

§3-4 TREE PROTECTION

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§3-4 TREE PROTECTION

Commentary: Trees provide many benefits for a community, including reducing air and noise pollution, reducing water pollution and flooding, providing natural habitat, preventing erosion, raising property values, and enhancing a community’s image. This module provides a tree protection ordinance that protects trees during the development process, requires street trees, and protects public trees.

§3-4-1 PURPOSE AND INTENT

Trees improve air and water quality, reduce soil erosion, reduce noise and glare, provide habitat for desirable wildlife, moderate the climate, and enhance community image and property values. Therefore, it is the intent of these regulations to encourage the protection and provision of trees through sound, responsible land development practices. It is also the intent of these regulations to protect public trees and promote a healthy community forest.

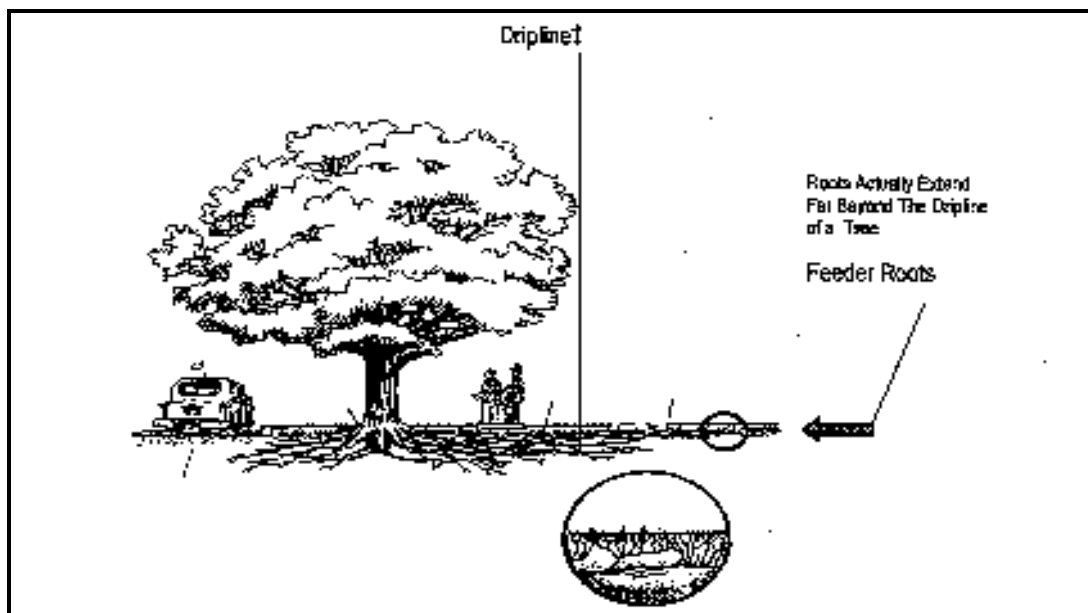
§3-4-2 DEFINITIONS

For the purposes of this Resolution [Ordinance], the following words are defined:

Critical Root Zone - (CRZ): The minimum area beneath a tree which must be left undisturbed in order to preserve a sufficient root mass to give a tree a reasonable chance of survival. The CRZ will typically be represented by a concentric circle centering on the tree's trunk with a radius equal in feet to one and one-half times the number of inches of the trunk diameter. EXAMPLE: The CRZ radius of a 20-inch diameter tree is 30 feet (see Figure 3-4-2.1).

Figure 3-4-2.1

Example of a Critical Root Zone.



Source: Adapted from Fulton County Tree Preservation Ordinance.

Development activity: Any alteration of the natural environment that requires the approval of a land use permit. Development Activity shall also include the "thinning" or removal of trees from any undeveloped land, including that carried out in conjunction with a forest management program, and the removal of trees incidental to the development of land or to the marketing of land for development.

Tree: Any self-supporting, woody perennial plant usually having a single trunk diameter of three inches or more that normally attains a mature height of a minimum of 15 feet.

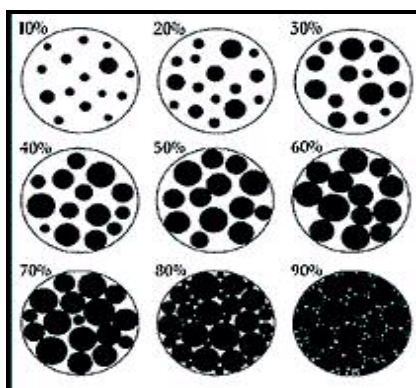
§3-4-3 TREE PROTECTION DURING DEVELOPMENT

§3-4-3.1 Applicability. The terms and provisions of this section shall apply to any activity that requires the issuance of a land use permit, with the exception of lots less than one acre in size. No land use permit shall be issued until it is determined that the proposed development is in conformance with the provisions of this Resolution [Ordinance].

§3-4-3.2 Tree Save Areas. All buffers with existing trees that may be required by this code or provided by a development shall be delineated on plans as tree save areas, unless the applicant clearly demonstrates the need for disturbance.

§3-4-3.3 Canopy Cover Requirements. Developers shall make all reasonable efforts to minimize cutting or clearing of trees and other woody plants in the development of a subdivision or project plan. Residential and mixed use planned developments are required to retain trees on the site to provide a total of 20 percent canopy cover. Commercial and industrial developments are required to protect a total of 15 percent canopy cover on the site. If the site is not currently forested, or only partially forested, the developer shall be required to plant trees to meet this requirement. (See Figure 3-4-3.3.1).

Figure 3-4-3.3.1
Examples of Canopy Cover (%)



http://birds.cornell.edu/bfl/study_site/describe_habitat/BFL_Quick_Reference_Sheet.pdf
http://birds.cornell.edu/bfl/study_site/describe_habitat/BFL_Quick_Reference_Sheet.pdf

Adapted from: Birds in Forested Landscapes, Cornell Lab of Ornithology
http://birds.cornell.edu/bfl/study_site/describe_habitat/site_char.html#can_cov

Commentary: Communities without access to aerial photographs or other convenient methods of determining canopy cover may elect to formulate the protection requirement as a percentage of the site (e.g., 10 percent of the site must be retained as woodland). Alternatively, communities with more administrative resources may wish to develop more detailed standards and require a tree survey and tree protection plan based on tree densities or other more specific standards (see <http://www.isa-arbor.com/tree-ord/ordinintro.htm> for more information).

§3-4-3.4 Replacement Trees. In developing a site, the first priority under this Resolution [Ordinance] is to protect and preserve trees whenever possible. Where replacement or new trees are necessary to meet the above requirements, the following provisions apply. Replacement trees must be compatible with the site ecologically and in terms of space requirements. The trees must have potential for size and quality comparable to those removed. Furthermore, no one genus may comprise more than 30 percent of the replacement trees.

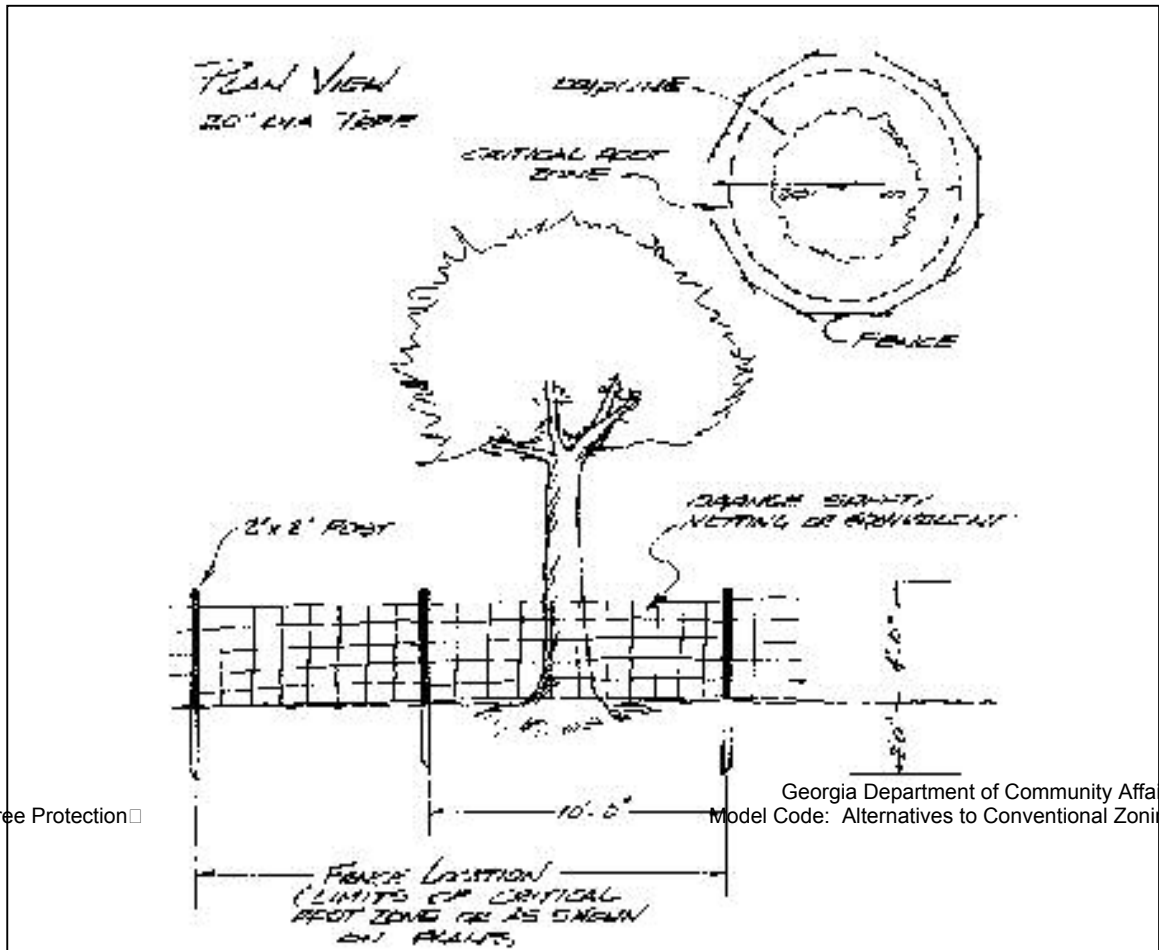
§3-4-3.5 Protection of Trees during Construction. Developers shall make all reasonable efforts to protect retained trees during the construction process, including, but not limited to, the following measures:

- (a) Placing protective barriers around trees, and marking such areas with “tree save area” signs;

- (b) Not grading, excavating, or locating utilities within the trees' critical root zone (CRZ);
- (c) Maintaining the CRZ as a pervious surface; and,
- (d) Maintaining the topsoil in the CRZ and preventing siltation.

Tree protection devices shall be installed prior to the issuance of a land use permit for any clearing and/or grading. Tree protection shall consist of chain link fencing, orange laminated plastic fencing supported by posts, rail fencing, or other equivalent restraining material. Tree protection devices shall remain in functioning condition throughout all phases of development and shall be subject to inspection by the Land Use Officer. (See Figure 3-4-3.5.1).

Figure 3-4-3.5.1
Tree Protection Device Detail.



Commentary: As an alternative or as a supplement to tree protection measures, a community may choose to adopt specimen or “heritage” tree protections, which protect individual trees considered important because of their size, species, age, historic significance, aesthetics, location, ecological importance, or other unique characteristics. For information on developing specimen tree protection measures, see <http://www.isa-arbor.com/tree-ord/ordintro.htm>

§3-4-4 STREET TREES REQUIRED

The requirements for street tree planting specified in this section are in addition to any requirements for the protection and replacement of trees on private property specified elsewhere in this Resolution [Ordinance]. Street tree planting is required along all new local, collector, and arterial streets and private streets within commercial, industrial, or residential subdivisions. The subdivider, owner of land to be dedicated as a public street, or the developer of a private street shall at the time of preliminary plat approval submit a plan for the provision of street trees along all said roads. It is the intent of this section that the subdivider carefully position street trees on the plan while taking into account future driveway and sidewalk locations if not constructed simultaneously with the construction of the public or private street. Suitable arrangements must be made for either the subdivider/developer or individual builders to install street trees according to a plan approved as a part of preliminary plat approval, prior to dedication or opening of said street. It is preferred that the subdivider/developer install said streets prior to the dedication or opening of the public or private street; however, the Planning Commission may accept an agreement where the responsibility for street tree planting is shifted to the owners or individual builders of the lots to be subdivided. Any such responsibility shall be legally transferred in a form acceptable to the County [City] Attorney. Trees must be planted within the public right-of-way or, if right-of-way width is insufficient to accommodate said street trees, then on private property abutting the public right of way within a street tree easement dedicated to the County [City]. (See Figure 3-4-4.1).

Table 3-4-1

Guidelines to Avoid Conflicts with Infrastructure

| MATURE SIZE | LARGE 50-70 FT | MEDIUM 30-40 FT | SMALL 15-20 FT | EVERGREEN 40-50 FT |
|--|-------------------|--------------------|-------------------|-----------------------|
| Minimum Width of Tree Lawn | 8 Feet | 5 Feet | 3 Feet | Yards Only |
| Spacing Between Trees | 60 Feet | 40 Feet | 20 Feet | 30 Feet |
| Overhead Utilities | Do Not Plant | Okay | Okay | Do Not Plant |
| Distance from Signs, Utility Poles, Driveways, Fire Hydrants | 10 Feet | 10 Feet | 10 Feet | 30 Feet |
| Distance From Intersection | 30 Feet | 30 Feet | 30 Feet | 30 Feet |
| Distance From Underground Utilities | 5 Feet | 5 Feet | 5 Feet | 5 Feet |

§3-4-5 PROTECTION OF PUBLIC TREES

§3-4-5.1 Right To Plant. The County [City] shall have the right to plant, prune, maintain and remove trees, plants and shrubs within the lines of all streets, alleys, avenues, lanes, squares and public grounds, as may be necessary to insure public safety or to preserve or enhance the symmetry and beauty of such public grounds.

§3-4-5.2 Permit Required. No person shall plant, spray, fertilize, prune, or remove, or otherwise disturb any tree on any road right-of-way or property owned by the County [City] without first procuring a permit from the County [City].

§3-4-5.3 Liability. Nothing contained in this section shall be deemed to impose any liability upon the County [City], its officers or employees, nor shall it relieve the owner of any private property from the duty to keep any tree, shrub or plant upon any street tree area on his property or under his control in such condition as to prevent it from constituting a hazard or an impediment to travel or vision upon any street, park, pleasure ground, boulevard, alley or public place within the city.

§3-4-6 PRUNING

§3-4-6.1 Pruning Standards. All tree pruning on public property shall conform to the ANSI A300 standards or other best management practices for tree care operations, as determined by the Land Use Officer.

§3-4-6.2 Tree Topping. It shall be unlawful for any person, or firm to top or severely prune any street tree, park tree, or other tree on public property. Topping is defined as the severe cutting back of limbs to stubs larger than three inches in diameter within the tree's crown to such a degree so as to remove the normal canopy and disfigure the tree. Severe pruning seriously affects a tree's food supply, can scald the newly exposed outer bark, make trees vulnerable to insect invasion, stimulate the regrowth of dense, upright branches below the pruning cut, make the tree more vulnerable to wind damage, disfigure the tree aesthetically, and sometimes result in the death of the tree. Where appropriate, crown reduction by a qualified arborist may be

substituted. Trees severely damaged by storms or other causes, or certain trees under obstructions such as utility wires where other pruning practices are impractical may be exempted from this Resolution [Ordinance] at the determination of the County [City].

Commentary: This module is written as a part of an overall land use management system. However, it can be easily adopted as a stand-alone resolution or ordinance, if the following other provisions are included in the adopted ordinance:

§2-0-1(A), PREAMBLE (although some of it may not be considered necessary)

§2-0-2, EFFECTIVE DATE

§2-0-3, LEGAL STATUS PROVISIONS

§2-0-4, ADMINISTRATION, APPEALS, ENFORCEMENT, AND PENALTIES

In addition, many small jurisdictions choose to create a Tree Commission or Tree Board to help administer the ordinance and provide policy direction for the urban forest; however, for administrative simplicity, such a provision been excluded. More information about Tree Commissions may be found at: <http://www.isa-arbor.com/tree-ord/ordintro.htm>

References

Abbey, Buck, ASLA. Guide to Writing A City Tree Ordinance: Model Tree Ordinances for Louisiana Communities. Louisiana State University. Available on-line at: <http://www.design.lsu.edu/greenlaws/modeltree.htm>

Bernhardt, E., and T. J. Swiecki. 1991. Guidelines for Developing and Evaluating Tree Ordinances. Sacramento: Urban Forestry Program, California Department of Forestry and Fire Protection. <http://www.isa-arbor.com/tree-ord>

Bond, Jerry. Sample Brief Tree Ordinance. Adapted from Hoefer, Philip, Himelick Dr. E.B., and David F. Devoto's Municipal Tree Manual, based on a sample ordinance prepared by Jim Nighswonger, 1982. <http://www.cce.cornell.edu/monroe/cfep/factsheets/sampleordinance.htm>