

# Town of Tyrone

Fayette County

Atlanta MSA

2003 Population Estimate 4,783; +16.7% change from 2000 Census.

Not a Tree City USA.

No tree board established by ordinance.

## Ordinance No. 423

### ARTICLE XI. VEGETATION AND TREE PROTECTION AND LANDSCAPE REQUIREMENTS

First adopted 2002. No revisions.

Addresses public and private property.

Includes landscape requirements.

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\*Follows the numbering system in the ordinance. It appears that the first 3 sections are numbered incorrectly, and should be 1-001, 1-002, and 1-003. In addition, several pages were missing containing numerous sections, as indicated.

AN ORDINANCE TO AMEND THE LAND DEVELOPMENT ORDINANCE OF THE TOWN OF TYRONE, GEORGIA, TO PROVIDE FOR TREE PRESERVATION WITHIN THE TOWN; TO REPEAL CONFLICTING ORDINANCES; TO PROVIDE FOR SEVERABILITY; AND FOR OTHER PURPOSES

WHEREAS, the Town Council has reviewed the existing ordinances regarding the protection of trees within the Town and determined that the imposition of additional regulations is appropriate; and

WHEREAS, the Town Council has determined that it would be in the best interest of the residents, property owners and citizens of the Town of Tyrone, Georgia to adopt tree protection regulations for the Town.

NOW THEREFORE, BE IT ORDAINED, by the Town Council of the Town of Tyrone, Georgia, that:

**Section 1.** That the Land Development Ordinance of the Town of Tyrone, Georgia, as amended, is hereby further amended by adding a new Article XI-A entitled "Tree Protection Ordinance." The Tree Protection Ordinance attached hereto as Exhibit "A" and incorporated herein by express reference, which ordinance provides for the protection of trees within the Town of Tyrone, is hereby adopted and added to the Land Development Ordinance of the Town as Article XI-A of said Land Development Ordinance.

**Section 2.** Should any phrase, clause, sentence, or section of this Ordinance be deemed unconstitutional by a Court of competent jurisdiction, such determination shall not effect the remaining provisions of this Ordinance, which provisions shall remain in full force and effect.

**Section 3.** All ordinances or parts thereof which conflict with the provisions of this Ordinance are, to the extent of such conflict, hereby repealed.

**Section 4.** The effective date of this Ordinance shall be upon adoption.

DONE, RATIFIED and PASSED, by the Town Council of the Town of Tyrone, Georgia, this the 1<sup>st</sup> day of May, 2002 in regular session assembled.

ATTEST:

Valerie Fowler  
Valerie Fowler, Town Clerk

Sheryl Lee  
Sheryl Lee, Mayor

APPROVED AS TO FORM:

\_\_\_\_\_  
C. Bradford Sears, Jr., Town Attorney

**Applicant:** Any person seeking approval to take action under this Article Land Development Ordinance.

**Basal area:** The cross-sectional area of a tree trunk at diameter breast height (dbh) expressed herein as "units" per acre.

**Buffer:** A natural or planted landscaped area intended to separate and partially obstruct the view of adjacent land uses from one another or from a public right-of-way or for purposes of noise reduction and interrupting vision. (Replaces definition already in Land Development Ordinance)

**Buildable area:** The area of a lot that is outside the minimum required front, side or rear yard and which is not subject to the open space requirements or other environmental restrictions of this Article or other laws, codes or Ordinances.

**Caliper:** A measure of the diameter of a tree trunk performed at a point on the tree six (6) inches above the natural, adjacent grade for trees up to and including four (4)-inch caliper, and twelve (12) inches above the natural, adjacent grade for trees larger than four (4)-inch caliper. The caliper of multiple stemmed trees, such as crape myrtle, shall be the sum of the individual stem diameters.

**Clearing:** Any activity which disturbs the vegetative cover of a parcel, including trees.

**Coniferous: tree:** Also referred to as "evergreen," any tree which retains its green foliage throughout the year.

**Construction permit:** A permit issued by the Zoning Administrator to allow initiation of any clearing, grubbing and/or grading. This permit is issued only following issuance of a land disturbance permit, and all erosion control and tree protection measures have been installed in accordance with an approved plan.

**Critical Root Zone (CRZ):** The minimum area beneath a tree which must remain undisturbed during land development or construction activity to preserve a sufficient root mass which will afford a reasonable chance of tree survival. CRZ is defined by a circle with a diameter dimension equal in feet to one and one-half (1 ½) the trunk diameter in inches and centered on the tree's trunk. For example, the CRZ of a twenty (20)-inch diameter tree is thirty (30) feet.

**Crown:** The upper portion of a tree comprised of branches and leaves.

**Deciduous tree:** Also referred to as "broad-leafed" trees, any tree which loses its leaves at the end of the growing season.

**Density factor:** A unit of measure used to prescribe the calculated tree coverage on a site. The required site density standard for properties within the corporate limits of Tyrone is one hundred (100) units per acre.

**Drip line:** A vertical line extending from the outermost branches of a tree canopy to the ground.

**Drip line area:** The total area underneath a tree which would encompass all drip lines.

**Diameter breast height (dbh):** A standard measure of tree size performed at a height of four and one-half (4 ½) feet above the natural, adjacent grade.

**Development activity:** Any alteration of the natural environment which requires approval of a site plan, construction drawings or issuance of a development permit. Development activity shall also include the selective cutting, thinning or removal of trees from any undeveloped land, including that performed in

Revegetation: Re-establishment of trees and other landscape materials within the minimum required landscaped areas, according to standards and provisions of this Article, or as determined by the Zoning Ordinance or conditions of zoning approval.

Shrub: A woody plant or bush, usually between one (1) and six (6) feet in height, and distinguished by multiple stems.

Site Density Standard: The minimum number of trees, measured in average tree density units per acre, that which must be present on a lot following development and not exempted from this Article.

Softwood Tree: Any coniferous (cone-bearing) tree, such as pine, spruce, hemlock, cedar, etc. This definition is based on the colloquialism, and does not necessarily reflect any true qualities of the tree.

Specimen tree or stand: Any tree or grouping of trees, which qualifies as being of high value because of its size, species, age, location or historical character. Designation of such trees may be initiated by the Town Manager, upon application by the Zoning Administrator or any other interested person. Such designation may occur only by Resolution of Council. The Zoning Administrator shall maintain and file with the Town clerk a complete listing of the location and identifying features of all specimen trees. General criteria for the determination of specimen trees are:

- (1) Any deciduous tree with a diameter of thirty (30) inches or greater.
- (2) Any coniferous tree with a diameter of twenty-four (24) inches or greater.
- (3) Any understory tree with a diameter of ten (10) inches or greater.
- (4) Any tree with significant historical value, documented through historical records or otherwise.
- (5) Any tree which is rare and unique.

Thinning: Selective cutting or removal of timber.

Timber harvesting: The felling, loading and transportation of timber products (saw logs, pulpwood, etc.) The term "timber harvesting" may include both clear cutting and selective cutting of timber.

Town Manager. The Town Manager of the Town of Tyrone, Georgia, or his designee.

Tree: Any self-supporting, woody perennial plant usually having a single trunk diameter of three (3) inches or more which normally attains a mature minimum height of fifteen (15) feet. Canopy trees are defined as any tree of greater or equal height and crown spread than surrounding trees. Examples include beech, hickory, maple, oak, pecan, pine and sycamore. Understory trees are defined as any tree or woody plant of lesser height and crown spread than surrounding trees. Understory species generally reach a mature height of less than forty (40) feet. Examples include cherry, crabapple, dogwood, magnolia, pear, redbud, holly, sassafras, and red cedar. (definition must replace existing tree definition)

Tree bank: An account of funds, maintained by the Administration Department of the Town of Tyrone, contributed by developers as a alternate form of compliance to the ~~Town of Tyrone Tree Preservation Ordinance~~. Funds from the tree bank are to be used solely for the purchase and planting of trees on public sites within the Town of Tyrone as authorized by the Town Manager.

Tree destruction: Any intentional or negligent act which will cause a tree to die within a period of two (2) years, including, but not limited to, cutting or otherwise damaging the trunk, roots or other vital sections of the tree; damage inflicted upon the root system of a tree by the application of toxic substances; damage caused by the operation of heavy machinery or change or natural grade by excavation or filling of the cover

## ARTICLE XI. VEGETATION AND TREE PROTECTION AND LANDSCAPE REQUIREMENTS

### Section 1101. Purpose

The guiding presumption behind this article is the belief that the natural environment has significant value in and of itself, and that all reasonable measures available should be used in the preservation of that environment, consistent with the continued development of a viable Tyrone. The purpose of this Article is to promote the preservation of existing tree canopy and tree specimen diversity within the Town of Tyrone and persevere the aesthetic quality of land during and after development. Such preservation shall protect and enhance Tyrone's urban greenery through tree protection and planting of trees and landscaping during land development of all property, public and private. Benefits associated with these regulations are reduced soil erosion, storm water management costs and flooding potential; moderation of microclimates; improved air and water quality; mitigation of noise and glare; energy conservation through reduced heating and cooling costs; and enhanced property values. These benefits are heightened by the scenic and psychological values associated with the tree cover and are consistent with Tyrone's emphasis on rural character.

The Town Council of Tyrone, therefore, declares it to be public policy to:

- a) Aid in stabilizing the environment's ecological balance by contributing to the process of air purification, oxygen regeneration, groundwater recharge, and storm water runoff retardation, while at the same time aiding in noise, glare, and heat abatement;
- b) Assist in providing adequate light and air by preventing overcrowding of land;
- c) Provide visual buffering and enhance beautification of the Town;
- d) Safeguard and attempt to enhance property values and, in so doing, protect private and public investment,
- e) Preserve, protect and further the unique identity and environment of Tyrone, and, thereby, preserve the economic base attracted to the Town by such factors;
- f) Recognize that the protection and enhancement of the natural beauty, environment, and green space within Tyrone contributes to the economy, as well as provides a truly necessary aesthetic balance to the development of an urban setting;
- g) Conserve an ever-dwindling supply of energy, by the preservation and enhancement of the natural environment,
- h) Protect the atmosphere, lands, and water from pollution, impairment or unnecessary destruction;
- i) Protect natural vegetation except where its removal is necessary for responsible property development or control of disease and infestation. This article shall serve to dissuade the unnecessary clearing of land and its disturbance, so as to preserve, insofar as possible, the natural and existing growth of vegetation, and to replace whenever possible the removed foliage with new vegetation;
- j) Protect vegetation within the intermediate regional flood plain and for a minimum ten (10) feet from the banks of those streams not having defined intermediate regional flood plain elevation contours, so as to assist in the retention of storm water runoff and the control of erosion, including particularly the protection of stream bank stability by vegetation protection or restoration;
- k) Preserve protected and "specimen" trees or stands of trees which are exceptional representatives of their species either in terms of size, age or unusual botanical quality, and encourage the good care of same through properly applied forestry practices; and
- l) Protect and supplement existing vegetation within greenbelts, open space, recreation areas and protected area where feasible.
- m) Establish and maintain the maximum amount of tree cover on public and private property in the town by prohibiting destruction and removal of trees except in accordance with standards herein set forth as well as requiring the planting of trees on all development sites to achieve a specified minimum tree cover;
- n) Maintain trees in the town in a healthy and non-hazardous condition through adoption and enforcement of professional arboricultural practices;
- o) Establish, and revise as necessary, standards for planting and maintaining trees designed to improve the town's economic base by improving property values, enhance the town's visual quality and its neighborhoods, and improve public health by reducing air pollution and the incidence of flooding; and

- p) Structure a tree density calculation method that favors the preservation of existing trees as opposed to replanting with smaller nursery stock.
- q) Strongly encourage the use of native plant materials to preserve the heritage of Tyrone's natural beauty and promote best practices for water usage.

**Section. 1102 Applicability**

The terms and provisions of this Section and these standards shall apply to any activity that requires issuance of a development permit on all public and private property within the Town. No development permit or grading permit shall be issued until it is determined that the proposed development is in conformance with the provisions of this Article.

**Section. 1103 Application Requirements**

Applications for land disturbance or other development permit shall be accompanied by an application for a tree removal permit and landscaping plan providing the following information

1. A complete Tree Survey and Inventory, as specified in Section 1-007.
2. A complete Tree Protection Plan, as specified in Section 1-008. This plan shall be an integrated site plan showing specimen trees, tree protection areas, those trees to be saved and those to be removed, utilities to be installed, grading, approximate location of all structures, driveways and curb cuts, proposed tree planting and other landscaping.
3. A complete Tree Replacement Plan as specified in Section 1-009. Replacement trees used in the density calculation must be ecologically compatible with the site. A list of acceptable replacement trees is provided in Appendix B, Tree Species Selection List.
4. A complete Landscape Plan, as specified by Section 1-024.

~~5. Minor additions to existing developments may require only a sketch plan showing proposed changes submitted to the Town Manager for review and approval.~~  
**Section 1-004: Procedures**

1. A Tree Protection Plan and Tree Replacement Plan, as appropriate, must be submitted to the Zoning Administrator concurrent with submission of site grading plans. No land disturbance permit shall be issued prior to approval of the TPP.
2. All Tree Protection Plans and related documentation shall be reviewed by the Town Manager for conformance to the provisions of this Article and either approved, returned for revision, or denied. If denied, the reasons for denial shall be annotated on the Tree Protection Plan or otherwise stated in writing.
3. All tree protection measures shall be installed prior to any land disturbance, and the Zoning Administrator shall be contacted for a Pre-Construction Conference prior to land disturbance. Land disturbance may proceed only after a permit is obtained and tree protection measures have been installed and approved by the Zoning Administrator.
4. The Town Engineer shall make unscheduled inspections prior to and during development to ensure protection of trees, critical root zones and buffer zones.
5. Upon completion of a development, the Town Engineer shall conduct an inspection to ensure compliance with the Tree Protection Plan and Tree Replacement Plan, as appropriate.

1. Any applicant for a land disturbance permit who is aggrieved by a decision of the Town Manager, Town Engineer or Zoning Administrator relating to the application of this Article shall have the right to appeal said decision as provided under the Town of Tyrone Zoning Ordinance.

### **Section 1-006 Landscape Plan Approval Procedures**

For any landscape plan required by these regulations, the following procedures shall be followed:

- 1) A developer shall submit to the Town clerk three (3) copies of a landscape plan which meets the requirements of these regulations.
- 2) The landscape plan shall be submitted along with the required site plan and the required grading plan.
- 3) For consideration at a planning commission meeting, the landscape plan must be submitted to and accepted by the Town clerk at least fifteen (15) days prior to the planning commission meeting.
- 4) The landscape plan will be reviewed by the Town staff. If the landscape plan does not meet the requirements of these regulations, the Town Clerk will return the plan to the developer with comments and suggestions for correction. If the plan meets the requirements, the Town Clerk shall place the landscape plan on the next planning commission agenda.
- 5) The Town staff shall submit the results of their review in writing to the planning commission.
- 6) The planning commission will review the landscape plan, taking into consideration the requirements of these regulations, the Town staff's report and approve, disapprove or approve with modifications.
- 7) If the Planning Commission approves the landscape plan, a copy will be returned to the developer with the approval inscribed thereon, along with a notation of any appropriate conditions or review comments.
- 8) If the Planning Commission does not approve the landscape plan, the developer may resubmit, with necessary changes, following the same procedures as if it were an original application.
- 9) An approved landscape plan must be implemented prior to the issuance of a certificate of occupancy; or the developer may choose to provide the Town clerk with a performance bond or other acceptable security in an amount equal to one hundred and ten (110) percent of the Town's estimated cost of the required improvements which have not been installed or are not installed in a satisfactory manner.
- 10) Upon posting this bond or security, the developer shall have a one-year period in which to complete the required improvements in a satisfactory manner, or the bond or other security shall be forfeited and revoked, and the Town shall then take whatever action is necessary to have the developer complete the required improvements as soon as possible thereafter.
- 11) When a developer has installed the required landscaping improvements, he shall request that the Town clerk schedule an inspection. If the Town staff approves the installation, he shall submit a written report to the Town clerk, and the project will be released for a certificate of occupancy. If the Town staff does not approve the plan, staff shall submit a report stating reasons for disapproval so the developer can make the necessary corrections. A fee of one hundred (100) dollars (\$100 00) each shall be charged for any required re-inspections, and the fee shall be payable in advance of the re-inspection.
- 12) The developer shall guarantee all plant materials and provide adequate maintenance of the above improvements for a minimum of one (1) year from implementation. The Town shall inspect said improvements during that period to ensure that the approved plan has been fully implemented and maintained. If the improvements have deteriorated within that one-year period, such landscaping shall be replaced by the developer.

### **Section 1-007. Tree Survey and Inventory Plan Documentation**

1. A Tree Survey shall be prepared in the form of a scaled site plan scaled by a registered surveyor, professional engineer, landscape architect, certified arborist or registered forester for property in excess of five (5) acres noting the location of all specimen trees plus all other trees to be preserved and credited toward site density standards. For all tracts less than five (5) acres any required tree survey can be prepared by the property owner or his agent.
2. All specimen trees and their critical root-zones shall be labeled, indicated on the survey and inventoried

4. Total acreage of the site and acreage exclusive of all zoning buffer areas.
5. Delineation of all areas located within a 100-year floodplain and an indication of acreage.
5. The location of any state waters and the limits of any proposed disturbance within a water quality buffer zone.
7. Location of all specimen trees and their critical root zones indicating those specimen trees proposed for removal or preservation. Any specimen tree proposed for removal is to be identified in terms of
8. The location, size (dbh) and species of all trees to be preserved and to be retained to fulfill site density standards. Five (5) or more trees whose drip lines combine into one tree protection area may be outlined as a group and their number, size and species listed in a summary table. All tree protection areas are to be outlined and labeled.
8. All tree protection zones, natural areas, landscaped areas, buffers and areas of re-vegetation. Specifications describing tree protection methods shall be indicated for all tree protection areas, including tree fencing, erosion control, retaining walls, tunneling for utilities, aeration systems, transplanting, staking, signs, etc.
9. Location, size and species of all new trees to be planted to fulfill site density standards. Trees grouped in tree planting areas may be listed in a summary table by total number in the grouping by size and species.
10. A summary table indicating the number of existing trees to remain and trees to be planted, by caliper to the nearest inch, shall be shown along with calculations demonstrating the site density achieved. Additional credits shall be noted where applicable. Groupings of trees in tree protection areas and areas for tree planting may be keyed to the summary table by area rather than labeling each tree individually on the plan.
11. A delineation of tree save areas in which trees have been inventoried for site density standards.
12. Location and details for all permanent tree protection measures (tree wells, aeration systems, permeable pavement, retaining walls, bollards, etc.)
13. Limits of clearing and land disturbance such as grading, trenching, etc. where these disturbances may affect tree protection zones.
14. Grade changes or other work adjacent to a tree that could adversely impact its survival, with specifications as to how the grade, drainage and aeration will be maintained around the tree.
15. Boundaries of all required buffer, landscaped and vehicle use areas.
16. Location of all existing and proposed utility lines or easements, including location of any boring sites for underground utilities.
17. Indication of staging areas for vehicle and equipment parking, materials storage, concrete washout, debris burn and burial holes and other areas where tree protection may be affected.
18. Location of existing and proposed structures, pavement, driveways, cut and fill areas, retention and detention facilities, etc.

6. Existing and proposed location of underground utilities or easements.
7. Methods of tree protection shall be indicated for all tree protection zones, including but not limited to tree fencing, erosion control, retaining walls, tunneling for utilities, aeration systems, transplanting, staking, signs, etc.
8. Staging areas for parking, material storage, concrete washout, and debris burn and burial holes where these areas might affect tree protection.
9. Compliance to the required site density standard shall be demonstrated on the tree replacement plan. Existing trees or stands of trees used in the density calculation must be indicated.
10. Ornamental replacement trees may not be used in site density calculations without prior approval from the Town Manager.
11. Replacement trees used in density calculations must be ecologically compatible with the intended growing site.
12. Planting schedule showing the type (common and botanical names), size and quantity of trees to be planted, and any special planting notes.
13. The locations of all trees to be planted on the site to meet density standards.
14. Indication of the type of irrigation to be used.
15. Additional information as required by the Town Manager.

The following notes shall also be shown on the Tree Replacement Plan:

**Tree Replacement Notes:**

**COMPLIANCE WITH SITE DENSITY STANDARDS SHOWN ON THE TREE REPLACEMENT PLAN MUST BE VERIFIED PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY OR ACCEPTANCE OF THE PROJECT. CALL THE TOWN ENGINEER AT 770.487.4038 FOR AN INSPECTION.**

WITH THE EXCEPTION OF SINGLE FAMILY RESIDENTIAL PLATTED LOTS, A TREE MAINTENANCE INSPECTION WILL BE PERFORMED AFTER ONE FULL GROWING SEASON FROM THE DATE OF THE FINAL CONSTRUCTION INSPECTION. PROJECT OWNERS AT THE TIME OF THE MAINTENANCE INSPECTION ARE RESPONSIBLE FOR ORDINANCE COMPLIANCE.

ALL PLANT MATERIALS ARE TO CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK 1980 EDITION AMERICAN ASSOCIATION OF NURSERYMEN.

**Section 1-010. Tree Replacement Plan Standards**

1. Tree replacement plans must be prepared with appropriate consideration given to the function of trees in the urban landscape. Every effort must be made to maximize the environmental benefit of the plant material.
2. Trees proposed for replanting must be on the Tree Species Selection List found in Appendix B, unless otherwise approved by the Town Manager. Trees selected must be free from injury, pests, disease, nutritional disorders or root defects, and must be in good vigor to assure a reasonable expectation of

eastern perimeters of buildings to shade structures in the summer and allow sunlight to pass through in the winter.

### Section 1-012. Criteria for determination of specimen trees or stands of trees.

#### A. Specimen trees are characterized by the following minimum standards:

1. Any tree equaling or exceeding the following diameter sizes:
  - a. 24-inch dbh: large hardwoods such as beech, oaks, hickories, yellow poplars, etc.
  - b. 30-inch dbh: large softwoods such as cedars, pines, spruces, etc.
2. Trees not fully conforming to these sizes may be considered specimen trees in the case of a rare or unusual species, trees of exceptional aesthetic or unique quality, or trees of historical significance. Such trees may also be considered specimen trees when specifically used by a builder, developer or design professional as a focal point in a landscape design.
3. Specimen trees are also characterized as any tree in fair or better condition, as determined by the Town Manager or Georgia Forestry Commission representative, meeting the following standards:
  - a. A life expectancy of over 15 years.
  - b. A structurally sound trunk, not hollow and having no extensive decay that exceeds twenty (20) percent radial trunk dieback.
  - c. No more than one major or several minor dead limbs (hardwoods only).
  - d. No major insect or pathological problem.

#### B. Specimen tree stands

**A contiguous grouping of trees that have been determined to be of high value by the Town Manager based on the following criteria:**

1. A relatively mature, even-aged stand.
2. A stand with purity of species composition or of a rare or unusual nature.
3. A stand of historical or cultural significance.
4. A stand with exceptional aesthetic quality.

#### C. Preservation

In order to encourage the preservation of specimen trees and incorporation of these trees into the project design, additional density credit will be given for successful preservation of specimen trees. Credit assigned for any specimen tree saved will be two (2) times the density unit value shown in Table 1 of Appendix A. Specimen trees shall be verified by the Town Manager, and shall be located on the Tree Protection Plan.

### Section 1-013. Minimum Site Density Standards

For all areas being developed except land used for pasture land a minimum site density of one hundred (100) units per acre, exclusive of any acreage within a zoning buffer area and any trees needed to meet buffer requirements as set forth in the Zoning Ordinance or as conditions of zoning approval, must be maintained on all properties subject to this Article. For all areas used as pasture land for the past ten (10) years a minimum the site density of fifty (50) units per acre, exclusive of any acreage within a zoning buffer area and any trees needed to meet buffer requirements as set forth in the Zoning Ordinance or as conditions of zoning approval.

#### A. Tree protection areas.

Tree root systems are the most critical factor in tree preservation throughout the development process. The root system can easily extend beyond the drip line of the tree canopy (Figure 2). Disturbance of the root system can directly affect a tree's survival. The following guidelines and standards shall apply to trees proposed to be retained for credit toward the minimum site density standard and to protect the critical root zones.

1. The root system within the drip line is generally considered to be the critical root zone. To protect these critical root zones, a tree protection area shall be established around each tree or group of trees to be retained. 1
2. The tree protection area shall include no less than the total area beneath the tree canopy as defined by the drip line of the tree or group of trees, collectively. In some instances, an area greater than the drip line area may be required to be designated as a tree protection area as determined by the Town Manager.
3. Layout of the project site utility and grading plans shall avoid disturbance of tree protection areas. Whenever utilities must be installed within a tree protection area and such installation will encroach into the drip line of any tree to be saved, the utility shall be installed by tunneling at a minimum depth of thirty-six (36) inches. Reasonable efforts shall be made to save as many trees as possible, including avoiding utility routing which would endanger the taproot of certain species.
4. Construction site activities such as vehicle or equipment parking, materials storage, concrete washout, burn pit placement, etc., shall be arranged so as to prevent damage to trees within tree protection areas.

#### B. Protective Barriers

1. **Prior to any land disturbance, all protective tree barriers shall be installed and maintained until completion of site landscaping. Authorization to remove protective barriers shall be in writing by the City Manager or by issuance of a final Certificate of Occupancy. Inspection of tree protection barriers is required prior to any land disturbance or development activity; the Town Engineer shall be contacted to schedule an inspection. Signs requesting subcontractor cooperation and compliance with tree protection standards are recommended for site entrances.**
2. Tree fencing shall be a minimum four (4) feet high, constructed in a post and rail configuration. A two-inch by four-inch wooden post and a double one-inch by four-inch wooden rail, painted orange, is recommended. Four foot orange, polyethylene laminar safety fencing is also acceptable (Figure 1).
3. Where approved, other forms of tree protection may be utilized to delineate tree save areas which are remote from areas of land disturbance. These areas must be completely surrounded with continuous rope of flagging (heavy mil, minimum four (4) inches wide). All such tree protection must be accompanied by "Keep Out" or "Tree Save" signs (Figure 2).
4. All tree protection areas must be protected from soil sedimentation intrusion through the use of silt fencing or other acceptable measures placed up-slope from tree protection areas. No construction of any structure or improvement, or any construction activity, shall encroach or place solvents, materials, construction machinery or temporary soil deposits within six (6) feet of the drip line, as defined herein, of any specimen tree or any tree within a tree protection zone.
5. All tree protection measures must be maintained throughout land disturbance and construction, and shall not be removed until final landscaping is installed

limited cases, this intent cannot be realized as a particular site will not bear the required density. Two methods of alternate compliance may be acceptable, at the discretion of the Town Manager.

1. Planting at a location other than the project site; or
2. Contributing to the Town of Tyrone Tree Bank.

The following standards have been established for administering these alternative compliance methods. The Town Manager must review and approve all requests for alternative compliance. In no instance shall more than fifty (50) percent of the required site density be met through alternative compliance. As many trees as can reasonably be expected to survive must be planted on the site proposed for development. No development permit shall be issued unless the town Manager has approved the request for alternate compliance and received the necessary documentation and funds.

**Alternate Location.** Whenever trees are to be planted at an alternate location, a Tree Replacement Plan, meeting all applicable standards, must be reviewed and approved. The following note must be shown on the approved plan:

“A tree replacement plan addendum for this project shall be submitted to the Town Manager for the Town of Tyrone a minimum of thirty (30) days prior to requesting a formal inspection. This plan shall include the species, size and location of trees to be planted off-site to conform to site density standards of this Article. Release of this project is subject to approval of this plan, as well as verification of the installation of trees.”

The following conditions apply when a tree is to be removed under the provisions of this Article:

- a. The Town may, with the consent of the property owner, relocate the tree at the Town's expense to Town-owned property for replanting, either for permanent use at the new location, or for future use on other Town property.
- b. **Credit may be given to the property owner, for each relocated tree as though the tree was proposed to remain on the property, provided the tree is relocated to a site designated by the town at the owner's expense.**

**Tyrone Tree Bank.** As an alternate method of compliance, the Town of Tyrone will accept monetary donations to the Tyrone Tree Bank. These donations will be used for the sole purpose of planting trees on public property within the town limits of Tyrone. Methods of calculating contributions to the Tyrone Tree Bank are contained in Appendix C of this Article.

The Town of Tyrone Tree Bank will be administered by the Town Manager. A quarterly report shall be submitted to Mayor and Council indicating monies collected, funds expended, and the species, number, size and location of trees planted.

#### **Section 1-017. Tree species selection list for replanting.**

A Tree Species Selection List providing recommended canopy and understory tree species for replanting is contained in Appendix B. The town Manager shall review all tree replacement plans to ensure tree species selected are appropriate, native species. The following species are considered inappropriate and shall not be used to comply with the requirements of this Article:

- |                        |                     |
|------------------------|---------------------|
| (a) Eastern White Pine | (f) Box Elder       |
| (b) Lombardy Poplar    | (g) Black Willow    |
| (c) Mimosa             | (h) Royal Paulownia |
| (d) Silver Maple       | (i) Tree of Heaven  |

time following denial of an application made pursuant to this Article. All applications not acted upon within thirty (30) days of the date of receipt of a complete application by the Zoning Administrator shall be deemed approved. An applicant may appeal the denial of a permit to the Planning Commission as provided under the Town of Tyrone Zoning Ordinance.

5. Criteria for tree removal or destruction: No permit shall be issued for removal or destruction of any tree unless:

- a. A tree replacement plan meeting the requirements of subsection 6. of this Section has been approved;
- b. All other applicable requirements of this Article are met; and
- c. One of the following conditions exists:

(1) The tree is located within the buildable area of the lot and the applicant has concurrently filed an application for a building permit to make improvements otherwise permissible under all applicable ordinances of the Town of Tyrone.

(2) The tree is diseased or injured to the extent that death is imminent within two (2) years, is in imminent danger of falling, is so close to existing or proposed structures as to endanger them, physically interferes with utility services in a manner that cannot be corrected by anything less than destruction or removal of the tree, or creates a hazardous traffic condition.

6 Standards for Tree Replacement: Each applicant shall, to the maximum extent feasible, minimize the removal of trees from the site. In any removal of trees from the site. In any request for a permit for tree removal in which the resulting site density present on the site will be less than 100 density units per acre, the Zoning Administrator shall require replacement such that the average number of trees on the site is equal to not less than 100 density units per acre. Where tree removal is unavoidable, trees replanted shall be an appropriate species mix considered native to the region.

### **Section 1-020. Tree topping.**

It shall be unlawful as a normal practice for any person to top any tree. Topping is defined as the severe pruning of limbs to stubs larger than three (3) inches in diameter within the crown of a tree to such an extent as to remove the normal canopy and disfigure the tree. Trees severely damaged by storms or other causes, or certain trees under utility wires or other obstructions where other pruning practices are impractical may be exempted from this provision at the discretion of the Town Manager.

### **Section 1-021. Exemptions.**

This Article shall not apply to so called "grandfathered" projects, that is, any portion of a property included within the limits of a valid land disturbance permit issued prior to the effective date of this Article, provided that all time constraints relating to the permit issued shall be observed. In no event shall any grandfathered project be extended for a time period greater than 12 months from the date of enactment of this Article.

1. Removal of any dead, diseased, structurally unsound or infested tree(s) or trees which constitute a danger to human life or property as determined by Fayette County extension service, Georgia Forestry Commission, a Certified arborist, registered forester or the Town Manager;
2. Removal of trees, other than specimen trees, from an owner-occupied, single family platted lot shall be limited to removal of no more than five (5) trees per acre that are less than 24 inches in diameter within a single calendar year;

1. A 75-foot undisturbed buffer shall be provided and maintained along the entire perimeter of the property, including road frontages, except for authorized access crossings.
2. Notwithstanding the other provisions of this section, no property owner shall be required to preserve an undisturbed buffer that covers more than twenty-five (25) percent of the total land area of the property, excluding areas inside the 100-year floodplain. In any such case, an alternate buffer width shall be provided, as determined by the Planning Commission pursuant to its review of the application for a tree harvesting permit.
3. The property shall be required to meet a site density standard of 100 (or 50) units per acre, not including the seventy-five (75) foot buffer, upon completion of authorized tree harvesting activities.
4. The owner/developer shall utilize the recommended Best Management Practices as established by the Georgia Forestry Commission.
5. Once tree harvesting takes place in conformity with the above regulations, no development of the property within five (5) years shall be permitted that would require either the property to be rezoned or removal of trees preserved under this Section.

#### **Sec. 1-024 Landscape Plan Documentation:**

- 1) A landscape plan shall be prepared by a landscape architect registered in the State of Georgia.
- 2) All areas not devoted to structures, site development features, and natural vegetation shall be landscaped.
- 3) A landscape plan shall include one (1) canopy tree with a *minimum* trunk caliper of two and one-half (2 1/2) inches (at four (4) inches from the ground) for every one thousand (1,000) square feet of permanently disturbed area on the site. An area is considered permanently disturbed if it is covered with a building, structure, or other impervious surfaces like walks, drives and patios.
- 4) A landscape plan shall include one (1) under-story tree with a *minimum* trunk caliper of one (1) inch (at four (4) inches from the ground) for every one thousand (1,000) square feet of permanently disturbed area on the site.
- 5) All required landscaping shall be maintained in a horticulturally healthy and aesthetically pleasing manner.
- 6) It is recommended that no new planting should be more than one hundred (100) feet from a watering source; however, it is required that assurances, acceptable to the Town, will be provided that water will be available and appropriate watering will take place.
- 7) All landscape areas within parking lots shall be one hundred (100) percent landscaped with deciduous trees, shrubs, ground cover (not requiring mowing), 1 and/or flowers in mulched beds.
- 8) Landscaped areas within and around parking lots must be large enough to provide for health and continued growth of the vegetation.
- 9) Landscaping shall not obstruct the view between twenty-four (24) inches high and sixty (60) inches high on access drives, streets or parking aisles.
- 10) The perimeter of all parking areas shall be landscaped. Parking areas designed to accommodate no more than twenty (20) automobiles are not required to install interior landscaped areas like islands, peninsulas, and medians. Parking areas designed to accommodate more than twenty (20) automobiles must install interior landscaped areas so that no more than twelve (12) adjacent parking spaces exist without a landscaped separation of at least five (5) feet in width. If significant tree-save areas or natural areas exist within a parking area, the Town may make an exception to this requirement, as appropriate.
- 11) Screening shall be used as a buffer between incompatible uses, and to reduce the effects of headlight glare, noise and other objectionable activities. The following minimum requirements shall apply to screening:
  - a) All vegetation used for screening shall be at least three (3) feet in height at time of installation. Plants shall be spaced as to provide for effective visual screening within three (3) growing seasons. Planting beds required for screening shall be a minimum of six (6) feet in width.

trimming under a single permit.

All tree removal companies, utility companies or persons in the business of removing trees or construction shall remove from the site of any trees, stumps, limbs or debris generated by activities allowed through issuance of a permit under this Article.

All utility companies shall be required to obtain an annual permit issued by the Zoning Administrator. All applications for an annual permit shall include a list of sub-contractors with names, addresses, telephone numbers and Town occupational permit numbers. Quarterly work schedules are to be submitted to the Town Manager indicating the proposed location(s) and extent of tree work to be performed.

All tree trimming and pruning to be performed by public utilities, public agencies, and their sub-contractors on trees growing on private or public right-of-way shall be done according to the National Arborist Association Standards for Pruning of Shade Trees.

The routing of all public and private utility easements shall be subject to review and comment by the Town Engineer.

#### **Section 1-027. Debris disposal requirements.**

Following any land disturbing activity, including clearing, grading or logging, all biodegradable debris, including but not limited to tree stumps, trunks, limbs or brush, shall be hauled off-site to an appropriate disposal location or chipped to be used as mulch.

#### **Section 1-028. Display of permit and inspections.**

The applicant shall prominently display the permit issued at the job site. Such permit shall be displayed continuously while trees are being removed or replaced or work performed as authorized on the permit. As a condition for issuance of a permit, the applicant shall agree in writing to entry onto his premises by representatives of the Town as designated by the Town Manager to inspect the permit and activities at any time, and such entry shall be lawful. Failure to allow such entry shall be unlawful and shall constitute a violation of this Article.

#### **Section 1-029. "Stop-work" orders.**

Upon notice from the issuing authority, work on any project that is being performed contrary to the provisions of this Ordinance shall cease immediately. Such notice shall be in writing; shall state the specific violation(s); shall be given to the applicant, his authorized agent, or the person or persons in charge of the activity on the subject property; and shall state the conditions under which work may resume. In the event of an emergency or threat to public health or safety, written notice shall not be required.

#### **Section 1-030. Emergencies.**

During the period of an emergency, such as a hurricane, wind storm, ice storm, flood or other natural disaster, the requirements of this Article may be waived by the Mayor, or other designated official, upon a finding that such waiver is necessary to the restoration of order in the Town.

#### **Section 1-031. Enforcement.**

The Town Manager shall enforce this Article, and may withhold issuance of a Certificate of Occupancy, or permits and inspections, for any development as required until the provisions of this Article have been fully met. For purposes of enforcement of this Article, the Zoning Administrator is hereby clothed with police power to perform all acts necessary to ensure that the provisions of this Article are not violated, including, but not limited

condition of said suspension, the court may require payment of restitution or impose other punishment allowed by law which may include mandatory attendance at an educational program concerning tree preservation. Each day's continuance of a violation may be considered a separate offense. Each tree cut, damaged or poisoned shall constitute a separate offense. The owner of any property wherein a violation exists, and any architect, developer, builder, contractor, tenant or agent who commits, or may have assisted in the commission of any such violation, shall be guilty of a separate offense.

**Section 1-033. Severability of provisions.**

Should any section or provision of this Article be declared to be invalid by a court of competent jurisdiction, such decision shall not affect the validity of this Article as a whole or any section thereof, other than the section or provision specifically declared to be invalid.

**Section 1-034. Repeal of conflicting ordinances.**

This Article is the Tree Preservation Ordinance of the Town of Tyrone, and all other conflicting ordinances or resolutions are hereby repealed, provided that nothing herein shall be construed as repealing the conditions of use, operation, or site development accompanying building or development permits issued under previous ordinances or resolutions, provided further that modification or repeal of these past conditions of approval may be accomplished as authorized and provided by the requirements of this Article.

It could also be considered permissible to replace a removed tree with a number of smaller trees of the same species, provided the combination caliper measurements of the smaller trees is at least equal to the measurement of the protected or specimen tree which was removed.

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that do not survive for a minimum period of two-years.

c. In the event that new trees proposed to be planted to achieve that site density standard are not installed upon application for a C.O., or final plat approval, as appropriate, a performance bond or other acceptable surety in an amount equal to one hundred and ten (110) percent of the value of the new trees and their installation shall be posted in accordance with performance bonding requirements. The term of the bond shall not exceed one (1) year.

d. An inspection of all tree plantings shall be made by the Town Engineer to assure compliance with plan requirements prior to release of the performance bond. The bond shall be drawn upon by the Town of Tyrone at the time of expiration should any approved plan requirements not be fulfilled, and the owner has not requested an extension. One six (6) month extension is permitted with documented justification. Any inspections performed after the final inspection (for project release) are subject to reinspection fee schedules.

#### 6. Restoration of disturbed tree save areas

Once a tree save area has been established through the plan approval process set forth in this Article, any destruction of trees in that area must be remedied by planting new trees to restore the required site density or to achieve the intended effect of the buffer, as appropriate.

#### 7. Remedial Care

Trees in tree save area which have been adversely impacted by construction activities may be subject to remedial care. Remedial care will be performed at the discretion of town Manager, and may include, but not be limited to the following actions:

- a. Tree pruning
- b. Soil aeration
- c. Fertilization
- d. Supplemental watering

#### 8. Appeals

Any person adversely affected by a decision of the Town Manager, Town Engineer or Zoning Administrator in the enforcement or interpretation of any of the terms or provisions of this Article may appeal the decision to the Planning Commission. Such appeal shall be made by filing written notice thereof with the Zoning Administrator within a maximum of ten (10) business days following the decision being appealed.

#### 9. Administrative variances

Front, side and rear yard setbacks may be reduced by an amount not to exceed fifty (50) percent where it is determined by the Town Manager to be necessary in order to preserve existing specimen or other significant trees. Appropriate conditions to said administrative variances shall be imposed so as to ensure the continued health of said trees following the granting of such variances, including mandatory replacement requirements. Such administrative variances shall be considered and decided consistent with the procedures and criteria contained in this Article. Appeals of final decisions regarding administrative variances may be made to the Planning Commission.

#### Section 1-032. Violation and penalty.

Any person, firm or corporation violating a provision of this Article shall be deemed guilty of violating a duly adopted ordinance of the Town of Tyrone, and upon conviction by a court of competent jurisdiction, may be punished as provided in the Code of Ordinances of the Town of Tyrone, and in addition thereto, may be enjoined from continuing such violation. The court shall have the power and authority to place any person found guilty of a violation of this Article on probation, and to suspend or modify any fine or sentence. As a

Town of Tyrone Tree Preservation Ordinance  
Appendix A

Density Factor Analysis

All properties subject to this Article must maintain a minimum site density of one hundred (100) units per acre. The term "unit" is an expression of basal area, and is not synonymous with "tree". The density requirement must be met as a condition of development permit issuance, whether or not a property contained trees prior to development. This density may be achieved through credits for preserving existing trees, by planting new trees according to the minimum standards of this Article, or through a combination of both.

The following formula shall apply to Site Density Standard (SDS) analysis:

$$\text{SDS} = \text{EDF} + \text{RDF}$$

SDS is the minimum site density to be achieved and maintained on all developed sites, 100 units per acre.

Existing Density Factor (EDF) is the density value or credit of existing trees to be preserved on a site.

Replacement Density Factor (RDF) is the density value of new trees to be planted on site.

The following steps are used to calculate the required tree preservation or replacement density:

**Step 1:** Calculate the Site Density Standard (SDS). SDS is calculated by multiplying the number of site acres by 100.

**EXAMPLE:** A 2.5-acre site has a SDS of  $2.5 \times 100 = 250$

**Step 2:** Calculate the Existing Density Factor (EDF). EDF is determined by converting the diameter of individual, existing trees to site density units as indicated in Table 1. These units are then totaled to determine the site EDF.

**EXAMPLE:** seven trees will remain on the 2.5-acre site. This includes four 6-inch trees and one 8-inch tree. The following site density units are associated with the trees to be preserved:

Number of Trees	Size Class	Density Units	Site Density
4	6-inch	12	48
2	7-inch	15	30
1	8-inch	20	20
7		TOTAL	98

The total site density units, 98, is the Existing Density Factor (EDF)

**Step 3:** Calculate the Replacement Density Factor (RDF). RDF is determined by subtracting the EDF value from the SDS value.

**EXAMPLE:**  $250 \text{ (SDS)} - 98 \text{ (EDF)} = 152 \text{ (RDF)}$

**Step 4:** Calculate a sample plan for achieving the required Replacement Density Factor (RDF)

Example plant eight (8) 2 ½ -inch, nine (9) three-inch, seven (7) four-inch, five (5) five inch and three (3) six-inch diameter trees as presented below:

TABLE 2. CONVERTING REPLACEMENT TREES TO SITE DENSITY UNITS

Tree Diameter	Density Units	Tree diameter	Density Units
2 ½	2.5	5	7
3	3.5	6	8
3 ½	4.5	7	9
4	6	8	10

Basis of Site Density Tables. Site density is based on a reservation of 25 percent of the total area of each development site as open space. This is the Atlanta Regional Commission minimum standard for impervious ratios in groundwater recharge areas. It is accepted here as a reasonable standard for minimizing flooding potential and preserving Tyrone's tree canopy. For a two-acre lot, this represents an area of 21, 780 square feet. The Town of Tyrone Zoning Ordinance requirement for landscaping is two trees for each 1,000 square feet of permanently disturbed area. The minimum planting size for canopy trees is two and one-half-inch (2 ½) caliper. This results in 43.56 trees for the 21, 780 square foot area. Accordingly, a total of forty (40) trees in the 2 ½-inch size class, 100 density units, is the basis of the tree diameter conversion for replacement trees. As this Article favors preservation of existing trees, the density credits are substantially skewed in favor of such preservation.

Town of Tyrone Tree Preservation Ordinance  
Appendix B

Tree Species Selection List  
Canopy Trees

1. <i>Acer floridanum</i>	Florida Maple or Southern Georgia Maple
2. <i>Acer rubrum</i>	Red Maple
3. <i>Acer saccharum</i>	Sugar Maple
4. <i>Betula nigra</i>	River Burch
5. <i>Carya species</i>	Hickories, Pecans
6. <i>Castanea mollissima</i>	Chinese Chestnut
7. <i>Celtis occidentalis</i>	Hackberry
8. <i>Cercidiphyllum japonicum</i>	Katsura Tree
9. <i>Cladrastis lutea</i>	American Yellowwood
10. <i>Cunninghamia lanceolata</i>	Common Chinafir
11. <i>Fagus grandifolia</i>	American Beech
12. <i>Fraxinus americana</i>	White Ash
13. <i>Fraxinus Pennsylvania</i>	Green Ash
14. <i>Ginkgo biloba</i>	Ginkgo
15. <i>Helesia Carolina</i>	Carolina Silverbell
16. <i>Juniperus virginiana</i>	Eastern Red Cedar
17. <i>Liquidambar styraciflua</i>	Sweetgum
18. <i>Liriodendron tulipifera</i>	Yellow Tulip, Poplar
19. <i>Magnolia grandiflora</i>	Southern Magnolia
20. <i>Metasequoia Glyptostrobooides</i>	Dawn Redwood
21. <i>Nyssa sylvatica</i>	Black Gum, Black Tupelo
22. <i>Pinus elliottii</i>	Slash Pine
23. <i>Pinus virginiana</i>	Virginia Pine
24. <i>Platanus occidentalis</i>	Sycamore
25. <i>Quercus species</i>	Oaks, except Live oaks
26. <i>Robinia pseudoacacia</i>	Black Locust
27. <i>Sophora japonica</i>	Japanese Pagoda Tree
28. <i>Taxodium distichum</i>	Bald Cypress
29. <i>Ulmus parvifolia</i>	True Chinese Elm
30. <i>Zelcova serrata</i>	Japanese Zelcova