



City of Alachua

Planning & Community Development Department

Staff Report

Planning & Zoning Board Hearing Date:
Legislative Hearing

November 13, 2018

SUBJECT: A Staff-initiated amendment to the City's Land Development Regulations (LDRs) regarding Landscape and Tree Protection Standards

APPLICANT/AGENT: City of Alachua

PROJECT PLANNERS: Kathy Winburn, AICP; Justin Tabor, AICP; Adam Hall, AICP

RECOMMENDATION: Staff recommends that the Planning & Zoning Board find the proposed Text Amendments to the City's Land Development Regulations to be consistent with the City of Alachua Comprehensive Plan and in compliance with the City's Land Development Regulations and transmit such finding to the City Commission with a recommendation to approve.

RECOMMENDED MOTION: *This Board finds the proposed text amendments to the City's Land Development Regulations to be consistent with the City of Alachua Comprehensive Plan and in compliance with the City's Land Development Regulations and transmits such finding to the City Commission with a recommendation to approve.*

SUMMARY

In the process of implementing the City's Land Development Regulations (LDRs) specifically pertaining to landscaping and tree protection standards, Staff has found that certain subsections could be streamlined for more efficient implementation, and that there was a need to reevaluate this section of the LDRs to ensure that its standards are in line with current scientific data and best practices. Staff consulted with landscape architects familiar with the City's LDRs and considered feedback received in the drafting of these proposed amendments.

In summary, some of the substantial changes being proposed as a part of this amendments are:

- ❖ Increased incentives for preservation of natural areas and meeting certain site design criteria
- ❖ Allowance for 25% of mitigation trees to be used for other landscaping requirements
- ❖ Reductions in total number of site landscaping trees for residential and business uses
- ❖ Reductions in landscaping required for small development areas
- ❖ Allowance for limiting amount of clustering of perimeter buffer landscaping
- ❖ Type D ("Opaque") buffer reduced to permit better spacing between canopy trees
- ❖ Deletion of recommended tree list
- ❖ Creation of cap on reductions: 20% of any landscape requirement must be provided regardless of any incentives used for reduction.
- ❖ Numerous procedural or technical clarifications
- ❖ Modified tree credit table that significantly increases incentives for preservation of heritage trees

Each proposed amendment and a staff comment further elaborating upon the purpose of the amendment is provided below. A summary table indicating all changed Code sections is included as Exhibit 'A' to this Staff report.

PROPOSED LDR TEXT AMENDMENTS

AMENDING SECTION 3.7.2 (C)(5)(d)(iii) REMOVING REFERENCE TO APPENDIX 6.2.2 (A)

- 3.7.2 (C)(5)(d)(iii) ~~The planting requirements contained in Appendix 6.2.2(A) shall apply.~~ Live Oak shall be used as the required canopy tree. Applicants shall use the following plant materials, in order to create a consistent and uniform planting program for the Gateway Overlay District:
- a. American Holly.
 - b. Crape Myrtle.
 - c. Drake Elm.
 - d. Ligustrum.

- e. Red Maple.
- f. Southern Magnolia.
- g. Southern Red Cedar.
- h. Oak.
- i. Bradford Pear.

Staff Comment: Reference to deleted Section removed.

AMENDING SECTION 6.2 TO RETITLE SECTION

Sec. 6.2. - ~~Tree protection/landscape/xeriscape standards.~~ Tree Protection & Landscaping Standards

Staff Comment: Section renamed for clarification.

AMENDING VARIOUS PORTIONS OF SECTION 6.2.1 RELATED TO TREE PROTECTION STANDARDS

6.2.1 (B)(2) Trees absorb ~~a high percentage of~~ carbon dioxide and return oxygen, a vital ingredient to life, to the environment;

Staff Comment: Language removed for clarification.

6.2.1 (D) *Tree planting, relocation, replacement, credit, banking.*

- (1) *New trees.* New trees shall be installed to replace healthy regulated trees removed pursuant to this section. Regulated trees shall be replaced on a one-for-one basis. Healthy heritage and champion trees removed as provided herein shall be replaced on an inch-for-inch basis. Replacement trees shall be graded Florida No. 1 or better, as outlined in the most recent publication of the State of Florida, Department of Agriculture and Consumer Services, Division of Plant Industry, Grades and Standards for Nursery Plants, Part II, Palms and Trees. The term "healthy," as stated herein, means "good" or better per the standard definition from the International Society of Arboriculture (ISA) stating the tree has no major structural problems, no significant damage due to disease or pests, no significant mechanical damage, a full balance crown, and normal twig condition and vigor for its species. Palm trees may be utilized as replacement trees but at an increased ratio of 3:1 replacement and shall be a minimum of eight feet tall at the time of planting. ~~trees meeting the following definitions adapted from the International Society of Arboriculture (ISA):~~

- (a) ~~Excellent.~~ The tree is nearly perfect in condition, vigor, and form. This rarely used category is generally applicable to small diameter trees that have been recently

~~transplanted and are well established. It also applies to large trees that have established themselves successfully in the landscape.~~

~~(b) Very good. Overall, the tree is healthy and satisfactory in condition, vigor, and form. The tree has no major structural problems, no mechanical damage, and may only have insignificant aesthetic, insect, disease or structural problems.~~

~~(c) Good. The tree has no major structural problems, no significant damage due to disease or pests, no significant mechanical damage, a full balance crown, and normal twig condition and vigor for its species.~~

Staff Comment: Redefined “healthy” tree to mean “good” or better. Existing code does not differentiate between “good”, “very good”, or “excellent” so it is unnecessary to define each category.

6.2.1 (D) (2) *During development.* During development or site alteration activities, the following standards shall be met:

(a) Protective barricades shall be placed to define a protective area around existing trees to remain. Barriers shall be placed around all regulated trees at a minimum of two-thirds of the area of the dripline of the tree or stand of trees ~~of or~~ at six feet from the trunk of the tree, whichever is greater. Protective barricades shall be placed at the dripline of all heritage trees, champion trees, and regulated palm trees. Protective barricades shall be placed around all trees to be retained on the site and shall remain in place until site clearing and construction activities are complete, except where land alteration and construction activities are approved within the protected area. If land alteration and construction activities are approved within the protected area, then the protective barricades shall only be removed when activities are occurring. Protective barricades shall be replaced upon completion of the activities within the protected area. Protective barricades shall be at least four feet high and constructed of either wooden corner posts at least ~~two-four~~ inches in width by four inches in depth by four feet in height buried one foot deep with at least two courses of wooden side slats at least ~~one-inch~~ two inches in width by four feet with colored flagging or colored mesh construction fencing attached or constructed of one inch angle iron corner posts with brightly colored mesh construction fencing attached.

Staff Comment: Standards for tree protection barriers during development amended to bring in line with best practice and current practice of other local governments.

6.2.1 (D)(2) (e) Raising or lowering of grade within the dripline of existing trees to remain shall not be permitted unless otherwise approved by the Land Development Regulations Administrator or appointee.

~~(e) A protective drywell and root aeration system shall be provided where retained regulated, heritage, and champion trees will be adversely affected by raising the grade.~~

~~(f) A protective retaining wall shall be constructed at the perimeter of the protective radius around retained protected trees where trees will be adversely affected by~~

~~the lowering of grade. An alternative to a retaining wall shall be to excavate to finished grade by hand and to cut exposed roots with a saw or root pruning equipment.~~

(~~g~~f) During the site clearing or construction phases, the following activities shall be prohibited within the protective area unless approved with the appropriate protective strategies by the City during site plan or ~~preliminary plat~~construction plan approval:

- (1) The clearing of vegetation except by hand;
- (2) The compaction, filling, or removal of soil deposits;
- (3) The placement of debris;
- (4) The placement or dumping of solvents or other chemicals;
- (5) The placement or storage of construction materials, machinery or other equipment of any kind; and
- (6) The use of concrete, asphalt, or other paving materials.

(~~h~~g) Any retained or relocated tree shall be replaced in accordance with the requirements of Subsection 6.2.1 (D) (1) ~~if~~, if the tree dies within one year after site clearing and construction.

(~~i~~h) Any root pruning and/or pruning of retained regulated, heritage, and champion trees during the site clearing or construction phases shall be done in accordance with arboricultural standards and directly overseen by an ISA-certified Arborist.

Staff Comment: Several amendments are proposed to simplify rules for development or construction activities around those trees that will remain on site during development, amend the determination of landscaping plan protective strategies from being determined at preliminary plat stage of subdivision to construction plan stage. The construction plan stage is the appropriate time at which to make this determination, as the full extent of impacts to trees will be known. Amends language clarifying that trees that die within one year of site development must be mitigated in accordance with tree mitigation standards and that pruning of trees retained on site must be overseen by an Arborist.

6.2.1 (D)(3) *Incentives for preservation.* The City may approve a transfer of development rights on lands preserved for tree preservation beyond the requirements in this section during the site plan or preliminary plat process.

(a) Developers preserving portions of tree protection areas within a development site will be authorized during the site plan or subdivision plat process for an on site transfer of development rights at a ~~density~~ density or intensity bonus rate of ~~23~~:1. For example, if a developer retains a contiguous five acre tract of quality tree protection area within ~~his or her~~ their development site, and that property has a zoning density of three units per acre, then the developer would be authorized to transfer ~~30~~ 45 dwelling units to the developable portion of ~~his or her~~ their site. (Five acres times three dwelling units per acre times ~~two~~ three equals ~~30~~ 45 dwelling units.)

Staff Comment: Proposed amendments increase incentives for preservation. The intent is to encourage a developer to cluster development away from environmentally sensitive lands.

6.2.1 (D)(4) *Tree replacement.*

- (a) When the applicant is required to replace a regulated ~~her~~heritage or heritage, ~~or champion~~ tree as a condition of approval for a tree removal, site plan or subdivision plat, the applicant shall select site-specific ~~appropriate~~ trees ~~from the recommended tree list~~. If it is feasible, the regulated, heritage, or champion tree may be related on the same parcel of land. When selecting replacement trees from the recommended tree list, the applicant shall choose from a similar species or category as the tree that is being removed. For example, a canopy tree should be replaced with a tree from the canopy or large tree list.
- (b) If the applicant is required to replace a regulated or heritage tree as a condition of approval for a tree removal, site plan or subdivision plat, up to 25% of the trees required to meet the site landscaping, parking lot landscaping, or perimeter buffer standards may be counted towards the requirements of Subsection 6.2.1 (D)(1).
- (b)c) At least 50 percent of the total required replacement trees shall be shade trees and at least 75 percent of the total required trees shall be site-specific trees ~~chosen from the recommended tree list~~. appropriate for the site.
- (d) Trees must meet the minimum requirements found in Section 6.2.2 (D)(9)(b)(ii).
- (e)e) Trees from the recommended tree list used to meet the requirements of this section shall be graded Florida No. 1 or better, as outlined by the most recent publication of the State of Florida, Department of Agriculture and Consumer Services, Division of Plant Industry, ~~Grades and Standards for Nursery Plants; and Grades and Standards for Nursery Plants, Part II, Palms and Trees.~~ Florida Grades and Standards for Nursery Plants.
- (e)f) Trees shall be planted in accordance with xeriscaping principles and accepted arboricultural standards and practices.
- (e)g) The pervious area or tree lawn provided around trees shall be sufficient to permit root growth and provide for longevity of the tree species planted. The height of the tree at maturity and root size shall be considered in the selection of the trees.
- (f)h) Trees shall be planted in accordance with the City of Alachua Department of Public Services Requirements for Design and Construction, as amended. ~~Tree species with a height greater than 20 feet at maturity shall not be planted within a utility easement when power lines lie directly overhead.~~
- ~~(g) Trees whose roots are known to cause root damage to public roadways or other public works shall not be planted within 15 feet of a public utility.~~
- (h)i) No tree shall be planted within ten feet of a fire hydrant or utility pole, within 15 feet of a driveway apron, within 20 feet of a traffic sign, or within 25 feet of an intersection in order to ensure adequate visibility.

- (i) The owner of the parcel shall be responsible for the maintenance of all preserved, relocated, or replacement trees. All trees will be inspected by an arborist, forester, or registered landscape architect, hired by the owner, within six months after planting to ensure the trees are surviving in a healthy condition. A certified report shall be provided to the land development regulations administrator describing the condition of trees. Trees found to be in declining condition shall be replaced by the owner of the parcel within 30 days of submittal of the report. If replacement is necessary, there shall be a reinspection report submitted within six months after the replacement replanting.
- (k) Champion trees may not be removed except by Resolution of the City Commission finding that the following conditions have been met:
 - (i) A report from a certified arborist documenting that:
 - a. The tree is dead; or,
 - b. The tree is seriously diseased and treatment is not practical; or,
 - c. The tree is significantly damaged and remedial pruning would not be effective in rehabilitating the tree

Staff Comment: The amendment to this section accomplishes two major goals. First, it permits a portion of the trees required for mitigation to be used for site landscaping, parking lot landscaping, or perimeter buffer requirements. Second, it significantly increases the regulatory threshold for the removal of a champion tree. The proposed amendment is in line with other local jurisdictions.

6.2.1 (D)(5) *Tree removal.*

- (a) When protected trees are allowed to be removed during land alteration/site clearing, the trees shall be identified by red flagging.
- (b) The rights-of-way of proposed roads, the corners of proposed buildings, the location of proposed drainage basins, manmade lakes, areas that require fill and other improvements shall be rough staked and protective barricades shall be installed around trees designated for protection prior to on-site inspection. If, on inspection, these areas have not been identified, a re-inspection will not be done until violations have been corrected.
- (c) A copy of the tree removal permit shall be posted on the site during these activities.
- ~~(d) Tree removal shall be conducted by a licensed general contractor, licensed residential contractor, or tree removal company. The entity responsible for removal of the tree or trees shall have a current occupational license granted by the jurisdiction in which the company is located. Proof of current occupational license shall be submitted at the time of application for tree removal permit or building permit.~~

Staff Comment: This amendment would remove the requirement that a general contractor or tree removal company with a local business tax be used to remove regulated or heritage trees.

6.2.1 (D)(6) *Tree credits.*

- (a) Where a minimum number of trees are required to meet the landscaping requirements of these land development regulations or an approved planned development, credit shall be given for the retention of ~~healthy~~ “good” or better existing native trees, as defined in Subsection 6.2.2(D)(4). ~~–No credit will be given for the preservation of trees on the nuisance tree list. A table displaying a list of all trees claimed for credits under this subsection shall be included in the landscape plan; this table shall include common name, botanical name, caliper at DBH, health, number of tree credits being used, and reference number to location on tree survey provided as a part of the landscape plan.~~

Staff Comment: This amendment would clarify that a table will be required identifying all trees being preserved that will be used to claim credits.

(7) *Tree banking.*

- (a) The City may allow off-site mitigation for required tree replacement that cannot be accommodated through on-site mitigation. Trees authorized for off-site mitigation shall be planted in City-owned properties and parks, City rights-of-way, and preservation or conservation areas owned by the City. The City may also plant trees within the medians and rights-of-way of State and County roads where an interlocal agreement authorizes such plantings.
- (b) The City will establish a separate fund within the City's chart of accounts to be used exclusively for off-site tree mitigation payments. Funds withdrawn from this account shall be spent solely for the planting and maintenance of new trees in accordance with this section.
- (c) The off-site mitigation formula shall be equal to the cost of the replacement tree, plus installation (labor and equipment), plus maintenance for one year, plus fund administration. This formula will be multiplied by ~~the number of trees to be planted~~ the number of replacement trees required to fulfill mitigation requirements. The fee for off-site tree mitigation shall be adopted by the City Commission through resolution.
- (d) Fees for off-site mitigation shall be ~~paid to~~ determined and approved in accordance with the above section (7)(c) by the City prior to ~~the issuance of any tree removal permit or building permit for new construction with an approved~~ any public hearing related to the proposed site plan or plat. Fees for off-site mitigation shall be paid to the City prior to the issuance of any tree removal permit or building permit. Receipts for payment will be specifically marked for the off-site mitigation account.

Staff Comment: This amendment would clarify the timing of the determination of the mitigation payment and the time that the payment is actually due to the City.

6.2.1 (E) *Maintenance.*

- (3) *Compliance by public agencies and utilities.* All public agencies and utilities shall comply with the permitting requirements of this section prior to commencing any pruning or removal of any regulated, heritage and champion trees. All public utilities, governmental agencies, and their subcontractors shall comply with the ~~National Arborist Association~~ International Society of Arboriculture standards for pruning shade trees when pruning ~~regulated, heritage and champion~~ any trees on public property. Emergency removal requiring immediate action to protect the health and safety of the public are not subject to this section.

Staff Comment: The proposed amendment clarifies the appropriate professional organization standards and proposes that standards apply to trimming any trees on public property.

6.2.1 (F) *Tree removal application and permit.*

(1) *Exemptions.*

- (a) Regulated trees, except for heritage or champion trees, on a All lots and parcels of land with a single-family residential dwelling unit, not to include mixed-use portions of developments, are exempt from the requirements of this section, ~~except that.~~ No person shall cut or remove any heritage or champion tree from any such lot or parcel of land without first obtaining a tree removal permit from the City.
- (g) Removal of nuisance trees or trees identified in the Florida Exotic Pest Plant Council's List of Invasive Plant Species, as amended. is exempt from the terms and provisions of this section.

Staff Comment: The proposed amendment clarifies that heritage and champion trees are not exempt from obtaining a tree removal permit, even on single-family residential properties. Additional language is proposed, which adds any trees listed in the Florida Exotic Pest Plant Council's List of Invasive Plant Species are exempt from tree removal permit requirements.

(G) *Site plan and subdivision plat requirements.*

- ~~(1) It is the intent and purpose of this section, among other objectives, to ensure to the extent reasonably practicable, the survival of existing trees on sites being developed or altered. Recognizing the impossibility of protecting all trees, the owner or developer of a site, with the approval of the LDR Administrator, shall designate those trees to be preserved and the level of protection to be afforded them based on the following categories:~~
- ~~(a) Category I trees. Those trees identified during the predesign on-site meeting as being healthy heritage trees which are required to be retained in accordance with the approved site plan or subdivision plat. All champion trees shall be protected to Category I standards.~~

- ~~(b) Category II trees. Those trees identified during the predesign meeting which are desirable to retain, but due to location and development activities, cannot be protected to the level of Category I trees.~~
- ~~(c) Category III trees. Those trees which due to the number or location, cannot receive the level of protection afforded to Categories I and II trees, yet add to the landscape and may survive development activities.~~

(21) Site plans and ~~preliminary plats~~construction plan shall include consideration of tree preservation and approval shall constitute the issuance of a tree removal permit consistent with the approved plan.

(a) Applicants for site plans and ~~preliminary plats~~construction plans shall ~~be required to have a predesign, on-site meeting with the LDR Administrator to locate any champion or heritage trees and other regulated trees, and to discuss protection methods for trees to be retained or relocated~~provide aerial or ground photographs of any regulated, heritage, or champion trees to be preserved. The applicant shall mark and reasonably locate upon the site plan or ~~preliminary plat~~construction plan drawing, all champion, heritage, and other regulated trees to be retained ~~, or~~ relocated or removed. The applicant shall mark and reasonably locate upon the site plan or construction plan all nuisance trees or trees identified in the Florida Exotic Pest Plant Council's List of Invasive Plant Species, as amended. The tree location drawing shall conform to the following:

- (i) Trees are to be identified by both common and scientific names.
- (ii) Trees shown on the tree location drawing will be identified as to which trees will be saved, relocated or removed.
- (iii) The tree location drawing is to be at the same scale as the site plan or ~~preliminary plat~~construction plan.
- (iv) The tree location drawing may be presented as a separate sheet within the site plan or ~~preliminary plat~~construction plan; however, the trees must be included on one sheet of the site plan or ~~preliminary plat~~construction plan that shows the location of the proposed buildings, driveways, off-street parking and loading facilities, stormwater management facilities, existing contours and finished elevations, overhead electric lines, underground utilities and any other proposed improvements that could potentially have a negative impact on existing trees.

(b) In the event that no champion, heritage or regulated trees are found, it shall be so noted on the site plan or ~~preliminary plat~~construction plan and a tree location drawing shall not be required.

(c) A note shall be included that all vegetative materials identified in the Florida Exotic Pest Plant Council's List of Invasive Plant Species, as amended, shall be removed at time of development.

Staff Comment: The proposed amendment clarifies information due at time of site plan or construction plan submittal and adds a requirement that invasive species material be removed at time of development added. The proposed amendment is in line with current best practice and similar to requirements of other local governments.

6.2.1 (H) *Administration, enforcement and appeal.* In addition to the general provisions of Article 9, the following provisions shall apply to this section:

(7) For the purposes of this section, the following are provided as a list of references, in addition to those publications previously referenced:

(b) The most current ~~American National Standards Institute (ANSI)~~International Society of Arboriculture (ISA) standards shall be referenced for all public utilities, government agencies, and their subcontractors when pruning trees on public or private property and National Arborist Association Standards for Pruning Shade Trees when pruning regulated, heritage or champion trees.

~~(d) Tree Inventory and Management Plan, Alachua, Florida, prepared in July 2005, by the Davey Resources Group, shall be utilized as a local resource manual for guidance on tree preservation during construction activities and for guidance on recommended tree species, in addition to the plant list in Appendix 6.2.2 A.~~

(8) The ~~City Commission~~Land Development Regulations Administrator may establish technical standards setting forth administrative guidelines governing the enforcement of this section, requirements not specifically addressed in this section, and any other information needed for the uniform and orderly administration of this section. Such standards may be published in a technical manual which shall be on file in the office of the City Clerk.

Staff Comment: The proposed amendment updates reference to appropriate standard and removes reference to recommended tree species list and the proposed amendment also allows the Land Development Regulations Administrator to adopt technical standards.

AMENDING VARIOUS PORTIONS OF SECTION 6.2.1 RELATED TO LANDSCAPING STANDARDS

6.2.2 *Landscaping standards.*

(B) *Applicability.* These standards shall apply to the following development in the City:

- (1) *Single-family lots or dwellings.* The subdivision or development of ~~ten~~eight or more single-family residential lots or dwellings.
- (2) *Single-family attached dwellings.* The subdivision or development of ~~five~~eight or more single-family attached dwellings.
- (3) *Two- to four-family dwellings.* The subdivision or development of ~~five~~eight or more two- to four-family dwellings.
- (4) *Manufactured home park.* Subdivision for a manufactured home park.
- (5) *Existing multifamily structure.* Development of a multifamily structure or redevelopment of an existing multifamily structure that results in an increase in building square footage of ~~50~~60 percent or more.

- (6) *Nonresidential.* Development of a nonresidential structure or redevelopment of a nonresidential structure that results in an increase in building square footage or impervious surface by 50 percent or more.
- (7) *Parking lot.* Development of a parking lot for ~~ten~~eight or more spaces.
- (8) *Existing parking lot.* Redevelopment or expansion of an existing parking lot that results in an increase of ~~25~~20 or more spaces. Redevelopment or expansion includes items such as repaving, changes in ingress or egress, and reconstruction of stormwater drainage systems.

Staff Comment: Proposed changes to this section would seek to remove disincentives for attached or multifamily housing. The proposed amendment would lower threshold for requirement of parking lot landscaping.

6.2.2 (C) *Landscape plan required.* A landscape plan shall be submitted with an application for a site plan (Section 2.4.9), subdivision (Section 2.4.10), planned development (Section 2.4.3) or building permit, whichever occurs first, for any development or change in use that is required to provide landscaping in accordance with this section. The landscape plan shall contain the following information which spells out how the development proposed will comply with this section:

- (1) *Identification of existing trees.* A survey showing ~~t~~The location, common name, and size existing regulated trees. ~~{For a development that is greater than ten acres, an aerial photograph, or a print of equal quality, may be substituted instead of the inventory if it provides essentially the same information as the tree survey.}~~
- (2) *Identification of existing trees to be* ~~maintained~~preserved. The location, common name, and estimated size of existing trees that are to be ~~maintained~~preserved as part of a tree protection zone or preserved for credit.
- (3) *Parking areas, buffers areas, and other planting areas.* The locations and dimensions of parking areas, perimeter buffer areas and other planting areas.
- (4) *Identification of new plant materials.* The size, botanical name, common name and spacing of new plant materials.
- (5) *Fences, walls or earthen berms.* The location and design of any fence, wall or earthen berm, indicating size and materials.
- (6) *Barriers required to protect existing vegetation.* The location and description of any barriers required to be erected to protect any existing vegetation from damage, both during and after construction.
- (7) *Maintenance.* Provisions for watering and other long-term maintenance to ensure serviceability, soil stabilization and plant protection.
- (8) ~~Xeriscape. Explanation of how xeriscape principles are utilized.~~ Florida Friendly Landscaping. A narrative explaining how Florida Friendly landscaping practices have been incorporated into landscape plan.

Staff Comment: The proposed amendment clarifies information required at time of development permit application, and modifies xeriscaping principles to Florida Friendly landscaping practices, which is inclusive of xeriscaping practices.

6.2.2 (D) *Landscape standards.*

- (1) *Site landscaping.* For purposes of this section the number of trees required is rounded to nearest whole tree or shrub (e.g., if number of canopy trees needed to meet site landscaping requirements is calculated at 9.5 trees then 10 trees would be required).
The following site landscaping shall be required for the following ~~development~~:

Staff Comment: The proposed amendment adds clarification on calculation of number of trees required for site landscaping. The proposed language is based on current practice.

6.2.2 (D)(1)(a) *Multifamily and townhouses.*

- (i) ~~Four~~Two canopy trees per acre, planted on the primary or street-facing side, and ~~two~~one canopy trees per acre planted on each of the exterior sides and exterior rear of ~~each~~each primary structure. An existing canopy tree that is a native species and in ~~very good to excellent health~~good or better health can be utilized to fulfill this requirement. It is encouraged that the tree be located so that it may provide shade on the structure during the summer afternoon.
- (ii) ~~Eight~~6 ornamental/understory trees per acre, with 50 percent planted in front and 25 percent on each side.
- (iii) A row of shrubs along the front facade of the structure, with consideration given to access to utility meters or mechanical equipment. Shrubs shall not be planted directly against the structure, but a minimum of two feet from the facade to facilitate adequate air circulation. In lieu of a horizontal line of shrubs along the front facade, shrub masses of three or more species may be utilized.
- (iv) For sites with multiple buildings, for each 100 feet of façade of the longest building face of any buildings at least one of the following options, located between all structures,:
 - a. Two canopy trees
 - b. Four understory trees
 - c. A row of shrubs along facades facing each other
 - d. Community garden area of at least 1,500 square feet
 - e. Fountain or other water feature
 - f. Shaded table or bench
 - g. Other significant landscape improvement as approved by LDR Administrator.

~~(iv)~~ A combination of solid sod, seeding, and sprigs shall be used to cover 100 percent of the lot site disturbed by construction activities. Areas of native vegetation are not required to be sodded. An area within 20 feet of the front building facade shall be sodded with other disturbed areas to be sodded, seeded or sprigged.

(vi) The site landscaping requirements found in 6.2.2 (D)(1)(a)(i) and (ii) are reduced by 50% for those developments on sites which are 43,560 square feet or less.

Staff Comment: The proposed amendment reduces the number of trees (both canopy and understory) for site landscaping and clarifies the location of trees in relation to primary structure. Additional landscaping requirement for sites with multiple structures are proposed to prevent non-landscaped areas between structures. The amendment also proposed to reduce the number of required trees for sites less than 1 acre (43,560 square feet).

6.2.2 (D)(1) (b) *Public and institutional uses.*

(i) Four canopy trees per acre, planted on the primary or street-facing side, three canopy trees per acre planted on each of the sides and rear of each structure, and an additional four canopy trees for each 100 lineal feet of facade, planted in front of the facade. An existing canopy tree that is a native species and in very good to excellent health can be utilized to fulfill this requirement if it is located within 25 feet of the building. It is encouraged that the tree be located, so that it may provide shade on the structure during the summer afternoon.

(ii) Eight ornamental/understory trees per acre, with 50 percent planted in front of the structure and 25 percent planted on each side.

(iii) For sites with multiple buildings, for each 100 feet of façade of the longest building face of any adjacent buildings at least one of the following options, located between structures:

a. Two canopy trees

b. Four understory trees

c. Community garden area of at least 1,500 square feet

d. Fountain or other water feature

e. Shaded table or bench

f. Other significant landscape improvement as approved by LDR Administrator.

~~(iiiiv)~~ A row of shrubs planted along all facades of the structure, with consideration given to access to utility meters or mechanical equipment. In lieu of a horizontal line of shrubs along the front facade, shrub masses of three or more species may be utilized. Shrubs shall not be planted directly against the structure, but a minimum of two feet from the facade to facilitate adequate air circulation.

(~~iv~~v) A combination of solid sod, seeding, and sprigs to cover 100 percent of the lot site disturbed by construction activities. Areas of native vegetation do not have to be sodded. An area within 20 feet of the front building facade shall be sodded with other disturbed areas to be sodded, seeded or sprigged.

(vii) For those uses that do not have a principal structure, site landscaping shall be distributed throughout site, as is practical.

Staff Comment: Additional landscaping requirement for sites with multiple structures are proposed to prevent non- landscaped areas between structures. Additional language is proposed for those uses, such as parks, which may not have structures associated with it.

6.2.2 (D)(1) (c) Business uses other than those use types found in the Industrial Services, Manufacturing and Production, and Warehouse and Freight Movement Use Categories.

- (i) Three canopy trees per acre, planted on the primary or street-facing side, two canopy trees per acre planted on each of the sides and rear of each structure, and an additional four canopy trees for each 100 lineal feet of facade, planted in front of the facade. An existing canopy tree located on site that is a native species and in very good to excellent health can be utilized to fulfill this requirement if it is located within 25 feet of the building. It is encouraged that the tree be located so that it may provide shade on the structure during the summer afternoon.
- (ii) Six ornamental/understory trees per acre, with 50 percent planted in front of the structure and 25 percent planted on each side.
- (iii) A row of shrubs planted along all facades of the structure, with consideration given to access to utility meters or mechanical equipment. In lieu of a horizontal line of shrubs along the front facade, shrub masses of three or more species may be utilized. Shrubs shall not be planted directly against the structure, but a minimum of two feet from the facade to facilitate adequate air circulation.
- (iv) A combination of solid sod, seeding and sprigs to cover 100 percent of the lot site disturbed by construction activities. Areas of native vegetation do not have to be sodded. An area within 20 feet of the front building facade shall be sodded with other disturbed areas to be sodded, seeded or sprigged.

(v) The site landscaping requirements found in 6.2.2 (D)(1)(c)(i) and (ii) are reduced by 33% for those developments on sites which are 1 acre or less.

Staff Comment: The proposed amendment changes the title of this subsection to remove certain business uses (Industrial Service, Manufacturing and Production, and Warehouse and Freight Movement Use Categories). The proposed amendment also reduces the number of trees for sites that are less than 1 acre.

6.2.2 (D)(1) (d) Business uses found in the Industrial Services, Manufacturing and Production, and Warehouse and Freight Movement Use Categories.

- (i) One canopy tree per acre, planted on the primary or street-facing side, two canopy trees per acre planted on each of the sides and rear of each structure, and an additional canopy tree for each 150 lineal feet of facade, planted in front of the façade of the primary structure. An existing canopy tree located on site that is a native species and in very good to excellent health can be utilized to fulfill this requirement if it is located within 25 feet of the building. It is encouraged that the tree be located so that it may provide shade on the structure during the summer afternoon.
- (ii) Six ornamental/understory trees per acre, with 50 percent planted in front of the structure and 25 percent planted on each side.
- (iii) A row of shrubs planted along front and side facades of the primary structure, with consideration given to access to utility meters or mechanical equipment. In lieu of a horizontal line of shrubs along the front and side facade, shrub masses of three or more species may be utilized. Shrubs shall not be planted directly against the structure, but a minimum of two feet from the facade to facilitate adequate air circulation.
- (iv) A combination of solid sod, seeding and sprigs to cover 100 percent of the lot site disturbed by construction activities. Areas of native vegetation do not have to be sodded. An area within 20 feet of the front building facade shall be sodded with other disturbed areas to be sodded, seeded or sprigged.
- (v) The site landscaping requirements found in 6.2.2 (D)(1)(c)(i) and (ii) are reduced by 25% for those developments on sites which are 3 acres or less.

Staff Comment: A new subsection is proposed to be added that creates new standards for certain business uses: Industrial Service, Manufacturing and Production, and Warehouse and Freight Movement Use Categories. The proposed standards created take into account the typically large nature of the sites and buildings and focuses landscaping onto the front and side of structures. The proposed amendment also includes a reduction in required number of trees that are 3 acres or less.

6.2.2 (D)(1) (de) Alternative placement. In cases where the configuration or topographical constraints of an existing site make the placement of required site landscaping impractical, the LDR Administrator may approve up to 50 percent of the required landscaping to be planted on ~~adjacent~~ City-owned properties and parks, City rights-of-way, and preservation or conservation areas owned by the City. ~~public property~~ in accordance with Subsection 6.2.2(D)(9) of this section, Alternative landscape plan.

Staff Comment: The proposed amendment provides clarification on the location that trees and landscaping can be planted if applicant is applying for an alternative landscape plan.

6.2.2 (D)(2) *Parking lot landscaping.*

- (a) *Interior landscaping.* All parking lots shall provide and maintain the following landscaped planting areas within the interior of the parking lot. These standards shall not apply to parking structures or vehicle display areas.
- (i) Each planting area shall contain an area adequate to accommodate the root growth of the plant material used. The size of the planting area and size of plant material at maturity shall allow for a 2½-foot bumper overhang from the face of the curb.
- (ii) Interior planting areas shall be ~~designed within parking areas as~~ located within or adjacent to parking areas, consisting of one or more of the following:
- a. Landscaped islands located at the end of parking bays; or
 - b. Landscaped islands located between parallel rows of cars, used to visually separate parking areas; or
 - c. Landscaped driveway medians with a minimum width of six feet if curbed or a minimum width of ten feet if not curbed ~~Driveway medians, which shall have a minimum width of four feet for medians with shrubs, six feet for medians with shrubs and intermediate trees and nine feet for medians with large trees; or,~~
 - d. Landscaped areas adjacent to parking lots, interior to the development area.

Staff Comment: The proposed amendment clarifies the location of parking lot interior planning areas and provides clearer standards for driveway medians.

- 6.2.2 (D)(2)(a)(iii) Each interior planting area shall contain locally adapted trees and shrubs at the following rate:.
- a. Trees shall be required at the minimum rate of one canopy or ornamental/understory tree for every ~~2,000~~ 1,800 square feet, or portion thereof, of the total parking lot area;
 - b. Shrubs shall be required at the minimum rate of ten shrubs per ~~canopy or ornamental/understory tree~~ landscaped island. ~~They may be massed around the tree, and are encouraged to be planted toward the interior of the islands, so as not to interfere with vehicle doors opening and closing;~~
 - c. ~~As a general guide, one tree island should be located at approximately ten space intervals;~~ Tree islands must be located no more than eleven parking spaces from another tree island or landscaped island at end of parking bay.
 - d. No parking space shall be separated from the trunk of an interior parking lot ornamental or canopy tree by more than ~~90~~ 80 feet;
 - e. In cases where the configuration or topographical constraints of an existing site make the placement of required site landscaping impractical, the LDR Administrator may approve up to 50 percent of the required

landscaping to be planted on an adjacent public property in accordance with Subsection 6.2.2(D)(9) of this section, Alternative landscape plan.

f. The interior planting requirements found in 6.2.2 (D)(2)(iii)a and b are reduced by 50% when all parking bays within the parking lot area are located in the rear or side of the property.

g. Parking lot area shall be calculated as the paved or unpaved area dedicated to the short- or long term parking or unloading of vehicles, including associated drive-aisles adjacent to parking bays or loading areas.

Staff Comment: This proposed amendment will increase the tree requirement rate for parking lot interiors, and clarify that tree islands must be located at least every 11 parking spaces. Proposed amendment would provide incentives for placing all parking in the rear or side of the property, and provides a definition clarifying meaning definition of “parking lot area”.

6.2.2 (D)(2)(a) ~~(v) Landscape planting areas shall be distributed throughout the parking area for the purpose of heat abatement.~~

(vii) Earthen berms may also be incorporated into the design of any required planting area. Any berm installed shall have a side slope of no greater than 2.5:1.

Staff Comment: Proposed amendment would reduce berm slope ratios (make landscape berms less steep).

6.2.2 (D)(2)(b) *Parking lot buffer.* All parking lots shall have landscape buffers around their exterior perimeter that shall be composed of trees, shrubs, ground cover and turfgrass as follows:

(ii) The buffer for the parking lot shall be ~~located on~~located on the exterior of the parking lot, immediately adjacent to the curbed and paved areas.

d. Other landscaping materials provided to meet any other requirement of this section may be considered a part of and count toward the requirement parking lot buffer, if such materials are located within 30 feet of the parking lot area.

Staff Comment: Proposed amendment would add language clarifying what other site landscaping can be counted towards parking lot buffer. This language would provide site designers additional flexibility, while maintaining intent of section.

6.2.2 (D)(3) *Perimeter buffers.*

- (b) *Types of buffers.* Table 6.2-1, Perimeter Buffer Classifications, in this subsection describes the four different types of buffers and their optional configurations. Any one of the three optional configurations may be utilized to meet the standards of this subsection. In cases where an option utilizing a fence is selected, the fence shall comply with the standards of Section 6.3, Fencing standards. If an existing tree proposed to remain is being used as credit towards perimeter buffer, it must be located within the area designated for that perimeter buffer. Trees required for buffering shall be distributed evenly along each perimeter, except that up to 33% of the required number of trees may be clustered.

Table 6.2-1. Perimeter Buffer Classifications			
Buffer Type and Configuration	Screening Requirement Within Buffer Yard		
	Option 1	Option 2	Option 3
A. Basic This buffer area functions as basic edge demarcating individual properties with a slight visual obstruction from the ground to a height of ten feet	One canopy tree per <u>every 60 linear feet</u> , plus one understory or ornamental tree per 60 linear feet	Option 1 <u>One canopy tree every 60 linear feet</u> , plus one hedge	One four-foot high berm or fence
B. Aesthetic This buffer area functions as an intermittent visual obstruction from the ground to a height of at least 20 feet, and creates the impression of spatial separation without eliminating visual contact between uses	One canopy tree per <u>every 50 linear feet</u> , plus one understory or ornamental tree per <u>every 40 linear feet</u>	One canopy tree per <u>every 40 linear feet</u> , plus one hedge	One four-foot berm or fence, plus one canopy tree per every <u>40 linear feet</u>
C. Semi-opaque This perimeter buffer functions as a semi-opaque screen from the ground to at least a height of six feet	1 canopy tree per every <u>30 linear feet</u> , plus one evergreen hedge	1 canopy tree per every <u>30 linear feet</u> , plus one shrub per eight linear feet	One fence or wall, plus one canopy tree per every <u>30 linear feet</u>
D. Opaque This perimeter buffer functions as an opaque screen from the ground to a height of at least six feet This type of buffer prevents visual contact between uses and creates a strong impression of total separation	Two canopy trees per 40 linear feet, One canopy tree every 25 linear feet, one understory tree every 40 linear feet, plus one evergreen hedge	Two canopy tree per 40 linear feet <u>One canopy tree every 25 linear feet, one understory tree every 35 feet,</u> plus one shrub hedge per five linear feet	One fence or wall, plus one canopy tree per every <u>20 25 linear feet</u>

Staff Comment: Proposed amendment clarifies placement of buffer, with allowance for limited clustering of buffering. The proposed amnemtn would reduce buffer requirements

for Buffer Type D in order to match best practice. The current language in the City's LDRs requires canopy trees to be too close to each other, which may prevent the desired buffer to fully develop. Language is also proposed to be added clarifying that buffer should be evenly spread along entire buffer area.

Table 6.2-2. Buffer Class Application											
Letter = Buffer type; Number = Required width in feet											
A = Type A; B = Type B; C = Type C; D = Type D; N = No buffer required											
Proposed Use		Adjacent Use									
		Residential Uses			Public and Institutional Uses			Commercial Uses			
		1	2	3	4	5	6	7	8	9	10
Residential uses											
1	Single-family detached dwelling, manufactured home, mobile home	N	N	N	B 7.5	N	N	N	N	N	N
2	Single-family attached, two- to four-family dwelling, townhouse development	C 10	A 10	B 10	C 7.5	B 7.5	A 5	N	N	N	N
3	Multiple-family development, group living uses	D 10	B 10	A 10	D 7.5	C 7.5	A 7.5	N	N	N	N
Public and institutional uses											
4	Parks and open areas	N	N	N	N	N	N	N	N	N	N
5	Community services, day care, educational facilities, institutions	C 15	B 15	A 15	C 10	A 7.5	B 7.5	B 7.5	A 7.5	A 5	A 5
6	Animal services, government facilities, health care facilities, public safety, transportation, utilities	D 15	C 15	B 15	D 10	B 7.5	A 7.5	B 7.5	A 7.5	A 5	A 5
Business uses											
7	Eating establishment (except drive-through), conference and training center, offices, retail sales and service (50,000 gross sq. ft. or less), indoor recreation/entertainment, sexually oriented business, visitor accommodation	D 15 25 1	C 15 1	B 15 1	D 15	C 10	C 10	A 7.5 7.5	B A 7.5 7.5	B 7.5	B 5
8	Drive-through eating establishment, retail sales and service (more than 50,000 gross sq. ft.), outdoor recreation/entertainment	D 15 25 1	D 15 1	C 15 1	D 15	D 10	D 10	C 7.5	A 7.5	C 7.5	B 5
9	Commercial parking, self-service storage, vehicle sales and services	D 15	D 15	C 15	D 15	D 10	D 10	C 7.5	C 7.5	A 7.5	B 5

10	Industrial services, manufacturing and production, warehouse and freight movement, waste-related services, wholesale sales	D 20	D 20	D 20	D 15	C 10	C 10	B 7.5	B 7.5	B 7.5	A 5
¹ In cases where a business property containing a freestanding restaurant abuts a residential district, the buffer shall be a minimum of 25 <u>30</u> feet in width.											

Staff Comment: The proposed amendment would increase buffer width between certain commercial uses and single family residential uses. The proposed amendment would also reduce buffer widths between similar commercial uses.

6.2.2 (D)(3)(f) *Development within perimeter buffers.*

- (i) The required buffer shall not contain any development, impervious surfaces, or site features that do not function to meet the standards of this section or that require removal of existing vegetation, unless otherwise permitted in these LDRs.
- (ii) No grading, development, or land disturbing activities shall occur within the buffer unless approved by the LDR Administrator.
- (iii) Sidewalks and trails may be placed in perimeter buffers, provided damage to existing vegetation is minimized.
- (iv) ~~Utilities, including~~Except for stormwater management facilities and necessary direct interconnections to existing systems, utilities are not ~~or other best management practices, are~~ permitted in perimeter buffers. ;

Staff Comment: The proposed amendment clarifies the type of development allowed within perimeter buffer areas.

6.2.2 (D)(4) *Credits for preservation of existing trees preserved.* Canopy or ornamental/understory trees that are in very good to excellent health, that are protected before and during development of the site and maintained thereafter in a healthy growing condition, can be used to comply with up to 75% of the landscaping standards for Subsections 6.2.2(D)(1), Site landscaping; 6.2.2(D)(2), Parking lot landscaping; or 6.2.2(D)(3), Perimeter buffers, of this section. Credits for the preservation of existing canopy or ornamental/understory trees will be based on the standards in Table 6.2-3, Credit for Existing Trees Preserved.

Table 6.2-3. Credit for Existing Trees Preserved	
Size of Tree (DBH in inches) (measured 4½ feet from natural ground level)	Number of Trees Credited
3-6 <u>3.00-9.99</u>	1
6-12 <u>10.00-19.99</u>	2 <u>3</u>
12-18 <u>20.00-29.99</u>	3 <u>6</u>
18-24 <u>30.00-39.99</u>	4 <u>12</u>
24-30 <u>40.00-49.99</u>	5 <u>20</u>
30-36 <u>50.00 or more</u>	6 <u>25</u>
36-42	7
42-48	8
48 or more	9

Staff Comment: The proposed amendment would significantly increase the tree credit rates for preservation of existing trees, but would cap the use of tree credits to 75% of any required landscape requirement.

6.2.2 (D)(5) *Credits for the provision of pedestrian amenities.* The amount of required site landscaping or required vegetation in a perimeter buffer may be reduced by up to ten percent based on the provision of three or more of the following pedestrian amenities, which shall be located adjacent to a sidewalk or multiuse trail:

- (a) Benches;
- (b) Exercise equipment;
- (c) Playground equipment;
- (d) Fountains or other water features;
- (e) Gazebos or other gathering places;
- (f) Pedestrian-scale lighting;
- (g) Raised planters meeting the requirements of this Article; or
- (h) Public art features.

Staff Comment: The proposed amendment adds a reference to applicable section for clarification.

6.2.2 (D) (6) Credits for the provision of natural wooded open space. The amount of required site landscaping or required vegetation for any required site landscaping, perimeter (except for arterial buffering), or parking lot landscaping or buffering may be reduced by no more than 35% if a minimum 50' buffer (at a rate of 2 canopy trees per each 50' linear feet and 2 understory/ornamental trees per each 50') is provided upon any side or rear of the site that meets the following conditions:

- (a) If located along a perimeter of the property, this natural wooded open space may count towards any required buffer, unless located adjacent to existing single family residential development or vacant lands zoned A, CSV, RSF-1, RSF-3, RSF-4 or RSF-6 in which case this natural wooded open space area buffer must be in addition to any required buffer.
- (b) Total natural wooded open space must be designated on the site plan as such and meet the minimum area requirements found in the Table below:

<u>Development Area in Acres</u>	<u>Natural Wooded Open Space Designated Area (% of Development Area)</u>
<u>Less than 1 acre</u>	<u>15%</u>
<u>1.00-2.99 acres</u>	<u>15%</u>
<u>3.00-4.99 acres</u>	<u>14%</u>
<u>5.00-6.99 acres</u>	<u>13%</u>
<u>7.00-8.99 acres</u>	<u>12%</u>
<u>9.00-9.99 acres</u>	<u>11%</u>
<u>10 acres or more</u>	<u>10%</u>

- (c) Development within this area shall be prohibited except for: underground utilities, unpaved paths, paved paths not exceeding ten feet, and limited lighting along any paths.

The amount of required vegetation or landscaping may be further reduced to no more than 50% if either or both of the following conditions are met, in addition to the conditions found in (a),(b), and (c) above:

- (d) The proposed natural wooded open space area is contiguous with a previously approved natural wooded open space (a minimum of 50' contiguous for development sites 3 acres or less in area and a minimum of 100' contiguous for development sites more than 3 acres).
- (e) The proposed natural wooded open space area is contiguous with a publicly owned property a minimum of ten acres in size with a zoning designation of Conservation (CSV).

Staff Comment: A new section is proposed under this amendment that would create an incentive for preservation of natural wooded open space, including further incentives for preservation areas adjacent to each other.

6.2.2 (D) ~~(76) Xeriscape~~Xeriscaping and Florida Friendly Landscaping Standards

(a) *Purpose and intent.*

- (i) *Purpose.* The purpose of ~~xeriscape~~these standards is to establish minimum standards for the development, installation, and maintenance of landscaped areas on a site with water use efficiency as a goal, without inhibiting the use of creative landscape design. Xeriscape encourages specific water conservation measures including the re-establishment of native plant communities, the use of site-specific plant materials, and the use of native vegetation.

Staff Comment: The proposed amendment would rename this section include Florida Friendly Landscaping Standards.

6.2.2 (D)(7)(b) (v)*Use of low water use plants.* Plants shall be selected based on their adaptability to the site based on water use, desired effect, color, texture, and mature size. The landscape should be designed to give the desired aesthetic effect and plants should be grouped in accordance with their respective water needs. The use of ~~native plants~~native or Florida-Friendly species shall be used, to the maximum extent practicable. ~~A list of xeriscape plant material that should be used is identified in Appendix 6.2.2 A, Plant list (set forth at the end of this article).~~

- (vi) *Efficient irrigation.* The irrigation system used for landscape shall be designed to correlate to the water use plant zones established in the landscape design. A preliminary irrigation plan shall be submitted at time of site plan, or construction plan application submission with a note that ~~t~~The following standards for irrigating the site shall be used in the design of the system:

f. Final submission at building permit or construction plans application. A final irrigation plan shall be submitted at the time of building permit application or construction plan application and shall be reviewed to ensure that the design standards found in this subsection have been met.

Staff Comment: Current development practice has made exact compliance with the City's Land Development Regulations difficult. Proposed language under this amendment would require the submission of a preliminary irrigation plan at time of site plan or construction plan for a subdivision.

6.2.2 (D)(7) (vii)*Maintenance.* Proper maintenance shall be used to preserve and enhance the quality of the landscape. ~~Included in the maintenance schedule should be the time periods for the following~~As part of the submitted landscape plan, a

maintenance schedule must be submitted addressing the following: the checking, adjusting, and repairing of the irrigation system, and the resetting of the irrigation schedule according to the season, remulching, fertilizing, weeding, ~~and pruning~~, pruning, and mowing.

(ix) Incentive for 100% Florida Friendly Landscaping. The amount of any required site or perimeter buffering landscaping may be reduced by 10% if the development area is completely (100%) landscaped using Florida Friendly practices and plant material as certified by a registered landscape architect. For subdivisions subject to these landscape requirements, a restrictive covenant must be included that requires individual lot owners to maintain Florida Friendly landscaping on their lots and, if applicable, requires the home owners association to maintain Florida Friendly landscaping in common areas.

Staff Comment: Proposed amendment would add a clarification concerning maintenance scheduled required, and would add additional language added providing an incentive for a 100% Florida Friendly landscaping plan.

6.2.2 (D)(~~87~~) Time for installation of landscaping.

- (a) ~~Accepted~~ Approved by City. The installation of landscape for all development projects shall be complete, inspected and approved ~~and accepted~~ by the City prior to the ~~issuance of a certificate of occupancy~~ scheduling of any final inspection.

Staff Comment: Proposed amendment would clarify that the City will be approving landscaping, not accepting it.

6.2.2 (D) (~~98~~) Plantings. Landscape plantings shall comply with the following standards:

- (a) Plant types. ~~Plant types are identified in Appendix 6.2.2-A, Plant list (set forth at the end of this article).~~ Plantings shall be categorized as one of the following plant types:
- (i) Canopy trees
 - (ii) Understory/ornamental trees
 - (iii) Shrubs
 - (iv) Vines
 - (v) Groundcover
 - (vi) Annual/Perennial flowers

Staff Comment: Proposed amendment removes reference to section proposed to be deleted.

6.2.2 (D)(9)(b) *Plant size.*

- (i) ~~All materials shall be a minimum quality of Florida Nursery and Grade Standard.~~ Plant material to comply with 'Florida #1' grade quality standard or better as defined and specified within the latest edition of the 'Florida Grades and Standards for Nursery Plants' as published by the Florida Department of Agriculture and Consumer Services, Division of Plant Industries. Provide healthy, vigorous stock grown in a recognized nursery in accordance with good horticultural practices and free of disease, pests, and defects.
- (ii) Canopy trees shall be a minimum of eight feet in height with ~~the caliper based on the tree type per Florida Nursery and Grade Standard.~~ a minimum caliper of 2".
- (iii) Ornamental or understory trees shall have a caliper of 1½ inches ~~at four inches above grade~~ at time of planting.
- (iv) Palm trees may be utilized as landscaping trees but at an increased ratio of 3:1 replacement and shall be a minimum of eight feet tall at the time of planting.
- ~~(ivv) Shrubs which are upright in nature shall be a minimum of 24 inches in height at time of planting, and shrubs which are spreading in nature shall be a minimum of 18 inches in diameter at the time of planting.~~ shall be a minimum of 3 gallon and groundcovers shall be a minimum of 1 gallon.
- (vi) To curtail the spread of disease or insect infestation in plant species, new plantings shall comply with the following standards:
 - a. When fewer than 20 trees are required on a site, no more than 50 percent shall be of one type;
 - b. When more than 20 but fewer than 40 trees are required to be planted on site, no more than 50 percent of the required plantings shall be of one single species; or
 - c. When 40 or more trees are required on a site, no more than 50 percent of the required trees shall be of one single species.
- (c) Raised planters, planter boxes, or raised landscape beds may be utilized to meet landscape requirements for understory tree, ornamental tree, or shrub numerical requirements if the following standards are met:
 - a. For rectangular shaped planters or boxes: Must be a minimum of 5 feet in width and 12 inches in height; or,
 - b. For all other shaped planters or beds (such as round or oval planters): must be a minimum of 28 inches in height and have a diameter of 36 inches or a circumference of 132 inches; and,
 - b. Must be constructed of or must be clad in a material similar in nature and/or color of the cladding of the principal structure located on the site

Staff Comment: Proposed amendment would create standards for new landscape materials, updated to match current best industry practice and terminology. The proposed amendment would also add a new section proposed that would provide clear standards for planter boxes added.

6.2.2 (D) (109) *Alternative landscape plan.*

- (a) *Generally.* An alternative landscape plan may be used where unreasonable or impractical situations would result from application of this section, or to replace a damaged tree pursuant to Subsection 6.2.1 of this section, alternative plans, materials or methods may be justified from natural conditions, such as streams, natural rock formations, topography and physical conditions related to the site. Also, the lot configuration and utility easements may justify an alternative landscape plan.
- (b) *Allowable deviations.* The LDR Administrator shall approve an alternative landscape plan. Allowable deviations from the standards of this section include, but are not limited to the following:
 - (i) A reduction in the total number of required trees and/or alteration of the spacing requirements between trees when underground connections to public facilities or public utilities, or public easements or rights-of-way, are located upon or in close proximity to the parcel or whenever a fewer number of trees would be more desirable in terms of good landscape planning practice.
 - (ii) A reduction in the count, spacing, or species diversity standards which would be more desirable in terms of good landscape planning practice considering the nature of the parcel and adjacent parcels.
 - (iii) Up to a ~~25~~33 percent reduction in the total number of required trees provided that the cumulative caliper size of all trees to be planted meets or exceeds the total caliper inches that would have been provided otherwise.

Staff Comment: Proposed amendment would increase the number of trees that may be reduced if same number of caliper inches are provided under the alternative landscape plan.

6.2.2 (E) *Installation of landscaping.*

- (1) *Time limit.* All landscaping, including mulching and seeding, shall be completed in accordance with the approved site plan (Section 2.4.9), subdivision (Section 2.4.10), planned development (Section 2.4.3), or building permit, prior to issuance of an occupancy permit unless the LDR Administrator grants an exception to meeting this requirement due to extreme weather conditions. In this case, an irrevocable letter of credit shall be in place to ensure that all landscaping requirements will be met at a

predetermined later date. The installation of these requirements shall comply with the required planting standards set forth in this section.

- (2) *Extensions and exceptions.* The LDR Administrator may grant exceptions and extensions to the above time limit in the following circumstances and under the following conditions:
- (a) Exceptions may be granted due to unusual environmental conditions, such as drought or ~~inappropriate planting season for the plant species~~ freezing conditions. In such cases, the LDR Administrator may issue a conditional occupancy permit for a period of 30 to 180 days, depending on the Administrator's recommendation for the next earliest planting season.
 - (b) Exceptions may be granted due to the substitution or unavailability of plant species or acceptable plant size as specified in the landscape plan in cases where such materials are not commercially available within a reasonable time.
 - (c) Exceptions may be granted due to circumstances beyond the developer's or landowner's control, such as incomplete construction or utility work to occur in a proposed landscaped area within 30 days after expected site completion, provided the developer or landowner submits a letter from the utility company stating the estimated installation date. In such cases, the LDR Administrator may issue a conditional occupancy permit for a defined period not to exceed 30 days.

Staff Comment: Proposed amendment would clarify when an extension may be granted.

6.2.2 (F) *Maintenance of landscaping.* The landowner ~~or a tenant~~ shall be ~~jointly and severally~~ responsible for the maintenance of all landscaping installed to comply with the standards of this section for a period of one year after the occupancy permit is issued. Such areas shall be maintained in accordance with the approved landscape plan. All plant life shown on a landscape plan shall be replaced if it dies, is seriously damaged, or removed.

- (1) *Damage due to natural occurrence.* In the event that any vegetation or physical element functioning to meet the standards of this section is severely damaged within the first year after issuance of the occupancy permit due to an unusual weather occurrence or natural catastrophe, or other natural occurrence such as damage by wild or domestic animals, the landowner shall be required to replant if the landscaping standards are not being met. The landowner shall have one growing season to replace or replant. The LDR Administrator shall consider the type and location of the landscape buffer or required vegetation area as well as the propensity for natural revegetation in making a determination on the extent of replanting.
- (2) *Protection during operations.* The landowner should take actions to protect trees and landscaping from unnecessary damage during all facility and site maintenance operations. Plants must be maintained in a way that does not obstruct sight distances at roadway and drive intersections, obstruct traffic signs or devices, and/or interfere with the use of sidewalks or pedestrian trails.

Staff Comment: Proposed amendment would limit maintenance responsibility to property owner.

6.2.2 (G) *Inspections.* The development project shall be inspected on a periodic basis by the owner during the first year after the issuance of the certificate of occupancy to ensure that all of the plant material is healthy and vigorous. If at any time, Any-any plant material ~~that~~ appears to be dead or ~~dying-dying it~~ shall be replaced at the landowner's expense with ~~an~~ identical a -plant that is the same in genus, ~~species~~, and size ~~to-match~~as the plant that is replaced.

Staff Comment: Proposed amendment clarifies that the property owner is responsible for ensuring survival of landscape materials.

6.2.2 (H) *Limitations of Incentives and Reductions.* Reductions in minimum landscaping required may be combined (stacked) except that, unless otherwise explicitly stated, the minimum requirement for any individual landscaping requirement shall not be reduced to less than 20% of the minimum required.

Staff Comment: The proposed amendment would create an overall limit to the “stacking” of incentives. At least 20% of all required landscaping would have to be installed regardless of number of incentives used.

6.2.2 (I) *The Land Development Regulations Administrator may establish technical standards setting forth administrative guidelines governing the enforcement of this section, requirements not specifically addressed in this section, and any other information needed for the uniform and orderly administration of this section. Such standards may be published in a technical manual which shall be on file in the office of the City Clerk.*

Staff Comment: Proposed amendment would explicitly allow the Land Development Regulations Administrator to create a technical standards manual.

6.2.3 *Screening standards.*

6.2.3 (E) *Arterial frontage.* Arterial frontage shall be screened with a series of canopy and understory trees, shrubs and ground cover, as follows:

- (1) *Canopy trees.* ~~Five-Four~~ canopy trees every 100 lineal feet of arterial frontage placed approximately every 25 feet; the width of the paved driveways at the property lines shall not be counted towards the arterial frontage requirement.

- (2) *Understory/ornamental trees.* Three understory/ornamental trees every 100 lineal feet of arterial frontage;
- (3) *Shrubs and ground cover.* A continuous row of shrubs or groups of shrubs that forms an opaque screen for the entire length of arterial frontage; or
- (4) *Alternative screening.* An alternative screen consisting of a solid wood fence at least six feet in height with the minimum number of canopy trees to provide a substantially opaque barrier

Staff Comment: Proposed amendment to this section would reduce number of trees required for arterial frontage and clarify that the driveway area would not count towards “frontage”. Current requirement could result in canopy trees being planted too closely together which ultimately impacts the quality of the arterial frontage buffer.

6.2.3 (F) *Screening methods.* The following items are permitted for use as screening materials. Alternative screening materials that are not listed may be used if it is determined by the LDR Administrator they are comparable to the screening materials required by this subsection.

- (1) *Vegetative material.* Planting materials that provide substantial opacity and minimum height of six feet within three years of planting. ~~that are listed on the approved plant species list and that meet the size and height requirements after three years of Appendix 6.2.2-A, Plant list (set forth at the end of this article).~~
- (2) *Wooden fence.* When wood fences are used, a solid wood fence of treated wood or rot-resistant wood, such as cypress or redwood, shall be used. Chainlink, barbed wire, stock wire, hog wire, chicken wire, and similar type fences are not permitted.
- (3) *Masonry walls.* When masonry walls are used, they shall be constructed of brick, textured concrete masonry units, or stuccoed block.

Staff Comment: Proposed amendment would remove a reference to a code section to be deleted.

Section 10.2 Amended to add the following definitions:

Florida Friendly Landscaping has the meaning as defined in §§ 373.185, Florida Statutes, as amended.

Quality tree protection area means an area protected through a tree preservation or conservation easement that is a minimum of 1 acre in size containing tree canopy coverage of at least 40% (or demonstrated to obtain such canopy coverage within twenty years of designation as quality tree protection area).

Staff Comment: Proposed amendment adds definitions for “Florida Friendly Landscaping” and “quality tree protection” areas.

App. 6.2.2-A. - ~~Plant list~~ List of recommended trees/plants and nuisance trees.

~~RECOMMENDED TREE/PLANT LIST~~

The plants listed in this Appendix are recommended plants for the use in site landscaping, parking lot landscaping, and perimeter buffers. In addition to those species listed herein, additional tree species from the "Tree Inventory and Management Plan, Alachua, Florida, July 2005," prepared by the Davey Resource Group, may be utilized to select tree species. Said document shall be used for species selection of street trees.

	Common Name	Botanical Name
	Canopy Trees	
	Autumn blaze maple	Acer saccharinum "Jeffers red"
	October glory maple	Acer rubrum "October Glory"
	American ash	Fraxinus Americana
	Pignut hickory	Carya glabra
	Green ash	Fraxinus pennsylvanica
	Red bay	Persea borbonia
	Red mulberry	Morus rubra
	Loblolly bay	Gordonia lasianthus
	White oak	Quercus alba
	Understory/ornamental trees	
	Rusty pittosporum	Pittosporum ferrugineum
	Chinese juniper	Juniperus chinensis
	River birch	Betula nigra

	Dura-heat river birch	Betula-nigra "BNMTF"
	Eastern-white redbud	Cercis-Canadensis "Alba"
	Common fig	Ficus-carica
	Loblolly bay	Gordonia-lasinathus
	Shrubs	
	Arrow wood	Viburnum-dentatum
	Azalea	Rhododendron-spp.
	Crimson-pygmy barberry	Berberis "Crimson-pygmy"
	Florida-anise	Illicium-floridavum
	Beautyberry	Callicarpa-americaana
	Carolina-silverbell	Halesia-caroliniana
	Sasanqua-camellia	Camellia-sasanqua
	Chaste tree	Vitex-agnus-castus
	Elderberry	Sambucus-nigra
	Gallberry	Hlex-coriacea
	Japanese holly	Hlex-crenata
	Schillings holly	Hlex-x "Schilling"
	Indian hawthorn	Raphiotepis-indica
	Oregon-grape holly	Mahonia-spp.
	Pampas-grass	Cortaderia-selloana
	Yew-podocarpus	Podocarpus-macrophyllus

	Virburnum family	Virburmum spp.
	Wax myrtle	Myrica cerifera Hydric/Mesic
	Spanish bayonette	Yucca filamentosa
	Vines	
	Bleeding heart	Clerodendrum thomsonale
	Muscadine grape	Vitis rotundifolia
	Cross-vine	Bignonia carpeolata
	Honeysuckle	Lonicera sempervirens
	Passion flower	Passiflora incarnate
	Trumpet vine	Campsis radicans
	American wisteria	Wisteria frutescens
	Virginia creeper	Parthenocissus quinquefolia
	Ground cover	
	Ajuga	Ajuga reptans
	Blue daze	Evolvulus glomerata
	Gopher apple	Licana michauxii
	Royal fern	Osmunda regalis
	Algerian ivy	Hedera canariensis
	Carolina jasmine	Gelsemium sempervirens
	Asiatic jasmine	Trachelospermum asaiticum
	Creeping juniper	Juniperus spp.

	Liriope	Liriope muscari
	Mondo-grass	Ophiopogon japonicus
	Cinnamon fern	Osmunda cinnamomea
Annuals and perennials		
	Blanket flower	Gallardia grandiflora
	Daylilly	Hermocallis spp.
	Periwinkle	Catharanthus roseus
	Moss-rose	Portulaca grandiflora
	Sunflower	Helianthus angustifolia
	Gerber daisy	Gerbera jamesonii
	Pentas	Penta spp.

NUISANCE TREE LIST

	Common Name	Botanical Name
	Australian pine	Casuarinas spp
	Black locust	Robinnia pseudoacacia
	Brazilian pepper	Schinum spp
	Chinaberry	Melia azedarach
	Chinese tallow tree	Sapium sebiferum
	Hackberry	Celtis occidentalis
	Sugarberry	Celtis laevigata

	Honeylocust	Gleditsia triacanthos
	Melaleuca	Melaleuca quinquenervia
	Mulberry	Broussonetia spp
	Wild cherry	Prunus serotina

Staff Comment: The appendix that includes the City of Alachua’s Recommended Tree List is proposed to be removed. The proposed list does not match current best practice, and is difficult to source for developers. The Nuisance tree list will remain. An updated recommended tree list may be considered later and incorporated into a Landscaping technical manual or considered for a land development regulations text amendment at a later date.

FINDINGS OF FACT: COMPLIANCE WITH LAND DEVELOPMENT REGULATIONS

Subsection 2.4.1(E)(1) of the Land Development Regulations (LDRs) states that, “in determining whether to approve a proposed text amendment to the Land Development Regulations, the City Commission shall find that an application is consistent with the following standards.” These standards are listed below, followed by Staff’s evaluation.

- (a) ***Consistent with Comprehensive Plan – Whether and the extent to which the proposed amendment is consistent with the Comprehensive Plan.***

Evaluation & Findings: These amendments do not conflict with any Goals, Objectives, or Policies of the Comprehensive Plan.

- (b) ***Consistent with Ordinances – Whether the proposed amendment is in conflict with any provision of these LDRs or the City Code of Ordinances.***

Evaluation & Findings: These amendments do not conflict with any provisions of the LDRs or the City Code of Ordinances.

- (c) ***Changed Conditions – Whether and the extent to which there are changed conditions that require an amendment.***

Evaluation & Findings: These amendments would address various subsections which are challenging for Staff to implement, challenging for the application of the subsection to be met by a landowner / developer, or the subsection is in need of further clarification.

- (d) **Community Need** – *Whether and the extent to which the proposed amendment addresses a demonstrated community need.*

Evaluation & Findings: These amendments would address community need by clarifying existing regulations, and by addressing matters that are not currently clearly or fully addressed.

- (e) **Compatible with Surrounding Uses** – *Whether and the extent to which the proposed amendment is consistent with the purpose and intent of the zone districts in these LDRs, or will improve compatibility among uses and will ensure efficient development within the City.*

Evaluation & Findings: To the extent of the applicability of this standard, these amendments would not adversely affect compatibility among uses or result in inefficient development.

- (f) **Development Patterns** – *Whether and the extent to which the proposed amendment would result in a logical and orderly development pattern.*

Evaluation & Findings: These amendments would have no effect upon development patterns.

- (g) **Effect on Natural Environment** – *Whether and the extent to which the proposed amendment would result in significantly adverse impacts on the natural environment, including but not limited to water, air, noise, storm water management, wildlife, vegetation, wetlands, and the natural functioning of the environment.*

Evaluation & Findings: These amendments would not negatively impact the natural environment. The proposed amendment would incentivize the preservation of natural wooded areas and large, mature trees.

- (h) **Public Facilities** – *Whether and the extent to which the proposed amendment would result in development that is adequately served by public facilities (roads, potable water, sewage, storm water management, parks, and solid wastes).*

Evaluation & Findings: These amendments would have no impact to the provision of public facilities.

EXHIBIT “A”
TO
LAND DEVELOPMENT REGULATIONS (LDR) TEXT AMENDMENT
FALL 2018 STAFF-INITIATED AMENDMENTS
STAFF REPORT

SUMMARY TABLE OF PROPOSED CHANGES TO LAND DEVELOPMENT CODE

Section of Code	Description of Change
3.7.2 (C)(5)(d)(iii)	Reference to recommended tree list removed
6.2	Section renamed
6.2.1 (D)(1)	Clarification as to which trees must be mitigated for : ISA “good” or better
6.2.1 (D)(2)	Clarification on protective barricades location and design
6.2.1 (D)(2) new (e)	Restriction on development within dripline of existing trees
6.2.1 (D)(2) new (f)	Section renumbered
6.2.1 (D)(2) new (g)	Clarification on size of replacement tree
6.2.1 (D)(2) new (h)	Requirement for trimming and pruning of regulated trees to be done by certified arborist
6.2.1 (D)(3)(a)	Increase in incentive for retention of preservation area (proposed 3:1 rate)
6.2.1 (D)(4)(a)	Removed champion tree language (discussed later); removed reference to recommended tree list
6.2.1 (D)(4) new (b)	Allows 25% of trees provided for other landscape requirements to be counted towards mitigation
6.2.1 (D)(4) new(c)	Removed reference to recommended tree list
6.2.1 (D)(4) new(d)	Provides requirements for trees provided for mitigation purposes
6.2.1 (D)(4) new(e)	Updated title of referenced source
6.2.1 (D)(4) new(f)	Section renumbered
6.2.1 (D)(4) new(g)	Section renumbered
6.2.1 (D)(4) new(h)	References Public Services Design Requirements

6.2.1 (D)(4) new(i)	Section renumbered
6.2.1 (D)(4) new(j)	Section renumbered
6.2.1 (D)(4) new(k)	Prohibits removal of champion trees unless certain findings are made by City Commission
6.2.1 (D)(5) removed (d)	Section removed
6.2.1 (D)(6)(a)	Clarification on data required for tree mitigation
6.2.1 (D)(7)(c)	Clarification
6.2.1 (D)(7)(d)	Clarification on timing of 1) calculation of payment and agreement with City and 2) actual payment
6.2.1 (E)(3)	Clarification on professional organization standards referenced and standards for trimming of any public trees
6.2.1 (F)(1)(a)	Clarification that heritage and champion trees on single family uses are NOT exempt from tree removal and mitigation process
6.2.1 (F)(1)(g)	Clarification that trees identified on Florida Exotic Pest Plant Council list of invasive plant species are exempt from tree removal and mitigation
6.2.1 (G) new (1)	Clarification of data required for mitigation at time of site plan or preliminary plat
6.2.1 (G) new (1)(c)	Requirement that developer must remove invasive plant species at time of development
6.2.1 (H)(7)(b)	Clarification on professional organization standards referenced
6.2.1 (H)(7) deleted (d)	Deletes reference to Tree Inventory and Management Plan and recommended tree species list
6.2.1 (H)(8)	Permits LDRA to establish technical standards for tree mitigation section
6.2.2 (B) (1),(2),(3)(5)	Applicability modified to not discourage multi-family or attached residential
6.2.2 (B)(7) (8)	Applicability modified to apply to more parking lot development
6.2.2 (C) (1)	Clarification that a tree survey is required
6.2.2 (C) (2)	Clarification of language
6.2.2 (D)(2)(a)(v)	Section removed
6.2.2 (D)(2)(a)(vii)	Decreased slope maximum (slopes for berms could not be as steep as currently allowed)
6.2.2 (D)(2)(b)(ii)	Clarification on location of parking lot buffer

6.2.2 (D)(2)(b)(iv)d	Clarification that other landscape requirements can be used towards the parking lot buffer if they are located within 30' of parking lot area
6.2.2 (D)(3)(b)	Allows for up to 33% of required number of trees to be clustered instead of evenly spaced
Table 6.2-1	Clarification of language; Buffer Type D modified to space trees more appropriately
Table 6.2-2	Increased buffer area between certain commercial uses and SFR; decreased buffer area between certain commercial uses
6.2.2 (D)(3)(f) (iv)	Clarification on permitted utilities within buffer areas
6.2.2 (D)(4)	Language added that limits amount of existing vegetation credited towards any landscape requirement to 75%
Table 6.2-3	Modified Tree Credit Table; significantly incentivized preservation of existing trees
6.2.2 (D)(6)	Creation of new section that would allow for reduction in required landscaping for preservation of a natural wooded open space; would ultimately allow for landscaping to be pushed to rear and/or side of property
6.2.2 (D) new (7)	Section renumbered and renamed
6.2.2 (D)(7)(b)(vi)f	Clarified time that final irrigation plan is due
6.2.2 (D)(7)(b)(ix)	Creation of incentive for 100% Florida Friendly landscaping
6.2.2 (D)(8)(a)	Clarification on approval by City
6.2.2 (D)(9)(a)	Removed reference to Recommended Plant List
6.2.2 (D)(9)(b)(i)	Reference updated to appropriate source
6.2.2 (D)(9)(b)(ii)	Clarification to size of canopy trees caliper
6.2.2 (D)(9)(b) new(iv)	Clarification that palm trees may be used for landscaping but at increased ration of 3:1
6.2.2 (D)(9)(c)	Clarifies and provides standards for raised planters, boxes, and landscape beds
6.2.2 (E) (2)	Clarification on exceptions for freezing conditions
6.2.2 (H)	Provides for an overall limitation on reduction , provides for a minimum amount of landscaping materials (20%) to be provided regardless of number of incentives used

6.2.2 (I)	Allows for LDRA to create a technical manual to provide more detail on requirements of this section
6.2.3 (E)	Reduces arterial frontage trees and clarifies that driveways at property lines do not count towards required linear feet calculation
6.2.3 (F)	Removed reference to Recommended Tree List
Article 10	Definitions added for Florida Friendly Landscaping, Quality tree protection area
Appendix 6.2.2 A	Deleted