

## ***Chapter 118 – TREE PRESERVATION, PROTECTION, & REPLACEMENT***

### **ARTICLE 1 – GENERAL**

#### **A. Background**

Prior to the enactment of these regulations, all tree permitting and enforcement within the City of Venice was administered and enforced by Sarasota County through interlocal agreement and incorporation by reference of Sarasota County Code of Ordinances, Sarasota County Ordinance No. 83-44, including all past and future amendments (tree ordinance).

#### **B. Purpose and Intent**

The intent of this article is to provide a uniform standard for the protection and replacement of trees on all property which require the issuance of land development permits and tree permits within the City of Venice. As communities continue developing, the construction and renovation of buildings, roads, parking lots and other infrastructure is required to accommodate this growth. Unfortunately, the value of a healthy urban tree canopy is often overlooked and greatly underestimated in the interest of short-term costs. For this reason, tree protection and tree replacement regulations are necessary. The purpose of these regulations is to balance the need to provide space for community growth with the need to protect natural tree and plant communities and to replace trees lost to development. Florida-Friendly urban tree communities provide valuable environmental, economic and aesthetic benefits to the Citizens of Venice. The preservation, replacement and management of trees and the urban tree canopy are a vital part of sustainable community growth and the long term well-being of the City of Venice.

#### **Sec (118-1) Definitions**

The following terms and phrases, when used in this Article, shall have the meanings described in this Chapter:

1. *Administrator.* The Tree Program Administrator, or an administrative official of City of Venice Government designated by the Development Services Director to administer and enforce the provisions of this article.

2. *Agriculture*. A commercial enterprise using lands classified by the County Property Appraiser under the agricultural assessment provisions of F.S. § 193.461, for the production and marketing of agricultural products.
3. *ANSI*. The American National Standards Institute.
4. *Applicant*. Any individual, firm, partnership, corporation, authorized agent, association, organization, trust, company, or any other legal entity that has applied for a Tree Permit or City approval.
5. *Boundary Tree*: Any tree located on an adjacent property with a critical root zone that will be impacted by proposed land disturbance activity.
6. *Caliper*: The average trunk diameter in one quarter (1/4) inch increments at a predetermined point for the purpose of grading nursery grown trees: For the purpose of this Article those points are: six (6) inches from the soil line for trees up to and including four (4) inches in diameter (caliper) and twelve (12) inches from the soil line for trees larger than four (4) inches in diameter (caliper) .
7. *Canopy Tree*: Those trees that compose the top layer of canopy of vegetation and will generally reach a mature height of forty (40) feet or more.
8. *Certified Arborist*. A professional certified by the International Society of Arboriculture (ISA) who possesses the technical competence through experience and related training to provide for or supervise the management of trees and other woody plants in the residential, commercial, and public landscape.
9. *City Arborist*: A person designated by the City to act on behalf of the City of Venice in the management of urban forests.
10. *Clear Trunk*. The portion of the trunk maintained free of branches. The clear trunk is the lower portion of the trunk measured from the soil line up to the first major branch. Small temporary branches may exist on a clear trunk.
11. *Conservation Area*. An area of land protected from development or damage.
12. *Critical Root Zone (CRZ)*. The minimum area required around a tree which must be preserved to provide the tree a reasonable chance to survive development activities. The CRZ is generally a concentric circle measured from the approximate center of the

trunk of the tree with a radius of one (1) foot for each one (1) inch of tree DBH or to the drip line, whichever is greater.

Example: A tree with a DBH of 20" (twenty inches)  
would have a CRZ radius of 20' (twenty feet).

$$20 \times 1.0 = 20 \text{ feet (diameter)}$$

13. *Development Permit.* Any building permit, zoning permit, plat approval, or rezoning, certification, variance, or other action having the effect of permitting Development of land.
14. *Development Services Department.* City of Venice Department comprised of Code Enforcement, Building, and Planning and Zoning Division, or successor department, by whatever title designated.
15. *Diameter at Breast Height (DBH).* The diameter of an established tree trunk measured at breast height, which is 54" (fifty-four inches) above the ground. When low branches or stems preclude measuring the trunk at 54" (fifty-four inches), the smallest circumference of the trunk below the lowest branch or stem juncture shall be the measure of DBH. For trees that fork below 54" (fifty-four inches) and have no discernable single trunk then DBH will be the sum of the diameters of each trunk. Trees that fork at or below ground level, each stem shall be considered individual trees. (See Exhibit 1)

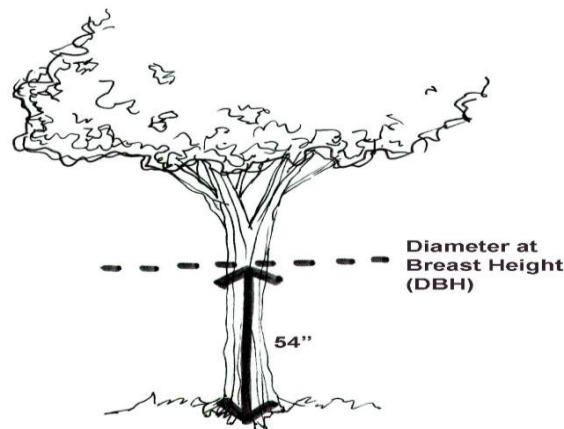


Exhibit 1 (above)

16. *Director*. The Director of Development Services, manages the Development Services Department, or his successor to his duties, by whatever title designated, or his designee.
17. *Drip Line*. The circumference around a tree formed by the outermost branches or portion of the Tree crown to the ground. (See Exhibit 2)

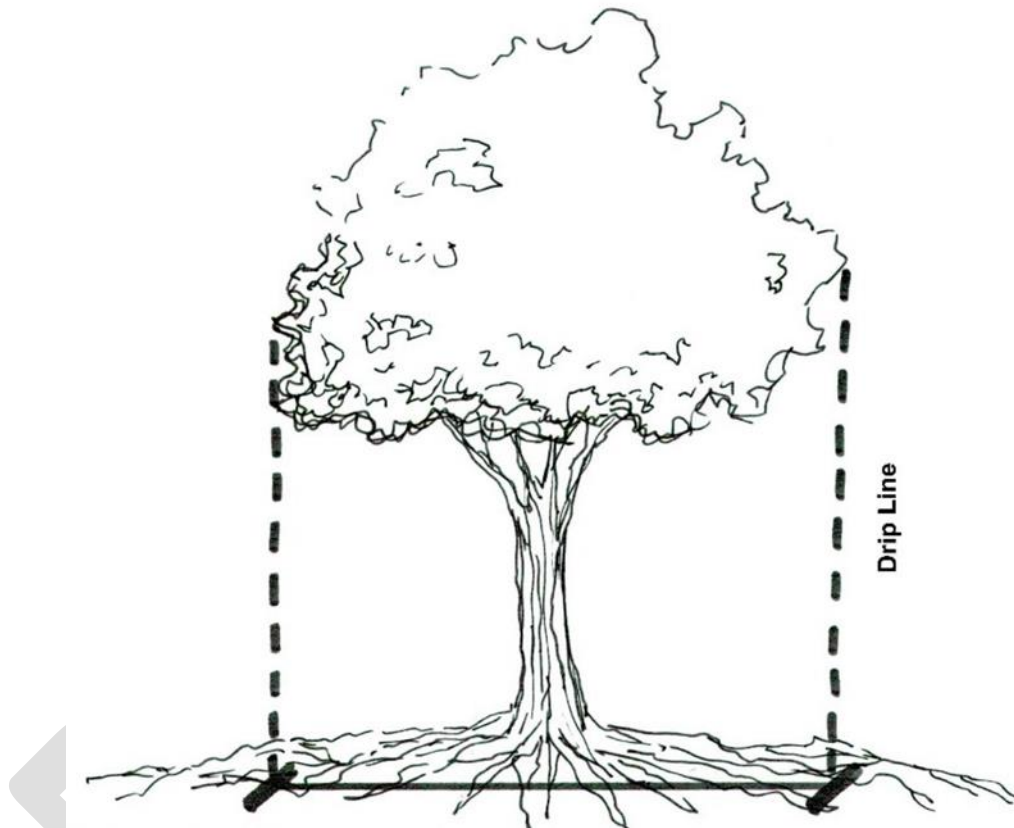


Exhibit 2 (above)

18. *Emergency*. Any manmade or natural disaster that is specifically declared to be an Emergency by the Mayor, Council Council or City Manager as .
19. *Hardwood tree*: Any tree that is not coniferous (not cone bearing or a needle leaf evergreen).
20. *Heritage Tree*. Any 30" (thirty inch) DBH single trunk or 45" (forty-five inch) DBH multi trunk native Tree that has been determined by the City Arborist to have the

characteristics as outlined in this Article or any Tree designated a Florida State Champion, United States Champion, or World Champion by the American Forestry Association.

21. *Florida-Friendly Landscaping™*. Planting comprised of low maintenance plants and uses low maintenance sustainable practices.
22. *Invasive Plant*. Any nonindigenous plant that grows aggressively enough to crowd out Native Plants. Refer to the current iteration of the List of Invasive Plant Species published by the Florida Exotic Pest Plant Council (FLEPPC).
23. *Irreparable Injury*. Any action less than tree removal that results in irreversible or incurable harm so as to cause the unnatural decline of the tree. Actions that are *Irreparable Injury* may include, but are not limited to: inflicting damage upon the root system by heavy machinery, changing the natural grade above the root system or around the trunk, inflicting damage that provides a pathway for infection or pest infestation, application of herbicides or other harmful chemical agents, infliction of trunk wounds, or improper removal of canopy or branches that is generally inconsistent with American National Standards Institute (ANSI) A300 standards for tree care.
24. *International Society of Arboriculture (ISA)*. A non-profit society that promotes the professional practice of arboriculture and fosters awareness of the benefits of trees.
25. *Listed Species*. Any plant or animal afforded protection pursuant to the Florida Administrative Code (FAC), including, but not limited to, species categorized as endangered, threatened, and species of special concern; or any plant or animal categorized as endangered or threatened pursuant to the U.S. Endangered Species Act, or bald eagles protected pursuant to the Bald and Golden Eagle Protection Act or other bird species protected pursuant to the U.S. Migratory Bird Treaty Act.
26. *Lot*. Includes "plot", "tract" or "parcel" and is a parcel of land of at least significant size to meet minimum zoning requirements for use and / or is otherwise determined to be a legal lot of record.
27. *Master Tree List*. A list maintained by the reference code section for list of trees which includes required tree species desirable for planting, according to: site location, specifications, use and constraints.

28. *Native Plant*. An indigenous plant.
29. *Naturalized Plant*. A plant that is not native to an area but has colonized without being invasive.
30. *Person*. Any individual, government, corporation, partnership, association, firm, trust, or other entity.
31. *Problem Trees*. Trees planted as part of a development project where the trees installed in accordance with the approved plan as determined by a certified arborist are: damaging infrastructure (utilities, sidewalks, parking area or structures), cause visibility issues for safe vehicular movement, or otherwise constitute a threat to the health, safety, and welfare of the general public.
32. *Project Area*. Land area subject to any land disturbing activity.
33. *Prune, Pruning, Trim, or Trimming*. The act of cutting or sawing to remove a dangerous hazard in a tree, or to maintain or improve the structure, form or health of a tree, in a manner generally consistent with the current ANSI A300 Standards (Part 1 *Pruning*), as may be amended.
34. *Right-of-Way*. The land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes. Specifically, land owned fee-simple or dedicated by easement to the State, County, or the City and/or municipality devoted to or required for use as a public street.
35. *Root Plate (RP)* means the area of the root zone near the trunk comprised of the main buttress and anchor roots. These roots are under compression and tension pressures and serve as the primary support structures of a tree. Catastrophic tree failure can result from damage to the root plate. The root plate is generally represented by the radius of a concentric circle measured from the approximate center of the trunk equal to five (5) times the DBH. This area can vary slightly by species. (See Exhibit 3)

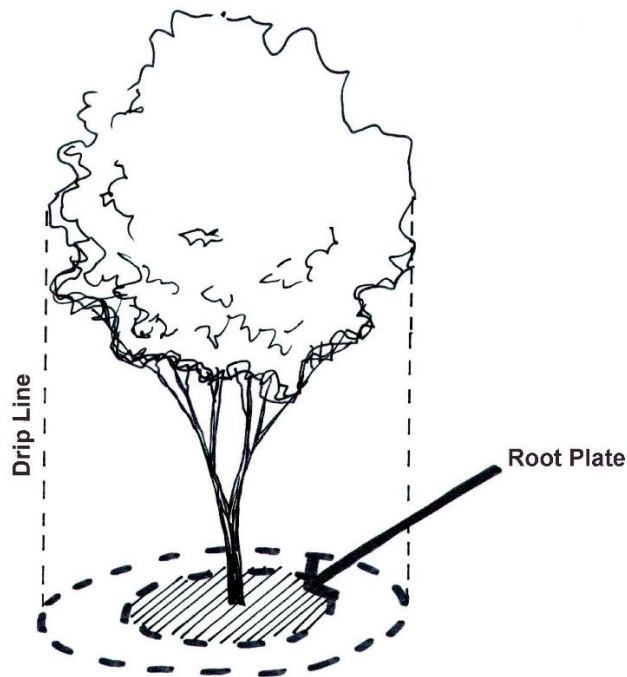
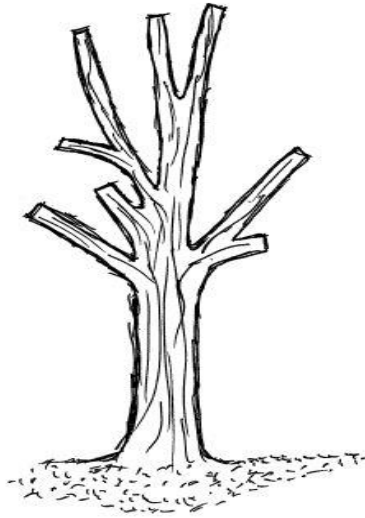


Exhibit 3 (above)

36. *Stipulation/Condition of Approval.* A statement or a condition issued with a Tree Permit or with an approved plan, with which compliance is necessary for continued validity of the Tree Permit or other approval.
37. *Street.* Includes any accessway such as a road, lane, highway, avenue, boulevard, alley, parkway, viaduct, circle, court, terrace, place or cul-de-sac, or other means of ingress or egress regardless of the descriptive term used, and also includes all of the land lying between the right-of-way lines as delineated on a plat showing such streets, whether improved or unimproved, but shall not include those accessways such as easements and rights-of-way intended solely for limited utility purposes, such as for electric power lines, gas lines, telephone lines, drainage, water and wastewater collection systems and easements of ingress and egress.
38. *Topping.* Internodal removal of woody branches containing heartwood or cutting back to a lateral branch too small to assume the terminal role. (See Exhibit 4)



*Exhibit 4 (above) (Diagram subject to change)*

39. *Tree*. Any self-supporting woody perennial plant, usually having a main stem or trunk and many branches, and at maturity normally attaining an average mature spread or crown of greater than 15 feet.
40. *Tree Cluster*. A group of six (6) or more protected trees with one continuous drip line.
41. *Tree Location Survey*. A survey that provides the following information: location of all trees, plotted by accurate techniques, common name of all trees, and Diameter at Breast Height (DBH), printed on the proposed site plan as described in this Article.
42. *Tree Measurement*. For the purposes of this Chapter and the standards, the terms (measurements) DBH and Caliper are applied as follows. For the purposes of this Chapter, Tree Measurement shall be in terms of Tree Inches.
  - a. DBH – Measurement used for standing, existing trees with a mature trunk flare to determine an accurate measurement of the size of the tree trunk.
  - b. Caliper – Measurement used for nursery stock to determine the trunk diameter. This measurement is only for material that is being specified and purchased from a nursery for installation.



43. *Tree Permit.* The legal authorization for Tree Removal, Irreparable Injury to a Tree, pruning of a Heritage or Venetian Tree, Tree Relocation, and /or the requirement for Tree Protection and /or Tree plantings pursuant to the provisions of this Article.
44. *Tree Protection Zone (TPZ)* is the area protected from all development activity protected by an approved barrier or fence. The area may consist of single a tree or tree clusters and other vegetation that has been agreed upon by the Applicant and the Director or their designee and set aside for preservation. These areas have been evaluated and determined to be worthy of preservation because of their aesthetic or environmental value. The Critical Root Zone (CRZ) will be the primary definer of the TPZ; however, some trees may need more or less space to be protected. Depending on condition, size, age and species, and tolerance of construction, the TPZ may be adjusted as needed, with approval by the City Arborist, to insure survival of the tree or tree cluster being preserved. Note: per standards provided in this Chapter, approval of the City Arborist is required.
45. *Tree Relocation.* To transplant, reestablish or move a tree to another place within a site or off site.
46. *Tree Removal.* To cut down, poison, or in any other manner destroy, or cause to be destroyed, a Tree as defined in this Article.
47. *Understory Tree.* A tree that, under normal forest conditions, may grow to maturity beneath canopy trees and will generally reach a mature height of at least ten (10)feet but less than forty (40) feet.
48. *Venetian Tree:* A protected tree designated by City Council as having a significant place or uncommonness in the City of Venice.

#### Sec (118-2) Administration

- (1) *Administration.* The Administrator shall be responsible for carrying out the provisions of this Article under the direction of the Development Services Director.
- (2) *Fees.* The City of Venice may establish reasonable fees and charges for the implementation of this Article. Such fees shall be set by resolution. Fees charged will substantially finance the expenditures of administering this Article. Any Person who conducts an activity that requires a Tree Permit, without first obtaining a Tree Permit, shall be required to obtain an

after-the-fact Tree Permit and/ or mitigate the impact in accordance with this Article. Payment shall not preclude nor be deemed a substitute for prosecution of violations of the provisions of this Article.

(3) *Applicability and Interpretation.*

- (a) In the application and interpretation of this Article, all provisions shall be considered minimal requirements and construed liberally to effectuate the purposes of this Article.
  - (b) This Article is not intended to repeal, abrogate, or impair any existing statutes, laws, ordinances, easements, covenants, or deed restrictions that impose more stringent restrictions on the protection or removal of trees.
  - (c) Where this Article conflicts with or overlaps another ordinance or statute, whichever imposes the more stringent restrictions for the protection of trees shall prevail.
  - (d) Where any provision of this Article refers to or incorporates another provision, ordinance, statute, rule, regulation, policy, official publication, or other authority, it refers to the most current version, incorporating any renumbering thereof or amendments thereto.
  - (e) This Article shall be applicable to all property within the City of Venice.
- (4) *Simultaneous Reviews.* In the event that an Applicant seeks authorization to conduct activities that are subject to overlapping code provisions from different Articles of Chapter 86 of the City of Venice Code, City staff shall perform simultaneous reviews to the greatest extent practicable.
- (5) *Listed Species.* In cases where impacts to Listed Species may occur, Applicants shall be required to consult with the appropriate Federal and State agencies, to use recognized sampling techniques as defined by accepted methodology of the agency to identify listed species, prior to any activities that could disturb listed species or the habitat.
- (6) *Appeals.* Appeals of the Administrator's decision shall be appealed to the Director who shall render a finding. Appeals of the Director's findings shall be to the Planning Commission.

## ARTICLE 2 – PROHIBITIONS & EXEMPTIONS

### Sec (118-3) Prohibitions

- A. Unless otherwise exempted or authorized in a Tree Permit in accordance with this Article, no Person shall:

1. Engage in Tree Removal;
2. Engage in Tree Relocation;
3. Initiate Development when a Tree exists on a property;
4. Cause Irreparable Injury to a Protected, Venetian, or Heritage Tree;
5. Cause Irreparable Injury to trees within a Right-of-Way; or

Plant a Tree or other vegetation within a Right-of-Way.

Any Person violating any provision within this Article or a Stipulation contained in a Tree Permit or a Development Permit that results in a prohibited activity shall constitute a violation of this Article. No person shall physically impede City staff who are engaged in the planting, maintaining, Pruning, treating, or removing of any Tree or portion of Tree in any public Right-of-Way.

*Sec (118-4) Exemptions*

A. The following activities are specifically exempted from this Article:

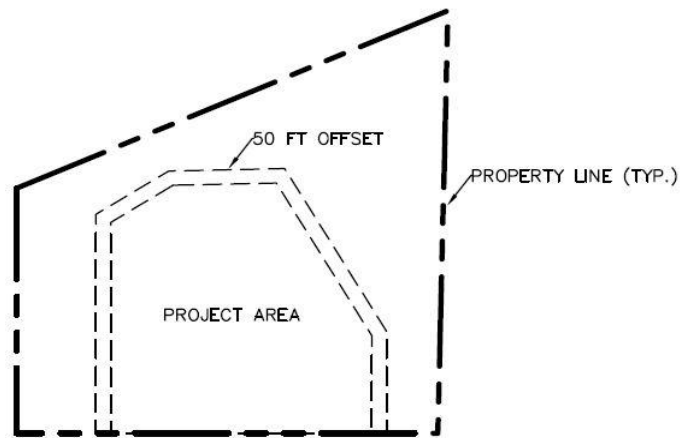
1. In emergencies such as a hurricane, flood, windstorm or other natural disaster, the requirements may be waived by the Mayor or City Council and/or the City Manager as appropriate if work is required to restore the order of the City.
2. Removing trees from nurseries and botanical gardens, which are being grown for retail or wholesale;
3. The construction of telecommunication towers (cell towers);
4. Removal of diseased or infested trees upon receiving written confirmation from the City Arborist, Florida Forest Service or ISA Certified Arborist.
5. City maintenance affiliated with road, utility and drainage projects.
6. Public utility companies and government agencies conducting operation on public and utility rights of way or easements or on sites for electric power substations and similar facilities.
7. Bona Fide Agricultural Land as classified pursuant to Section 193.461, Florida Statutes, or proposed agricultural purposes, except if such activity must be done in compliance with the Southwest Florida Water Management District (SWFWMD) and the Florida Department of Environmental Protection (DEP) regulations.

8. Allow for solar access for the efficient operation of solar dependent technologies including solar collection and solar hot water systems. The applicant shall supply supporting documentation prepared by a registered landscape architect and/ or certified arborist.
9. Private Homes as defined in Florida Statute 163.045

## ARTICLE 3 – PERMITTING

### A. Permit Application Requirements:

1. A completed application and the applicable application fee. The application shall include all required information and associated documents as established by the appropriate application form of the City of Venice and any other information as deemed appropriate by the Development Services Director or designee to effectuate the review of the application consistent with the requirements and standards of this Chapter.
2. Tree Protection and Replacement Plan unless otherwise exempted in Section 118-4. Tree Protection and Replacement Plans must provide the following information:
  - a. A complete tree survey and inventory of the project area is required for all development that does not meet exemption (Section 118-4) prior to the submittal of a Tree Protection and Replacement Plan. The survey shall show all trees measured 4" DBH or greater, tree stands and tree groupings within the property line or within 50 feet of the project area/ limits of disturbance within the property line. The project area is all land on the property that is disturbed by grading and development. The project area can be located within the property line/ limits.



*Exhibit 5 (above)*

- b. An inventory of identified trees by type and size (in DBH).
  - c. Shown on a copy of the site plan, with proposed buildings, grading, streets, accessways, sidewalks, hardscape, and proposed / existing utilities.
  - d. Methods for tree protection including fencing and retaining walls.
- B. Plans shall be prepared by a state licensed Landscape Architect or Certified Arborist.
- C. After the submission of the plan, a designee appointed by the Director will perform a site inspection. The Tree Protection and Replacement plan shall provide sufficient information and detail to demonstrate that all applicable requirements and standards of this Article are fully satisfied.
- D. Active permit applications shall constitute authorization from the property owner for the appropriate City of Venice staff to conduct review and site inspections of the subject property through the duration of the permit.

#### ARTICLE 4 – TREE PRESERVATION, RELOCATION AND REPLACEMENT

The following establishes standards by which plans and field conditions are to be evaluated to determine compliance within;

### Sec (118-5) Protected Trees

Protected trees identified for removal on the tree removal permit application shall be replaced with new planted trees or transplanted trees. The following are protected trees:

1. Trees planted or retained for approved binding master plans during zoning approval, site and development plans, preliminary plats, building permits, and construction plans;
2. Any tree over four (4) inch DBH, unless identified on the invasive species list as defined in Sec 118-4 (Exemptions) or by the Florida Exotic Pest Plant Council (FLEPPC).
3. Sabal Palms with minimum six (6) foot clear trunk (CT).

### Sec (118-6) Heritage Trees & Venetian Trees

- A. Heritage trees are any native, single trunk tree 30" (thirty) inches DBH or greater, or multi-trunk 45 (forty-five) inches DBH or greater.
- B. Venetian trees are specific native and non-native trees designated by City Council as having a historic or cultural significance within the City. Venetian Trees are established as follows:
  1. Applicable species are native and noninvasive species that have uncommonly large size in relation to the species, rarity for the area, documented historic or cultural significance in the community or designated as State, National, and or World Champions.
  2. Venetian trees must be nominated by the owner of the property where the tree is located. Trees with overhanging canopy (branches) onto adjoining properties must also include nomination consent from all adjoining property owners where the overhanging canopy occurs. Tree nominations will be directed to the City Arborist for review and shall include a completed nomination form including the consent of adjoining property owners (if required). To qualify for consideration by City Council, the proposed tree must be evaluated by the Tree Program Administrator for health, condition, location and structure before being presented to Council considered for approval. The Tree Program Administrator will prepare a brief report with a description of the proposed tree providing technical guidance to Council as to the suitability of the proposed tree(s) for preservation.

3. Heritage and Venetian trees may be provided a reduction in City property taxes up to \$250.
- C. A permit is required for the pruning and trimming of any Heritage or Venetian Tree as defined in this Article. Any pruning operation not performed in accordance with the ANSI A300 will be subject to fines as outlined by City Council.
1. Pruning of a designated Heritage or Venetian tree of a branch 8 (eight) inches in diameter measured 12 (twelve) inches from the branch union shall require application for a permit issued by the Administrator. This application shall provide a photograph of the tree along with a simple plan or current aerial photography of the property where the tree is located identifying the tree to be pruned and any nearby structures, species of tree, size (DBH) of tree, a description of the branch to be removed and reason for removing the branch. The City Arborist shall inspect the tree and property for approval or denial and may request an onsite meeting with the contractor or owner prior to the issuance of a permit. Violations of this permit requirement will be subject to fines per Article 7.
  2. Topping of trees shall be illegal within the City and subject to fines of the tree owner and the tree care service that committed the offense as determined by the Administrator.

*Sec (118-7) Removal of any Heritage and Venetian Tree*

1. Except as authorized by Florida Statutes, a Heritage or Venetian tree may be removed by obtaining a Tree Permit, if it presents a safety hazard. In the instance that the tree is diseased, injured, or in decline, applicant will provide an affidavit that bears the signature of a certified arborist stating the reason for the application. The tree will then be examined by the City Arborist for approval or denial of a tree removal permit.
2. The Criteria described in Sec. 118-8 of this Article shall be utilized in making a determination of the suitability of the permit application.

## Sec (118-8) Determining suitability for removal or preservation of trees

Determining the suitability of a tree or tree clusters for preservation during the design and planning phase of site development is an important early step so that resources are not misallocated. Guidance is provided by the ANSI A300, Part 5, *Site Planning, Site Development* for determining the suitability of preservation and methods for protection of trees during site development. The City Arborist will approve or deny preservation and removal plans based in part on the following criteria. To determine the suitability for preservation or removal of Protected, Heritage and Venetian trees, the following criteria will be considered:

### A. Location:

1. Relationship to a Building, Structure and / or Construction Activity;
2. Grading Impacts (Cut & Fill)
3. Infrastructure Conflicts (Utilities, driveways, sidewalks, etc.)
4. Susceptibility to wind and sun exposure

### B. Health & Condition:

1. Appropriate and vigorous growth
2. Existing decay in trunk, main branches, or roots
3. Lightning Damage
4. Pruning Errors (Tree Topping)

### C. Structure:

1. Structural Defects (Cracks, Decay, Overextended Branches, Girdling Roots)
2. Stability of the tree (Root Health, Leaning)
3. Branch Attachments

### D. Species:

Shall meet Florida Friendly Principles which conserve water, reduce waste and pollution, create wildlife habitat and prevent erosion. The below species characteristics will be assessed in conjunction with using the appropriate species in the appropriate space.

1. Desirable Species
2. Wind Resistance
3. Pest Resistant
4. Water Efficient
5. Reduce and manage stormwater runoff



6. Meets desired aesthetic and / or environmental benefits

Sec (118-9) Removal of previously approved and required tree plantings

This section applies only to trees that were planted as part of a development project, including PUD;

- A. Problem trees shall be replaced at a 1:1 tree inch ratio for each tree removed. Protected Trees are to be replaced with equivalent tree inches of similar species and location. When replacement of Protected Trees is not practical as reasonably determined by the City Director and/ or Director's Designee at the same location of the tree(s) to be removed, an equal number of inches of the same species shall be applied to replace the Trees. The plantings shall meet the general planting requirements as provided in this Article and shall be planted on the same site or addressed through the Tree Mitigation Fund as provided in Sec 118-12.

Depending on available planting area, the replacement tree can be located on the same site/ lot in another location or other common areas, such as around drainage ponds, near a clubhouse, a park or entry. If all of the replacement trees cannot be replaced on site, the applicant shall contribute to the Tree Mitigation Fund as provided in Sec 118-12.

Sec (118-10) Tree Replacement and Mitigation Calculations

Calculations provided herein provide minimum standards for tree replacement and mitigation. All properties must meet the minimum standards per acre whether or not a site had trees prior to development. All trees that are designated for replacement shall be on an inch per inch basis. The density is based on zoning as set below: The density can be described as follows:

- A. Replacement tree density calculations shall apply to all districts, including PUDs, *except* for RSF, RMF and Industrial zoning districts. Calculations below are based on the Tree Measurement definition.
  - 1. A minimum site/project area density of Forty (40) Tree inches per acre of approved trees are required. This can be achieved as follows:
    - a. Preservation of existing trees (inches measured in DBH) to be preserved with no impact to the TPZ.

- b. Planting new trees. Within PUD district, planting of new trees is restricted to common areas only.

*Formula:*

Total project area acreage (See Exhibit 5) x 40 inches = required tree inches per acre

*Example:*

3.2 acres x 40 inches = 88 total tree inches required

B. Individual Lot Replacement:

1. RSF and RMF zoned lots with detached single family or two-family dwellings, on lots under 1 acre, shall provide 40 tree inches per acre. The City Arborist with approval by the Director, may allow a combination of canopy and understory trees. Suitable existing trees on site may be credited to the required trees with approval by the City Arborist.
2. No Land Clearing or Protected Tree Removal shall be allowed before receiving an approved Permit unless defined in Section 86-50 and per Tree removal and trimming shall be consistent with F.S. § 163.045. Applications for such approval shall be submitted complete with:
  - Scaled detailed Site Plan showing all Lot characteristics and dimensions
  - All existing and proposed Construction Improvements
  - All fill including septic mounds, onsite sanitary disposal tanks and wells
  - On any portion of a Lot with less than six (6) inches of grade change, said Site Plans shall also show in their proper approximate location all existing Protected Trees which shall thereafter be protected and saved during Building Construction to minimize future expense in planting Trees necessary to meet the Tree inches per acre requirement.

C. Replacement tree density calculations for all industrial zoning districts

1. A site density of twenty (20) Tree inches per acre of approved trees.

#### D. Replacement tree density calculations Heritage and Venetian Trees

1. Heritage and Venetian Trees shall be replaced at a rate of one to one tree inches (1:1). If there is insufficient land area on a site to accommodate the proposed trees then the Applicant shall alternatively pay into the Tree Mitigation Fund equivalent to the tree inches not able to be accommodated on the site (Sec. 118-12).

#### E. Replacement Tree Criteria:

1. Live Oaks (*Quercus virginiana*) over four (4) inch DBH removed shall be replaced only with live oaks. The total caliper inches of replacement live oaks shall equal the total DBH inches of protected live oaks removed; for other removed protected trees, the total caliper inches of replacement trees shall equal one-half the total caliper inches removed, unless otherwise approved by the City Arborist. If multi-trunked trees are used as replacement trees, then the total DBH of the four largest trunks shall equal the replacement caliper. New palms may be used only to replace protected palms removed.
2. Tree species selected for planting are subject to City approval based upon site conditions including but not limited to: soil characteristics, soil volume, planting area size, and visibility. At a minimum, seventy-five percent (75%) of the replacement Trees shall be Large and Medium sized canopy trees, unless Canopy Trees are not suitable, as reasonably determined by the Director and/ or Director's Designee in the area to be planted. Refer to the Master Tree Species List (Table: 118.10-1).

**Table 118.10-1: Master Tree Species List (Florida Friendly Species Required)**

CS = Cold Sensitive (Requires protection if planted away from coastal areas generally understood to be located east of I-75)

FF = Florida Friendly Plant

<b>Large Canopy Trees</b>						
<b>Scientific Name</b>	<b>Common Name</b>	<b>Max. Height (ft.)</b>	<b>Max. Spread (ft.)</b>	<b>Native</b>	<b>FF</b>	<b>CS</b>
<i>Acer rubrum</i>	Red Maple	50-60	25-35	Y	Y	N
<i>Carya glabra</i>	Hickory, Pignut	50-65	30-40	Y	Y	N
<i>Delonix regia</i>	Royal Poinciana	35-40	40-60	N	Y	Y
<i>Ficus aurea</i>	Strangler Fig	50-60	50-70	Y	Y	Y
<i>Jacaranda mimosifolia</i>	Jacaranda	25-50	45-60	N	Y	N
<i>Liquidambar styraciflua</i>	Sweet Gum	60-70	35-50	Y	Y	N
<i>Magnolia grandiflora</i>	Southern Magnolia	60-80	30-40	Y	Y	N
<i>Pinus elliottii</i> var. <i>densa</i>	South Florida Slash Pine	75-100	35-50	Y	Y	N
<i>Pinus palustris</i>	Long Leaf Pine	60-80	30-40	Y	Y	N
<i>Platanus occidentalis</i>	American Sycamore	75-90	50-70	Y	Y	N
<i>Quercus shumardii</i>	Shumard Oak	75-90	35-60	Y	Y	N
<i>Quercus virginiana</i>	Oak, Live	60-80	60-120	Y	Y	N
<i>Swietenia mahagoni</i>	West Indian Mahogany	40-50	46-60	Y	Y	Y
<i>Tabebuia heterophylla</i>	Pink Trumpet Tree	40-50	35-50	N	Y	N
<i>Taxodium distichum</i>	Bald Cypress	60-80	25-35	Y	Y	N

<b>Medium Canopy Trees</b>						
<b>Scientific Name</b>	<b>Common Name</b>	<b>Max. Height (ft.)</b>	<b>Max. Spread (ft.)</b>	<b>Native</b>	<b>FF</b>	<b>CS</b>
<i>Avicennia germinans</i>	Black Mangrove	30-50	20-30	Y	Y	Y
<i>Bucida buceras</i> 'Shady Lady'	Shady Lady Black Olive	30-50	20-40	N	Y	Y
<i>Bursera simaruba</i>	Gumbo Limbo	25-40	25-40	Y	Y	Y
<i>Cassia fistula</i>	Golden Shower	30-40	30-40	N	Y	Y
<i>Coccoloba diversifolia</i>	Pigeon Plum	15-25	20-30	Y	Y	Y
<i>Conocarpus erectus</i>	Buttonwood	30-40	20-30	Y	Y	N
<i>Elaeocarpus decipens</i>	Japanese Blueberry	30-40	30-40	N	Y	N
<i>Fraxinus caroliniana</i>	Carolina Ash	30-50	10-15	Y	Y	N
<i>Gordonia lasianthus</i>	Loblolly-Bay	35-45	10-15	Y	Y	N
<i>Ilex opaca</i>	American Holly	35-50	15-25	Y	Y	N
<i>Juniperus silicicola</i>	Southern Red Cedar	30-45	20-30	Y	Y	N

<b>Medium Canopy Trees (Cont.)</b>						
<i>Laguncularia racemosa</i>	White Mangrove	30-50	20-30	Y	Y	Y
<i>Magnolia grandiflora</i> x var.	Southern Magnolia	20-40	15-25	Y	Y	N
<i>Magnolia virginiana</i>	Sweet Bay	40-50	15-25	Y	Y	N
<i>Persea borbinia</i>	Redbay	30-50	30-50	Y	Y	N
<i>Podocarpus macrophyllus</i>	Podocarpus	30-40	20-25	N	Y	N
<i>Quercus geminata</i>	Oak, Sand Live	30-60	20-30	Y	Y	N
<i>Taxodium ascendens</i>	Cypress, Pond	50-60	10-15	Y	Y	N
<i>Ulmus alata</i>	Winged Elm	45-65	30-40	Y	Y	N
<i>Ulmus parvifolia</i>	Chinese Elm	40-50	35-50	N	Y	N

<b>Small Understory Trees</b>						
<b>Scientific Name</b>	<b>Common Name</b>	<b>Max. Height (ft.)</b>	<b>Max. Spread (ft.)</b>	<b>Native</b>	<b>FF</b>	<b>CS</b>
<i>Acacia farnesiana</i>	Sweet Acacia	15-20	15-25	Y	Y	N
<i>Acer saccharum</i> 'floridanum'	Florida Maple	25-30	15-25	Y	Y	N
<i>Ardisia escallonioides</i>	Marleberry	12-20	6-12	Y	Y	Y
<i>Calliandra</i> sp.	Powderpuff	12-15	10-15	N	Y	N
<i>Cephalanthus occidentalis</i>	Bottlebrush	10-15	10-15	N	Y	N
<i>Coccoloba uvifera</i>	Seagrape	25-30	20-30	Y	Y	N
<i>Cordia sebestena</i>	Geiger Tree	25-30	20-25	Y	Y	Y
<i>Ilex cassine</i>	Holly, Dahoon	20-30	8-12	Y	Y	N
<i>Ilex vomitoria</i>	Holly, Yaupon	15-25	15-20	Y	Y	N
<i>Lagerstroemia indica</i>	Crepe Myrtle	10-30	15-25	Y	Y	N
<i>Ligustrum japonicum</i>	Japanese Privet	8-12	15-20	N	Y	N
<i>Myrcianthes fragrans</i>	Simpson's Stopper	20-30	15-20	Y	Y	N
<i>Myrica cerifera</i>	Wax Myrtle	15-25	20-25	Y	Y	N
<i>Myrica cerifera</i>	Frangipani	20-25	20-25	N	Y	Y
<i>Quercus myrtifolia</i>	Oak, Myrtle	15-30	15-30	Y	Y	N
<i>Rhizophora mangle</i>	Red Mangrove	20-30	20-30	Y	Y	Y
<i>Sabal palmetto</i>	Cabbage Palm	40-50	10-15	Y	Y	N
<i>Tabebuia caraiba</i>	Silver Tabebuia	15-25	15-20	N	Y	Y
<i>Tabebuia chrysotricha</i>	Golden Trumpet	25-35	25-35	N	Y	Y
<i>Tabebuia heterophylla</i>	Pink Trumpet Tree	20-30	15-25	N	Y	Y
<i>Tabebuia impetiginosa</i>	Purple Tabebuia	12-18	10-15	N	Y	Y

1. To provide diversity, no single species shall constitute more than fifty percent (50%) of the total replacement planting.

2. All replacement trees shall be a minimum 2.5" (two and one-half inches) caliper measured no closer than 6" (six) inches from the ground.
3. Only 25% of the required tree plantings can be of the Pinus (commonly referred to as Pine) species.
4. Replacement Trees shall be Florida No. 1 or Greater (Florida Grades and Standards for Nursery Plants, latest edition).
6. *Sabal palmetto* (Cabbage Palm) may be planted at a rate equivalent to three (3) palms to one (1) replacement to a Canopy Tree equivalent to 2.5 required tree inches. Other Florida-Friendly palm species may be proposed at the same 3:1 rate for approval of the Administrator. Palms shall not constitute more than twenty five (25%) of the total replacement planting.

#### Sec (118-10) Incentives – Retention of Existing Trees

Preserved inches may be credited to the total inches required by one or more of the following methods:

1. *Incentive one:* Retention of Native trees twenty-four (24) inches in diameter and larger shall be credited at two (2) times the diameter of trees twenty-four (24) inches and larger to remain. All invasive species within the TPZ shall be removed utilizing only hand-held power equipment, no heavy equipment is allowed within the TPZ unless approved by the Director or designee.
2. *Incentive two:* Retention of Clusters of six (6) or more protected native trees with one continuous drip line shall be credited at one and one half (1 ½) times the diameter to remain for trees under twenty-four (24) DBH. Trees over twenty-four (24) inches DBH shall be credited at two (2) times their DHB as outlined in Sec. 118-10.1. All invasive species shall be removed utilizing only hand-held power equipment, no heavy equipment is allowed within the TPZ unless approved by the Director or designee.
3. *Incentive three:* Retention of Native tree clusters of six (6) protected trees or more will be credited as outlined in 118-10.1 -2 plus with a continuous ground cover of Saw Palmetto (*Serenoa repens*) or other approved native understory plant

community shall be counted as one (1) tree inch per 1,000 (one-thousand) square feet of Saw Palmetto or native understory to remain. This area must remain pristine and undisturbed to earn credit inches. All invasive species within the TPZ shall be removed utilizing only hand held power equipment, no heavy equipment is allowed within the TPZ unless approved by the Director or designee.

#### *Sec (118-10) Mangroves*

Trimming and alteration of mangroves shall be consistent with the Mangrove Trimming and Preservation Act, F.S. § 403.9321 through 403.9332. Any red (*Rhizophora mangle*), black (*Avicennia germinans*) and white (*Laguncularia racemosa*) mangrove trimming beyond that associated with this permit requires a permit from the Florida Department of Environmental Protection.

#### ARTICLE 5 – Methods

##### *Sec (118-11) Best Management Practices (Required)*

The following Best Management Practices shall be applicable to all tree permits, unless specified otherwise herein. These standard Best Management Practices shall also be applicable to all activities that affect Protected, Heritage, and Venetian trees, trees located within a TPZ, and regardless of whether a tree permit is required for the proposed activity.

1. Prior to commencing work and throughout the duration of the authorized activity, the owner, developer, contractor or agent shall clearly mark (with red flagging) all trees proposed to be removed and shall erect barricades around all trees to be protected. The barricades must remain in place and be in good condition for the duration of the authorized activity. Protective barricades for protected trees shall be installed no closer than the designated TPZ of the tree. Barricades may be placed three feet from the trunk of palms. Barricades shall be constructed in a post and rail configuration or Orange Barrier fencing, four (4) feet in height. The upright posts shall be a minimum of a two by two-inch (common industry standard) wooden stake, four feet long. Posts shall be implanted deep enough into the ground to be stable and extend a minimum height of three feet above the ground. A minimum of a one by four-inch by one inch (common industry standard) wooden

board shall be used to connect the upright posts. Silt barriers, hay bales, or similarly effective erosion control barriers may be substituted and required in any area where erosion or siltation may cause damage to trees upon approval by the Administrator. The maximum distance allowed between upright posts is eight feet. More protective barricades may be substituted with the approval of the Administrator. In all cases these barriers must remain in place until the final finish grade is being established at the end of the project or project phase. Damage to protection barriers and encroachments into the TPZ will be subject to fines and penalties establish in Article 7. Signs shall be posted at (fifty) 50-foot intervals for single trees or tree clusters of twenty (20) trees or less and; One-Hundred (100) foot intervals for areas of more than twenty (20) trees; clearly stating potential fines and "Tree Protection Area, Keep Out".

2. Throughout the duration of the authorized activity, the owner, developer, contractor or agent shall not cause or permit the cleaning of equipment or material or the storage or disposal of debris, fill, waste materials such as paints, oils, solvents, asphalt, concrete, mortar or any other material within the TPZ of any tree or cluster of trees or within any native habitat or buffer.
3. No damaging attachment ropes or wires (other than supportive measures for a Tree), signs, posters, handbills, Tree Permits or other objects may be fastened to any tree. No gaseous, liquid, or solid substance which may be harmful to trees shall come into contact with any portion of the tree except pursuant to authorization under the provisions of this article, including attaching signs and other objects to the tree.
4. Where elevation changes are proposed within the protected zone of trees, the applicant will be required to justify the need for the elevation change and install retaining walls or drain tiles unless the applicant demonstrates that such protection would be impractical. The applicant shall have the choice of the type or design. Where elevation changes are proposed within the TPZ from the trunk of any Venetian or Heritage tree, the applicant will be required to install retaining walls or drain tiles unless the applicant demonstrates such protection would be impractical. The applicant shall have the choice of the type or design. These root protection measures shall be in place prior to the deposition of fill, or excavation of soil within the TPZ from the trunk. Tree species tolerances for grade changes, size



and age will be considered when locating tree wells and retaining walls. Tree wells or retaining walls will be required as applicable when grade changes of more than six (6) inches are needed within more than 20% of the TPZ. Tree well and retaining wall distances from the face of the trunk range from 0.75 feet for each one-inch DBH for a young or construction tolerant species to 1.5 feet for each one-inch DBH of mature or less tolerant species. The applicant will be required to present a report bearing the signature of a Certified Arborist with a statement of minimal impact design. The Applicant may also request a pre-application meeting with the City Arborist before submitting a design. These structures should be built with shallow and small footers or footers of stone or sand to lessen the impact of cut or compacted roots. In cases where grade changes can be accomplished with less than 20% of the CRZ being impacted then the change should be as gradual and as far from the trunk face as possible with no more than 6" of fill over 20% of the CRZ. Under no circumstances will fill be allowed over the Root Plate.

5. The Administrator may conduct periodic inspections of the site during land clearing and construction in order to ensure compliance with this Article.
6. The Administrator may allow certain activities to be conducted within the barricaded TPZ Line of a Tree, upon a determination that the tree will not be adversely affected, such as driveways, swimming pool decks, and patio pavers.
7. If temporary equipment or vehicle access into the TPZ is required for construction activity, then steps must be taken to protect the TPZ from compaction and damage. This will be required for short-term temporary access of three (3) weeks or less by installing and maintaining a six (6) to twelve (12) inch layer of organic mulch in the area of encroachment. When access is required for longer periods the applicant will be required to install and maintain a four (4) inch layer of mulch and place  $\frac{3}{4}$ " plywood on the mulch layer to create a path for equipment or vehicles. Under no circumstances should these access paths be placed on or where they may impact the root plate. The Tree Program Administrator must be informed and approve of any alterations to the original approved Tree Protection Plan. Violations will be subject to fines and penalties as outlined in the enforcement section of this Article.
8. Should the construction of a deck, wall, fence or other similar structure be desired within the TPZ then the use of posts or pilings or similar system shall be used as the

construction method. Continuous footers and stem walls shall not be installed within the TPZ unless approved by the Director and/ or Director's Designee. These posts or pilings shall be engineered only as large as necessary to support the proposed structure. All efforts should be made to reduce the impact to large roots and in no circumstances should the structure encroach on the Root Plate of a tree.

9. No trenches are permitted within the TPZ without prior approval unless per an exempted use. In some cases, with approval of the City Arborist, hand dug trenches may be allowed and roots pruned cleanly as directed in ANSI A300 Part 8, *Root Management Standard*. All efforts should be made to bypass the TPZ with underground utilities and irrigation lines unless tunneling methods are used a minimum of thirty-six (36) inches below the existing grade. Underground utility lines that encroachment into the TPZ shall be indicated on the site and landscape plans. The City Arborist will approve, deny or alter all proposed methods of trenching within the TPZ.

A. Recommended Soil Volumes for Trees.

1. Large canopy trees, 45 feet height and taller
  - a) Minimum open soil space 400 square feet or;
  - b) minimum uncompacted soil volume 1200 cubic feet
  - c) No closer than four (4) feet from any pavement or curbing
  - d) Minimum planting space width is eight (8) feet
  - e) Minimum uncompacted soil depth 36 inches
2. Medium canopy trees, 25 to 45 feet height
  - a. Minimum open soil space 200 square feet or;
  - b. minimum uncompacted soil volume 500 cubic feet
  - c. No closer than 36 inches from any pavement or curbing
  - d. Minimum planting space width is six (6) feet
  - e. Minimum uncompacted soil depth 30 inches
3. Small understory trees, less than 25 feet in height
  - a. Minimum open soil space 100 square feet or;
  - b. minimum uncompacted soil volume 200 cubic feet
  - c. No closer than 24 inches from any pavement or curbing
  - d. Minimum planting space with is six (6) feet

- e. Minimum uncompacted soil depth 24 inches
  - 4. Some exceptions to the space requirements may be granted by the Tree Program Administrator for small species that have a mature height of less than twenty (20) feet
- B. Methods to achieve soil volume requirements for street trees in or near sidewalks, within plazas and parking lots
- 1. *Root paths under pavement*  
Root paths are trenches under pavement through compacted soil, four (4) inches wide and twelve (12) inches deep with a six (6) inch strip drain installed in each trench within uncompacted soil. A minimum of two (2) trenches per tree spaced four (4) feet apart on center and only used to connect the tree planting pit to open soil or nearby planting areas. The root path system shall be used only to provide a path for tree roots to open soil and not as an independent system to provide soil volume.
  - 2. *Structural soil under pavement*  
CU Structural Soil™ is an aggregate soil developed and patented by Cornell University. It consists of a combination of stone and soil plus additives. This product or an approved equal provides a highly compactable material that also allows for root growth. It may be used under pavement to provide the required soil volume for root space.
  - 3. *Suspended pavement*  
Modular soil cell systems designed to be assembled and placed under pavements may be used to provide root space. These systems are designed to support the pavement weight while providing soil volume for tree roots.
  - 4. Other soil volume system designs may be proposed for approval by the Director and/ or Director's Designee

## ARTICLE 6 - Tree Mitigation Fund

A dedicated Tree Mitigation Fund, financial fund for all lands within the corporate limits of the City of Venice shall be created under authority of this Code to receive payments as detailed

elsewhere in this Article. The Tree Mitigation Fund shall be a separate line item set up and shown on the City's financial records in which all receipts and expenditures are detailed. Expenditures of Tree Mitigation funds as part of the City budget process upon approval by City Council based on recommendation of the Administrator for the following projects:

1. City Construction and capital improvement of publicly owned lands and rights-of-way, limited to cost of Trees, landscaping equipment and associated installation and irrigation equipment incidental to the installed trees.
2. Tree planting on City property, limited to the cost of trees, landscaping equipment and associated installation and irrigation equipment incidental to the planting of trees. Where Tree Mitigation funds are used to plant trees in City street medians or shoulders, such funds may also be used to fund design by a Registered Landscape Architect to assure the safety, viability and appropriateness of such plantings, as follows:
  - a. Conservation or natural preserve area protection and enhancement limited to cost of Trees, landscaping equipment, access and trails, and associated installation and irrigation equipment incidental to the enhancement project.
  - b. To mitigate negative environmental effects of tree removal and the loss of treed acreage and to provide the ability to mitigate wildlife displacement as reasonably determined by the Director and/ or Director's Designee using acceptable environmental evaluation practices and programs or preservation land assessment and acquisition.
  - c. Qualified Attainable Housing Projects. Where funds are available, up to fifty percent (50%) of the required trees purchase price may be provided by this fund.

3. Urban forest assessments and/or tree inventories within the City.

ARTICLE 7 – Enforcement: Penalties & Fees

Penalties and fees will be enforced by Code Enforcement as location in Chapter 2, Article VI  
Code Enforcement as approved by Council.

Any person who violates any provision of this section shall be subject to the following penalties:

1. Any person who removes a tree without first obtaining the required permit may be issued an after-the-fact permit. An after-the-fact permit may be issued if the applicant can demonstrate that the factors for removal would have met the same time the tree was removed. If the applicant cannot demonstrate that the criteria for removal have been met, then no after-the-fact permit shall be issued and the person in violation will be in violation of this section and will be required to apply for a site permit.
2. The number and size of the replacement trees shall not be less than the number of trees necessary to meet the requirements of this Chapter. If a tree is removed illegally, the replacement trees shall be equivalent to two times the replacement value of the trees removed illegally (in tree inches).
3. In lieu of replanting trees, the total value of the trees illegally removed or damaged, may be paid to the City into the Tree Mitigation Fund. The penalty for illegally removed or damaged trees that have not been authorized through the permit will be paid at \$150.00 per inch removed and \$175.00 per inch removed for Heritage/Venetian trees.
4. If the applicant demonstrates to the satisfaction of the Director and/ or Director's Designee that a site/project area cannot accommodate the total number of replacement trees required by this section as a result of insufficient planting area, the applicant will provide a monetary contribution to the Tree Mitigation Fund at the rate as follows:
  - a. For residential, \$150.00 per inch of the total caliper inches of replacement trees that could not be accommodated on site
  - b. For common areas on residential PUD sites, \$150.00 per inch of the total caliper inches of replacement trees that could not be

accommodated on site. There is no maximum for common areas. The maximum will be determined by the Administrator with approval by the Director depending on the site and reasoning for replacement off-site.

- c. For non-residential, \$150.00 per inch of the total caliper inches of replacement trees that could not be accommodated on site. There is no maximum for non-residential projects. The maximum will be determined by the Administrator with approval by the Director depending on the site and reasoning for replacement off-site.