ORDINANCE NO. C-15-09

AN ORDINANCE AMENDING SECTION 47-21, LANDSCAPING AND TREE PRESERVATION REQUIREMENTS, OF THE UNIFIED LAND DEVELOPMENT REGULATIONS OF THE CITY OF FORT LAUDERDALE, FLORIDA, TO INCORPORATE FLORIDA-FRIENDLY LANDSCAPING PRINCIPLES; PROVIDING FOR SEVERABILITY; REPEAL OF CONFLICTING ORDINANCE PROVISIONS; AND PROVIDING FOR AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA:

SECTION 1. That Section 47-21.1, Intent and purpose, of Section 47-21, Landscape and Tree Preservation Requirements, of the Unified Land Development Regulations (hereinafter referred to as "ULDR") of the City of Fort Lauderdale, Florida, is hereby amended to read as follows:

SECTION 47-21. LANDSCAPE AND TREE PRESERVATION REQUIREMENTS

Sec. 47-21.1. Intent and purpose.

A. The intent of these regulations is to protect, preserve and enhance the natural environment and beauty of the city and promote better ~~air~~ quality ~~by providing for~~ of life by creating a safe, healthy, and sustainable landscape. This will be achieved by reducing the use of fertilizers and pesticides through the use of Florida-Friendly Landscaping™ principles in landscaped areas containing trees, nectar-producing plants for wildlife pollinators, and other plants and arranging them by irrigation needs in a pleasing manner in relation to paved areas and structures. ~~The installation of drought-resistant, locally adapted and native plant materials is highly desirable and preferred.~~ These regulations are to establish minimum standards for the development, installation, and maintenance of Florida-Friendly Landscaping™ without inhibiting creative landscape design, construction, and management.

. . .

SECTION 2. That Section 47-21.2, Definitions, of the ULDR of the City of Fort Lauderdale, Florida, is hereby amended to create new definitions to read as follows:

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Sec. 47-21.2. Definitions.

A. For the purpose of this section, the following terms and words shall have the meanings herein prescribed unless the context clearly requires otherwise:

1. *Berm.* A mound of earth configured in a manner which supports landscaping.

2. *Biological control.* A component of an integrated pest management strategy. It is defined as the reduction of pest populations by natural enemies and typically involves an active human role.

3. *Bioretention.* An engineered process to manage stormwater runoff using the chemical, biological, and/or physical properties found in natural, terrestrial-based communities of plants, microbes, and soils.

~~2~~4. *Bufferyard.* An area or areas located on nonresidential property which extend the full length of the property lines abutting residential property which meet the requirements for a bufferyard as provided in Sec. 47-25.3

5. *Caliper*. Diameter measurement of nursery size tree trunks. Trunk caliper is measured 6 inches from the ground on trees up to and including 4 inches in diameter, and 12 inches above the ground for trees that are larger than four (4) inches but smaller than seven (7) inches. As part of this ordinance, trees with diameters of seven (7) inches or greater is measured at four and one-half (4 1/2) feet above grade. See Diameter definition.

6. *Canopy.* The upper portion of a tree consisting of limbs, branches, and leaves.

7. *Clear trunk.* The distance between the top of the root ball along the vertical trunk or trunks of a tree to the point at which lateral branching or fronds begin.

~~3~~8. *Conifer.* Cone-bearing seed plant.

4~~9~~. *Conspicuous flowering.* A plant which exhibits a contrasting display of reproductive parts of size, quantity and duration.

~~5~~10. *Diameter.* See 'Caliper' for measuring trees less than seven (7) inches in diameter. The diameter of a dicot or conifer tree trunk ~~as measured six (6) inches above grade, if no more than three (3) inches in diameter; or at twelve (12) inches above grade, if no more than five (5) inches in diameter, and for anything greater than five (5) inches in diameter~~ seven (7) inches or greater in diameter, is measured at four and one half (4 ½) feet above grade or ground level. The diameter of a

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monocot is the diameter of the tree trunk measured one (1) foot above ~~the ground~~ grade or ground level.

~~6~~11. *Dripline.* The natural outside end of the branches of a tree or shrub projected vertically to the ground.

~~7~~12. *Equivalent replacement.* A tree (or trees) which due to its classification (based on the table of tree evaluation of the department) in the case of dicot or conifer, condition, size and location, is determined by the department to be the equivalent to the tree (or trees) which it replaces. In making this determination, the department shall be guided by the standards established by the International Society of Arboriculture.

~~8~~13. *Equivalent value.* An amount of money, which reflects the cost of replacing a dicot or conifer tree, determined by multiplying the cross-sectional ~~diameter~~ surface area measured at four and one-half (4 ½) feet above grade commonly known as "diameter at breast height (DBH)" of the tree (measured in square inches) by the following values (based on the cost of obtaining an equivalent replacement according to classification of the tree as listed in the table of tree evaluation of the department):

a. Class A—Twenty-five dollars ($25.00) per square inch.

b. Class B—Twenty dollars ($20.00) per square inch.

c. Class C—Fifteen dollars ($15.00) per square inch.

d. Class D—Ten dollars ($10.00) per square inch.

e. Class E—Five dollars ($5.00) per square inch.

f. Class F—Zero dollars per square inch.

g. Equivalent value of a monocot is determined by multiplying the number of trunk feet to the terminal bud by thirty dollars ($30.00) per foot.

~~9~~14. *Excavation.* To make a hole, unearth, scrape, or dig out for the purpose of construction, demolition, or removal with specific relation to a tree drip line and root system.

15. *Florida-Friendly Landscaping™.* Quality landscapes that conserve water, protect the environment, are appropriate for local conditions, and are drought, wind, and/or salt tolerant. Principles of Florida-Friendly Landscaping™ include planting the right plant in the right place, efficiently watering, appropriate fertilization, mulching, attraction of wildlife, responsible management of yard pests, recycling

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yard waste, reduction of stormwater runoff, and waterfront protection. Additional components of Florida-Friendly Landscaping™ include planning and design, soil analysis, use of solid waste compost, practical use of turf, and proper maintenance.

~~10~~16. *Ground cover.* A planting of low growing plants that covers the ground in place of turf. Within the dripline of a tree, two (2) to three (3) inches of mulch may be used instead of plants.

~~11~~17. *Hatracking.* To flat-cut the top of a tree, severing the leader or leaders; or pruning a tree by stubbing off mature wood; or reducing the total circumference or canopy spread not in conformance with the American National Standards Institute, A-300 standards or other accepted standards as published.

~~12~~18. *Hedge.* ~~A close planting of shrubs which forms a compact, dense, visually opaque, living barrier when mature.~~ A row of evenly-spaced shrubs or other vegetation planted to form a dense, continuous, unbroken visual screen.

19. *Hydrozone.* A distinct grouping of plants with similar water needs and climatic requirements. Also referred to as water use zone.

~~13~~20. *Interior landscape area.* That landscape area located within a vehicular use area further than twenty-eight (28) feet from the perimeter and not attached to the perimeter landscape area.

21. *Integrated pest management.* A pest management strategy that focuses on long-term prevention or suppression of pest problems through a combination of techniques such as encouraging biological control, use of resistant plant varieties, and adoption of alternate cultural practices to make the habitat less conducive to pest development. Pesticides are used only when careful monitoring indicates they are needed, or to prevent pests from significantly interfering with the purposes for which plants are being grown.

~~14~~22. *Interior parking.* Parking spaces not contiguous to, nor directly abutting a perimeter.

~~15 *Irrigation. To supply with water by a mechanical sprinkler system.*~~

23. *Irrigation System.* A constructed watering system designed to transport and distribute water to plants.

24. *Irrigation Zone*. A grouping of soakers, sprinkler heads, bubblers, or microirrigation emitters operated simultaneously by the control of one (1) valve.

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25. *Landscape or landscaping.* Any combination of living plants (such as grass, groundcover, shrubs, vines, hedges, palms, or trees) and non-living landscape material (such as rocks, pebbles, sand, mulch, walls, fences, or decorative paving materials installed for functional or aesthetic reasons at ground level and open to the sky.

~~16~~26. *Landscape area.* An area where landscaping has been or shall be installed.

~~17~~27. *Landscape area, required.* Landscape areas that are directly permeable to the subgrade through a natural drainage system unless otherwise specifically permitted by the ULDR.

~~18. Landscaping. Living plant material purposely installed for functional or aesthetic reasons at ground level and open to the sky.~~

~~19~~28. *Lawn/turf/sod.* ~~Upper layer of soil bound by grassy plant roots.~~ An area of land planted with grasses or (rarely) other durable plants, which are maintained at a short height and used for aesthetic and recreational purposes.

29. *Low impact site design practices.* Practices that minimize changes to the site's soil levels and composition by preserving existing landscape, shrubs and/or trees and other natural features.

~~20~~30. *Monocotyledonous (monocot) tree.* A tree having fronds with parallel veination and an indistinct, tightly held trunk surface (a palm).

~~22~~31. *Mulch.* An organic soil additive or topping such as compost, wood chips, wood shavings, seasoned sawdust, bark, leaves or straw, used to reduce evaporation, prevent erosion, control weeds, enrich the soil and lower soil temperature.

32. *Native vegetation.* Any plant species with a geographic distribution indigenous to all, or part, of the state of Florida as identified in the *Guide to the Vascular Plants of Florida*, R. P. Wunderlin, 1998, University Press of Florida, Gainesville, or the *Atlas of Florida Vascular Plants.*

33. *Nectar-producing plant.* A plant that serves as a food source by producing nectar within their flowers for mainly nectar-consuming pollinators such as butterflies, moths, bees, hummingbirds and bats.

~~21~~34. *Net lot area.* The total square footage of a parcel of land after subtracting the square footage area of any vehicular use area including the VUA required landscaping, building footprint, walls, walks and swimming pools or any other impervious area.

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~~23~~35. *One-family residence.* A building and its surrounding lot intended to be occupied by one (1) family only.

~~24~~36. *Ornamental shrub.* A multi-stemmed woody plant with several permanent stems used for ornamental purposes.

37. *Palm.* A plant belonging to the monocot order of the family Palmae, distinguished by having unbranched single or multi-trunks crowned by large, compound pinnate, or palmate leaves/fronds.

3638. *Parking garage.* A building or structure consisting of more than one (1) level and used to park vehicles.

~~25~~39. *Peninsular or island landscape area.* A pervious area set aside for landscaping, located at the end of a parking row where it abuts an aisle or driveway, and also intermittently located within parking rows.

~~26~~40. *Perimeter.* The boundary line separating one (1) parcel of land from another or a parcel of land from a right-of-way. If the property is on a waterway, the perimeter shall be the bulkhead line.

~~27~~41. *Perimeter landscape area.* The landscape area directly abutting the perimeter of a VUA and within twenty-eight (28) feet of the property line.

~~28~~42. *Perimeter parking.* Parking spaces contiguous to or directly abutting a perimeter landscape area.

~~29. Parking structure. Any structure which contains two (2) or more levels of vehicular use.~~

~~30~~43. *Pervious area.* That non-compacted land located at ground level, open to the sky allowing passage of air and water to the subsurface and used or set aside for landscaping.

44. *Pervious paving materials.* A porous asphaltic, concrete, or other surface having a high-void aggregate base which allows for rapid infiltration and temporary storage of rain on, or runoff delivered to paved surfaces.

45. *Plant bed.* A grouping of trees, shrubs, groundcover, perennials, or annuals growing together in a defined area devoid of turfgrass, normally using mulch around the plants.

46. *Plant communities.* An association of native plants that are dominated by one (1) or more prominent species or a characteristic physical attribute.

47. *Plant palette.* A list of site appropriate plant species of various colors, textures, and mature sizes chosen to be used in the landscape design.

48. *Planting plan.* Specifications and installation details for plants, soil amendments, mulch, edging, gravel, staking materials, and other similar materials.

49. *Point of connection ("POC").* The location where an irrigation system is connected to a water supply.

~~31~~50. *Protected tree.* A tree which due to its size, shape, character, age, aesthetic value, species, historical value or any combination thereof declared by the city commission to be a locally unique example of the species.

~~32~~51. *Protective barrier.* Fences or like structures at least four (4) feet in height that are conspicuously colored and are erected to prevent or obstruct passage.

~~33~~52. *Prune.* To remove, cut off, or cut back parts of a tree or plant which will alter the natural shape.

~~34~~53. *Right-of-way.* Land provided by dedication, deed or easement which is devoted to, required for or intended for the use by the public as a means of public traverse.

54. *Runoff.* The water that results from and occurs following a rain event, or following an irrigation event, because the water is not absorbed by the soil or landscape and flows off from the area.

~~35~~55. *Shock.* A state of retarded growth or degeneration of the vital processes resulting from, but not limited to, root damage, wounds, impact, partial or total girdling, or improper cutting.

~~36~~56. *Shade tree.* A single-trunked dicot or conifer tree which by virtue of its natural shape provides at maturity a minimum shade canopy thirty (30) feet in diameter as listed in the table of tree evaluation.

~~37~~57. *Shrub.* A multistemmed woody plant with several permanent stems usually maturing at less than 15 feet in height.

58. *Site appropriate plant.* A plant that, after establishment, will thrive within the environmental conditions that are normal for a specific location without artificial inputs or supplements such as irrigation.

~~38~~59. *Specimen tree.* Any tree which has a diameter of eighteen (18) inches or greater and is well shaped and in good health. Exceptions are the following trees which are not specimen trees:

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a. Fruit trees that are capable of producing potentially edible fruit, including, but not limited to: mangos, avocados, or species of citrus;

b. Species of the genus Ficus except F. aurea (strangler fig), F. citrifolia (short leaf fig), F. lyrata (fiddle leaf fig), F. rubiginosa (patio fig or rustyleaf fig);

c. Acoelorrhaphe wrightii (paurotis palm) and Phoenix reclinata (Senegal date palm) which have less than eight (8) feet of wood height;

d. All other multi-trunked palms not mentioned above;

e. Australian pine, Brazilian pepper, melaleuca, pencil tree and poison wood, carrotwood, schefflera; and

f. Trees which are "Class D" or lower.

~~39~~60. *Standard.* A woody perennial plant with a number of stout stems, all but one (1) of which has been removed. The remaining stem then has been trained into an upright, small, tree-like form having a rounded crown usually supported by a stake.

~~40~~61. *Street.* The term street includes any road, highway and other ways greater than twenty (20) feet in width which are open to travel by the public including the roadbed, right-of-way, sidewalk and other land devoted, required or intended for general circulation which affords a primary means of access to abutting property.

~~41~~62. *Street tree.* A tree which is located within twelve (12) feet of the edge of pavement or curb of a street or such other distance as determined by the department in accordance with this section.

~~42~~63. *Table of tree evaluation.* A table prepared by the city and amended from time to time listing tree species and information pertinent to such species, on file with the department.

~~43~~64. *Tree.* A woody perennial plant, possibly shrubby when young, with one (1) main stem or trunk which naturally develops diameter and height characteristics of a particular species.

~~44~~65. *Tree abuse.* Any action or inaction which does not follow acceptable trimming practices as established by the American National Standards Institute, A-300 standards or other accepted standards as published. Abuse also includes, but is not limited to, damage inflicted upon the roots by machinery, changing the natural grade within the drip line, destruction of the natural shape or any action which causes infection, infestation or decay.

~~45~~66. *Tree Canopy Trust Fund.* The fund maintained by the city to which funds received

by the city for the equivalent value of trees removed shall be deposited. Money from the fund shall ~~only be used to purchase non-required trees which are then planted on public lands.~~ be used to enhance tree canopy coverage. Trust funds shall be expended, utilized and disbursed for the planting of trees and any other ancillary costs associated with the planting of trees on public lands. Ancillary costs shall not exceed 20 percent of the cost of the particular tree planting project, and may include landscape design services, irrigation, mulch, tree grates, porous surfacing, or other materials necessary for the proper installation and maintenance of tree planting projects. These monies may also be used for the relocation of trees to public lands and for periodically distributing saplings to the public to increase tree canopy coverage.

~~46~~67. *Tree service/arborist.* Any person, company, corporation or service which does regularly, for compensation or fee, transplant, remove, prune, trim, repair, inject, or perform surgery upon a tree.

~~47~~68. *Tree removal.* To change the location of a tree, or to cause damage to or destruction of a tree or root system so as to cause a tree to die.

~~48~~69. *Trim.* To reduce, shorten or gradually diminish the size of a plant by removal of parts of a plant without altering the natural shape.

~~49~~70. *Vehicular use area (also referred to as "VUA").* Any area used by vehicles including, but not limited to, areas for parking, display, storage or traverse of any and all types of motor vehicles, bicycles, watercraft, trailers, airplanes or construction equipment, but shall not include areas used exclusively as an airport ramp or apron.

~~50~~71. *Vine.* A plant whose natural growth characteristic produces climbing stems.

~~51. *Xeriscape.* Techniques or methods utilized for water conservation by the proper selection and arrangement of plantings and site drainage.~~

SECTION 3. That Section 47-21.3, Landscaping required is renumbered as provided in Section 4 of this ordinance and a new Section 47-21.3, entitled General provisions and design standards, of the ULDR of the City of Fort Lauderdale, Florida, is hereby created to read as follows:

Sec. 47-21.3. General provisions and design standards.

A. Low impact site design practices, such as preserving existing native trees and vegetation, shall be used to the extent feasible. Irrigation shall not be required in area where established native vegetation is incorporated into the landscape design.

B. The plant palette and irrigation system shall be site appropriate, based on current acceptable industry standards, for site conditions, taking into account that, in some cases, soil improvement can enhance water use efficiency.

C. Plants shall be grouped together by irrigation demand. The percentage of landscaped area in irrigated high water use hydrozones shall be minimized.

D. All landscapes must be designed and planted in accordance with Florida-Friendly Landscaping™ principles. The percentage of landscaped area, excluding turfgrass areas, in irrigated high water use hydrozones shall be no more than twenty percent (20%) of the total non-turfgrass landscaped area.

E. When designing landscapes, fruit-bearing trees and plants should be considered as part of a sustainable and edible landscape.

F. When designing landscapes to support wildlife, nectar-producing native plants, shrubs and trees should be incorporated as much as possible to provide food-sources for nectar-consuming pollinators such as butterflies, moths, bees, hummingbirds and bats.

G. Site designs and landscape plans shall be prepared in accordance with the requirements of all applicable Florida and local laws, rules, regulations, and ordinances. All landscape and irrigation system designs shall be consistent with the standards developed pursuant to Section 373.228, Florida Statutes, as amended.

H. The landscape plan shall consider natural drainage features to minimize runoff. The use of pervious surfaces and areas is preferred; therefore, impervious surfaces and materials within the landscaped area shall be limited to borders, sidewalks, step stones, parking lots, and other similar materials, and shall not exceed ten percent (10%) of the landscaped area.

Use of pervious paving materials, where appropriate, is encouraged.

I. The landscape plan should consider the soil requirements for trees based on their size at maturity and their distance from any adjacent paved/hardscape areas and utility infrastructure. Larger soil volumes lead to greater tree size, better tree health, longer tree life, greater environmental benefits, and fewer costs, such as those associated with tree replacement and damage by roots to property improvements and infrastructure.

SECTION 4. That Section 47-21.3, Landscaping required, of the ULDR of the City of Fort Lauderdale, Florida, is hereby renumbered and amended to read as follows:

Sec. ~~47-21.3~~ 47-21.4. Landscaping required.

No person shall carry out any development or use any parcel of land for any purpose, nor shall any permit for building or paving be issued unless a landscaping permit is ~~installed~~ issued in accordance with the requirements of this section.

SECTION 5. That Section 47-21.4, Permit required, of the ULDR of the City of Fort Lauderdale, Florida, is hereby renumbered and amended to read as follows:

Sec. ~~47-21.4~~ 47-21.5. Permit required.

A landscaping permit shall be required for the installation, removal, or replacement of any ~~required~~ landscaping in accordance with the provisions of this section.

SECTION 6. That Section 47-21.5, Landscape plan required, of the ULDR of the City of Fort Lauderdale, Florida, is hereby renumbered and amended to read as follows:

Sec. ~~47-21.5~~ 47-21.6. Landscape plan required.

A. Prior to the issuance of a landscape permit, a landscape plan shall be submitted to the department. The landscape plan shall include, but not be limited to, the following:

1. Name, address and telephone number of the person who has prepared the landscape plan. Landscape plans submitted for approval must be prepared by a registered landscape architect, dated, signed and stamped with his or her seal. A

property owner may prepare plans or drawings for ~~his~~ their own property. A nurseryman or nursery stock dealer may also prepare plans or drawings but only as an adjunct to merchandising his products.

A landscape plan drawn at a scale no less than one (1) inch equal to thirty (30) feet showing the location, size, description and specifications of materials, grade of plantings, mulch specifications, protective structures such as curbs, the number of interior parking spaces and the square foot area of the VUA, and perimeter and interior landscape area. New trees shown shall be spaced so as not to conflict with normal canopy development. An existing desirable tree proposed to be retained on site shall be left with a root pervious area surrounding it sufficient to support the species and canopy.

3. The landscape plan shall:

   a. Be designed so that landscaping shall not be adversely affected by factors such as salt exposure, prevailing winds, overhead obstructions, utility services, deep shadows, unusual soil conditions and shall identify and show location of existing trees on and adjacent to the development site, and;

   b. Take into consideration solar access for photovoltaic solar systems when determining appropriate areas on the development site for proposed tree locations.

~~4. If an irrigation plan is provided, it shall be drawn at a scale of not less than one (1) inch equal to thirty (30) feet showing the location, size and type of automatic shutoff switches, zoners and backflow devices.~~

~~5.~~4. A site plan drawn at a scale of not less than one (1) inch equal to thirty (30) feet showing the property boundaries and dimensions, existing and proposed structures, pools, walks, walls, patios, VUA's, lot orientation, utility services, light poles, pad-mounted transformer locations, fire hydrants, siamese connections, existing and proposed elevations and any other factor affecting the proposed use of the property, including the use and zoning of adjacent property.

~~6~~5. A current survey when construction or alteration to a structure, or change of use or construction related to a VUA is proposed. The survey shall depict site utilization and improvements thereon and may be submitted in place of the landscape plan

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and site plan described in this section when the survey provides sufficient information to determine compliance with the requirements of this section.

6. The location of all underground and overhead utilities.

7. A landscape material schedule listing all plants being used with their botanical, common, and, where applicable, cultivar names; spacing; quantities; size of each type of plant by container size, mature height, and spread; degree of drought tolerance (as determined by the most recent edition of the South Florida Water Management District's guide *Waterwise: South Florida Landscapes*); and indication of whether native to Florida that will thrive in South Florida consistent with Florida-Friendly Landscaping™ principles.

8. The hydrozones, as determined by the most recent edition of the South Florida Water Management District's guide *Waterwise: South Florida Landscapes*, shall be shown on irrigation and planting plans, as required.

9. A table showing the total square footage(s) of the various landscape hydrozones on the plan. If more than one (1) water meter serves the site, the total hydrozone square footages of the various hydrozones must be identified with each POC and meter providing water service.

10. A layer of organic mulch three (3) inches deep is required and shall be noted on plans in plant beds, except annual beds, and individual trees in turfgrass areas. Mulch rings should extend at least three (3) feet around freestanding trees and shrubs. Mulch should be at least six (6) inches away from any portion of a building or structure, or the trunks of trees, and at least three (3) inches away from the base of shrubs.

11. If an irrigation plan is required it must include:

    a. A minimum scale of one (1) inch equals thirty (30) feet;

    b. The location of existing trees, vegetation, and ecological communities to

remain, if applicable;

c. The location of existing buildings, paving, and site improvements to remain;

d. The location of proposed trees, vegetation, and ecological communities;

e. The location of proposed buildings, paving, site improvements, and water bodies;

f. The irrigation POCs and design capacity;

g. The water service pressure at irrigation POCs;

h. The water meter location and size;

i. The major components and location of the irrigation system, including all pumps, filters, valves, and pipe sizes and lengths;

j. Reduced-pressure-principle backflow-prevention devices for each irrigation POC on potable water systems and specifications;

k. The locations and specifications of controllers of rain shut-off devices and soil moisture sensors;

l. An irrigation legend with the following elements:

i. Separate symbols for all irrigation equipment with different spray patterns and precipitation rates and pressure compensating devices;

ii. General description of equipment; manufacturer's name and model number for all specified equipment;

iii. Recommended operating pressure per nozzle and bubbler and low-flow emitter;

iv. Manufacturer's recommended overhead and bubbler irrigation nozzle rating in gallons per minute or gallons per hour for low flow point applicators;

v. Minimum (no less than seventy-five percent (75%) of maximum spray radius) and maximum spray radius per nozzle; and

vi. Manufacturer's rated precipitation rate per nozzle at specified pounds per square inch ("psi"); and

m. Zone layout plan (minimum scale of one (1) inch equals twenty (20) feet):

i. Indicating headtype, specifications, and spacing; and

ii. Indicating methods used to achieve compliance with landscape irrigation design standards as required by Section 373.228, Florida Statutes, as amended.

SECTION 7. That Section 47-21.7, Irrigation, is renumbered as provided in Section 10 of this ordinance and a new Section 47-21.7, Soils, of the ULDR of the City of Fort Lauderdale, Florida, is hereby created to read as follow:

Sec. 47-21.7. Soils.

A. Where landscape plans are required, applicants shall, as determined by Zoning Administrator or designee, seek a soil test and analysis performed by a reputable soil testing lab to determine soil texture, percentage of organic matter, measurement of pH, total soluble salts, and estimated soil infiltration rate.

B. Existing horticulturally-suitable topsoil shall be stockpiled and respread during final site grading.

C. Any new soil required shall be similar to the existing soil in pH, texture, permeability, and other characteristics, unless demonstrated to the City that a different type of soil amendment approach is justified.

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D. The use of solid waste compost as a soil amendment is encouraged where it is appropriate.

SECTION 8. That Section 47-21.8, Maintenance, is renumbered as provided in Section 11 of this ordinance and a new Section 47-21.8, Appropriate plant, sod, and tree selection, location, and arrangement, of the ULDR of the City of Fort Lauderdale, Florida, is hereby created to read as follows:

Sec. 47-21.8. Appropriate plant, sod, and tree selection, location, and arrangement.

A. Plant selection should be based on the plant's adaptability to the existing conditions present at the landscaped area and native plant communities, particularly considering appropriate hardiness zone, soil type and moisture conditions, light, mature plant size, desired effect, color, and texture. Plant species that are tolerant to drought, wind, and/or salt are preferred. Determinations of prohibited and controlled plant species shall be pursuant to the Department of Agriculture and Consumer Services, Chapter 5B-57, Florida Administrative Code ("F.A.C."), as amended, and the Florida Exotic Pest Plant Council ("FLEPPC") Invasive Plant Species list. Plant species identified as prohibited and controlled according to Chapter 5B-57, F.A.C., and the FLEPPC Invasive Plant Species list may not be used, except as specifically allowed therein.

B. Plants shall be grouped in accordance with their respective water and maintenance needs. Plants with similar water and cultural (soil, climate, sun, and light) requirements shall be grouped together. Consideration should be given to plantings that require minimal or no use of gasoline-powered maintenance equipment. Where natural conditions are such that irrigation is not required, the presence of site appropriate plants shall not be considered a high water use hydrozone.

C. The combined size of all high water use hydrozones, other than turfgrass areas, shall be limited to twenty percent (20%) of the total landscaped area. In landscapes irrigated with reclaimed water, the allowable size of all high water use zones shall not be limited. These high water use limits do not apply to landscaped areas requiring large amounts of turf for their primary functions.

D. Plants used in accordance with this article shall conform to the standards for Florida Grade One, or better, as provided for in the most current edition of *Grades and Standards for Nursery Plants*, by the Division of Plant Industry, Department of Agriculture and

Consumer Affairs, State of Florida. Sod shall be clean and visibly free of weeds, noxious pests, and diseases.

E. Fifty percent (50%) of all vegetation, excluding all turfgrass, required to be planted by this section shall be vegetation native to Florida that will thrive in South Florida, consistent with Florida-Friendly Landscaping™ principles.

F. Shade Trees shall be of a species having an average mature crown spread of greater than twenty (20) feet and shall have trunks that can be maintained with over six (6) feet of clear trunk. Trees or palms having an average mature crown spread of less than twenty (20) feet may be substituted by grouping the same so as to create the equivalent of a twenty (20) foot crown spread in areas where shade trees cannot be planted, such as under overhead utilities. Such a grouping shall count as one (1) tree towards meeting tree requirements for any provision herein. If palms are used, they shall constitute no more than twenty percent (20%) of the total tree requirements for any provision herein, and shall have a minimum of six (6) feet of clear trunk/gray wood at installation. On projects requiring six (6) to ten (10) trees, a minimum of two (2) species shall be utilized; for eleven (11) to twenty (20) trees required, a minimum of three (3) species shall be utilized; for twenty-one (21) to fifty (50) trees required, a minimum of four (4) species shall be utilized; and for fifty-one (51) or more trees required, a minimum of five (5) species shall be utilized.

G. Sites with lots under three thousand (3,000) square feet or with less than five (5) feet of planting space for required buffers may use canopy trees with a mature height of twelve (12) to fifteen (15) feet, with canopy spread characteristic of the species at such height.

H. Trees used in the required landscaping adjacent to a public street or swale are subject to approval by the City so that the sustainable character, biological diversity of tree species, and safety of the public street can be maintained, and the reduction of the urban heat island effect shall be encouraged, and "walkable" communities shall be promoted. All large trees installed within six (6) feet of public infrastructure shall utilize a root barrier system, as approved by the City. Tree root barriers shall be installed at the sidewalk edge in those circumstances where tree roots are causing, or may potentially cause, a trip hazard because of lifting of some portions of a public sidewalk.

I. Tree and plant species on the Florida Exotic Pest Plant Council, (“FLEPPC”) Invasive Plant Species list, as amended, shall not be planted as required or optional landscaping, and invasive plant species listed therein shall be removed from construction sites. Any tree not listed as an invasive tree shall require a Tree Removal Permit prior to removal.

J. Tree species shall have a minimum height of ten (10) feet at time of installation. Minimum canopy spread shall be characteristic of the species at such height. Credit for existing native and non-invasive trees preserved on a site shall be granted toward meeting the tree requirements of any landscaping provisions of this article. No credit shall be granted for preserved trees which are in poor condition or declining health.

K. Sites with lots under three thousand (3,000) square feet or with less than five (5) feet of non-vehicular planting space for required buffers may use canopy trees with a twelve (12) to fifteen (15) foot maturity, with canopy characteristic of the species used at such height.

L. Shrubs used as hedges shall be a minimum height of two (2) feet at installation, full to base, and planted two (2) feet on center when measured immediately after planting. When shrubs are used as a screen around vehicular use area, said shrubs shall be a minimum of two (2) feet in height at installation above the vehicular use area that directly abuts the shrubs at time of planting. All shrubs should be placed a minimum of two and one-half (2½) feet on center from structures.

M. Required buffer hedges shall be planted and maintained so as to form a continuous, unbroken solid visual screen, with a minimum height of three (3) feet, to be attained within one (1) year after planting.

N. Native and non-invasive vines shall be a minimum of thirty (30) inches in supported height immediately after planting, may be used in conjunction with fences, visual screens, or walls, and shall be planted at ten (10) foot intervals to meet landscape buffer requirements.

O. Groundcover shall be planted with a minimum of fifty percent (50%) coverage, with one hundred percent (100%) coverage occurring within six (6) months of installation.

P. Topsoil shall be clear and free of construction debris, weeds, rocks, noxious pests, and diseases. The topsoil for all planting areas shall be composed of a minimum of fifty percent (50%) muck or horticulturally-acceptable organic material.

Q. All turfgrass areas shall be sodded using species suitable as permanent lawns in Broward County. Where appropriate, turf species that require minimum irrigation are encouraged. The type and location of turf areas shall be selected in the same manner as with all the other plantings. Irrigated turf areas, as opposed to non-irrigated turf areas, are considered to

be a high water use hydrozone. Irrigated turf shall not be treated as a fill-in material but rather as a planned element of the landscape. Turf shall be placed so that it can be irrigated using separate zones.

R. Irrigated turfgrass areas shall be consolidated as per Florida-Friendly Landscaping™ principles and as required by Zoning Administrator or designee. Turfgrass areas shall be identified on the landscape plan and be subject to the following requirements:

1. No more than sixty percent (60%) of the landscaped area for single-family and duplex dwellings may be in turfgrass;

2. No more than fifty percent (50%) of the landscaped area for multifamily dwellings may be in turfgrass; and

3. No more than fifty percent (50%) of the landscaped area for other development uses may be in turfgrass.

S. Native and drought-tolerant landscaping shall be identified on the landscape plan and be subject to the following requirements:

1. A minimum of fifty percent (50%) of the non-turfgrass landscaped area of single-family and duplex dwellings must be in native or drought-tolerant landscaping; and

2. A minimum of fifty percent (50%) of the landscaped area of all other development uses must be in native or drought-tolerant landscaping.

SECTION 9. That Section 47-21.6, Installation, of the ULDR of the City of Fort Lauderdale, Florida, is hereby amended to read as follows:

Sec. ~~47-21.6~~ 47-21.9. Installation.

A. All landscaping shall be installed in accordance with the requirements of this section within ninety (90) days of issuance of the landscape permit in accordance with the landscape plan approved by the department and the requirements of this section and prior to the issuance of a certificate of occupancy or final use approval.

B. All landscape material shall be installed in accordance with sound landscaping practices, ~~and xeriscaping~~ following all applicable Florida-Friendly Landscaping™ principles. All

landscape materials shall be graded at least Florida Number One. ~~Xeriscaping~~ Florida-Friendly Landscaping™ may include the use of soil amendments to increase the water holding capacity of sandy soils or improve the drainage of heavy soils, or other applicable principles or techniques. The use of turf that does not need supplemental irrigation, such as Bahia, is ~~recommended~~ encouraged. Alternatives to the use of turf are also encouraged, such as drought resistant shrubs and ground cover. Codominant (V-crotched) trees are not acceptable.

C. Unless stated otherwise, required tress shall be a species designated class "C" or higher, as defined in the table of tree evaluation compiled by the department. Existing trees which are healthy, well maintained and are in class "C" or higher may be used to meet tree planting requirements and no approval shall be given for trees in poor or damaged condition regardless of classification.

D. New trees required to be installed shall be planted so normal growth and aesthetic appearance will not be impaired nor shall potentially large trees be planted under utility lines or lighting, too close to structures or in an area where they will obstruct emergency vehicle access.

E. Except as otherwise required for VUA's, dicot trees shall have a minimum of ten (10) feet of height. Monocots shall have a minimum of eight (8) feet of wood, except Coconut, Thrinax, Phoenix robellini, Sago, and Livingstonia palms which shall have a minimum of three (3) feet of wood when planted.

F. Trees shall be installed as follows:

1. Shade trees shall be located a minimum of fifteen (15) feet away from structures ~~and thirty (30) feet from other shade trees~~.

   Nonshade trees and palms shall be located a minimum of seven and one-half (7½) feet away from structures~~, fifteen (15) feet from other nonshade trees, and twenty-two and one-half (22½) feet from shade trees~~. Palms may be planted closer to each other to form multiples or clusters.

3. ~~Trees shall be planted no closer to an impervious area than half of the minimum size of the required planting area for the particular tree species.~~ No large trees shall be located closer than twelve (12) feet to street lights. No palms may be closer than seven (7) feet from street lights. The spacing of trees from electric utility lines must follow "Right Tree, Right Place " guidelines as established by Florida Power and Light.

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~~4. Trees which are in excess of the minimum number required by the ULDR may be spaced closer to each other. The species and distance of such trees shall be determined by the director.~~

~~5.~~4. Where a conflict in spacing or canopy spread occurs between required trees and existing offsite or onsite trees, the requirements of this section may be modified as determined by the director.

G. Each tree shall have pervious area surrounding it sufficient to support the species, as determined by the department. The minimum planting area shall be for:

1. Shade species with a minimum caliper of three (3) inches, two hundred twenty-five (225) square feet ~~within~~ with fifteen (15) feet being the smallest dimension.

   Shade species with a minimum caliper of two (2) inches, ninety (90) square feet with eight (8) feet being the smallest dimension.

3. Other dicot tree species, sixty-four (64) square feet with eight (8) feet being the smallest dimension.

4. Palm types, twenty-five (25) square feet with five (5) feet being the smallest dimension, except Areca, Carpentaria, Cocothrinax, Phychosperma, Rhapis, and Sabal ~~and Washingtonia~~, ~~nine (9) square feet with three (3)~~ sixteen (16) square feet with four (4) feet being the smallest dimension.

H. Trees when braced shall be braced in such a fashion as to not girdle, scar, perforate or otherwise inflict damage to the tree.

I. Shrubbery, when installed to screen a VUA, shall be a minimum of twenty-four (24) inches high at time of installation, be full to base, and be spaced a maximum of thirty (30) inches on center. Shrubbery shall be permitted to grow and shall be maintained at a minimum height of thirty (30) inches. Vines used in conjunction with wire fences to screen a VUA shall be a minimum of thirty (30) inches in height immediately after planting, have a minimum of three (3) runners with plants spaced a maximum of six (6) feet on center.

J. All plant beds shall be excavated to a minimum depth of twenty-four (24) inches and back-filled with a suitable soil consisting of fifty percent (50%) composted organic matter, well-mixed with native soil. Backfill material shall be free from rock, construction debris, or other

extraneous material. Planting beds shall be free from construction debris and planted with ground cover or lawn or when not otherwise provided in these regulations, mulched with an appropriate organic material to a minimum depth of two (2) inches.

K. Decorative stone or gravel may be utilized up to a maximum of ten percent (10%) of the total landscape area where the stone or gravel is to be used for decorative or other approved purpose as an adjunct to planting beds.

~~K~~.L. Finished grade of landscape areas shall be at or below the grade of adjacent VUA or public sidewalks, except for mounding or other surface aesthetics. Grade shall be designed to receive roof and surface runoff and to assist Florida-Friendly Landscaping™ plantings and then any overflow routed as necessary underground. Mounding or other surface aesthetics shall not inhibit or defeat intended rainwater capture, retention or percolation from a VUA.

~~L.~~M. All undeveloped portions of a parcel of land shall be left undisturbed or planted with ground cover or lawn so as to leave no exposed soil in order to prevent dust or soil erosion.

SECTION 10. That Section 47-21.7, Irrigation, of the ULDR of the City of Fort Lauderdale, Florida, is hereby amended to read as follows:

Sec. ~~47-21.7~~ 47-21.10. Irrigation.

A. Sufficient irrigation, as determined by ~~director~~ Zoning Administrator or designee in accordance with the design of the landscaped area and the requirements of the plant material to be used, shall be supplied to all landscaped areas. When required, irrigation systems shall be installed to provide coverage to target areas, minimizing spray upon public sidewalks, streets or adjacent properties. Irrigation systems compatible with ~~xeriscaping~~ Florida-Friendly Landscaping™ principles shall be encouraged. This may include the use of low volume, low pressure, subsurface irrigation systems, and other such methods, such as rainbarrels, cisterns and handwatering, which encourage water conservation. All automatic lawn or landscape irrigation systems shall be equipped with and operate a moisture sensor or approved automatic switch which overrides the irrigation cycle when adequate rainfall has occurred.

B. All irrigation systems shall meet the irrigation standards developed pursuant to Section 373.228, Florida Statutes, as amended. All landscape areas, excluding single-family residences and duplex dwellings, shall be provided with an automatically operating, underground irrigation system designed to have head-to-head one hundred percent (100%)

coverage. Drip, trickle, or other low-volume or micro-irrigation systems shall be required for non-turf areas unless the owner demonstrates and the City agrees that the size of the area makes such systems financially infeasible or a tripping hazard associated with these systems has been identified. Irrigation systems shall be designed to minimize application of water to impervious areas.

1. Irrigation systems shall be designed to meet the needs of the plants in the landscape.

2. Irrigation systems shall be designed to separately serve turf and non-turf areas.

3. Irrigation system plans and specifications shall identify the materials to be used and the construction methods.

4. Irrigation systems shall be designed to consider soil, slope, and other site characteristics in order to minimize water waste, including overspray, the watering of impervious surfaces and other non-vegetated areas, and off-site runoff.

5. Irrigation systems shall be designed to minimize free flow conditions in case of damage or other mechanical failure.

6. Irrigation systems shall be designed to use the lowest quality water available at the time of the installation.

7. A recommended seasonal operating schedule and average precipitation rates for each irrigation zone for both establishment and maintenance conditions shall be provided.

8. Control systems shall provide the following minimum capabilities:

    a. Ability to be programmed in minutes, by day of week, season, and time of day;

    b. Ability to accommodate multiple start times and programs;

c. Automatic shut-off after adequate rainfall or detection of adequate soil moisture;

d. Ability to maintain time during power outages for a minimum of three (3) days; and

e. Operational flexibility to meet applicable year-round water conservation requirements and temporary water shortage restrictions.

9. Recommended maintenance activities and schedules shall be provided.

10. Precipitation rates for sprinklers and all other emitters in the same zone shall be matched, except that micro-irrigation emitters may be specified to meet the requirements of individual plants.

11. Irrigation systems shall be designed to maximize uniformity, considering factors such as emitter types, head spacing, sprinkler pattern, and water pressure at the emitter.

12. Irrigation systems with main lines larger than two (2) inches or designed to supply more than seventy (70) gallons per minute shall incorporate a means to measure irrigation water use, at a minimum of ninety-five percent (95%) accuracy across the flow range.

13. The system installer shall conduct final testing and adjustments to achieve irrigation system specifications prior to completion of the system installation and acceptance by the owner or owner's representative.

14. The system installer shall provide property owners and users with post-construction documentation, including as-built drawings, recommended maintenance activities and schedules, operational schedules, design precipitation rates, instructions on adjusting the system to apply less water after the landscape is established, water source, water shut-off method, and the manufacturer's operational guide for the irrigation controller. Property owners are encouraged to

safely store such information and make it available to subsequent property owners.

15. All licensed contractors installing or performing work on automatic landscape irrigation systems must comply with the provisions of Section 373.62, Florida Statutes, as amended, which may be enforced by the City pursuant to this chapter.

16. To assist the end user to operate the system properly, the following should be provided to the owner at the time of installation:

    a. A map of the system;

    b. Irrigation scheduling information, with instructions for seasonal timer and sensor changes; and

    c. An irrigation valve site map detailing valve locations, gallons per minute demands, precipitation rates, plant types within valve circuits, and operating pressure requirements for each valve.

17. The irrigation system shall be designed to correlate to the organization of plants into hydrozones. These hydrozones shall be shown on the Irrigation Plan, as required. All plants require watering during establishment. Temporary facilities may be installed to facilitate establishment. Irrigation must be conducted in accordance with South Florida Water Management District restrictions. If local water restrictions are more restrictive, then irrigation must be conducted in accordance with the stricter restrictions.

18. Pursuant to Section 373.62, Florida Statutes, as amended, rain shut-off switch equipment shall be required on automatic irrigation systems to avoid irrigation during periods of sufficient rainfall or soil moisture. The equipment shall consist of an automatic mechanical or electronic sensing device or switch that will override the irrigation cycle of the sprinkler system when adequate rainfall has occurred.

19. The installation of tracer wire along main lines and laterals is strongly encouraged to permit easy location and prevent inadvertent cutting of pipes.

20. If the water supply for the irrigation system is from a well, a constant pressure flow control device or pressure tank with adequate capacity shall be required to minimize pump "cycling".

21. Check valves must be installed at irrigation heads, as needed, to prevent low head drainage and puddling.

22. Nozzle precipitation rates for all heads within each valve circuit must be matched to within twenty percent (20%) of one another.

23. Water spray from irrigation systems shall be applied to landscape areas only and not directed toward structures.

24. Irrigated areas shall not be less than four (4) feet wide, except when using micro or drip irrigation.

25. A pressure-regulating valve shall be installed and maintained if static service pressure exceeds eighty (80) psi.

26. Preserved ecological communities shall be only temporarily irrigated as needed for newly installed plants during an establishment period as required by the City.

27. On lots under five thousand (5,000) square feet in size requiring landscape upgrades, irrigation may be accomplished by the installation and use of hand watering in accordance with current water restrictions.

SECTION 11. That Section 47-21.8, Maintenance, of the ULDR of the City of Fort Lauderdale, Florida, is hereby amended to read as follows:

Sec. ~~47-21.8~~ 47-21.11. Maintenance.

A. The owner, tenant and their agent, if any, shall be jointly and severally responsible for the proper maintenance and protection of landscaping and irrigation systems existing or hereafter installed. Maintenance shall include watering, weeding, mowing, fertilizing, treating, mulching, trimming, removal or replacement of dead or diseased plants and removal of refuse and debris on a regular basis so as to continue a healthy growing condition and present a neat and well-kept appearance at all times.

B. Shade trees shall be maintained at a minimum canopy diameter of thirty (30) feet in accordance with the American National Standards Institute, A-300 standards or similar accepted standards as published.

C. A landscaped sight triangle shall be provided and visibility maintained as provided in Section 47-2.2

D. Plant materials which block visibility shall be removed by the property owner or maintained so as to allow clear visibility of oncoming traffic.

E. Landscaping shall be inspected periodically by the department to insure proper maintenance. The owner, tenant or their agent shall be notified in writing, of any areas which are not being properly maintained and shall provide corrective action within thirty (30) calendar days from the time of notification.

SECTION 12. That Section 47-21.9, Landscape requirements for vehicular use areas, of the ULDR of the City of Fort Lauderdale, Florida, is hereby amended to read as follows:

Sec. ~~47-21.9~~ 47-21.12. Landscape requirements for vehicular use areas.

. . .

C. *VUA planting requirements.*

1. One (1) tree and six (6) shrubs shall be required for every one thousand (1,000) square feet, or fraction thereof, of VUA.

a. The first twenty-five percent (25%), or fraction thereof, of the required trees shall be shade species with a three ~~(3)~~ and one-half (3-1/2) inch minimum

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trunk ~~diameter at four and one half (4 ½) feet above the ground~~ caliper, and shall be evenly distributed between interior and perimeter landscape areas.

b. Twenty-five percent (25%) of the required trees shall be shade species with a two ~~(2)~~ and one-half (2-½) inch minimum ~~truck diameter at four and one half (4 ½) feet above the ground.~~ trunk caliper.

c. Twenty percent (20%) of the required trees shall be conspicuously flowering species.

d. Twenty percent (20%) of the required trees shall be palm species.

e. Ten percent (10%) of the required trees shall be optional species.

. . .

SECTION 13. That Section 47-21.10, Landscape requirements for all zoned districts, of the ULDR of the City of Fort Lauderdale, Florida, is hereby amended to read as follows:

Sec. ~~47-21.10~~ 47-21.13. Landscape requirements for all zoned districts.

A. The following is a chart which provides the landscape requirements for each zoning district:

Zoning District	Landscape Requirements
RS-4.4, RS-8	1, 10, 16
RC-15, RD-15	1, 2, 10, 15, 16
RM-15, RML-25, RMM-25, RMH-25, RMH-60, MHP	1, 2, 3, 10, 15, 16
R-O, R-O-C	1, 2, 3, 4, 10, 16
R-O-A	1, 2, 5, 10, 16
CB, X-Use	1, 2, 7, 8, 10, 16
B-1, B-2, B-3, I, CF, CF-H, CF-S, CF-HS, P, T, U, I	1, 2, 6, 7, 8, 10, 16
AIP, CC	1, 2, 7, 8, 13, 10, 16
GAA	1, 2, 8, 9, 13, 10, 16
H-1	1, 2, 7, 8, 10, 16

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PEDD	1, 2, 7, 8, 11, 12, 10, 16
PRD, ABA, IOA, NBRA, SBMHA, SLA	1, 2, 14, 10, 16
RAC (see Sec. 47-21.11)	

B. *Landscape requirements.*

. . .

16. *Street trees.* In order to provide for adequate landscaping along streets within the city, street trees shall be required along the length of the property abutting a street. Required street trees shall be planted in an area located between the roadway and the property line. Where such a planting strip does not exist or is impractical to provide, street trees may be located in a perimeter planting area where this perimeter landscaping area adjoins the street right-of-way.

A minimum of fifty percent (50%) of the required street trees shall be shade trees, and the remaining street trees may be provided as flowering or palm trees. Street trees shall be provided at a ratio of one street tree per forty (40) feet of street frontage, or greater fraction thereof, not subtracting ingress and egress dimensions. Where overhead utilities exist, required street trees may be small trees provided at a ratio of one street tree per twenty (20) feet of street frontage.

The street trees shall be planted at a minimum height and size in accordance with the requirements of Section 47-21, Landscape and Tree Preservation Requirements, except in the downtown RAC districts the requirements of Sec. 47-13.20.H.8 shall apply. The requirements for street trees, as provided herein, may be located within the public right-of-way as approved by the entity with jurisdiction over the abutting right-of-way.

The use of structural soil is required in paved sites to provide adequate soil volumes for tree roots under pavements

SECTION 14. That Section 47-21.11, Additional landscape requirements for special uses and districts, of the ULDR of the City of Fort Lauderdale, Florida, is hereby amended to read as follows:

Sec. ~~47-21.11~~ 47-21.14. Additional landscape requirements for special uses and districts.

A. In addition to the requirements for land zoned in certain districts, additional landscaping shall be required for certain special districts and uses as follows:

1. *Downtown Regional Activity Center (RAC).*

a. Within the RAC districts newly planted street trees shall be limited to the following species:

RAC Street	Tree Species*
Broward Boulevard	Royal Palm (Roystonia elata)
Andrews Avenue	Sabal Palm (Sabal palmetto) Carpentaria Palm (Carpentaria acuminata)
Federal Highway	Sabal Palm (Sabal palmetto) Gumbo Limbo (Bursera simarouba) ~~Silver Trumpet (Tabebuia argentea)~~ Live Oak (Quercus virginiana) Weeping Wild Tamarind (Lysiloma sabicu)
East 8th Avenue	No designated tree
East 3rd Avenue	Royal Palm (Roystonia elata) Live Oak (Quercus virginiana) Carpentaria Palm (Carpentaria acuminata) ~~Washington Palm (Washingtonia robusta)~~
East 1st Avenue	Gumbo Limbo (Bursera simarouba)
West 1st Avenue	No designated tree
West 3rd Avenue	No designated tree
Flagler	~~Silver Trumpet Tree (Tabebuia argentea)~~ Live Oak (Quercus virginiana)
West 2nd Avenue	Little Leaf Calophyllum (Calophyllum antillarum)

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West 4th Avenue	Live Oak (Quercus virginiana)
West 5th Avenue	Live Oak (Quercus virginiana)
South 7th Street	No designated tree
East South 6th Street	Royal Palm (Roystonia elata) ~~Yellow Elder (Tecoma stans)~~
West South 6th Street	No designated tree
South 5 Street	~~Florida Orchid Tree (Bauhinia variegata)~~ ~~Yellow Elder (Tecoma Stans)~~ No designated tree
S.E. 5th Court	Gumbo Limbo (Bursera simarouba) Maypan Palm (Cocos nucifera var. Maypan)
S.E. 4th Street	Weeping Wild Tamarind (Lysiloma sabicu)
Las Olas Boulevard	Sabal Palm (Sabal palmetto) ~~Washington Palm (Washingtonia robusta)~~ Live Oak (Quercus virginiana) Maypan Palm (Cocos nuciefer var. Maypan) Carpentaria Palm (Carpentaria acuminata)
South 2nd Street, east of city parking garage	Royal Poinciana (Delonix regia) ~~Silver Trumpet Tree (Tabebuia argentea)~~ Live Oak (Quercus virginiana)
South 2nd Street, west of city parking garage	Weeping Wild Tamarind (Lysiloma sabicu) Sabal Palm (Sabal palmetto)
South 1st Street	No designated tree
North 1st Street	No designated tree
North 2nd Street	Live Oak (Quercus virginiana) Washington Palm (Washingtonia robusta)
North 3rd Street	Weeping Wild Tamarind (Lysiloma sabicu)
North 4th Street	Gumbo Limbo (Bursera simarouba) ~~Carrotwood (Cupaniopsis anacardiodes)~~
North 5th Street	No designated tree

*Black Olive (Bucida buceras) trees existing as street trees prior to March 26, 1999 are legal and their existence shall not cause a development to be nonconforming, and shall be considered to meet the street tree requirements for any redevelopment or reconstruction of

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existing structures adjacent to or in front of said Black Olive trees, but such trees shall not be permitted to be planted or replaced with Black Olive subsequent to this date.

b. When planted in non-pervious areas, dicot street trees shall be accompanied by expandable tree grates or porous aggregate system which are at least five (5) feet square, with three-eighths (⅜) inch slot openings. Area must meet current ADA standards.

c. All newly planted dicot street trees shall have a minimum ~~diameter~~ caliper of two ~~(2)~~ and one half (2-1/2) inches.

d. All newly planted monocot street trees shall have a minimum overall height of twelve (12) feet.

e. Planting plans shall obtain the approval of the department. The necessity for installation of an irrigation system for street trees and the type and kind to be used shall be determined by the city based on tree species requirements.

f. The RAC requirements may be appealed by written request to the department. Such appeal shall be accompanied by a plan which shows the location, size, description and species of landscape improvements proposed. The department may find that the applicant is unable to observe planting requirements for reasons such as the lack of available plant material, constraints of the planting area or inconsistency with existing street trees or building design. In the department's discretion, when the appeal provides landscaping which is harmonious with adjacent landscaping and uses and is otherwise consistent with the intent and purpose of this subsection, they may approve modifications to Code requirements.

…

4. *Parking garages.*

a. Structures which enclose parking shall provide a landscape area between the street and that portion of structure enclosing the parking utilizing trees and ground cover. The minimum square footage of the landscape area to be provided shall be determined by multiplying by five (5) the lineal street

frontage of the parcel of land upon which the parking ~~structure~~ garage is located, and adding four hundred (400) square feet for each corner of the parcels adjacent to a street.

b. Parking garages constructed in residentially-zoned districts shall meet the landscape requirement of the district in which the garage is located. No paving or walkways shall be allowed in the yard fronting on the principal street other than necessary access from that right-of-way.

...

SECTION 15. That Section 47-21.12, Tree preservation, of the ULDR of the City of Fort Lauderdale, Florida, is hereby amended to read as follows:

Sec. ~~47-21.12~~ 47-21.15. Tree preservation.

A. *Tree removal.*

1. It shall be unlawful to remove a tree described as follows without first obtaining a tree removal permit:

a. a dicot or conifer tree having a diameter of three (3) inches or more or a monocot having eight (8) feet or more of wood, on other than a developed one family residential lot;

b. on a developed one family residential lot, if:

i. the tree is to be removed in anticipation of redevelopment and it is a dicot or conifer tree having a diameter of three (3) inches or more or a monocot having eight (8) feet or more of wood;

ii. no redevelopment is anticipated and the tree to be removed is a dicot or conifer having a diameter of ~~twelve (12)~~ eight (8) inches or more measured four and one-half (4½) feet above grade; or

iii. a palm in the genus of Cocos, Roystonea and Phoenix (except roebellini) with eight (8) feet or more of wood.

For the purposes of this section, redevelopment is defined as a change of use, an added use such as an additional living unit or an office, or remodeling or demolition of more than fifty (50) percent of the existing interior. Room additions to a structure, which will continue as a one family use do not constitute

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redevelopment. An application for a building permit to redevelop a one family property within twelve (12) months of previously unpermitted tree removal shall be construed as anticipation of redevelopment and will require tree removal permits and equivalent replacement.

Application for a tree removal permit shall be made to the department. Upon receipt of an application for tree removal, the department shall determine the equivalent replacement or equivalent value of each tree to be removed. No permit nor replacements shall be required for removal of Schinus spp. (Pepper Trees, Florida Holly), Metopium toxiferum (Poison Wood), Casuarinas spp. (Australian Pine, Beefwood), Melaleuca spp. quinquinervia and M. leucadendron (Paper Bark Trees), Euphorbia tirucalli (Pencil Tree), Bischofia javanica (Bischofia, Bishopwood), Acacia auriculaeformis (Earleaf Acacia), Araucaria excelsia (Norfolk Island Pine), Cupaniopsis anacardioides (Carrotwood) or Brassia actinophylla (Schefflera).

3. Effort shall be made to design around existing, large, desirable trees. If, as determined by the department, there are large desirable existing tree(s) and the proposed placement of the site plan elements will not save such tree(s) and sufficient root system to support the tree(s), and such tree(s) are capable of being protected by a reasonable modification of said plan, then a tree removal permit may be denied by the department. In addition, if a permit is sought to remove an existing, large, desirable tree because its root system is causing damage to the associated sidewalks, paved areas, or septic systems, or if falling tree debris is staining nearby surface area, then the tree removal permit may be denied by the department if alternatives such as sidewalk bridging, canopy reduction, or trimming have not been considered or attempted, and such action would address the problem while preserving the tree. An alternative or redesigned site plan shall then be submitted.

4. The department shall issue a tree removal permit when the applicant for such permit has agreed to fulfill one (1) of the following requirements:

   a. That the tree, if transplanted, will be moved by the applicant following the American National Standards Institute A-300 standards or similar accepted standards as published, to another location within the city and guaranteed by the permit holder for ~~ninety (90) days~~ one (1) year for trees of less than or equal to six (6) inches in caliper and for two (2) years for trees greater than six (6) inches in caliper.

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b. That the tree, if destroyed, will be replaced by trees of equivalent replacement, as determined by the department, planted on the site from which the tree was removed. Sufficient room shall remain on the site to allow replacements to establish a mature canopy spread, based on usual growth characteristics of the species. A replacement planting plan may be required.

c. That the tree, if destroyed, will be replaced by new trees of equivalent replacement upon public lands and guaranteed by the donor for three hundred sixty-five (365) days. The replacement species, size and planting location shall be determined by the department.

d. That a tree, if destroyed, will be replaced by a container grown tree or trees of equivalent replacement delivered to the city nursery or other location. The delivery location, as well as the replacement species and size, shall be determined by the department.

e. That the tree, if destroyed, will be replaced by the applicant by providing the equivalent value to the city's tree canopy trust fund.

f. That a specimen tree having a caliper measurement of eighteen (18) inches or more shall be limited to the option of providing equivalent value by cash only deposited to the tree canopy trust fund at the time the removal permit is issued.

5. Any tree removed without a permit having first been issued by the department shall be replaced by equivalent replacement or equivalent value. If the tree removed was a tree required by ordinance, the equivalent replacement shall be made by planting the largest tree reasonably available upon the site. Any remainder of equivalent replacement shall be planted on public property by the violator, at a location determined by the department and guaranteed for three hundred sixty-five (365) days. If the tree removed was a nonrequired tree, equivalent replacement or value shall be provided in accordance with subsection A.4.

6. In the event that insufficient trunk remains of the removed tree so that equivalency cannot be determined thereby, size and equivalency shall be estimated based upon trees of the same species existing in the vicinity, considering, among other things, aerial photographic records and other available data relative to the area.

7. Failure of an applicant to replace a removed tree within sixty (60) days after being notified by the department shall be a violation of this section. Removals

necessitated by permitted construction may be replaced after the sixty-day limit, but prior to the issuance of a certificate of occupancy or final use approval.

8. Trees which have been planted and are being grown in a state-certified plant nursery or botanical garden for sale to the general public and are being transplanted in order to be utilized as landscape material do not require tree removal permits.

9. A monetary guarantee may be required to insure compliance with requirements. This bond, cash, letter of credit, or certificate of deposit in favor of the city shall be computed based upon the equivalent value of the tree or trees in question. The subsequent deposit of this monetary guarantee into the tree canopy trust fund shall immediately fulfill tree replacement requirements. Otherwise, when tree planting is used to fulfill the tree replacement conditions, the security shall be held by the city and the guarantee period shall extend at least three hundred sixty-five (365) days past the replacement planting date. The monetary guarantee shall be in addition to any bond required by any other governmental entity.

10. In the event of storms, accidents or other acts of God of an emergency nature by reason of which life, limb or property is in immediate jeopardy, or for trees which have died due to lightning, disease, storm damage, or other natural causes, part or all of the terms and provisions of this section may be waived by the department.

B. *Tree services and arborists.*

1. ~~All tree services shall register with the department and obtain a certificate of competency before beginning work.~~ All tree services working within Fort Lauderdale shall have a current Broward Tree Trimmer License and comply with all applicable Broward Tree Trimmer license regulations.

Vehicles used by a tree service/arborist operating within the city shall be clearly marked with the name of the tree service/arborist. Certified arborists shall display the certified logo and registration number, if any.

3. A photocopy of the current business tax receipt ~~and city registration~~ shall be available for inspection at each job site.

4. Standards for cutting on or repair to dicotyledonous species shall be in accordance with the American National Standards Institute A-300 standards or similar accepted standards as published.

5. Persons engaged in business as a tree service in the city shall adhere to the American National Standards Institute, A-300 standards or similar accepted

standards as published on all tree species within the City of Fort Lauderdale. ~~except for service to the following tree species:~~

~~a. Australian Pine.~~

~~b. Bishopwood.~~

~~c. Brazilian Pepper.~~

~~d. Earleaf Acacia.~~

~~e. Melaleuca.~~

~~f. Norfolk Island Pine.~~

~~g. Pencil Tree.~~

~~h. Poison Wood.~~

~~i. Schefflera.~~

C. *Tree protection.*

1. Trees retained on a site shall be protectively barricaded before and during construction activities as approved by the department. A monetary performance assurance instead of or in addition to a protective barricade may be required to ensure protection of a tree or trees or to guarantee restoration of an equivalency. The amount of said assurance shall be based upon the equivalent value of the tree or trees specifically covered. Any assurance required for a "protected tree" shall be four (4) times the equivalent value for that tree.

   Underground utility lines shall be routed around existing trees to the outside of the dripline. If this is not possible, as determined by the department, a tunnel made by a power-driven soil auger may be used under the tree.

3. Installation of fences and walls shall take into consideration the root systems of existing trees. Post holes and trenches located close to trees shall be dug by hand and adjusted as necessary to avoid damage to major roots. Continuous footers for masonry walls shall be ended at locations where larger roots are encountered and the roots bridged.

4. Any tree which has been declared by resolution of the city commission to be a "protected tree" shall not be removed unless such removal has been approved by resolution of the city commission. When a protected tree is on or adjacent to a site to be developed or redeveloped, the owner, developer or contractor shall take all reasonable measures to prevent damage to the tree and root system out to the

natural dripline. The extent of the dripline will be based on diameter and species without respect to previous pruning activities.

5. Any owner, tenant, contractor or agent thereof who fails to provide tree protection as stated herein shall be guilty of tree abuse.

D. *Tree abuse.*

1. Tree abuse is prohibited. Abused trees may not be counted toward fulfilling landscape requirements. Tree abuse shall include:

   a. Damage inflicted upon any part of a tree, including the root system, by machinery, storage of materials, soil compaction, excavation, vehicle accidents, chemical application or change to the natural grade.

   b. Damage inflicted to or cutting upon a tree which permits infection or pest infestation.

   c. Cutting upon any tree which permanently reduces the function of the tree or causes it to go into shock;

   d. Cutting upon a tree which alters the natural shape.

   e. Hatracking.

   f. Bark removal of more than one-third (1/3) of the tree diameter.

   g. Tears and splitting of limb ends or peeling and stripping of bark.

   h. Use of climbing spikes on any species of tree for any purpose other than total tree removal.

   i. Severe neglect of tree nutrition or adequate irrigation necessary for continued growth.

   j. Pruning of live palm fronds, which initiate above the horizontal plane.

   Trees shall be cut in the following manner:

   a. All cuts shall be clean and at junctions, laterals or crotches. Tunneling or drop crotch trimming for overhead utility lines shall be followed.

   b. Removal of dead wood, crossing branches, weak or insignificant branches, and suckers shall be accomplished simultaneously with any reduction in crown.

3. An owner of a parcel of land upon which tree abuse has occurred may be required to replant an equivalent replacement upon such parcel, or at a different location selected by the department, within sixty (60) days after being notified by the department.

SECTION 16. That Section 47-21.13, Removal of trees and dead trees constituting a public nuisance, of the ULDR of the City of Fort Lauderdale, Florida, is hereby amended to read as follows:

Sec. ~~47-21.13~~ 47-21.16. Removal of trees and dead trees constituting a public nuisance.

A. The existence of any tree, dead tree or stump upon any parcel of land within the city which threatens or endangers the public health, safety or welfare, or which could foreseeably cause the spread of disease or infestation to surrounding plant life, is hereby prohibited and declared to be a public nuisance.

B. The department shall give notice to the owner upon whose parcel of land such nuisance is located, advising the owner of the same.

C. Such notice shall be served by personal service or certified mail. In the event that the address of the owner is unknown or such certified mail is returned unclaimed or refused, such notice may be served by posting the same in a conspicuous place on the premises upon which the nuisance is located.

D. Such notice shall command the owner to forthwith remove such tree, dead tree or stump no later than thirty (30) days after receipt or posting of the aforementioned notice, whichever is applicable. In the event that such nuisance is not removed by the owner, the city may remove the same or have the same removed and the cost thereof shall constitute a charge and lien against the owner's property to the same extent and character as the lien now granted by law for special assessments for the cost of local improvements.

E. Liens shall be forthwith due and payable, unless the time for payment thereof shall be extended by the city commission, and there shall be applicable thereto the same penalties and rights for sale and forfeiture as may be provided by law for special assessments for the cost of local improvements.

F. Each day any such violation exists shall constitute a separate offense.

SECTION 17. That Section 47-21.14, Street tree planting, of the ULDR of the City of Fort Lauderdale, Florida, is hereby amended to read as follows:

Sec. ~~47-21.14~~ 47-21.17. Street tree planting.

A. There are many reasons to plant street trees. Depending on canopy density, trees reduce temperatures. They provide shade and visual interest by leaf and bloom color, bark texture, profile and scaffold architecture. They also provide protection and security to the ever increasing pedestrian traffic.

1. *Sidewalk and swale tree planting.* These are usually individual trees planted at or near the street curb line for aesthetic, environmental and security reasons. Many sidewalk trees are planted and/or maintained by adjacent property owners. It is their voluntary contribution to the city tree canopy.
2. *Median tree planting.* Street medians form a special area of public park land. Proximity and speed of vehicular traffic influence the tree size category and placement. Tree species classification and size selection is in inverse correlation with proximity and speed of roadway traffic. As speed of traffic increases and median width narrows, size of tree selected should decrease or be moved farther into the center of the median. Median tree plantings serve to provide:
    a. Security to pedestrians crossings wide streets.
    b. A screen for drivers from headlight glare of oncoming traffic.
    c. Blockage of direct sun into the eyes of drivers, especially commuters traveling east and west. An indication of the course of the roadway in the distance.
    d. A protective barricade to head-on collisions with out-of-control vehicles which cross into the median.
3. *Arbor streets.* The majority of the property owners abutting any street may request establishment of an arbor street. An arbor street is one (1) determined by the city to be suitable for extensive planting of trees. Requests shall be in writing and submitted to the department. The request shall:
    a. Be on a standard form obtainable from the city;
    b. Designate areas to be improved by tree planting;
    c. Contain names of all owners wishing trees to be planted adjacent to or upon their properties;

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d. Evidence a commitment to contribute to the cost of and provide subsequent care, feeding and maintenance of such plantings; and

e. Contain a proposed planting plan.

B. The department shall coordinate with and obtain recommendations from the appropriate city departments reviewing the arbor street application. Review shall take into consideration the general safety and welfare of the public, the interests of affected property owners, utilities, and municipal services, present and future and shall include but not be limited to onsite inspections of the proposed planting area.

C. When the arbor street request has been reviewed by all departments concerned, the representative of the city shall submit any objections and amendments to the applicants. Should the area be determined by the city to be unsuitable for arbor street purposes, the applicants will be notified of the unsuitability.

D. The application shall constitute an agreement between the city and the applicants. The city commission must approve the application by resolution. The arbor street project shall be implemented in accordance with provisions of the approved plan, and as city resources may permit. The applicants shall supply the planting labor, the city shall supply the trees, or vice versa as the approved plan provides.

E. Trimming of arbor street plantings by adjacent property owners is permitted and all such work shall adhere to the American National Standards Institute, A-300 standards or similar accepted standards as published. Trees existing within an area designated in an arbor street agreement are not to be removed without permit.

SECTION 18. That Section 47-21.15, Prohibited landscaping, of the ULDR of the City of Fort Lauderdale, Florida, is hereby amended to read as follows:

Sec. ~~47-21.15~~ 47-21.18. Prohibited landscaping.

It shall be unlawful to install or relocate ~~Melaleuca spp., Casuarina spp.,~~ Schinus spp. (Pepper Trees, Florida Holly), ~~tree type Ficus spp., class "C" or lower~~, Araucaria heterophyllum Metopium toxiferum (Poison Wood), Casuarinas spp. (Australian Pine, Beefwood), Melaleuca quinquinervia and M. leucadendron (Paper Bark Trees), Euphorbia tirucalli (Pencil Tree), Bischofia javanica (Bischofia, Bishopwood), Acacia auriculaeformis (Earleaf Acacia), Araucaria excelsia (Norfolk Island Pine), Cupaniopsis anacardioides (Carrotwood) or Brassia actinophylla (Schefflera).

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SECTION 19. That if any clause, section or other part of this Ordinance shall be held invalid or unconstitutional by any court of competent jurisdiction, the remainder of this Ordinance shall not be affected thereby, but shall remain in full force and effect.

SECTION 20. That all ordinances or parts of ordinances in conflict herewith, be and the same are hereby repealed.

SECTION 21. That this Ordinance shall be in full force and effect ten days from the date of final passage.

PASSED FIRST READING this the 3rd day of February, 2015.
PASSED SECOND READING this the 17th day of February, 2015.

_____
Mayor
JOHN P. "JACK" SEILER

ATTEST:

_____
City Clerk
JONDA K. JOSEPH

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