A Urban Hydrology for Small Watersheds shall be used in the stormwater designs described herein. However, the City Engineer may authorize the use of alternative methodology, such as the Green-Ampt model or the Horton infiltration method, where geotechnical factors are notably distinct from those used in the TR-55 method. Examples may include large areas with an abundance of Hydrologic Soils Group "A" soils or large areas with weighted runoff Curve Number less than 40.~~if similar results are produced.~~
- b. ~~Three-One (31) hard-copies-copy and one (1) electronic copy~~ of the stormwater calculations prepared-signed and sealed by a licensed professional engineer shall be submitted for all proposed developments exceeding 9,000 sqft total impervious surface~~permits not requiring a SJRWMD permit~~. For the purposes of this chapter, impervious surface shall include rooftops, pedestrian walkways, all areas generally devoid of vegetation where vehicular traffic is reasonably expected to occur regardless of surface material type.
- c. Innovative approaches to stormwater management shall be encouraged and the concurrent control of erosion, sedimentation and flooding shall be mandatory. Best Management Practices (BMPs) shall be used in controlling stormwater runoff prior to discharge to the City's MS4 or waters of the United States.
- d. On-site pollution abatement shall be provided for no less than one-half-inch runoff depth over the entire project area. For sites which contribute runoff, whether directly or indirectly, to receiving waters for which the FDEP has adopted a Basin Management Action Plan (BMAP) or a similar document to remedy an impairment by imposing reductions on the City in the form of Total Maximum Daily Loads (TMDL), or equivalent, for point-source and non-point-source pollutants, the City shall assess the proportionate share of such reductions to be borne by any new development or redevelopment.
- e. Pollution abatement shall be provided through retention where the project soils allow the process to occur. If one hundred percent (100%) of the retention volume is not capable of evacuation within seventy-two (72) hours through percolation and evapo-transpiration,

detention with filtration ~~shall~~may be used. A minimum factor of safety of 2.0 shall be used for all drawdown calculations.

- f. In general, the design and performance standards as listed in the latest version of the SJRWMD Permit Information Manual Volume II (formerly the Applicant's Handbook) Part B shall be used for stormwater management systems. Alternative and innovative approaches to stormwater management systems may be approved by the City Engineer where the Applicant demonstrates such system provides a higher degree of pollution abatement and water quantity attenuation.~~Other alternative methods, such as wet detention with controlled bleed down, are acceptable at the discretion of the City Engineer, provided a permit from the SJRWMD is obtained.~~
- g. All project areas greater than one quarter (1/4) acre shall ~~also~~ calculate the ~~retention~~pollution abatement volume based upon ~~the runoff generated from the first one inch (1")~~ multiplied by the entirety of the parcel area landward of the riverine mean high water line. If any undisturbed wetland or required conservation buffers are present onsite, these may be deducted from the area calculation for pollution abatement volume. Other surface waters such as drainage canals or stormwater management ponds shall not be excluded from the area calculations. ~~of rainfall and be calculated as the total percentage of impervious surface, including pond surface area, multiplied by one inch of rainfall.~~ If the ~~runoff~~calculated pollution abatement volume ~~depth~~ does not exceed one half-inch multiplied by the entirety of the parcel area, one-half inch multiplied by the entirety of the parcel area shall be used as the ~~runoff value~~pollution abatement volume.
- h. The use of ~~filtration systems~~Low Impact Development (LID) techniques is ~~not permitted~~encouraged. Low Impact Development is an ecologically friendly approach to site development and storm water management that aims to mitigate development impacts to land, water and air by emphasizing the integration of site design and planning techniques that conserve the natural systems and hydrologic functions of a site. All new development and redevelopment projects are encouraged to implement permeable surfaces, bioretention areas, grassed swales, vegetated roof tops and catchment systems for irrigation in the development, when feasible.~~If no other stormwater treatment method is available, the TRC may approve the use of filtration systems (underdrain or exfiltration) and shall require a minimum of two (2) soil borings that detail soil profile, seasonal high water table and any pertinent percolation rates at the filter site location by a certified geotechnical engineer registered in the State of Florida.~~
- i. All projects that qualify for Environmental Resource Permits and/or Surface Water Management Permits issued through SJRWMD, FDEP, or other State or Federal agencies shall provide copies of the permit application and calculations to the Development Services Department as part of the site review process. Final approval of required State and Federal permits shall be granted and copies of the issued permits provided to the Development Services Department prior to ~~issuance of Development Order or any construction permits~~commencing any construction activities.
- j. All projects that qualify for a FDEP - NPDES Permit pursuant to Chapter 62-621, F.A.C.

shall provide copies of the Notice of Intent and all attachments to the Development Services Department prior to ~~issuance of any building permit~~commencing any construction activities. Two (2) copies of the Erosion & Sediment Control Plan shall also be submitted.

- k. The post-development discharge peak volumetric flowrate and ~~volumes~~ shall not exceed the pre-development rates -for each of the following storm events: Mean Annual/24-hour/4.7-inch, 25-year/24-hour/9.4-inch, and 100 year/24-hour/13.1-inch for systems with positive outfall to a public conveyance. For development within land-locked basins lacking positive outfall to a public conveyance, in a fully retain onsite the 100-100-year/3-day/72-hour/16.0-inch storm event for land-locked basins and 25 year/24 hour storm event for a positive outfall basin.
- l. The rainfall depths of the design storm events shall be as published by the National Weather Service using a continually updated statistical epoch, but in no case lower than those depths stated above which were derived from NOAA Atlas 14, Volume 9, Version 2 Point Precipitation Frequency Estimates for Edgewater, Florida. Peak precipitation intensities shall be estimated from the greater of the following sources: NOAA Atlas 14, SJRWMD Type II-Florida Modified hydrograph in the latest version of the Permit Information Manual Volume II (formerly Applicant's Handbook) used with the NRCS TR-55 method, or Florida Department of Transportation (FDOT) Intensity-Duration-Frequency (IDF) curves in the latest version of the Drainage Design Manual. All rainfall amounts shall be interpolated from the hydrograph contour in the latest version of TR-55 for the particular area of the City.
- m. If the development discharges into a public conveyance which serves areas impacted by the 100-year floodplain (as identified by FEMA or wide-area stormwater modeling adopted by the City), The-the peak discharge rate from a developed or redeveloped site shall not exceed 90% the peak discharge rate prior to development or redevelopment.
- n. No site alteration shall cause siltation of wetlands, pollution of downstream wetlands, reduce the natural retention or filtering capabilities of wetlands.
- o. No site alteration shall allow water to become a health hazard or contribute to the breeding of mosquitoes.
- p. All stormwater design shall be consistent with the City's Standard Construction Details.

21-53.05 - Site Attenuation Standards

- a. Proposed stormwater management facilities must be designed to meet the minimum design performance criteria, for both water quality treatment and attenuation, established by the SJRWMD within Chapters 40C-4, 40C-40, 40C-41 and 40C-42, F.A.C. (or current chapters). Plans and computations shall be signed, sealed and dated with a readable signature.
 - 1. Stormwater management systems shall comply with accepted engineering practices to minimize pollution, remove oils and suspended solids and other objectionable material contained within the stormwater runoff to acceptable

limits, as well as employ Best Management Practices.

21-53.06 - Positive Outfall Standards

- a. A positive drainage outfall system shall be provided to a public conveyance which does not adversely impact downstream owners or adjacent lands, nor redirect preexisting runoff to previously unaffected lands. A drainage easement shall be required for outfall systems which affect private property.
- b. In the case of preexisting flooding downstream, the City Engineer may allow the relocation of the natural outfall if it can be shown that:
 1. Redirection of water will help mitigate downstream flooding problems.
 2. Land receiving new upstream discharge demonstrates the capability to handle additional upstream discharge.
 3. The owner(s) of new receiving land presents an acknowledgment and acceptance of the outfall flows.
 4. All stormwater discharge to Class II Waters, principally the Indian River Lagoon, shall meet the requirements of Chapter 62-302, F.A.C.
 5. The seasonal high water table shall not be reduced if adverse effects on wetlands or increased flows to the detriment of neighboring lands result.
- c. Stormwater Discharges to the MS4 and Waters of the United States
 1. Discharges to the City's MS4 shall be controlled to the extent that such discharges will not impair the operation of the MS4 or contribute to the failure of the MS4 to meet any local, state or federal requirements, including but not limited to, NPDES Permit ID No.FLR04E016. Discharges to the waters of the United States shall be controlled to the maximum extent practicable as defined in the NPDES Permit ID NO. FLR04E016.
 2. Any person responsible for discharges determined by the City to be contributing to the failure of the City's MS4 or waters within the City shall comply with the provisions and conditions of NPDES Permit ID No. FLR04E016 and shall provide corrective measures within 30 days of notification by the City and shall be subject to payment of fines and damages.
- d. Stormwater Discharges from Industrial and Construction Activities
 1. Stormwater discharges from industrial activities shall be treated or managed on site, in accordance with appropriate federal, state or local permits and regulations prior to discharge to the City's MS4 or to waters of the United States.
 2. Stormwater discharges from construction activities shall be treated or managed on site in accordance with appropriate federal, state or local permits and regulations prior to discharge to the City's MS4 or to waters of the United States. Erosion, sediment and pollution controls for the construction site shall be properly implemented, maintained and operated according to a pollution prevention plan

required by an NPDES permit for the discharge of stormwater from construction activities or according to a state permit issued by the Florida Department of Environmental Protection or the St. Johns River Water Management District.

3. The owners or operators of industrial facilities and construction sites which will discharge stormwater to the City's MS4 or to waters of the United States within the City limits shall provide written notification of the connection or discharge prior to the discharge from the industrial activity or construction activity.

e. Prohibition of Illicit Discharges and Illicit Connections

1. Illicit discharges and illicit connections not exempt under the provisions of this Article are prohibited.
2. Failure to report a connection from industrial activities or construction activities to the City's MS4 or to waters of the United States constitutes an illicit connection.
3. Failure to report a discharge from industrial activities or construction activities to the City's MS4 or to waters of the United States constitutes an illicit discharge.
4. Any discharge to the City's MS4 or to waters of the United States which is in violation of federal, state or local permits or regulations constitutes an illicit discharge.
5. Persons responsible for illicit discharges or illicit connections shall immediately, upon notification or discovery, initiate procedures to cease the illicit discharge or illicit connection, or obtain appropriate federal, state, or local permits for such discharge or connection.

f. Exemptions for Illicit Discharges and Illicit Connections

The following activities shall not be considered either an illicit discharge or illicit connection unless such activities cause, or significantly contribute to, the impairment of the use of the City's MS4 or the violation of the conditions of NPDES Permit No. FLR04E016.

- a. Water line flushing
- b. Flushing of reclaimed water lines
- c. Street cleaning
- d. Construction dust control
- e. Landscape Irrigation
- f. Diverted stream flows
- g. Rising ground waters
- h. Foundation and footing drains
- i. Swimming Pool Discharges
- j. Uncontaminated ground water infiltration
- k. Uncontaminated pumped ground water
- l. Discharges from potable water sources
- m. Air conditioning condensate
- n. Springs
- o. Individual residential car washing

- p. Flows from riparian habitat and wetlands
- q. Discharges or flows from emergency firefighting activities and emergency response activities done in accordance with an adopted spill/response action plan.

21-53.07 - Shoreline Protection Standards

- a. Vertical seawalls and bulkheads are prohibited unless a variance is approved pursuant to the requirements of Section 21-100. Hardening of the estuarian shoreline shall be permitted only when other stabilization methods are not practical and erosion is causing a significant threat to real property. Permits from the appropriate regulatory agency are required.
- b. A 50 foot wide shoreline buffer zone upland from the mean high water mark along the Indian River Lagoon is hereby established. Except as provided in subsection “d” below, the native vegetation shall be maintained and no development shall be permitted.
- c. All portions of the shoreline containing wetlands vegetation are subject to the requirements of Section 21-41.
- d. No more than twenty percent (20%) or twenty-five feet (25’), whichever is greater, of the shoreline within property boundaries may be altered for reasonable access. Reasonable access may include docks, boat ramps, pervious walkways and elevated walkways.

21-53.08 - System Maintenance Standards

- a. Except for systems accepted for City maintenance, property owners and/or occupants shall ensure that all stormwater facilities are maintained in proper working condition.
- b. The property owners of private systems shall execute an access easement to permit the City to inspect and, if necessary, to take corrective action should the owner fail to properly maintain the system(s).
- c. Should the owner fail to properly maintain the system(s), the City shall give such owner written notice of the nature of the corrective action necessary.
- d. Should an owner fail to complete corrective action within thirty (30) days of the written notice from the City, the City may enter the parcel, complete the corrective actions and assess the costs of the corrective action to the owner.
- e. All areas and/or structures to be maintained by the City must be dedicated to the City by plat or separate instrument and accepted by the City Council upon a recommendation from the City Engineer and Development Services Director.

21-53.09 - Stormwater Permit Application

- a. A stormwater permit application is required for development activity as described in Section

21-53.02. The application shall include:

1. Non-residential Sites:

- a. Detailed site plan prepared by a professional engineer or architect registered in the state of Florida.
- b. Topographic maps of the site before and after the proposed alteration, as prepared by a professional engineer or land surveyor registered in the state.
- c. General vegetation maps of the site before and after the proposed alteration.
- d. Construction plans, specifications, computations and hydrographs necessary to indicate compliance with the requirements of this Article, as prepared by a professional engineer registered in the State of Florida. Construction plans shall be readable with a minimum scale of one-inch (1") equals thirty feet (30').

2. Residential Sites:

- a. Map of the site as prepared by a professional engineer or land surveyor registered in the state.
- b. Proposed alterations with all impervious surface areas shown to scale on the survey.
- c. All proposed pond and/or swale dimensions and depths.
- d. A statement expressing the intent and scope of the proposed project.

21-53.10 - Plan Adherence

- a. Upon issuance of a stormwater permit, the applicant shall be required to adhere to the permit as approved. Any change or amendments to the plan must be approved by the City Engineer in accordance with the procedures set forth above.
- b. All stormwater conveyance appurtenances including ponds and swales to rough grade shall be in place prior to construction of any other improvements. Sodding or other erosion control measures may be required during construction in order to control erosion and sediment.
- c. Structural controls and other BMPs used for controlling the discharge of pollutants to the City's MS4 or to waters of the United States shall be operated and maintained so as to function in accordance with permitted design or performance criteria and in compliance with federal, state or local permit conditions and regulations.
- d. After the completion of the project, the applicant or his engineer shall submit as-built plans to the Development Services Department.

21-53.11 - Enforcement

Whenever the code enforcement officer or City Engineer finds any work being performed in a manner either in violation to the provisions of the code or unsafe or in conflicting with permitted work, the code enforcement officer or City Engineer is authorized to issue a stop work

order. The stop work order shall be in writing and posted on the property. Upon posting the stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and conditions under which the cited work will be permitted to resume. Any person who continues work after the property has been posted, except such work as that person is directed to perform to remove or secure a violation or unsafe condition, shall be unlawful and constitutes a civil penalty as outlined in Chapter 1, of the City of Edgewater Code of Ordinances.

SECTION 21-54 - LANDSCAPING REQUIREMENTS

21-54.01 - Comprehensive Plan Reference

The intent of this Section is to improve the appearance of the City, protect and improve property values and establish an integrated system of landscaping and horizontal corridors that provide visual accessibility to businesses. The provisions of Section 21-54 - Landscaping are consistent with and implement the Comprehensive Plan contained in the Future Land Use Element, Utilities Element and Recreation & Open Space Element

This Section applies to all proposed development and redevelopment. New subdivisions are subject to the requirements of Article XIII. Properties located within the Indian River Boulevard Overlay are subject to the requirements contained in Article XVIII - Indian River Boulevard Corridor Design Regulations. Landscaping plans must be submitted as a component of development approval.

The City of Edgewater encourages innovative water conservation planning, design and techniques, including xeriscape landscaping methods as defined in Article II.

21-54.02 - Installation Standards

- a. The property owner shall be responsible for the installation of required landscaping in conformance with accepted commercial planting procedures.
- b. The property owner shall be responsible to ensure that all required landscaping is maintained in a healthy condition, including but not limited to, sufficient watering and trimming.
- c. All plant materials used in conformance with the requirements of this Section shall be Florida grade #1, as established, and periodically revised by the Florida Department of Agriculture and Consumer Affairs.
- d. Ground cover shall be planted so as to present a finished appearance and complete coverage within twelve (12) months of installation.
- e. Shrubs and hedges shall be non-deciduous species, shall be a minimum of twenty-four inches (24") in height immediately after planting. Plants shall be spaced no more than three feet (3') apart measured center to center. The number of shrubs required shall be determined by the linear length of the lot perimeter divided by three.
- f. Sod shall be used in road right-of-ways, swales, stormwater management areas and other

areas subject to erosion. All new development or expansions must sod all disturbed areas of the lot prior to the time the Certificate of Occupancy is issued in accordance with all applicable regulatory agency requirements.

- g. Landscaped areas required by this Section shall not use either the trees listed in Table V-6 nor the plants listed in Table V-2.

**TABLE V- 2
PROHIBITED PLANTS**

COMMON PLANT NAME	BOTANICAL NAME
Acacia	Acacia spp.
Air Potato Vine	Dioscorea bulbifera
Caster Bean	Ricinus communis
Hydrilla	Hydrilla verticillata
Kudzu Vine	Paeraria lobate
Mimosa	Albizia julibrissin
Paper Mulberry	Broussonetia papyrifera
Rice Paper Plant	Tetrapanax papyriferus
Rosewood	Dalbergia sissoo
Taro	Colocasia esculenta
Water Hyacinth	Eichhornia spp.
Cogongrass	Imperata cylindrical
Tropical Soda Apple	Solanum viarum
Catchlaw mimosa	Mimosa pigra
Old World climbing fern	Lygodium microphyllum
Skunk vine	Paederia foetida

21-54.03 - Parking Lot Landscaping Requirements

The requirements of this subsection shall apply to new parking areas, altered or improved parking areas and parking areas that are altered due to a change in use of the primary structure.

- a. A minimum ten foot (10') wide landscaped area shall be provided between vehicular use areas and any adjacent public roadway.
- b. Landscaped areas shall be protected from vehicular encroachment with effective curbs. Wheel stops are permitted only when certain stormwater system conditions warrant their use. Wheel stops are permitted on the perimeter of the parking area only and shall be maintained by the property owner in a manner as to not cause any bodily injury or property damage. Wheel stops shall be avoided in principle areas of pedestrian movement.
- c. Parking areas shall be designed so that in areas other than industrial zoned property no more than ten (10) spaces in a row occur and shall have a minimum ten foot (10') landscaped island in between.
- d. Parking lots shall have a minimum of a ten foot (10') landscape area abutting the stalls unless abutting sidewalks.

21-54.04 - Buffer Yard Determination Process

The City shall utilize a matrix to determine buffer requirements.

- a. Determine the type of proposed use.
- b. Identify the type(s) of uses adjacent to the proposed site, except the side adjacent to a public roadway.
- c. Identify the use intensity classification from Table V-3, i.e., Class I, II, III, IV, V or VI.
- d. Determine the buffer yard classification from Table V-4, i.e., A, B, C or D. For example, a Class III land use adjacent to a Class II land use requires a B buffer yard.
- e. Select the desired buffer yard components for each perimeter of the site from the B buffer yard options in Table V-5. For example, a project needing a B buffer yard has the following options to meet the buffer yard requirement:
 1. Install a 35 foot wide buffer yard with 24 plants per 100 linear feet and one tree for each 1500 sq. ft. of lot area and no wall (e.g. 200-foot wide lot = 48 shrubs/five (5) trees); or
 2. Install a 20 foot wide buffer yard with 32 plants per 100 linear feet and one tree per 1500 sq. ft. of lot area and a 6 foot high masonry wall (e.g. 200-foot wide lot = 64 shrubs/three (3) trees); or
 3. Install a 15 foot wide buffer yard with 40 plants per 100 linear feet and one tree per 1500 sq. ft. of lot area and a 6-foot high masonry wall (e.g. 200-foot wide lot = 80 shrubs/ two (2) trees).
- f. Where walls are selected, they shall be inside the buffer area with plantings on the outside.
- g. A project could have different buffer yard requirements for the rear and each side depending upon the adjacent uses.
- h. The buffer yard plan shall be included in the landscaping plan.
- h. Planting of trees in buffer areas may satisfy the total number to meet the one tree per 1,500 square feet of lot area requirements.

**TABLE V-3
USE INTENSITY CLASSIFICATION**

Class I	Class II	Class III	Class IV	Class V	Class VI
Single Family	Townhouses	Day Care - Children or Adults	Restaurant	Places of Assembly	
Duplex	Community Residential Homes	Manufactured Home Subdivisions	Bars, Lodges	Outdoor Recreation	Outdoor Storage
Multifamily Dwellings less than 4 units	Multifamily Dwellings	Professional Offices	Schools - Public Private No spec.	Warehouse & Distribution	Body Shops Auto Service/Repair
					Machine Shops
			Automobile Sales	I-1 Uses Not Specified	I-2 Uses Not Specified
	Nursing Homes/ALF's		Retail - Not Specified	BPUD uses not specified	IPUD uses not specified
	Bed & Breakfast	Personal Service Establishments	Indoor Recreation		
	Manufactured/ Mobile Homes	Places of Worship	Hotels & Motels		
		Medical, Dental & Veterinary Clinics	Shopping Centers		
			Theaters		
		Mini-warehouse	B-3 & B-4 Uses Not Specified		
		Marinas/Fish Camps			

**TABLE V-4
BUFFER YARD CLASSIFICATIONS**

Adjacent (Existing) Use Intensity Class From Table V-3	Proposed Use Intensity Class From Table V-8					
	I	II	III	IV	V	VI
Class I	N/A	A	B	C	C	D
Class II	A	A	B	C	C	D
Class III	B	B	A	A	A	A
Class IV	C	C	A	N/A	N/A	A
Class V	C	C	A	N/A	N/A	N/A
Class VI	D	D	A	A	N/A	N/A

**TABLE V- 5
BUFFER YARD PLANTING OPTIONS**

Table V-4 Buffer Class	Min. Buffer Yard Width Ft.	Plants/ 100 Ft.	Req. Screening	Req. Trees
Class A	20	20	None	(1)
	15	27.5	None	(1)
	10	37.5	None	(1)
Class B	35	24	None	(1)
	20	32	(2)	(1)
	15	40	(2)	(1)
Class C	50	30	None	(1)
	40	40	(2)	(1)
	30	50	(2)	(1)
Class D	70	36	(2)	(1)
	50	48	(2)	(1)
	40	60	(2)	(1)

(1) One tree per 1500 sq. ft. of buffer yard.

(2) 6 foot masonry wall (inside buffer) plus required plantings and trees (outside of wall) unless part of an approved Master Development Plan.

21-54.05 - Buffer Yard Installation Standards

- a. Buffer yards shall be located at the perimeter of the property and shall not be located in an existing or proposed public road right-of-way.
- b. When additional plants or trees are required in areas with existing natural vegetation, it shall be planted to minimize disturbance of suitable native plants.
- c. In the event it is impractical to install landscaping outside of a required wall, fifty percent (50%) of the required buffer yard plantings may be located on either side of a required wall on the same parcel.

SECTION 21-55 - TREE PROTECTION REQUIREMENTS

21-55.01 - Comprehensive Plan Reference

The intent of this Section is to protect certain trees to aid in the stabilization of soil by the prevention of erosion and sedimentation, reduce stormwater runoff and assist with the replenishment of groundwater supplies. The provisions of this Section are intended to provide a haven for wildlife, protect and increase property values, provide a noise buffer and enhance the City's physical and aesthetic environment.

Policy statements implementing these intents were adopted in the Comprehensive Plan. The provisions of Section 21-55 - Tree Protection are consistent with and implement the Comprehensive Plan policies contained in the Future Land Use Element and Recreation/Open Space Element.

21-55.02 - Tree Removal Permit

- a. **Standard Permits:** A tree removal permit shall be required for trees of six inches (6") DBH (diameter at breast height measured 4 ½ feet from base of tree) or larger on all property within the City limits. Trees shall be defined by Section 21-20.02. Trees to be removed in this category will be required to be replaced if there are an insufficient number of trees left on the lot.
- b. Replacement trees shall be a minimum of 2 ½ inches in diameter measured 6 inches above the soil line or 10 feet in height above the soil line. An application for the permit is available in the Development Services Department. Fifty-percent (50%) of replacement trees shall be specimen trees as identified in Section 21-55-06.
- c. **Historic Tree Permits:** A tree so designated as historic per Section 21-55.05 shall only be removed by special permit granted by the City Council under Section 21-55.03 (b).
- d. Specimen and Historic trees, regardless of location, shall only be removed upon the issuance of a tree removal permit.

- e. Any tree listed in Table V-6 may be removed without a tree permit and shall be prohibited from use in landscaping areas.

**TABLE V-6
PROHIBITED TREES**

COMMON TREE NAME	BOTANICAL NAME
White Mulberry	Morus rubra
Australian Pine/Beefwood	Casuarina spp.
Brazilian Pepper	Schinus terebinthifolia
Cajeput or Punk Tree/Melaleuca	Melaleuca quinquenervia
Camphor	Cinnamomum camphora
Chinaberry	Melia azedarach
Chinese Tallow	Sapium sebiferum
Ear Tree	Enterolobium cyclocarpum
Eucalyptus	Eucalyptus spp.
Jacaranda	Jacaranda acutifolia
Silk Oak	Grevillea robusta
Woman's Tongue/Mimosa	Albizia lebbbeck spp.
Norfolk Island Pine	Araucaria heterophylla
Paper Mulberry	Broussonetia papyrifera
Golden Raintree	Koelreuteria paniculata
Orchid Tree	Bauhinia spp.
Carrotwood	Cupaniopsis anacardioides

21-55.03 - Tree Removal Permit Standards

- a. Existing trees may be relocated to suitable areas on same site in accordance with sound industry practices, refer to Section 21-311.
- b. All mitigated (replaced or relocated) trees shall be a minimum of 2.5 inches measured six inches (6") above the soil line or 10-feet in height above the soil line. Historic tree removal permits granted by the City Council shall have the following options:
 1. Determine the tree to be removed is in such a condition that it is hazardous to the

- surrounding area or structure(s) that no replacement is necessary, or
 2. Require the replacement of historic trees at a ratio of one inch (1”) diameter to one inch (1”) diameter of replacement trees, or
 3. Require the payment of money per Section 21-311 equivalent to the replacement cost of the replacement trees.
- c. Relocated trees shall be planted in landscape buffer areas or parking island areas provided with irrigation systems.
 - d. All tree plantings shall be replaced if they die within two (2) years after installation. The health of a replacement tree shall be maintained for a period of two (2) years from the date of planting. The two (2) year maintenance period shall begin anew whenever a tree is replaced.
 - e. Replacement trees shall be sufficiently spaced to allow adequate growth room for the species.

21-55.04 - Exemptions

Notwithstanding any other provision of this Section to the contrary, any person may cut down, destroy, replace or authorize removal of one or more trees, whose trunks lie wholly within the boundaries of property owned by said person without a tree removal permit if any of the following criteria are met:

1. The property is engaged in active silviculture uses; or
2. The property contains trees which may have been determined by the Building Department to be deteriorated as a result of age, hurricane, storms, fire, freeze, disease, lightning or other natural acts; or
3. The trees are within an existing public or private right-of-way or maintenance easement and requires action to maintain traffic visibility at intersecting public streets or such other trees which may disrupt public utilities, such as powerlines, drainage ways or other public needs.

21-55.05 - Historic Trees

Historic trees shall only be removed upon approval of a Tree Removal Permit granted by the City Council. Historic trees are those listed in Section 21-55.06 that reach 36-inches DBH with the exception of the Laurel Oak.

21-55.06 - Specimen Trees

Specimen trees shall not be removed without a Tree Removal Permit or as part of an approved development plan. The following trees are designated as Specimen Trees.

Common Name	Botanical Name	Inches (DBH)
Elm	Ulmus spp.	12 plus
Hickory	Carya spp.	12 plus
Loblolly Bay	Gordonia lasianthus	12 plus
Magnolia	Magnolia grandiflora	12 plus
Maple	Acer spp.	12 plus
Other Oak Species	Quercus spp.	12 plus
Red Bay	Persea borbonia	12 plus
Red Cedar	Juniperus silicicola	12 plus
Swamp Bay	Persea palustris	12 plus
Sweet Bay	Magnolia virginiana	12 plus
Sweet Gum	Liquidambar styraciflua	12 plus
Sycamore	Platanus occidentalis	12 plus
Turkey Oak	Quercus laevis	12 plus
Cypress	Taxodium spp.	12 Plus
Sugarberry/Hackberry	Celtis laevigata	12 Plus
Slash Pine	Pinus elliottii	18 Plus
Longleaf Pine	Pinus palustris	18 Plus

21-55.07 - Historic and Specimen Tree Protection Requirements

- a. All development projects shall provide a plan to protect historic and/or specimen trees after construction has occurred on a site. Such plan may include, but not be limited to conservation easements, common open space, tree protection easements, deed restrictions and homeowner association documents. The minimum protection requirements for historic and specimen trees are as follows:

Number of Trees	Minimum Tree Protection
less than 2.9 per acre	80 percent
3.0 to 5.0 per acre	65 percent
5.1 to 8.0 per acre	50 percent
8.0 plus per acre	4 per acre

- b. All proposed development projects shall be required to include a tree survey by either a licensed Surveyor or Arborist, locating all Specimen and Historic Trees.
- c. Statistical tree survey information may be considered at the direction of the TRC. However,

such statistical surveys shall be limited to sites containing an overstory consisting predominantly of trees uniform in age, species and distribution which do not contain specimen or historic trees. Statistical surveys must be conducted in compliance with accepted forestry practices.

- d. All trees to be preserved shall be identified on site by harmlessly marking or banding.
- e. All trees to be preserved shall have their natural soil level maintained. Tree wells and/or planter islands shall be provided if necessary to maintain the natural existing soil levels. All efforts shall be made to maintain the natural drainage of trees in the grading and drainage plan.
- f. Prior to construction, the developer shall erect protective barriers around all trees to be preserved. These barriers shall be sufficient to prevent intrusion on that area within the drip line of the canopy of the tree.
- g. During construction, no signs, attachments or permits may be attached to any protected tree.
- h. No existing or replacement trees shall be removed after a Certificate of Occupancy is issued.

21-55.08 - Area Tree Protection Requirements

Fifteen percent (15%) of the square footage of any development shall be designated for the protection of trees. The area required to protect historic/specimen trees may be included to satisfy this requirement. This required area may be constituted as one or more sub-areas within the development. Said area may include any landscape buffer or other areas as required by the City on a development. Such designated areas shall contain sufficient land area to comply with minimum tree protection standards to adequately protect the trees contained within the areas. A minimum of fifty percent (50%) of the required minimum number of trees as provided in Section 21-55.07 shall consist of existing trees within said areas. The City may provide for a waiver or modification of this requirement if the development contains an insufficient amount of existing trees to meet this requirement or, if the City determines that modification of this requirement is warranted by specific on-site conditions.

21-55.09 - Installation Requirements

- a. Single-family and duplex lots shall have a minimum of one (1) tree per 1,500 square feet of lot area.
- b. All development projects requiring site plan approval shall contain a minimum of one (1) tree for every 1,500 square feet of lot area.
- c. If the lot contains an insufficient number of existing trees to meet these requirements, replacement trees shall be provided per Section 21-55.02(b).
- d. In the event it is impractical to install the required number of replacement trees due to lot

size, building configuration or other impediments, the Development Services Department may:

1. Allow up to a forty percent (40%) modification in the number required as long as the overall caliper requirements are fulfilled; or
 2. Allow the required trees to be planted on City property.
- e. Existing trees shall meet the definition provided in Article II to be counted in minimum requirements.

21-55.10 - Enforcement

- a. The Development Services Director, Building Official, Code Enforcement Officer or designee shall issue a stop-work order to any person found in the act of cutting down, destroying, damaging or removing trees in violation of this Section.
- b. Historic/specimen trees removed in violation of this Section shall be replaced at a ratio of 2 inches per inch of caliper lost. In lieu of physical replacement, City Council may impose a fee of \$37.00 per cross sectional square inch lost or combination thereof.

SECTION 21-56 PARKING AND LOADING REQUIREMENTS

21-56.01 - Comprehensive Plan Reference

Chapter 163.3202, F.S. requires adoption of land development regulations to include safe and convenient off-street parking and loading provisions. The provisions of Section 21-57 - Parking and Loading Requirements are consistent with and implement the Comprehensive Plan contained in the Future Land Use Element and Utilities Element.

Properties located in the Indian River Boulevard-S.R. 442 Corridor Overlay and Ridgewood Avenue Corridor Overlay are also subject to the regulations contained in Article XVIII and Article XX respectively for parking and loading design layout.

21-56.02 - Off-Street Parking Standards

- a. All required off-street parking shall be located a minimum of ten feet (10') behind the right-of-way line of the adjacent street and on the same parcel as the building which they are intended to serve, unless a joint parking area agreement is executed as described in Section 21.56.04.
- b. No building permit, site plan, conditional use, planned unit development or business tax receipt application shall be approved unless the required number of spaces are provided in compliance with the requirements herein unless a variance has been approved.
- c. Any use that becomes non-conforming as to parking requirements upon adoption of this

Article shall be required to come into compliance if the use changes or the structure is expanded by more than twenty percent (20%).

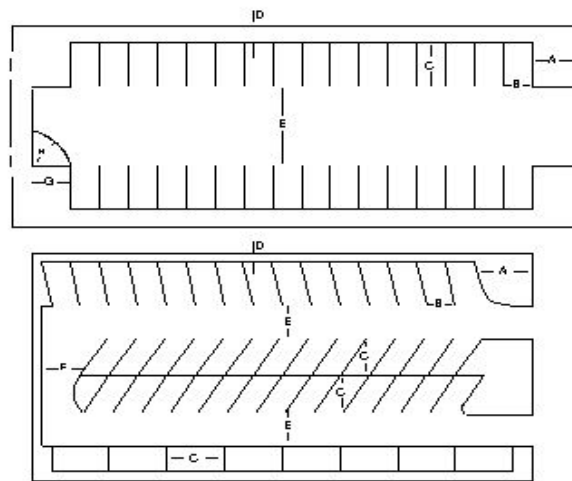
- d. The parking lot design standards are depicted in Table V-7 and Figure V-7A.

TABLE V-7
Parking Lot Design Standards

Stall Angle / Requirements (ft)	45 Dgres	50 Dgres	55 Dgres	60 Dgres	90 Dgres	180 Dgres
Offset - A	18'	16'	13'	10'	10'	10'
Space Width - B	12'	12'	13'	10'	10'*	10'
Space Depth - C	18'	18'	19'	20'	20'*	22'
Landscape Area - D	10'	10'	10'	10'	10'	10'
Aisle Width - E	13'	15'	16'	18'	24'	15'
Turning Area - F	17'	16'	15'	14'	14'	14'
Maneuver Depth - G					15'	
Maneuver Radius - H					15'	

*Note 2' overhang is permitted when parking stalls are curbed.

FIGURE V - 7A



- e. Maneuvering areas shall be designed to permit vehicles to enter and leave the parking area in a forward direction.
- f. Any vehicle backup areas shall be fifteen feet (15') deep and have a minimum fifteen foot (15') turning radius.
- g. Driveways shall be considered parking spaces on parcels developed for single-family residences. All driveways shall be paved including the aprons and shall be constructed no closer than five feet (5') to any lot line or encroach into any side or rear easement.
- h. When the parking calculations described in Table V-8 result in a fractional parking space, fractions less than $\frac{1}{2}$ shall be disregarded and fractions greater than $\frac{1}{2}$ shall require a full space.
- i. Each parking lot shall have direct access to a public street or legal easement as part of an approved development plan.
- j. All parking areas shall be landscaped as provided in Section 21-54.
- k. Parking areas shall be hard-surfaced using material approved by the City.
- l. All site plans shall include FDOT standard traffic control signs and pavement markings necessary to ensure safe traffic and pedestrian flow, including but not limited to, fire lanes.
- m. All customer generated parking areas shall be used for vehicle parking only.

- n. No door or pedestrian entrance at ground level shall open directly upon a driveway or access aisle unless the doorway of the entrance is at least three feet (3') from said driveway or access aisle or unless improvements are provided to allow for safe doorway access.
- o. All parking spaces shall have lines between each space and shall be maintained by the property owner.
- p. Public rights-of-way shall not be used to satisfy on-site parking or loading requirements.
- q. Development may be required to provide fire lanes in accordance with the Florida Fire Prevention Code

TABLE V -8
OFF-STREET PARKING REQUIREMENTS

Land Use Category	Spaces	Unit of Measure
Adult Living Facility	2	Each largest shift employee plus 1/5 beds
Assembly Places With Fixed Seats	1	per 4 seat plus 1 per employee
Assembly Places w/o Fixed Seats	1	40 SFGFA of main assembly area space
Auto Sales *	1 1	400 SFGFA plus 1 space for each vehicle for sale/lease
Auto Service/Repair	3 1	Service bay plus 200 SFGFA non bay area
Beauty/Barber Shops	1.5	per chair
Bed & Breakfast	1	per each room rented plus residential requirements
Community Residential Homes	1	Employee plus 5 visitor spaces
Convenience Stores	1	200 SFGFA
Day Care - Children or Adults	1 1	Employee plus a 5 space drop area plus per 25 students
Restaurants/Bars/Lodges	1 1	4 Seats plus per 2 employees
Financial Institutions	1 1	250 SFGFA on ground floor plus 200 SFGFA on other floors
Funeral Homes	1 2	4 Seats in main assembly area plus business vehicle
Furniture, Appliance and Similar	1 1	400 SFGFA to 10,000 SFGFA 750 SFGFA over 10,000 SFGFA
Health/Fitness	1	150 SFGFA
Hotel/Motel	1 1	each bedroom unit plus per 2 employees
Lab/Research Facilities	1	each employee
Machine Shop/Repair	1	400 SFGFA
Manufacturing - General	1	2 employees on largest shift
Marinas/Fish Camps	1 4	Boat slip plus 4 boat trailer spaces per boat ramp plus any accessory requirements
Medical/Dental or Veterinary Facilities	1 2	Each employee plus Examination rooms
Mini-warehouse	1	Per office
Residential, Institutional/Multi-Family	1.5	Unit plus 5% for visitors
Personal Service Not specified	1	300 SFGFA
Pool Hall/Billiards	2 1	per pool table plus employee
Professional Offices	1	250 SFGFA
Recreation - Outdoor	1	Each employee plus
- Indoor	1 1	4 patrons capacity 400 SFGFA
Retail Not Specified	1	250 SFGFA
Schools - Other Than High School	1 1	Each employee plus 4 spaces per instructional room
- High School & Community College	1 1	4 students plus each employee
Single Family, Duplex & Mobile Homes	2	Unit
Shopping Centers	5	1000 SFGFA
Theaters	1	10 Seats
Warehouse, Storage & Similar	1	1000 SFGFA

*Auto Sales to have display parking requirements of 8'x16' all other parking 10' x 20'

Notes:

SFGFA = Square Feet of Gross Floor Area, i.e., the total floor area inside the outside walls of the structure(s).

21-56.03 - Handicapped Parking Standards

- a. Development must meet Florida Accessibility Codes.

21-56.04 - Joint Parking Use Agreements

- a. The Development Services Director may authorize a reduction in the parking requirements for two or more uses jointly providing off-street parking.
- b. A reduction may be authorized in such cases if the developer submits sufficient data to demonstrate that the hours of maximum demand for parking at the respective uses do not normally overlap.
- c. The City shall have the authority to require the creation, use and maintenance of joint-use parking and/or joint-use driveways or other common ingress-egress facilities for multifamily, commercial and/or industrial uses.
- d. A joint-use parking or access agreement shall be recorded in the public records of Volusia County prior to issuance of a building permit and shall at a minimum include:
 - 1. A statement holding the City harmless from any and all claims or potential liability; and
 - 2. Shall run with the land involved and be binding on the parties to the agreement, their successors and/or their assigns.

21-56.05 - Loading Berth Standards

- a. Each required off-street loading space shall have a minimum dimension of fourteen (14') feet by forty (40') feet and a minimum overhead clearance of fourteen (14') feet above the paving grade.
- b. All commercial and industrial uses shall provide the number of off-street loading and unloading spaces described in Table V-10.

**TABLE V-10
LOADING BERTH STANDARDS**

Use Category	Floor Area (sq.ft.)	Berths Required
Retail and/or Service Uses	5,000 to 24,999	One
	25,000 to 59,999	Two
	60,000 to 119,999	Three
	120,000 to 199,999	Four
	200,000 to 289,999	Five
	290,000 plus	One/90,000 sq.ft.
Storage or Wholesale Uses	5,000 to 24,999	One
	25,000 to 59,999	Two
	60,000 to 119,999	Three
	120,000 to 199,999	Four
	200,000 to 289,999	Five
	290,000 plus	One/90,000 sq.ft.
Places of Assembly, Hotels, Motels, Office Buildings, Long Term Health Care Facilities	10,000 to 39,999	One
	40,000 plus	One/60,000 sq.ft.
Automotive, Recreation	2,000 to 14,999	One
	15,000 to 39,999	Two
	40,000 plus	One/10,000 sq.ft.
Manufacturing Uses	0 to 14,999	One
	15,000 to 39,999	Two
	40,000 to 64,999	Three
	65,000 plus	One/80,000 sq.ft.

- c. Where a building is used for more than one use or for different uses, the loading space requirement shall be based on the use for which the most spaces are required.
- d. All loading areas shall be paved and clearly marked and delineated.
- e. All loading berths and maneuvering areas shall be separated from required off-street parking facilities and shall include traffic flow directional information.
- f. Delivery truck berths may be located within required parking spaces, provided they are marked as reserved for loading purposes. Access aisles may serve both parking and loading facilities.
- g. All loading and delivery areas shall be designed to prevent backing into streets, pedestrian ways or bikeways.
- h. Off-street loading spaces shall be directly accessible from a street without crossing or entering any other loading space and may not extend into any street.

SECTION 21-57- PLANNED UNIT DEVELOPMENT DESIGN CRITERIA

21-57.01 - Comprehensive Plan Reference

The provisions of Section 21-57- Planned Unit Developments are consistent with and implement the Comprehensive Plan policies contained in the Future Land Use Element, Coastal Element, Conservation Element and Recreation & Open Space Element.

21-57.02 - Residential Planned Unit Development (RPUD)

a. Purpose

The Residential Planned Unit Development (RPUD) District is intended to provide a flexible approach for unique and innovative land development, which would otherwise not be permitted by this Code. Notwithstanding the specific criteria identified herein, RPUDs should accomplish the following purposes, to the greatest extent possible:

1. Provide a variety of housing types with a broad range of housing costs allowing for the integration of differing age groups and socioeconomic classes;
2. Promote innovative site and building design, including traditional neighborhood developments;
3. Provide efficient location and utilization of infrastructure through orderly and economical development, including a fully integrated network of streets and pedestrian/bicycle facilities;
4. Establish open areas set aside for the preservation of natural resources, significant natural features and listed species habitats;
5. Create usable and suitably located public spaces, recreational facilities, open spaces and scenic areas; and
6. Provide for other limitations, restrictions and requirements as deemed necessary by the City to ensure compatibility with adjacent neighborhoods and effectively reduce potential adverse impacts.

b. Permitted Uses

All uses in conjunction with Residential Planned Unit Developments are considered conditional and require Planning and Zoning Board and Council approval. Permitted uses are listed in Article III, Table III-3.

c. Density and Intensity

1. Variable up to 4.0 dwelling units per net acre in areas designated Low Density Residential on the Future Land Use Map.
2. Variable between 4.1 and 8.0 dwelling units per net acre in areas designated Medium Density Residential on the Future Land Use Map.
3. Variable between 8.1 and 12.0 dwelling units per net acre in areas designated High Density Residential on the Future Land Use Map.
4. Proposed residential projects containing over 500 dwelling units shall include internally oriented retail commercial uses with a minimum of 250 sq. ft. of land area per dwelling unit.

5. Medium and high-rise residential projects shall not exceed a Floor Area Ratio of 0.4 nor an Impervious Surface Ratio of 0.3.

d. Conceptual Development Plan

A Conceptual Development Plan shall be submitted along with a Development Agreement, see Section 21-101. The Conceptual Development Plan shall contain the following:

1. Minimum dimensional requirements, including proposed lot area and width, setbacks, building heights and minimum floor areas;
2. Landscaping, parking and signage;
3. Project phasing, if applicable;
4. Infrastructure improvements;
5. Common/open space areas and their use, including any resource protection areas as defined in Article IV;
6. Proposed street layout, names and lot numbers; and
7. Overall stormwater/drainage master plan.

e. Master Plan Approval

A master plan shall be submitted in conjunction with Article XIII.

21-57.03 - Business Planned Unit Development (BPUD)

a. Purpose

The Business Planned Unit Development District is intended to provide a flexible approach for unique and innovative land development proposals, which would otherwise not be permitted by this Code. Notwithstanding the specific criteria identified herein, proposals should accomplish the following purposes, to the greatest extent possible:

1. Provide for mixed use commercial, office and residential development such as shopping centers, office parks and multi-family residential developments;
2. Promote innovative site and building design;
3. Provide efficient location and utilization of infrastructure through orderly and economic development;
4. Establish open areas set aside for the preservation of natural resources, significant natural features and listed species habitats;
5. Provide for a visually attractive environment through consistency of architectural styles, landscaping designs and other elements of the built environment; and
6. Provide for requirements to ensure compatibility with adjacent neighborhoods and effectively reduce potential adverse impacts.

b. Permitted Uses

All uses in conjunction with Business Planned Unit Developments are considered conditional and require Planning and Zoning Board and Council approval. Permitted uses are listed in Article III, Table III-3. If residential uses are provided, the residential floor area shall be no greater than forty percent (40%) of the gross commercial floor area.

c. Conceptual Development Plan

A Conceptual Development Plan shall be submitted along with a Development Agreement, see Section 21-101. The Conceptual Development Plan shall contain the following:

1. Lot layouts for commercial and residential development including lot areas and widths, setbacks, building heights, lot coverage and minimum floor areas;
2. Landscaping, fencing, parking, loading areas, signage and lighting;
3. Project phasing, if applicable;
4. Infrastructure improvements;
5. Common/open space areas and their use including any resource protection areas as defined in Article IV;
6. Proposed street layout, names and lot numbers; and
7. Overall stormwater master plan.

d. Site Plan Approval

A site plan shall be submitted in conjunction with Section 21-93.

21-57.04 - Industrial Planned Unit Development (IPUD)

a. Purpose

The Industrial Planned Unit Development (IPUD) District is intended to provide a flexible approach for unique and innovative land development proposals, which would otherwise not be permitted by this Code. Notwithstanding the specific criteria identified herein, proposals should accomplish the following purposes to the greatest extent possible:

1. Provide for mixed-use industrial development such as industrial office parks, aircraft and marine related uses and limited commercial;
2. Promote innovative site and building design;
3. Provide efficient location and utilization of infrastructure through orderly and economic development;
4. Establish open areas set aside for the preservation of natural resources, significant natural features and listed species habitats;
5. Provide for a coherent and visually attractive physical environment through coordination and consistency of architectural styles, landscaping designs and other elements of the built environment; and
6. Provide for other limitations, restrictions and requirements as deemed necessary by the City to ensure compatibility with adjacent neighborhoods and effectively reduce potential adverse impacts.

b. Permitted Uses

All uses in conjunction with Industrial Planned Unit Developments are considered conditional and require Planning and Zoning Board and Council approval. Permitted uses are listed in Article III, Table III-3.

c. Conceptual Development Plan

A Conceptual Development Plan shall be submitted prior to site plan approval. The

Conceptual Development Plan shall include the following:

1. The lots areas for industrial and/or commercial development, including lot widths, setbacks, building heights, building footprint and minimum floor areas;
2. Landscaping, fencing, parking, loading areas, signage and lighting;
3. Project phasing, if applicable;
4. Infrastructure improvements, all utility lines shall be installed underground;
5. Common/open space areas and their use including resource protection areas as defined in Article IV; and
6. Overall stormwater master plan.

d. Site Plan Approval

A site plan shall be submitted in conjunction with Section 21-93.

21-57.05 – Mixed-Use Planned Unit Development (MUPUD)

a. Purpose

The Mixed-Use Planned Unit Development (MUPUD) is intended to provide a flexible approach for mixed use and innovative land use techniques, which would otherwise not be permitted by this Code. Notwithstanding the specific criteria identified herein, proposals should accomplish the following purposes, to the greatest extent possible:

1. Provide a variety of land uses including non-residential, residential, public/civic and recreational
2. Provide innovative site and building design, including traditional neighborhood developments;
3. Provide efficient location and utilization of infrastructure through orderly and economical development, including a fully integrated network of streets and pedestrian/bicycle facilities;
4. Establish open areas set aside for the preservation of natural resources, significant natural features and listed species habitats;
5. Create usable and suitably located public spaces, recreational facilities, open spaces and scenic areas; and
6. Provide for other limitations, restrictions and requirements as deemed necessary by the City to ensure compatibility with adjacent neighborhoods and effectively reduce potential adverse impacts.

b. Permitted Uses

All permitted uses in conjunction with Mixed-Use Planned Unit Developments are listed in Article III, Table III-3.

c. Density and Intensity

The densities and intensities of Mixed-Use Planned Unit Developments vary. Specific requirements are contained in the City's Comprehensive Plan.

d. **Conceptual Development Plan**

A Conceptual Development Plan shall be submitted along with a Development Agreement, see Section 21-101. The Conceptual Development Plan shall contain the following:

1. Minimum dimensional requirements, including proposed lot area and width, setbacks, building heights and minimum floor areas;
2. Landscaping, parking and signage;
3. Project phasing, if applicable;
4. Infrastructure improvements;
5. Common/open space areas and their use, including any resource protection areas as defined in Article IV;
6. Proposed street layout, names and lot numbers; and
7. Overall stormwater/drainage master plan.

e. **Master Plan Approval**

A master plan shall be submitted in conjunction with Article XIII.

21-57.06 - Sustainable Community Development Planned Unit Development (SCD/PUD)

a. **Purpose**

The Sustainable Community Development Planned Unit Development (SCD/PUD) is intended to provide a flexible approach for mixed use and innovative land use techniques, which would otherwise not be permitted by this Code. Notwithstanding the specific criteria identified herein, proposals should accomplish the following purposes, to the greatest extent possible:

1. Provide a variety of land uses including residential, office, commercial, public/civic and recreational which complement and serve residential uses while reducing transportation needs and conserving energy and natural resources;
2. Provide a socially and economically diverse community with a wide range of housing types including but not limited to, single-family, multi-family and townhouse homes as well as some residential inventory to be located above retail or commercial uses with various price points;
3. Provide innovative site and building design, including design principles that are consistent with Traditional Neighborhood Design, Transit-Oriented Development and New Urbanism;
4. Provide efficient location and utilization of infrastructure through orderly and economical development, including a fully integrated network of streets arranged and designed to promote a pleasant, pedestrian and bicycle-friendly environment with an emphasis on convenient access to surrounding neighborhoods and community amenities;
5. Conserve large areas of uninterrupted environmentally sensitive areas which shall be managed as part of a system for habitat, wetlands, surface water

protection and to provide scenic areas and recreational opportunities (both active and passive); and

6. Provide for other limitations, restrictions and requirements as deemed necessary by the City to ensure compatibility with adjacent neighborhoods and effectively reduce potential adverse impacts.

b. **Permitted Uses**

All permitted uses in conjunction with Sustainable Community Development Planned Unit Developments are listed in Article III, Table III-3.

c. **Density and Intensity**

The densities and intensities of Sustained Community Development Planned Unit Developments vary. Specific requirements are contained in the City's Comprehensive Plan.

d. **Conceptual Development Plan**

A Conceptual Development Plan shall be submitted along with a Development Agreement, see Section 21-101. The Conceptual Development Plan shall contain, but not be limited to the following:

1. Minimum dimensional requirements, including proposed lot area and width, setbacks, building heights and minimum floor areas;
2. Landscaping, parking and signage;
3. Project phasing, if applicable;
4. Infrastructure improvements;
5. Common/open space areas and their use, including any resource protection areas as defined in Article IV;
6. Proposed street layout, names and lot numbers; and
7. Overall stormwater/drainage master plan.

e. **Master Plan Approval**

A master plan shall be submitted in conjunction with Article XIII.