

CHAPTER FIVE
LANDSCAPING, BUFFERING, AND TREE PRESERVATION

| | |
|--|-----------|
| 5100. GENERAL REQUIREMENT..... | 1 |
| 5101.APPLICABILITY | 1 |
| 5210. NEW DEVELOPMENTS | 1 |
| 5220. EXISTING DEVELOPMENTS | 1 |
| 5300. USE CATEGORIES | 2 |
| 5400. LANDSCAPE BUFFER TYPES | 2 |
| 5500. DEFINITIONS OF LANDSCAPE BUFFER TYPES | 4 |
| 5510.WALL | 4 |
| 5520.SHRUBS | 5 |
| 5530.TREES..... | 6 |
| 5540. LOCATION OF VEGETATION..... | 7 |
| 5550. REQUIRED BUFFER TYPE..... | 7 |
| 5560. USE OF LANDSCAPE BUFFER AREAS | 8 |
| 5570. MAINTENANCE | 8 |
| 5600. VEGETATION REQUIREMENTS | 8 |
| 5610. RECOMMENDED TREES..... | 9 |
| 5620. RECOMMENDED SHRUBS AND HEDGES..... | 10 |
| 5630. PROHIBITED PLANT SPECIES..... | 12 |
| 5700. TREE PRESERVATION AND PROTECTION STANDARDS | 14 |
| 5705.AUTHORITY AND SCOPE | 14 |
| 5710.GENERAL PROVISIONS..... | 15 |
| 5715.EXEMPTIONS | 15 |
| 5720.RESIDENTIAL DEVELOPMENT STANDARDS | 16 |
| 5725.NONRESIDENTIAL DEVELOPMENT STANDARDS | 17 |
| 5730.SUBDIVISION STANDARDS..... | 18 |
| 5735.CANOPY AND TREE-LINED SCENIC ROAD PROTECTION..... | 19 |
| 5740.TREE PROTECTION STANDARDS | 22 |
| 5745.REFORESTATION STANDARDS | 23 |
| 5750.MITIGATION REQUIREMENTS..... | 23 |
| 5800. CANOPY PROTECTION OF RED-COCKADED WOODPECKER COLONIES | 28 |

CHAPTER FIVE
LANDSCAPING, BUFFERING, AND TREE PRESERVATION

5100. GENERAL REQUIREMENT

A landscaping area is required along the perimeter of the proposed development whenever the development abuts a different type of use. The existing use or, where vacant, the permitted use of the abutting property will determine the type of landscape area required for the proposed development. Landscape areas may not be located on any portion of an existing or dedicated street right-of-way or roadway easement.



5101. APPLICABILITY

5210. NEW DEVELOPMENTS

All new development must meet the buffering requirements of this section.

5220. EXISTING DEVELOPMENTS

Existing landscapes that do not comply with the provisions of this section must be brought into conformity when:

1. The vehicular use area is altered or expanded in any manner other than re-striping or re-marking;
2. The building square footage is increased by more than 50 percent; and/or
3. There has been a discontinuance of use for a period of 365 days or more.

5300. USE CATEGORIES

In interpreting and applying the provisions of this section, development is classified into the following categories, each of which includes various land use districts as defined in this Code. The use categories for landscape purposes are:

- A. Agriculture
 - 1. AGR, Agriculture
 - 2. CON, Conservation
 - 3. RUR, Rural Residential

- B. Residential
 - 1. CL, Low Intensity Coastal and Lakes
 - 2. CLR, Coastal Lakes Residential
 - 3. CRR, Central Ridge Residential
 - 4. LDR, Low Density Residential
 - 5. MDR, Medium Density Residential
 - 6. HDR, High Density Residential
 - 7. PDR, Planned Development Residential
 - 8. MHP, Mobile Home Park
 - 9. RVP, Recreational Vehicle Park

- C. Commercial
 - 1. PSO, Professional Service Office
 - 2. CLC, Coastal Lakes Commercial
 - 3. NEC, Neighborhood Commercial
 - 4. GNC, General Commercial
 - 5. PSI, Public, Semi-Public, Institution
 - 6. REC, Recreation
 - 7. RAC, Rural Activity Center

- D. Industrial
 - 1. LIND, Light Industrial
 - 2. IND, Heavy Industrial
 - 3. EXT, Extractive
 - 4. TCU, Transportation, Communication, Utilities
 - 5. PORT

5400. LANDSCAPE BUFFER TYPES

There are several landscape buffer types, as described below. Each type includes a minimum width and a minimum number of trees and shrubs per 100-linear-foot segment of boundary.

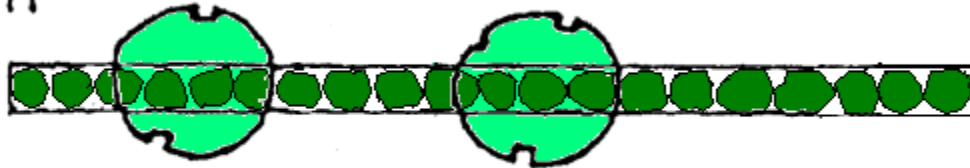
The various types are:

A. Buffer A:

1. Minimum width: five feet minimum; 10 feet preferred (if available)
2. Minimum number of trees: two
3. Minimum number of shrubs: 20

WIDTH

5' min
(10'
(preferred)



Type A Buffer

B. Buffer B:

1. Minimum width: 10 feet minimum; 15 feet preferred (if available)
2. Minimum number of trees: four
3. Minimum number of shrubs: 20

WIDTH

10' minimum
(15'
preferred)



Type B Buffer

C. Buffer C:

1. Minimum width: 15 feet minimum; 20 feet preferred (if available)
2. Minimum number of trees: six
3. Minimum number of shrubs: 24

WIDTH

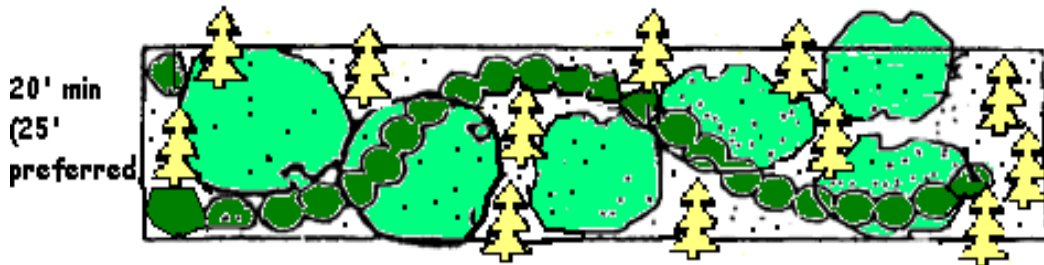
15' min
(20'
preferred)



Type C Buffer

D. Buffer D:

1. Minimum width: 20 feet minimum; 25 feet preferred (if available)
2. Minimum number of trees: six with a wall
3. Minimum number of shrubs: 24
4. Minimum number of conifers: 12



Type D Buffer

- E. For projects that propose to retain 150-foot undisturbed area between the extent of the development and the property line, the TRT may grant an exemption from buffering requirements of this section. This exemption does not apply to industrial, extractive, or outdoor recreation uses. Additionally, the site plan must show the undisturbed area has an existing mixture of grass, trees, and shrubs, and other vegetation that would serve in the same capacity as the required buffer.

5500. DEFINITIONS OF LANDSCAPE BUFFER TYPES

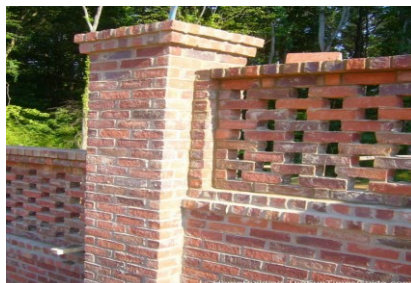
5510. WALL

A solid wall, berm, or wall and berm combination, not less than six feet in height designed to ensure that historic surface water and ground water flows are accommodated.

- A. The design and function of any wall must be compatible with existing and proposed site architecture as well as with the existing use of any abutting property.

B. Walls must be constructed of:

1. Brick;



2. Stone (rough cut, flagstones or ledge);
3. Formed concrete; or



4. Concrete blocks faced with tile, bricks, blocks, precast units, or ashlar



5520. SHRUBS

Shrubs, if planted, must be in staggered rows and be maintained.

- A. For type A and B buffers, so as to form a visual screen at least 24 inches in height within one year after the time of planting.
- B. For type C buffers, so as to form a continuous visual screen 36 inches in height within one year after the time of planting.
- C. For type D buffers, so as to form a continuous visual screen 48 inches in height within one year after the time of planting, and maintained thereafter to reach at least 60 inches in height.

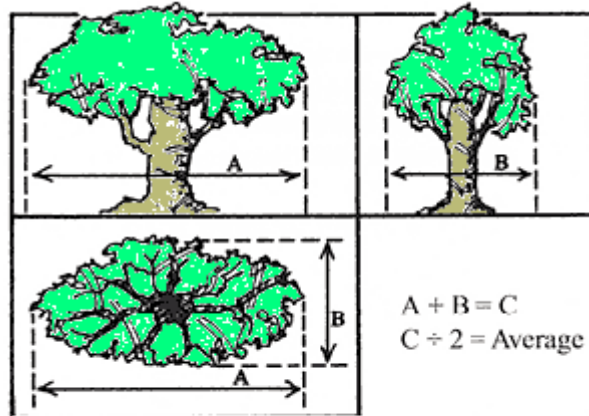


5530. TREES

Trees may be planted in a single row or grouped and must be maintained. All trees, except palms, must be a minimum of six feet in height with a minimum caliper width of at least two inches when measured at six inches above grade immediately after planting.



In the case of palms, the required height shall be six feet measured from ground level to base of fronds. At maturity, trees shall have a crown spread, measured at the diameter of the crown, averaging fifteen feet. Trees having a mature crown spread of less than fifteen feet may be grouped to create the equivalent of a crown spread of fifteen feet, but such groupings shall only count for one required tree under the provisions of this ordinance.



Measuring crown of tree

5540. LOCATION OF VEGETATION

The buffer is measured from the property line and the required trees and shrubs must be within the proposed buffer; when the buffer includes a wall as well as vegetation, the required trees and shrubs must be located between the wall and the property line of the property to be protected from the proposed use. Alternative plans for the location of required tree plantings may be considered where buffers are located directly adjacent to overhead utility lines.

5550. REQUIRED BUFFER TYPE

The table below describes the required buffer type when abutting a different use with the following exceptions:

The Land Development Director may reduce any buffer required in this section upon receipt of evidence that the abutting property owner will be unaffected if a lesser buffer type is installed; however, the Land Development Director may reduce the required buffer by no more than two types, e.g., from D to B, or C to A, and the Director may not entirely eliminate a required buffer.

| Buffer Requirements | | | | |
|----------------------------|-----------------------------------|------------|------------|------------|
| | Permitted or Existing Uses | | | |
| Proposed use | Ag | Res | Com | Ind |
| Agriculture | None | A | None | None |
| Residential Subdivision | A | None* | B | B |
| Commercial | C | C | None* | B |
| Industrial | C | D | D | None* |

* Sodded strip required between like uses

- A. Additional standards for buffering may apply for individual uses found in Chapter Three of this LDC. In all other cases, any off-street parking area that abuts a public right-of-way shall include a landscape strip on the perimeter of the parking area adjacent to the right-of-way. This landscaped strip shall be a minimum Type A Buffer.

5560. USE OF LANDSCAPE BUFFER AREAS

Required landscape buffer areas may be used for passive recreation such as pedestrian, bike, or equestrian trails, provided that:

- A. No required trees, shrubs, hedges, or walls are eliminated;
- B. Not more than 20 percent of the width of the buffer is impervious surface;
- C. The total width of the buffer area is maintained; and
- D. All other requirements of this section are met.

5570. MAINTENANCE

The land owner shall be responsible for the maintenance of all buffer areas which shall be maintained so as to present a healthy, neat and orderly appearance at all times and shall be kept free of refuse and debris. All planted areas shall be provided with an adequate water supply to ensure healthy growth and development. Maintenance includes the prompt replacement of all dead plant materials.

5600. VEGETATION REQUIREMENTS

Where practical, native species or species recognized as *Florida Friendly Landscaping*™ should be planted to meet the requirements of this article. All buffer plantings should be chosen to minimize the need for artificial irrigation. However, artificial irrigation must be provided where buffer vegetation will not survive without such irrigation.

5610. RECOMMENDED TREES

American Hophornbeam (*Ostrya virginiana*)
Bald Cypress (*Taxodium distichum*)
Bluejack Oak (*Quercus incana*)
Chickasaw Plum (*Prunus angus tifolia*)
Crepe Myrtle (*Lagerstroemia indica*)
Eastern Redbud (*Cercis canadensis*)
Laurel Oak (*Quercus laurifolia*)
Live Oak (*Quercus virginiana*)
Lobloby Bay (*Gordonia lasianthus*)



Lobloby Bay tree

Loquat (*Eriobotrya japonica*)
Longleaf Pine (*Pinus Palustris*)
Pignut Hickory (*Carya glabra*)
Pindo Palm (*Butia capitata*)
Pond Cypress (*Taxodium ascendens*)
River Birch (*Betula nigra*)



River Birch tree

Sabal or Cabbage Palm (*Sabal palmetto*)
Sand Pine (*Pinus clausa*)
Southern Magnolia (*Magnolia grandiflora*)
Southern Red Cedar (*Juniperus silicicola*)
Southern Red Maple (*Acer rubrum*)
Spruce Pine (*Pinus glabra*)
Sweetbay (*Magnolia virginiana*)
Sweetgum (*Liquidambar styraciflua*)
Sycamore (*Plantanus occidentalis*)
Tulip Poplar (*Liriodendron tulipifera*)



Tulip Poplar tree (flower)

Turkey Oak (*Quercus laevis*)
Water oak (*Quercus nigra*)
White Ash (*Fraxinus americana*)
Wild Olive (*Osmanthus americanus*)
Winged Elm (*Ulmus alata*)

5620. RECOMMENDED SHRUBS AND HEDGES

Beautyberry (*Callicarpa americana*)
Butterfly Bush (*Buddleia lindleyana*)
Chinese Holly (*Ilex cornuta* and cvs.)
Christmas berry (*Lycium carolinianum*)
Coontie (*Zamia floridana*)
Coral bean (*Erythrina herbacea*)
Crinum lily (*Crinum asiaticum*)
Dwarf Palmetto (*Sabal minor*)
Fetterbush (*Lyonia lucida*)
Firebush (*Hamelia patens*)



Firebush shrub

Florida privet (*Forestiera segregata*)
Glossy Abelia (*Abelia x grandiflora*)
Hawthorne (*Crataegus* spp.)
Holly, Stokes dwarf (*Ilex vomitoria*)
Holly, Dahoon (*Ilex cassine*)
Indian Hawthorne (*Raphiolepis* spp. and cvs.)
Japanese Plum Yew (*Cephalotaxus harringtonia*)
Ligustrum (*Ligustrum japonicum* and cvs.)
Mary Nell Holly (*Ilex* 'Mary Nell')
Oakleaf Hydrangea (*Hydrangea quercifolia*)



Oakleaf Hydrangea bush

Red Star Hibiscus (*Hibiscus coccinea*)
Simpson's Stopper (*Myrcianthes fragrans*)
Walter's viburnum (*Viburnum obovatum*)
Wax Myrtle (*Myrica cerifera*)

5630. PROHIBITED PLANT SPECIES

All plants listed by the Florida Department of Environmental Protection as “invasive species” are prohibited for use in buffer zones. In addition, the following trees and shrubs are specifically prohibited for use in buffer zones:

Air potato (*Dioscorea bulbifera*)
Australian Pine (*Casuarina* spp.)
Banyan Tree (*Ficus benghalensis*)
Brazilian pepper (*Schinus terbinthifolius*)



Brazilian Pepper

Catclaw Mimosa (*Mimosa pigra*)
Carrotwood (*Cupania anacoardioides*)
Chinese Tallow (*Sapium seiviferum*)
Climbing Fern (*Lygodium* spp.)
Cuban Laurel (*Ficus nitida*)
Earleaf acacia (*Acacia auriculiformis*)



Earleaf acacia

Eucalyptus (*Eucalyptus* spp.)
Indian Rosewood (*Dalbergia sissoo*)
Java Plum (*Syzygium jambolana*)
Lead tree (*Leucaena leucocephala*)

Lather leaf (*Colubrina asiatica*)
Melaleuca (*Melaleuca quinquenervia*)



Melaleuca

Rubber tree (*Ficus decora*)
Silk Oak (*Grevillea robusta*)
Weeping Fig (*Ficus benjamina*)
Women's Tongue (*Albizia lebbek*)

The following shrubs are specifically prohibited for use in buffer zones:

Beach Naupaka (*Scaevola sericea*)
Downy Rose Myrtle (*Rhodomyrtus Tomentosa*)
Surinam Cherry (*Eugenia michelii*)



Surinam Cherry

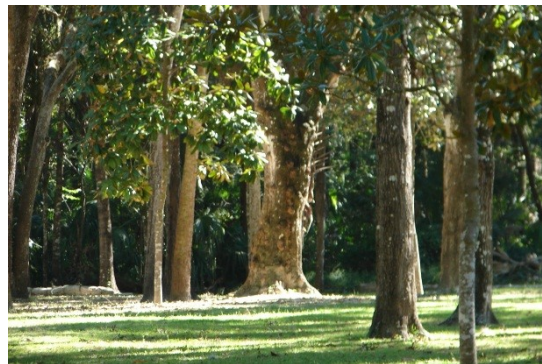
5700. TREE PRESERVATION AND PROTECTION STANDARDS

5705. Authority and Scope

- A. For the purposes of this section, a protected tree (herein called a 'tree') shall be any perennial, woody plant measuring four inches or greater in diameter at breast height (dbh); (12.6 inches in circumference). Breast height is defined as four and one-half feet above grade.



- B. Trees of over 24 inches dbh (75.4 inches in circumference) shall be designated 'Specimen Trees' and given special standards for protection.
- C. No protected tree, unless exempt from the requirements of this chapter, shall be removed without a development permit. Applications for permits shall be filed and reviewed under the procedure outlined in this LDC.



- D. Loss of trees and tree canopy, unless otherwise exempt from the requirements of this chapter, shall be offset through the mitigation standards contained herein.
- E. The definition of 'tree removal' shall include the felling and/or topping of trees, pruning of more than 30 percent of the crown of any tree, and causing

damage to the branches, trunk, or root system of any tree to shorten its life. Determination of such damage can be provided by a Forestry Consultant, Certified Arborist, or other professionally qualified individual.

- F. Residential development shall be defined as the construction of single family or duplex dwellings on individual lots of record. All other development shall be defined as nonresidential development.

5710. GENERAL PROVISIONS

- A. Except for residential development, tree removal outside of an approved construction footprint, the Firewise Program footprint, and where there are other site requirements shall be prohibited. The Land Development Division Director or his/her designee may approve additional tree removal under the following circumstances: ecological restoration work, alleviation of wildfire hazard, avoiding vehicular or pedestrian hazard, ensuring the structural integrity of buildings, necessary grading work on sloping properties, and the provision of essential services. Removing trees for the purpose of filling the regulatory floodplain on vacant property is not considered a special circumstance and is subject to the mitigation requirements contained herein.
- B. Trees may be removed from within a wetland, surface water body, or construction buffer area required by this LDC, if the area in question is covered by an approved State Environmental Resource Permit or its successor.
- C. Trees within and adjacent to certain scenic tree-lined and canopied road rights-of-way, as listed in the following table, are hereby provided special protection standards as contained herein.
- D. Tree removal on all vacant land (defined in this section as property on which no County building or development permit has been approved or on which no habitable structure exists) shall be subject to the mitigation requirements contained herein. A vacant property tree removal permit shall be required and shall be valid for 180 days from issuance. A request for extension shall be made in writing to the Director of the Land Development Division prior to the expiration.

5715. Exemptions

The following types of tree removal may be undertaken without a permit:

- A. Tree removal on residential lots of record developed with one or more habitable dwelling units.

- B. Tree removal on publicly owned land that has the approval of the governing land-managing agency.
- C. Agriculture operations (new or existing) that are allowable in the land use district in which the activity takes place.
- D. The installation and maintenance of utilities within existing road rights-of-way or within utility easements. Non-emergency operations affecting scenic tree-lined and canopied road sections shall require a permit.
- E. Department of Public Works (or their designee) rights-of-way maintenance operations and emergency work.
- F. Removal of trees that are fallen, irreversibly diseased (to include terminal insect infestations), dead, or listed as 'invasive' this LDC or by the FLEPPC - Florida Exotic Pest Plant Council. Proof of these conditions should be supplied to the Land Development Director or his/her designee.
- G. In developments containing commonly owned lands, e.g., a greenbelt, the authorized managing agency may selectively remove individual trees in common areas under conditions that meet the criteria of 'special circumstances' described in this LDC.
- H. Approved Planned Unit Developments, as of the adoption date of this ordinance, shall be exempt from these provisions but shall comply on an individual lot basis when lots are developed, unless Planned Unit Development standards provide specific standards for tree preservation.

5720. RESIDENTIAL DEVELOPMENT STANDARDS

- A. Trees shall be preserved or planted as follows:

| Residential Lot Size | Minimum Number of Required Trees |
|--|--|
| Lots 10,890 square feet or less | Two trees |
| Lots greater than 10,890 square feet, but less than 21,780 square feet | Four trees |
| Lots greater than 21,780 square feet, but less than 32,760 square feet | Five trees |
| Lots greater than 32,760 square feet, but less than 43,560 square feet | Six trees |
| Lots greater than 43,560 square feet | Eight trees minimum with one tree for every additional 3,000 square feet over 43,560 square feet or fraction thereof |

The following are exceptions to the minimum number of required trees:

1. There are insufficient trees existing on the property before development to meet the minimum tree preservation requirements, and non-permitted tree removal has not taken place on the property.
 2. The property is part of an approved planned unit development, less than 10,000 square feet in area, and subject to building setbacks smaller than the standard LDC requirements.
- B. If there are insufficient trees existing on the property before development to meet the minimum standard or if no tree removal will take place during development, an affidavit to that effect will be provided to the County as part of the building permit.



- C. Requests for tree removal shall include provisions for tree preservation on a sketch plan of the subject property drawn to scale showing all proposed improvements, the proposed areas of trees to be preserved and the proposed areas to be cleared. Any proposed tree plantings needed to meet minimum preservation requirements shall also be shown. This will be made part of the building permit application.

5725. NONRESIDENTIAL DEVELOPMENT STANDARDS

- A. Developers or property owners must show the County that reasonable measures have been taken to design and locate all proposed development so that tree removal is minimized.
- B. A minimum of 10 trees for every acre will be maintained on all nonresidential property with one tree for every additional 4,356 square feet or fraction thereof. Trees within required buffers and landscaping may count towards this base minimum standard.
- C. 'Specimen' trees shall be preserved and protected from development. In the event this is not possible, mitigation requirements will be met as contained in this LDC.

- D. An approved plan for tree protection will be required by the County as part of a site development plan, site improvement plan, or subdivision plat. The plan shall include the following elements:
1. Statement of justification for tree removal outside of the approved construction footprint, the Firewise Program footprint, and where there are other site requirements, with a schedule for any proposed reforestation and a description of methods for tree protection during development.
 2. Location of all regulated trees to be preserved, removed, and replaced. For areas of closed tree canopy an aerial photograph (most recent available and of appropriate scale), can be submitted to define areas of tree preservation. All 'specimen' trees will be located individually by species and dbh. A notation establishing the minimum tree preservation requirements for the property shall be included.
 3. *On-site verification*. Standards to assist staff during site inspection shall be noted on the plan. Trees to be preserved/removed shall be individually tagged or corralled off. Red tags/tape shall mark trees proposed for removal and blue for preservation, or as otherwise noted.

5730. SUBDIVISION STANDARDS

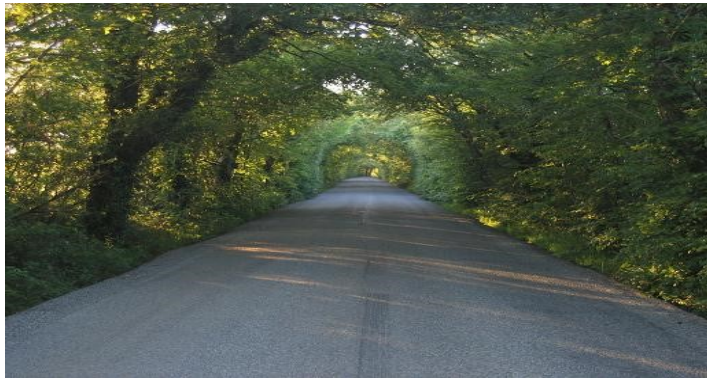
- A. A plan shall be required before any Preliminary Plat is approved by the County. If no tree removal will take place as a result of proposed improvements, an affidavit to that effect shall be provided to the County as part of the preliminary plat application.
- B. The subdivision should be designed so that tree removal is minimized.
- C. 'Specimen' trees shall be preserved and protected. If this provision cannot be met, mitigation requirements shall be met consisting of reforestation with an equal number of tree diameter inches, or a payment of one tree credit per four inches of dbh removed.
- D. The plan shall include the following:
1. An aerial photograph (most recent available), with overlay of the proposed plat.
 2. The location and dbh of all specimen trees within all areas impacted by improvements and construction activities.



5735. CANOPY AND TREE-LINED SCENIC ROAD PROTECTION

Trees that line certain sections of roads within the county are afforded special protection. The applicable road sections are individually listed in this chapter.

- A. Removal of any regulated tree within an area extending 50 feet on either side of the centerline of the pavement shall require a tree removal permit and include a written justification to the Land Development Division Director or his/her designee.
- B. Any tree approved for removal shall be replaced by the same number of trunk diameter inches as those removed. Replacement trees shall be of the same species as those removed. An exception is made to allow one access point of minimum required width to a previously undeveloped property.
- C. Non-permitted tree removal within protected road sections will be addressed through the mitigation requirements contained herein.



CANOPY AND TREE-LINED SCENIC ROADS

| Location | Road or Road Segment |
|---------------------------|---|
| Chassahowitzka | W. Miss Maggie Drive from S. Woodward Point west to the boat ramp |
| Crystal River Area | N. Basswood Avenue between W. Belvedere Street and W. Riverwood Drive |
| | W. Fort Island Trail from N. Palm Springs Terrace to Fort Island Beach |
| | W. Lancelot Court |
| | N. Old Tallahassee Road between W. State Park Street and W. Lancelot Court |
| | W. Riverwood Drive between N. Basswood Avenue and N. Northcut Avenue |
| Floral City Area | S. Annie Terrace |
| | S. Aroostook Way |
| | S. Baker Avenue |
| | S. Bedford Road from E. Jane Lane south to the Hills of Rest Cemetery |
| | S. Carmen Terrace |
| | S. Choron Terrace |
| | S. Church Terrace |
| | S. College Terrace |
| | S. Duval Terrace |
| | S. Fanny Terrace |
| | E. Gobbler Drive from S. Old Floral City Road to the end of the Good Council Camp |
| | S. Great Oaks Drive between E. Orange Avenue and E. Daniels Road |
| | S. Heather Point |
| | E. Jefferson Street |
| E. Magnolia Street | |

CANOPY AND TREE-LINED SCENIC ROADS

| Location | Road or Road Segment |
|-----------------------|---|
| | E. Marvin Street |
| | S. Mick Point |
| | S. Old Floral City Road between E. Orange Avenue and E. Gobbler Drive |
| | E. Orange Avenue |
| | E. Walnut Lane |
| | E. Washington Lane |
| Homosassa Area | W. Aqueduct Street between S. Pittsburgh Avenue and S. East Park Way |
| | W. Bavarian Street west of S. East Park Way |
| | S. Centennial Avenue north of W. Grover Cleveland Boulevard |
| | S. East Park Way between W. Homosassa Trail and W. Grover Cleveland Boulevard |
| | W. Fishbowl Drive between W. Hall's River Road and W. Yulee Drive |
| | W. Hall's River Road, between 0.2 and 1.2 miles west of US-19 |
| | S. Illinois Terrace between W. Homosassa Trail and W. Grover Cleveland Boulevard |
| | S. Indiana Terrace between W. Homosassa Trail and W. Grover Cleveland Boulevard |
| | S. Mason Creek Road from W. Creek Lane south to the boat ramp |
| | S. Michigan Boulevard from W. Homosassa Trail to S. Stonebrook Drive |
| | S. Minnesota Terrace |
| | S. Ohio Avenue between W. Homosassa Trail and W. Grover Cleveland Boulevard |
| | W. Ox-Eye Place between W. Homosassa Trail and S. East Park Way |
| | S. Pittsburgh Avenue between W. Homosassa Trail and W. Grover Cleveland Boulevard |
| | W. Spring Cove Road |
| | S. Stonebrook Drive from S. Michigan Boulevard to W. Promenade Drive |
| | W. Yulee Drive between W. Fishbowl Drive and W. Central Street |

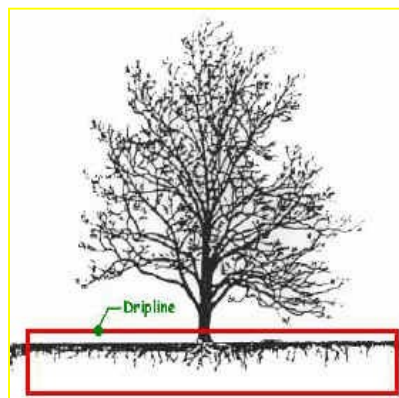
CANOPY AND TREE-LINED SCENIC ROADS

| Location | Road or Road Segment |
|--------------------------|--|
| Inverness Area | E. Eden Drive/E. Moccasin Slough Road from Carnegie Drive east about 0.4 miles to Bellamy Grove |
| Ozello | S. John Brown Drive S. and W. Ozello Trail from W. Holloway Path to Pirates Cove |
| Rock Crusher Area | N. Bearmount Terrace between W. Fox Lane and SR-44 W. Fox Lane between N. Rockcrusher Road and N. Bearmount Terrace |

5740. TREE PROTECTION STANDARDS

To ensure the health and survival of preserved trees within the project construction area, the following measures shall be required before any land clearing, grading, or construction operations take place:

- A. A highly visible tree protection barrier, at least 36 inches in height, shall be placed around the drip line of protected trees except residential homesites which may use plastic ribbons or other temporary marking measures. The barrier may not be closer than five feet, nor need be further than 20 feet, from the trunk of any protected tree.



- B. Large areas containing trees to be preserved may be staked off with stakes being a maximum of ten feet apart, connected by plastic ribbon, and setback from the drip line of all protected trees.
- C. No equipment, chemicals, debris, or other stored material shall be placed within tree protection areas.

- D. Where grade cuts are necessary within the tree drip line, proper root pruning will take place and be overseen by a qualified individual.
- E. Raising the grade within the tree drip line will not be permitted unless an appropriate dry well and drainage design is approved by the County.

5745. REFORESTATION STANDARDS

- A. A plan will be required to detail the species, location, and numbers of required plantings.
- B. Replanted trees will either be the same species as those removed or a native species of similar mature height placed in an appropriate growing environment, and be within the same tree category. No single species will make up more than 40 percent of the plantings unless there is a proven ecological benefit defined by a qualified individual.
- C. Trees planted adjacent to utility lines and other potential hazards will be of a species of an appropriate type and mature height.
- D. Each tree will be of Florida Grade #1 nursery stock or better, as defined by the Grades and Standards for Nursery Plants (GSNP) of Florida Department of Agriculture and Consumer Services or its successor agency, and a minimum size of two inches caliper. Caliper is defined as six inches above grade. Trees from the County's Tree Enhancement Program are exempt from this provision.
- E. Replacement trees on nonresidential property should not be planted within ten feet of any existing or proposed pavement, building, or property line, and be a minimum of 15 feet from any other tree unless otherwise approved by the County. Establishment of trees within buffers and landscaped areas required by this LDC may count toward these reforestation standards, subject to review by the Land Development Division Director.
- F. Trees planted to meet reforestation requirements will be maintained in a healthy condition for a minimum of one year or until they are fully established.

5750. MITIGATION REQUIREMENTS

To ensure the purpose and intent of the tree preservation and protection standards, certain circumstances will require either on-site or in-kind reforestation.

The Citrus County Landscape Enhancement Fund (LEF) has been established to offset loss to the county's trees and tree canopy and provide for in-kind reforestation. LEF funds may be used for tree planting projects by the County or

other non-profit groups on County property and for other projects that advance tree preservation and further the intent of this ordinance. Payment to the fund will be by tree credit. A tree credit will be based on the current existing dollar value of installing a two-inch caliper live oak (*Quercus virginiana*), Florida Grade #1 stock. A tree credit is currently set at \$125.00, which figure may be amended periodically by resolution of the Board of County Commissioners.

- A. All tree removal on residential property that results in a reduction of trees below the minimum tree preservation standards will require either reforestation with sufficient diameter inches to address the deficiency of required trees, or payment of one tree credit per deficient tree to the LEF.
- B. Tree removal on nonresidential property without a required permit, tree removal on all property that deviates from an approved TPP or tree removal permit, and tree removal on all vacant land without a tree removal permit will require either reforestation with trees equal to the number removed or a payment of one tree credit per 1,000 square feet of affected area.

Any affected area will be measured as a series of squared off units each of 1,000 square feet. Estimates of tree numbers will be made through aerial photograph interpretation or extrapolated from comparable properties.

- C. Removal of Specimen Trees, except on residential lots of record, will require reforestation with an equal number of tree diameter inches, or a payment of one tree credit per four inches dbh removed.
- D. Removal of regulated trees within a canopy and tree-lined scenic road section without a permit will require reforestation with 1.5 times the tree diameter inches or a payment of one tree credit per two inches dbh removed. Replacement trees shall be of the same species as those removed.

INVASIVE EXOTIC TREE SPECIES

| | |
|--|---------------------------------|
| <p>These tree species are altering native plant communities by displacing and/or hybridizing with native plant *(IT MAY BE ILLEGAL TO CULTIVATE OR POSSESS THESE TREE SPECIES)</p> | |
| Australian Pine | <i>Casuarina equisetifolia</i> |
| Catclaw (Black) Mimosa | <i>Mimosa pigra</i> |
| Brazilian Beefwood | <i>Casuarina glauca</i> |
| Brazilian Pepper | <i>Schinus terebinthefolius</i> |
| Camphor Tree | <i>Cinnamomum camphora</i> |
| Chinaberry | <i>Melia azedarach</i> |
| Chinese Tallow | <i>Sapium sebiferum</i> |
| Melaleuca (Punk tree) | <i>Melaleuca quinquenervia</i> |
| Silk Tree (Mimosa) | <i>Albizia julibrissin</i> |

**REFORESTATION GUIDELINES AND INVENTORY OF
TREE SPECIES NATIVE TO CITRUS COUNTY**

| Common Name | Scientific Name | Mature Height | Suitable Growing Environment D = Deciduous E = Evergreen C = Cone-bearing |
|--|--------------------------------|---------------|--|
| *Tree species not listed may be used for reforestation at the discretion of the Land Development Director or his/her designee. | | | |
| Category I: Native Evergreen and Mixed Overstory | | | |
| Buttonwood | <i>Conocarpus erectus</i> | 65' | E, coastal hammock, swampy areas |
| Cypress, Bald | <i>Taxodium distichum</i> | 100' | D, C, along ponds, lakesides and flowing water |
| Cypress, Pond | <i>Taxodium ascendens</i> | 80' | D, C, flatwood ponds, mainly coastal wet areas |
| Elm, American | <i>Ulmus americana</i> | 100' | D, moister upland areas |
| Hickory, Pignut | <i>Carya glabra</i> | 120' | D, variety of upland areas |
| Hickory, Water | <i>Carya aquatica</i> | 100' | D, floodplains, riverbanks |
| Magnolia, Southern | <i>Magnolia grandiflora</i> | 100' | E, moist upland woods |
| Mangrove, Black | <i>Avicennia germinans</i> | 60' | E, coastal inter-tidal zone |
| Mangrove, White | <i>Laguncularia racemosa</i> | 60' | E, coastal inter-tidal zone |
| Mangrove, Red | <i>Rizophora mangle</i> | 80' | E, coastal inter-tidal zone |
| Oak, Diamond Leaf | <i>Quercus laurifolia</i> | 100' | D, floodplains, moist areas |
| Oak, Live | <i>Quercus virginiana</i> | 70' | E, variety of well drained upland sites |
| Oak, Sand Live | <i>Quercus geminata</i> | 60' | E, excessively drained soil, scrub only |
| Oak, Swamp Chestnut | <i>Quercus michauxii</i> | 100' | D, floodplains, limestone surface areas |
| Oak, Water | <i>Quercus nigra</i> | 100' | D, moist woods, typically near wetlands |
| Poplar, Yellow (Tuliptree) | <i>Liriodendron tulipifera</i> | 100' | D, moist soils, bluffs adjacent to water |
| Pine, Longleaf | <i>Pinus palustris</i> | 100' | E, C, sandy soils of flatwoods and upland ridge |
| Pine, Sand | <i>Pinus clausa</i> | 80' | E, C, excessively drained soil, scrub only |
| Category II: Mixed Overstory and Understory | | | |
| Ash, Carolina | <i>Fraxinus caroliniana</i> | 40' | D, swamps, moist woods, pond sides |

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| Ash, Green | <i>Fraxinus pennsylvanica</i> | 100' | D, floodplains, swamps |
| Ash, Prickly (Hercules Club) | <i>Zanthoxylum clavaherculis</i> | 55' | D, coastal hammocks, wet woods, sand dunes |
| Ash, White | <i>Fraxinus americana</i> | 80' | D, rich soils. Mixed woodland areas |
| Basswood, American | <i>Tilia americana</i> | 70' | D, moist mixed wooded areas |
| Blackgum | <i>Nyssa biflora</i> | 80' | D, swamps, fresh water margins |
| Boxelder | <i>Acer negundo</i> | 65' | D, floodplains, moist woods |
| Buckthorn, Carolina | <i>Rhamnus caroliniana</i> | 40' | D, moist deciduous forested areas |
| Cottonwood, Eastern | <i>Populus deltoides</i> | 90' | D, bottomlands, wet woodlands |
| Elm, Winged | <i>Ulmus alata</i> | 40' | D, floodplains, well drained soils |
| Holly, American | <i>Ilex opaca</i> | 45' | E, moist woods, variety of upland areas |
| Holly, Dahoon | <i>Ilex cassine</i> | 40' | E, cypress ponds, flatwood depressions, wetlands |
| Hophornbeam, Eastern | <i>Ostrya virginiana</i> | 50' | D, mixed moist woodlands |
| Loblolly Bay | <i>Gordonia lasianthus</i> | 50' | E, swamps, flatwood edges |
| Magnolia, Sweetbay | <i>Magnolia virginiana</i> | 60' | E, swamps, wetlands |
| Maple, Florida (Sugar) | <i>Acer saccharum</i> | 80' | D, moist upland areas, depressions |
| Maple, Red | <i>Acer rubrum</i> | 60' | D, moist woods, swamps and other wet areas |
| Oak, Laurel | <i>Quercus hemisphaerica</i> | 80' | E, moist, sandy upland areas |
| Oaks (not otherwise listed) | <i>Quercus spp.</i> | 25' – 60' | D-E, well to excessively drained sandy soils |
| Persimmon, Common | <i>Diospyros virginiana</i> | 50' | D, variety of upland habitats |

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| Red Bay | <i>Persea borbonia</i> | 50' | E, hammocks, bluffs, moist areas |
| Sassafrass | <i>Sassafrass albidum</i> | 40' | D, dry bluffs, disturbed sites |
| Sugarberry (Hackberry) | <i>Celtis laevigata</i> | 75' | D, moist woods, upland woods |
| Swamp Bay | <i>Persea Palustris</i> | 40' | E, swamps and other wetland areas |
| Sweetgum | <i>Liquidambar styraciflua</i> | 100' | D, moist lowland woods |
| Water Locust | <i>Gleditsia aquatica</i> | 80' | D, floodplains, river swamps |
| Category III: Native Palms and Cone-bearing Evergreens | | | |
| Cedar, Eastern Red | <i>Juniperus virginiana</i> | 40' | E, C rocky outcrops, upland and lowland |
| Palm, Cabbage (Sabal) | <i>Sabal palmetto</i> | 60' | E, upland, mainly coastal areas |
| Pine, Loblolly | <i>Pinus taeda</i> | 100' | E, C, variety of upland and lowland areas |
| Pine, Pond | <i>Pinus serotina</i> | 60' | E, C, wet areas, shallow ponds |
| Pine, Slash | <i>Pinus elliotii</i> | 130' | E, C, moist sandy areas |
| Category IV: Mixed Small Understory | | | |
| Buckeye, Red | <i>Aesculus pavia</i> | 30' | D, bottomland, rich mesic woods |
| Bumelia, Gum | <i>Bumelia lanuginosa</i> | 30' | D, dry, sandy uplands |
| Bumelia, Tough | <i>Bumelia tenax</i> | 20' | D, interior scrub and other dry areas |
| Carolina Laurel Cherry | <i>Prunus caroliniana</i> | 30' | E, variety of upland habitats, spreads profusely |
| Cherry, Black | <i>Prunus serotina</i> | 60' | D, mixed woods, general upland areas |
| Dogwood, Flowering | <i>Cornus florida</i> | 30' | D, well drained wooded areas |
| Eastern Redbud | <i>Cercis canadensis</i> | 25' | D, rich woods, roadsides, yards |
| Fringe Tree | <i>Chionanthus virginicus</i> | 30' | D, variety of upland areas |
| Hawthorns | <i>Crataegus spp.</i> | 25' | D, mixed upland woods and bottomlands |
| Holly, Carolina | <i>Ilex ambigua</i> | 20' | D, sand ridges and upland woods |

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| *Tree species not listed may be used for reforestation at the discretion of the Land Development Director or his/her designee. | | | |
| Holly, Possumhaw | <i>Ilex decidua</i> | 30' | D, floodplains, moist woodlands |
| Holly, Yaupon | <i>Ilex vomitoria</i> | 25' | E, variety of upland habitats |
| Hornbeam, American (Ironwood) | <i>Carpinus caroliniana</i> | 40' | D, wet woodlands, swamps |
| Mayten | <i>Maytenus phyllanthoides</i> | 20' | E, coastal scrub and hammock edges |
| Mulberry, Red | <i>Morus rubra</i> | 40' | D, bottomland woods and general upland sites |
| Myrsine | <i>Myrsine floridana</i> | 20' | E, coastal hammocks, pinelands |
| Myrtle, Wax | <i>Myrica cerifera</i> | 40' | E, variety of moist and dry areas |
| Plum, Chickasaw | <i>Prunus angustifolia</i> | 25' | D, woodland edges, dry soils |
| Plum, Hog (Flatwoods) | <i>Prunus umbellata</i> | 20' | D, mixed woodlands, pine flatwoods |
| Sparkleberry | <i>Vaccinium arboreum</i> | 30' | D, dry woodlands, sandhill habitat |
| Sumac, Winged | <i>Rhus copallina</i> | 20' | D, upland areas, dry woods, disturbed areas |
| Wild Olive (Devilwood) | <i>Osmanthus americanus</i> | 40' | E, floodplains, swamps and moist woods |
| Willow, Coastal Plain | <i>Salix caroliniana</i> | 30' | D, water's edge and other moist areas |
| Witch Hazel | <i>Hamamelis virginiana</i> | 25' | D, lowlands, slopes, ravines, mesic woods |

5800. CANOPY PROTECTION OF RED-COCKADED WOODPECKER COLONIES

- A. The Board of County Commissioners has determined that certain areas within the county merit special protection of the trees that provide habitat to the Red-cockaded Woodpecker (*Picoides borealis*). These habitats have been identified as those existing in ecological areas defined as sandhills. The purpose of this section is to protect this species through additional criteria for development not regulated by this LDC. For the purpose of this section, the exemptions stated in this LDC, shall not be applicable.

- B. The presence of Red-cockaded Woodpecker colonies will be preliminarily determined with a review by the Department of Planning and Development personnel. Any aggrieved party may file for an appeal in accordance with this LDC, where the staff findings are challenged regarding the existence or nonexistence of these colonies.



- C. For parcels with a Red-cockaded Woodpecker colony (ies), a tree preservation site plan shall be submitted. This plan shall provide for:
1. Onsite preservation of Longleaf Pines (*Pinus palustris*) that contain an active, inactive, or start-hole created or used by Red-cockaded Woodpeckers.
 2. Establishment of a 200-foot buffer around any active nest of a Red-cockaded Woodpecker.
 3. Preservation of 80 percent of the basal area of Longleaf Pines within a 330-foot radius of pines that contain an active, inactive, or start-hole.

(Ordinance No. 2013-A08, sections 5300., 5710., adopted April 23, 2013)

(Ordinance No. 2016-A07, Section 5510., adopted April 12, 2016)

(Ordinance No. 2017-A21. Section 5550 adopted May 9, 2017)