CHAPTER 175. TREE PROTECTION, LANDSCAPING, BUFFERING	175-1
PART 1. TREE PRESERVATION CODE.	175-1
§ 175.001. GENERAL PROVISIONS	175-1
§ 175.002. REMOVAL CRITERIA.	175-1
§ 175.003. PROTECTION OF TREES TO BE PRESERVED	175-2
PART 2. TREE REMOVAL, GRUBBING, AND SITE WORK PERMITTING.	175-3
§ 175.010. APPLICABILITY.	175-3
§ 175.011. EXPIRATION OF PERMITS	175-3
§ 175.012. RENEWAL OF PERMITS.	175-3
§ 175.013. APPEALS	175-3
§ 175.014. TREE REMOVAL AND SMALL RESIDENTIAL SITE LAND CLEARING PERMIT	175-3
§ 175.015. GRUBBING PERMIT	
§ 175.016. SITE WORK PERMIT	175-8
PART 3. LANDSCAPING AND BUFFER REQUIREMENTS	
§ 175.020. PURPOSE AND INTENT	175-11
§ 175.021. LANDSCAPING STANDARDS FOR SINGLE- AND TWO-FAMILY RESIDENTIAL LOTS	
§ 175.022. LANDSCAPING WITHIN VEHICULAR USE AREAS	175-13
§ 175.023. PEDESTRIAN ZONE LANDSCAPING	175-14
§ 175.024. LANDSCAPING IN OTHER INTERIOR SITE AREAS.	175-15
§ 175.025. PERIMETER LANDSCAPING AND BUFFER REQUIREMENTS	175-15
§ 175.026. STREET TREES IN RESIDENTIAL DEVELOPMENTS	175-18
§ 175.027. LANDSCAPING MATERIALS CRITERIA	175-18
§ 175.028. INSTALLATION AND MAINTENANCE	
§ 175.029. LANDSCAPE AND IRRIGATION PLANS	175-22

CHAPTER 175. TREE PROTECTION, LANDSCAPING, BUFFERING

PART 1. TREE PRESERVATION CODE.

§ 175.001. GENERAL PROVISIONS.

- (A) Intent. The city finds that trees provide many environmental, aesthetic, and economic functions. It is declared to be essential to preserve trees as a means to:
 - (1) Protect the value of lands and water quality;
 - (2) Preserve community appearance; and
 - (3) Assist climate control, soil stabilization, oxygen exchange, and noise and air pollution abatement
- (B) These factors relate to the economy of the city and provide for the health, safety and welfare of residents and visitors of the city. It is the intent of this code to provide for the enhancement, preservation, and protection of the City's existing tree canopy and to regulate the removal, relocation, or destruction of trees.

§ 175.002. REMOVAL CRITERIA.

- (A) The following justifications shall be considered for the proposed removal of existing tree(s) and vegetation:
 - (1) Necessity to remove trees which present a hazard or other unsafe condition to people, vehicular traffic, or threaten to cause disruption to public services or public easements;
 - (2) Removal of Class I invasive species of trees and/or vegetation (as identified annually by the Florida Invasive Species Council) which characteristically becomes nuisance overgrowth and outcompetes native vegetation.
 - (3) Necessity to remove diseased or fallen trees or trees weakened by age, storm, or fire;
 - (4) The extent to which tree or vegetation removal is likely to result in damage to the property or structures of the applicant or others, public or private, including damage to buildings accessory structures, lakes, ponds, streams or rivers, drainage canals or swales;
 - (5) Proposed landscaping improvements including plans whereby the applicant has planted or will plant trees or vegetation to replace those that are proposed to be cleared;
 - (6) Necessity to remove trees or vegetation in order to construct proposed improvements to allow economic use of the property, including the need for access for construction equipment (maximum of ten feet) and essential grade changes;
 - (7) Topography of the land and the adverse impact of tree or vegetation removal on erosion, soil retention and the diversion or increased flow of surface water, which is necessary to use the land while conserving natural resources;
 - (8) Must be removed so the applicant may use the property for any use permitted, conditional, or special use for the zoning district in which the property is located and that such a use could not be made of the property unless the tree is removed; and

(9) Alternative site plans shall be considered to determine if protected trees, specimen trees, and native vegetation may be retained.

§ 175.003. PROTECTION OF TREES TO BE PRESERVED

- (A) All trees not approved for removal shall be protected and maintained during site preparation and construction, as specified herein:
 - (1) Identification of trees to be preserved. All trees to be preserved shall be identified on-site with harmless bands, flagging, or other suitable markings. These shall correspond with the approved site plan.
 - (2) For all activities requiring a site plan, the method of protection shall appear in the graphic details within the approved site plan.
 - (3) All efforts shall be made through the grading and drainage plan to maintain the natural drainage to those trees to be preserved. Swaling and minor negative grade changes should always be designed outside the critical root zone as much as possible. Piping should be used where deep swales or ditches would require significant grade changes adjacent to trees to be saved. Trenching of any type should be avoided in the CRZ. Where underground installations are required adjacent to the trunks of trees to be preserved, tunneling should be used. When trenching or tunneling near trees to remain, all possible protective measures should be taken.
 - (4) Critical Root Zone (CRZ). shall be established for each tree retained on site. This shall be calculated by taking the DBH of the tree and multiplying by twelve (12). This is the diameter in inches of the CRZ, centered on the tree. Visible barricades shall be erected along the CRZ line of all trees to be protected. These barricades shall be no closer than the calculated CRZ or ten (10) feet from the trunk of the tree, whichever is greater. The CRZ for all existing palms shall be three (3) feet from trunk. For clusters of four or more trees, a limit of development shall be indicated on the site plan which provides no less than twelve (12) feet of protection from the base of the outermost trees. The following activities shall be limited within the CRZ as described herein:
 - (a) All felled material shall be promptly and carefully removed from the site in order to avoid potential damage to remaining trees and vegetation
 - (b) Underbrush and vegetation within the CRZ shall be hand cleared
 - (c) Materials, machinery, and soil shall not be placed within the CRZ.
 - (d) Materials, wires, signs, or nails shall not be attached to any tree unless such materials are used to preserve the tree.
- (B) All trees to be preserved, except palms, shall have their natural soil level maintained to the maximum extent practicable. Tree wells, retaining walls, or landscape timbers may be utilized where necessary to maintain the natural existing soil level.

§ 175.004 through § 175.009 RESERVED

PART 2. TREE REMOVAL, GRUBBING, AND SITE WORK PERMITTING.

§ 175.010. APPLICABILITY.

The terms and provisions of this subchapter shall apply to all lands lying within City limits, including publicly owned lands, rights-of-way, and easements, except as provided for in this subchapter. It shall be unlawful to remove, destroy, cut down or damage existing tree(s) or habitat, except as defined in this subchapter. Exceptions to this subchapter shall be permitted in the manner prescribed herein.

§ 175.011. EXPIRATION OF PERMITS.

Any permit issued hereunder shall remain valid for six (6) months and may be renewable for a second six (6) month period upon request to the City Manager or designee, provided such request occurs prior to the expiration date of the initial permit. If a permit required by this subchapter has been issued in conjunction with an approved site plan, subdivision, or building permit, then such permit shall remain valid for the life of the approved site plan, subdivision or building permit unless any of these approvals expire, are revoked or suspended.

§ 175.012. RENEWAL OF PERMITS.

The City Manager or designee may require reapplication and full review in those renewal cases where site conditions have changed substantially from the date of issuance of the initial permit as a result of natural growth of trees and vegetation or high winds, hurricane, tornado, flooding, fire, or other acts of nature.

§ 175.013. APPEALS.

Any application for a tree removal, small residential site land clearing, grubbing, or site work permit that has been denied may be appealed pursuant to §172.014 provided a written request is submitted to the City Manager or designee. Such appeal shall follow the procedures set forth therein.

§ 175.014. TREE REMOVAL AND SMALL RESIDENTIAL SITE LAND CLEARING PERMIT.

It shall be unlawful without first securing a permit to remove, destroy, cut down, damage, or cause the removal, destruction, cutting down, or damage of any trees having a diameter at breast height (DBH) of six (6) inches or greater or palms having four and a half (4- 1/2) feet of clear wood or greater, as measured from the ground to the base of the first fronds. This permit is also required for any land clearing activities on all residential lots which are less than one (1) acre in area.

- (A) Exceptions. Trees may be removed without a tree removal permit on the following properties:
 - (1) Bona fide agricultural uses, cultivation, or grazing lands;
 - (2) Commercial nursery sites;
 - (3) Publicly owned lands, provided compliance with the Municipal Tree Code or for the purpose of habitat management or restoration;
 - (4) Undeveloped multi-family, commercial, industrial, or institutional sites with a recently approved site plan and a valid Site Work Permit, which has not yet received a certificate of occupancy;
 - (5) Developed single- and two-family lots, which meet the criteria of and provide the City with the documentation required in accordance with Florida State Statute 163.045;

- (6) After receiving approval from the City Manager or designee, any species of trees determined to be prohibited pursuant to § 175.027(C).
- (7) In the event that any tree shall pose an immediate threat to persons or property, and require immediate removal, on-site verbal authorization may be given by a City Manager or designee to allow for the removal of the tree without obtaining a permit as herein required.
- (8) In the event of the Declaration of a Public Emergency caused by a hurricane or other natural disaster, the provisions of this article may be suspended.
- (B) Application. Anyone desiring a permit to remove a tree as defined by this code or clear a residential lot which is less than an acre in area shall perform the following application requirements:
 - (1) Fee. Submit a fee at time of application, as established by resolution pursuant to § 172.011.
 - (2) Recorded deed indicating the current owner
 - (3) Hold Harmless agreement initialed and signed by the owner or authorized representative
 - (4) Letter of Authorization is required should the applicant not be the owner of the property
 - (5) Site sketch. Submit a site drawing of the parcel with application which clearly indicates the following information:
 - (a) Existing and proposed site features, such as structures, roads, and surface waters;
 - (b) The diameter at breast height (DBH) and species of all trees on the entire parcel;
 - (c) Indicate which trees are proposed for removal and which are to be preserved;
 - (d) Indicate location and species of any proposed replacement trees to be added to the site, as required in this subsection.
 - (e) Explain reason(s) for removal.
- (C) Review Criteria. The permit application shall be processed within seven (10) days. Requests for tree removal permits shall be reviewed based on the approved reasons for removal, pursuant to § 175.002. In addition, the following considerations may apply:
 - (1) When there is a question of tree hazard, the applicant may be required to provide documentation from a certified arborist.
 - (2) Single- and two-family residential properties less than an acre, which are requesting land clearing to allow for proposed development or improvement(s), must also have the necessary building permit(s) currently under review and shall provide the permit application number with request.
 - (3) On developed multi-family, commercial, industrial, or institutional sites which have received a certificate of occupancy, an approved tree removal may require replacement plantings to maintain the site's conformance with the approved site plan.
 - (4) On all single- and two-family residential properties, an approved tree removal may require replacement plantings to maintain conformance with § 175.021.

- (5) Tree Credits. On single- and two-family residential properties, for each existing tree which is to remain and meets the following criteria, credit may be applied as determined herein towards the number of trees required by this chapter.
 - (a) Existing trees which are classified as protected or specimen as defined in this chapter:

DBH	CREDIT PER TREE
6" – less than 12"	3 trees
12" – less than 20"	4 trees
20" – and larger	5 trees

- (b) Existing palms having four and a half (4-1/2) feet of clear wood or more, as measured from the ground to the base of the first fronds which are retained are credited on a one-for-one basis, provided they may not account for more than fifty (50%) of total trees required.
- (D) *Violations*. Each failure to comply with any of the provisions of this subchapter shall constitute an individual violation. The property owner, contractor and/or authorized agent shall be issued a stop work order and/or a violation notice and shall have one (1) week to apply for a tree removal permit for which the application fee shall be equal to twice the standard fee for the permit pursuant to § 172.011. The following penalties may also apply:
 - (1) Restoration Plan. Dependent on the extent of violation, a restoration plan may be required. They shall then have a maximum of two (2) weeks to submit a restoration plan as described below. For projects that are under construction, a stop-work order will be issued when applicable and the issuance of a certificate of occupancy for any attendant structure(s) will be withheld until the restoration plan is submitted and approved by the Planning Division. This restoration plan shall, include where applicable:
 - (a) Provide information as described in § 175.014(B).
 - (b) Identify the locations of new tree plantings to restore the site, providing:
 - 1. One (1) restoration tree as described shall be shown for each six (6) inches of trunk diameter at breast height (DBH) of those specimen trees, as defined in this chapter, which was severely damaged, cut down, or removed from the site. Each required restoration tree shall have a minimum five (5) inch DBH and a minimum height of fifteen (15) feet and shall be a native canopy species approved by the City Manager or designee.
 - 2. One (1) replacement tree shall be shown for each protected tree, as defined in this chapter, which was severely damaged, cut down or removed from the site. Each required replacement tree shall have a minimum two and a half (2-1/2) inch DBH, three (3) feet of clear wood, a minimum height of twelve (12) feet and shall be a native canopy species approved by the City Manager or designee.
 - 3. Provide an irrigation system or method for the maintenance for the new trees, in compliance with §175.28(B).
 - 4. All replanted trees shall be properly planted, mulched, and secured to ensure their establishment.

- 5. Indicate a schedule for the restoration to occur which shall at the latest coincide with the final inspection for a site development, where applicable, or within three (3) months where final inspections would not normally occur. If the restoration does not occur within the approved time schedule, each day of which the property is not in compliance shall constitute a violation of this subchapter and the violation shall be presented to Special Magistrate for action.
- (2) Mitigation Fee. Should it be determined that a restoration plan is not feasible, then for each restoration tree not replanted as required above, the specimen tree mitigation fee shall be paid and for each replacement tree not replanted as required above, the protected tree mitigation fee shall be paid pursuant to § 172.011. If the site has been cleared, and little evidence of the removed trees is present so as to determine the extent of the violation, then they shall be held responsible for the replanting of four (4) restoration trees, as defined above, per one quarter (1/4) acre of disturbed area or shall pay specimen tree mitigation fee for the four (4) trees pursuant to § 172.011.
- (3) Environmental Regulations. In the event it is determined that a violation as defined herein has resulted in potential impacts to protected species or habitats, the applicable regulatory agencies shall be notified, and additional penalties may be imposed.

§ 175.015. GRUBBING PERMIT.

It shall be unlawful without first securing a Grubbing Permit to remove or destroy underbrush vegetation except as defined by this subchapter. A grubbing permit does not authorize the clearing, scraping, balancing, or filling of land or the removal of protected trees, specimen trees, or mangroves. Methods of grubbing include hand clearing, roto-chopping, or mulching in place.

- (A) *Exceptions*. The following exceptions to this subchapter shall be permitted in the manner prescribed: shrubs, vegetation, or underbrush may be removed without a grubbing permit on the following properties:
 - (1) Bona fide agricultural uses, cultivation, or grazing lands;
 - (2) Commercial nursery sites;
 - (3) Publicly owned lands, provided in compliance with the Municipal Tree Code or for the purposes of habitat management or restoration;
 - (4) Single- and two- family residential sites less than an acre in size.
 - (5) Undeveloped multi-family, commercial, industrial, or institutional development which has an approved site plan and a valid Site Work Permit and has not yet received a Certificate of Occupancy.
 - (6) Any site in which the area to be grubbed is one quarter (1/4) acre in area or less.
- (B) *Application*. Anyone desiring a permit for grubbing activities as defined by this code shall perform the following application requirements:
 - (1) Fee. Submit a fee at time of application, as established by resolution pursuant to § 172.011;
 - (2) Recorded deed indicating the current owner;
 - (3) Hold Harmless agreement initialed and signed by the owner or authorized representative
 - (4) Letter of Authorization is required should the applicant not be the owner of the property

- (5) Site sketch. Submit a site drawing with application which clearly shows all the following information:
 - (a) All major existing and proposed site features, such as: structures, roads, and surface waters;
 - (b) The diameter at breast height (DBH), scientific, and common names of each tree within and in the vicinity of the area to be grubbed;
 - (c) Clearly delineate and provide the estimated acreage of the proposed area of grubbing; and
 - (d) Explain reason(s) for grubbing.
- (C) Review Criteria. The permit application shall be processed within seven (10) days. Requests for grubbing permits shall be reviewed based on the approved reasons for removal, pursuant to § 175.002. In addition, the following considerations may apply:
 - (1) Environmental summary. For larger areas, which are determined to be environmentally sensitive, an environmental summary of the subject property may be required which provides information regarding any natural habitats (FLUCCS Map) and species within the proposed grubbing area and the immediate vicinity.
 - (2) If the proposed grubbing site does not have a submitted plan for development, grubbing of environmentally sensitive lands may be restricted by the requirement for external agency permits and/or the presence of protected species or habitat.
- (D) Violations. Each failure to comply with any of the provisions of this subchapter shall constitute an individual violation. The property owner, contractor and/or authorized agent shall be issued a stop work order and/or a violation notice and shall have two (2) weeks to apply for a grubbing permit for which the application fee shall be equal to twice the standard fee for the permit pursuant to § 172.011. The following penalties may also apply:
 - (1) Restoration Plan. Dependent on the extent of violation, a restoration plan may be required. They shall then have a maximum of two (2) weeks to submit a restoration plan as described below. For projects that are under construction, a stop-work order will be issued when applicable and the issuance of a certificate of occupancy for any attendant structure(s) will be withheld until the restoration plan is submitted and approved by the City Manager or designee. This restoration plan shall include where applicable:
 - (a) Provide information as described in § 175.015(B).
 - (b) Identify the locations and species of new plantings as required by City Manager or designee to restore any native habitat that may have been damaged
 - (c) Provide irrigation system or method for the maintenance of the new vegetation, in compliance with 175.19(B).
 - (d) Indicate a schedule for the restoration to occur which shall at the latest coincide with the final inspection for a site development, where applicable, or within three (3) months where final inspections would not normally occur. If the restoration does not occur within the approved time schedule, each day of which the property is not in compliance shall constitute a violation of this subchapter and the violation shall be presented to the Magistrate for action.

- (e) Should it be determined that a mitigation plan is not feasible, then they shall pay the amount equal to the specimen tree mitigation fee for each one quarter acre of land that is grubbed, pursuant to § 172.011.
- (2) Environmental Regulations. In the event it is determined that a violation as defined herein has resulted in potential impacts to protected species or habitats, the applicable regulatory agencies shall be notified, and additional penalties may be imposed.

§ 175.016. SITE WORK PERMIT.

It shall be unlawful without first securing a Site Work Permit to clear, scrape, balance, and fill the land surface except as defined by this subchapter. A site work permit also authorizes the removal of trees and underbrush vegetation in accordance with the provisions of the approved site plan.

- (A) *Exceptions*. The following exceptions to this subchapter shall be permitted in the manner prescribed: land clearing, scraping, filling, land balancing activities may occur without a permit on the following properties:
 - (1) Bona fide agricultural uses, cultivation, or grazing lands;
 - (2) Commercial nursery sites
 - (3) Single- and two-family sites with less than one acre of area; and
 - (4) Publicly owned lands provided compliance with the Municipal Tree Code or for the purposes of habitat management or restoration.
- (B) *Application*. Anyone desiring a permit for site work activities as defined by this code shall perform the following application requirements:
 - (1) Fee. Fee must be submitted during the site plan review process, as established by resolution pursuant to § 172.011.
 - (2) Recorded deed indicating the current owner;
 - (3) Documentation that all applicable external agency permits have been acquired and;
 - (4) Site Plan Approval. A City-stamped, approved, site plan must be submitted at time of application;
 - (5) Environmental Assessment. Full environmental report for the subject property which provides information regarding any natural habitats, soils, vegetation, and species, and surface waters (natural and manmade) present on the proposed development site and within the immediate vicinity. This shall also include related maps and whether the site is within the protected Turkey Creek or Indian River Lagoon watersheds.
 - (6) Tree Survey Required. A complete survey of trees on the proposed development site shall be part of the site plan submittal and shall be at a scale of no greater than one (1) inch equals fifty (50) feet (1:50) which clearly shows the following information drawn to scale:
 - (a) All existing and proposed site features, such as: structures, grading and drainage, pavements, easement, landscaping, utilities, streets, screening requirements;
 - (b) Sites to ten (10) acres. The diameter at breast height, scientific, and common names of every tree on the site;

- (c) Sites above ten (10) acres. The diameter at breast height, botanical, and common names of all protected and specimen trees as defined in this subchapter. General distribution/groupings of protected trees as defined in this subchapter may be shown on the site plan instead of individual trees. The scale of this drawing may be increased as per the City Manager or designee.
- (d) Identification of those trees proposed to be removed and those to be preserved.
- (e) Provide the number of all protected trees to be removed and the sum of the DBH of all specimen trees to be removed.
- (f) Graphic details and notes explaining the method(s) for the protection of those trees to remain in compliance with § 175.03.
- (g) Name, signature, address, and telephone number of property owner and his agent, if applicable.
- (h) Legal description and address of property.
- (i) North arrow and scale.
- (C) *Tree Credits*. The property owner, developer, contractor, and/or authorized agents shall make every effort to retain existing trees on site. The preservation of groupings of trees and native vegetation is preferred. For each existing tree that is retained on a development site which meets the following criteria, credit may be applied towards the number of trees required by this chapter, as follows:
 - (1) Existing protected and specimen trees, as defined in this chapter:

Diameter at Breast Height	Credit Per Tree
6" – less than 12"	3 trees
12" – less than 20"	4 trees
20" – and larger	5 trees

- (2) A grouping of four (4) or more existing trees, some of which may be less than six (6) inches DBH, may be credited according to the sum of their DBH, provided the sum DBH is equal to at least six (6) inches.
- (3) Existing palms, as defined in this chapter, having four and a half (4- 1/2) feet of clear wood or more, as measured from the ground to the base of the first fronds are credited on a one-for-one basis. Palms retained for credit shall not comprise more than thirty (30%) percent of the total trees required.
- (4) In lieu of tree credits, the preservation of existing vegetation may be presented in consideration for administrative variance approval of the following, provided the request meets the criteria set forth in §172.025:
 - (a) Parking space reduction waivers,
 - (b) Increases in intensity/ density,
 - (c) increase in building height/length, or
 - (d) decreases in required landscaping.
- (5) Pre-Sitework Meeting. Following site plan approval and prior to issuance of a Sitework Permit, a Pre-Sitework Meeting shall be held.

- (D) *Review Criteria*. The permit application shall be processed within seven (10) days, except that no site work permit shall be issued until the owner/developer has applied for building permit(s) and all applicable subdivision and/or site plan reviews have been completed and approved. In addition, the following may apply:
 - (1) Reasonable efforts shall be made on the property to save and design around existing healthy trees. Preservation of protected and specimen trees may be required after review in the field by the City Manager or his designee. However, this shall not reasonably restrict the development of a permitted use and shall not create an unsafe condition.
 - (2) Effort shall be made to preserve enough trees on site so as to maintain the character of the existing tree coverage in the neighborhood based upon the number, type, size and distribution of trees.
 - (3) Efforts shall be made to preserve specimen trees and those trees which are of significant historical, aesthetic, or ecological importance to a site and/or the city.
 - (4) Efforts shall be made to preserve trees, especially groupings of trees which are in required landscape areas or yards.
 - (5) Efforts shall be made to select, design and locate permitted signs so that they do not necessitate the removal of trees.
 - (6) In addition to trees required by the Landscaping Code, one (1) restoration tree shall be shown on approved landscape plan for each six (6) inches DBH of specimen trees, defined as having twelve (12) or more inches DBH, which was approved for removal. Each required restoration tree shall have a minimum five (5) inch DBH trunk and a minimum height of fifteen (15) feet and shall be a native canopy species approved by the City Manager or designee.
 - (7) In addition to trees required by the Landscaping Code, one (1) replacement tree shall be shown on the approved landscape plan for each protected tree, having from six (6") to less than twelve (12) inches DBH, which was approved for removal. Each required replacement tree shall have a minimum two and a half (2-1/2) inch DBH trunk, three (3) feet of clear wood, a minimum height of twelve (12) feet and shall be a native canopy species approved by the City Manager or designee.
 - (8) In the event that trees as required above are not added to the landscape plan, the following fees will apply: for each restoration tree, the specimen tree mitigation fee shall be paid and for each replacement tree required above, the protected tree mitigation fee shall be paid pursuant to §172.011.
- (E) Violations. Each failure to comply with any of the provisions of this subchapter shall constitute an individual violation. The property owner, contractor and/or authorized agent shall be issued a stop work order and/or a violation notice and shall have one (1) week to apply for a site work permit for which the application fee shall be equal to twice the standard fee for the permit pursuant to § 172.011. The following penalties may also apply.
 - (1) Restoration Plan. Dependent on the extent of violation, a restoration plan may be required. For proposed development sites, the restoration plan may be incorporated into the landscape plan as part of a site plan submittal. A stop-work order will be issued when applicable and the issuance of a certificate of occupancy for any attendant structure(s) will be withheld until the restoration

requirements have been satisfied. The following information shall be incorporated into the restoration plan, where applicable:

- (a) Identify the locations of new tree(s) and vegetation plantings to restore the site, providing:
 - 1. One (1) restoration tree as described shall be shown for each six (6) inches of trunk diameter at breast height (DBH) of those specimen trees, having twelve (12) or more inches DBH which was severely damaged, cut down, or removed from the site. Each required restoration tree shall have a minimum five (5) inch DBH trunk and a minimum height of fifteen (15) feet and shall be a native canopy species approved by the City Manager or designee.
 - 2. One (1) replacement tree shall be shown for each protected tree, having from six (6") to less than twelve (12) inches DBH, which was severely damaged, cut down or removed from the site. Each required replacement tree shall have a minimum two and a half (2-1/2) inch DBH trunk, three (3) feet of clear wood, a minimum height of fifteen (12) feet and shall be a native canopy species approved by the City Manager or designee.
- (b) Provide irrigation system or method for the maintenance for the new trees, in compliance with §175.028(B).
- (c) All replanted trees shall be properly planted, mulched, and secured to ensure their establishment.
- (d) Indicate a schedule for the restoration to occur which shall at the latest coincide with the final inspection for a site development, where applicable, or within three (3) months where final inspections would not normally occur. If the restoration does not occur within the approved time schedule, each day of which the property is not in compliance shall constitute a violation of this subchapter and the violation shall be presented to Special Magistrate for action.
- (2) Mitigation Fees. Should it be determined that a restoration plan is not feasible, then for each restoration tree not replanted as required above, the specimen tree mitigation fee shall be paid and for each protected tree not replanted as required above, the protected tree mitigation fee shall be paid pursuant to § 172.011.
- (3) Stormwater Violation. Conducting site work activities without an approved drainage plan is in violation of the Stormwater Management and Conservation Ordinance and may be subject to the penalties provided in §177.030(C).
- (4) Environmental Regulations. In the event it is determined that a violation as defined herein has resulted in potential impacts to protected species or habitats, the applicable regulatory agencies shall be notified, and additional penalties may be imposed.

§ 175.017 through § 175.019 RESERVED

PART 3. LANDSCAPING AND BUFFER REQUIREMENTS

§ 175.020. PURPOSE AND INTENT

The purpose of the landscape and buffer requirements is to enhance the aesthetic quality of the city, promote water conservation, mitigate the impact that a use or traffic may have on the neighboring sites, and promote the health and general welfare of the citizens.

§ 175.021. LANDSCAPING STANDARDS FOR SINGLE- AND TWO-FAMILY RESIDENTIAL LOTS

- (A) Applicability; Building Permit Required. The terms and provisions of this subchapter shall apply to property within the City, as defined in the zoning regulations set forth in Chapter 185 of this code of ordinances, developed after the effective date of this subchapter. Every parcel developed hereafter shall be provided with landscaping in accordance with the provisions set forth herein. Where a principal structure existed or was in the process of being developed at the effective date of this subchapter, the principal structure may be modernized, altered, or repaired without providing the required landscaping. All detached accessory structures to the principal structure are permitted to be developed, modernized, altered, or repaired without providing the required landscaping for new principal structures.
- (B) Minimum Landscaping Required. The following minimum landscaping is required for all newly developed single- and two-family residential lots (required vegetation shall meet the landscaping materials standards of § 175.027):
 - (1) Required Vegetation. Prior to the issuance of a certificate of completeness or a certificate of occupancy, the following number of trees and shrubs must exist or be planted on the lot:

LOT SIZE	NUMBER OF TREES	NUMBER OF SHRUBS
Less than one acre	4	10
One acre or larger	6	20
	plus 4 trees for each additional	plus 10 shrubs for each additional
	acre*, up to a maximum of 40 trees	acre*, up to a maximum of 50 shrubs

- (2) Tree Species. Fifty percent (50%) of all trees planted must be native canopy species. Small trees and/or Palms may comprise the remaining fifty percent (50%).
- (3) Existing Vegetation. Existing trees and shrubs may be utilized to meet the requirements of this subchapter, in conformance with the approved provided such vegetation is located within the property lines of the lot and not in any rights-of-way or easements.
- (4) Required Groundcover. One hundred percent (100%) of the lot, excluding principal structures, accessory structures, vehicle-use areas, and pedestrian walkways must be covered with turf grass or other approved living ground cover. Nonliving ground cover is permitted only within designated landscape beds. All drainage swales, easements, and rights-of-way areas shall be one hundred percent (100%) covered with turfgrass.
- (5) The intent of this section is that all landscaped areas present a finished appearance, as determined by the City Manager or designee.
- (C) Landscape Plan Required. Applicants for single- and two-family building permits shall submit a landscape plan, unless one was approved as part of the subdivision approval. The landscape plan must be shown on a survey drawing, or on the site plan submitted for the building permit. The plan must show compliance with the requirements of this subsection and shall include the following:
 - (1) All existing and proposed site features, such as structures, pavements, easements, landscaping, irrigation, streets, drainage, septic tanks and drain fields, and above ground utility poles.

(2) Identify the location, species, and DBH of those trees to be preserved

- (3) The location, species, number, and size at planting of proposed shrubs, trees, and living ground cover shall be shown or listed in a key.
- (4) The type and location of all nonliving ground cover also must be shown or listed in a key.

§ 175.022. LANDSCAPING WITHIN VEHICULAR USE AREAS.

- (A) Applicability. Sites with off-street parking areas in excess of one thousand five hundred (1,500) square feet, or five (5) spaces, shall conform to the minimum landscaping requirements set forth in this section. Single-family and duplex residential uses on individually platted lots and multilevel parking structures shall be exempt from this section. All landscaped areas shall be protected from vehicular encroachment by curbs, wheel stops or other similar devices.
 - (1) When existing off-street parking or other vehicular use areas are enlarged, the enlarged areas shall meet the provisions of this section. The newly enlarged areas shall not cause the existing parking area landscaping to be more nonconforming.
 - (2) When existing off-street parking or other vehicular use areas are modified, the modification shall not cause the existing parking area landscaping to be more nonconforming. The intent of this provision is that any existing off-street parking or vehicular use areas shall, when feasible, become more conforming to the landscaping requirements of this section. Determination of the feasibility of modifying the existing parking or vehicular use areas, to become more conforming, shall be made by the City Manager or designee. This determination shall be based on the following considerations:
 - (a) Cost of compliance with specific criteria in the parking area landscaping code;
 - (b) Physical space available within the existing areas to comply with specific criteria in the parking area landscaping codes, such as existing "green" spaces;
 - (c) The extent that existing conditions represent safety hazards; and
 - (d) The extent to which modification addresses other criteria within the Code of Ordinances, such as, but not limited to, enhanced landscape installation, compliance with the Americans with Disabilities Act (ADA), stormwater management requirements, and similar regulations.
- (B) Minimum Landscaping Required in Vehicular Use Areas.
 - (1) Required interior parking area landscaping. All parking areas shall be internally landscaped to provide visual and climatic relief from broad expanses of pavement and to channelize and define logical areas for pedestrian and vehicular circulation.
 - (a) Interior landscaping, excluding required parking setbacks, shall account for ten percent (10%) of the total parking area. Landscape dividing strips, with or without walkways, shall be used to subdivide the parking area into rows with not more than an average of ten (10) spaces, per row except that parking rows adjacent to required landscape row dividers shall only be required such landscape strips at the end of each landscape row divider.
 - (b) Each separate landscape area shall contain a minimum of one hundred (100) square feet and shall have a minimum dimension of at least ten (10) feet, measured at its narrowest area, except that islands required to be designed with turn radii are permitted to have less than ten (10) feet if

- approved by the City Manager or designee, and shall include at least one (1) tree, with the remaining area meeting the requirements of this code.
- (c) The total number of trees shall not be less than one (1) per two hundred (200) square feet or fraction thereof of required interior landscaped area and shall exclude those trees required along the perimeter of the parcel. Such landscaped areas shall be protected from vehicular encroachment by curbs, wheel stops or landscape timbers.
- (d) Whenever an off-street parking area is designed to provide parking of vehicles in five (5) rows or more, at least one (1) interior landscaped area not less than ten (10) feet in width shall be provided for the length of the parking rows, with at least one (1) landscaped row divider required for every five (5) parking rows.
- (e) Landscaped areas, including landscaped islands, within or abutting vehicular use areas shall be excavated to a depth of two (2) feet to remove lot base course material, lime rock, asphalt, concrete, and similar material in order to ensure that adequate planting soil exists.
- (f) In parking areas where the strict application of this section will seriously limit the function of such areas, such as off-street loading areas, the required landscaping may be located near the perimeter of the paved area. Such interior landscaping which is relocated as herein provided shall be in addition to the perimeter landscaping requirements.
- (g) The front of a vehicle may encroach upon any interior landscaped area or walkway when the area is at least three and one-half (3½) feet in depth per abutting parking space and protected by motor vehicle stops or curbing. An overhang may be permitted in such landscaped area or walkway. If shrubs or hedges are planted in front of such parking areas, the shrubs must be planted a minimum of three and one-half (3½) feet from the back of the curb or wheel stop to prevent damage to the hedge.
- (h) Interior landscaped areas may be used for retention and detention sites for groundwater recharge.
- (i) Landscape vines, shrubs, or a combination of the two, are required to be planted along the outside of subdivision walls or any required masonry walls facing canal, road, or other rights-of-way.

§ 175.023. PEDESTRIAN ZONE LANDSCAPING

Non-residential, mixed use, and multifamily buildings shall provide a pedestrian landscaped zone, defined as the area between the front and side building facades and the adjacent parking area or driveway, which meets the following criteria:

- (A) The pedestrian zone shall include a sidewalk with a maximum width of five (5) feet and a five (5)-foot landscaping strip.
- (B) A minimum of five (5) feet of the width of the required pedestrian zone shall be clear of roof overhead.
- (C) Facades that include drive-through windows or loading/unloading spaces and overhead doors in industrial/warehouse or commercial buildings shall be exempt from these provisions.
- (D) All multi-family and all non-residential development shall have at least two (2) trees planted per pedestrian zone, except for areas under a canopy. The tree requirement shall not apply to gasoline stations if such trees cause a line-of-sight obstruction.

§ 175.024. LANDSCAPING IN OTHER INTERIOR SITE AREAS.

- (A) Foundation landscaping. Non-residential, mixed use, and multifamily buildings shall include a four-foot-wide landscaped strip adjacent to all building walls facing public and private streets. Shrubs, meeting the standards of §175.027, shall be planted within the strip and cover a minimum of 60 percent of the total length of each building wall.
- (B) *Dumpster Enclosures*. All garbage/refuse containers shall be screened on at least three (3) sides by concrete block, wall, or fencing at least six (6) feet in height and gated which renders the view of the container opaque. Shrubs, meeting the standards of §175.027, shall be provided adjacent to three sides of dumpster enclosures.

§ 175.025. PERIMETER LANDSCAPING AND BUFFER REQUIREMENTS.

(A) Required Perimeter Landscaping and Buffers. Table 175-1 shows the minimum perimeter landscaping/buffer width, landscaping materials, and solid screening required based on the proposed and adjacent uses.

Table 175 - 1. Required Perimeter Landscaping and Buffers (1)

ALONG TO RIGHTS-OF-WAY Single-family, duplex, townhouse, and multi-family	Width (minimum) 10' along arterial and	Trees (type and minimum quantity (2)) 1 canopy tree per 50 linear feet	Shrubs Continuous row	Screen (minimum height and type) 6' masonry wall or fence
developments ⁽³⁾	collector roads; 7' along local roads			
Vehicular use areas (regardless of the principal use)	10'	1 canopy tree per 50 linear feet or fraction thereof	Continuous row	3' hedge or street wall or 2' berm
ALONG SHARED PROPERTY LIN	IES			
Any use adjacent to the same type of use	5'	None	Continuous row	None
Multi-family use adjacent to single family, duplex, townhome, mobile home park use or district	25'	1 understory tree per 35 linear feet or fraction thereof	Continuous row	6' masonry wall or fence
Non-residential use adjacent to any residential or institutional use or district	25'	1 understory tree per 35 linear feet or fraction thereof	Continuous row	6' masonry wall
Heavy industrial use adjacent to other non-residential use or district	25'	1 understory tree per 35 linear feet or fraction thereof	Continuous row	6' masonry wall

	Width (minimum)	Trees (type and minimum quantity (2))	Shrubs	Screen (minimum height and type)
	(minimum)	quantity ` ')	Siliubs	neight and type)
Heavy industrial use adjacent	40'	1 understory tree	Continuous	6' masonry wall
to any residential or		per 35 linear feet or	row	
institutional use or district		fraction thereof		

⁽¹⁾ These requirements may be waived per subsection (C) below.

See §175.027 for plant specifications and §175.028 for installation and maintenance.

Figure 175 - 1. Development buffers along rights-of-way





Left: Buffer required; Right: Buffer not required

(B) Buffer specifications.

- (1) Buffers shall not include buildings or vehicular use areas but may include stormwater ponds.
- (2) The required perimeter landscape area shall be provided above and beyond the minimum maintenance berm around a retention pond, unless otherwise approved by the City Manager or designee.
- (3) The required plantings shall not be placed in any drainage facility or easement.
- (4) Where a masonry wall is required, it shall be constructed of a finished, maintenance-free material such as brick, split-faced masonry block, textured concrete, or similar materials and shall be consistent with the architectural style of the building(s) on site and surrounding properties. Columns or pilasters shall be required and shall not be spaced more than 50 linear feet on center. The height of the wall shall be measured on the interior side of the wall.

(5) Where a fence is required, it shall be constructed of wood, or PVC.

⁽²⁾ Fractions shall be rounded up.

⁽³⁾ The fence requirement shall be waived if the buildings along the perimeter streets are oriented to the street (see Figure 175-1).

- (6) For perimeter fences or walls adjacent to road rights-of-way, ivy or clinging vines may be used in lieu of the shrub requirement. Earthen berms may be approved in lieu of the wall or fence provided the berm is six (6) feet in height with landscaping provided as identified in this Chapter.
- (7) Street walls shall be constructed of wrought iron, brick, masonry, stone, powder-coated aluminum or other decorative materials that complement the finish on the primary building. Chain link, wood and PVC street walls/fences shall be prohibited. Street walls shall have a minimum height of two and a half (2.5) feet high and a maximum height of four (4) feet in height if the portion above the 2.5-foot height (or the entire wall) is transparent (i.e., wrong iron or similar material).

Figure 175 - 2. Street Wall Examples







- (8) Required masonry walls (including street walls) shall be set back from the property line a minimum of three (3) feet to provide adequate room for maintenance of both sides of the wall.
- (9) Screening walls and fences between abutting properties shall be built along the property line and the required landscaping shall be placed between the wall and the proposed development. Walls and fences required along a right-of-way shall be placed between the required landscaping and the proposed development.
- (10) Canopy trees may be used in lieu of understory trees but shall comply with the minimum separation requirements stated above.
- (11) Where existing canopy trees are located within 50 feet of a required tree location, understory trees may be provided in lieu of the required canopy trees.
- (12) Whenever the adjacent use changes to a more intensive use requiring less buffer requirements, the subject site may modify the buffer components.
- (C) *Buffer adjustments*. The Development Review Committee (DRC) may approve a waiver or modification of some of the requirements of this section if the committee determines that the waiver/modification will not adversely impact the compatibility of land and water uses in the area, the use of a masonry wall would adversely impact adjacent residential uses, or existing specimen trees greater than 30 inches DBH and in good health would be affected by the buffer requirements.
 - (1) The DRC may allow a six-foot high solid hedge or a solid fence instead of the required wall. All other perimeter landscape area width and landscaping requirements shall still apply.

- (2) The DRC may allow a narrower width for the perimeter landscape area or buffer if a six-foot high solid hedge or a solid fence is instead of the required shrubs. All other perimeter landscape area width and landscaping requirements shall still apply.
- (3) The DRC may waive the perimeter landscape area, landscaping, and buffer requirements between uses if their vehicular use areas are unified and designed to be shared.

§ 175.026. STREET TREES IN RESIDENTIAL DEVELOPMENTS

- (A) Proposed residential developments shall submit a street tree plan to ensure that street trees will be planted and established in accordance with the standards of this chapter. The street tree plan shall specify proposed methods by which the developer, owner or homeowner's association will implement to ensure maintenance, liability, establishment, protection, watering, and initial structural pruning of the trees.
- (B) Street trees shall consist of canopy trees planted every fifty (50 linear feet within a minimum six (6) footwide parkway located between the travel lane and the sidewalk. Small trees may be permitted in areas where there is a conflict with overhead powerlines. Palm trees may not be utilized to meet this requirement unless they are grouped with a minimum of two (2) palms for each required canopy tree. No more than twenty-five (25%) percent of proposed street trees may be palms.
- (C) Palm trees may not be utilized to meet this requirement, unless they are grouped with a minimum of two (2) used for each canopy tree. A maximum of twenty-five (25) percent of all proposed residential street trees may be palm trees.
- (D) Street trees shall not be planted within 10 feet of an underground utility line or within a public or private utility easement. Street trees shall also not be within the site visibility triangle.

§ 175.027. LANDSCAPING MATERIALS CRITERIA

Trees and plants required by this chapter must be selected from the latest edition of the Florida-Friendly Landscaping Plant Guide. The varieties chosen shall be compatible with the existing soil and drainage conditions and must be in locations which will not cause danger or interference with existing structures, on-site septic systems, wells, utility lines (both above and below ground), driveways, or waterbodies. Artificial plant material or lawns shall not be used to meet the requirements of this chapter. All proposed landscaping shall conform to the following landscaping materials criteria:

- (A) Conformance with State Standards. All plant material added to the site shall conform to the standards for Florida No. 1, or better, as established in Grades and Standards for Nursery Plants, State of Florida, Department of Agriculture.
- (B) Existing Vegetation. The preservation and maintenance of existing native vegetation is strongly encouraged and may be utilized to fulfill the requirements of this chapter, provided such vegetation is located inside of the property boundary and not within rights-of-way or easements. Credit received for preserving native trees and vegetation shall be as established in the approved land clearing or site work permit.
- (C) Prohibited Species. All Class I invasive plant species, as established annually by the Florida Invasive Species Council are prohibited. If any of these species are existing on the property at the time of development, they must be removed before development will receive a certificate of occupancy; they may not to be

used as substitutes to fulfill the requirements in this section, nor shall they be planted on site. These species include but are not limited to:

BOTANICAL NAME	COMMON NAMES
Casuarina	Australian pine, beefwood
Melaleuca	Cajeput, punk tree, paperbark tree
Eucalyptus	Eucalyptus, gum tree
Schinus terebinthifolius	Brazilian pepper
Ricinus cummunis	Castor bean
Melia azedarach	Chinaberry
Enterolobium cyclocarpum	Ear tree, elephant ear
Cinnamomum camphora	Camphor tree
Sapium sebiferum	Chinese Tallow
Cupaniopsis anacardioides	Carrotwood
Leucaena leucocephala	White Leadtree

- (D) *Trees.* Any self-supporting woody plant which is of a species having an average mature height of fifteen (15) feet or greater and having trunks which can be maintained in a clean condition with over five (5) feet of clear wood measured from the ground at maturity. No single species of tree shall be used to total more than fifty (50%) percent of the required number of trees.
- (E) Avoiding Conflicts. Tree species known to cause damage to roadways and sidewalks shall not be planted closer than 10 feet to public rights-of-way, or utility line, unless the root system is completely contained within a barrier for which the minimum interior dimensions shall be four (4) inches thick concrete reinforced with No.6 load mesh (6x6x6) or equivalent.
- (F) Canopy Trees. Tree species having an average mature height of twenty-five (25) feet or more, under local climatic conditions. A minimum of fifty percent (50%) of all trees added to the site must be native canopy trees with a minimum of eight (8) feet in height with a DBH of two and a half (2-1/2) inches at planting. Recommended species include but are not limited to:

COMMON NAME	SCIENTIFIC NAME
Live Oak (native)	Quericus virginiana
Slash Pine (native)	Pinus elliotti
Red Maple (native)	Acer rubrum
Southern Magnolia (native)	Magnolia grandiflora
Bald Cypress (native)	Taxodium spp.

(G) Small Trees. Tree species which have an average mature height of no less than fifteen (15) feet and no more than twenty-five (25) feet, under local climactic conditions. Small Trees added to a site shall be a native or Florida-Friendly species with minimum of eight (8) feet in height with a DBH of one and a half (1-1/2) at planting. Recommended species include but are not limited to:

COMMON NAME	SCIENTIFIC NAME
Silver Buttonwood (native)	Conocarpus erectus
Holly (native)	llex spp.
Crape Myrtle	Lagerstroemia indica
Stoppers (native)	Eugenia spp.
Southern Red Cedar (native)	Juniperus silicicola

(H) *Palms*. Unbranched evergreen tree with a crown of long feathered or fan-shaped leaves. This shall include only true palms which are classified as Florida-Friendly by the University of Florida. Palms planted shall have at least four and a half (4-1/2) inches of clear wood at planting and shall not account for more than thirty percent 30% of required trees.

COMMON NAME	SCIENTIFIC NAME
Cabbage Palm (native)	Sabal palmetto
Bismark Palm	Bismackia nobilus
Date Palms	Phoenix spp.
Saw Palmetto (native)	Acoelorrhaphe wrightii
Needle Palm (native	Rhapidophyllum hystrix

(I) Shrubs and Hedges. A bushy, woody plants, usually with several permanent stems, and usually less than ten (10) feet tall at maturity. Fifty percent (50%) of shrubs or hedges planted must be a native species. All shrubs planted shall be three (3) feet tall at planting and spaced thirty (30) inches apart. All required hedges shall be two (2) feet tall at planting and be spaced and maintained to form a continuous, unbroken, solid visual screen within 6 months of planting. Recommended species include but are not limited to:

COMMON NAME	SCIENTIFIC NAME
Cocoplum (native)	Chrysobalanus icaco
Firebush (native)	Hamelia patens
Wax Myrtle (native)	Myrica cerifera
Walters Viburnum (native)	Viburnum obovatum
Hibiscus/ Mallows (native)	Hibiscus spp.

(J) Living Ground Covers. Plants that are low growing, form a dense mat of foliage, and spread easily by stolons, runners, or rhizomes. These may include annuals, perennials, ornamental grasses, and/or vines. Species may be Native or Florida Friendly species. Living ground covers shall be planted within designated landscape beds so as to present a finished appearance. Recommended species include but are not limited to:

COMMON NAME	SCIENTIFIC NAME
Coontie (native)	Zamia pumila
Dune Sunflower (native)	Helianthus debillis
Muhly Grass (native)	Muhlenbergia capillaris

COMMON NAME	SCIENTIFIC NAME
Cordgrass	Spartina spp.
Liriope	Liriope spp.

(K) *Turfgrass*. Any species of grassy living groundcover which resists mowing and foot traffic, typically installed as sod, seeds, or plugs. May be Native or Florida Friendly species but species used shall be a grass species commonly grown as permanent lawns in this region. Grass shall be clean and reasonably free of weeds, noxious pests or disease. Turfgrass must be used in swales or other areas subject to erosion. Recommended species include but are not limited to:

COMMON NAME	SCIENTIFIC NAME
Bermudagrass	Cynodon dactylon L.
Centipedegrass	Eremochloa ophiuroides
Bahiagrass	Pasplum noatum Flugge
St. Augustinegrass	Stenotaphrum secundatum
Zoysiagrass	Zoysia japonica Steud.

(L) Nonliving Ground Covers. Mulch, rocks, pine straw, or other types of approved similar nonliving ground cover are only permitted within designated planted landscape beds. The use of synthetic turf, marl, crushed shell, coquina, or other road base material as a ground cover is unacceptable. Railroad ties, wood, bricks, and synthetic materials may be used to separate landscape areas but may not be used in place of required living ground cover.

§ 175.028. INSTALLATION AND MAINTENANCE

- (A) *Quality*. All landscaping shall be installed following accepted commercial planting procedures. Soil, which is free of lime rock, pebbles, or other construction debris shall be provided. The owner of the property shall be responsible for the maintenance of all landscaping in good condition so as to present a neat, healthy, and orderly appearance, free of refuse and debris.
- (B) *Irrigation*. All landscaped areas shall be provided with a permanent irrigation system. Therefore, an irrigation plan showing identifying the water source(s) and showing sufficient details and coverage of all landscaped areas shall be required as part of the site plan submittal. For sites with an area of one quarter acre or less, available water supply may be utilized, provided that at least one (1) outlet is located within one hundred and fifty (150) feet of all plant material. Where existing native vegetation is preserved, irrigation is not required. To reduce irrigation requirements, the following water saving techniques will be encouraged:
 - (1) The use of reclaimed water where available;
 - (2) The use of stormwater from wet detention areas
 - (3) The use of water sourced from a well
 - (4) Irrigation systems shall use drip, trickle, low flow sprinkler heads or any other recognized method of low volume, high efficiency irrigation

- (5) Rain sensing override devices shall be required on all automatic irrigation systems. Soil moisture sensing devices are encouraged;
- (6) The use of native ground cover species instead of exotic ornamental turfgrass;
- (7) Watering schedules for automatic systems shall reduce irrigation in the rainy summer and dormant winter seasons and be zoned to provide for the peak irrigation requirements of the specific plant material;
- (8) The commitment to irrigate between sunset and sunrise when evaporation is minimal;
- (9) Irrigation systems shall be designed to the greatest extent practical to avoid surface runoff, overspray onto adjacent properties, and non-irrigated areas. Water being applied to impervious areas shall be eliminated;
- (10) The use of Florida-Friendly Landscaping Program techniques for watering efficiently, as developed by The University of Florida
- (C) Replacement of Vegetation. If any living material that is required by this code and shown on the approved site/landscape plan dies or fails to achieve normal growth, it shall be replaced within thirty (30) days of notification from the City Manager or designee. Such replacement landscaping shall meet all requirements of this code and the approved site/landscape plan. Failure to maintain the minimum landscape requirements of this section shall constitute a violation of this code.
- (D) *Pruning and Topping*. Pruning restrictions shall not apply for trees located under power lines. Trees shall be pruned only as necessary to promote healthy growth. Trees shall be allowed to attain their normal size and shall not be severely pruned or "hat racked" in order to permanently maintain growth at a reduced height. Trees may be periodically pruned or thinned in order to reduce leaf mass in preparation for tropical storms. All pruning shall be accomplished in accordance with the National Arborist's Standards.
- (E) *Nuisance Trees*. All recognized nuisance trees (i.e., pepper trees, Australian pines, etc.) shall be removed during site preparation and perpetually removed (upon re- growth) after issuance of a Certificate of Occupancy.
- (F) All landscaping and buffering shall meet the sight triangle requirements (see Chapter 176).

§ 175.029. LANDSCAPE AND IRRIGATION PLANS

- (A) Landscape Plan. All development applications multi-family, commercial, industrial, or institutional sites shall submit a landscape plan verifying compliance with the requirements of this chapter. The plan shall contain the following:
 - (1) An engineering scale (One (1) inch equals twenty (20) feet preferred).
 - (2) Property boundary lines.
 - (3) All site dimensions.
 - (4) Existing and proposed structures.
 - (5) Location of water lines or other underground utilities, fire hydrants and other above ground utility fixtures.

- (6) Accurate parking lot design showing parking spaces, aisles, loading areas, driveways, islands, signs, and parking lot or security light fixtures and the like.
- (7) Calculations of total square footage of the parking and landscaped areas.
- (8) Calculations of all landscape requirements in table listing what is required and what is being provided
- (9) Plant specification list which is keyed to the plan and contains the botanical name, common name, size at planting, quantity of each.
- (B) *Irrigation Plan*. Applicants for building permits shall submit an irrigation plan showing items (A)(1) trough (6) above, in addition to the location of the water source and size of well (if applicable), backflow preventer (if applicable), the location of water use zones, irrigation heads, drip lines, water lines or other items to show sufficient coverage of all landscaped areas in compliance with this chapter.