

Proposed changes to tree protection ordinance to better protect Brookhaven Urban Forest and to preserve more of our best trees

Green are items unchanged from current ordinance. Yellow are discussion items. Black are proposed changes.

ARTICLE III. - TREE PRESERVATION AND MAINTENANCE

Sec. 14-47. - Purpose and intent; applicability.

- (a) **Purpose.** The purpose and intent of this article is to facilitate the preservation of high value trees and urban forest as an integral part of land development and construction in the city of Brookhaven, with the goal of sustaining at least 50% mature tree canopy. It is the intent of this ordinance to sustain a balance between the built environment and the natural environment in order to maintain a healthy green infrastructure for the city and quality of life for its residents.

It is the intent of this article to:

- 1) Preserve, sustain and restore high value trees and native forest to achieve 50% tree canopy in Brookhaven.
- 2) Protect high and excellent value trees and historical trees in a manner consistent with this article.
- 3) Provide standards for the preservation of trees as a part of the land development process.
- 4) Ensure that all ordinances and codes that impact trees are enforced congruently and effectively to meet the goals of tree preservation outlined here.
- 5) Reduce mass grading and impervious surface of land that results in the loss of trees and urban forests.
- 6) Protect trees during construction on all public and private properties.
- 7) Maintain trees in a healthy and non-hazardous condition through good arboricultural practices such as proper planting, pruning and maintenance.
- 8) Provide standards for ecologically appropriate tree planting for the purpose of enhancing the city's tree canopy including diversity in tree native species.

(b) *Community benefits of trees and urban forest.*

The following are benefits from trees and urban forest, including benefits that are essential to the economic and ecological vitality of the city, and the health and well-being of its citizens:

- 1) Trees help to reduce the amounts of airborne pollutants, including carbon dioxide which is a major environmental concern locally and globally.

- 2) Trees are critical in cooling the urban "heat island" effect which helps moderate our air temperature, providing a more comfortable environment, reduced energy costs, and reduced toxic airborne chemicals at ground level.
- 3) Trees and their foliage intercept dust and particulate matter, thereby helping to purify our air and reduce health risks.
- 4) Trees and their root systems reduce soil erosion and stormwater runoff, decreasing sedimentation problems and improving water quality.
- 5) Trees and urban forest enhance the natural functions of streams and riparian buffers.
- 6) Trees provide food and shelter for desirable urban wildlife and protected species.
- 7) Trees provide screening which aids in the reduction of noise and glare.
- 8) Trees provide scenic amenities that improve quality of life, enhance property values.
- 9) Trees and urban forest improve human health: research shows improved immune system function, faster recovery from injury, and healthier mental and psychological benefits, and better functioning of many other physical processes for residents near trees and greenspace.

(c) **General applicability.**

- 1) This article shall apply to any activity which could potentially destroy or adversely impact trees.
- 2) This article applies to all property and all zoning districts lying within the city inclusive of property owned by the city, its agencies, authorities and affiliated entities.
- 3) Nothing in this section shall be deemed to prohibit a property owner from pruning, maintaining or otherwise caring for trees on their property.

(d) **Definitions.** The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

ANSI means the American National Standards Institute.

ANSI standards means the ANSI A300 Series for tree care operations.

Arborist means a person who is certified by the International Society of Arboriculture as an ISA Certified Arborist whose certification is current.

Boundary tree means a tree located on any part of a property adjacent to another property or properties, where any portion of the structural root plate and/or 20% or more of canopy or Critical Root Zone extends onto an adjacent property.

Boundary tree escrow account. For any boundary tree that has its canopy or critical root zone impacted and/or encroached into more than 20 percent without a previously approved certified arborist prescription, the permittee shall either deposit into an escrow

account, or cause to be issued in favor of the city, an irrevocable letter of credit, in an amount totaling the estimated cost of removal of the boundary tree plus the momentary tree value according to $\text{tree} \times 25 \text{ (years)}^*$ plus cost to replace the boundary tree with a minimum 2.0-inch caliper tree native tree. The applicant must send a certified letter describing the proposed disturbance to the boundary tree owner at the last known address of the boundary tree owner. A copy of the letter and the certificate of mailing must be provided to the city to place in the permit file prior to permit issuance. This does not prevent the boundary tree owner from filing a civil action in court for any damages to the boundary tree real or perceived. Replacement trees shall be of comparable mature canopy size and species quality to the replaced boundary tree, and shall be ecologically compatible with the intended growing site as determined by the city arborist.

- a. After three years from the date of certificate of occupancy issuance, the permittee may petition the city arborist to return the money held in escrow for the boundary tree. The city arborist will review the boundary tree to determine if it is in irreversible decline as a result of the permittee's disturbance activities. Permittee and boundary tree owner are notified of the arborist's determination via first class mail. Either party may appeal the decision to the zoning board of appeals/Tree Conservation Commission.
- b. If, during the three-year period, the boundary tree is in irreversible decline or has died as a result of the permittee's land disturbance and/or construction activity, the boundary tree owner will be issued a check by the city for the amount deposited by the permittee. The permittee and boundary tree owner will be notified by the arborist via first class mail. Either party may appeal the decision to the zoning board of appeals/Tree Conservation Commission.
- c. Neither the boundary tree owner nor the permittee shall be entitled to receive interest on any funds required by this provision. Any funds not collected by either the boundary tree owner or the permittee within a period of four years shall be deposited into the city tree fund.

* footnote -- cost for 10, 20, 30, 40" dbh trees

Buffer means a naturally existing area, a landscaped area or a combination of both designated for screening or buffering incompatible uses.

Buildable area means that area of the lot available for the construction of a dwelling, egress, and permissible accessory uses after having provided the required front, side and rear setbacks.

Caliper means the standard for trunk width measurement of nursery stock. Caliper of the trunk shall be taken at six inches above the ground for trees up to and including four-inch

caliper size, and 12 inches above the ground for trees larger than four-inch caliper. For multi-stem trees, measure the diameter of the largest stem plus the average diameter of the remaining stems.

City arborist means the city's designee who is a certified arborist and is responsible for administering the provisions of this article.

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. For the purpose of this article, the minimum area of the critical root zone shall be 1.3 feet radius for every inch of diameter (DBH). The critical root zone includes the structural root plate. Failure of the tree could result if roots in this area are damaged or destroyed. CRZ shall be calculated in a way that adjusts appropriately for pre-existing structures and impervious surfaces such that the CRZ may not be indicated as a perfect circle on the site plan. It is the intent to ensure that a tree's roots are not considered damaged in areas under previous structures where roots will not be located.

Dead, Dying and Hazardous (DDH) tree means any tree determined by an ISA certified arborist which is deemed to be in irreversible decline or is diseased with a life expectancy of 5 years or less, or has been found to be of "high" or "very high" risk according to the Traq Tree Risk Assessment survey.

Diameter at breast height (DBH) means the diameter of a tree trunk measured in inches at a height of 4.5 feet above the ground. If a tree splits into multiple trunks below 4.5 feet, then the trunk is measured at its most narrow point beneath the split. If using an inch tape, measure the circumference of the trunk at breast height and divide by 3.14. Example: $62 \text{ inches} / 3.14 = 19.74$ or 20 inches DBH ($3.14 = \pi$).

Dieback means a condition in which a tree or shrub begins to die from the leaf tips backward into the trunk due to disease or unfavorable environmental conditions.

Excellent Value Tree means a tree that meets the criteria of "excellent" according to the TreeValueMatrix™.

A tree may also be designated as high or excellent value tree if the city arborist deems

- a. It is a rare or unusual species or of historical significance.
- b. It is specifically used by a builder, developer or design professional as a focal point in a project or landscape.
- c. It is a tree with an exceptional aesthetic quality.

High Value Tree means a tree that meets the criteria of "high" according to the TreeValueMatrix™.

A tree may also be designated as high or excellent value tree if the city arborist deems

- a. It is a rare or unusual species or of historical significance.

b. It is specifically used by a builder, developer or design professional as a focal point in a project or landscape.

c. It is a tree with an exceptional aesthetic quality.

Low Value Tree means a tree that meets the criteria of “low” according to the TreeValueMatrix™.

Moderate Value Tree means a tree that meets the criteria of “moderate” according to the TreeValueMatrix™.

Historic tree means any historic or landmark tree designated as such by the Georgia Urban Forest Council. A link to the Georgia Urban Forest Council is provided where a map of state landmark and historic trees can be found:

<http://www.gufc.org/programs/landmark-and-historic-tree/>

ISA means the International Society of Arboriculture.

Mature canopy size means the potential amount of canopy that can be expected for a species at maturity, categorized as small (400 square feet), medium (900 square feet) and large (1,600 square feet).

Notice means any notice required by the provisions of this article.

Permit means any tree removal permit, land disturbance permit, or building permit impacting trees.

Pruning means pruning to elevate branches/limbs that are likely to be damaged by construction activities. Pruning shall not exceed 20 percent of the live crown. All pruning shall comply with ANSI Standard A300 (part 1) pertaining to pruning.

Setback means an area that shall remain undisturbed with the exceptions of necessary ingress and egress and administrative variances in order to protect high and excellent value trees. (as defined in zoning code, added here just as a reminder).

Specimen tree means any tree described in section 14-51(b), which qualifies for special consideration for conservation due to its size, type, condition, location or historical significance.

Structural root plate (SRP) means the area of the root zone comprised of pedestal roots, the zone of rapid taper and roots under compression, the directional radius of which is based upon the tree trunk diameter at 4.5 feet above the ground. The root plate will typically be represented by a concentric circle centering on the tree trunk with a radius equal in feet to one-half times the number of inches of the trunk diameter. Example: The root plate radius of a 20-inch diameter tree is ten feet.

Land disturbance or impervious surface areas exceeding the Soil Disturbance Footprint are allowed only if 1) a variance to this section has been approved and 2) an Impervious

Surface Fee figured at 80% of fair market value is paid to the municipality for the sole purpose of purchasing greenspace).

Tree means any living, self-supporting woody or fibrous plant which normally obtains a diameter breast height of at least three inches, and typically has one main stem, a trunk and many branches.

- **Understory tree** means those trees that grow beneath the overstory trees and will generally reach a mature height of less than 40 feet. The understory is the underlying layer of vegetation in a forest or wooded area, especially the trees and shrubs growing between the forest canopy and the forest floor. Plants in the understory comprise an assortment of seedlings and saplings of canopy trees together with specialist understory shrubs and herbs. Much of the understory contains saplings of the overstory trees.
- **Midstory tree** means those trees that grow between understory trees and overstory trees and will generally reach a mature height of 40-60 feet.
- **Overstory tree** means those trees that compose the top layer or canopy of vegetation and will generally reach a mature height of greater than 40 feet.

Tree canopy means the area of a tree or trees foliage 25' or above the ground area of a property, measured in square feet.

Tree Conservation Commission means a board comprised of arborists, landscape architects, conservationists, and citizens who meet to approve or deny appeals of decisions made by the arborist.* (Appendix TCC)

Tree fund means an account, maintained by the finance department of the city, of funds contributed as a form of alternative compliance to this article. Tree funds may be used for:

- (1) The purchase and installation of native trees in parks, right-of-ways and other city owned or leased property;
- (2) Maintenance of city trees; and
- (3) Promotion of a healthy urban forest.

Tree protection and replacement plan, tree protection plan, and tree replacement plan has the meaning given to such terms in section 14-49(2).

Tree save area means an area designated for saving existing trees and/or preserving natural buffers or other natural areas.

TreeValueMatrix™ is a tool for establishing the qualitative value of a tree accounting for species, size, age, health, and contribution to the urban forest.

Trophic layer means the different levels of low-growing grasses, forbs (non-woody flowering plants other than grass) and other plants; small trees, bushes and/or shrubs; and canopy cover from medium to larger trees existing in a stream buffer.

(Ord. No. 2014-07-07, 8-26-2014; Ord. No. 2015-02-01, § 1, 2-10-2015; Ord. No. 2015-08-01, 8-25-2015)

Sec. 14-48. - Tree removal exemptions.

The following shall be exempt from the provisions of this article:

- (1) The removal of trees cultivated for horticultural purposes in nurseries or orchards, except removal of trees from the state stream buffers or floodplains.
- (2) In emergency cases, a hazardous tree may be removed without a permit if the tree poses imminent danger to life or property, with notification of the removal submitted to the City within 3 days after removal. Activities or trees described in a waiver issued by the city manager or his designee during and immediately after the period of an emergency such as a flood, ice storm, thunderstorm, windstorm, tornado, or any other disastrous act of nature. No tree replacement is required for such trees.
- (3) The removal of trees by a public utility or the city within permanent utility easements.

Sec. 14-49. - Procedures and requirements.

- (1) Tree Removal Permits, Applications and Tree Save Requirements. The City requires a tree removal permit to cut any tree except as noted in 14-48. It shall be unlawful to remove more than 20% of the critical root zone (CRZ) or branches of boundary trees. The trunk and structural root plate (SRP) of any boundary tree may not be damaged.

(a) **Tree removal for property owners not applying for land disturbance permits:**

The owner of an owner-occupied, single-family residential property may remove up to three trees within an 18 month period provided they are not high or excellent value trees according to the TreeValueMatrix™

1. A tree removal application must include the location of the tree(s), the size, species, and TVM™ value of each tree, along with current photograph(s) and reason(s) for removal.
2. For trees that may be Dead, Dying or Hazardous (DDH), a certified arborist's report confirming that the tree meets the definition of DDH (as described in section 14-47), must be included in the permit application to remove the tree.

3. High and exceptional value trees may not be removed
4. If trees are removed so that 50% or less of the property contains tree canopy, then the applicant is required to replant overstory and understory trees. For every 400 square feet of contiguous soil area on the property where moderate, high or excellent value trees were removed, then one overstory and two understory trees are required to be planted to replace the ones removed.

(b) Tree removal for property owners applying for land disturbance permits, such as demolition, grading, construction, utilities, etc.):

1. *Tree survey, tree protection and tree replacement plan requirements.*

Prior to demolition or any other land disturbance including installation of silt fencing, a tree protection plan shall be submitted and approved. Site plans must conform to all applicable zoning conditions and any administrative guidelines.

- d. **Site plan requirements:** a tree survey, tree protection and tree replacement shall be included in the site plan along with land disturbance, construction and other plans required as part of the permitting process. Plans will not be accepted without a completed tree survey and tree protection and replacement plan. The tree protection plan and the tree replacement plan should be separated into two plans if the overall plan requirements are too complex to be reflected on one plan. Otherwise, the tree protection plan and the tree replacement plan may be on the same plan. The final decision of whether they are separate or combined is at the discretion of the city arborist. The following must be shown on the site plan:
 - i. The identity of the tract of land, including the address, land lot and district and any adjacent roadways or other major identifying factors, the name, address and telephone number of the owner, developer, landscape architect, surveyor, engineer and a 24-hour contact person;
 - ii. The tree survey, must include all trees 6" DBH or greater identified by location, size, species and TVM™ value.
 - iii. The locations of pre-existing built structures and impervious surfaces such as houses, garages, driveways, pools, walls, and other hardscape features.

- iv. The Critical Root Zone (CRZ) and Structural Root Plate (SRP) area of each tree. **Note:** the CRZ may not be an exact circle given the tree's adaptation over time to site conditions such as former houses, driveways etc.
- v. The area and location of the Soil Disturbance Footprint.
- vi. The location of boundary tree(s) and their CRZ and SRP areas shown to scale for all boundary trees with 20% or more of their critical root zone extending onto the applicant's property.
- vii. Tree protection fencing locations.
- viii. The schedule for the implementation, installation, and maintenance of tree protection measures (the overall project schedule can be referenced, but must include tree protection measures).
- ix. All existing and proposed utility lines including but not limited to: overhead and underground power lines, easements, water lines, sewer lines and other utility lines.
- x. A list of all the trees saved or removed, with their species and DBH listed.
- xi. A certified arborist shall review, approve and stamp the plan prior to submittal.

2. Tree Save requirements:

Applicants are encouraged to save trees whenever possible, and to locate new structures as much as possible within the disturbed footprints of previous structures.

a. **High and Excellent value trees:** The city requires the preservation of "high" and "excellent" value trees as determined by the TreeValueMatrix.™ However, the city arborist may allow the applicant to remove high and/or excellent value trees if 66% of their CRZ is located within the Soil Disturbance Footprint, and other practical designs cannot be accomplished. The arborist may require the applicant to submit alternative plans that save more trees, or more high or excellent value trees on a site.

b. **Trees located in setbacks and buffers:** the city requires the preservation of all trees located in setbacks and buffers with the disturbance of no more than 20 percent of the critical root zone of

each tree to be preserved. The arborist may allow for an administrative variance of up to 50% incursion into a setback in order to preserve existing trees.

c. **Tunneling shall be required for all utility infrastructure** if those utility infrastructure impact more than 20% of the CRZ of any Moderate, High or Excellent value tree.

d. The city arborist may identify and require the preservation of a tree stand if it contains one or more high or excellent value trees and the high or excellent value trees are interlocked with other members of the stand in such a way as to imperil the tree if other members of the stand were to be removed. (This is now included in TreeValueMatrix™).

e. High or Excellent value trees located outside of the Soil Disturbance Footprint must be preserved, as long as at least 80% of the CRZ (s) without a prescription, or at least 66% of the CRZ(s) with arborist prescriptions, can be preserved.

f. **Boundary trees:** The applicant may not remove more than 20% of the CRZ or prune more than 20% of the crown of a boundary tree whose roots or branches extend into or over the applicant's property, unless there is a boundary tree agreement between the owners of the adjacent properties on which the boundary tree resides. Boundary tree owner(s) may request a **Boundary Tree Escrow Account** to be established, which may be an irrevocable letter of credit in favor of the city from the applicant in the amount agreed to by both parties or may be a cash deposit in trust with the city in that amount, or the applicant must submit an agreement contract concerning the proposed boundary tree disturbance that is agreed upon and signed and notarized by both parties, prior to permit issuance. A copy of that agreement shall be submitted to the city to be placed in the building permit file before the building is approved.

3. Tree replacement requirements. When moderate, high, or excellent value trees are removed from a property, the arborist shall require the applicant to replant 1 overstory tree of at least 3 caliper inches, and 2 understory trees for every 20" dbh of tree(s) removed. Whenever possible, trees should be replanted on the same property where trees were removed. However, if there is not enough room to replant trees on a property, then the applicant shall pay into the Tree Fund an amount that is equivalent to the replanting requirement.

- a. For every 400 square feet of contiguous soil area on the property one overstory and two understory trees are required to be planted to replace trees removed.
- b. If there is less than 400 square feet of contiguous soil area on the property, then 1-2 understory trees must be planted as approved by the arborist.
- c. A tree replacement plan is required for permit approval. The tree replacement plan shall include:
 - a. a planting schedule/list with proposed tree names (botanical and common), quantity, caliper or other size noted, and any special planting notes or comments. 100% of overstory trees must be native to the region. A minimum of 75% of understory trees must be native to the region unless otherwise approved.
 - b. Trees to be planted must be on the approved plant list shown in this section. Any trees not on this list must be approved by the city arborist before planting. Trees selected for planting must meet the minimum requirements as provided in the American Standard for Nursery Stock (ANSI Z60.1, edition).
 - c. No more than 25 percent of any one species may be included in any plan. When more than 25 trees are proposed for replanting, a minimum of seven species of trees is required.
 - d. Replacement tree planting within utility, storm drainage, sanitary sewer, or other types of easements is not permissible without the written permission of the easement holder and a copy of such consent is delivered to the city arborist with the tree protection and replacement plan.
 - e. Replacement trees shall be planted in a manner that provides adequate spacing for nourishment, light and maturation pursuant to ANSI standards. The minimum spacing between the trunks of all overstory trees and existing or proposed buildings shall be 10 feet.
 - f. Approved tree planting and staking details shall be included in the plan.
 - g.
 - h. Planted trees required on the plan shall be maintained for two growing seasons after the date of final inspection. The property owner shall maintain the number planted at current tree density.
 - i. The permittee (applicant or builder) will be responsible for identifying newly planted trees to the homebuyer and to inform the

homebuyer as to their proper maintenance. Should any tree begin failure within the two-year period, a replanting of new replacement trees shall be completed. An agreement between the permittee and homebuyer to determine who will cover replacement costs at time of tree death to be submitted prior to certificate of occupancy. If there is no homebuyer at the time of certificate of occupancy, the permittee is responsible for tree replacement.

2. **Recompense** is determined according to National Tree Benefit Calculator for 40 years. (For example, a white oak with 30" DBH at 40 years would have a value of \$17,540.)

d. **Issuance of permit.** No permit shall be issued until the tree protection and replacement plan has been reviewed and approved by the city arborist. All tree protection measures shall be installed as approved and inspected by the city arborist or a designee prior to land disturbance. Once land disturbance begins, sites not complying with the approved tree protection and replacement plan may be issued a "Stop Work Order" or a permit may be revoked if conditions of the permit terms are violated.

e. **Final inspection.** No certificate of occupancy will be issued by the director for any improvement where the construction and/or land disturbance is subject to this article until the city arborist has inspected the site and confirmed that all remaining existing trees are in good condition and all replacement trees have been planted in compliance with the approved tree protection and replacement plan.

f. **Tree Care Responsibility and Bonds**

1. Commercial properties in perpetuity require a bond.
2. Residential properties for five years; after then the provision in section 14-48(1) shall be extended to the homeowner **with a tracking mechanism in place (see Section 14-50).**
3. Required tree canopy cover lost over time due to natural causes, disease, or pests shall be replaced during the first planting season after the loss occurs with the same mature canopy size potential 2.5-inch caliper tree.

g. **Administrative variances .** Front, side, and rear yard setbacks, and parking requirements may be reduced up to 50 percent by the city arborist and the director in order to preserve existing high and excellent value 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. Administrative variances shall be considered and decided consistent with procedures and criteria as set forth within the zoning ordinance.

Sec. 14-50 City Tracking

The Community Development Staff will create and maintain a database that shows trees removed, trees saved, and planted trees. It will also produce a monthly report showing this information.

(Ord. No. 2014-07-07, 8-26-2014; Ord. No. 2015-02-01, § 1, 2-10-2015; Ord. No. 2015-08-01, 8-25-2015; Ord. No. [2017-08-07](#), § I, 8-22-2017)

Sec. 14-51. - Tree Removal Permit Application Fee

Refer to the city's fee schedule.

(Ord. No. 2014-07-07, 8-26-2014; Ord. No. 2015-02-01, § 1, 2-10-2015; Ord. No. 2015-08-01, 8-25-2015)

Sec. 14-52. - Tree preservation and replacement standards.

(a) *Transplant trees.*

- 1) A tree spade transplanting agreement must be signed by the applicant and approved by the city arborist prior to plan approval.
- 2) Transplanting shall be performed using a tree spade of proper dimension.
- 3) Transplanting shall comply with the current ANSI Standard Z-60.1, section 1.3.
- 4) Trees and shrubs should not be dug or moved with a tree spade during the active growing period (Mid-March to early October).

(b) *Protection of trees during construction.* It is the specific intent of this section to require that damage to trees located within the setback and required yard areas and not in the soil disturbance footprint and to trees located on abutting properties owned by others be minimized to the greatest degree possible under the particular circumstances, as determined by the city arborist according to the following guidelines:

- (1) Trees identified to be preserved shall have temporary chain link fence or four foot orange tree protection fencing in addition to staked hay bales which shall be installed in all locations within the CRZ of protected tree. A sign shall be placed on the fencing stating "Keep Out." A two-inch layer of mulch and mycorrhizae fungi shall be applied over the critical root zone prior to construction.
- (2) Pre-construction limb pruning shall be performed on any trees within the construction zone, that are to be preserved, tree branches shall be pruned

to an appropriate height to avoid damage by construction equipment and structures. All dead branches greater than one inch in diameter should be removed to reduce the risk of dead branch failure to construction personnel. All tree pruning is to be done using ANSI standard A300 (part 1) for pruning. No gaff or spike climbing to be used to access limbs.

(3) Root pruning is to be done whenever roots of trees are exposed during construction, All root pruning to be done using ANSI standard A300 (part 8) for root management. The root ends are to be cut off cleanly and the roots covered by dirt or plastic for as long as the root is exposed. When performing a trench excavation, the roots have to be cut on the tree-side of the trench prior to excavating. No root pruning shall be allowed in the structural root plate of any saved tree.

(4) In tree save areas where large equipment will be operating, a temporary bridge over the root system of the tree shall be constructed including but not limited to construction mats or landscape timbers and plywood. Area of bridge will typically adhere to the area under the dripline for all trees. Temporary bridge detail must be included on the tree protection and replacement plan.

(5) No person engaged in the construction of any improvement or site work shall encroach or place solvents, material, construction machinery or temporary soil deposits within the critical root zone of specimen trees, tree save areas, transitional buffer zones, stream buffers and/or state buffers.

(6) All tree protection devices must remain in functioning condition until completion of the project:

a. For all projects, tree protection devices must be installed and inspected prior to any clearing, grubbing or grading.

b. Tree protection fences for subdivisions shall be installed by the developer at the same time as the erosion control devices. The developer is responsible for maintenance of tree protection fences and devices until building commences on a lot. Thereafter, both the developer and the general contractor are responsible for maintenance of the fence on the lot.

(7) Any tree designated on the tree protection plan to be saved, which is damaged during construction other than by an act of God, shall be treated according to ISA standards. If fatally damaged, the tree shall be recompensed on a 1.5-inch per one-inch basis with a combination of two-inch, three-inch and four-inch or larger caliper overstory trees.

(d) *Removal of trees from floodplain.* Trees shall not be cut or removed from the 100-year floodplain and only as approved by the city arborist except as follows:

- (1) Those trees found to be diseased or infested by **invasive** insects as determined by either the city arborist, county extension service, the state forestry commission, a certified arborist or a registered forester; Permission shall be granted to remove invasive vines in order to save trees.
- (2) For the construction, repair or maintenance of public roads, utilities or stormwater management facilities;
- (3) As part of a governmental approved wetland mitigation plan; or
- (4) In the event that this section conflicts with article VIII of this chapter relating to floodplain management, the provisions of article VIII of this chapter shall control.
Remove this provision.

(f) *Parking lot trees.*

- (1) Any redevelopment project that results in the removal and replacement of 50 percent or more of an existing parking lot, other than routine maintenance of the parking lot surface, shall be subject to the requirements of this section.
- (2) Parking areas containing more than 20 off-street parking spaces on any single lot shall contain parking lot trees.
- (3) There shall be a minimum of one overstory tree for every eight parking spaces included in the required landscaped areas (i.e., peninsula, island or median island). Perimeter trees are not considered parking lot trees.
- (4) Parking lot trees must be a minimum of 2.5-inch caliper and no parking space shall be more than 50 feet from a tree. A 50-foot dashed radius circle for each parking lot tree shall be depicted on the tree protection and replacement plan. Overstory trees shall have a minimum of 200 square feet per tree per planting area.
- (5) Parking lot tree islands shall terminate each row of parking and shall be a minimum of nine feet wide. Interior islands shall be a minimum of eight feet wide. Tree islands shall be backfilled with a minimum of three feet of suitable soil.
- (6) Light poles and associated underground electric lines shall not be allowed in parking lot tree islands. A 20-foot minimum spacing is required between the trunks of all deciduous shade trees and any existing or proposed light poles. The final light pole locations shall be depicted on the plan with a 20-foot dashed radius circle around each light pole.

(g) *Street trees.*

- (1) On commercial and industrial sites, there shall be a minimum of one 2.5-inch caliper deciduous shade tree for every 35 feet of public street or private entrance road frontage. The planting area must be

a minimum of eight feet from the back of curb, if no sidewalk is present. If a sidewalk is present or is to be installed, the planting area from the back of sidewalk must be a minimum of five feet. If the public street has a speed limit of 45 or more miles per hour, trees must be located a minimum of 16 feet from edge of the pavement. The plan submittals require a detail of the street front planting requirement and include all calculations. Root barriers may be required on a case by case basis. Acceptable understory species, as approved by utility provider, may be substituted as road frontage trees in situations where overhead power lines are present.

(h) **Buffers.**

Each type of buffer gets a certain treatment

- (1) All buffers shall be clearly demarcated on all development plans and protected during any land disturbance, demolition and construction.
- (2) Disturbance or encroachments of buffers are not permitted. This includes, but is not limited to, ditches, swales, stormwater conveyance facilities, stormwater detention ponds, sanitary sewer conveyance facilities and any associated easements except that necessary utility access and crossings may encroach into the buffer as near to perpendicular as practical.
- (3) Required stream buffers shall comply with all current state and local guidelines.
- (4) Undisturbed buffers may be required as a condition of rezoning of a parcel, the granting of a variance or the granting of a special exception under chapter 27.
- (5) Buffer planting standards are as follows:

A zoning buffer shall consist of native evergreen plant materials that when planted are intended to form an 80 percent visual barrier within two years and a 100 percent visual barrier within five years. Planted trees and shrubs must have a minimum height of six feet and two feet, respectively.

- a. *Existing buffer to remain undisturbed* . Sparsely vegetated or previously disturbed portions of any existing buffer shall be replanted to comply with **subsection (h)(3)** of this section. Dying, diseased, dead or invasive materials may be removed from a buffer provided that minimal disturbance occurs and the written approval of the city arborist or director is obtained prior to the removal.

- b. *Buffer width 20 feet or less* . This buffer shall consist of a minimum of one row of evergreen trees and one row of evergreen shrubs.
 - c. *Buffer width 21—35 feet* . This buffer shall consist of a minimum of two rows of evergreen trees and one row of evergreen shrubs.
 - d. *Buffer width greater than 35 feet*. This buffer shall be subject to approval by the city. A mix of hardwood and evergreen trees planted within buffer areas may be counted for credit toward the minimum required density inches per acre. Up to 25 percent of this buffer may also be planted with shrubs as approved by the city arborist.
- (i) Commercial tree harvesting is not permitted in the city of Brookhaven with the exception of (see DeKalb ordinance).
 - (j) *Utility company and public works guidelines*.
 - (1) All tree trimming and pruning are to be performed by public utilities, public agencies and their subcontractors on trees growing on private or public rights-of-way shall be done according to the most current ANSI standards for pruning of mature trees.
 - (2) The routing of public and private utility easements shall be subject to review and comment by the city arborist.
 - (3) No person, firm or corporation shall interfere with the director of public works or persons acting under the director of public works' authority while engaged in planting, mulching, pruning or removal of trees, shrubs, etc., in any street or public place within the city.
 - (k) *Enforcement*. It shall be the duty of the director or a designee of the director to enforce this article. The director shall have the authority to, and the city arborist may recommend that, the director revoke, suspend or void any permit or suspend all work on a site or portion thereof in order to effect compliance with this section.
 - (1) *Violation and penalty* . Any violation of any of the provisions of this article by any person, firm or corporation shall be deemed an offense and upon conviction in municipal court such person, firm or corporation shall be subject to penalty as is provided in section 1-11. Each tree removed or killed in violation of this section shall be considered a separate offense. Upon conviction in municipal court, the owner of any buildings or premises or parts thereof, where anything in violation of this section exists, and any architect, builder, contractor or any other agent of the owner, or any tenant, who commits or assists in the commission of any violation, shall be guilty of a separate offense. Any homeowner of record found in violation of

any of the provisions of this article, after having first been issued a warning notice, shall be subject to penalty as is provided in section 1-11.

- (2) *Additional legal remedies* . In addition to all other actions and penalties authorized in this section, city attorney or his designee is hereby authorized to institute injunctive, abatement or any other appropriate judicial or administrative actions or proceedings to prevent, enjoin, abate or remove any violation of this section.
 - (3) Business licenses are required for all tree cutters, contractors and developers, individuals as well as companies, who do business in Brookhaven. After 3 infractions of any portion of this article, the Brookhaven business license will be revoked for a period of 5 years.
- (l) **Appeals.** The tree conservation commission shall hear and decide applications for special exceptions for the removal or retention of trees. Applicants and Brookhaven residents may appeal decisions of the arborist to the Tree Conservation Commission.
- (m) **Potential Conflicts with other ordinances resolved:** In the event that the requirements of other ordinances may appear to conflict with the requirements herewith, the requirements of all ordinances That all ordinances, parts of ordinances, and resolutions in conflict herewith are hereby waived for purposes of this Ordinance only, and only to the extent of said conflict.

(Ord. No. 2014-07-07, 8-26-2014; Ord. No. 2015-02-01, § 1, 2-10-2015; Ord. No. 2015-08-01, 8-25-2015; Ord. No. [2017-08-07](#), § 1, 8-22-2017)

Editor's note— Ord. No. [2017-08-07](#), § 1, adopted Aug. 22, 2017, amended § 14-51 and in so doing changed the title of said section from "Tree preservation and replacement standards for specimen and transplant trees" to "Tree preservation and replacement standards," as set out herein.