

Hall County

Gainesville MSA

2003 Population Estimate 156,101; +10.8% change from 2000.

Not a Tree City USA.

No tree board established by ordinance.

CHAPTER 17.280. TREE PROTECTION

Year first adopted unknown. Revised 2004.

Addresses private property.

Includes buffer and landscape requirements.

TABLE OF CONTENTS

- 17.280.010. Purpose.
- 17.280.020. Applicability.
- 17.280.030. Removal of trees other than during development.
- 17.280.040. Protection of existing trees.
- 17.280.050. Criteria for replacement trees.
- 17.280.060. Tree measurement units.
- 17.280.070. Tree protection plan.
- 17.280.080. Tree requirements for non-single-family residential development.
- 17.280.090. Tree requirements for single-family residential developments.
- 17.280.100. Definitions.

For more information, contact:

Steven T. Fletcher

Planner I/Plans Review Coordinator
770.297.5541 voice / 770.531.3902 fax

pletcher@hallcounty.org

www.hallcounty.org

CHAPTER 17.280. TREE PROTECTION*

- 17.280.010. Purpose.
- 17.280.020. Applicability.
- 17.280.030. Removal of trees other than during development.
- 17.280.040. Protection of existing trees.
- 17.280.050. Criteria for replacement trees.
- 17.280.060. Tree measurement units.
- 17.280.070. Tree protection plan.
- 17.280.080. Tree requirements for non-single-family residential development.
- 17.280.090. Tree requirements for single-family residential developments.
- 17.280.100. Definitions.

17.280.010. Purpose.

Growth and development in Hall County has resulted in the loss of innumerable trees in areas. Tree roots hold soil in place and tree photosynthesis converts carbon dioxide to oxygen. Tree loss thus has contributed to dramatically increased soil erosion and sedimentation. High growth areas, where natural green spaces are diminishing, have fewer trees to transform into oxygen the carbon dioxide of ever increasing harmful vehicular and industrial emissions, resulting in air quality degradation. Therefore, since trees:

- A. Cool the environment three to ten degrees;
- B. Protect from winter winds thus reducing heating costs and the burning of fossil fuels;
- C. Reduce the velocity of falling rain, help stormwater infiltrate into the soil, settle particulates, slow runoff, prevent soil erosion, and help to protect water quality;
- D. Buffer noise and reduce glare;
- E. Remove carbon from the atmosphere and give off oxygen;
- F. Are an invaluable physical, aesthetic, and psychological counterpoint to the urban setting, making urban life more comfortable by providing shade and cooling the air and land, reducing noise levels and

*Cross references—Soil erosion and sedimentation control, ch. 8.40; buildings and construction, tit. 15; subdivisions, tit. 16.

glare, and breaking the monotony of human developments on the land, particularly parking areas; and

- G. Have important impact on the desirability of land, and therefore property values;

it is not only desirable but essential to the health, safety, and welfare of all persons living or working within the jurisdiction to protect certain significant existing trees and, under circumstances set forth herein, to require the planting of new trees. (Res. of 7-13-92; Code 1991, § 17.275.010; Ord. of 11-11-99; Res. of 2-27-03(1), § 1)

17.280.020. Applicability.

A. The tree protection zone shall apply to the entirety of a tract of land for which no tree protection plan has been approved. After such approval, the tree protection zone shall correspond to that part of a tract of land designated as a tree conservation area in said plan.

B. The tree protection zone shall not apply to the following (but see the soil erosion and sedimentation control ordinance for provisions regarding retention of undisturbed natural vegetative buffers adjacent to Lake Lanier and other state waters):

- 1. Tracts of land for which the zoning ordinance imposes no yard requirements and permits 100 percent coverage of the lot by buildings.
- 2. Property already occupied by an owner-occupied single-family dwelling; unless non-residential uses are proposed for such property, except that any construction, paving, or other activity on the property that will damage trees on the public right-of-way is subject to the restrictions of section 17.280.040, "Protection of existing trees."
- 3. Public utility companies and government agencies conducting operations on public and utility rights-of-way and easements or on-sites for electric power substations and similar facilities, which operations are for the purpose of assuring uninterrupted utility and governmental services and unobstructed passage on public streets.

4. Property in use for tree farming (as defined herein) or other agricultural activities (as defined herein), provided the best management practices established by the Georgia Forestry Commission or the state department of agriculture are observed.
5. Family held property the subdivision of which is affected for the sole purpose of transferring a portion of such property to one (1) or more family members for use as the family member's primary residence.
6. Minor subdivisions as defined in section 17.20.720.

(Res. of 7-13-92; Code 1991, § 17.275.020; Ord. of 11-11-99; Res. of 2-27-03(1), § 1)

17.280.030. Removal of trees other than during development.

A. Permit. On properties which are not exempted under section 17.280.020.B, a permit shall be required to remove or cause the death of existing significant trees and any other trees ten inches DBH or larger located within the tree protection zone or for grading or other work adjacent to a tree which would affect it adversely. An approved tree protection plan is required for issuance of a permit. Permit requirements are waived where the county determines that trees to be removed are dead, are diseased or are infested to the extent that removal is necessary, or have been damaged by lightning, wind, ice, or other disasters to the extent that public safety is endangered.

B. Retention. The property owner shall retain trees on the property equivalent to 15 units per acre of development site, as defined herein, (not including land area covered by buildings) in accordance with these regulations and the approved plan, including, if necessary, replacing trees which die or are irreparably damaged.

(Res. of 7-13-92; Code 1991, § 17.275.030; Ord. of 11-11-99; Res. of 2-27-03(1), § 1)

17.280.040. Protection of existing trees.

A. Priority among existing trees. When a choice is available as to which existing trees to save, emphasis shall be given to the preservation of significant trees, even isolated individual trees,

over retention of other trees. Nonsignificant trees, however, should be saved in stands rather than as individual trees scattered over a site. Removal of significant trees and other trees ten inches DBH or larger shall be permitted only in conjunction with an approved preliminary tree protection plan, an approved grading plan, and actual grading of building pads (i.e., not simply to clear the lot).

B. On properties which are not exempted under section 17.280.020.B, the following provisions shall apply; except that encroachment on the critical root zone of a tree is permitted where necessary to the development (e.g., construction of a driveway), provided the tree is not counted toward the required 15 units per acre of development site (not including land area covered by buildings):

1. *Damage prohibited.* No person shall:
 - a. Cut, carve, or otherwise damage or remove any tree except in accordance with the provisions of this chapter;
 - b. Attach any wire, nails, advertising posters, or other contrivance harmful to any tree;
 - c. Allow any gaseous, liquid, or solid substance which is harmful to trees (such as concrete washout, fuel, lubricants, herbicides, or paint) to come in contact with them; or
 - d. Set a fire or permit any fire to burn when such fire or the heat thereof will injure any portion of any tree.
2. *Fence required.* During excavation, filling, construction, or demolition operations, each tree or stand of trees to remain on the property shall be protected against damage to bark, roots, and low-hanging branches with a fence enclosing the critical root zone. Fencing shall be either plastic construction area fencing, silt fencing, 12-gauge two-inch by four-inch wire mesh, double one-inch by four-inch rails on two-inch by four-inch posts, or high-

visibility surveyors' tape on one-inch by two-inch posts. Height of the latter three fence types shall be four feet.

3. *Compaction prohibited.* All building materials, vehicles, construction equipment, dirt, debris, or other objects likely to cause soil compaction or above-ground damage shall be kept outside the critical root zone. Where a limited amount of encroachment is unavoidable and is approved by the county, the critical root zone shall first be mulched with a four-inch layer of processed pine bark or wood chips or a six-inch layer of pine straw.
4. *Grade change prohibited.* There shall be no raising or lowering of the ground level within the critical root zone. Stripping of topsoil in the critical root zone shall not be permitted. Where necessary, the use of moderate fill is permitted only with prior installation of an aeration system approved by the county. Deposition of sediment in the critical root zone shall be prevented by placement of sediment barriers, which shall be backed by two-inch by four-inch wire mesh in areas of steep slope.
5. *Ditches prohibited.* No person shall excavate any ditch or trench within the critical root zone. Where such encroachment is unavoidable and is approved by the county, ditches or trenches shall be so located as to minimize root damage. If roots must be cut, root pruning procedures approved by the county must be employed.
6. *Paving prohibited.* No person shall pave with concrete, asphalt, or other impervious material within the critical root zone.

(Res. of 7-13-92; Code 1991, § 17.275.040; Ord. of 11-11-99; Res. of 2-27-03(1), § 1)

17.280.050. Criteria for replacement trees.

A. Spacing and the potential size of species chosen shall be compatible with spatial limitations of the site.

B. The species must be ecologically compatible with the specifically intended growing site.

C. The trees must have the potential for size and quality comparable to those removed.

D. The trees must be compatible in extent of crown and root systems at maturity with nearby utilities.

E. Planting preference shall be given to specimens of no more than three inches DBH.

F. Where trees must be added to achieve the required 15 units per acre of development site (not including land area covered by buildings), pines may not comprise more than 30 percent of the required units. Where existing pines already comprise 30 percent or more of the required units, no more pines may be credited toward the required units. At least 25 percent of the replacement tree units must be canopy trees.

G. Authority for questions of tree characteristics shall be publications of the Georgia Forestry Commission, publications of the Cooperative Extension Service of the University of Georgia College of Agriculture, or other authority acceptable to the county.

(Res. of 7-13-92; Code 1991, § 17.275.050; Ord. of 11-11-99; Res. of 2-27-03(1), § 1)

17.280.060. Tree measurement units.

The diameter of a tree's trunk will be measured and a value assigned in "units" in accordance with the following table. The values assigned to trees of the same size will be different for existing and new trees, as indicated. One unit is not the same as one tree.

Table of Values for Existing Trees*
Diameter at breast height

Inches	Units	Inches	Units
1 to 4	0.1	28	4.3
5 to 6	0.2	29	4.6
7	0.3	30	4.9
8	0.4	31	5.2
9	0.5	32	5.6
10	0.6	33	5.9
11	0.7	34	6.3
12	0.8	35	6.7
13	0.9	36	7.1

<i>Inches</i>	<i>Units</i>	<i>Inches</i>	<i>Units</i>
14	1.1	37	7.5
15	1.2	38	7.9
16	1.4	39	8.3
17	1.6	40	8.7
18	1.8	41	9.2
19	2.0	42	9.6
20	2.2	43	10.1
21	2.4	44	10.6
22	2.6	45	11.0
23	2.9	46	11.5
24	3.1	47	12.0
25	3.4	48	12.6
26	3.7	49	13.1
27	4.0	50	13.6

Table of Values for New (Replacement) Trees

<i>Caliper</i>	<i>Units</i>
1	0.4
2	0.5
3	0.6
4	0.7
5	0.8
6	1.0
7 and above	

Large Species**

<i>Caliper</i>	<i>Units</i>
1	0.5
2	0.6
3	0.7
4	0.9
5	1.1
6 and above	

**A "large species" is one which will have a height at maturity of 40 feet or more.

**A "canopy tree" is one that will have a height at maturity of 40 feet or more and is known to provide shade. See definition.

Note: For existing trees, a "unit" is one square foot of trunk cross-section area. (Res. of 7-13-92; Code 1991, § 17.275.060; Ord. of 11-11-99; Res. of 2-27-03(1), § 1)

17.280.070. Tree protection plan.

A proposal for development or improvement of any tract of land shall include a tree protection

plan. The tree protection plan may be included on the soil erosion plan. Such plan shall be submitted to the county prior to any grading, bulldozing, or other removal of existing vegetation. A preliminary plan may be submitted in certain circumstances, as provided in section 17.280.070.B.

A. The full tree protection plan shall show the following:

1. The extent of the development site.
2. All significant trees to be removed and all other trees ten inches DBH or larger to be removed.
3. All significant trees and all other trees ten inches DBH or larger which will remain on the development site and be protected during construction; and trees less than ten inches DBH which are submitted for credit as part of the required 15 units per acre of development site (not including land area covered by buildings).
4. In heavily wooded areas that will not be disturbed, the plan may show only the boundaries of each stand of trees and a list of the number, size, and type (e.g., hardwood, softwood, deciduous, evergreen) of trees in each stand which are submitted for credit.
5. Areas subject to provisions of the soil erosion and sedimentation control ordinance regarding retention of undisturbed natural vegetative buffers adjacent to Lake Lanier and other state waters shall also be shown.
6. Locations of proposed on-site underground utility lines.
7. Locations of other on- and off-site utility lines. Indicate areas where trees cannot be planted because of interference with (1) existing or proposed utilities on public rights-of-way or on utility rights-of-way or easements and (2) existing utilities on adjoining properties.
8. Limits of land disturbance, clearing, grading, and trenching.

9. Limits of tree conservation areas, showing trees to be maintained and planted, specifying type and size.
10. Grade changes or other work adjacent to a significant tree or any other tree ten inches DBH or larger which would affect it adversely, with drawings or descriptions as to how the grade, drainage, and aeration will be maintained around the tree.
11. Planting schedule, if applicable.

B. A preliminary tree protection plan may be submitted for development of an industrial park where multiple sites will be cleared and graded for purposes of marketing vacant sites to industrial prospects. Planting of new trees will not be required on a lot until a use is developed on that lot, and locations of new trees need not be shown on the preliminary plan. The preliminary tree plan for industrial/office or commercial parks protection shall show the following:

1. The extent of the development site.
2. Limits of land disturbance, clearing, grading, and trenching.
3. All significant trees to be removed and all other trees ten inches DBH or larger to be removed.
4. Grade changes or other work adjacent to a significant tree or any other tree ten inches DBH or larger which would affect it adversely, with drawings or descriptions as to how the grade, drainage, and aeration will be maintained around the tree.
5. Units of trees that will be required on the lot when it is developed, calculated both (a) without subtracting any building footprint area from the acreage and (b) by subtracting one-third of the lot area as assumed building area.

C. Where property has been clear-cut of trees in violation of the Best Management Practices as established by the Georgia Forestry Commission, or in violation of the provisions of this ordinance

[chapter], no rezoning or permissive use application shall be made for that property for a minimum of three years.

(Res. of 7-13-92; Code 1991, § 17.275.070; Ord. of 11-11-99; Res. of 2-27-03(1), § 1)

17.280.080. Tree requirements for non-single-family residential development.

The following shall apply to the development of tracts for non-single-family residential uses.

- A. Upon completion of development, all properties shall have a number of trees equivalent to 15 units per acre of development site (not including land area covered by buildings).
- B. Existing significant trees or any other trees ten inches DBH or larger that are in excess of the required 15 units per acre of development site (not including land area covered by buildings) but outside the construction area (buildings, accessory uses, parking area) shall not be removed unless adjacent development would cause irreparable damage to the critical root zones.
- C. Flowering ornamental trees can not be used in density calculations.
- D. Trees located within the 25 foot non-disturb buffer of a creek or stream shall not count toward the unit requirement.
- E. Frontage landscape strips shall be provided between any parking lot designed or intended to accommodate five cars or more and any street frontage of the property on which the parking lot is located. Landscaping shall be provided as follows unless the parking area is otherwise screened from the street by a building or other means. The depth of such strips shall be ten feet for commercial and industrial zoned properties, and 20 feet for residentially zoned property.
 1. Landscape strips shall contain no structures, parking areas, patios, stormwater detention facilities, or any other accessory uses except for retaining walls or earthen berms constructed as part of an overall land-

scape design, pedestrian-oriented facilities such as sidewalks and bus stops, underground utilities, driveways required to access the property, and signs otherwise permitted by this regulation.

2. One tree shall be provided within the landscape strip for every 40 feet of length of street frontage, or portion thereof. Such trees must be of a type that is suitable to local growing conditions and that will normally reach at least 12 inches at diameter breast height upon maturity.
 3. All portions of a landscape strip shall be planted in trees, shrubs, grass, or ground cover, except for those ground areas that are mulched or covered by permitted structures.
 4. Upon planting, new trees shall have a caliper of no less than two inches, and may be clustered for decorative effect following professional landscaping standards for spacing, location, and design.
 5. Plant materials in the landscape strip are not to extend into the street right-of-way unless specifically allowed by the public works department.
 6. Where, for any reason, trees cannot be saved or planted within the required planting strips, the depth of the strip shall be extended beyond the minimum indicated to such depth as necessary to accommodate the required number of units. (Uniform extension of the depth is not required.)
- F. Deciduous shade trees shall be provided within any parking lot designed or intended to accommodate five cars or more, in accordance with the requirements of this section.
1. One deciduous shade tree shall be provided within the parking lot for every ten parking spaces, or portion thereof. Each tree shall be located

within the parking lot in reasonable proximity to the spaces for which the tree was required. Trees provided to meet the minimum requirements of any landscape strip or buffer may not be counted toward this requirement.

2. A landscaping island shall be located at the end of every parking bay between the parking space and an adjacent travel aisle or driveway. The island shall be no less than eight feet wide for at least one-half the length of the adjacent parking space. The island shall be planted in trees.
 3. Tree planting areas shall be no less than eight feet in width and shall provide at least 100 square feet of planting area per tree. No tree shall be located less than two and one-half feet from the back of curb.
 4. Landscaping islands and tree planting areas shall be well drained and contain suitable soil and natural irrigation characteristics for the planting materials they contain.
 5. To facilitate a more efficient and functional parking lot design, the planning department may approve modifications to the above requirements (such as the clustering of landscape islands or expansion of frontage strips) to the above planting requirements, provided the total landscaping area is not reduced.
- G. Trees between building and street. Where trees must be added to achieve the required 15 units per acre of development site (not including land area covered by buildings), such additions should be made between the street right-of-way and the building tree line (as defined herein) in locations approved by the planning department.
- H. Parking lot and buffer trees. Trees required by this regulation in relation to parking lot landscaping may be included in calculating the required 15 units per

acre. However, trees existing or planted in a buffer required under section 17.260 of this regulation are not to be counted as part of the minimum 15 units per acre requirement.

- I. On properties on which all of the requirements of this section would exceed the required 15 units per acre, the planning department shall approve of the location and design of the landscape plan.

(Res. of 7-13-92; Code 1991, § 17.275.080; Ord. of 11-11-99; Res. of 2-27-03(1), § 1)

17.280.090. Tree requirements for single-family residential development.

The following shall apply to single-family residential development.

- A. A tree plan shall accompany all preliminary plat submissions. The tree plan shall indicate the location of all significant trees and existing tree stands, and the limits of clearing proposed to accommodate the construction of roads, utilities and other infrastructure necessary for the development of the subdivision.
- B. The removal or clearing of trees or other existing vegetation shall be prohibited outside the appropriate clearing boundaries as defined on the approved preliminary plan.
- C. Lots shall not be cleared and prepared during the construction of the roads, infrastructure, utilities, etc. Where limited clearing is necessary, a note shall be placed on the final plat indicating a tree plan for the lot in its entirety shall be required.
- D. In order to encourage the preservation of significant trees and the incorporation of these trees into the design of the development, additional density credit will be given for significant trees that are successfully saved. Credit for any significant tree saved will be two (2) times the assigned unit value shown in "Table of Values for Existing Trees."
- E. Any significant tree that is removed without the appropriate review and approval

by the department of planning must be replaced by trees with a total density equal to twice the unit value of the tree removed.

- F. Preference is given to existing trees that will be maintained on the property.
- G. Each residential subdivision development shall, upon completion, achieve a tree count equivalent to 15 tree units per acre. It is anticipated that this requirement shall be achieved through the preservation of existing trees on the site. However, where a site is primarily pasture land (90 percent open space or greater) prior to the initiation of the subdivision development, the tree units required shall be calculated using the total acreage from disturbed areas only (i.e. acreage from road and utility construction).
- H. For subdivision developments in which trees must be planted to achieve the required tree units, the final plat shall include a landscaping plan specifying the method in which the requirement shall be met. Any new trees required shall be planted prior to the issuance of an occupancy permit for any dwelling located on a lot which would require a tree unit(s).

(Res. of 7-13-92; Code 1991, § 17.275.090; Ord. of 11-11-99; Res. of 2-27-03(1), § 1)

17.280.100. Definitions.

As used in this chapter, the following words and terms shall have the meanings ascribed to them in this section:

Agricultural activities means (a) good-faith commercial production from the land or on the land of agricultural products, including horticultural, floricultural, dairy, livestock, poultry, and apiary products, but not including forestry products (see "tree farming" herein); and (b) clearing trees for the purpose of planting crops, providing pasture for livestock, or constructing buildings accessory to production of agricultural products.

Authority for questions of tree characteristics or urban and community forestry shall be referred to the USDA Forest Service, Georgia Forestry Com-

mission, Cooperative Extension Service of the University of Georgia College of Agriculture, American Forest Foundation, The National Arbor Day Foundation or any other authority found acceptable by the county.

Building tree line means the lines extending from the corners of a building nearest a street to the side lines of the lot (not including a street right-of-way), parallel to the right-of-way line or to the chord of that line.

Caliper means tree trunk diameter measured at a point six inches above ground level. (See also DBH.)

Canopy tree is a species of tree that normally reaches a height at maturity in excess of 40 feet and in which the layers of leaves and branches of the tree are so arranged or formed to provide shade. Examples of canopy trees would include scarlet oak, northern red oak, shumark oak, water oak, white oak, yellow poplar, red maple, sugar maple, American elm, winged elm, Chinese elm, trident maple, pin oak, American beech, pecan, southern magnolia, sweetgum, and willow oak.

Clear cut is the large-scale, indiscriminate removal of trees, shrubs, and undergrowth with the intention of preparing real property for non-agricultural development purposes.

Critical root zone means the land area circular in shape and centered on the trunk of a tree, the radius of which circle is determined by the farthest extent of the drip line from the trunk.

DBH (diameter-at-breast-height) means tree trunk diameter (in inches) at a height of four and one-half feet above the ground. If a tree splits into multiple trunks below four and one half feet, then each trunk is measured as a separate tree. (See also Caliper.)

Development site means that portion of a tract of land that will be dedicated to a proposed development, including that land containing trees that will be counted toward satisfying the requirements of these provisions. Where a development site is smaller than the tract in its entirety, only

those trees specified to be within the construction area shall be counted toward meeting the 15 units per acre requirement.

Drip line means a perimeter formed by the points farthest away from the trunk of a tree where precipitation falling from the branches of that tree lands on the ground.

Significant tree means a tree in fair or better condition which has been determined to be of a high value by a knowledgeable person because of its species, size, age, or other professional criteria. A tree is considered in fair or better condition if:

- (1) Its life expectancy is greater than 15 years;
- (2) It has a relatively sound and solid trunk with no extensive decay or hollow with less than 29 percent radial tip die-back; and
- (3) It has no major insect or pathological problems.

Hardwood trees such as oaks and hickories and softwood trees such as pines and cedars whose diameters are 18 inches DBH or more and small hardwoods such as dogwoods, redbuds or sourwoods whose diameters are eight inches DBH or more shall be considered significant trees due to size. A tree of lesser size than the preceding shall be significant if it is a rare or unusual species or is of historical significance or is specifically used by design as a landscape focal point of the project.

Tree farming means the planting, cultivating, and harvesting of trees in a continuous cycle as a regular practice on a tract of land, not including the removal of trees for purposes of development or the removal of trees without replanting. (Res. of 7-13-92; Code 1991, § 17.275.100; Ord. of 11-11-99; Res. of 2-27-03(1), § 1)

Cross references—Definitions and rules of construction generally, § 1.20.010 et seq.; zoning definitions, ch. 17.20.