

## ARTICLE II. TREES

### Sec. 114-31. Purpose and intent of article.

The purpose of this article is to encourage the preservation of mature trees and natural areas, to preserve protected trees during construction, and to provide for the removal of protected trees when necessary. It is the intention of the city to:

- (1) Prohibit the indiscriminate clearing of property;
- (2) Protect and increase the value of residential and commercial properties within the city;
- (3) Maintain and enhance a positive image for the attraction of new businesses and residents to the city;
- (4) Protect healthy mature trees and promote the natural ecological, environmental and aesthetic qualities of the city.

(Code 1975, § 5-141)

### Sec. 114-32. Definitions.

- (a) *General rules.* For the purpose of this article, the following rules shall be applied in constructing, interpreting or otherwise defining the terms and provisions hereof:
  - (1) Terms used in the present tense shall include the future, terms used in the singular number shall include the plural number and terms used in the plural shall include the singular.
  - (2) The term "shall" is mandatory and the term "may" is permissive.
- (b) *Enumeration.* The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning. Words and terms used in this article, but not defined in this article shall have the meaning ascribed thereto in the zoning chapter of this Code (chapter 118), article III of this chapter, landscaping, or other ordinances of the city. Words and terms defined in two ordinances shall be read in harmony unless there exists an irreconcilable conflict in which case the definition contained in this article shall control.

*Build able area* means that portion of a building site exclusive of the required yard areas on which a structure or building improvements may be erected and including the actual structure, driveway, parking lot, pool and other construction as

shown on a site plan. The build able area shall extend five feet from such area to allow for the normal operation of construction equipment.

*Building pad* means the actual foundation area of a building and a reasonable area around the foundation necessary for construction and grade transitions.

*Clear-cutting* means the removal of all trees or a significant majority of the trees within an area of land.

*Cut/fill* means the deposition of rock, concrete, soil or sod such that the cumulative thickness of all materials is equivalent to six inches or greater.

*Development review committee (DRC)* means city staff members who represent their department in reviewing development projects. The departments include planning, permits and inspections, public works, economic development, parks and recreation, police and fire or others as designated by the city manager.

*Drip line* means a vertical line run through the outermost portion of the canopy of a tree and extending to the ground. See section 114-40.

*Grading* means the movement of dirt, topsoil, grass, native material, bushes, trees, landscaping or other forms of surface material which will result in a long term difference of six inches or greater from the initial elevation.

*Grading plan* means a topographical map of the subdivision with sufficient perimeter area to provide a clear definition of the initial elevations, watercourses and drainage patterns. In addition, the plan includes one-foot contours, spot elevations, and flow arrows. The plan is sufficient in detail and scale to determine limits and depths of excavation or fill, The plan must be signed and sealed by a registered professional engineer licensed by the state.

*Limits of construction* means delineation on the graphic exhibit, which shows the boundary of the area within which all construction activity will occur.

*Person* means any corporation, partnership, association or other artificial entity; or any individual; or any agent or employee of the foregoing.

*Protected tree* means any self-supporting woody perennial plant which has a caliper of four inches or more when measure at a point of 4.5 feet above ground level and which normally attains an overall height of at least 15 feet at maturity, usually with one main stem or trunk and many branches. It may appear to have several stems or trunks as in several varieties of oaks.

*Protective fencing* means snow fencing, chain link fence, barbed wire fence, orange vinyl construction fencing or other similar fencing with a four-foot approximate height.

*Selective thinning* means selective clearing of undesirable trees to allow unrestricted growth of young vigorous trees, especially hardwoods. Fifty to 60 percent shade is more desirable and conducive to all activities. Dense shade is the least desirable. On densely wooded properties selective thinning may be used to accomplish a required tree survey on the property.

*Tree removal authorization* means permission granted by the building official, the development review committee or city council to remove protected trees in accordance with this article.

*Yard area* means the front, side and rear yard areas as defined under the comprehensive zoning chapter (chapter 118 of this Code) and the zoning district requirements applicable thereto.

(Code 1975, § 5-142)

**Cross references:** Definitions generally, § 1-2.

### **Sec. 114-33. Applicability of article provisions.**

(a) *Generally.* The terms and provisions of this article shall apply to real property as follows except as noted in section 114-34(b), tree removal. All developments which have not submitted a preliminary plat/construction plans, site plan or building permit, whichever is applicable as of the effective date of this article shall be subject to the requirements for tree protection and replacement specified herein.

- (1) All vacant and undeveloped property.
- (2) All property to be redeveloped, including additions and alterations.
- (3) All easements and rights-of-way, except those included in a preliminary plat approved by the planning and zoning commission shall meet the terms and provisions of this article.
- (4) The yard areas of all developed property, excluding developed single-family residential property.

(b) *Protected trees.*

- (1) A "protected tree" is any tree that has a trunk caliper of four inches or more, as measured 4.5 feet above natural grade level.
- (2) Protected trees shall not include the following species:

Bois d'Arcy - (*Maclura pomifera* female only)

Cottonwood - (*Populus deltoides* )

Chinaberry - (*Melia azeoarach* )

Hackberry - (*Celtis occidentalis laevigata* )

Honeylocust - (*Gleditsia triacanthos* )

Mesquite - (*Prosopis glandulosa* )

Mulberry - (*Morus alba* )

Tree of Heaven - (*Ailanthus altissima* )

Black Willow - (*Salix nigra* )

(Code 1975, § 5-143)

#### **Sec. 114-34. Tree removal.**

(a) *Authorization required.*

- (1) *Required on private and public property; exception.* A tree removal authorization shall be required when protected trees are requested to be removed except as allowed by subsection (b) of this section, removal procedures. No person, directly or indirectly, shall cut down, destroy, move or remove, or effectively destroy through damaging, any protected tree situated on private or public property regulated by this article without first obtaining a tree removal authorization unless the conditions of subsection (b) of this section apply.
- (2) *Clear-cutting.* The clear-cutting of land as defined in this article is prohibited except as allowed by subsection (b) of this section, removal procedures.
- (3) *Selective thinning.* The removal of selected trees from within a densely forested area when done in a professionally accepted manner shall be allowed as a single permit upon approval by the building official or his designee. Approval will only be granted when the building official or his designee determines that the selective thinning is being done in a manner that would enhance the environment and likelihood of survival for the remaining trees. Approved selective thinning may take place either before, during or after construction.

(b) *Removal procedures.*

- (1) *Allowable tree removal prior to issuance of a building permit.* No protected trees shall be removed prior to issuance of a building permit unless one of the following conditions exists. The burden of proof as a qualified exception is upon the person removing the tree.
- a. Any protected tree located in a new single-family residential subdivision with two lots or less.
  - b. Any protected tree located within street rights-of-way, utility or drainage easements as shown on a preliminary plat approved by the planning and zoning commission. If certain trees outside the above areas or trees based partially outside the easement or right-of-way are requested to be removed to allow the operation of equipment, the applicant shall submit a recorded plat, and a site plan which indicates the exact operation area needed. The building official or his designee may approve selected removal under this condition.
  - c. The protected tree is dying, dead, diseased, injured, in danger of falling, interferes with utility service, creates unsafe vision clearance, or conflicts with other ordinances or regulations and immediate removal is required.
  - d. Any protected tree that has disrupted a public utility service due to a tornado, storm, flood or other act of nature. Removal shall be limited to the portion of the tree reasonably necessary to reestablish and maintain reliable utility service.
  - e. Landscape nursery. All licensed plant or tree nurseries shall be exempt from the tree protection and replacement requirements and from the tree removal provision only in relation to those trees planted and growing on the premises of said licensee which are so planted and growing for the sale or intended sale to the general public in the ordinary course of said licensee's business. This may also apply to a nursery established and so designated by a developer of a large project within the city, where trees are intended for landscaping future phases of such larger project.
  - f. Any protected tree that is required to be removed in order to properly grade and drain the property as required on a final grading plan that is approved by the public works department. If this option is utilized on any lot in a single family residential district, a total of three trees per lot shall be required. These replacement trees will meet the minimum requirements subsection 114-35(a) and shall be planted prior to the final building inspection. At least one of these trees shall be planted in the required front yard setback. Other types of development shall meet the current approved landscape regulations.

- g. The owner of property zoned agricultural and is being actively used for agricultural purposes shall be exempt from this article.
  - h. Utilities operating under a franchise agreement with the city are exempt from this article and are not required to make application for removal of protected trees provided that any trees removed under this exemption pose a direct hindrance to the utility's ability to exercise its rights under the franchise to utilize city property rights-of-way, and dedicated easements to provide safe, reliable service to its customers and that said trees are located in the aforementioned areas governed by the franchise agreement and removal of trees is directly linked to extending service to new customers.
- (2) *Allowable tree removal after issuance of a building permit.* Upon issuance of a building permit, the developer shall be allowed to remove trees located in the approved buildable area of the property except as noted in subsection (b)(1) of this section. Trees located in required yard areas, buffers and open space area shall be maintained.

(c) *Authorization review and approval process.*

- (1) *Authority for review.* The building official or his designee shall be responsible for the review and approval of all requests for tree removal authorizations submitted in accordance with the requirements specified herein. Upon receipt of a completed application, the building official may take one of the following actions:
- a. *Deferral of decision.* The building official may defer the approval of a tree removal authorization to the development review committee (DRC) for any reason. Any decision made by the development review committee may be appealed to city council. All decisions made by city council shall be final.
  - b. *Approval.* The building official shall issue a tree removal authorization if it is determined that:
    - 1. The tree constitutes a hazard to life or property which cannot be reasonably mitigated without removing the tree.
    - 2. The tree is dying, dead, or diseased to the point that restoration is not practical.
    - 3. All reasonable efforts have been made to avoid removing the tree for the development and removal cannot be avoided.

- c. *Refusal.* The building official shall deny a tree removal authorization application if it is determined that:
  - 1. Removal of the tree is not reasonably required in order to conduct anticipated activities; or
  - 2. A reasonable accommodation can be made to preserve the tree.
- d. *Appeal of decision.* Any decision made by the building official may be appealed to the development review committee. Any decision made by the development review committee may be appealed to city council. All decisions made by city council shall be final.
- e. *Authorization expiration.* Tree removal authorization issued in connection with an approved building permit or site plan shall be valid for the period of that building permit's or site plan's validity. A tree removal authorization not issued in connection with an approved building permit or a site plan shall become void 180 days after the date of the approval.

(2) *Tree removal authorization application.*

- a. *Authorization.* A request for tree removal authorization must be submitted and approved prior to the removal of any protected tree in the city unless the tree is exempt under a provision of this article.
- b. *Application.* The application shall be made by the property owner in conjunction with a registered landscape architect, certified nurseryman, arborist, registered engineer or registered professional land surveyor. A graphic exhibit shall be attached showing at least the following items:
  - 1. Appropriate title (i.e. tree removal authorization exhibit);
  - 2. Title block includes street address, lot and block, subdivision name, city and date of preparation;
  - 3. North arrow, graphic and written scale in close proximity;
  - 4. Scale at a size no larger than one inch equals 200 feet (i.e. one inch equals 100 feet OK);
  - 5. Name, address and phone of owners and persons preparing the exhibit;
  - 6. Location of all right-of-way lines and public easements;

7. Location of all buildings, structures, pools, parking, and other improvements which are existing or intended on the lot;
8. Areas of proposed cut/fill as required per city requirements with amount of each shown (graphically different than subsection (c)(2)b.9 of this section), and the drainage flow line, if applicable;
9. Areas of proposed cut/fill not required per city requirements with amount of each shown (graphically different than subsection (c)(2)b.8 of this section), and the drainage flow line, if applicable;
10. Existing and proposed spot elevation, grades and major contours, along with existing landscaping, streams, ponds and major natural features;
11. Limits of construction line shown, if applicable;
12. Location of all protected trees and thicket boundaries that are not exempted by subsection (b)(1) of this section within 50 feet of any construction area that are to remain, with a description of the size and types of trees, such trees shall be designated by a circle;
13. The location of all protected trees that are not exempted by subsection (b)(1) of this section which are to be removed, such trees shall be designated by a triangle;
14. Note on the graphic exhibit the caliper size (as measured 4.5 feet from the ground), the Latin and common name of tree to be removed; and
15. Location of any required replacement trees shown with caliper size and common name of tree found from the list of approved trees as noted in section 114-41.

These requirements may be modified by the building official as needed to administer this article. An aerial photograph may be allowed if it includes all of the above items on a transparency at the same scale as the photo.

(Code 1975, §§ 5-144--5-146)

### **Sec. 114-35. Tree replacement.**

- (a) *Generally.* If a tree removal authorization is granted, the applicant shall replace the protected trees being removed with trees listed in section 114-41 shall be a minimum of three caliper inches measured 12 inches from the ground and a minimum of seven feet in height when planted. A sufficient number of trees shall

be planted so that the total caliper of the replacement trees is equal to the caliper of the tree removed as measured 4.5 feet high on the trunk. The replacement trees shall be noted either on the required landscape plan for all non-single-family developments or on the plot plan submitted with the building permit application for single-family developments.

- (b) *Replacement procedures.* Replacement trees shall be located on the subject site whenever possible. However, if this is not feasible, the building official or his designee has the authority to allow the planting to take place on another property. Such replacement shall occur at the time of landscaping of newly developed property or in the event of removal or death of a tree after the property has been developed except for developed single-family residential development. Single-family residential lots that have been finalized are exempt from replacing required replacement trees.
- (c) *Reforestation fund.* If approved by the building official, the development review committee (DRC) or city council, the applicant, in lieu of compliance with this article, may make a payment into the reforestation fund, which shall be a special account administered by the city parks and recreation department. The funds shall be used only for purchasing, planting and maintaining trees on public property, or for acquiring and preserving wooded property. The amount of payment required shall be calculated based on an average of three current market prices for the cost of acquiring, planting and maintaining a tree equal in caliper to the trees to be removed for a period of one year. Two prices will be provided by the applicant and the city will provide one price.

(Code 1975, § 5-147)

### **Sec. 114-36. Tree protection.**

- (a) *Prior to construction.* The following procedures shall be followed on all types of construction projects (i.e. residential subdivisions, commercial, multi family, industrial developments, residential builders and municipal/public). It is the responsibility of the developer and his subcontractors to take the appropriate action to preserve all protected trees during all phases of construction.
  - (1) *Tree flagging.* All protected trees that are to remain on the subject property within 50 feet of any area where vehicles, materials, and/or equipment are moved, placed, transported, or stored, shall be flagged with bright fluorescent orange vinyl tape wrapped around the main trunk at a height of four feet or more, such that the tape is very visible to workers operating construction equipment.
  - (2) *Open space flagging.* All trees or groups of trees within areas intended to be saved as open space shall be enclosed with fluorescent orange tape along all

areas of possible access or intrusion by construction equipment. Tape shall be supported at a minimum of 25-foot intervals by wrapping trees or utilizing another approved method. Single incident access for the purposes of clearing underbrush is allowed.

- (3) *Protective fencing.* In those situations where a protected tree is so close to the construction area that construction equipment will infringe on the root system, a system of protective fencing may be required between the tree and the construction activity.
  - (4) *Bark protection.* In situations where a protected tree remains in the immediate area of intended construction, the tree shall be protected by enclosing the entire circumference of the tree with two-inch x four-inch lumber encircle with wire or other means that do not damage the tree. This will protect the bark of the tree against incidental contact by large construction equipment.
- (b) *Prohibited activities adjacent to trees.* The following activities shall be prohibited within the limits of the drip line of any protected tree subject to the requirements of the article.
- (1) *Material storage.* No materials intended for use in construction, or waste materials accumulated due to excavation or demolition, shall be placed under the canopy of any protected tree.
  - (2) *Equipment cleaning/liquid disposal.* No equipment shall be cleaned, or other materials or liquids deposited or allowed to flow over land, within the limits of the canopy of a protected tree. This includes, without limitation, paint, oil, solvents, asphalt, concrete, mortar or similar materials.
  - (3) *Tree attachments.* No signs, wires, or other attachments other than those of a protective nature shall be attached to any protected tree.
  - (4) *Vehicular traffic.* No vehicular and/or construction equipment traffic or parking shall take place within the limits of the canopy of any protected tree other than on an existing paved street or parking lot. This restriction does not apply to single incident access within the drip line 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.
  - (5) *Grade changes.* No grade changes in excess of two inches (cut or fill) shall be allowed within the limits of the drip line of any protected tree unless adequate construction methods are utilized which have been approved by the building official.

- (6) *Impervious paving.* No paving with asphalt, concrete or other impervious materials in a manner which may reasonable by expected to kill a tree shall be placed within the limits of the drip line of a protected tree except as otherwise allowed in this article.
- (c) *Preserved tree criteria.* A protected tree shall be considered preserved only if a minimum of 75 percent of the area under the drip line is maintained at undisturbed natural grade and no more than 25 percent of the canopy is removed due to building encroachment.

(Code 1975, § 5-148)

### **Sec. 114-37. Tree pruning restrictions.**

- (a) *Generally.* Normal pruning required to promote tree health and vitality is permitted. No protected tree shall be pruned in a manner, which would reasonably lead to the death of the tree.
- (b) *Required pruning.* The owners of any tree adjacent to a public right of way shall be required to maintain a minimum clearance of 14 feet above the traveled surface or curb of a public street or open space trail. The city shall also have the right to prune trees overhanging the public right-of-way as necessary to preserve the public safety.
- (c) *Allowed pruning.* The building official may approve pruning of a protected tree in cases where protected trees must be strategically pruned to allow construction or demolition of a structure. When allowed, all pruning shall be in accordance with subsection 114-34(a)(1), approved arboricultural techniques and the recommendation of section 114-42. This section is not intended to require a tree removal authorization for reasonable pruning performed or contracted to be performed by the owner of the tree when unrelated to construction activity.
- (d) *Tree topping.* It shall be unlawful as a normal practice for any person, firm, or city department to top any 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 article at the determination of the building official.

(Code 1975, § 5-149)

### **Sec. 114-38. Tree planting restriction.**

- (a) *Overhead lines.* Replacement trees shall not be planted in a location where the natural canopy of the tree will interfere with overhead utility lines.

- (b) *Underground utilities.* Any required replacement trees or street trees shall not be planted within an area such that the mature root zone of the tree will interfere with underground public utilities lines, including water lines, sewer lines, transmission lines or other utilities. No trees shall be planted within ten feet of a fire hydrant and surface utilities such as pad-mounted transformers and gas meters.
- (c) *Visibility triangle.* No trees shall be planted in the visibility triangle as defined in the zoning chapter of this Code (chapter 118), article 118-714.

(Code 1975, § 5-150)

#### **Sec. 114-39. Enforcement of article provisions.**

- (a) *Developer's agreement.* All developer's agreements shall state that all construction activities shall meet the requirements of this article.
- (b) *Construction permits.* Prior to issuance of a permit to do any site work, a tree survey of the development shall be submitted to the building official.
- (c) *Building permit.* No building permit shall be issued unless the applicant signs a statement that binds the applicant to ensuring that all construction activities shall meet the requirements of this article. The building official shall make a copy of the this article and other relevant city policies available to the applicant.
- (d) *Acceptance of improvements.* No acceptance of public improvements shall be authorized until all fines for violations of this article have been paid to the city or otherwise disposed of through the municipal court.
- (e) *Certificate of occupancy.* No certificate of occupancy shall be issued until all fines for violations of this article have been paid to the city or otherwise disposed of through the municipal court.
- (f) *Enforcement.* Any person, firm, corporation, agent, or employee thereof who violates any provision of this article shall be guilty of a misdemeanor, and upon final conviction thereof shall be fined an amount not to exceed \$500.00 for each incident. The unlawful injury, destruction, or removal of each protected tree shall be considered a separate incident. In addition, all violations shall be required to meet the requirements of section 114-35, tree replacement.

(Code 1975, § 5-151)

#### **Sec. 114-40. Tree exhibit.**

**GRAPHIC LINK:**[Click here](#)

*Critical root zone (CRZ).* The area of undisturbed natural 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.

*Drip line.* A vertical line run through the outermost portion of the canopy of a tree and extending to the ground.

(Code 1975, § 5-151(Exhibit "A"))

**Sec. 114-41. Approved tree replacement list.**

The following is the approved tree replacement list:

TABLE INSET:

Common Name	Scientific Name
<i>Large Tree - Deciduous</i>	
*Big Tooth Maple	<i>Acer grandidentatum</i>
*Chinese Pistache	<i>Pistachia chinensis</i>
*Ornamental Pear ('Aristocrat, Bradford')	<i>Pyrus calleryana</i>
Osage Orange (native) (fruitless, thornless cultivars only)	<i>Malcura pomifera</i>
*Paniced Goldenrain Tree	<i>Koelreuteria paniculata</i>
*Texas Red Oak (native)	<i>Quercus buckleyi</i>
Western Soapberry (native)	<i>Sapindus drummondii</i>
Lacebark Elm	<i>Ulmus parvifolia</i>
*Bald Cypress	<i>Taxodium distichum var. distichum</i>
Bur Oak (native)	<i>Quercus macrocarpa</i>
Chinquapin Oak (native)	<i>Quercus muehlenbergii</i>
Pecan (native)	<i>Carya illinoensis</i>
*Shumard Oak (native)	<i>Quercus shumardii</i>
*Caddo Maple	<i>Acer barbatum var. caddo</i>
*Cedar Elm	<i>Ulmus crassifolia</i>
<i>Evergreen</i>	
Afghan Pine	<i>Pinus eldarica</i>
Japanese Black Pine	<i>Pinus thunbergiana</i>
Deodar Cedar	<i>Cedrus deodara</i>
*Southern Live Oak	<i>Quercus virginiana</i>
Southern Magnolia	<i>Magnolia grandiflora</i>

An asterisk (\*) denotes those plant materials which are particularly outstanding for this area.

(Code 1975, § 5-151(Exhibit "B"))

### **Sec. 114-42. Tree pruning recommendations.**

The following are the tree pruning recommendations:

**GRAPHIC LINK:**[Click here](#)

When removing a branch always cut outside the branch bark ridge and collar. Do not make a flush cut.

**GRAPHIC LINK:**[Click here](#)

Branches that do not have a distinct collar should be cut at a right angle to the branch outside the branch bark ridge.

**GRAPHIC LINK:** [Click here](#)

Trees may have codominant stems as shown above. If a codominant stem must be removed, cut at an angle outside of the bark ridge as shown in the inset below. Avoid leaving any stub.

**GRAPHIC LINK:**[Click here](#)

When removing heavy limbs first make an undercut several inches outside of the collar. Then remove limb by a second cut an or inch or so outside of the first cut. Remove stub with a third cut just outside of the collar.

(Code 1975, § 5-151(Exhibit "C"))

Secs. 114-43--114-70. Reserved.