

Article 6: Tree Conservation

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Town of McClellanville Zoning and Land Development Ordinance
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Section 6.0 Purpose and Intent

- (a) **Purpose.** Trees are an essential natural, economic, and aesthetic resource. Trees improve air and water quality, reduce stormwater runoff and erosion, provide wildlife habitat, reduce heat, and buffer noise and glare. Trees enhance community character, promote commerce and tourism by buffering different land uses, and enhance property values.
- (b) **Intent.** The Town of McClellanville adopts this Article under the authority of S.C. Code §6-29-720 to protect public health, safety, and welfare by conserving trees and maintaining the Town's tree canopy. These standards provide direction for tree protection and management on both public and private property.

Section 6.1 Applicability

- (a) **General Applicability.** This Article applies to all land disturbance and tree removal activities on all public and private property in the Town, except as stated below.
- (b) **Exempt Activities.** This Article does not apply to:
 - (1) Commercial timber harvesting
 - (2) Bona fide agricultural operations on property with an agricultural land-use classification assigned by the Charleston County tax assessor.
 - (3) Bush hogging and mulching without tree removal.
- (c) **Exceptions.**
 - (1) Exempt Trees listed in Section 6.3(i) may be removed without a permit.
 - (2) Trees less than 8" DBH (diameter at breast height) may be removed on private property without a permit.

Section 6.2 Administration

- (a) The Zoning Administrator (or designee) shall administer and enforce this Article, including public tree management.
- (b) A Tree Committee, designated under Section 12.5 of this Ordinance, will provide support to the Town.

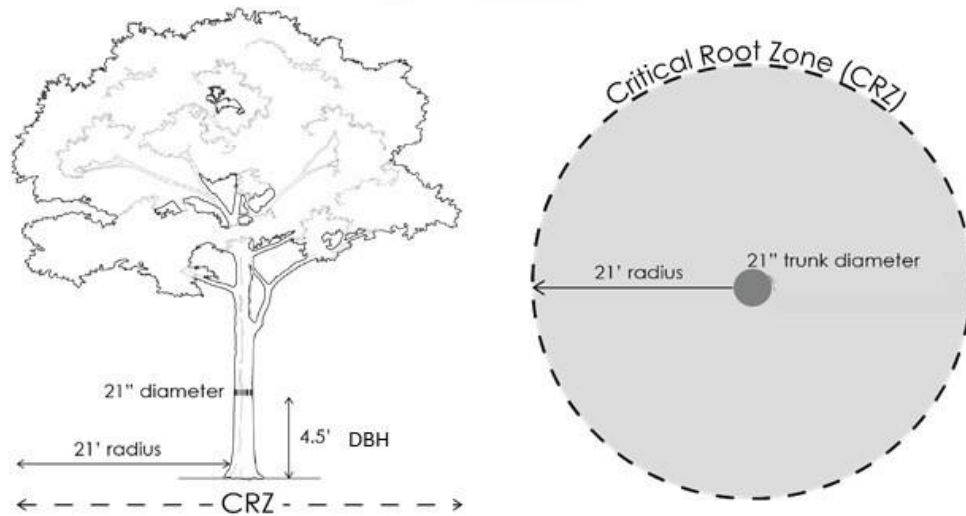
Section 6.3 Definitions

For purposes of this Article, the following definitions apply:

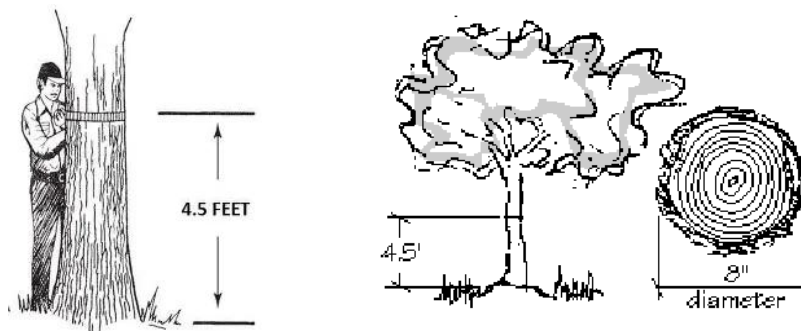
- (a) **Bona Fide Agricultural Use.** Property is actively committed to and assessed by the County as being used for agricultural production, including horticulture, floriculture, forestry, livestock, poultry, dairy, apiculture, and farm products.
- (b) **Caliper.** Diameter of a newly planted tree either:
 - (1) 4 inches or less as measured 6 inches above ground level or soil line; or

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- (2) 4.5 inches or larger as caliper is measured 12 inches above ground level or soil line.
- (c) **Canopy.** Area shaded by living limbs and foliage of a tree or group of trees. Canopy coverage is a measure of the percentage of a lot covered by a vertical projection of the tree canopy.
- (d) **Certified Arborist.** An individual certified by the International Society of Arboriculture (ISA) and maintaining certification through required continuing education.
- (e) **Crown.** The upper portion of a tree made up of its branches, twigs, and leaves, extending outward from the main trunk and forming the tree's canopy.
- (f) **Critical Root Zone (CRZ).** The essential soil area around a tree containing vital roots for its survival, health, and stability, defined by a radius of one foot for every inch of trunk diameter (measured at 4.5 feet above grade). This zone protects key feeder and structural roots from damage during construction or development.

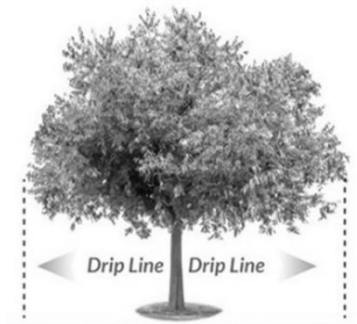


- (g) **Diameter at Breast Height (DBH).** Measurement at 4.5 feet above grade for established trees. To measure DBH, measure from the ground to a spot 4.5 feet up the tree, from that point, wrap the tape measure around the tree to measure the circumference. Then take the circumference and divide by 3.14. Multi-trunk trees are measured per trunk if trunks do not share a common base.



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- (h) **Dripline.** An imaginary line on the ground directly below the outer edge of the tree's branches (canopy) where rain would "drip" off the leaves.



- (i) **Exempt Trees.** The following trees may be removed without permit requirements under this Article:

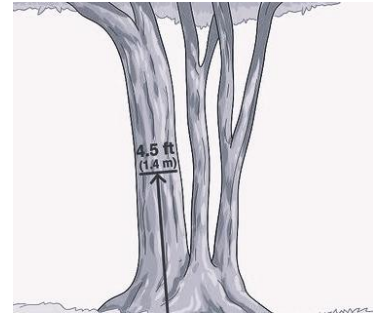
• Callery Pears	• Mimosa
• Camphor	• Mulberry
• Chinaberry	• River Birch
• Chinese Tallow	• Sweet Gum
• Crape Myrtle	• White Poplar
• Hackberry/Sugarberry	• Pines
• Leyland Cypress	• Any tree classified as an invasive species in SC

- (j) **Grand Tree.** A tree with a DBH of 24 inches or greater as measured at 4.5 feet from ground level, except for those trees listed as "Exempt" from the provisions of this ordinance in Section 6.3(i) above.
- (k) **Hazard Tree.** A tree at risk of failure where its falling could damage persons or property.
- (l) **Historic Trees.** Trees listed as "contributing" to the National Register Historic District or designated as a SC Heritage Tree, including the oak trees lining Scotia Street and Baker Street and the Deerhead Oak.
- (m) **Large Maturing Tree.** A tree species that, at full maturity, typically reaches a large canopy size, generally fifty (50) feet or more in height and/or a broad crown spread and is planted to provide long-term shade, canopy cover, and environmental benefits. See [Appendix I](#).
- (n) **Limbing Up.** Removal of low branches for views or access. Limbing up beyond one-third (1/3) of a tree's height is excessive. Removing more than 25% of leaf surface in a growing season is excessive.
- (o) **Maintenance.** Routine work to preserve tree health including but not limited to pruning, mulching, irrigation, fertilization, pest control, cabling/bracing, and lightning protection.

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- (p) **Multi-Trunk Tree.** A tree with more than one main trunk or stem growing from a single root mass where the fused base splits below 4.5-feet above ground or breast height.

The size of a multi-trunk tree shall be determined as 75% of the cumulative diameter of the two largest individual trunks greater than eight (8) inches DBH.



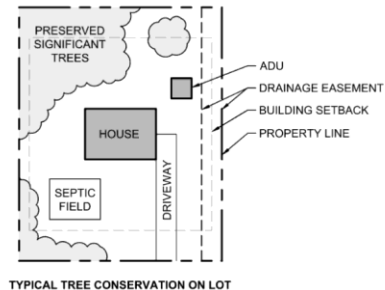
- (q) **Proper Pruning.** According to ANSI 300 standards, the careful removal of dead, damaged, diseased, or unwanted branches using clean cuts made outside the branch collar to allow for natural sealing of the wound. The branch collar is the trunk tissue that forms around the base of a branch between the main stem and the branch or a branch and lateral.
- (r) **Protected Tree.** Any Historic Tree, Grand Tree, or Significant Tree, except for Exempt Trees listed in Section 6.3(i) above.
- (s) **Public Tree.** Any tree located on property owned or maintained by the Town, including rights-of-way and parks.
- (t) **Small Maturing Tree.** A tree species that, at full maturity, typically reaches a smaller overall size, generally under thirty (30) feet tall with a narrower canopy spread, and is often used where space, utilities, or visibility limits tree height. See [Appendix I](#).
- (u) **Significant Tree.** A tree with a DBH of 8 inches or greater, but less than 24 inches as measured at 4.5 feet from ground level, except for those trees listed as “Exempt” from the provisions of this ordinance in Section 6.3(i) above.
- (v) **Topping.** Reducing tree size by indiscriminately cutting between nodes to stubs without regard for long-term tree health or structural integrity. Excessive topping is treated as a violation and will require mitigation per Section 6.9.
- (w) **Tree Removal/Damage.** Any action that removes, kills, or seriously harms a tree, including root damage, chemical application, soil compaction, grade changes, land disturbing activity, improper paving, excessive pruning, topping or intentional injury.
- (x) **Tree Value – Appraised.** The value calculated by a Certified Arborist or ISA-trained appraiser using the current edition of the Guide for Plant Appraisal published by the International Society of Arboriculture (ISA).

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Section 6.4 Conservation Required

- (a) **Permit Required.** No person shall remove or damage a Protected Tree (public or private) without approval and issuance by the Town of a Tree Removal and Land Disturbance Permit except as exempted by Section 6.1(b), Section 6.1(c) and Section 6.3(i).

- (b) **Conservation Required.** All Protected Trees on a lot shall be conserved, except those in areas approved for required driveways, roads, easements, utilities (including water and wastewater disposal systems), and permitted structures.

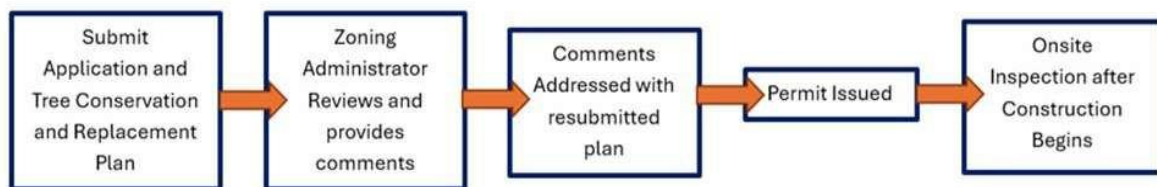


- (c) **Historic and Grand Trees Protected.** All Historic and Grand Trees shall be conserved and may only be removed as authorized under Section 6.8.
- (d) **Public Trees Protected.** No Public Tree may be removed or damaged without a permit as required in Section 6.5.
- (e) **Lot and Road Design Restriction.** Lots or roads shall not be platted in a manner that places a Grand Tree at or near the center of the lot or road unless the recorded plat includes a note stating the tree shall not be removed and shall not be eligible for a variance for removal to accommodate development.
- (f) **Minimum Tree Density.** In the event that trees are being removed from a site, a sufficient number of Significant and Grand Trees shall be conserved or installed to ensure that each lot contains a minimum of twenty (20) non-exempt trees per acre or a combined density of trees equal to or greater than the cumulative density of trees existing prior to removal activity, whichever is less. In calculating the number of trees required, the following shall be applied:
- (1) Wetlands and required easements, including drainage ditches or ponds, shall be subtracted from the calculation of lot area.
 - (2) Trees (non-exempt) located within wetland areas on a lot may be used to fulfill the minimum twenty (20) tree/acre requirement.
 - (3) Newly installed trees shall be a minimum 1.5-inch caliper at the time of installation.
- (g) **Trees Installed for Compliance Are Protected.** Any tree installed to meet requirements Section 6.4, Section 6.8(d), and/or Section 6.9 under this Article shall be conserved.
- (h) **Two-Year Survival Requirement.** Required trees shall remain alive and in good condition for a period of not less than two (2) years. Dead or declining trees within the two-year period shall be replaced by the owner.

Section 6.5 Tree Removal Approvals

- (a) **Permit Required.** Except as provided for in Section 6.1(b) and Section 6.1(c), it is unlawful to remove, excessively prune, excessively limb up, top, or otherwise destroy any Protected Tree without first obtaining a Tree Removal and Land Disturbance Permit from the Town of McClellanville.
- (b) **Application Requirements.** Permit applications shall be submitted on forms provided by the Town and available on the Town's website. A complete permit application includes a signed application form; tree conservation and planting plan as outlined in Section 6.5(g) depicting the location, size, and of tree(s) to be retained or removed; as well as the permit fee.

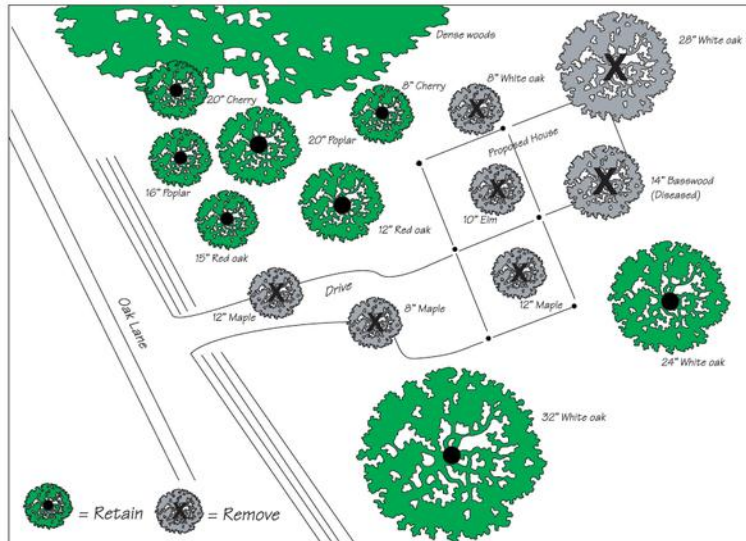
Refer to the Town of McClellanville's adopted Zoning and Planning Fee Schedule to determine the required permit fee. Fees may be waived for an application to remove a tree that is deceased when the application is accompanied by a Certified Arborist Report attesting to the condition.



- (c) **Failure to Secure Permit.** Failure to secure the Tree Removal and Land Disturbance Permit prior to removal of a tree will result in a violation as described in Section 6.9. Removal of any Significant Tree shall comply with the approval criteria in Section 6.5(f).
- (d) **No Clearing Before Permit.** No site clearing, grading, filling, material delivery, or construction may begin before issuance of the permit required in Section 6.5(a) and Section 6.5(b).
- (e) **Responsibility.** The property owner is responsible for compliance. Contractors must follow all permit conditions and obtain a business license from the Town of McClellanville prior to tree removal activity. A revised permit is required if there is a change in contractors.
- (f) **Criteria for Approval to Remove Significant Trees.** The Zoning Administrator may issue a Tree Removal Permit for the removal of a Significant Tree, valid for a period of six (6) months, when the request meets at least one of the following criteria:
- (1) Removal is allowed under this Article and conservation under Section 6.4 is not required.
 - (2) The tree is hazardous due to loss of stability caused by natural forces, including but not limited to high winds and storms (as confirmed by a Certified Arborist or the Zoning Administrator).
 - (3) The tree is diseased and in irreversible decline (as confirmed by a Certified Arborist).
 - (4) The tree is causing visible damage to permanent structures that cannot reasonably be prevented (as confirmed by a Certified Arborist or Structural Engineer).
 - (5) The tree is damaging utility lines and cannot be reasonably addressed through proper pruning or an alternative utility installation method.

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- (g) **Tree Conservation and Replacement Plan Required.** A Tree Conservation and Replacement Plan for the area to be impacted by development and a perimeter 50' in depth around the impact area shall be included with/on all site development plans, record plats, and subdivision applications and shall include the following information:



- (1) The number, size and species, DBH, and critical root zone as defined in Section 6.3 with a graphic locational representation for each Grand and Significant Tree.
 - (2) The location, number, size, and species of all trees proposed for conservation and/or removal (including dead/diseased trees). Trees located within five (5) feet of other trees, and those located in wetland areas, may be designated in groups with the predominant species, and estimated number and average DBH indicated.
 - (3) Required perimeter buffers for non-residential plans.
 - (4) Required building setbacks.
 - (5) Replanting plan and calculations demonstrating compliance with Section 6.4(f).
- (h) **Criteria for Approval for Removal of Public Trees.** A permit is required for any private person/entity to remove a Public Tree as defined in Section 6.3(s). Applications shall be submitted at least thirty (30) days before a regular Tree Committee meeting. The Tree Committee shall apply the criteria in Section 6.5(e). If granted, the Zoning Administrator shall issue a Tree Removal Permit, valid for a period of six (6) months. A private applicant proposing removal of a Public Tree shall submit a Certified Arborist Report that includes the following information:
- (1) Tree identification information including species, DBH, and location in relationship to a street intersection or property address.
 - (2) Condition value using ISA appraisal methods.
 - (3) Hazard rating using ISA guidance.

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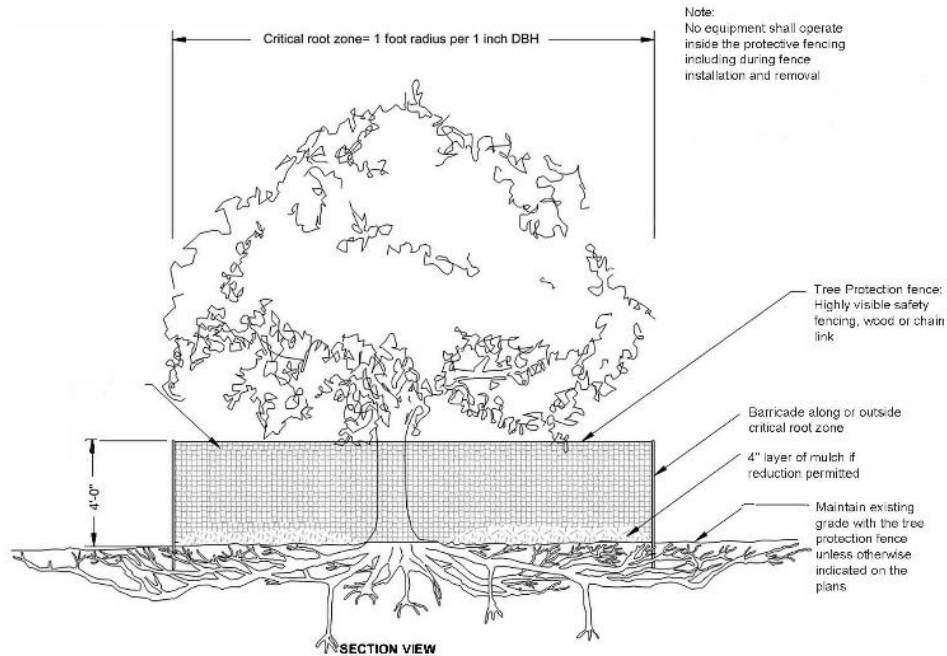
- (4) Alternate recommendations for maintenance action (prune, cable and brace, remove, or other) and priority level (routine or immediate).
- (i) **Public Notice of Removal.** The Town Administrator or designee shall notify residents of its intent to remove a Grand Tree on public property at least 15 days prior to scheduled removal by:
 - (1) Posting two (2) signs (minimum 11" x 17") on street and sidewalk sides of the tree.
 - (2) Publishing notice in the local newspaper or Town newsletter.
 - (3) Notices shall include tree species, DBH, location, posting date, reason for removal, and Town contact information.
- (j) **Emergency Exception.** Public notice requirements for removal of a public tree do not apply during emergencies under Section 6.7 or during storm damage cleanup.

Section 6.6 Protection During Construction and Other Activities

- (a) **Protection Required.** All trees required to be conserved under this Article shall be protected before and during development or harvesting from activities that may damage or harm the trees, including but not limited to the following:
 - (1) Unnecessary cutting, breaking, or skinning of roots.
 - (2) Skinning and bruising of bark.
 - (3) Storing or stockpiling construction, excavation, or other machinery tools, materials, and debris within critical root zone areas.
 - (4) Dumping of wastewater within critical root zone areas.
 - (5) Burning within critical root zone areas.
 - (6) Excessive foot or vehicular traffic within critical root zone areas.
 - (7) Parking vehicles within critical root zone areas.

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- (b) **Tree Protection Barricades/Fencing Required.** Protective fencing shall be installed around the critical root zone (CRZ), as defined in Section 6.3(f), of all Grand and Significant Trees, in or near development areas, prior to the start of development activities and shall remain in place until completion.



TREE PROTECTION DURING CONSTRUCTION

- (1) Group barricading is encouraged.
- (2) Barricades must be placed at or beyond the critical root zone.
- (3) The Zoning Administrator may allow limited reduction of barricade limits, when necessary to allow access or circulation within the construction site provided a four-inch layer of wood mulch or pine straw covers the unenclosed ground within the critical root zone.
- (4) The Zoning Administrator may allow encroachment into the critical root zone for construction of permanent structures and pervious surfaces when it has been determined that the method of construction will not cause significant infringement upon the root system applying the following limitations:
 - a. The area of disturbance/encroachment within the Critical Root Zone allowed shall not exceed more than 25% of the Critical Root Zone's area.
 - b. In no case shall the Zoning Administrator allow greater than 5% of the encroachment to occur within the first half (50%) of the critical root zone's depth as measured from the trunk of the tree.
- (5) Barricades must be highly visible and may be comprised of orange safety fencing, wood, or chain link fencing. The use of tape or string as primary fencing is not allowed.

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- (c) **Designation Required.** Tree protection areas shall be marked with signs or tape posted visibly on or within fencing denoting that the area is off-limits for development activity.
- (d) **Utilities.** Utilities shall be installed using tunneling to conserve tree root systems where feasible. Trenching may be allowed only when it does not disturb more than 25% of the critical root zone.
- (e) **Wound Treatment.** Tree wounds shall be cleaned to sound wood with smooth edges.
- (f) **Root Protection.** In the event that it is necessary to remove roots of Significant Trees, the remaining roots shall be clean-cut and covered with a four-inch layer of mulch. This area of mulching must be maintained during the duration of construction activities.
- (g) **Soil Disturbance Limits.** Except as permitted by approval of an encroachment under Section 6.6(b)(4), in the event soil disturbance occurs within the critical root zone of a protected tree (Grand or Significant) soil disturbance shall not exceed three (3) inches in depth removed or three (3) inches in depth added. Any added soil must be a loamy soil mix to minimize compaction and cover no more than 25% of the critical root zone.
- (h) **Public Events.** The Town shall protect all Grand, Historic, and Public Trees during public events/gatherings by applying three (3) inches of leaves, aged wood chips, pine straw, or other quality organic mulch within the critical root zone of the tree(s).

Section 6.7 Emergency Provisions

- (a) **Emergency Authorization.** If a tree poses a serious and/or imminent threat to property or public safety due to death, disease, or damage resulting from emergency conditions (fire, storm, flooding, natural disaster, etc.), the Zoning Administrator may waive the requirements of this Article.
- (b) **Replacement Required for Negligence.** The Zoning Administrator shall require replacement of trees which are removed under the provisions of this Section where a Certified Arborist determines that the death or disease of the tree resulted from negligence or malfeasance of the property owner.
- (c) **Arborist Report Safe Harbor.** A property owner may avoid enforcement action if a report prepared by a Certified Arborist confirms the tree was an imminent hazard. The report must include photographs and be submitted to the Zoning Administrator within 60 days of tree removal. Failure to submit the report within the specified timeframe may result in the property owner being subject to penalties as provided in Section 6.9 and Article XII.

Section 6.8 Waivers and Variances

- (a) **Administrative Waiver for Dead or Dying Grand Trees.** The Zoning Administrator may administratively waive the requirement for Board of Zoning Appeals (BZA) approval of a variance to Section 6.4(c) requiring conservation of Historic or Grand Trees, where there is evidence that such tree is deceased and/or a Certified Arborist report is submitted noting that the tree is in irreversible decline, there is a severe decline in the tree's structural integrity, or the tree is deceased.

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- (b) **Criteria for Board of Zoning Appeals Variance.** If a waiver by the Zoning Administrator is not appropriate per Section 6.8(a), a variance for the removal of a Protected Tree, as defined in Section 6.3(r), may be granted by the Board of Zoning Appeals provided the applicant demonstrates all of the following:
- (1) Unnecessary Hardship. Strict application of the ordinance would result in unnecessary hardships that are not merely financial or an inconvenience.
 - (2) Peculiar Conditions. The hardship results from conditions unique to the property, such as its size, shape, or topography, which distinguish it from neighboring lots.
 - (3) No Self-Created Hardship. The hardship did not result from actions taken by the applicant or previous property owner.
 - (4) Harmony with Intent. The variance is in harmony with the general purpose and intent of this Article and preserves its spirit, ensuring public safety and welfare.
- (c) **Allowable Grounds for Removal.** Subject to the criteria in Section 6.8(b), a variance may be considered if the tree in question:
- (1) Threatens Public Safety. The subject tree is dead, dying, diseased, or poses an imminent threat to improved structures or public infrastructure.
 - (2) Prevents Reasonable Use. The subject tree's location prevents reasonable development of property that is consistent with the zoning district.
 - (3) Interference with Utilities. The subject tree causes ongoing damage to water/wastewater, communication or electrical systems where alternative mitigation is not feasible.



- (d) **Mitigation and Replacement.** Removal of trees approved by the Board of Zoning Appeals per Section 6.8(b) and Section 6.8(c) shall be mitigated with planting of indigenous trees (see [Appendix I](#)) having a minimum 3-inch caliper at installation by the property owner. The required replacement trees shall have a combined DBH equal to or greater than the removed tree's DBH minus 24.2 inches. No mitigation is required when an Administrative Waiver of the Variance Requirement was approved subject to the provisions in Section 6.8(a).
- (e) **Fee-in-Lieu.** In the event that the planting of required mitigation trees, as required in Section 6.8(d), would harm existing trees or is not practical for the site design, the Town may accept a fee-in-lieu in place of planting. Fees shall be deposited into the Town's Tree Fund for use by the Tree Committee to plant and/or maintain trees on public lands in accordance with Section 6.9(f). The fee shall be \$400 per required mitigation tree, as provided in Section 6.8(e) and Section 6.9(e).
- (f) **Appeals Process.** Decisions of the Board of Zoning Appeals may be appealed to the Court of Common Pleas for Charleston County.

Section 6.9 Violations and Penalties

Any person or entity who removes, damages, or causes the removal of trees in violation of this Article shall be guilty of a misdemeanor and, upon conviction, shall be subject to penalties as provided in Article XII, and the remedies below.

- (a) **Enforcement Actions.** If violations are discovered during construction or at final inspection, the Zoning Administrator may revoke permits or withhold certificates of occupancy. No further activity shall occur on the site until the Board of Zoning Appeals determines if remedial actions are required, which may include replacement of illegally removed trees, replacement of required installed trees per Section 6.4(f) and Section 6.8(d) that are damaged or dead, and additional tree protection measures.
- (b) **Illegal Removal of Significant Trees.** Where Significant Trees are cleared in violation of this Article, installation of replacement trees shall be required based on the schedule below unless the Board of Zoning Appeals approves a modification.
 - (1) A combined total of at least 64 inches DBH per acre shall be provided.
 - (2) One-half of the individual replacement trees shall be at least two (2) inches caliper in size.
- (c) **Illegal Removal or Negligent Loss of Grand or Historic Trees.** Where a Grand Tree or Historic Tree is removed in violation of this Article, or where removal is required due to negligence, replacement shall be required based on the schedule below unless the Board of Zoning Appeals approves a modification.
 - (1) The combined inches of replacement trees shall be equal to or greater than the inches of the trees removed.
 - (2) Each replacement tree shall be at least three (3) inches caliper in size.
 - (3) Replacement trees shall be inspected periodically for two (2) years by the Zoning Administrator to assure growth and viability.
- (d) **Damage or Removal of Public Trees.** Any person or entity responsible for damage or destruction of a Public Tree shall provide the Town of McClellanville with compensation equal to the appraised value of the tree prior to the damage. All public trees removed shall be replaced with a comparable tree of species/size as determined by the Zoning Administrator. The timeframe for replacement by the responsible party is within one year. If replacement is not feasible at the removal location, the Town may require replanting at the nearest suitable location or another Town-identified location in the vicinity.
- (e) **Tree Fund**
 - (1) Fee-in-Lieu Option. Where trees have been removed in violation of this Article or replacement planting is impractical for the intended site design or would harm existing trees, the Town may accept a fee-in-lieu to be deposited into a Tree Fund to be used by the Tree Committee to support tree planting and/or maintenance of trees on public lands and for public education on the benefits of trees and tree maintenance.

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- a. The Tree Mitigation Fee shall be based on the current market cost of installing a 3-inch caliper tree, including delivery, installation, and mulching. The fee is currently established as no less than \$400 for a 3-inch caliper tree. The Town may periodically adjust the fee if market conditions or related costs fluctuate.
 - b. Partial planting of required trees supplemented with partial payment of fee-in-lieu may be allowed with prior Town approval.
- (2) Penalty for Grand or Historic Tree Removal. If a Grand or Historic Tree is removed or intentionally damaged such that removal becomes necessary, a penalty equal to two (2) times the appraised value of the tree shall be paid into the Tree Fund. In addition, no zoning permits shall be issued for the property for two (2) years following removal.
- (3) Appeal. Any person who disagrees with the Tree Mitigation Fee amount may appeal the fee determination to the Board of Zoning Appeals, in accordance with the procedures of this Ordinance.
- (f) **Inspection Authority**. Town staff may inspect required trees associated with new development, major site changes, mitigation, and/or replacement. With reasonable notice, the Town may conduct site visits at a mutually agreed time to verify tree health and survival during the two (2) year required maintenance period in Section 6.4(h).

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Appendix I: Indigenous Trees for the South Carolina Coastal Plain

Large Maturing Trees: Common Name <i>Scientific Name</i>	Evergreen/ Deciduous	Comments	Bloom Time
Southern Sugar Maple <i>Acer barbatum</i>	D	Bottomland forests, mesic slopes	Apr. - July
Boxelder <i>Acer negundo</i>	D	Lowland or seasonally flooded sites	Mar. - Apr.
Red Maple <i>Acer rubrum</i>	D	Red fall color; varied sites, best on moist; great shade	Feb. - Mar.
River Birch <i>Betula nigra</i>	D	Lowland or moist sites	Mar. - Apr.
Ironwood, Muscledwood <i>Carpinus caroliniana</i>	D	Moist, rich areas; tolerates shading; smooth bark	Mar. - Apr.
Water Hickory <i>Carya aquatica</i>	D	Wet, poorly drained sites, fastest growth on well-drained	Apr. - May
Bitternut Hickory <i>Carya cordiformis</i>	D	Wet to drier sites, best on rich, well-drained soils	Apr.
Pignut Hickory <i>Carya glabra</i>	D	Dry or moist sites; very common	Apr. - May
Nutmeg Hickory <i>Carya myristicaeformis</i>	D	Rich bottomlands; very rare, locally in Chas/Berk Cos	Apr.
Sweet pignut Hickory <i>Carya ovalis</i>	D	Dry, fertile forests	Apr. - May
Pale or Sand Hickory <i>Carya pallida</i>	D	Dry or sandy sites; resembles <i>Carya glabra</i>	Apr. - May
Mockernut Hickory <i>Carya tomentosa</i>	D	Very common; prefers dry, rich sites	Apr. - May
Hackberry, Sugarberry <i>Celtis laevigata</i>	D	Low, wet areas; bark has corky projections	Apr. - May
White Ash <i>Fraxinus americana</i>	D	Deep, rich well-drained sites	Apr. - May
Carolina or Water Ash <i>Fraxinus caroliniana</i>	D	Low sites; small tree, rarely exceeds 40 feet	May
Green Ash <i>Fraxinus pensylvanica</i>	D	Widely distributed; moist sites; relatively fast growing	Apr.
Pumpkin Ash <i>Fraxinus tomentosa</i>	D	Low, moist sites, in association with cypress and tupelo	Apr. - May
American Holly <i>Ilex opaca</i>	E	Varied soil types; deep, rich best; attractive foliage/berries	
Black Walnut <i>Juglans nigra</i>	D	Rich, well-drained sites; struggles in pure coastal setting	Apr.
Southern Red Cedar <i>Juniperus silicicola</i>	E	Low, wet areas; slow-growing; long-lived; screen tree	
Red Cedar <i>Juniperus virginiana</i>	E	Low to dry sites; dense foliage; great screen tree	
Sweet Gum <i>Liquidambar styraciflua</i>	D	Floodplain soils or moist upland sites; great autumn color	Apr. - Jun
Tulip Poplar <i>Liriodendron tulipifera</i>	D	Deep, well-drained soils; fairly insect/disease resistant	Apr. - Jun

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Large Maturing Trees: Common Name Scientific Name	Evergreen/ Deciduous	Comments	Bloom Time
Southern Magnolia <i>Magnolia grandiflora</i>	E	Rich, moist sites; large, attractive white flowers	May - July
Sweetbay Magnolia <i>Magnolia virginiana</i>	E	Wet, sandy acidic soils; white flowers; lemon fragrance	Apr. - July
Red Mulberry <i>Morus rubra</i>	D	Rich, moist sites; rapid growth; large canopy; red fruit	Apr. - May
Tupelo, Swamp Tupelo <i>Nyssa aquatica</i>	D	Wet to well-drained sites; fast grower; dark purple fruit	Apr. - May
Swamp Gum <i>Nyssa biflora</i>	D	Wet to well-drained sites	Apr. - Jun
Black Gum <i>Nyssa sylvatica</i>	D	Moist or dry areas; early, brilliant fall color; great shade	Apr. - Jun
Hop Hornbeam <i>Ostrya virginiana</i>	D	Moist, fertile soils to sandy sites; occasional coastal plain	Apr. - May
Shortleaf Pine <i>Pinus echinata</i>	E	Dry, fertile upland sites; relatively fast growing	Mar. - Apr.
Slash Pine <i>Pinus elliotii</i>	E	Wet flatland sites, can be found on wet sandy soils	Mar. - Apr.
Spruce Pine <i>Pinus glabra</i>	E	Rich, bottomland sites; not widely distributed within range	Mar. - Apr.
Longleaf Pine <i>Pinus palustris</i>	E	Slow grower; sandy sites; tolerates drought well	Mar. - Apr.
Pond Pine <i>Pinus serotina</i>	E	Wet flatwoods to sandy, peat-rich swamps	Apr.
Loblolly Pine <i>Pinus taeda</i>	E	Very common; variety of sites, avoid very wet sites	Mar. - Apr.
Sycamore <i>Platanus occidentalis</i>	D	Wet sites, tolerates poorly soils; fast growth	Apr. - May
Cottonwood <i>Populus deltoides</i>	D	Stream sides, floodplains	Mar. - Apr.
Swamp cottonwood <i>Populus heterophylla</i>	D	Swamp forests, floodplains	Mar. - Apr.
Black Cherry <i>Prunus serotina</i>	D	Widely distributed; rapid growth; best on moist sites	Apr. - May
White Oak <i>Quercus alba</i>	D	Variety of sites, best on well-drained areas; wildlife food	Apr.
Bluff Oak <i>Quercus austrina</i>	D	Rich slopes, over calcareous sediments; rare	Apr.
Scarlet Oak <i>Quercus coccinea</i>	D	Dry, upland sites; rapid grower, short-lived; rare coastal	Apr. - May
Southern Red Oak <i>Quercus falcata</i>	D	Dry areas	Apr.
Upland Laurel Oak <i>Quercus hemisphaerica</i>	E	Maritime forests, dry sandy soils	Mar. - Apr.
Bluejack Oak <i>Quercus incana</i>	D	Sand ridges; small shrubby tree	Apr.
Turkey Oak <i>Quercus laevis</i>	D	Sand ridges; very xeric soils	Apr.

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Large Maturing Trees: Common Name Scientific Name	Evergreen/ Deciduous	Comments	Bloom Time
Laurel Oak <i>Quercus laurifolia</i>	E	Low or sandy areas, best in well-drained	Mar. - Apr.
Overcup Oak <i>Quercus lyrata</i>	D	Lowland or floodplain sites; slow grower	Mar. - Apr.
Sand post Oak <i>Quercus margaretta</i>	D	Sand ridges with loam or clay	Apr.
Blackjack Oak <i>Quercus marilandica</i>	D	Clay-rich upland woods, droughty soils	Apr.
Swamp Chestnut Oak <i>Quercus michauxii</i>	D	Bottomlands	Apr.
Water Oak <i>Quercus nigra</i>	D	Ubiquitous, well-suited to coastal environment	Apr.
Cherrybark Oak <i>Quercus pagoda</i>	D	Bottomlands	Apr.
Willow Oak <i>Quercus phellos</i>	D	Low, well-drained sites; rapid growth; resembles a willow	Mar. - Apr.
Shumard's Oak <i>Quercus shumardii</i>	D	Bottomlands; moist, fertile soils; scattered distribution	Apr.
Bottomland Post Oak <i>Quercus similes</i>	D	Rich calcareous stream bottoms; rare	
Post Oak <i>Quercus stellata</i>	D	Dry uplands or clay soils, best on loamy soils	Apr.
Black Oak <i>Quercus velutina</i>	D	Dry woods; xeric, sandy soils	Apr.
Live Oak <i>Quercus virginiana</i>	E	Variety of sites; well-suited to coast	Apr.
Cabbage Palmetto <i>Sabal palmetto</i>	E	Dry or wet areas	
Pond Cypress <i>Taxodium ascendens</i>	D	Cypress savannas, acid swamps	
Bald Cypress <i>Taxodium distichum</i>	D	Freshwater wet areas	Mar. - Apr.
Winged Elm <i>Ulmus alata</i>	D	Rich woods	Feb. - Mar.
American Elm <i>Ulmus americana</i>	D	Bottomlands	Mar. - Apr.

Notes: The intent of Appendix I is to present indigenous species available, their basic characteristics as well as attributes and cultural preferences. The range and diversity of tree species available should satisfy landscaping needs in McClellanville while preserving and promoting the natural environment within Town.

Longleaf pine is strongly preferred over other pine species in landscape plans since it serves as the natural habitat to a federally endangered species, the red-cockaded woodpecker, and is the predominant tree of old-growth upland pine forests remaining in Charleston County. Therefore, in tree loss mitigation, a removed longleaf pine shall be replaced by the same.