

## **SECTION 11. [TREE PRESERVATION]**

A. *Scope:* This section shall be effective within the corporate limits of the City, including any areas subsequently annexed by the City.

B. *Definitions:* The following words shall have the meanings as indicated:

*Buildable area:* The actual base area of a building and an area not to exceed six feet (6') around the foundation necessary for construction and grade transitions.

*Caliper:* The diameter of the trunk of a tree measured twelve inches (12") above grade.

*City:* The City of Roanoke, Texas.

*Clear-cutting:* The indiscriminate removal of protected trees from a site or tract.

*Critical root zone:* The area of native soil around a tree defined by a concentric circle with a radius equal to the distance from the trunk to the outermost portion of the drip line, as reflected in Figure 2.

*Critically alter* or *critical alteration:* Uprooting or severing the main trunk of a tree, or any act which causes or may reasonably be expected to cause a tree to die. This includes, but is not limited to: damage inflicted upon the root system of a tree by machinery, storage of materials, or the compaction of soil above the root system of a tree; a change in the natural grade above the root system of a tree; an application of herbicidal chemical(s) or the misapplication of beneficial chemical(s); excessive pruning; placement of impervious pavement over the root system of a tree; or trenching or boring within the critical root zone.

*dbh:* The diameter at breast height (dbh) is the tree trunk diameter measured in inches at height of four and one-half feet (4 1/2') above ground level.

*Drip line:* A vertical line run through the outermost portion of the canopy of a tree and extending to the ground, as reflected in Figure 2, or, if a tree is damaged or deformed, a circular area with a radius equal to two feet per caliper inch.

*Development Review Committee:* A committee comprised of staff members from City departments responsible for the review and approval, where applicable, of all applications and requests submitted relative to this Section. The Development Review Committee shall consist of the City Manager, Building Official, Public Works Director and Fire Chief, or their designees. The City Engineer shall be an ex officio member and may offer input on any application or request submitted pursuant to the terms of this Section.

*Protective fence or protective fencing:* Chain link fencing, orange vinyl construction fencing or other fencing at least four feet (4') in height and supported at a maximum of ten-foot intervals by approved methods sufficient to keep the fence upright and in place. The fencing shall be of a highly visible material.

*Pruning:* The removal of dead, injured or diseased limbs or roots to maintain plant health or the removal of limbs or roots [to] control or direct vegetative growth.

*Tree:* Any self-supporting, woody perennial plant which will attain a trunk diameter of two inches (2") or more when measured at a point six inches (6") above ground level.

*Tree, protected:* A tree as listed in the Approved Tree List, as reflected in Figure 1, that has a diameter of four inches (4) or greater measured at four and one-half feet (4 1/2') above ground level. For a multi-trunk tree, the diameter shall be the total diameter of the largest trunk plus one-half ( 1/2) of the diameter of each additional trunk.

*Tree, replacement:* A tree as listed in the Approved Tree List, as reflected in Figure 1, that has a minimum number of caliper inches, pursuant to Subsection G of this Ordinance and a minimum height of seven feet (7'), measured at ground level, at time of planting.

*Utility service provider:* A company or entity, or agent for a company or entity, which provides a utility service such as the provision of gas, electric, cable or telephone service in the City.

C. *Applicability:* The terms and provisions of this Section apply to all property as follows:

1. All vacant (without structures), undeveloped land.
2. All property to be redeveloped, including additions and alterations but excluding interior alterations; and all property to be subdivided or re-subdivided, including final plats and replants.
3. Rights-of-way, streets, parks, and any other public property under the jurisdiction of the City of Roanoke shall be governed by this Section.

D. *Exemptions:*

1. The provisions of this Section do not apply to any property zoned as single family, duplex and single family-attached after initial development and final inspection of the dwelling nor to any expansion, addition or alteration to any existing single family, duplex and single family-attached dwelling. This Section does not apply to the redevelopment of any single family, duplex or single family-attached dwelling.

2. Nothing herein shall require any change in the plans, construction or designed use of any parcel of property, for which a permit for construction has been issued, as of the effective date of this Section.
3. During the period of an emergency, including but not limited to a tornado, storm, flood or other natural disaster, the requirements of this Section may be waived as deemed necessary by the City Council. In addition to rights granted by easement, those utility service providers lawfully operating within the right-of-way may remove trees that interfere with utility service during an emergency or where there is a danger to the public health, safety and welfare.
4. For the maintenance or installation of facilities, utility service providers or their contractors, subcontractors, agents, successors and assigns shall have the right to trim or remove trees so as to prevent any part of such trees from becoming a danger to public health, safety and welfare by interfering with utility service. Said trimming or removal shall not be done in a manner such that the aesthetics and health of the trees are destroyed and shall be done under the supervision and direction of any City official to whom said duties have been or may be delegated. The City may require boring under trees within the drip-line instead of trenching. Nothing herein shall supersede the provisions of the City's right-of-way management ordinance, as amended.
5. A diseased or damaged tree which is determined to be beyond the point of recovery, or in danger of falling, shall be exempt from the provisions of this Section. The removal of a diseased tree by the City or by an individual is required to reduce the chance of spreading the disease to adjacent, healthy trees.
6. Any plant nursery, as defined in the Zoning Regulations of the City, as amended, is exempt from the provisions of this Section only in relation to those trees planted and growing on the premises for sale, either retail or wholesale.
7. Any paved surface within the critical root zone of a protected tree, which is in existence on or before the effective date of this Section, may be replaced or maintained.
8. Golf courses, hike/bike trails and sports fields open for public use.
9. Major drainage structures, including detention and retention basins/ponds, and including transitional slopes at the maximum slope allowed by ordinance or other applicable regulation.
10. All easements and rights-of-way included on a final plat approved by the City and filed in the plat records of Denton County, Texas.

11. The mowing, clearing and grubbing of brush located within the drip line of protected trees shall be allowed, provided such mowing, clearing or grubbing is accomplished by hand or by mowers. The use of bulldozers, loaders or other construction or earth moving equipment for this purpose shall not be allowed.

E. *Tree Preservation and Protection:*

1. No clear-cutting of land is allowed. Prior to construction or development on a site that contains one (1) or more protected trees, a tree preservation plan must be approved by the City Council. If the site does not contain any protected trees, as defined herein, a letter, prepared by a registered surveyor, engineer, architect, registered arborist or landscape architect, shall be submitted to the City, which verifies that protected trees are not on the subject site. In the event ten (10) or more protected trees are removed from a site without a tree removal permit, the zoning classification on such site may not be changed for thirty-six (36) months thereafter, nor can an application for approval of a preliminary plat, final plat, site plan, planned development relative to such site be made or accepted by the City for such period, calculated from the date of discovery of such removal.
2. The application for a tree preservation plan shall be submitted on a form provided by the City and accompanied by a site plan by a registered surveyor, engineer, architect, registered arborist or landscape architect that includes, but is not limited to the following:
  - a. Delineation of site boundaries;
  - b. Location of all existing or proposed structures and improvements including but not limited to streets, alleys and easements;
  - c. A tree survey depicting the species, location and caliper of all protected trees to be preserved, with a numerical reference for each tree to be preserved;
  - d. A tree survey depicting the species, location and caliper of all protected trees to be removed, with a numerical reference for each tree to be removed;
  - e. Proposed and existing contours; and
  - f. Tree protection measures.
3. Protected trees that are not removed, or have been identified and designated on the tree preservation plan to be preserved, must be protected under the following conditions:

- a. No materials intended for the use in construction or waste materials accumulated due to excavations or demolition shall be placed within the limits of the critical root zone.
  - b. No equipment shall be cleaned or other foreign materials deposited or allowed to flow overland within the critical root zone of a protected tree. This includes without limitation, paint, oil, solvents, asphalt, concrete, mortar or similar materials.
  - c. No signs, wires or other objects, other than those of a protective nature, shall be attached to any protected tree; however, lighting of a decorative nature may be attached to a protected tree. The lighting shall be attached in a manner as not to damage the protected tree.
  - d. No vehicular and/or construction traffic or parking shall take place within the limits of the critical root zone of any protected tree other than on a pre-existing paved surface. This restriction does not apply to access within the critical root zone for purposes of clearing underbrush, establishing the building pad and associated lot grading, vehicular traffic necessary for routine utility maintenance or emergency restoration of utility service or routine mowing operations.
  - e. Grade changes shall be allowed within the limits of the critical root zone of any protected tree only upon approval by the City.
  - f. No paving with asphalt, concrete or other impervious materials shall be placed within the critical root zone of a protected tree; however, paving may encroach up to five feet (5') from the trunk, upon approval by the City.
  - g. In those situations where a protected tree is within fifty feet (50') of a construction area, a protective fence, a minimum of four feet (4') feet in height, shall be erected and maintained outside of the critical root zone of each protected tree or tree group. If the critical root zone extends onto adjacent property, the protective fencing shall be only required on the subject site.
  - h. No person, directly or indirectly, shall critically alter, prune, cut down, destroy, remove or move, or effectively destroy through damaging, any protected tree on City-owned property unless otherwise authorized by the City.
4. Boring of utilities under protected trees shall be required in those circumstances where it is not possible to trench around the critical root zone of a protected tree. When required, the length of the bore shall be the width of the critical root zone at a minimum and shall be a minimum depth of 48 inches. All trenching shall be designed to avoid trenching across the critical root zone of any

protected tree, unless otherwise approved by the Development Review Committee. Mechanical trenching within the critical root zone shall not be allowed. Trenching by hand shall not critically alter the root system. The placement of irrigation systems and underground utility lines shall be located outside of the critical root zone of protected trees.

5. The City has the right to plant, prune and maintain any tree located on a right-of-way, easement, public park land or any other municipally-owned property as may be necessary to ensure public safety or to preserve or enhance the symmetry and beauty of such public properties. The City may remove or cause or order to be removed any tree or part thereof, which is in an unsafe condition, or which by reason of its nature is injurious to sewers, electric power lines, gas lines, water lines or other public improvements. Tree removal by the City may be undertaken without a tree removal permit.

F. *Tree Removal Permit:*

1. No person, directly or indirectly, shall critically alter, cut down, destroy, remove or move, or effectively destroy through damaging, any protected tree without first obtaining a tree removal permit, unless otherwise specified in this Section. The application for a tree removal permit shall be submitted on a form provided by the City. Permits may be issued with verification that the protected tree is damaged or diseased.
2. An application for a tree removal permit may be submitted in conjunction with the following:
  - a. An application for a Development Permit to fill or grade property;
  - b. An application for a preliminary plat, including the development of new internal streets, final plat or replant; or
  - c. If the property is platted, an application for a tree removal permit shall be submitted in advance of or in conjunction with a permit application for new construction.
  - d. A tree removal permit application also may be submitted in conjunction with a tree preservation plan.
3. A tree removal permit is not required for any tree located within the Buildable Area of a lot or site and a tree in the Buildable Area may be removed without such permit.
4. An application for a tree removal permit shall be accompanied by a site plan by a registered surveyor, engineer, architect, registered arborist or landscape architect that includes, but is not limited to, the following:

- a. Delineation of site boundaries;
  - b. Location of all existing or proposed structures in conjunction with a building permit application, or improvements or facilities such as streets, alleys and easements in conjunction with a plat application;
  - c. A survey depicting the location, species and dbh of all protected trees to be removed; and
  - d. A statement of the reason(s) for the proposed tree removal shall be summarized in legend form on the plan. The same summary shall also be submitted on a legible 8.5"x 11" document.
5. Upon receipt of a complete application for a tree removal permit, the City's Development Review Committee shall be responsible for the review and approval, where applicable, of all requests submitted in accordance with the requirements specified herein.
  6. Any decision of the Development Review Committee relative to a tree removal permit may be appealed to the Park Board which shall provide a recommendation to the City Council. Action upon an appeal by the City Council shall be final.
  7. Consideration for the approval of a tree removal permit shall be based upon the following guidelines:
    - a. Whether the removal of the protected tree is permitted by any of the exemptions of this Section;
    - b. Whether a reasonable accommodation or alternative solution is available to accomplish the desired activity without the removal of the protected tree;
    - c. The effect of the removal of the protected tree on erosion, soil moisture, retention, flow of surface waters and drainage systems;
    - d. The need for buffering of residential areas from the noise, glare and the visual effects of nonresidential uses;
    - e. Whether the removal of the protected tree affects the public health, safety or welfare of the City and its residents; and
    - f. Whether the application and related submittals reflect an attempt to preserve existing trees on the site.
  8. An approved Tree Removal Permit shall expire six (6) months from the date it was issued, as reflected on the Tree Removal Permit.

9. In the event any protected tree is removed from property without a tree removal permit, or any protected tree is injured or critically altered because of failure to follow required tree protection measures such that the tree dies or may reasonably be expected to die, the City Manager or his designee shall have the authority to impose one or more of the following administrative or civil penalties on the developer and/or owner of the property:
  - a. A monetary penalty of two hundred fifty dollars (\$250.00) per caliper inch of width of the protected tree(s) removed, payable to the City. All funds so received shall be deposited in the Tree Restoration Fund.
  - b. Replacement with new trees having a total caliper width equivalent to five (5) times that of the removed tree(s). Such replacement trees shall be container-grown and have a minimum caliper width of two and one-half to three inches (2 1/2" to 3"), measured at six inches (6") above ground level. Alternatively, container-grown replacement trees may have a minimum caliper width of four inches (4") measured at twelve inches (12") above ground level. In either event, replacement trees shall have a minimum height of at least seven feet (7') and shall be planted in a location(s) as approved by the City Manager or his designee.

*G. Tree Replacement Requirements:*

1. Replacement trees shall be required under the following conditions:
  - a. For any protected tree that has been removed without a tree removal permit, as provided for in this Section.
  - b. To replace a tree that was identified on a tree preservation and replacement plan but dies within two (2) years of the date it was planted.
2. Replacement trees for those trees that have died, as referenced above, shall be planted in accordance with the provisions of this Section per the following rates:

TABLE INSET:

For each Tree That Dies Within 2 Years of Planting	Required Size and Number of New Replacement Trees
4" dbh to 12" dbh	Minimum 3" caliper, equivalent to 100% of dbh removed
Greater than 12" dbh to 30" dbh	Minimum 4" caliper, equivalent to 100% of dbh removed
Greater than 30" dbh	Minimum 6" caliper, equivalent to 100% of dbh removed



3. Acceptable types of replacement trees are designated in the Approved Tree List, as reflected in Figure 1.
4. A replacement tree shall be located on the subject site whenever possible; however, if there is not a suitable location for the replacement tree on the subject site and upon recommendation of the Park Board, the City Council may approve either of the following or a combination of the following:
  - a. The planting of a replacement tree within a public right-of-way, public park land or any other municipally-owned property;
  - b. The planting of a replacement tree within private open space;
  - c. The payment of a fee into the Tree Restoration Fund in the amount in accordance with a fee schedule provided by the City. The fee schedule shall be based on the average cost of installation. The funds shall be used solely for the purpose of purchasing and installing trees on public rights-of-way, public park land or any other municipally-owned property.

H. *Miscellaneous Provisions:*

1. Trees identified on a tree preservation plan or trees identified to be replaced shall be eligible to meet the requirements and credits of the Zoning Regulations for areas of the site not within a Landscape Buffer. The minimum landscape requirements of a Landscape Buffer shall be met in addition to this Section, when applicable.
2. No protected tree shall be pruned in a manner which critically alters the tree, or in a manner which would reasonably lead to the death of the tree. This provision is not intended to require a tree removal permit for reasonable pruning performed or contracted to be performed by the owner of the tree.
3. Trees required to be planted by this Section shall be planted in accordance with the intersection visibility triangles as specified in the Zoning Regulations, Chapter 12, Exhibit "A," Section 9(O)(11), "Sight Distance and Visibility," as amended, of the Code of Ordinances of the City of Roanoke, Texas.
4. The filling and reclamation of property and mitigation as delineated on a Section 404 Permit, issued by the U.S. Army Corps of Engineers, shall be permitted in lieu of the requirements of this Section. The removal of any protected tree on the subject property shall be in accordance with a filing, reclamation, and mitigation plan approved and/or ordered by the Corps of Engineers incident to the filling and reclamation of wetlands and flood lands on such property. As soon as the reclamation and mitigation prescribed by the Corps of Engineers has been completed, and the property is no longer under

the supervision and authority of the Corps of Engineers, this Section and its provisions shall immediately apply to such property thereafter.

5. *Special Provisions for Agriculturally Zoned Property.* No fee shall be charged to make application for a tree removal permit for the removal of protected trees located on real property with an agricultural zoning district classification; provided, however, if within any twelve (12) month period, tree removal permits for the removal of twenty (20) or more protected trees are issued for the same agricultural property or tract, or any portion thereof, the agricultural zoning district classification of said property cannot be changed nor can an application for approval of a development plan, plat, planned development or zoning amendment relative to said property be made, during the thirty-six (36) month period following the aforementioned twelve-month period during which the twenty (20) or more protected trees were removed. Additionally, notwithstanding anything contained in this Section to the contrary, for tracts or real property agriculturally zoned A, the tree preservation plan requirements contained in this Section shall be limited in their application to proposed rights-of-way, easements and an area equal to twenty feet (20') on any side of such rights-of-way and easements, provided the applicant executes a development agreement with the City that all trees on the tract and outside of such aforementioned areas, for the purposes of said agreement, are protected trees (regardless of their species or caliper width) and that the unauthorized removal of such trees shall result in the revocation of any previously approved development plan and plat for a thirty-six (36) month period.
- I. *VariANCES and Appeals:* The Zoning Board of Adjustment, after conducting a Public Hearing in accordance with state law, shall hear appeals from decisions or determinations of the Development Review Committee (other than tree removal permit determinations, which appeals shall be heard by the City Council) and/or City staff, and may approve a variance to all or a portion of such decisions or determinations.
- J. *Enforcement, Violations and Penalties:*
  1. No building permit, development permit or certificate of occupancy shall be issued if there has not been compliance with any provision contained in this Section.
  2. The City may refuse to accept any public improvements until all penalties and/or fines for violations of this Section have been paid; provided, however, that acceptance of public improvements shall be authorized before all trees shall be replaced if, with the Development Review Committee's approval, the City is provided with a cash deposit or acceptable surety bond in the amount of the cost to replace any tree(s).

3. A person commits an offense if the person critically alters a protected tree not otherwise excepted by this Section.
4. Any person, firm, corporation, agent or employee thereof who violates any provision of this Section shall be guilty of a misdemeanor and upon conviction shall be fined not to exceed \$500.00 for each such violation. The unlawful critical alteration of each protected tree shall be considered a separate offense.
5. Allegation and evidence of a culpable mental state is not required for the proof of an offense defined in this Section.

K. *Figures:*

FIGURE 1: APPROVED TREE LIST

TABLE INSET:

<b>Large Trees (40+ feet)</b>	
Big tooth Maple	Acer grandidentatum
Caddo Maple	Acer saccharum 'Caddo'
Pecan	Carya Illinoensis
White Ash	Franxinus Americana
Ginkgo	Ginkgo biloba
Sweetgum	Liquidamber styraciflua
Southern Magnolia	Magnolia grandiflora
Escarpment Live Oak	Quercus fusiformus
Bur Oak	Quercus macrocarpa
Chinkapin Oak	Quercus muehlenbergii
Shumard Red Oak	Quercus shumardii
Post Oak	Quercus stellata
Live Oak	Quercus virginiana
Bald Cypress	Taxodium distichum
American Elm	Ulmus Americana
Cedar Elm	Ulmus crassifolia
Drake Elm	Ulmus parvifolia ('Drake')
Lacebark Elm	Ulmus parvifolia
Slippery Elm	Ulmus rubra
<b>Mid-sized Trees (25--40 feet)</b>	
Chittamwood	Bumelia langinosa
Arizona Cypress	Cupressus arizonica

Texas Persimmon	<i>Diospyros texana</i>
Eastern Persimmon	<i>Diospyros virginiana</i>
Green Ash	<i>Fraxinus pennsylvanica</i>
Texas Ash	<i>Fraxinus texensis</i>
Texas Walnut	<i>Juglans microcarpa</i>
Ashe Juniper	<i>Juniperus ashei</i>
Eastern Red Cedar	<i>Juniperus virginiana</i>
Eldarica Pine	<i>Pinus eldarica</i>
Chinese Pistachio	<i>Pistacia chinensis</i>
Texas Oak	<i>Quercus buckleyi</i>
Havard Shin Oak	<i>Quercus havardii</i>
Bluejack Oak	<i>Quercus incana</i>
Lacey Oak	<i>Quercus laceyi</i>
Blackjack Oak	<i>Quercus marilandica</i>
White Shin Oak	<i>Quercus sinuate</i> var. <i>brevicoba</i>
Western Soapberry	<i>Sapindus drummondii</i>
Winged Elm	<i>Ulmus alata</i>

FIGURE 2: CRITICAL ROOT ZONE

**GRAPHIC LINK:**[Critical Root Zone](#)

(Ord. No. 2004-106, § 2, adopted 7/13/04)

**GRAPHIC LINK:**[Preliminary Plat](#)

**GRAPHIC LINK:**[Final Plat](#)