CITY OF KENNESAW, GEORGIA

ORDINANCE NO. 2015-14, 2015

ORDINANCE TO AMEND THE UNIFIED DEVELOPMENT CODE, CHAPTER 3 – "PROTECTION OF NATURAL FEATURES AND RESOURCES" SPECIFICALLY SECTION 3.07.00 "LANDSCAPING, BUFFERS, AND TREE CONSERVATION AND REPLACEMENT" IN ITS ENTIRETY BY ADDING A NEW SECTION 3.07.00 "LANDSCAPE AND TREE REQUIREMENTS"

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF KENNESAW, COBB COUNTY, GEORGIA, AS FOLLOWS:

WHEREAS, deleting Section 3.07.00 in its entirety, replacing and changing the title to "Landscape and Tree Requirements; and

WHEREAS, the public hearings were duly advertised in the Marietta Daily Journal on October 16, 2015 and October 23, 2015; and

WHEREAS, the amended and retitled Section 3.07.00 of the Unified Development Code is attached to this Ordinance.

SECTION 1. BE IT ORDAINED THAT all ordinances, parts of ordinances, or regulations in conflict herewith are repealed as of the effective date of this ordinance.

SECTION 2. BE IT FURTHER ORDAINED THAT should any section of this ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of the ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 3. BE IT FURTHER ORDAINED this ordinance shall become effective immediately from and after its adoption and execution by the Mayor, pursuant to Section 2.11 of the City Charter of the City of Kennesaw,

PASSED AND ADOPTED by the Kennesaw City Council on this <u>21st</u> day of December, 2015.

ATTEST:

CITY OF KENNESAW:

Debra Taylor, City Clerk

Mark Mathews, Mayor

3.07.00 LANDSCAPE AND TREE REQUIREMENTS

3.07.00 LANDSCAPING AND TREE REQUIREMENTS

- 3.07.01 Purpose
- 3.07.02 Application
- 3.07.03 Definitions
- 3.07.04 General Provisions Tree Removal and Permit Requirements
- 3.07.05 Landscape Plan Required
- 3.07.06 Vegetation and Tree Survey
- 3.07.07 Density Factor Analysis
- 3.07.08 Conservation of Mature Trees
- 3.07.09 Maintenance of Trees
- 3.07.10 Tree Conservation Standards
- 3.07.11 Buffer Zones
- 3.07.12 Tree Replacement Standards
- 3.07.13 Alternative Compliance
- 3.07.14 Public Tree Protection and Care
- 3.07.15 Notification and Penalties for Damaging Trees on Public Property
- Attachment "A" City of Kennesaw Approved Trees

3.07.01 Purpose

The purposes of this chapter are to:

- 1. Protect and maintain the urban forest by managing the impact of development.
- 2. Preserve the environmental and aesthetic assets of the community by requiring tree planting and landscaping for development.
- 3. Provide protection from removal for all trees, without a permit, within the city unless exempted.
- 4. Provide the necessary information to facilitate development project design, plan review, and enforcement processes in order that the provisions of the ordinance are administered in the most effective, efficient and economical manner.

3.07.02 Application

The terms, provisions and standards of this Chapter shall apply to any activity, private and/or governmental, on real property, which requires the issuance of a land disturbance permit or creates a land disturbance through the use of motorized vehicles within the City of Kennesaw. (Chapter 46, Article III)

3.07.03 Definitions

The following words, terms and phrases, when used in this article, shall have the

3.07.00 LANDSCAPE AND TREE REQUIREMENTS

meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Buffer. Any visual buffer or screening required by this chapter or any other pertinent section of the city zoning regulations.

*City or t*he words "the city" means the City of Kennesaw, Georgia or any designated employee thereof.

Critical Root Zone (CRZ) means 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.

Clearing. The removal of trees or other vegetation of two inches dbh or greater.

Diameter at Breast Height (DBH). The diameter or width of the main stem of a tree as measured 4.5 feet above the natural grade at its base. Whenever a branch, limb, defect or abnormal swelling of the trunk occurs at this height, the diameter at breast height (dbh) shall be measured at the nearest point above or below 4.5 feet at which a normal diameter occurs.

Director means the Director of Public Works or his/her designee.

Existing Density Factor (EDF) means density of existing trees to be conserved on a site.

Landscape Plan. A map and supporting documentation which describes for a particular site where vegetation is to be retained or provided in compliance with the requirements of this chapter. The landscape plan shall include any required buffer elements.

Pervious Area means an area of a parcel that allows the penetration, percolation or soaking of rain water into the ground. Also known as "Green Area" or "Green Space".

Street Yard means an area of a lot which lies between the street right-of-way line and the actual front wall line of the building, as such building wall line extends from the outward corners of the building, parallel to the street, until such imaginary extensions of such front building wall lines intersect the side property lines. In determining the actual building wall of the building for the purposes of this definition, steps and unenclosed porches shall be excluded, but such building wall line shall follow and include the irregular indentations of the building. A front building wall is a building wall fronting on a street. On corner lots the street yard shall consist of all the area of such lot between all abutting street right-of-way lines and their corresponding actual front building wall lines, as such lines are extended in the manner provided in this

3.07.00 LANDSCAPE AND TREE REQUIREMENTS

definition. When there are multiple buildings on a lot, the street yard shall consist of all the area of the lot between the street right-of-way line and an imaginary line beginning at one side of the property line, running parallel to the street, connecting to the front most corner of the building wall fronting the street and nearest such side property line, then following and connecting the front most walls of all buildings fronting on the street, and then extending to the other side property line, running parallel to the street. If a building has a rounded front, the front building wall corners shall be the points closest to the side boundaries; provided, however, that isolated buildings (e.g., fast food restaurants in a shopping center, photo processing drop-offs, bank drive-through, etc.) shall not be considered in delineating the street yard. Notwithstanding all of the foregoing, on land used only for parking purposes or only as a commercial or private parking lot, the street yard shall consist of the area between the street right-of-way line and the back property line.

Tree Density Factor (TDF) means the minimum number of trees required to be maintained on a developed site.

3.07.04 General Provisions Tree Removal and Permit Requirements

- 1. A Tree Removal Permit shall be obtained prior to the removal of any tree (DEAD or ALIVE) from all residential and/or commercial property located within the city limits.
 - a. A Permit Application is available on-line from the City Website or can be picked up at the Public Works Department.
 - b. Properties within the Historic District shall comply with Chapter 4.02.01 in addition the requirements outlined in this Section.
 - i. Applicants shall be required to pay an application fee for a Certificate of Appropriateness when applying for a permit within the Historic District in an amount as set forth by the city.
 - ii. All applications shall be reviewed by the Historic Preservation Committee.
- 2. Removal of Trees on Residential Properties.
 - a. A permit is required for the removal of any tree five (5) inches in diameter and larger (measured at 4.5 feet above the ground). Trees smaller than 5 inches in circumference (measured at 4.5 feet above the ground) are not regulated.
 - b. Removal of trees within common areas of residential neighborhoods such as clubhouses, tennis courts, pools, neighborhood entrances, etc. will be treated as commercial properties.
- 3. Removal of Trees on Commercial Sites

3.07.00 LANDSCAPE AND TREE REQUIREMENTS

- a. A permit shall be secured prior to the commencement of any planting, removal, trimming, or cutting of trees subject to this chapter. For purposes of this subsection, a landscape plan approved in writing by the City constitutes a permit.
- b. No land disturbance permit for full site development shall be issued without it being determined that the proposed development is incompliance with the provisions of these regulations and Chapter 46, Article III.
- c. The City shall have the authority to review all requests for permits to grant or deny permits or attach reasonable conditions to the permits.
- d. Permits are not required for city, county and state department of transportation projects so long as tree preservation and protection requirements are included in the project.

3.07.05 LANDSCAPE PLAN REQUIRED

- Landscape plans shall be provided for all projects that exceed one (1) acre. The landscaping plan shall be prepared by, and bear the seal of, a landscape architect or professional engineer licensed to practice in the State of Georgia prior to the issuance of a building permit.
- 2. The landscape plan shall:
 - a. Be drawn to scale and include property boundaries, north arrow, graphic scale, and date.
 - b. Include a vegetation survey, including an aerial photograph which outlines the subject site, provided at the same scale as the landscape plan.
 - c. Delineate existing and proposed structures, parking spaces, driveways and other vehicular use areas, sidewalks, utilities, easements, height and voltage of power lines on the property or adjacent property.
 - d. Critical layout dimensions for trees, plant beds and landscape features.
 - e. Method(s) to protect and relocate trees and native plant communities during construction.
 - f. Indicate the common and scientific name and quantity of plants to be installed.
 - g. Identify all landscape features and non-living landscape materials.
 - h. Show all areas of vegetation required to be preserved by law, including but not limited to trees, specimen trees, native plant species, native habitats and wetlands.
 - i. Illustrate geologic, historic and archeological features to be preserved.
 - j. Depict stormwater retention/detention areas and areas excluded from maximum permitted lawn area.
 - k. Irrigation system details, if irrigation is provided.

3.07.06 Vegetation and Tree Survey

1. A vegetation survey shall be provided for all sites at the same scale as the landscape plan. The vegetation survey shall be accompanied by an aerial photograph which outlines the subject site without obscuring its features.

3.07.00 LANDSCAPE AND TREE REQUIREMENTS

- 2. All trees that are to be counted toward meeting density requirements must be inventoried. Trees in other protected zones; such as stream buffers and flood plains need not be inventoried.
- 3. Sampling methods may be used to determine tree densities for large forested areas, subject to prior written approval of the City. Written guidelines for performing sample inventories can be obtained from the Director.
- 4. Accurate locations for specimen trees shall be shown on the plan with an indication of whether they are to be retained or removed.
- 5. Delineate all ground cover types (including pasture or forest) on the site and a general description of the types of trees and range of tree sizes in each forest-cover type [e.g. mixed pine and upland hardwoods 12 to 20 inches DBH].

3.07.07 Density Factor Analysis

- A. Overview
 - 1. A basic requirement of this Chapter is that all applicable sites maintain a minimum number of trees on the developed site, based on pervious (green) area.
 - 2. The Tree Density requirement shall be met independent of whether a site had trees prior to development. The density may be achieved by counting existing trees to be conserved, planting new trees or some combination of the two.
- B. Tree Density Factor

1. The tree density factor is dependent on the pervious area available based on the following equation: Tree Density Factor = Pervious Area (in square feet) ÷ 2750.

- C. Existing Density Factor (EDF)
 - 1. Trees that exist in any 100-year flood plain, stream buffers, wetland, or utility easements, cannot be counted toward meeting tree density requirements. These areas shall not be included in the "Pervious Area".
 - 2. The EDF is calculated by dividing the diameter of each tree by 12, i.e., a 12-inch tree has a value of one (1) tree, a 24-inch tree has a value of two (2) trees. No trees less than 5 inches in diameter shall be counted as an existing tree.

- 3. Specimen Trees
 - a. Some trees on a site warrant special consideration and encouragement for conservation. These trees are referred to as specimen trees.
 - b. The following criteria shall be used to identify specimen trees. Both the size and condition criteria must be met for a tree to qualify.
 - i. Over story hardwoods and non-pine softwoods: seventeen (17) inch diameter or larger;
 - ii. Over story pines: thirty (30) inch diameter or larger;
 - iii. Understory trees: eight (8) inch diameter or larger.
 - c. Condition criteria
 - i. Life expectancy of greater than fifteen (15) years;
 - ii. Relatively sound and solid trunk with no extensive decay;
 - iii. No more than one (1) major and several minor dead limbs (hardwoods only);
 - iv. No major insect or pathological problem.
 - d.. Conservation. In order to encourage the conservation of specimen trees and the incorporation of these trees into the design of projects, additional density credit will be given for specimen trees which are successfully saved by a design feature specifically designated for such purpose. Credit for any specimen tree thus saved would be one and one-quarter (1¼) times the assigned unit value for existing trees.
 - e.. Removal and Replacement.
 - i. If a specimen tree is to be removed, a plan or written document indicating the reason for the removal shall be submitted to the Director for approval.
 - ii. Specimen trees must be replaced by species with comparable growth rate and potential for comparable size and quality.
 - iii. Any specimen tree removed without the required review and approval of the Director shall be replaced by trees with a total density equal to three (3) times the unit value of the tree removed. If a tree is removed without approval and there is no evidence of its condition, size alone will determine whether the tree was of specimen quality. The CRZ of the specimen tree shall remain pervious.
- D. Replacement Density Factor
 - 1. Additional (Tree) Density Factor (ADF) is the number of new trees to be planted on a site.

- 2. Calculate the ADF by subtracting the EDF from the TDF (ADF= TDF EDF).
- 3. All replacement trees shall be, at a minimum, from 3-inches to 4-inches in diameter.
- 4. Any number or combination of transplant-sized trees can be used as long as the total Tree Density Factor units will equal or exceed the TDF, the trees are included on the attached list, and the species mix is acceptable to the City.
- E. Additional Density Requirements
 - 1. Subdivision and multi-family developments
 - a. Every lot in a subdivision shall have a minimum number of trees:
 - i. Lot Area Less than 0.20 acres: 2 trees
 - ii. Lot Area Larger than 0.2 acres: No. of Trees = area of lot (acres to one decimal point) X 10
 - b. These trees can be counted as part of the required trees (TDF).
 - c. At least twenty (20) percent of the required trees, and a minimum of one tree, must be planted in the front street yard area.
 - d. This requirement shall apply to the owner/developer or homebuilder, whoever is responsible for obtaining the certificate of occupancy for the individual lot.
 - e. Subdivision amenity/recreation areas shall meet all tree ordinance density requirements as part of the overall subdivision.
 - 2. Commercial and Industrial Developments
 - a. A sufficient number of trees must be planted in interior portions of parking lots to achieve a minimum ratio of one (1) tree per twelve (12) parking spaces.
 - b. In addition, every parking space must be within fifty (50) feet of the trunk of a tree to assure uniform distribution of trees throughout the parking area.
 - c. Any redevelopment project which results in the removal and resurfacing of fifteen (15) percent or more of an existing parking lot (other than sealing or patching), must retrofit the entire parking lot to meet the tree planting standard in the previous paragraph.

- d. All street yards shall be planted with one tree for each thirty-five (35) linear feet exclusive of driveways, access ways and sight distance triangles. Trees planted to meet the parking lot and street yard requirements must meet or exceed the minimum standards specified under this section, but there may be an additional requirement if the TDF requirement is met elsewhere on the site.
- 3. Out parcels that are part of larger shopping or commercial centers shall meet all tree density requirements separate from the overall shopping center.
- 4. Grading only permits
 - a. Grading projects, for which no full site plans have been submitted for review by the City, are subject to the same buffer requirements as development or redevelopment projects.
 - b. The grading plan shall conform to the review requirements as set forth in the UDC Chapter 10.
 - c. An estimated completion date must be noted on the plan. Buffer areas that must be landscaped shall be planted at the completion of the grading projects or postponed to an appropriate planting season, provided that appropriate performance security arrangements are made in accordance with Chapter 10.10.04. Planted buffers are subject to maintenance inspection procedures.
- 5. Speculative grading may be postponed for up to six months provided that appropriate performance security arrangements are made in accordance with this Section.
- 6. Tree Density requirements for additions to existing projects may be met in one of the following ways:
 - a. Calculate the area of any new land disturbance and/or improvements and add replacement trees based on that area (existing trees elsewhere on the site may not be counted with this option); or,
 - b. Base density requirements on the total site area and count any existing trees on the site (subject to all restrictions noted elsewhere in these standards).
- 7. Phased projects.
 - a. If a tract is to be developed in phases, a separate permit shall be required for each phase as appropriate.

3.07.00 LANDSCAPE AND TREE REQUIREMENTS

- b. Density calculations must be based on a site area established for each phase line or construction limit line. Existing trees to be counted toward meeting the density requirements must be within the limits of the phase line.
- c. Time limit *on approval.* A permit shall be valid for 12 months. In the event the permittee has not begun the permitted work within 12 months, the permit shall lapse and a new permit must be obtained before work can begin. Once work is begun under a valid permit the permittee may continue the permitted work until the work is completed. Any permit, including grandfathered projects, will automatically lapse after 12 months of inactivity, unless the developer has obtained an extension from the director.

3.07.08 Conservation of Mature Trees

- A. Developers shall make all reasonable efforts to protect retained mature trees' critical root zones on the site using tree save fence or other approved method during the construction within the development site and abutting properties according to the following guidelines:
 - 1. On lots and subdivisions of one (1) acre or more,
 - a. The applicant shall identify environmentally sensitive areas as part of the site plan design.
 - b. Such areas shall include wetlands, flood plains, permanent and intermittent streams with associated buffers, mature stands of trees and other significant aspects of the natural environment on the site.
 - c. Limits of disturbance to these areas shall be established and detailed on the site plan.
 - d. In order to protect the more environmentally sensitive areas, development shall be confined to the portion of the lot required for the intended construction.
 - e. These limits also to apply to priority trail and green space corridors as defined by the greenway and trail plan established by the City.
 - 2. On lots and subdivisions of less than one (1) acre,
 - a. Root save areas shall be established in the setback and required yard areas to preserve mature trees in those areas.
 - b. Grading, trenching, or other land disturbance in these areas shall be limited to necessary storm drainage improvements, erosion control measures and access to streets, sidewalks, driveways, utility connections (power, water, cable) or other features required by code.

3.07.00 LANDSCAPE AND TREE REQUIREMENTS

3. A maximum of ten (10%) percent of the trees in a designated 100-year flood plain, but outside applicable stream buffer zones, may be approved for removal or destruction. Recompense to the tree bank for trees removed or destroyed in designated wetlands or flood plain shall be calculated separately and multiplied by a factor of five (5) before being added to the recompense for other areas of the site.

3.07.09 Maintenance of Trees

- A. The city requires a surety for landscape performance and maintenance related to development or redevelopment of property. These requirements are defined in Section 80-184 of the City of Kennesaw Code of Ordinances.
- B. The developer shall be responsible for maintaining the health of all replacement trees and landscape vegetation for a period of one (1) year from the date of the last certificate of occupancy issued for the subdivision or project.
- C. The developer shall replace any tree that dies, becomes significantly deformed in growth, or becomes diseased during this time period.

3.07.10 Tree Conservation Standards

- A. Tree Inventories and Surveys
 - 1. All trees that are to be counted toward meeting density requirements shall be inventoried. Trees in other protected zones; such as stream buffers and flood plains need not be inventoried.
 - 2. Sampling methods may be used to determine tree densities for large forested areas, subject to prior approval of the City. Written guidelines for performing sample inventories can be obtained from the Director.
 - 3. Specimen trees shall be shown on the plan with an indication of whether they are to be retained or removed. Accurate locations are requested when the conservation of a specimen tree is questionable or when a site design alteration is feasible. Approximate locations are acceptable otherwise.
 - 4. Projects over one (1) acre must provide a landscape plan delineating all ground cover types (including pasture or forest) on the site and a general description of the types of trees and range of tree sizes in each forest-cover type [e.g. mixed pine and upland hardwoods 12 to 20 inches DBH].

3.07.00 LANDSCAPE AND TREE REQUIREMENTS

5. Any specimen tree that has a surveyed location shown on the plan will receive one and one-quarter (1¹/₄) the normal unit value credit if there is to be no construction activity in that tree's CRZ. These trees must be represented on the plan by a circle the size of the CRZ.

3.07.11 Buffer Zones

- 1. All properties zoned commercial, office institutional, and industrial zoned shall establish a buffer along any property line that abuts a residential district. This standard also applies to screening from residential property separated by right-of-way and transmission easements.
- 2. All properties zoned mixed use and multi-family shall establish a buffer zone along any property line abutting a single family residential district. This standard also applies to screening from single family residential property that is separated by right-of-way and transmission easements.
- 3. Buffer zones shall incorporate tree specimens that will provide total screening of activity from property lines.
- 4. Combination of berms, hedges and tree installation to accomplish the intent of these standards shall be approved by the Director. Installation height for trees in these zones shall be at least five feet and be of an evergreen variety.
- 5. Landscaping buffer zones will meet the following minimum widths for each district:
 - 3.07 LI and HI- 50 feet
 - 3.08 PVC, PSC, HGB, GC-40 feet
 - 3.09 CRC, NRC- 35 feet
 - 3.10 RM-8, RM-12, MHP- 25 feet
 - 3.11 OI, NS,-20 feet
 - 3.12 PUD-RRA-4, FST, HPV, UVC- 10 feet
 - 3.13 SLO- 10 feet
- 6. For subdivisions, all buffers shall be delineated on the final plat and identified as tree conservation easements. Final plats shall also identify any individual lots with other tree conservation and/or planting requirements. These lots shall be identified on the plat with a symbol and a corresponding note indicating the homebuilder's responsibility for such tree conservation and/or planting requirements.
- D. Protection of Trees during Construction
 - 1. 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.
- 2. 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 Director. (See Figure).



- 3.07.12 Tree Replacement Standards
 - A. Tree replacement plans should be prepared with appropriate consideration given to the function of trees in the urban landscape. Every effort should be made to maximize the environmental benefit of the plant material.
 - B. Planting Specifications.

- 1. Trees selected for planting must be free from injury, pests, disease, nutritional disorders, or root defects, and must be of good vigor in order to ensure a reasonable expectation of survival.
- 2. Standards for transplanting shall be in keeping with those established in the International Society of Arboriculture publication, Tree and Shrub Transplanting Manual, or similar publication. Reference the American Association of Nurserymen publication, American Standard for Nursery Stock (ANSI Z60, 1973), for plant material quality specifications. Reference the Manual of Woody Landscape Plants (Michael Dirr, 1983 Castle Books), or similar publication, for information on tree species site requirements.
- C. Species.
 - 1. Species must be selected from the "Kennesaw Tree Species Selection List" shown in Appendix A. All trees shall be quality specimens and ecologically compatible with the intended growing site.
 - 2. Flowering ornamental species are typically not acceptable for use in meeting density requirements.
 - 3. When less than ten (10) trees are shown to be planted on a project, one (1) species of tree may be specified. When ten (10) to fifty (50) trees are shown, a minimum of three (3) species of trees is required. When more than fifty (50) trees are shown, a minimum of five (5) species of trees is required.
 - 4. Where summer shading is required or recommended, the use of deciduous over story tree species is necessary.
- D. Parking Lots and Street Yards.
 - 1. All root zones must be a minimum of eight (8) feet in width (measured from back-ofcurb where curbing is installed or edge or pavement otherwise).
 - 2. The root zone for over story trees must be a minimum of 200 square feet. If that area is shared with other trees, add 100 square feet for each additional tree.
 - 3. The root zone for understory trees must be a minimum of 100 square feet. If that area is shared with other understory trees, add fifty (50) square feet for each additional tree.

- 4. Parking lot islands, peninsulas and medians must have clean, cultivated soil to a total depth of two and one-half (2½) feet. Native subsoil, free of construction debris and litter, is acceptable in parking lot islands, peninsulas and medians if the entire area is amended with appropriate soil improvements and thoroughly tilled. Otherwise, loamy topsoil is required.
- 5. Parking lot islands, peninsulas and medians must be mulched with four (4) inches of suitable mulch material, replaced as needed. To discourage soil compaction from pedestrian traffic, these areas may be planted with low evergreen shrubs but not with grass.
- 6. Light poles are prohibited in parking lot islands, peninsulas and medians unless a plan is submitted by the lighting contractor showing minimum impact to the root zone.
- 7. No fastigiated (narrow-crowned) varieties of trees are permissible in parking lots.
- 8. Trees planted to meet parking lot and street yard requirements must be over story trees, a minimum of three (3) inches in diameter.
- 9. The use of at-grade planting areas in parking lots to promote storm water runoff and to supplement irrigation needs is encouraged, provided that the trees planted there will not be adversely impacted and that the system is designed by a licensed, professional civil engineer.
- 10. Where street yard trees will be planted near the edge of pavement of a public street with a design speed of forty-five (45) mph or higher, or in areas beneath overhead utility lines, the use of an understory species is required.
- E. Root Barriers. Root barriers are required in parking lot islands, peninsulas, medians and alongside sidewalks. Root barriers must be commercially produce for the purpose of deflecting tree roots downward. Root barriers are typically made of polypropylene, polyethylene, or polystyrene, at least (0.060) inches thick, with vertical root guides every (6) inches. Root barrier products should specify use as a tree root barrier.
- F. Irrigation. Newly planted trees and existing trees subjected to construction impacts, typically need supplemental watering when rainfall is inadequate. Commercial project applicants should be prepared to discuss how trees are to be watered during their establishment or transition period, and may be required to submit a maintenance schedule. Their plan should indicate the method of irrigation that is proposed.
- G. Public Streets Rights-of-Way.

3.07.00 LANDSCAPE AND TREE REQUIREMENTS

1. No Trees may be planted within publicly-maintained street rights-of-way.

H. Subdivisions.

- 1. Trees shown to be planted in common areas within a subdivision (outside of amenity areas) shall be planted by the subdivision owner/developer. These trees must be in place before the final plat is approved.
- 2. Trees shown to be planted on individual lots must be planted by the owner/homebuilder. These trees must be in place before the certificate of occupancy for the affected lot is approved.

3.07.13 Alternative Compliance

- In situations where the tree conservation and replacement requirements cannot be met because a project site will not bear the required density of trees, a request for alternative compliance may be submitted to the Director. In no instance shall more than fifty (50) percent of the required site density factor be met through alternative compliance.
- 2. Parking Lot and Street Yard Requirements.
 - a. If sufficient cause is demonstrated that the parking lot and street yard planting requirements cannot be met, a request for alternative compliance which is equal to (or exceeds) the minimum requirements may be submitted to the Director.
 - b. Sufficient cause is deemed to be when enforcing any of the parking lot or street yard requirements would cause the applicant to violate any state or federal law or any City ordinance or zoning stipulation specific to the applicant.
 - c. A land disturbance permit will only be issued after the Director has approved and received the necessary documentation and funds if required.
- 3. Alternative compliance methods include the following.
 - a. Off-site Planting.
 - The off-site location, if at all possible, should be in the same area of the city as the project site and shall be on public property.
 - A tree replacement plan, meeting all applicable standards in these guidelines, must be reviewed and approved by the Director before any work is started.

3.07.00 LANDSCAPE AND TREE REQUIREMENTS

- The following note must be shown on the approved plan: "A tree replacement plan addendum for this project shall be submitted to the Director at least thirty (30) days prior to requesting a final inspection. This plan shall include the species, size and location of trees to be planted off-site to meet the tree density deficit shown. Release of this project is subject to approval of this plan as well as verification of the installation of the trees."
- b. City Tree Bank Fund. The City will accept contributions to the tree bank fund which will be used for the sole purpose of planting trees and landscaping material on public property. The locations of plantings will be determined by the Director. Calculating contribution amounts are as follows:
 - i. Contribution calculations are based on a tree unit value of \$400.00 each, representing material costs, labor, maintenance and guarantee for trees planted.
 - ii. To determine the appropriate contribution, first calculate the tree density factor deficit (TFD) or unit value that cannot be planted-on site then multiply by \$400 per tree.
 - iii. Fund administration. The City Tree Bank fund will be administered by the City.

3.07.14 Public Tree Protection and Care

- A. Except as hereinafter provided, no person except a public utility shall cut, prune, injure or remove any living tree on or in a public highway, right-of-way, public park, public place, triangle, sidewalk, or other public property; or cut or disturb or interfere in any way with the roots of any tree on public property; or spray with any chemical insecticide or herbicide or other oils or whitewash any tree on public property; or place any wire, rope, sign, poster, barricade, or other fixture on a tree or tree guard on public property; or injure, misuse or remove any device placed to protect any such tree, or for any entity, utility, citizen, or tree care company or government to trench, cut, grade, clear, or fill within the critical root zone of any public tree without the expressed written consent of the Director.
- B. It shall be unlawful as a normal practice for any person, firm, or government entity/department to top any street tree, park tree, or other tree on public property. 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

3.07.00 LANDSCAPE AND TREE REQUIREMENTS

provision of this ordinance by receipt of written consent of the Director for each instance allowing such actions.

- C. The city shall have the right to plant, prune, maintain and remove trees, plants and shrubs within the rights-of-way of all streets, parks, squares, and public grounds, as may be necessary to insure public safety and wellbeing.
- D. All tree work taking place on public property being conducted by contractors, subcontractors, or county/city employees will conform to International Society of Arboriculture and ANSI 300 and Z-133 arboricultural standards for tree work.
- E. It may become necessary, from time to time for emergency crews to prune or remove trees to provide for public safety or restore phone or electrical service. Such an action may be conducted by government, emergency or public utility crews without permit so as to allow immediate action to prevent damage or correct a condition which may pose a hazard to life or property. The Director shall be notified of any such action within 24 hours of the action being initiated, by the entity taking such action, for each instance of action.

3.07.15 Notification and Penalties for Damaging Trees on Public Property

- A. Any person who shall injure, damage or destroy any public tree situated upon the public right-of-way of any street, alley, sidewalk, park or other public property within the city shall promptly notify the Director of such fact and shall, within such reasonable time as specified by the Director, repair or replace the same to the satisfaction of the Director.
- B. Should the person fail or refuse to repair or replace the damaged or destroyed trees or plants within such reasonable time, the Director shall do or cause to be done the necessary repairing or replacement, and the costs of this work shall be recovered from the person responsible for the damage or destruction by, a proper action of law. In any such action, "The Guide for Establishing Values of Trees and Other Plants," published by the Council of Trees and Landscape Appraisers, current edition, shall form the basis for establishing any monetary damages due for damage or destruction to the tree. In addition, the City may recover any other damages or losses to which it is entitled by law.

3.07.00 LANDSCAPING, BUFFERS, AND TREE CONSERVATION AND REPLACEMENT

	City of Kennesaw Tree Species Selection List		
	· · · · · ·	Size	
	Species/Name	Class	
1	Ash, Green	Large	
2	Bald Cypress	Medium	
3	Basswood, American	Large	
4	Beech, American	Large	
5	Birch, River	Medium	
6	Black Gum, Tupelo	Medium	
7	Buckthorn, Carolina	Medium	
8	Catalpa, Southern	Medium	
9	Cedar, Deodar	Medium	
10	Cedar, Lebanon	Medium	
11	Cherry Laurel, Carolina	Medium	
12	Elm, American	Large	
13	Elm, Winged	Large	
14	Hickory (spp.)	Large	
15	Hornbeam, American	Medium	
16	Locust, Black (seedless)	Medium	
17	Magnolia, Southern	Large	
18	Magnolia, Southern "Little Gem"	Medium	
19	Maple, Red	Medium	
20	Maple, Southern Sugar	Medium	
21	Maple, Sugar	Large	
22	Oak, Black	Large	
23	Oak, Chestnut	Large	
24	Oak, Darlington	Large	
25	Oak, Laurel	Large	
26	Oak, Northern Red	Large	
27	Oak, Nuttall	Large	
28	Oak, Overcup	Large	
29	Oak, Post	Large	
30	Oak, Sawtooth	Large	
31	Oak, Scarlet	Large	
32	Oak, Shumard	Large	
33	Oak, Southern Red	Large	
34	Oak, Water	Large	
35	Oak, White	Large	
36	Oak, Willow	Large	
		J	

3.07.00 LANDSCAPING, BUFFERS, AND TREE CONSERVATION AND REPLACEMENT

37	Pecan	Large
38	Pine, Virginia	Medium
39	Popular, Tulip	Large
40	Red Cedar, Eastern	Medium
41	Redwood, Dawn	Medium
42	Sassafras	Medium
43	Silver Bell, Carolina	Medium
44	Sourwood	Medium
45	Sweet Gum, Fruitless	Large
46	Sycamore, American	Large
47	Tupelo, Swamp	Large
48	Walnut, Black	Large
49	Yellowwood, American	Medium