

**CITY OF GREEN COVE SPRINGS, FLORIDA
STAFF REPORT
FOR MEETING OF MARCH 21, 2017**



SUBJECT: Second and Final Reading of Ordinance No. O-03-2017, an Ordinance of the City of Green Cove Springs, Florida, amending City Code Section 98, Article VI – Landscaping and Section 98, Article VII – Trees; to Modify the Landscaping and Tree Protection Requirements; and Providing For Repealer, Severability, and Setting an Effective Date.

BACKGROUND: City Staff submitted and was awarded an Urban and Community Forestry Grant from the Florida Forest Service to revise the Tree Mitigation and Landscape Ordinance. Staff created a committee made of City staff, a developer/landscape architect, urban forester, garden club member, and nursery owner to review the existing landscape and tree mitigation ordinance in the Land Development Regulations and to provide input for proposed changes.

On January 12th, the changes were brought to the Planning and Zoning Board who recommended approval of the proposed changes. There were no comments from the public. The ordinance with the proposed changes was presented to the City Council for first reading on January 24th. The City Council requested that a community meeting be held to see if there were any comments from the public. The first community meeting was held on February 2, 2017, with no comments from the public. A second community meeting was held on March 2, 2017, with approximately 20 people attending. The Power Point presentation presented at the community meeting is attached and the minutes of the meeting of March 2nd.

Also after the first reading of the ordinance on January 24th, the committee reconvened and revised the draft. The committee have agreed on almost all proposed revisions included in the ordinance. A summary of the changes is included and a chart with the revisions, with comments received and a comparison of surrounding communities' landscape requirements. This ordinance is scheduled for the second and final reading on March 21st, to allow the City to meet the grant requirements for adoption of the ordinance and completion of the grant by March 31st.

The proposed changes to the City Code have been submitted in underline and strikeout format for review.

PLANNING AND ZONING BOARD RECOMMENDATION: The Planning and Zoning Board held a Public Hearing on the Ordinance at their meeting of January 12, 2017. There were no comments received at the Public Hearing. A motion was made to recommend to the City Council adoption of an Ordinance Amending City Code Section 98, Article VI – Landscaping

and Section 98, Article VII – Trees; To Modify The Landscaping and Tree Protection Requirements. The vote was unanimous.

FISCAL IMPACT/FUNDING SOURCE: Adoption of this ordinance will allow the City to obtain \$14,682 from the Urban Forestry Grant.

RECOMMENDATION: Approve Ordinance No. O-03-2017 on Second and Final Reading of the Ordinance.

MOTION: Approve Ordinance No. O-03-2017 on Second and Final Reading of the Ordinance.

Created/Initiated By: Janis Fleet, Development Services Director on 03/14/2017 10:26 AM

Final Approval By: Danielle J. Judd, City Manager on 3/14/2017 10:30:10 AM

ORDINANCE NO. O-03-2017

AN ORDINANCE OF THE CITY COUNCIL OF GREEN COVE SPRINGS, FLORIDA, AMENDING CITY CODE SECTION 98, ARTICLE VI - LANDSCAPING AND SECTION 98, ARTICLE VII – TREES; TO MODIFY THE LANDSCAPING AND TREE PROTECTION REQUIREMENTS; AND PROVIDING FOR REPEALER, SEVERABILITY AND SETTING AN EFFECTIVE DATE.

WHEREAS, the City received a state grant to review and revise our landscape and tree protection requirements; and

WHEREAS, the attached revisions are in the best interest of the City and will help preserve our environment by requiring appropriate landscaping and tree protection practices.

NOW, THEREFORE BE IT ENACTED BY THE CITY COUNCIL OF THE GREEN COVE SPRINGS, FLORIDA AS FOLLOWS:

Section 1. Article VI of the City Code entitled “Landscaping” is hereby amended as more particularly shown on Exhibit “A” attached hereto.

Section 2. Article VII of the City Code entitled “Trees” is hereby amended as more particularly shown on Exhibit “B” attached hereto.

Section 3. New verbiage is underlined and deleted verbiage has a ~~strike~~ through.

Section 4. **REPEALER.** Any Ordinances or parts thereof in conflict with the provisions of this Ordinance are hereby repealed to the extent of such conflict.

Section 5. **SEVERABILITY.** The various parts, sections and clauses of this Ordinance are hereby declared severable. If any part, sentence, paragraph, section or clause is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of the Ordinance shall not be affected thereby.

Section 6. **EFFECTIVE DATE.** This Ordinance shall become effective upon passage.

INTRODUCED AND APPROVED AS TO FORM ONLY ON THE FIRST READING BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, ON THIS 24TH DAY OF JANUARY, 2017.

CITY OF GREEN COVE SPRINGS, FLORIDA

Pamela J. Lewis, Mayor

ATTEST:

Julia W. Clevinger, City Clerk

**PASSED ON SECOND AND FINAL READING BY THE CITY COUNCIL OF THE
CITY OF GREEN COVE SPRINGS, FLORIDA, THIS 21ST DAY OF FEBRUARY, 2017.**

CITY OF GREEN COVE SPRINGS, FLORIDA

Pamela J. Lewis, Mayor

ATTEST:

Julia W. Clevinger, City Clerk

APPROVED AS TO FORM:

L. J. Arnold, III, City Attorney

Exhibit "A"

ARTICLE VI. - LANDSCAPING

Sec. 98-231. - Purpose and intent.

Landscape, landscaped areas, buffers and tree protection shall be provided and/or accomplished for all premises in the manner set forth in this schedule. Required landscaped areas shall be located at or above grade unless otherwise prescribed in these land development regulations. The minimum provision of required landscape, landscaped areas, buffers and trees may be exceeded. Unless otherwise prescribed, the most stringent provision of this schedule shall prevail.

Landscape, buffer and tree protection requirements serve many purposes in the built-up environment. Landscape provides visual and climatic relief from buildings, structures and broad expanses of pavement; landscape buffers pedestrian and vehicular traffic; trees provide shade, scenic beauty and natural habitat.

In general, landscaping and buffers shall be designed to:

- (1) Enhance the urban development by blending natural and man-made environments.
- (2) Provide shade for paved surfaces.
- (3) Separate vehicular and non-vehicular use areas.
- (4) Define vehicular access ways and access points.
- (5) Screen vehicular movement, noise and glare.
- (6) Provide visual and physical separation of potentially incompatible land uses.
- (7) Incorporate water conservation features such as drought tolerant landscaping and reclaimed water usage as required herein.

Sec. 98-232. - Definitions; landscape, buffers and trees.

The words or phrases defined below have special or limited meanings as used in this schedule and shall mean:

~~Accent tree: A small tree with attractive flowers, berries, leaves or bark used in the forefront of a landscaped area to provide interest, emphasis or a focal point in the landscape.~~

Berm: Man-made earth contoured so as to form a mound above the general elevation of the adjacent ground or surface and designed to provide visual interest, screen undesirable view and/or decrease noise.

Buffer: A combination of physical space and vertical elements such as plants, berms, fences, or walls, whose purpose is to separate and screen incompatible land uses from one another.

Caliper: For the purposes of this schedule, caliper shall mean the diameter of a tree measured at breast height (dbh) which is approximately four and one-half feet above the ground.

~~Canopy or shade tree:-Canopy or shade tree is any tree grown specifically for its shade. This term usually applies to large trees with spreading canopies. Canopy trees normally grow to a minimum overall height of 30 feet and an average mature crown spread of 25 feet. Oaks, maples, ashes, lindens, and elms are classified as examples canopy/shade trees. Tall trees that form the uppermost leaf layer in a natural landscape as may be required by these regulations. Canopy trees shall be a minimum of 4 inch caliper DBH.~~

Clear trunk: The distance between the top of the root ball and the point of the trunk where lateral branching begins.

Commercial: All uses in RPO, CBD, GCN, GCC, C-1, and C-2 zoning districts and commercial development in a PUD zoning district.

Common area: That area which will be maintained by a homeowners association, city service area, or other form of cooperative organization. ~~For purposes of these regulations, "common area" does not include open space which cannot legally be disturbed.~~

Decorative turf: Turf used purely for ornamental purposes having no use other than aesthetics.

Drip line: The vertical line running through the outermost portion of the tree crown projected vertically to the ground.

Fully shielded lighting: Lighting constructed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal. Such fixtures usually have a flat, horizontally oriented lens and opaque (usually metal) sides. They are often described as "shoebox" luminaires if the luminaire has a predominantly rectangular form. Fixtures that either have reflecting surfaces or lenses (clear or prismatic) located below the lamp and visible from the side or above and fixtures that can be mounted such that the shielding is ineffective are not considered fully shielded lighting.

Groundcover: A low-growing plant, ~~other than~~ including turf grass, that, by the nature of its growth characteristics, completely covers the ground and does not usually exceed two feet in height.

Hat racking or topping: Pruning a tree in such a way that the majority of limbs are removed and the tree is left with only a trunk and the stumps of a few primary limbs, with little or no foliage or other trimming or pruning that has the effect of preventing a tree from attaining its natural height and/or shape.

Hedge: A row of evenly spaced shrubs planted to form a continuous unbroken visual screen.

Industrial: All uses in M-1 and M-2 zoning districts and all industrial uses in a PUD zoning -district.

Landscape: Vegetative and inert materials including, but not limited to, grass, sod, shrubs, vines, hedges, trees, flowers, berms and complementary structural landscape architectural features such as rocks, fountains, sculpture, decorative walls and tree wells or other hardscape features.

Landscaped area: Land area to be provided with landscape.

Landscaped strip or landscaped island: Required landscaped areas containing ground cover, shrubs, trees and/or other landscape used to divide parking areas into individual bays.

Moisture sensing switch: A device which has the ability to shut off an automatic irrigation controller after receiving a determined amount of rainfall.

Mulch: Non-living organic materials such as wood chips that is customarily placed around the base of trees, shrubs and groundcovers for the purpose of retaining moisture and retarding weed infestation and soil erosion. Also, used in pathways and play areas.

Native or naturalizing plant species: Plant species native to the region or introduced which once established are capable of sustaining growth and reproduction under local climatic conditions, without supplemental watering.

Non-residential: Pursuant to land use category headings reflected in Schedule B, Permitted Uses in these land development regulations, all commercial, transient lodging and entertainment, automotive, miscellaneous business and services, industrial and public/semi-public uses.

Parking area: A paved ground surface area used for the temporary parking and maneuvering of vehicles by employees or customers, either for compensation, or to provide an accessory service to a commercial, industrial, institutional or residential use.

Paved ground surface area. See chapter 86, definitions.

Poodle cut: Stripping off the lower branches of a tree and rounding or shearing the ends of the greenery to create an unnatural shape.

Required landscaped area: Any landscaped area required ~~by this schedule~~ in the City Code.

Residential: All uses in R-1, R-2, R-3 and PUD zoning districts; one-family, two-family and multiple-family dwellings.

Shrub: A self-supporting woody species of plant characterized by persistent stems and branches springing from the base.

Specimen tree: A particularly fine or unusual example of any tree due to its age, size, rarity, environmental value or exceptional aesthetic quality. A tree may also be designated a specimen due to its association with historic events or persons. A specimen tree cannot be of a species that is unacceptable as referenced in list of exempt trees in ~~chapter 98, subsections 98-262(3), (6) exempt trees~~ the City Code.

Tree: A self-supporting woody plant of a species that normally grows to a minimum overall height of 15 feet and has an average mature crown spread greater than 15 feet within the city.

Turf: Upper layer of soil bound by grass and plant roots into a thick mat.

-Understory, sub-canopy tree means trees which normally grow to a maximum overall height of 15 feet and an average mature crown spread of 15 feet.

Vehicular circulation area: Streets, rights-of-way, access ways, parking spaces, parking, loading and unloading and other similar or related functions.

Sec. 98-233. - Required landscaping.

(1) Landscape requirements for one-family dwellings and two-family dwellings residential uses.

a. Landscape shall be provided for all residential uses in the following manner:

1. One and two family dwellings. At least one canopy tree, 4 inches DBH, shall be located in the required front yard of each dwelling unit for one family dwellings and two family dwellings.

2. The lot shall be sodded or seeded for erosion control.

(2) Landscape Requirements for non-residential uses, including multi-family structures with 3 or more dwelling units

Perimeter landscaping - Required landscaping will be consistent with the landscape code. At a minimum the each site developed for multi-family, institutional, commercial, or industrial uses will contain one shade or canopy tree for each 50 linear feet of linear the perimeter of the site.

Interior landscaping - There will be one tree per every 1,500 square feet of the first 40,000 10,500 square feet of the project site, then one tree for every 4,000 square feet of the remainder of the project site. The trees shall be an equal proportion of shade (canopy) and understory trees. At a minimum, 15 percent of the site shall be landscaped.

~~(1) Landscape requirements for residential uses.~~

~~a. Landscape shall be provided for all residential uses in the following manner:~~

~~1. One and two family dwellings. At least one tree shall be located in the required front yard of each dwelling unit for one family dwellings and two family dwellings.~~

~~(2) Landscape adjacent to streets and parcels.~~

~~1. A landscaped strip shall be provided along all parcel lines and abutting street right-of-way lines as required by the provisions of this schedule.~~

~~(1) The depth of the required landscaped strip shall be measured and provided parallel to the parcel line or abutting street right-of-way in question.~~

~~(2) Landscaped strips shall be considered to be required landscaped area.~~

~~(3) A landscaped strip may be included as fulfilling the in satisfying buffer requirements for the premise in question. However, no part of a landscaped strip required for any use shall be included as fulfilling the landscape or buffer requirements for another use unless specifically provided for in this schedule.~~

~~(4) Landscaped strips shall be provided in the following manner:~~

~~a. Ten-foot landscaped strip along all rights-of-way.~~

~~ab. Alternative design for Arterials. Properties properties fronting on all roads classified as arterials, including, but not limited to, U.S. 17 (Orange Avenue), S.R. 16 East (Leonard C. Taylor Parkway) and S.R. 16 West (Ferris Street and Idlewild Avenue), shall comply with the following standards:~~

~~b. The developer/property owner shall be responsible for providing a landscape buffer in the area abutting the designated roadway right-of-way lines by meeting on of the following conditions:~~

~~1.——The roadway shall be separated from the back of curb by a six-foot landscaped strip, a six-foot pedestrian walkway, then a six-foot landscaped strip. Building setback shall be calculated from the back of curb or:~~

~~2. Ten-foot landscaped strip along all rights-of-way.~~

~~Alternative designs. Where natural features or spacing of existing driveways and roadways cause the access requirements of this section affecting placement or planting of landscaped buffers or trees to be physically infeasible, alternate designs may be approved as part of the issuance of the final development order.~~

~~(3) [Reserved.]~~

~~(4) c. The landscape buffer area shall be planted in the following manner:~~

~~(1). with Canopy trees~~

~~(a). One two rows of canopy trees, four 4 inches DBH diameter at breast height (dbh) at planting. For 50% of the canopy trees, two sub-canopy/understory tree may be substituted for each canopy tree.~~

~~(b). The trees shall be planted every 50 feet and staggered so as to be midway between each other, and equal distance between each row and right-of-way and/or parcel line. Trees shall be evenly spaced. The tree spacing may be altered with approval of the Development Services, provided the total number of trees is provided.~~

~~(2). Sub-canopy/Understory trees~~

~~(a). A minimum of four sub-canopy/undertory trees per 100 feet of frontage shall be planted in and about each access point and intersection. Unless otherwise noted herein, all landscaping shall comply with landscape, buffer and tree requirements listing.~~

~~Collectors. A ten-foot wide landscaped strip shall be provided along all parcel lines abutting a street right-of-way classified as collector roadways in the transportation circulation element of the comprehensive plan. Required landscape shall be provided within the required landscaped strip as follows:~~

~~a. Trees. One canopy tree shall be provided for every 30 to 40 linear feet of parcel line in question. Tree spacing shall be determined by the administrative official based upon the type of species to be planted. Such trees shall be evenly spaced.~~

~~b.(3).—Hedges.~~

~~(a). When off-street parking, loading, unloading and vehicular circulation areas are to be located adjacent to the street in question right of way, a dense hedge of evergreen-type shrubs shall be provided in the following manner:~~

~~i.4. At initial planting and installation, shrubs shall be at least 30-24 inches in height and shall be planted at least 30-36 inches or less on center.~~

~~ii.—The. The hedge shall be planted four feet or more behind from the tree trunks.~~

~~2.iii. Within one-two years of initial planting and installation, shrubs shall have attained and be maintained at a minimum height of four-three feet and shall provide an opaque vegetative screen between the street and the use of the premise.~~

~~3iv. In lieu of a vegetative hedge, the administrative official may approve the use of vegetated berms or other appropriate landscape materials in a manner that results in the visual separation of street right-of-way can be approved by the Development Services Director. and the premises in question.~~

~~(4). Shrubs.~~

~~i. If a hedge is not required, the Bbuffer areas, not adjacent to a street right-of-way, shall include nine shrubs for every 100 linear feet of the parcel line~~

~~ii. in question. Shrubs shall be at least 30-24 inches in height at the time of planting.~~

~~(5). Groundcover.~~

~~i. The buffer area shall be planted with groundcover minimum of 18 inches on center or solid grass sod, unless natural area to remain. The groundcover shall completely cover the area within three months of installation.0~~

Sec. 98-234. - Exemptions and exceptions to landscape requirements.

~~(a) One and two family dwellings are exempt from all provisions of these landscaping regulations. This subsection shall not be construed to exempt any residential developments that require the approval of a development plan.~~

~~(b)(a) Interior landscaping for Pparking garages or other vehicle use areas contained entirely within a roofed and walled structure, shall provide landscaping shall be provided around the perimeter of the structures, where such area is available and to comply with landscaping regulations.~~

~~(c) Required landscaped strip, required landscaped area and required landscape. The planning and zoning board or its designee may, upon appeal by an applicant or unless otherwise provided for, waive or reduce the required landscape provisions of this article where such requirements would be unreasonable and excessive due to the size of the parcel and/or the fact that the landscape requirement is not necessary due to the unique location and/or natural topographical or other physical character of the specific parcel in question, and provided such reduction would not be detrimental to the adjacent parcel or parcels.~~

Sec. 98-235. - ~~Buffers and parking~~ Parking area landscaping.

The requirements of this section apply to all development, unless exempted new commercial, multifamily residential, governmental and recreational land uses and also those altered, improved or enlarged, subsequent to the adoption of these regulations. The performance standards for this section are as follows:

(1) ~~Required~~ Internal landscape area.

~~The minimum required internal landscaped area for parking areas shall cover ten percent of the parking area.~~

a. Minimum required land area for required landscaped areas not in a parking area.

1. Each required landscaped area shall contain a minimum land area of 200 square feet.

b. The minimum required internal landscaped area for parking areas shall cover ten percent of the parking area.

~~b.c.~~ Required landscaped area for rows of parking spaces.

1. A landscaped area shall be provided at each end of all rows of parking.

2. In addition, at least one landscaped area shall be provided between every ten parking spaces.

3. Each required landscaped area shall be five feet wide inside the curb or paving line running the entire length of the parking space.

4. At least one canopy tree shall be provided at each island.

~~; provided however, that wWhen double (front to front) rows of parking spaces are utilized, each required landscaped area shall contain a minimum land area of 400 square feet. Length shall match that of the adjacent parking space.~~

5. A 205-foot turning radius shall be accommodated at the end of parking rows.

c. Parking space reduction to protect existing trees. The ~~administrative official~~ Development Services Director shall have the authority to reduce the required number of off-street parking spaces when such reduction would result in the preservation of existing trees

1. ~~which are a~~ Trees to be preserved must be a minimum of ~~six~~ twelve inches in diameter measured at breast height above the ground

2. ~~The provided that such~~ reduction in the number of required parking spaces shall result in a reduction in an amount of required parking of less than five percent of the total number of required off-street parking spaces.

d. ~~Two or more Pparallel driving aisles.~~

1. In situations where there are four or more rows of parking spaces, the city has the authority to require the use of ~~After 4 parallel spaces a~~ landscaped strips with a minimum of ten feet in width to be parallel to the subject driving aisles ~~shall be provided.~~

2. In such areas, ~~t~~ Trees shall generally be spaced at intervals of 25 feet apart.

(2) Required trees.

1. At least one canopy tree shall be provided in each required landscaped area.

2. ~~; provided, however, that two~~ One canopy trees or two sub canopy trees shall be provided for each required landscaped area ~~as prescribed in subsection (1)b. of this section~~ for the rows of parking. A minimum of 50% of the trees used shall be canopy trees.

(3) Location of landscaped areas for Interior Landscaping; ~~trees.~~

1. ~~-~~ A landscaped area or buffer shall be provided between all parking areas and principal structure ~~and~~ or any sidewalk, and street or right-of-way.

2. This landscape area or buffer ~~landscape are~~ must will contain at least one ~~shade~~ or canopy tree per 50 feet of ~~lineal~~ linear perimeter of the parcel.

3. Every effort will be made to retain native vegetation and trees.

4. ~~The m~~ Minimum width of the buffer shall be as follows: landscape area

- a. Ten feet when Abutting a public right-of-way, excepting alleys: ten feet.
- b. Five feet when Abutting alleys or the rear or side common-property lines: five feet.

5. Each required-landscaped area shall be provided with have five shrubs in the ratio of five shrubs per each tree required.

6. All landscaped areas shall be covered in groundcover or turf.

~~— (4) — Islands. Interior landscaped areas shall be provided within interior vehicular use areas. One interior island shall be provided for every ten spaces and rows of parking shall be terminated with landscaped islands.~~

(54) Maintenance of planted areas.

- 1. Irrigation shall be provided for all new planting. Hose bibs maybe installed as an alternative, 1 hose bib within 75 ft. of all landscaped areas
- 2. This mMaintenance shall be the responsibility of the developer and/or landowner.
- 3. Failure to maintain—such, landscaped areas shall be considered a violation of the land development code and subject to code enforcement.

(6) Buffer zones for Incompatible Land Uses.

- a. A buffer zone is a five-foot landscaped strip along parcel boundaries that serves as a buffer between incompatible uses and land use districts. This shall not be interpreted to mean that parcels within a planned mixed use development must meet these requirements.
- b. A buffer zone shall have a visual screen running the entire length of the property with a minimum opacity of 85 percent and a minimum height of six feet.
- ~~c. Wherever the principal structure on a site abuts a vehicle use area on the same site, a buffer zone of a minimum of five feet, between the vehicle use area and the principle structure shall be provided.~~
- d. The use of existing native vegetation in buffer zones is preferred.
- e. A five-foot buffer of native vegetation between a conservation designated land use and any other development shall be required. This is not in addition to buffers required by any permitting agency.

(7) Street trees for Subdivisions.

- a. The developer shall plant, within ten feet of the right-of-way of each street within a residential development meeting the subdivision requirements of this code, one ~~shade canopy~~ tree for every 50 linear feet of right-of-way.
- b. Except where property on one side of the right-of-way is not owned by the developer, the trees shall be planted alternately on either side of the street.
- c. Existing trees and native tree species that need less water and maintenance are preferred.
- d. Coordination with the city utility departments is required prior to planting the street trees .
- be. Street Ttrees planted pursuant to this section shall be selected from the list of canopy trees approved by the city and shall have a minimum overall height of ten to 12 feet 4 inch DBH at time of planting. Existing trees and native tree species that need less water and maintenance are preferred.

~~Trees, shade, means trees which normally grow to a minimum overall height of 30 feet and an average mature crown spread of 25 feet.~~

~~Trees, understory, means trees which normally grow to a minimum overall height of 15 feet and an average mature crown spread of 15 feet.~~

- (8) ~~Use of required areas. No accessory structures, garbage or trash collection points or receptacles, parking, or any other functional use contrary to the intent and purpose of the land development code shall be permitted in a the minimum required landscape area and/or buffer zone.~~
- ~~1. This does not prohibit the combining of compatible functions such as landscaping and drainage facilities are permitted.~~
- (9) Concealing and location of dumpsters.
- ~~1. Dumpsters must be concealed in opaque concrete, brick or chain link fence with screening slats of enough height consistent with the size of the container to shield the container from view from all sides.~~
- ~~2. The front of screen must be accessible for service of the container.~~
- ~~3. The dumpster must be located on a paved surface of asphalt or concrete.~~
- (10) Clear line of sight.
- ~~1. An unobstructed cross visibility at a level between two feet and six feet above the ground shall be required with in a triangle area formed by the intersection of two rights-of-way or access ways, as referenced in section 98-66 of this chapter.~~

Sec. 98-236. - Landscape design and materials.

- (a) Design principles. All landscaped areas required ~~by the land development code should~~ shall conform to the following general design principles:
- (1) Landscaping should integrate the proposed development into existing site features through consideration of existing topography, hydrology, soils and vegetation.
 - (2) The functional elements of the development plan, particularly the drainage systems and internal circulation systems for vehicles and pedestrians, should be integrated into the landscaping plan.
 - (3) Landscaping should be used to minimize potential erosion through the use of ground covers or any other type of landscape material that aids in soil stabilization.
 - (4) Existing native vegetation should be preserved and used to meet landscaping requirements.
 - (5) Landscaping should enhance the visual environment through the use of materials that achieve variety with respect to seasonal changes, species of living material selected, textures, colors and size at maturity.
 - (6) Landscaping design should consider the aesthetic and functional aspects of vegetation, both when initially installed and when the vegetation has reached maturity. Newly installed plants should be placed at intervals appropriate to the size of the plant at maturity, and the design should use short-term and long-term elements to satisfy the general design principles of this section over time.
 - (7) Landscaping should enhance public safety and minimize nuisances.
 - (8) All landscaping and plant material shall be planted in a manner which shall not be intrusive or interfere, at or before maturity, with pavement surfaces, power, cable television, or telephone lines, sewer or water pipes, or any other existing or proposed overhead or underground utility services.
 - (9) Landscaping should maximize the shading of streets and vehicle use areas.
 - (10) ~~If a~~ Architectural planters
 - ~~1. Can be~~ are used to meet landscaping requirements
 - ~~2. , they~~ Planters shall be a minimum of ten square feet and shall have minimum depth of 15 inches.
 - ~~3. Planters shall be maintained and replanted if necessary~~

~~4. and can~~ ~~Planters not~~ cannot be located within the city right-of-ways without prior consent from the city manager or his designee Development Services Director.

(b) Installation of required landscape and trees.

1. All required trees and landscaping shall be installed according to generally accepted commercial planting procedures.

2. Soil, free of limerock, rocks, and other construction debris, shall be provided.

3. All landscaped areas shall be protected from pedestrian and vehicular encroachment by raised planting surfaces, depressed walks, curbs, edges, wheel stops and the like.

(4) 4. Florida No. 1 quality. All required plant materials including, but not limited to, trees and shrubs shall equal or exceed the standards for Florida No. 1 as established and revised by the ~~state State department~~ Department of Agriculture and Consumer Services ~~except as otherwise provided in this schedule~~.

(1) Grass sod shall be healthy and reasonably free of weeds, pests and disease.

(2) ~~(2)~~ Proper planting and anchoring.

(3) All plant material shall be mulched to a depth of ~~three to four~~ two inches.

(4) ~~Wherever new trees shall be~~ are installed ~~they shall be provided~~ with anchoring for a period of at least one year, in order to provide sufficient time for their roots to become established.

a. Trees with trunks under four inches in diameter should be staked with one to three stakes ~~while~~

b. ~~Trees~~ with a diameter of four inches or more DBH ~~(measured four feet from the ground)~~ should be guyed with three to four guy wires.

(~~36~~) Irrigation.

a. ~~All required~~ landscaped areas shall be watered with an underground irrigation system or a drip irrigation system or hose bibs designed to allow differential operation schedules for high and low water requirement areas. To avoid operation of the system during periods of increased rainfall, an operational moisture sensor switch shall be required on all irrigation systems equipped with automatic controls that will override the irrigation cycle of the sprinkler system when adequate rainfall has occurred.

b. The use of reclaimed water as a water supply source for irrigation shall be required when such source is available or anticipated to be available within 100 feet of an existing or proposed city reclaimed water line.

In areas where food is served or consumed, such as outdoor eating areas of restaurants, a dual supply source distribution system shall be installed whereby potable water shall serve as the source for the food serving and/or consumption areas and reclaimed water shall serve as the supply source in all other landscaped areas.

c. If a landscaped area contains primarily species native to the immediate region, or plants acceptable for xeriscape landscaping, the ~~planning and zoning~~ Development Services Director ~~department, as applicable~~, may waive the requirement for installation of an irrigation system. Consideration of a waiver of the irrigation requirement shall include, in addition to the area covered by native vegetation, such local conditions as sun or shade, use of fill soil, and depth to water table.

d. ~~The administrative official~~ Development Services Director may require or otherwise approve water supply provisions for unusual landscape conditions provided, however, that a readily available water source shall be located within 100 feet of any required landscaping plant material.

(4) Berm-

When a berm is used to form a required visual screen in lieu of, or in conjunction with a required hedge or wall, such berm shall not exceed a slope of 30 degrees and shall be completely covered with shrubs, trees, or other living ground cover.

(5) Grass.

- a. ~~When utilized, g~~ Grass shall be seeded, plugged, or sodded
- b. ~~On with the exception of~~ swales, berms or other areas that are subject to erosion in which case such areas, grass shall be completely sodded.

(6) Ground cover.

- a. Ground cover shall be installed and maintained for all improved parcels, including residential, in order to prevent erosion and dust.
- b. Ground cover used in lieu of grass shall be planted in such a manner so as to present a finished appearance and reasonably complete coverage within three months after planting.

(7) ~~Nonliving materials~~—Mulch shall be a minimum depth of two inches.

~~(8) — Clear line of sight (FDOT std.). When an access way intersects a public right-of-way, landscape shall be used to define the intersection; provided, however, that all landscape within the triangular areas described below shall provide unobstructed clear line of sight at a level between two and one-half and ten feet. Trees shall be trimmed in such a manner that no limbs or foliage extend into defined triangular areas. Landscape, except grass and groundcover, shall not be located closer than three feet from the edge of any access way pavement.~~

~~The triangular areas are defined as follows:~~

- a. ~~The areas of property on both sides of an access way formed by the intersection of each side of the access way and the public right-of-way as per section 98-66, clear line of sight using the FDOT standard referenced.~~
- b. ~~The area of property located at a corner formed by the intersection of two or more public streets as per section 98-66, clear line of sight using the FDOT standard referenced.~~

(c) Recommended plant list. Below is a A list of recommended plants by category: is found in Appendix 4.

Understory Trees/Sub-Canopy (Max. Height 15')

<u>Common Name</u>	<u>Botanical Name</u>
<u>Redbud</u>	<u>Cercis canadensis</u>
<u>Anise</u>	<u>Illicium spp.</u>
<u>Drake/Chinese elm</u>	<u>Ulmus parvifolia</u>
<u>Flowering dogwood</u>	<u>Comus florida</u>
<u>Wax myrtle</u>	<u>Myrica cerifera</u>

<u>Loblolly bay</u>	<u>Gordonia lasianthus</u>
<u>Southern red cedar</u>	<u>Juniperus silicicola</u>
<u>Yaupon holly</u>	<u>Ilex vomitoria</u>
<u>Fringe tree</u>	<u>Chionanthus virginica</u>
<u>Sweet bay magnolia</u>	<u>Magnolia virginiana</u>
<u>Chinese fan palm</u>	<u>Livistona chinensis</u>
<u>Windmill palm</u>	<u>Trachycarpus fortunei</u>
<u>Washington palm</u>	<u>Washingtonian robusta</u>
<u>Dahoon holly</u>	<u>Ilex cassine</u>
<u>Savannah holly</u>	<u>Ilex opaca × attenuate & cultivars</u>
<u>River birch</u>	<u>Betula nigra</u>
<u>Palatka holly</u>	<u>Ilex attenuate</u>

-Understory

<u>Common Name</u>	<u>Botanical Name</u>
<u>Crape myrtle</u>	<u>Lagerstroemia × fauriei</u>
<u>Wax myrtle</u>	<u>Myrica cerifera</u>
<u>Loblolly bay</u>	<u>Gordonia lasianthus</u>
<u>Junipers</u>	<u>Juniperus torulosa & spartan</u>
<u>Bottlebrush</u>	<u>Callistemon spp.</u>
<u>Redbud</u>	<u>Cercis canadensis</u>

<u>Rusty pittosporum</u>	<u>Pittosporum ferrugineum</u>
<u>Podocarpus</u>	<u>Podocarpus nagi</u>
<u>Holly</u>	<u>Ilex spp.</u>
<u>Leyland cypress</u>	<u>Cupressocyparis leylandi</u>

Canopy Trees Spaced 50 Feet Apart

<u>Common Name</u>	<u>Botanical Name</u>
<u>American elm</u>	<u>Ulmus americana</u>
<u>Live oak</u>	<u>Quercus virginiana</u>
<u>Sweet bay magnolia</u>	<u>Magnolia virginiana</u>
<u>Silver dollar tree</u>	<u>Eucalyptus cinerea</u>
<u>Chinese elm</u>	<u>Ulmus parvifolia</u>
<u>Red bay</u>	<u>Persea borbonia</u>
<u>American sycamore</u>	<u>Platanus occidentalis</u>
<u>Tulip tree</u>	<u>Liriodendron tulipifera</u>
<u>Southern magnolia</u>	<u>Magnolia grandiflora & cultivar</u>
<u>Laurel oak</u>	<u>Quercus laurifolia</u>

<u>Washington palm</u>	<u>Washingtonian robusta</u>
<u>Canary Island palm</u>	<u>Phoenix canariensis</u>
<u>European fan palm</u>	<u>Chamaerops humillis</u>
<u>Sabal palm</u>	<u>Sabal palmetto</u>
<u>Chinese fan palm</u>	<u>Livistona chenensis</u>
<u>Windmill palm</u>	<u>Trachycarpus fortunei</u>
<u>Pindo palm</u>	<u>Butia capitata</u>

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Canopy Trees Spaced 30 Feet Apart

<u>Common Name</u>	<u>Botanical Name</u>
<u>Dahoon holly</u>	<u>Ilex cassine</u>
<u>Hornbeam/bluebeech</u>	<u>Carpinus caroliniana</u>
<u>Water ash-Pop ash</u>	<u>Fraxinus caroliniana</u>
<u>Florida winged elm</u>	<u>Ulmus alata</u>
<u>Florida elm</u>	<u>Ulmus americana floridana</u>
<u>Red maple</u>	<u>Acer rubrum</u>
<u>Savannah holly</u>	<u>Ilex opaca × attenuate & cultivars</u>
<u>American holly</u>	<u>Ilex opaca & cultivars</u>
<u>Loblolly bay</u>	<u>Gordonia lasianthus</u>

<u>River birch</u>	<u>Betula nigra</u>
<u>Palatka holly</u>	<u>Ilex attenuate</u>

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Ornamental Landscape Trees Small Trees

<u>Common Name</u>	<u>Botanical Name</u>
<u>Grape myrtle</u>	<u>Lagerstroemia x fauriei</u>
<u>Wax myrtle</u>	<u>Myrica cerifera</u>
<u>Loblolly bay</u>	<u>Gordonia lasianthus</u>
<u>Junipers</u>	<u>Juniperus torulosa & spartan</u>
<u>Bottlebrush</u>	<u>Callistemon spp.</u>
<u>Redbud</u>	<u>Cercis canadensis</u>
<u>Rusty pittosporum</u>	<u>Pittosporum ferrugineum</u>
<u>Podocarpus</u>	<u>Podocarpus nagi</u>
<u>Holly</u>	<u>Ilex spp.</u>
<u>Leyland cypress</u>	<u>Cupressocyparis leylandi</u>
<u>Jerusalem thorn</u>	<u>Parkinsonia aculeate</u>

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Large Ornamental Trees and Palms

<u>Common Name</u>	<u>Botanical Name</u>
<u>Winged elm</u>	<u>Ulmus alata</u>
<u>Washington palm</u>	<u>Washingtonian robusta</u>
<u>Canary Island palm</u>	<u>Phoenix canariensis</u>
<u>European fan palm</u>	<u>Chamaerops humillis</u>
<u>Sabal palm</u>	<u>Sabal palmetto</u>
<u>Heritage river birch</u>	<u>Betula nigra "heritage"</u>
<u>Chinese fan palm</u>	<u>Livistona chenensis</u>
<u>Windmill palm</u>	<u>Trachycarpus fortunei</u>
<u>Pindo palm</u>	<u>Butia capitata</u>

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Shrubs and Minimum On-Center (OC) Requirements for Visual Screens

<u>Common Name</u>	<u>Botanical Name</u>	<u>On Center</u>
<u>Glossy abelia</u>	<u>Abelia spp.</u>	<u>2.0 OC</u>
<u>Allamanda</u>	<u>Cortadenia selloana</u>	<u>4.0 OC</u>
<u>Pineapple guava</u>	<u>Feijoa sellowiana</u>	<u>3.0 OC</u>
<u>Anise</u>	<u>Illicium floridanum</u>	<u>2.5 OC</u>
<u>Pittosporum</u>	<u>Pittosporum tobira</u>	<u>3.0 OC</u>

<u>Azalea</u>	<u>Rhododendron spp.</u>	<u>3.0 OC</u>
<u>Plumbago</u>	<u>Plumbago capensis</u>	<u>2.0 OC</u>
<u>Banana shrub</u>	<u>Michelia fuscata</u>	<u>3.0 OC</u>
<u>Primrose jasmine</u>	<u>Jasiminum mesnyi</u>	<u>3.0 OC</u>
<u>Boxwood</u>	<u>Buxus microphylla</u>	<u>2.0 OC</u>
<u>Viburnum</u>	<u>Viburnum spp.</u>	<u>3.0 OC</u>
<u>Chinese juniper</u>	<u>Juniperus chinensis</u>	<u>3.0 OC</u>
<u>Silverthorn</u>	<u>Elaeagnus philippensis</u>	<u>3.0 OC</u>
<u>Podocarpus</u>	<u>Podocarpus macrophyllus</u>	<u>2.0 OC</u>
<u>Holly</u>	<u>Ilex spp.</u>	<u>2.0—3.0 OC</u>
<u>Indian hawthorne</u>	<u>Raphiolepis indica</u>	<u>2.5 OC</u>

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Groundcovers

<u>Common Name</u>	<u>Botanical Name</u>
<u>Bugle weed</u>	<u>Ajuga reptans</u>
<u>Asparagus fern</u>	<u>Asparagus sprengeri</u>
<u>Iceplant</u>	<u>Carpobrotus edulis</u>
<u>False heather</u>	<u>Cuphea hyssopifolia</u>
<u>Dichondra</u>	<u>Dichondra carolinensis</u>

<u>Golden creeper</u>	<u>Ernodea littoralis</u>
<u>Trailing fig</u>	<u>Ficus sagittata</u>
<u>Carolina jessamine</u>	<u>Gelsemium sempervirens</u>
<u>Algerian ivy</u>	<u>Hedera canariensis</u>
<u>Beach sunflower</u>	<u>Helianthus debilis</u>
<u>Dwarf yaupon holly</u>	<u>Ilex vomitoria "Schellings"</u>
<u>Chinese juniper</u>	<u>Juniperus chinensis</u>
<u>Dwarf lantana</u>	<u>Lantana depressa</u>
<u>Lily turf</u>	<u>Liriope spicata</u>
<u>Sword fern</u>	<u>Nephrolepis exaltata</u>
<u>Oyster plant</u>	<u>Rhoeo spathacea</u>
<u>Erect selaginella</u>	<u>Selaginella involvens</u>
<u>Confederate jasmine</u>	<u>Trachelospermum asiaticum</u>
<u>Caltrops</u>	<u>Trilobus terrestris</u>
<u>Society garlic</u>	<u>Tulbaghia violacea</u>
<u>Coontie</u>	<u>Zamia pumila</u>
<u>Aloe</u>	<u>Aloe spp.</u>
<u>Cast iron plant</u>	<u>Aspidistra elatior</u>
<u>Gopher apple</u>	<u>Locania michauxii</u>
<u>Earth star</u>	<u>Cryptanthus spp.</u>

<u>Miniature agave</u>	<u>Dyckia brevifolia</u>
<u>Creeping fig</u>	<u>Ficus pumila</u>
<u>Dwarf gardenia</u>	<u>Gardenia jasminoides</u>
<u>Fig marigold</u>	<u>Glottiphyllum depressum</u>
<u>English ivy</u>	<u>Hedera helix</u>
<u>Daylily</u>	<u>Hemerocallis spp.</u>
<u>Beach elder</u>	<u>Iva imbricate</u>
<u>Shore juniper</u>	<u>Juniperus conferta</u>
<u>Trailing lantana</u>	<u>Lantana montevidensis</u>
<u>Partidge berry</u>	<u>Mitchella repens</u>
<u>Mondo grass</u>	<u>Ophioipogon japonicus</u>
<u>Leatherlef fern</u>	<u>Rumonra adiantiformis</u>
<u>Purple heart</u>	<u>Setcreasea pallida</u>
<u>Star jasmine</u>	<u>Trachelospermum jasminoides</u>
<u>Wedelia</u>	<u>Wedelia trilobata</u>
<u>Wandering jew</u>	<u>Zebrina pendula</u>

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Grasses

<u>Bahia</u>

St. Augustine cultivars

Annual ryegrass

(d) Unacceptable plant species.

1. All prohibited species, ~~as enumerated in [section 98-262],~~ shall be allowed to be removed without a permit and prior to the development of the site.

(e) Maintenance and replacement of landscape plants. All plant material shall be maintained according to the following standards:

(1) All required trees, shrubs and landscaped areas shall be maintained in good and healthy condition for as long as the use continues to exist.

(2) Maintenance shall consist of mowing, removing of litter and dead plant material, necessary pruning, pest control, water and fertilizing.

(23) Maintenance also includes, but is not limited to, the replacement of plants damaged by insects, disease, vehicular traffic, acts of God and vandalism.

(4) Necessary replacements shall be made within a time period not to exceed 30 days after notification by the ~~city~~ City of a ~~the violation of this schedule.~~

(35) In order to increase the tree canopy within the city, give shade to paved surfaces, buffer pedestrian and vehicular traffic and provide scenic beauty and natural habitat, as well as prevent decay, sunburn and hazards to trees, ~~a~~ All landscape material ~~required under this schedule~~ shall be pruned to maintain the natural shape of the plant.

(6) No topping, hat racking, poodle cutting, excess pruning or excess crown reduction shall be performed ~~and such actions are unlawful on trees within the right of way.~~

(47) ~~The city shall encourage the standards of the International Society of Arboriculture and the Tree Care Industry Association (National Arborist Association) for tree care operations, plant maintenance and proper pruning methods by providing guidance, upon request, to applicants.~~

Sec. 98-237. - Tree preservation during development and construction.

(1)(a) — Protective barriers.

a. During construction, protective barriers shall be placed, as necessary, and/or as directed by the ~~administrative official~~ Development Services Director to prevent the destruction or damaging of trees.

b. Trees destroyed or receiving major damage must be replaced before occupancy or use unless approval for their removal has been granted ~~under the provisions of this article during the site p[lan approval process]~~

c. All trees not designated for removal may be required to be protected by barrier zones erected prior to construction of any structures, roads, utility service, or other improvements, ~~and may be required to comply with the following if determined to be necessary by the administrative official:~~

(42) The protective barrier shall be constructed to the following standards:

- a. The protective barrier shall be constructed outside the drip line of the tree, when possible (see Figure A). Minimum of 6-inch radius plus 1 inch for each 1 inch of caliper.
- b. The protective barrier shall be a minimum of three feet high.
- c. Protective barrier posts shall be two inches by four inches or larger and shall be no more than six feet apart.
- d. The barrier shall have two, one by four-inch horizontal railings affixed securely to the posts.
- e. The entire protective zone shall be wrapped in orange safety fencing material, a minimum of three feet in height.
- f. The protective barriers shall be inspected by the department prior to the commencement of construction.

(23) No grade changes shall be made within the protective barrier zones without prior approval of the ~~administrative City official~~ Development Services Director.

(4) Where roots greater than one inch diameter are exposed, they shall be cut cleanly.

(35) Protective barrier zones shall remain in place and intact until such time as landscape operations begin or construction is complete, whichever occurs first.

(46) The ~~administrative official or his designee~~ Development Services Director may conduct periodic inspections of the site before work begins and during clearing, construction and post-construction phases of development in order to insure compliance ~~with these land development regulations and the intent of this chapter.~~

(57) No building materials, machinery or temporary soil deposits shall be placed within protective barrier zones defined above.

(68) No attachments or wires other than those of a protective or non-damaging nature shall be attached to any tree.

~~(b) Regulations pertaining to utility companies. Whenever any electric, water, telephone or other public utility firm or corporation wishes to extend, maintain or relocate service such that any tree on an unimproved lot or tract will be removed, they shall make application for a permit to do so. Any public utility wishing to prune trees on a right-of-way shall notify the administrative official in writing in advance of the time and place these pruning activities will take place. The administrative official shall supervise these activities as necessary and shall have the authority to regulate or halt such pruning when these actions are deemed detrimental to the trees or beyond that needed to insure continued utility service.~~

Tree Protection Barrier

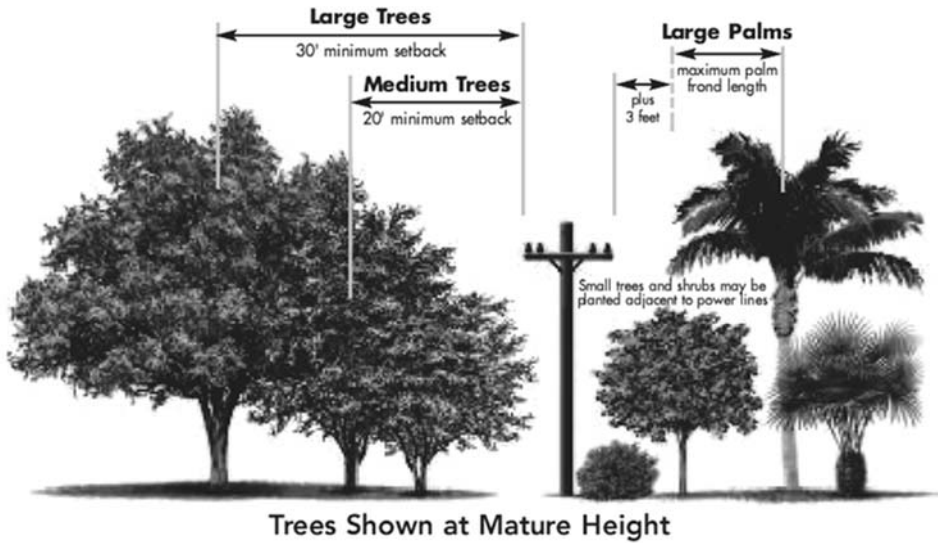
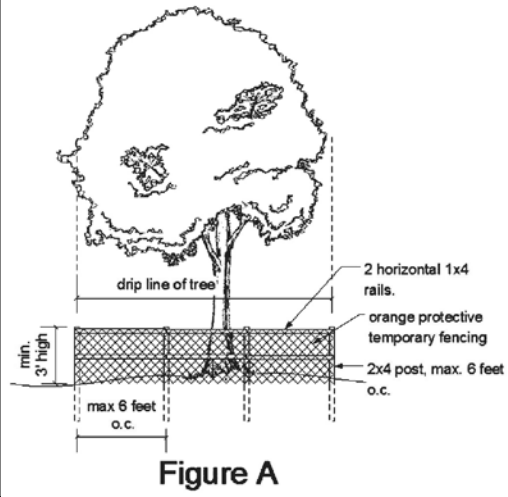
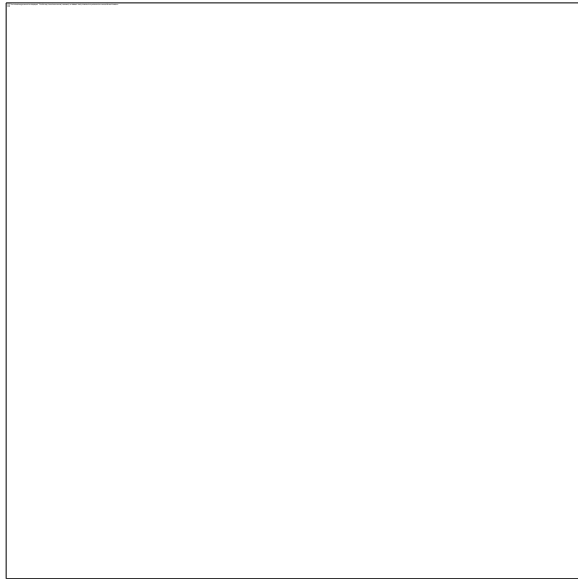


Figure 2
Large, Medium and Small Trees and Shrubs.

Exhibit "B"

Secs. 98-238—98-260. - Reserved.

ARTICLE VII. - TREES

Sec. 98-261. - Removal of trees.

- (a) Removal of a tree includes any act which will cause a tree to die, such as damage inflicted upon the root system by heavy machinery, changing the natural grade above the root system or round the trunk, damage, including fire damage, inflicted on the tree permitting infection or pest infestation.
- (b) It shall be unlawful for any person, organization, society, association or corporation or any agent or representative thereof, directly or indirectly, to cut down, destroy, remove or move, or effectively destroy through damaging any tree located on any property without obtaining a permit.
- (c) No authorization for the removal of a protected tree shall be granted unless the developer demonstrates the reason for removal of trees.

Sec. 98-262. - Exceptions and exemptions.

The following are exempt from the requirements of section 98-261.

- (1) ~~Utility and Public Works projects undertaken by the city, including~~ In the case of emergencies such as hurricane, windstorm, flood, freeze, or other disasters.
- (2) ~~Homesteaded residents~~ One and two family dwelling units.
- (3) Dangerous trees.
 - a. ~~In the event that any tree endangers health or safety and requires immediate removal, such as, but not limited to, the cutting of emergency fire lanes by firefighting units,~~ verbal authorization may be given by the ~~administrative official~~ Development Services Director.
 - b. ~~and~~ The tree may be removed without obtaining a written permit, as herein required. Such ~~The~~ verbal authorization shall later be confirmed in writing by the ~~administrative official~~ Development Services Director.
- ~~(4) — Emergencies. In the case of emergencies such as hurricane, windstorm, flood, freeze, or other disasters, the requirements of this section may be waived by the city manager. At the earliest possible meeting of the city council, the city manager shall set forth in detail those findings establishing that such waiver is necessary so that public or private work to restore order in the city will not be impeded. Said waiver must be for a time certain and may not be for an indefinite period.~~
- (5) ~~Notification requirements pertaining to utility companies. Whenever any electric, water, telephone or other public utility firm or corporation wishes to extend, maintain or relocate service such that any tree on an unimproved lot or tract will be removed, they shall make application for a permit to do so. Any public utility wishing to prune trees on a right of way shall coordinate with the administrative official in writing in advance of the time and place those pruning activities will take place. The administrative official or his designee shall supervise these activities as necessary and shall have the authority to regulate or halt such pruning when these actions are deemed detrimental to the trees or beyond that needed to insure continued utility service.~~
- (6) Exempt trees. The following types of trees shall be exempt from the provisions of this section and removal allowed without a permit:

Common Name	Botanical Name
American mulberry	(Morus rubra)
Australian pine	(Casuarinas spp.)
Black cherry	(Prunus serotina)
Brazilian pepper	(Shinus terebinthifolius)
Cajuput tree	(Melaleuca leucadendra)
Camphor tree	(Cinnamomum camphora)
Cherry laurel	(Prunus laurocerasis)
Chinaberry	(Meliala azedarach)
Chinese tallow tree	(Sapium sebiferum)
Containerized trees and nursery stock trees grown for resale	
Ear trees	(Enterolobium cyclocarpum) (Enterolobium contortisliquum)
Eucalyptus robusta	(Eucalyptus robusta)
Jacaranda	(Jacaranda acutifolia)
Golden rain tree	(Koelreuteria elegans)
Orchid tree	(Bauhinia)
Rosewood	(Dalbergia sissoo)
All pines	(Pinus)
Silk oak	(Grevillea robusta)
Pecan	(Carya illinoensis)

Sec. 98-263. - Drought tolerant plant standards applicable to required landscaping.

Drought tolerant plants which shall be used in required landscaping are native, non-invasive plants which will survive and flourish with comparatively little supplemental irrigation. Industrial, commercial, civic, and multi-family residential buildings or structures; common areas of single-family or multi-family residential developments shall incorporate drought tolerant trees, shrubs, and groundcovers in landscape plans as a water conservation measure. A list of plants which require minimal water are included in the St. Johns River Water Management District's publication: Water Wise, Florida Landscapes. In addition, mulches and drought tolerant groundcovers shall replace narrow turf areas where irrigation is impractical. Interior remodels or minor modifications to the exterior of a structure are not subject to this requirement.

Sec. 98-264. - Conditions for tree removal.

- (a) ~~The planning and zoning board, or its appointed designee~~ Development Services Director shall issue the permit for removal of a tree if one of the following reasons for removal is found to be present:
- (1) The condition of the tree with respect to disease, insect attack, age or other damage creates a danger of falling, or otherwise causes the tree to have an adverse impact on the urban or natural environment;
 - (2) Removal of the tree is necessary to construct proposed improvements in order to make use of the property, or
 - (3) ~~to~~ To avoid interference with utility services; or
 - (34) Removal of a tree in compliance with a state-approved timber management plan.

Sec. 98-265. - Replacement.

- (a) Generally. In respect to removal of trees to allow construction of improvements on property, and as a condition to granting of a permit, replacement shall be required.
- (1) Trees Removed
 - a. Live Oaks
 - i. All efforts shall be made to maintain all live oak trees on the site.
 - ii. Replacement of live oak tree shall be with live oak trees and the total caliper inches of replacement trees shall equal the total caliper inches of live oak trees removed.
 - (2) ~~b. All Other Trees~~
 - i. ~~Trees removed trees~~ Trees removed ~~trees~~ over 12 inches in caliper ~~at~~ at DBH on the site shall be replaced.
 - ii. The replacement for all trees over 12 inches in caliper at DBH on the site shall equal one-third of the total caliper at DBH of the trees removed.
 - (3) In lieu of replacement of trees on the site, the ~~planning and zoning board~~ Development Services Director may approve a plan for replacement of trees off-site or payment to the City Tree Mitigation Fund. The value will be based on the average cost of other municipalities in Northeast Florida.
- (b) Credit for trees.
- ~~(1) Trees which are replaced shall receive credit against landscape requirements according to the following schedule:~~

Small trees:	Between two inches and six inches diameter at six inches above ground: one-half credit
Medium trees:	Between six inches and 12 inches in diameter at six inches above ground: one credit
Large trees:	Greater than 12 inches in diameter but less than 24 inches at four and one-half feet above ground: two credits
Large trees:	Greater than 24 inches in diameter at four and one-half feet above ground: four credits

(21) Trees which are preserved shall receive credit against the landscape requirements according to the following schedule:

Large trees:	Greater than 12 inches in diameter but less than 24 inches at four and one-half feet above ground: three credits
Large trees:	Greater than 24 inches in diameter at four and one-half feet above ground: five credits

- a. Trees 12 to 18 inches - Live Oaks 1 inch credit, all others 50 % inch credit.
- b. Trees 19 to 30 inches - Live Oaks 1.25 inch credit, all others 75% inch tree credit.
- c. Trees over 30 inches - Live Oaks 1.5 inch credit, all others 100 % inch credit.

APPENDIX 1 - LIST OF PLANTS RECOMMENDED FOR GREEN COVE SPRINGS

~~Understory Trees (Max. Height 15')~~

Common Name	Botanical Name
Redbud	Cercis canadensis
Anise	Illicium spp.
Drake/Chinese elm	Ulmus parvifolia
Flowering dogwood	Comus florida
Wax myrtle	Myrica corifera

Loblolly bay	Gordonia lasianthus
Southern red cedar	Juniperus silicicola
Yaupon holly	Ilex vomitoria
Fringe tree	Chionanthus virginica

~~Canopy Trees Spaced 50 Feet Apart~~

Common Name	Botanical Name
American elm	Ulmus americana
Live oak	Quercus virginiana
Sweet bay magnolia	Magnolia virginiana
Silver dollar tree	Eucalyptus cinerea
Chinese elm	Ulmus parvifolia
Red bay	Persea borbonia
American sycamore	Platanus occidentalis
Tulip tree	Liriodendron tulipifera
Southern magnolia	Magnolia grandiflora & cultivar
Laurel oak	Quercus laurifolia
Washington palm	Washingtonian robusta
Canary Island palm	Phoenix canariensis
European fan palm	Chamaerops humillie
Sabal palm	Sabal palmetto
Chinese fan palm	Livistona chenensis
Windmill palm	Trachycarpus fortunei

Pindo palm	Butia capitata
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~~Canopy Trees Spaced 30 Feet Apart~~

Common Name	Botanical Name
Dahoon holly	Ilex cassine
Hornbeam/bluebeech	Carpinus caroliniana
Water ash/Pop ash	Fraxinus caroliniana
Florida winged elm	Ulmus alata
Florida elm	Ulmus americana floridana
Red maple	Acer rubrum
Savannah holly	Ilex opaca x attenuate & cultivars
American holly	Ilex opaca & cultivars
Loblolly bay	Gordonia lasianthus
River birch	Betula nigra
Palatka holly	Ilex attenuate

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~~Ornamental Landscape Trees Small Trees~~

Common Name	Botanical Name
Crape myrtle	Lagerstroemia x fauriei
Wax myrtle	Myrica cerifera
Loblolly bay	Gordonia lasianthus
Junipers	Juniperus torulosa & spartan

Bottlebrush	Callistemon spp.
Redbud	Cercis canadensis
Rusty pittosporum	Pittosporum ferruginum
Pedocarpus	Pedocarpus nagi
Holly	Ilex spp.
Leyland cypress	Cupressocyparis leylandi
Jerusalem thorn	Parkinsonia aculeate

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~~Large Ornamental Trees and Palms~~

Common Name	Botanical Name
Winged elm	Ulmus alata
Washington palm	Washingtonian robusta
Canary Island palm	Phoenix canariensis
European fan palm	Chamaerops humilis
Sabal palm	Sabal palmetto
Heritage river birch	Betula nigra "heritage"
Chinese fan palm	Livistona chinensis
Windmill palm	Trachycarpus fortunei
Pindo palm	Butia capitata

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~~Shrubs and Minimum On-Center (OC) Requirements for Visual Screens~~

Common Name	Botanical Name	On Center

Glossy abelia	Abelia spp.	2.0 OG
Allamanda	Cortadenia selleana	4.0 OG
Pineapple guava	Feijoa sellowiana	3.0 OG
Anise	Illicium floridanum	2.5 OG
Pittosporum	Pittosporum tobira	3.0 OG
Azalea	Rhododendron spp.	3.0 OG
Plumbago	Plumbago capensis	2.0 OG
Banana shrub	Michelia fuscata	3.0 OG
Primrose jasmine	Jasminum mesnyi	3.0 OG
Boxwood	Buxus microphylla	2.0 OG
Viburnum	Viburnum spp.	3.0 OG
Chinese juniper	Juniperus chinensis	3.0 OG
Silverthorn	Elaeagnus philippensis	3.0 OG
Podocarpus	Podocarpus macrophyllus	2.0 OG
Holly	Ilex spp.	2.0 - 3.0 OG
Indian hawthorne	Raphiolepis indica	2.5 OG

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Groundcovers

Common Name	Botanical Name
Bugle wood	Ajuga reptans
Asparagus fern	Asparagus sprengeri
Iceplant	Carpobrotus edulis
False heather	Cuphea hyssopifolia

Dichondra	Dichondra carolinensis
Golden creeper	Ernodea littoralis
Trailing fig	Ficus sagittata
Carolina jessamine	Celsemium sempervirens
Algerian ivy	Hedera canariensis
Beach sunflower	Helianthus debilis
Dwarf yaupon holly	Ilex vomitoria "Schollings"
Chinese juniper	Juniperus chinensis
Dwarf lantana	Lantana depressa
Lily turf	Liriope spicata
Sword fern	Nephrolepis exaltata
Oyster plant	Rhoeo spathacea
Erect selaginella	Selaginella involvens
Confederate jasmine	Trachelospermum asiaticum
Caltrops	Trilobus terrestris
Society garlic	Tulbaghia violacea
Coontie	Zamia pumila
Aloe	Aloe spp.
Cast iron plant	Aspidistra elatior
Gopher apple	Locania michauxii
Earth star	Cryptanthus spp.
Miniature agave	Dyckia brevifolia
Creeping fig	Ficus pumila

Dwarf gardenia	Gardenia jasminoides
Fig marigold	Glottiphyllum depressum
English ivy	Hedera helix
Daylily	Hemerocallis spp.
Beach elder	Iva imbricate
Shore juniper	Juniperus conferta
Trailing lantana	Lantana montevidensis
Partridge berry	Mitchella repens
Mondo grass	Ophiopogon japonicus
Leatherleaf fern	Rumex adiantiformis
Purple heart	Setcreasea pallida
Star jasmine	Trachelospermum jasminoides
Wedelia	Wedelia trilobata
Wandering jew	Zebrina pendula

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~~Grasses~~

Bahia
St. Augustine cultivars
Annual ryegrass

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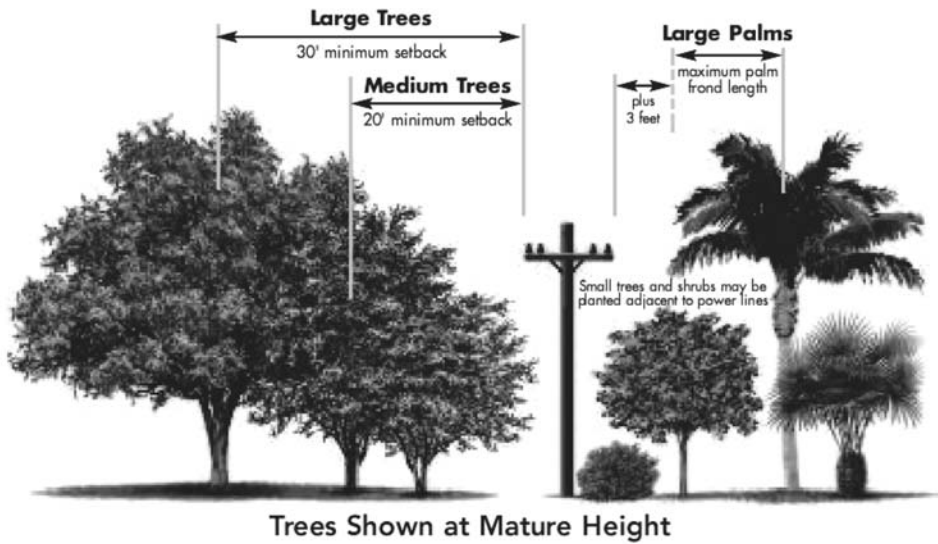
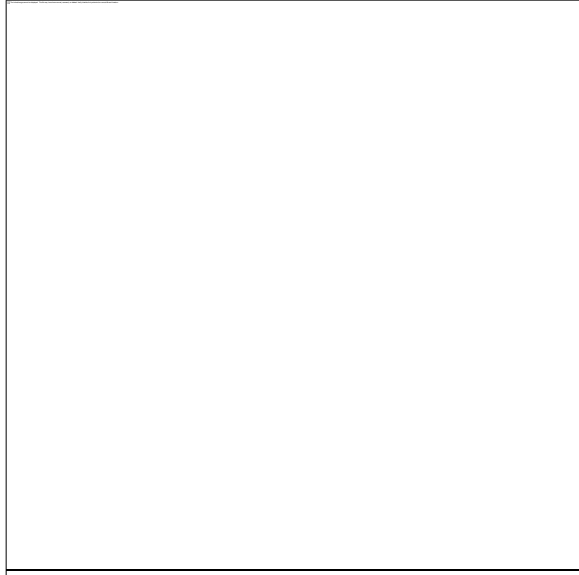


Figure 2
Large, Medium and Small Trees and Shrubs.

Secs. 98-266—98-290. - Reserved.

Proposed Changes to Landscaping and Tree Protection Ordinance

Changed references to administrative official, City Manager to Development Services Director

Section 98-232

- Definitions
 - Delete definition of accent tree – Not in code
 - Combined definitions of canopy and shade trees
 - Updated Commercial zoning districts
 - Updated industrial zoning districts
 - Deleted paved ground surface reference
 - Moved definition of trees, understory

Section 98-233

- Reorganized for ease of design and implementation
- Added minimums
 - 10 % open space
 - 1 – 4-inch tree per non-residential lot
- Deleted reference arterial & collectors and used name roadways
- Identified location of shrubs

Section 98-234

- Clarified exemptions
 - Deleted P & Z Board appeal process.

Section 98-235

- Clarified what development must comply
- Reorganized
- Clarified landscape islands and landscape areas
- Reduced duplications
- Added landscaping subject to code enforcement
- Moved definitions to definitions
- Combined clear line of sight descriptions
- Moved plant list from Appendix
- Added back section under “Unacceptable Plant Species”
- Removed references to requirement for utility companies, as they are exempt

Section 98-262

- Clarified exemptions
 - Utility and Public Works
 - Added emergencies
 - Single family and two family dwelling units

Section 98-265

- Clarified mitigation requirements
- Changed tree credits for preserved trees
 - No credit for trees under 12 inches DBH

Code Section	Existing Code	Proposed Draft 1-24- 17	Committee Revisions - 2-28-17 (Included in Ordinance for 2nd an Final Reading			Comments Received from Others	Orange Park	Clay County (except Branam Field Corridor and Lake Asbury)	St. Johns County (excludes PUDs)	Nassau(exclude historic and scenic roads, PUDs and DRIs)	City of Alachua
SECTION 98-233 - REQUIRED LANDSCAPING											
- Interior Landscaping - Minimum Landscaping of Site	15 percent *	15 percent	15 percent			15 percent	5 percent of parking area - 1 tree for each 100 s.f. of landscaped area			10 percent	
Minimum size of tree	4 inches DBH	4 inches DBH	4 inches DBH	2 1/2 inches DBH		4 inches DBH	4 inches DBH			3 inch DBH	
Landscape Buffers						150 s.f.					
- Canopy Trees	Two Rows of Canopy Trees - 4 inches DBH	Two Rows of Canopy Trees - 4 inches DBH	One Row of Canopy Trees 4 inches DBH	One row - 2 1/2 inches DBH							3 canopy trees per acre street + 2 canopy trees per acre side/ rear + 4 canopy trees per 100 linear ft. of facade
-Plant distance	50 feet apart *	30 to 40 feet apart	50 feet apart *			1 tree every 50 ft.	Every 30 ft. In 10 ft wide landscaped				
- Sub-canopy trees	4 per 100 ft. of frontage	4 per 100 ft. of frontage	2 sub canopy trees and replace 1 canopy tree with a minimum of 50% of the trees being canopy trees.								6 understory trees per acre
Hedges	30 inches in height/30 inches on center	30 inches in height/30 inches on center	24 inches - 36 inch on center			12 inches to reach 30 inches in 2 years					
	Within 1 year shall be 4 feet high	Within 1 year shall be 4 feet high	Within 2 years 3 feet high								
Shrubs	30 inches at time of planting	30 inches at time of planting	24 inches at time of planting			30 inches at time of planting	18 inches in height	24 inches - 3 ft. on center			
Groundcover	Buffer covered with ground cover	Buffer covered with ground cover	18 in. on center or solid grass sod unless natural					mulch 2 inch to 3 inch in depth			Row of shrubs
SECTION 98-235 - PARKING AREA LANDSCAPING											
Minimum for each landscaped area	5 ft. wide - minimum 200 s.f	5 ft. wide - minimum of 200 s.f	5 ft wide the entire length of parking space			5 ft. - 150 s.f.	5 ft. adjacent to ROW with 3 ft. plants			166 s.f	
Double Rows of parking	400 s.f.	400 s.f	deleted								
Turning radius	20 ft	20 ft.	Minimum 5 ft.								
Parallel Parking Spaces	10 ft. Landscape strip after 4 spaces	10 ft. Landscape strip after 4 spaces	deleted								
-Tree spacing	25 ft. apart	25 ft. apart	1 tree per island								
Required Trees	2 canopy trees	2 canopy trees	1 canopy tree or 2 subcanopy trees with 50% canopy trees			1 tree for 50 ft.					
Location of Landscaped Areas	Landscape area/buffer between parking/structure & sidewalk and ROW	Landscape area/buffer between parking/structure & sidewalk and ROW	15% of Landscaped area							10 ft. to 25 ft.	
Trees in Landscaped Buffer	1 shade tree per 50 ft.	1 shade tree per 30 to 40 ft.	1 tree per 50 s.f.			1 tree per 20 ft.				1 island per 10 spaces	
Shrubs per landscaped area	5 shrubs per tree	5 Shrubs	5 shrubs per tree			20 ft. solid hedge					

Code Section	Existing Code	Proposed Draft 1-24- 17	Committee Revisions - 2-28-17 (Included in Ordinance for 2nd an Final Reading		Comments Received from Others	Orange Park	Clay County (except Branran Field Corridor and Lake Asbury)	St. Johns County (excludes PUDs)	Nassau(exclude historic and scenic roads, PUDs and DRIs)	City of Alachua
Landscaped Areas Coverage	Groundcover or turf	Groundcover	Groundcover or turf							
Maintenance of Plants	Irrigation for new plants*	Irrigation for new plants	Irrigation or hose bibs every 75 ft							
Street Trees	Within 10 ft of ROW - 1 canopy tree per 50 ft	Within 10 ft of ROW - 1 canopy tree per 30 to 40 ft	1 canopy tree per 50 ft not Within 10 ft of ROW -							
-Coordination with City Utility	Coordination with City Utility	Coordination with City Utility prior to planting	Coordination with City Utility prior to planting							
-Minimum Size at planting	Canopy Tree - 10 to 12 ft high at planting	10 to 12 ft high at planting	4 inches DBH	2 1/2 inch DBH at planting						
-Use of Required Areas	No accessory structures , etc. allowed in landscape area	No accessory structures , etc. allowed in landscape and/or buffer area	No accessory structures, etc. allowed in minimum landscape and/or buffer area							
(6) Irrigation	No change *	No change	Added hose bibbs every 75 ft.					irrigation or hose bibs within 50 ft. of landscaping		
(5) Grass	Grass shall be plugged or sodded	Grass shall be plugged or sodded	Grass shall be plugged, sodded , or seeded							
SECTION 98-327										
Protective barrier	Protective barrier outside the drip line of the tree	Protective barrier outside the drip line of the tree	Minimum of 6 ft. radius with up to 1ft.plus for each 1 inch of caliper.							
SECTION 98-265 - REPLACEMENT										
Credit for Trees	Greater Than 12 but less than 24 - three credits	Greater Than 12 inches DBH credit for two trees	Trees 12 to 18 inches - Live Oaks 1 inch credit, all others 50 % inch credit					Greater than 12 DBH - credit 500 s.f., greater than 6 inch - 400 s.f., 3 to 6 inch - 100 s.f. Apply when in planting area		
	Greater Than 24 - Five credits	Deleted	Trees 19 to 30 inches - Live Oaks 1.25 inch credit, all others 75% inch tree credit							
			Trees over 30 inches - Live Oaks 1.5 inch credit, all others 100 % inch credit							
* Since 2000										
Prepared by the City of Green Cove Springs Development Services Department - 3/2/17										

LANDSCAPE AND TREE PROTECTION ORDINANCE

March 2, 2017



PURPOSE

PURPOSE

- Goal - Clarity and Consistency of existing code



BACKGROUND

BACKGROUND

- Requirement to be designated “Tree City”
 - City has been designated a “Tree City” for 28 years
- Revised in 2000, 2011
- Urban Forestry Grant



PROCESS

PROCESS

- Committee met to review existing code and provide input
- Planning and Zoning Board
 - Advertised Public Hearing - 1-12-17
 - No comments from the Public
 - Recommended to City Council to approve revisions .
- City Council
 - 1st Advertised Public Hearing - 1-24-17
 - No Comments from the public
- Community Meeting to receive input - 2-2-17
 - No Comments from the public
- Committee met to review proposed changes and recommended revisions
- 2nd and Final Advertised Public Hearing - Scheduled for 3-21-17
- Link on Homepage of City's Website - www.greencovesprings.com



SUMMARY OF REVISIONS

SUMMARY OF REVISIONS - LANDSCAPE

- Goal - Clarity and Consistency
- Underline and Strikeout Format
- Changed references to administrative official, City Manager to Development Services Director
- Section 98-232 - Definitions
 - Delete definition of accent tree – Not in code
 - Combined definitions of canopy and shade trees
 - Updated Commercial zoning districts
 - Updated Industrial zoning districts
 - Deleted paved ground surface reference
 - Moved definition of trees, understory/sub-canopy



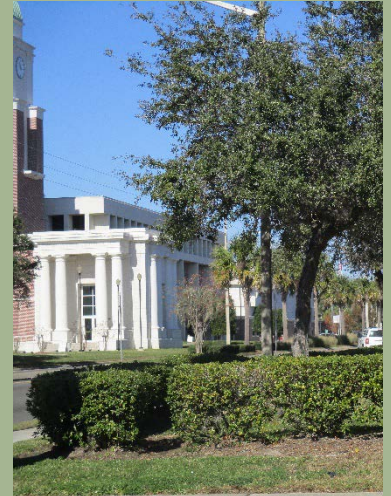
SUMMARY OF REVISIONS - LANDSCAPE

- **Section 98-233**
 - Reorganized for ease of design and implementation
 - Clarified minimums
 - 15 % of site
 - 1 – 4-inch tree per non-residential lot
 - Deleted reference to arterial & collectors and used named roadways
 - Identified location of shrubs



SUMMARY OF REVISIONS - LANDSCAPE

- **Section 98-234**
 - Clarified exemptions
 - Deleted P & Z Board appeal process
- **Section 98-235**
 - Clarified what development must comply
 - Reorganized
 - Clarified landscape islands and landscape areas
 - Reduced duplications
 - Added landscaping subject to code enforcement
 - Clarifies distance of trees to 50 feet
 - Moved definitions to definitions



SUMMARY OF REVISIONS - LANDSCAPE

- **Section 98-235**
 - Combined clear line of sight descriptions
 - Revised plant list and moved the list from Appendix
 - Removed references to requirement for utility companies, as they are exempt
 - Added that hose bibs can be an irrigation system



SUMMARY OF REVISION - TREES

- Section 98-262
 - Clarified exemptions
 - Utility and Public Works
 - Added emergencies
 - Single family dwelling units



SUMMARY OF REVISION - TREES

- Section 98-265
 - Clarified mitigation requirements
 - Changed tree credits for preserved trees
 - No credit for trees under 12 inches DBH
 - Trees 12 to 18 inches
 - Live Oaks - 1 inch credit
 - All others - 50 % inch credit
 - Trees 19 to 30 inches
 - Live Oaks - 1.25 inch credit
 - All others - 75% inch tree credit
 - Trees over 30 inches
 - Live Oaks - 1.5 inch credit
 - All others - 100% inch tree credit



COMMENTS

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904-297-7500, ext. 3317

