



Council

Kevin Phillips
Mayor

Mary Beth Heyward
Mayor Pro Tempore

Jerry Ashmore
Jorge Guerrero
Darryl Owens

Van Willis
Town Manager

T. Alan Beach
Chief of Police

Jeffrey S. Coppinger
Operations

Noah Krepps
Planning

ORDINANCE 2024-14

AN ORDINANCE TO AMEND CHAPTER 20 “TREES” OF THE CODE OF ORDINANCES OF THE TOWN OF PORT ROYAL SOUTH CAROLINA

WHEREAS, the Town of Port Royal takes great pride in maintaining a sustainable and healthy tree canopy throughout the Town, and

WHEREAS, the Town desires to promote the benefits and advantages of retaining mature trees in our landscapes, parks, and streets, and

WHEREAS, Council seeks to make necessary amendments to the ordinance after directing Town staff to perform a thorough review one year after its adoption, and

WHEREAS, Council finds these changes in the best interest of the Town.

NOW, THEREFORE, BE IT ORDAINED, by the Council of the Town of Port Royal, duly assembled and with authority of same, that Chapter 20 be amended as follows:

This ordinance shall become effective immediately upon adoption by Council.

REQUESTED:

APPROVED:

Milton E. Willis
Town Manager

Kevin Phillips
Mayor

ATTEST:

Introduced: June 12, 2024

Lisa Graham
Town Clerk

Final Reading:

Sec. 20-1. Purpose and Intent

It is the purpose and intent of this ordinance to regulate and protect a sustainable and healthy tree canopy throughout the Town of Port Royal while promoting the benefits and advantages of retaining mature trees in our landscapes, parks, and streets.

Every tree has an individual canopy composed of stems, branches, and leaves needed for that tree to survive. More important is the combined canopy created when many of these individual trees are retained in landscapes and on development sites to form an intertwining blended and shared canopy.

Trees are multigenerational and, when properly cared for, can live for many, many years. We are stewards, not owners, of these long-lived entities even when they are living on our private property.

Tree values increase exponentially as the tree ages. There are no carbon sequestration techniques currently known to man that work better than allowing trees to absorb carbon from the atmosphere. Trees, especially mature forests, are the cheapest, fastest, most reliable form of carbon storage. Trees get increasingly better at doing this as they age.

We are hardwired to live amongst trees. 99.99% of the human species' experience up to now has lived in natural settings. Aside from their aesthetic appeal and the beautification of our communities and neighborhoods, trees provide a litany of benefits. Air quality, stormwater management, wind buffers, increased property values, and cooling effects to our homes and communities are just a few of their many benefits. We now also know through research that trees can also benefit our physical and mental health. We have not only an environmental responsibility but also a social responsibility to preserve trees wherever possible.

(a) Specifically, the standards in this section are intended to:

- (1) Lessen air pollution and promote clean air quality by increasing dust filtration;
- (2) Prevent soil erosion;
- (3) Improve surface drainage, minimize flooding, and minimize the cost of constructing and maintaining drainage systems necessitated by the increased flow and diversion of surface waters;
- (4) Conserve energy by reducing heating and cooling costs;
- (5) Ensure that noise, glare, and other distractions originating in one area do not adversely affect adjacent areas;
- (6) Reduce noise, heat, dust, and glare;
- (7) Beautify and enhance land and views from the Town's entryways, public lands, and streets;
- (8) Preserve residents' quality of life and the natural heritage of the Town; and
- (9) Maintain the ambience of the Town and enhance property values.

Sec. 20-2. Definitions

- (a) *Arborist Report*. A report compiled by an ISA certified arborist containing pertinent information about the physical and structural health of the trees on a site.
- (b) *Caliper*. The diameter of the trunk measured six (6) inches above the ground for trees up to and including four-inch diameter and measured twelve (12) inches above the ground for larger trees. This measurement is used for proposed or nursery-grown trees.
- (c) *Certified Arborist*. A person who has met the criteria for certification from the International Society of Arboriculture, maintains his or her credential, and is a full-time employee of the company submitting the request for pruning or removal.
- (d) *Clearcutting*. A forestry practice in which most of or all the trees in an area are uniformly cut down.
- (e) *Commercial Use*. Any use of property for a principal use of operating a “business,” as defined in Section 12-22 of the Code of Ordinances, excluding any residential use, as defined in Article 10 of the Port Royal Code, that may be operated for the object of gain, benefit, or advantage by way of rental income.
- (f) *Developed*. Land on which manmade structures exist or land modifications (clearing, grading, etc.) have occurred.
- (g) *Diameter at Breast Height (DBH)*. The diameter in inches of the trunk of a tree, or, for multiple trunk trees, the aggregate diameters of multiple trunks, measured four and one-half (4½) feet from the existing grade at the base of the tree. This measurement is used for existing trees.
- (h) *Diseased*. A severe disease or pest that is known to cause or is causing the death of a tree.
- (i) *Drip Line*. An imaginary vertical line extending downward from the outermost tips of a tree’s branches to the ground.
- (j) *Elevated Risk*. A tree, or any part of a tree, that poses a risk of harm to person or property due to damage, deterioration, or numerous hazards, and where such risk cannot be mitigated by any arboricultural procedures.
- (k) *Healthy Tree*. A tree that is not dead, dying, or diseased, is not at an elevated risk of failure, and is not an invasive tree.
- (l) *Impervious Surface*. Solid surface that prevents aeration, infiltration, and water penetration, resulting in several harmful side effects.
- (m) *Invasive Species*. Any non-native organism whose introduction causes or is likely to cause economic or environmental harm or harm to human health.
- (n) *Official*. A member of Town staff designated by the Town Manager.
- (o) *Overstory Tree*. A tree that, when mature, reaches a height of at least thirty-five (35) feet.

(p) *Pervious Surface*. A surface that allows water to percolate through to the area underneath rather than becoming runoff.

(q) *Replacement Planting*. Tree planting that is proposed as a replacement for a tree which has been cut down.

(r) *Residential Lot of Record*. A lot existing prior to the adoption of this ordinance where single, two-, or three-family development is permitted.

(s) *Specimen and Landmark Trees*. Certain trees, because of their species and size, are an asset to both the Town and the individual property owners and are designated as “specimen” and “landmark” trees. Specimen trees are valuable due to their age and potential to reach landmark size. Landmark trees are the most mature and valuable in the urban canopy.

(t) *Tree Protection Zone*. The area reserved around a tree or group of trees in which no grading, access, stockpiling, or other construction activity shall occur, the extent of which will be determined by the proposed site design and existing site conditions.

(u) *Undeveloped*. Raw land on which manmade structures or land modifications (clearing, grading, etc.) do not exist.

(v) *Understory Tree*. A tree that, when mature, reaches a height of twelve (12) to thirty-five (35) feet and whose natural habitat is growing under larger, higher canopied trees.

(w) *Willful Violation*. A violation in which the landowner, developer, and/or operator knowingly failed to comply with the requirements of this section.

Sec. 20-3. Applicability

(a) General

(1) *Permit required for removal*. Except as exempted in Sec. 20-3.b below, a Tree Permit shall be required to remove or relocate any tree of 8” DBH or more, or a specimen or landmark tree, in the Town.

(2) *Permit required for pruning*. A Tree Permit is required to prune any landmark tree as described in Table 20-7. Pruning must be done by, or under the guidance of, a certified arborist.

(3) Consistent with the purpose of this section, all persons shall make all reasonable efforts to preserve and retain any existing specimen and landmark trees and established stands or groves of trees which may serve as habitat corridors.

(4) Failure to comply with the standards of this section shall be a violation of this ordinance and subject to the remedies and penalties specified in Tables 20-11 and 20-12 of this ordinance and in Article 7 of the Port Royal Code.

(b) Exemptions

(1) The following activities are exempt from the standards in this ordinance and the requirements for a Tree Permit:

- a. Removal of severely damaged trees that have an imminent likelihood of failure or pose an immediate risk to person or property following a natural disaster such as a hurricane, tornado, ice or windstorm, flood, wildfire or any other such act of nature.

b. Tree removal associated with forestry activities shielded from local development regulation in accordance with S.C. Code Ann. § 48-23-205, subject to the limitations on subsequent development in Sec. 20-6 below. Forestry activities shall be regulated by a Forestry Management Plan approved by a certified South Carolina Forester.

c. Removal of plant species designated as invasive by the South Carolina Forestry Commission, including, but not limited to the following:

1. Chinese Tallow (*Triadica sebifera*), Chinaberry Tree (*Melia azedarach*), Callery Pear (*Pyrus calleryana*), Camphor Tree (*Cinnamomum camphora*), Princesstree (*Paulownia tomentosa*)

(2) No Tree Permit is required where the proposed tree removal or alteration is reviewed and authorized in accordance with an approved Site Development Permit or Building Permit, though compliance with the standards in this section is required.

(3) **Gateway to Port Royal Overlay Zone, Residential Lots of Record, and Commercial Uses in T4NC-O, T4UC, and T5MS.** Lots in the Gateway to Port Royal Overlay Zone, residential lots of record, as defined herein, and commercial uses, as defined herein, in the T4NC-O, T4UC, and T5MS zoning districts are exempt from the mitigation requirements of Table 20-11 Tree Mitigation Schedule. Mitigation for tree removals in conjunction with development of these properties shall be regulated by Sec. 20-10 below. All other requirements of this ordinance shall apply to such uses.

Sec. 20-4. Tree Protection Information in Applications

(a) New Development

(1) Applications for a Major Subdivision, Site Development Permit, or Commercial Building Permit shall include at least the following information:

- a. A complete Tree Survey verified by a certified arborist, as described in subsection 20-4(c) below;
- b. A brief written narrative of proposed plans for tree protection and justification for proposed removals and replacements, verified by a certified arborist;
- c. A complete tree tally sheet listing exact species and diameter of trees by category (see Table 20-9 Tree Equivalency Table);
- d. For a Site Development Permit, a complete site development plan showing utility lines, grading activities, and building footprints in relation to existing trees and denoting trees to be removed with an "X"; and
- e. A replacement tree replanting schedule, if required by Sec. 20-8 below.

(2) Applications for a Residential Building Permit shall include at least the following:

- a. A complete Tree Survey.
- b. A certified arborist report including all specimen and landmark trees; and
- c. A complete site plan showing utility lines and building footprints in relation to

(b) existing trees and denoting trees to be removed with an "X."**Existing Development.** Applications for pruning or removal of trees on individual developed lots shall include a tree survey and a report from a certified arborist. An exception is granted on developed single-, two-, and three-family lots wherein a report from a certified arborist is only required for removal of a specimen or landmark tree and pruning of a landmark tree. A tree survey shall never be required on developed single-, two-, and three-family lots.

(c) **Tree Survey.** The tree survey shall be in the form of a map or site plan, prepared and sealed by a registered land surveyor within two years of the date of application. The tree survey shall be at the same scale as the required site development plan and shall include the species and DBH of all trees 8" DBH or greater.

(1) All palmetto trees over eight (8) feet tall shall be measured in height, from the ground to the base of the frond initiation point.

Sec. 20-5. **Pre-Development Standards.** Trees shall be marked with color ribbons, using blue ribbons to mark trees to be preserved, red ribbons for trees to be removed, and orange ribbons for high-risk trees that are proposed to be removed (high-risk trees will not count towards the overall required tree replacement). In heavily wooded areas, the official may allow large groups of trees to be preserved or removed to be marked with the appropriately colored ribbon extending around the perimeter of the group of trees.

Sec. 20-6. **Penalty for Clear Cutting Prior to Development.** Nothing in this section shall be construed as to prevent the practice of forestry, as exempted from local development regulation by S.C. Code Ann. § 48-23-205. Forestry practiced in the Town shall be accompanied by a Forestry Management Plan that has been approved by a certified South Carolina Forester.

(a) **Two Year Deferral.** If the developer removes any portion of the trees that would have been protected by this section pursuant to a development application, the application shall be deferred for a period of two (2) years after completion of the removal, and the mitigation and replanting requirements of this ordinance shall apply.

(b) **Five Year Deferral.** If the landowner, developer, and/or operator does not have a Forestry Management Plan, the work was not completed according to the Plan, or transfer of property occurs following the completion of the work, it shall be considered a willful violation of Town ordinances and an application for a development permit on any portion of the property will be deferred for five (5) years, and the mitigation and replanting requirements of this ordinance shall apply.

Sec. 20-7. Specimen and Landmark Tree Preservation

(a) **Specimen and Landmark Trees Defined.** For purposes of this section, a specimen or landmark tree is any tree of a species designated by the state or federal government as an endangered, threatened, or rare species, or any tree of a type and with a DBH equal to or greater than that indicated in Table 20-7 Specimen and Landmark Trees for the tree type.

TABLE 20-7: SPECIMEN AND LANDMARK TREES			
TREE TYPE		SPECIMEN DBH (INCHES)	LANDMARK DBH (INCHES)
Live Oak	Single trunk	12	24
	Multiple trunks	30 (sum of all)	60 (sum of all)
Red Oak		16	30
White Oak		16	30
American Elm		16	30

Longleaf and Pond Pines	12	24
Red Bay	6	8
Southern Magnolia	12	30
Bald Cypress and Pond Cypress	16	24
Black Gum	16	24
Red Maple	16	24
Spruce Pine	6	8
Red Cedar	8	18
Post Oak	16	30
Holly, American and Carolina	12	20
Sassafras	5	6
All Other Overstory Hardwood Trees ¹	24	36

¹Excluding Laurel Oaks, Water Oaks, Sweet Gums, Pecans, and all other Pines – those species are never considered specimen or landmark trees, regardless of their size.

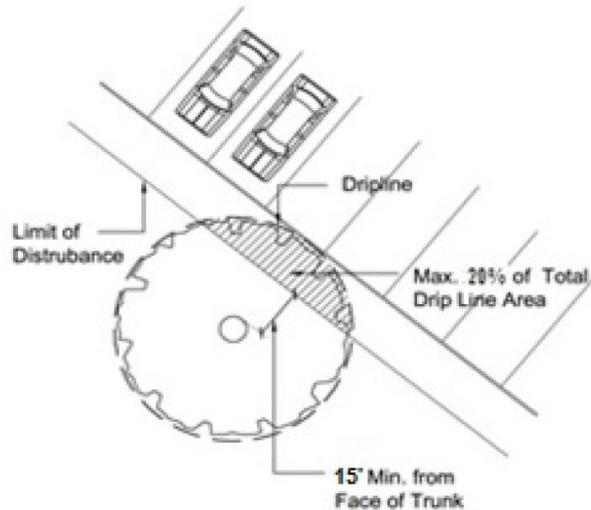
(b) General Requirements

(1) Priority shall be placed on the retention of existing specimen and landmark trees.

(2) No landmark tree may be removed except in accordance with subsection 20-7(c) below. In addition, all landmark trees shall have the following protections, whether located on public or private land:

a. An arborist report shall be submitted and approved for any activities performed within the drip line of a landmark tree.

b. No more than 20 percent of the total area within the drip line of any landmark tree shall be subject to paving or soil compaction, and no paving or soil compaction is allowed within 15 feet of the tree trunk. The official may allow paving or soil compaction beyond the 20 percent limit and within 15 feet of the trunk if low impact development techniques (e.g., pervious pavers, materials placed at or above grade, no use of mechanical machinery) are used as an alternative means of protecting the landmark tree.



c. If preservation of a landmark tree cannot be achieved, the developer may apply for an exception to the requirements of this subsection from the Design Review Board. The developer shall submit a brief narrative of the justification for the landmark tree removal(s), certified arborist report, conceptual site plan, tree survey, and design alternatives that have been explored to be considered for an exception.

d. The Design Review Board shall consider the following criteria when reviewing an application for a landmark tree removal:

- i. Health. Whether or not the tree is dead, dying, or diseased according to a certified arborist report and/or staff evaluation.
- ii. Elevated Risk. Whether or not the tree presents hazards that cannot be mitigated by any arboricultural procedures due to its deteriorated or damaged state.
- iii. Developability. Whether or not the tree constrains reasonable development of the specific site, considering lot size, applicable setbacks, context, building type and use, stormwater requirements, and other relevant site development considerations.

e. All other requirements of this ordinance shall apply when an exception is granted for the removal of a landmark tree.

Sec. 20-8. Replacement Planting and Mitigation

(a) This section applies:

- (1) Where the official approves removal of trees for new development.
- (2) Where any vegetation, existing or proposed, used to comply with the requirement of this section, does not survive in a healthy condition.
- (3) When a tree protected under this ordinance is removed from a property without permission from the official, is significantly damaged during construction, or significantly declines and is recommended for removal by a certified arborist.

(b) **Minimum Tree Coverage Requirements**

- (1) All properties shall maintain a minimum baseline canopy coverage area based on the zoning district and lot size (see Table 20-8 Minimum Tree Coverage Requirements). This canopy can be comprised of a combination of existing trees and

replacement Category I trees. Refer to Table 20-9 Tree Equivalency Table for a complete list of Category I trees.

TABLE 20-8: MINIMUM TREE COVERAGE REQUIREMENTS	
ZONING DISTRICT	MINIMUM NUMBER OF TREES BY LOT SIZE
	One (1) Category I Tree required
T3 Edge	Per 3,000 square feet
T3 Sub-Urban Neighborhood	Per 3,000 square feet
T3 Neighborhood	Per 3,000 square feet
T4 Neighborhood Center	Per 6,000 square feet
T4 Urban Center	Per 6,000 square feet
T5 Main Street	Staff determination based on site design

(c) **Standards for Replacement Trees.** Replacement trees provided in accordance with this section shall comply with the following standards:

(1) **Location.** Replacement trees shall be planted within any part of the development site or on Town property with staff approval.

(2) **Native Species Required.** Replacement trees shall be native species, as established in Table 20-9 Tree Equivalency Table below. The purpose of Table 20-9 is to illustrate the relative value of broad groups of trees, as well as individual trees, provide guidance in choosing trees, and provide guidance in selecting trees for replacement planting.

TABLE 20-9: TREE EQUIVALENCY TABLE	
COMMON NAME	LATIN NAME NAME
CATEGORY I: BROAD-LEAVED EVERGREEN OVERSTORY HARDWOODS AND ENDANGERED SPECIES	
American Holly	Ilex opaca
Bald Cypress	Taxodium distichum
Laurel Oak	Quercus laurifolia
Live Oak	Quercus virginiana
Loblolly Bay	Gordonia lasianthus

Pond Cypress	Taxodium ascendens
Spruce Pine	Pinus glabra
Southern Magnolia	Magnolia grandiflora
Bluff Oak	Quercus austrina
Longleaf Pine	Pinus palustris
CATEGORY II: DECIDUOUS OVERSTORY HARDWOODS AND BROAD-LEAVED EVERGREEN UNDERSTORY	
American Beech	Fagus grandifolia
American Elm	Ulmus americana
American Hornbeam	Carpinus caroliniana
American Sycamore	Platanus occidentalis
Hickory	Carya specie
Black Cherry	Prunus serotina
Black Gum / Tupelo	Nyssa sylvatica
Buckthorn Bumelia	Bumelia lycioides
Carolina Ash	Fraxinus caroliniana
Carolina Basswood	Tilia caroliniana
Carolina Silverbell	Halesia Carolina
Common Persimmon	Diospyros virginiana
Dahoon Holly	Ilex cassine
Devilwood	Osmanthus americanus
Eastern Hophornbeam	Ostrya virginiana
Hercules Club	Zanthoxylum clava-herculis
Pecan	Carya illinoensis
Post Oak	Quercus stellata
Red Buckeye	Aesculus pavia
Red Maple	Acer rubrum

Red Mulberry	Morus rubra
Redbay	Persea borbonia
River Birch	Betula nigra
Sassafras	Sassafrass albidum
Southern Bayberry	Myrica cerifera
Southern Red Oak	Quercus falcata
Sugarberry	Celtis laevigata
Swamp Chestnut Oak	Quercus michauxii
Sweet Gum	Liquidamber styraciflua
Sweetbay	Magnolia virginiana
Tough Bumelia	Bumelia tenax
Turkey Oak	Quercus laevis
Water Oak	Quercus nigra
White Oak	Quercus alba
Yaupon Holly	Ilex vomitoria
CATEGORY III: CONE-BEARING EVERGREENS AND PALMS	
Cabbage Palmetto	Sabal palmetto
Eastern Red Cedar	Juniperus virginiana
Loblolly Pine	Pinus taeda
Pond Pine	Pinus serotina
Slash Pine	Pinus elliotii
Shortleaf Pine	Pinus echinate
Southern Red Cedar	Juniperis silicicola
CATEGORY IV: ORNAMENTALS AND SMALL UNDERSTORY TREES	
American Plum	Prunus americana
Carolina Cherry Laurel	Prunus caroliniana
Crepe Myrtle	Lagerstroemia indica

Dahoon Holly	Ilex cassine
Eastern Coralbean	Erythrina herbacea
Eastern Redbud	Cercis canadensis
Florida Chinkapin	Castanea floridana
Flowering Dogwood	Cornus florida
Sparkleberry	Vaccinium arboretum
Witch Hazel	Hamamlis virginiana

(3) **Tree Category.** Replacement trees shall be within the same or a higher-valued tree category (see Table 20-9 above) as the trees being replaced.

(4) **Planting Size.** At the time of planting, replacement trees shall have the minimum height and trunk diameter for the category of the tree shown in Table 20-10 Minimum Planting Size for Replacement Trees below.

TABLE 20-10: MINIMUM PLANTING SIZE FOR REPLACEMENT TREES		
TREE CATEGORY	MINIMUM HEIGHT (FEET)	MINIMUM TRUNK DIAMETER (INCHES) (USING ANSI STANDARDS)
Category I	12	2.5
Category II	12	2.5
Category III	6	1.5
Category IV	6	1.5

(d) **Planting Standards.** Planting, staking, mulching, and care of all replacement trees shall be in accordance with the guidelines of the International Society of Arboriculture, as published in the latest edition of the ISA Best Management Practices: Tree Planting Guide.

(e) **Timing.** The official shall be notified 48 hours prior to tree removal approved under a Site Development Permit.

(f) **Post-Development Inspections**

(1) After development is complete, the official may continue to make random inspections to ensure that all existing trees of protected size as well as replacement trees are maintained.

(2) Tree planting shall be required should any of these trees die, be removed, or be destroyed within five (5) years after the issuance of a Certificate of Occupancy.

(g) **Replacement Planting and Mitigation.** The tree mitigation fee is established to allow tree planting elsewhere in the Town in cases where the requirements for retention of existing

trees cannot be achieved. Where a certified arborist determines that a site cannot sustainably support all or a portion of the required replacement due to viable site constraints, a fee based on the mitigation schedule in Table 20-11 shall be paid to the Town for the purposes of tree planting and maintenance.

TABLE 20-11: TREE MITIGATION SCHEDULE		
TREE TYPE	REPLACEMENT RATE	MITIGATION COST PER CALIPER INCH
Landmark Tree	50%	\$750.00*
Specimen Tree	33%	\$500.00*
All other trees 8-inch caliper or greater	24%	None
*Any tree that is removed from a property without approval shall require 100% replacement of caliper inches and the mitigation cost per caliper inch shall be doubled.		
Examples	Approved Specimen Removal: A 12 -inch Live Oak is approved for removal. The applicant must plant back 4 caliper inches of Live Oak or pay a mitigation fee of \$6,000 (12 inches x \$500.00/inch) if the site cannot support the replacement.	
	Approved Landmark Removal: A 30-inch Live Oak is approved for removal by the Design Review Board. The applicant must plant back 15 caliper inches of Live Oak or pay a mitigation fee of \$22,500 (30 inches x \$750.00/inch) if the site cannot support the replacement.	

(1) **Timing of Fee Payment.** All required tree mitigation fees shall be paid prior to issuance of a Site Development Permit or Building Permit.

(2) **Tree Replacement Fund.** The Town shall establish and maintain a separate accounting fund for the deposit of tree mitigation fees paid in lieu of providing required replacement trees. Such funds need not be segregated from other Town monies for banking purposes. Any yield on such accounting fund shall accrue to that fund and shall only be spent on trees on publicly owned and maintained property. Qualifying debits include the cost of trees, installation of trees, and maintenance of trees.

(h) The provisions of this section shall apply to all projects, regardless of the date the Site Development Permit or development approval was issued.

(i) Exemption. Any specimen or landmark tree that fails due to a natural catastrophe shall be exempt from the requirements of this section.

Sec. 20-9. **Tree and Buffer Protection During Development Activity**

(a) **Tree and Buffer Protection Zones**

(1) Tree and buffer protection zones shall include:

- (a) Areas of a development site that are within the drip lines of individual trees and stands of trees proposed to be retained and protected;
- (b) Areas for any replacement trees proposed to be provided; and
- (c) Proposed buffer areas.

(2) Tree and buffer protection zones shall be depicted on all development plans.

(b) **Responsibility.** During any development activity (including demolition activity), the property owner or developer shall be responsible for protecting existing or replacement trees and other existing vegetation within tree and buffer protection zones.

(c) **Protective Fencing, Marking, and Signage**

(1) **Protective Fencing**

- a. Continuous tree protective fencing shall be provided along the boundaries of tree and buffer protection zones. The official shall consider existing site conditions and the species and size of the trees to be protected in determining the exact location of tree protective fencing and may require the fencing to be extended to include the critical root zones of trees. For buffer protection, the fencing shall be installed along the edge of the buffer on the interior of the site.
- b. Protective fencing shall consist of mesh or netting that is at least four feet high.
- c. Protective fencing shall be removed prior to issuing a Certificate of Occupancy.

(2) **Warning Signage.** Warning signs shall be installed along any required tree and buffer protective fencing at points no more than 150 feet apart. The signs shall be clearly visible from all sides of the outside of the fenced-in area. The size of each sign must be a minimum of two feet by two feet. The sign message shall identify the fenced or marked area as a tree or buffer protection zone and direct workers not to encroach into the area (e.g., "Tree Protection Zone: Do Not Enter").

(3) **Duration of Protective Fencing and Signage.** Required protective fencing and signage shall be erected before any grading or other development activity begins and shall be maintained until issuance of a Certificate of Occupancy following completion of all development in the immediate area of the fencing or signage.

(d) **Tree and Buffer Protection Zone Encroachments and Protective Measures.**

Encroachments into tree and buffer protection zones may occur only when no other alternative exists, and shall comply with landscaping best management practices and the following limitations and requirements:

(1) No development or demolition activity – including grading, operation of heavy equipment, or storage of material – shall be allowed within the tree and buffer protection zone unless approved as established in subsection 20-7(b)(2).

(2) Where soil compaction might occur due to construction traffic or materials delivery through a tree and buffer protection zone, the area must first be mulched with a minimum four-inch layer of coarse single-ground wood chip material.

Equipment or materials storage shall not be allowed within a tree and buffer protection zone, and mulch shall be removed immediately after the activity in the tree and buffer protection zone is complete.

- (3) Trees located within a tree and buffer protection zone shall be protected from chemical contamination from liquid or other materials, including but not limited to paint, chemical solvents, gasoline, oil, diesel fuel, hydraulic fluid, concrete spoils, or rinse water from vehicle cleaning, including rinsing of concrete truck tanks and chutes.
- (4) No impervious surface is allowed within a tree and buffer protection zone unless approved as established in subsection 20-7(b)(2).
- (5) The removal of trees adjacent to tree and buffer protection zones can cause inadvertent damage to the protected trees. Prior to clearing activities, trenches with a minimum width of 1½ inches and a minimum depth of 12 inches shall be dug along the limits of land disturbance to cut, rather than tear, the tree roots.
- (6) Underground utility lines that encroach into tree and buffer protection zones shall be installed using trenchless tunneling as appropriate for the soil and site conditions.

(e) Inspections

- (1) All tree and buffer protection measures may be inspected by the official before the start of any land disturbing activities and during the development process. The official may continue to conduct random inspections to ensure that retained trees and replacement trees are maintained in a healthy state.
- (2) If any tree protected by this section is removed, dies, or is destroyed at any time during development activities or within two years of completion of the development, it shall be replaced in accordance with Sec. 20-8.

Sec. 20-10. Mitigation for the Gateway to Port Royal Overlay Zone, Residential Lots of Record, and Commercial Uses in T4NC-O, T4UC, and T5MS

- (a) This section applies where the official approves removal of trees in the Gateway to Port Royal Overlay Zone, on residential lots of record, and for commercial development or redevelopment in the T4NC-O, T4UC, and T5MS zoning districts.
- (b) For the purposes of administering the provisions of this section, the official is hereby authorized to make a final determination whether the principal use of property constitutes a commercial use.
- (c) The provisions of this section shall apply to all properties in the applicable areas, regardless of the date the Site Development Permit or development approval was issued.
- (d) Replacement Planting and **Mitigation**. The tree mitigation fee is established to allow tree planting elsewhere in the Town in cases where the requirements for retention of existing trees cannot be achieved.

TABLE 20-12: TREE MITIGATION SCHEDULE FOR EXCEPTIONS IN SEC. 20-10		
TREE TYPE	REPLACEMENT RATE	MITIGATION COST PER CALIPER INCH
Landmark Tree	50%	\$100.00*
Specimen Tree	33%	\$50.00*

TABLE 20-12: TREE MITIGATION SCHEDULE FOR EXCEPTIONS IN SEC. 20-10

TREE TYPE	REPLACEMENT RATE	MITIGATION COST PER CALIPER INCH
All other trees 8-inch caliper or greater	24%	None
*Any tree that is removed from a property without approval shall require 100% replacement of caliper inches and the mitigation cost per caliper inch shall be doubled.		
Examples	<p>Approved Specimen Removal: A 12 -inch Live Oak is approved for removal. The applicant must plant back 4 caliper inches of Live Oak or pay a mitigation fee of \$600.00 (12 inches x \$50.00/inch) if the site cannot support the replacement.</p>	
	<p>Approved Landmark Removal: A 30-inch Live Oak is approved for removal by the Design Review Board. The applicant must plant back 15 caliper inches or pay a mitigation fee of \$3,000 (30 inches x \$100.00/inch) if the site cannot support the replacement.</p>	