

Article 4: Tree Preservation

401 Administration

A. Purpose

The purpose of this section is to preserve, protect, and enhance existing trees and natural landscapes to contribute to a safe and livable community; to enhance a positive community image that attracts new residents and business enterprises; and to support the long-term viability of existing trees through protection measures that promote the natural, ecological, environmental, and aesthetic qualities of the City. The Director of Planning, or their designee, is appointed by the city manager to administer city ordinances related to tree preservation.

B. Applicability

All properties within the City of McKinney are subject to Tree Preservation, and all trees shall be preserved, protected, and mitigated according to the regulations of this Section.

402 Tree Preservation Standards

A. Prohibited Activities

The critical alteration, removal, or disturbance of any tree is prohibited unless otherwise authorized in this Article.

B. Critical Alteration of Trees

1. General Standards

- a. Prior to the critical alteration of any tree, a permit must be submitted and approved in compliance with §404, *Tree Removal Procedures*.
- b. Specimen Trees shall not be critically altered, unless approved by the Director of Planning. Approval shall be based on the type of tree, health of the tree, location of the tree on site, elevation of the tree, and impact of the tree on the proposed site or development plan.
- c. Critical alteration of any Protected Tree, including Specimen Trees, is subject to the tree mitigation and replacement requirements of §405, *Tree Mitigation and Replacement*.

C. Protected Trees

Table 4-1, *Protected Trees*, indicates protected trees that are subject to the protection measures and mitigation and replacement requirements of this Article. Protected trees located in the perimeter tree zone are not allowed to be removed.

Table 4-1 Protected Trees			
● Protected Tree			
○ Protected Tree when adjacent to existing platted residential lots			
Location	Quality Tree (6" or greater)	Quality Tree (27" or greater)	Specimen Tree (42" or greater)
Existing Single-Family (attached and Detached), Duplex, Triplex, and Quadplex Uses		●	●
Existing Non-Residential, Manufactured Housing, and Multi-Family Residential Uses	●	●	●
Qualified Ag Land [1]	●	●	●

Development Projects	● _____	● _____	● _____
Other Properties [2]	● _____	● _____	● _____
<i>Special Locations</i>			
Perimeter Tree Zone	○ _____	○ _____	○ _____
Floodplain	● _____	● _____	● _____

[1] A property receiving a special use appraisal as a qualified agricultural, timber land, and wildlife management property from the Collin Central Appraisal District (CCAD). An agricultural exemption is not the same as a qualified agricultural, timber land, and wildlife management property special use appraisal.

[2] Unless otherwise determined by the Director of Planning.

NOTE: sizes measured at DBH

1. Special Protected Tree Locations

All protected trees shall be protected as identified in Table 4-1, plus the following additional regulations shall apply to protected trees in the following locations:

a. Perimeter Tree Zone

If a protected tree exists within 15 feet of the boundary line between a proposed development and an existing platted residential development with four or fewer units per lot, a perimeter tree zone shall be provided. The perimeter tree zone shall extend 15 feet out from each protected tree onto the proposed development for a maximum 30-foot-wide perimeter tree zone. No protected tree within the perimeter tree zone may be critically altered. See Figure 4-1.

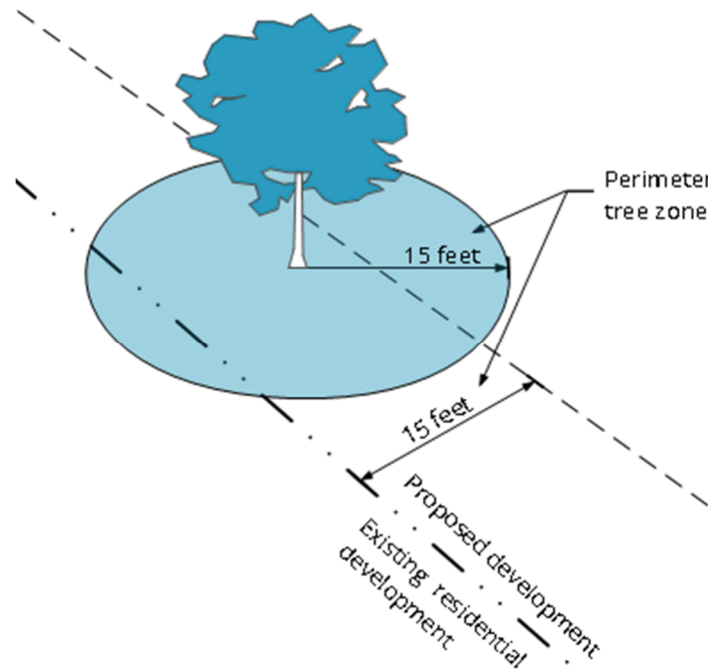


Figure 4-1: Perimeter Tree Zone

b. Floodplain

I. Within the 100-year fully developed floodplain, no more than 30 percent of protected trees may be critically altered. The following conditions are exempt from the requirement:

- a. If the floodplain area is located within the interior of a commercially zoned property and construction of buildings or parking is to occur on both sides of the floodplain; or

- b. When the construction of roads are required by the City to provide cross access to adjacent properties or a second point of access.
- II. A request to remove greater than 30 percent of quality trees may be made pursuant to §203G.1, Design Exception.

D. Quality Tree List

The following list of tree species are quality trees.

Table 4-2 Quality Tree List	
Common Name (Botanical Name)	Common Name (Botanical Name)
<u>Maple Species (<i>Acer spp.</i>) [1]</u>	<u>Crabapple (<i>Mallus spp.</i>)</u>
<u>Chittamwood (<i>Bumelia lanuginose</i>)</u>	<u>Dawn Redwood (<i>Metasequoia glyptostroboides</i>)</u>
<u>Birch Species (<i>Betula spp.</i>)</u>	<u>Wax Myrtle (<i>Myrica cerifera</i>)</u>
<u>Buckeye Species (<i>Aesculus spp.</i>)</u>	<u>Pine (<i>Pinus spp.</i>)</u>
<u>Texas Madrone(<i>Arbutus xalapensis</i>)</u>	<u>Chinese Pistache (<i>Pistacia chinensis</i>)</u>
<u>Hickory Species (<i>Carya spp.</i>)</u>	<u>Sycamore (<i>Platanus occidentalis</i>)</u>
<u>Pecan (<i>Carya illioinensis</i>)</u>	<u>Mesquite (<i>Prosopis glandulosa</i>)</u>
<u>Redbud (<i>Cercis canadensis</i>)</u>	<u>Cherry Laurel (<i>Prunus caroliniana</i>)</u>
<u>Desert Willow (<i>Chilopsis linearis</i>)</u>	<u>Mexican Plum (<i>Prunus mexicana</i>)</u>
<u>Chinese Fringe Tree (<i>Chionanthus virginica</i>)</u>	<u>Oak Species (<i>Quercus spp.</i>)</u>
<u>Dogwood Species (<i>Cornus spp.</i>)</u>	<u>Carolina Buckthorn (<i>Rhamnus caroliniana</i>)</u>
<u>Smoketree (<i>Cotinus coggygria</i>)</u>	<u>Aromatic Sumac (<i>Rhus aromatic</i>)</u>
<u>Hawthorn (<i>Crataegus spp.</i>)</u>	<u>Smooth Sumac (<i>Rhus glabra</i>)</u>
<u>Arizona Cypress (<i>Cupressus arizonica</i>)</u>	<u>Prairie Flameleaf Sumac (<i>Rhus lanceolata</i>)</u>
<u>Leyland Cypress (<i>Cupressocyparis leylandii</i>)</u>	<u>Western Soapberry (<i>Sapindus drummondii</i>)</u>
<u>Persimmon (<i>Diospyros spp.</i>)</u>	<u>Gum Bully (<i>Sideroxylon lanuginosum</i>)</u>
<u>Ginkgo (<i>Ginkgo biloba</i>)</u>	<u>Eve's Necklace (<i>Sophora affinis</i>)</u>
<u>Holly Species (<i>Ilex spp.</i>)</u>	<u>Texas Mountain Laurel (<i>Sophora secundiflora</i>)</u>
<u>Juniper Species (<i>Juniperus spp.</i>)</u>	<u>Pond Cypress (<i>Taxodium ascendens</i>)</u>
<u>Walnut Species (<i>Juglans spp.</i>)</u>	<u>Bald Cypress (<i>Taxodium distichum</i>)</u>
<u>Golden Raintree (<i>Koelreuteria paniculata</i>)</u>	<u>Elm Species (<i>Ulmus spp.</i>) [2]</u>
<u>Crape Myrtle (<i>Lagerstroemia indica</i>)</u>	<u>Mexican Buckeye (<i>Ungnadia speciosa</i>)</u>
<u>Goldenball Leadtree (<i>Leucaena retusa</i>)</u>	<u>Viburnum (<i>Viburnum spp.</i>)</u>
<u>Sweetgum (<i>Liquidambar styraciflua</i>)</u>	<u>Vitex (<i>Vitex agnus-castus</i>)</u>
<u>Magnolia (<i>Magnolia spp.</i>)</u>	

[1] Except: Box Elder (*Acer negundo*) and Silver Maple (*Acer saccharinum*).

[2] Except: American Elm (*Ulmus americana*) and Siberian Elm (*Ulmus pumila*).

403 Tree Protection Measures

A. Applicability

Trees being preserved on- or off-site are subject to the following procedures, unless otherwise exempted.

B. Prohibited and Limited Activities in Critical Root Zone

The following activities are prohibited within the limits of the critical root zone of any tree being preserved, unless otherwise specified in this section.

1. Material Storage

No materials intended for use in construction or waste materials shall be placed within the critical root zone of any tree being preserved.

2. Equipment Cleaning/Liquid Disposal

No cleaning or other liquids shall be deposited or allowed to flow over land within the critical root zone of any tree being preserved. This includes, but is not limited to 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 tree being preserved.

4. Construction Equipment/Vehicular Traffic

No vehicular and/or construction equipment traffic or parking shall take place within the critical root zone of any tree being preserved other than on existing street pavement, unless otherwise approved by the Director of Planning. This restriction does not apply to single incident 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, emergency restoration of utility service, or routine mowing operations. No heavy equipment including trucks and tractors shall be allowed inside the dripline of any protected tree on any construction site without the specific approval of the Director of Planning.

5. Grade Changes

No grade changes shall be allowed within the critical root zone of any tree being preserved, unless the Director of Planning and/or the Director of Engineering approves adequate construction methods.

6. Impervious Paving Near Protected Trees

No paving shall occur within the critical root zone of a protected tree that is being preserved. Paving with asphalt, concrete, or other impervious materials may be allowed to encroach within the first 25 percent from the edge of the critical root zone of a protected tree that is being preserved only when a health, safety, or welfare issue arises due to access and circulation requirements.

7. Impervious Paving Near Non-Protected Trees

Unless otherwise approved by the Director of Planning, for any non-protected tree that is being preserved, the following shall apply:

- a. No paving with asphalt, concrete, or other impervious materials may be placed within a 5-foot radius of the trunk; and
- b. A total of 400 square feet of area on the critical root zone shall be kept free of impervious materials. This pervious area may be in the shape of a circle, rectangle, or other shape, and shall include and be contiguous with the area within a 5-foot radius of the trunk.

8. Boring

Where it is not possible to trench around the critical root zone of the protected tree, boring of utilities under a protected tree shall be required. 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.

9. Trenching

Trenching shall be designed to avoid the critical root zone of any protected tree, unless otherwise approved by the Director of Planning. Mechanical trenching within the critical root zone shall be prohibited. Trenching by hand shall not critically alter the root system. The placement of irrigation systems and underground utility lines such as electric, phone, gas, etc., shall be located outside of the critical root zone of protected trees. The minimum required single head supply line for irrigation systems is allowed to extend into the critical root zone perpendicular to the tree trunk and in the manner that has the least possible encroachment into the critical root zone.

C. Construction Methods

1. Ground-Level Cuts

Tree trunks must be cut at ground level where removal of a tree may damage root systems of an adjacent tree. Stump grinding in such situations is allowed with the approval of the Director of Planning.

2. Root Pruning

All roots two inches or larger in caliper, which are exposed as a result of trenching or other excavation, shall be cut off square.

D. Protective Measures Required Prior to Construction

Prior to the commencement of any site work or construction, the contractor shall construct and maintain a protective fence and bark protection around each tree being protected as shown on standard drawing 1180M of the City of McKinney Construction Standard Details, until all work on-site has been completed.

401404 Tree Removal Procedures

A. Permits Required

Table 4-3, *Permit Requirements* indicates the type of permit required to critically alter a tree.

Type of Work	Type of Permit
Critical Alteration (not part of a Development Project)	Tree Permit
Critical Alteration (Development Project)	Development Permit: Tree Preservation Plan
Critical Alteration (Demolition of a Building)	Limited Purpose Tree Permit
<i>Maintenance Activities</i>	
Selective Thinning	Limited Purpose Tree Permit
Grubbing under the drip line	Limited Purpose Tree Permit
Clearing underbrush with mechanical equipment	Limited Purpose Tree Permit

1. Permit Exceptions

a. Tree Permit Exceptions

A Tree Permit is not required if:

- I. The tree, other than a specimen tree, is being critically altered on an existing lot being used for Single-Family Residential.
- II. The tree endangers the public health, welfare, or safety and immediate alteration is required from an arborist, including documentation stating the diameter, species and reason for removal;
- III. The tree has disrupted a public utility service due to a tornado, storm, flood, or any force of nature. Critical alteration shall be limited to the portion of the tree reasonably necessary to reestablish or maintain reliable utility service;
- IV. The tree is being critically altered as part of routine utility maintenance;
- V. The tree is located on city owned property and is being critically altered as part of routine maintenance by the Parks and Recreation Department;
- VI. The tree is dead as documented by an arborist, including information citing the diameter, species, and reason for removal, unless the tree was required under a Landscape Plan or was a required replacement tree under this section;
- VII. The tree is located on the property of a plant or tree nursery, or an orchard, where trees are planted and grown on the premises for the sale or intended sale to the general public in the ordinary course of the nursery's or orchard's business; or
- VIII. Removing underbrush with hand tools, not including grubbing under drip lines.

b. Tree Preservation Plan Exceptions

An approved Tree Preservation Plan is not required prior to the critical alteration of any protected tree for the following:

- I. A Tree Preservation Plan shall not be required if no trees exist on the site property. The Director of Planning may request additional information to confirm that no trees exist on the site.
- II. A Tree Preservation Plan shall not be required for the areas outside the width of construction and maintenance easements when constructing off-site public infrastructure and utilities. The Director of Planning may request that additional areas be included if impacts are anticipated beyond the limits of construction.

~~III. For developments 35 acres or greater in size, an Aerial Tree Exhibit may be submitted in lieu of a Tree Preservation Plan, along with a payment into the Reforestation Fund, pursuant to Appendix A – Schedule of Fees of the Code of Ordinances.~~

~~IV. For all projects constructed by the city, regardless of size, an Aerial Tree Exhibit may be accepted in lieu of a Tree Preservation Plan.~~

~~For all projects constructed by the City, regardless of size, an Aerial Tree Exhibit may be accepted in lieu of a Tree Preservation Plan.~~

~~A.~~ **Tree Preservation Plan**

~~1. Applicability~~

~~2. A Tree Preservation Plan is required for any new development, redevelopment, expansion, alteration, or change in use that necessitates the preservation, mitigation, or protection of trees pursuant to this Code.~~

~~3. Exceptions~~

~~4. A Tree Preservation Plan shall not be required if no trees exist on the site. The Director of Planning may request additional information to confirm that no trees exist on the site.~~

~~5. A Tree Preservation Plan shall not be required for the areas outside the width of construction and maintenance easements when constructing off-site public infrastructure and utilities. The Director of Planning may request that additional areas be included if impacts are anticipated beyond the limits of construction.~~

~~6. For developments 35 acres or greater in size, an Aerial Tree Exhibit may be submitted in lieu of a Tree Preservation Plan, along with a payment into the Reforestation Fund, pursuant to Appendix A – Schedule of Fees of the Code of Ordinances.~~

~~7. For all projects constructed by the City, regardless of size, an Aerial Tree Exhibit may be accepted in lieu of a Tree Preservation Plan.~~

~~8. Submittal Requirements~~

~~9. Tree Preservation Plan~~

~~I. A Tree Preservation Plan, conforming to the requirements below, shall be submitted and processed as part of a Site Plan or Preliminary Plat, pursuant to §303E.1, *Site Plan*, and §405A, *Preliminary Plat*.~~

~~II. A Tree Preservation Plan shall be prepared by a registered engineer, arborist, surveyor, architect, or landscape architect.~~

~~10. Tree Preservation Plan Exhibit Requirements~~

~~I. The location of any tree with a diameter at breast height (DBH) of six inches and greater;~~

~~II. The proposed and existing contours;~~

~~III. The property lines, with dimensions;~~

~~IV. The location of all rights-of-way, and easements (existing and proposed);~~

~~V. The location of all buildings, structures, pools, parking and vehicular maneuvering areas, utilities, sidewalks, and other improvements (existing and proposed);~~

~~VI. The adjacent land uses, and zoning of adjacent properties;~~

~~VII. The creeks, lakes, and other water features (existing and proposed);~~

~~VIII. The location of FEMA 100-year floodplain, the 100-year fully developed floodplain, and erosion hazard setback easement (existing and proposed);~~

~~IX. The major site construction features;~~

~~X. Any proposed non-disturbance area;~~

- XI. Identification of the DBH, species, and location of trees that are to remain;
- XII. Identification of the DBH, species, and location of trees to be removed;
- XIII. The tree protection measures; and
- XIV. Summary tables and mitigation information tables (if required).

11. Aerial Tree Exhibit Requirements (if applicability qualifications are met)

- I. An Aerial Tree Exhibit shall be submitted in conformance with the following requirements and processed in accordance with §303A, *Standard Procedures*.
- II. An aerial exhibit which includes a transparent overlay of the proposed plat at the same scale as a color aerial image of the property with all non-disturbance areas, floodplain limits, and tree protection measures clearly identified.
- III. An Aerial Tree Exhibit shall include the same information required by a Tree Preservation Plan as described in provisions a. through n. in the preceding subsection, for the following areas:
 - a. Area(s) identified as a required Perimeter Tree Zone(s) unless a 30-foot non-disturbance area is identified along the property line of the proposed development and any existing, platted single family residential development; and
 - b. Area(s) identified as floodplain if reclamation or land disturbing activities are to occur within said areas. The mitigation requirements of §206B.4, Tree Replacement and Mitigation, for the areas being disturbed shall still apply.

12. Approval Required

A Tree Preservation Plan or Aerial Tree Exhibit shall be approved prior to the issuance of permits for development or construction.

13. Approval Procedure

The Director of Planning shall have the authority to review, approve, or deny a Tree Preservation Plan or Aerial Tree Exhibit as part of the development or building permit process.

14. Expiration

A Tree Preservation Plan shall expire at the same time the development or building permit expires.

B. Tree Permit

1. Applicability

A Tree Permit is required prior to the critical alteration of any tree 6 inches or greater in diameter at breast height (DBH) except as specified by this section or when a Tree Preservation Plan is required.

2. Exceptions

A tree may be critically altered without first receiving a Tree Permit only in the following circumstances:

- a. The tree is less than 6 inches at DBH.
- b. The Tree is:
 - I. located on a lot of record on which a single family (attached or detached), duplex, triplex, and quadplex residential dwelling legally exists as the primary use of the property,
 - II. less than 27 inches at DBH,
 - III. not located within a FEMA 100 year flood plain, fully developed 100 year floodplain, or erosion hazard setback zone, and
 - IV. not part of a development project.
- c. The Tree is:
 - I. located on a property that is actively receiving a special use appraisal as a qualified agricultural, timber land, and wildlife management property from the Collin Central Appraisal District,
 - II. not a quality tree,
 - III. not greater than 42 inches at DBH,

~~IV. not located within 15 feet of any platted property used for single-family (attached and detached), duplex, triplex, and quadplex residential purposes,~~

~~V. not located within a FEMA 100-year flood plain, fully-developed 100-year floodplain, or erosion hazard setback zone, and~~

~~VI. not part of a development project.~~

~~d. The tree endangers the public health, welfare, or safety and immediate alteration is required from an arborist, including documentation stating the diameter, species and reason for removal.~~

~~e. The tree has disrupted a public utility service due to a tornado, storm, flood, or any force of nature. Critical alteration shall be limited to the portion of the tree reasonably necessary to reestablish or maintain reliable utility service.~~

~~f. The tree is being critically altered as part of routine utility maintenance.~~

~~g. The tree is dead as documented by an arborist, including information citing the diameter, species, and reason for removal, unless the tree was required under a Landscape Plan or was a required replacement tree under this section.~~

~~h. Removal of underbrush, not including grubbing under drip lines.~~

3.1. Submittal Requirements Tree Permit Application

A Tree Permit application and submittal fees (see Appendix A - Schedule of Fees) shall be submitted in conformance with the requirements of this section and ~~processed in accordance with S303A, Standard Procedures, shown on one of the following:~~

4. Tree Permit Application Requirements

~~a. Application and submittal fees (see Appendix A - Schedule of Fees);~~

~~a. For existing single-family residential (single-family (detached and attached), Duplex, Triplex, and Quadplex) uses, a tree permit exhibit shall include the following information:~~

~~I. The location of any proposed tree for removal or transplanting on an aerial exhibit or plot plan;~~

~~II. The diameter at breast height (DBH) of the proposed tree for removal or transplanting; and~~

~~III. the following standard notations:~~

~~a. Tree trunks must be cut at ground level where removal of a tree may damage root systems of an adjacent tree.~~

~~b. All roots two inches or larger in caliper, which are exposed as a result of trenching or other excavation, shall be cut off square.~~

~~IV. Tree protection measures.~~

~~b. For existing non-residential uses, manufactured homes, multi-family residential uses, and Qualified Ag Land, a tree permit exhibit shall include the following information:~~

~~I. The location of any proposed tree for removal or transplanting on an aerial exhibit, Site Plan, or approved Landscape Plan;~~

~~II. The diameter at breast height (DBH) of the proposed tree for removal or transplanting;~~

~~III. the following standard notations:~~

~~a. Tree trunks must be cut at ground level where removal of a tree may damage root systems of an adjacent tree.~~

~~b. All roots two inches or larger in caliper, which are exposed as a result of trenching or other excavation, shall be cut off square.~~

~~IV. Tree protection measures; and~~

~~V. Summary tables including mitigation information, if applicable.~~

~~c. For other properties, a tree permit exhibit shall include the following information:~~

~~I. The location of any proposed tree for removal or transplanting on an aerial exhibit, Site Plan, or approved Landscape Plan;~~

~~II. The diameter at breast height (DBH) of the proposed tree for removal or transplanting;~~

~~III. the following standard notations:~~

~~a. Tree trunks must be cut at ground level where removal of a tree may damage root systems of an adjacent tree.~~

~~b. All roots two inches or larger in caliper, which are exposed as a result of trenching or other excavation, shall be cut off square.~~

~~IV. Tree protection measures; and~~

~~V. Summary tables including mitigation information, if applicable.~~

~~b. Residential Tree Permit exhibit shall include the following information:~~

~~I. The location of any proposed tree for removal or transplanting on an aerial exhibit or plot plan; and~~

~~II. The diameter at breast height (DBH) of the proposed tree for removal or transplanting.~~

~~c. Non-residential Tree Permit exhibit shall include the following information:~~

~~I. The location of any proposed tree for removal or transplanting on an aerial exhibit, Site Plan, or approved Landscape Plan;~~

~~II. The diameter at breast height (DBH) of the proposed tree for removal or transplanting; and~~

~~III. Summary tables including mitigation information tables, if applicable.~~

~~d. Alternate submittal materials may be deemed appropriate in limited instances and may be accepted, subject to the sole discretion of the Director of Planning.~~

~~5. Approval Required~~

~~A Tree Permit shall be approved prior to critical alteration of trees and prior to issuance of permits for development or construction.~~

~~6.2. Approval Procedure~~

~~The Director of Planning shall have the authority to issue a Tree Permit if it complies with all the regulations of this Code;~~

~~a. As part of a Tree Permit application the Director of Planning, with the input of the Director of Engineering, may approve the removal of specimen trees based on the type of tree, health of the tree, location of the tree on site, elevation of the tree, and the impact of the tree on the proposed site or development plan.~~

~~7.3. Appeals~~

~~If the Director of Planning denies the request to remove a specimen tree Tree Permit, the owner/applicant may appeal the decision to the City Council Board of Adjustment in accordance with §303F.2203F.1, *Certain Appeals to City Council* Administrative Appeals.~~

~~8.4. Expiration~~

~~A Tree Permit shall expire two years after its issuance.~~

402 Development Standards

A. Tree Preservation

1. Purpose

The purpose of this section is to preserve, protect, and enhance existing trees and natural landscapes to contribute to a safe and livable community; to enhance a positive community image that attracts new residents and business enterprises; and to support the long-term viability of existing trees through protection measures that promote the natural, ecological, environmental, and aesthetic qualities of the City. The Director of Planning, or their designee, is appointed by the city manager to administer city ordinances related to tree preservation.

2. Applicability

Information required to demonstrate compliance with this section shall be shown on a Tree Preservation Plan or Tree Permit pursuant to the procedures outlined in §303E.2, *Landscape Plan*.

a. New Development

Tree preservation is required as provided in this section for all new development within the City.

b. Existing Development

Tree preservation for all existing development within the City shall be required as follows:

I. Single-Family Residential

Quality trees of 27 inches diameter at breast height (DBH) or greater that are located on an existing single-family residential lot, regardless of location of the tree on the lot, shall be subject to the tree preservation requirements described in this section.

II. Non-Residential, Manufactured Housing, and Multi-Family Residential

Tree preservation is required as provided in this section for all existing non-residential, manufactured housing, and multi-family residential developments within the city.

III. Common Areas

Tree preservation is required as provided in this section for all common areas within single-family residential, multi-family residential, and any non-residential developments.

c. Exceptions

I. The following shall be exempt from the requirements of this section:

- a. Critical alteration of any quality tree or specimen tree by a utility company in order to maintain appropriate existing utility service; or
- b. Critical alteration of a quality tree that is located on the property of a plant or tree nursery, or an orchard, which has trees planted and growing on the premises for the sale or intended sale to the general public in the ordinary course of the nursery's or orchard's business.

II. The following shall be exempt from the tree mitigation and replacement requirements described in §101A, *Tree Replacement and Mitigation*:

~~a. Public parks, infrastructure, and improvements~~

- ~~i. Public projects including the construction of hike/bike trails;~~
- ~~ii. City-owned parks and sports fields open for public use;~~
- ~~iii. Construction of master-planned public utilities within permanent utility easements;~~
- ~~iv. Stabilization of creeks and streams; and~~
- ~~v. Construction of thoroughfares as shown on the Master Thoroughfare Plan within the limits of the right-of-way when approved by the Director of Parks and Recreation or the Director of Engineering.~~

~~b.a. Demolition~~

~~The critical alteration of a quality tree is permitted if such critical alteration is necessary to allow demolition of a structure. The quality tree covered by the permit shall be exempt from the tree replacement and tree protection requirements of this section.~~

~~c.a. Selective Thinning~~

~~Selective thinning of certain quality trees from a densely forested area in a manner specified by a certified arborist in a management plan that will enhance the likelihood of survival for the remaining trees is permitted. The quality trees covered by the permit shall be exempt from the tree replacement and tree protection requirements of this section.~~

~~d.a. Grubbing under Drip Lines~~

~~Clearing and grubbing of brush located within or under the drip lines of quality trees is permitted with a management plan specified by a certified arborist that will enhance the likelihood of survival for the remaining trees.~~

~~e.a. Diseased Trees~~

~~A diseased quality tree may be critically altered to reduce the chances of spreading the disease to adjacent healthy trees. The quality trees covered by a Tree Permit shall be exempt from the tree replacement and protection requirements of this section.~~

~~3. Tree Preservation Standards~~

~~a. Clear-Cutting~~

~~Clear-cutting is prohibited unless specifically authorized by a Tree Permit.~~

~~b. Perimeter Tree Zone~~

~~If a quality tree six inches or greater exists within 15 feet of the boundary line between a proposed development and an existing platted residential development with four or fewer units per lot, a perimeter tree zone shall be provided. The perimeter tree zone shall extend 15 feet out from each quality tree six inches or greater onto the proposed development for a maximum 30-foot wide perimeter tree zone. No tree within the perimeter tree zone may be critically altered. See Figure 3-27.~~

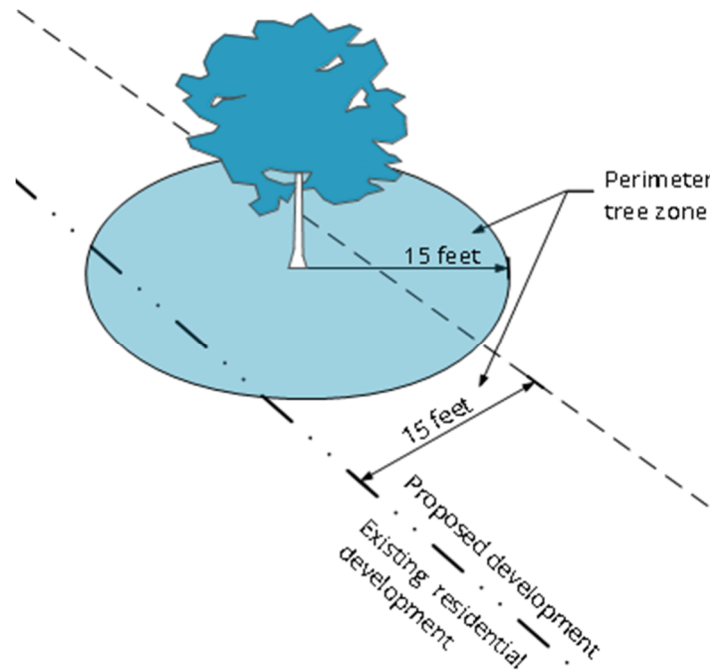


Figure 4-21: Perimeter Tree Zone

c. Floodplain

- I.—Within the 100-year fully developed floodplain, no more than 30 percent of quality trees that are six inches DBH or greater may be critically altered. The following conditions are exempt from meeting the requirement:
 - a.—floodplain areas within the interior of a property that is zoned for commercial uses, and construction of buildings or parking is to occur on both sides of the floodplain; or
 - b.—construction of roads that are required by the City to provide cross access to adjacent properties or to provide for a second point of access.
- II.—A request to remove greater than 30 percent of quality trees may be made pursuant to 303G.1, *Design Exception*.

d. Specimen Trees

Trees 42 inches DBH and greater shall be considered a specimen tree and may not be removed, nor may the critical root zone be altered. The Director of Planning may approve the removal of specimen trees based on the type of tree, health of the tree, location of the tree on site, elevation of the tree, impact of the tree on the proposed site or development plan.

e. Quality Trees

All quality trees greater than six inches DBH that are located outside the floodplain, except specimen trees, may be critically altered. Any quality tree that is critically altered is subject to the tree mitigation and replacement requirements of this section, except where the tree must be critically altered to:

- I.—Install and maintain any utility lines;
- II.—Dedicate public rights-of-way;
- III.—Construct any public or private streets or alleys at the minimum required width only;
- IV.—Provide any required easement up to the minimum width needed to accommodate the required service;
- V.—Construct any fire lanes at the minimum required width only;
- VI.—Construct any sidewalks;

- VII. Construct any driveways;
- VIII. Construct fences and screening walls;
- IX. Construct patios;
- X. Construct swimming pools and associated deck areas;
- XI. Construct required parking;
- XII. Install a building pad site;
- XIII. Construct any hike/bike trails; or
- XIV. Achieve cut and fill drainage as designed in master drainage construction plan, including required detention or retention ponds. Transitional slopes to the original grade, which are less steep than the maximum allowed slope shall not be exempt.

f. Ground-Level Cuts

Tree trunks must be cut at ground level where removal of a tree may damage root systems of an adjacent tree. Stump grinding in such situations is allowed with the approval of the Director of Planning.

4. Quality Tree List

The following list of tree species are protected trees with a dbh of 6 inches to 41 inches. The tree species that are listed below in bold are not protected trees. All tree species are protected trees with a dbh of 42 inches and greater.

Common Name (Botanical Name)	Common Name (Botanical Name)
Maple Species (<i>Acer spp.</i>) [1]	Crabapple (<i>Mallus spp.</i>)
Chittamwood (<i>Bumelia lanuginosa</i>)	Dawn Redwood (<i>Metasequoia glyptostroboides</i>)
Birch Species (<i>Betula spp.</i>)	Wax Myrtle (<i>Myrica cerifera</i>)
Buckeye Species (<i>Aesculus spp.</i>)	Pine (<i>Pinus spp.</i>)
Texas Madrone (<i>Arbutus xalapensis</i>)	Chinese Pistache (<i>Pistacia chinensis</i>)
Hickory Species (<i>Carya spp.</i>)	Sycamore (<i>Platanus occidentalis</i>)
Pecan (<i>Carya illinoensis</i>)	Mesquite (<i>Prosopis glandulosa</i>)
Redbud (<i>Cercis canadensis</i>)	Cherry Laurel (<i>Prunus caroliniana</i>)
Desert Willow (<i>Chilopsis linearis</i>)	Mexican Plum (<i>Prunus mexicana</i>)
Chinese Fringe Tree (<i>Chionanthus virginica</i>)	Oak Species (<i>Quercus spp.</i>)
Dogwood Species (<i>Cornus spp.</i>)	Carolina Buckthorn (<i>Rhamnus caroliniana</i>)
Smoketree (<i>Cotinus coggygria</i>)	Aromatic Sumac (<i>Rhus aromatic</i>)
Hawthorn (<i>Crataegus spp.</i>)	Smooth Sumac (<i>Rhus glabra</i>)
Arizona Cypress (<i>Cupressus arizonica</i>)	Prairie Flameleaf Sumac (<i>Rhus lanceolata</i>)
Leyland Cypress (<i>Cupressocyparis leylandii</i>)	Western Soapberry (<i>Sapindus drummondii</i>)
Persimmon (<i>Diospyros spp.</i>)	Gum Bully (<i>Sideroxylon lanuginosum</i>)
Ginkgo (<i>Ginkgo biloba</i>)	Eve's Necklace (<i>Sophora affinis</i>)
Holly Species (<i>Ilex spp.</i>)	Texas Mountain Laurel (<i>Sophora secundiflora</i>)
Juniper Species (<i>Juniperus spp.</i>)	Pond Cypress (<i>Taxodium ascendens</i>)
Walnut Species (<i>Juglans spp.</i>)	Bald Cypress (<i>Taxodium distichum</i>)
Golden Raintree (<i>Koelreuteria paniculata</i>)	Elm Species (<i>Ulmus spp.</i>) [2]
Crape Myrtle (<i>Lagerstroemia indica</i>)	Mexican Buckeye (<i>Ungnadia speciosa</i>)
Goldenball Leadtree (<i>Leucaena retusa</i>)	Viburnum (<i>Viburnum spp.</i>)
Sweetgum (<i>Liquidambar styraciflua</i>)	Vitex (<i>Vitex agnus-castus</i>)
Magnolia (<i>Magnolia spp.</i>)	

[1] Except: Box Elder (*Acer negundo*) and Silver Maple (*Acer saccharinum*).

[2] Except: American Elm (*Ulmus americana*) and Siberian Elm (*Ulmus pumila*).

C. Development Permit Process

1. Development Permit Application

A Tree Preservation Plan or Aerial Tree Exhibit, conforming to the requirements below, shall be submitted for a development project with the Site Plan or Plat, unless otherwise approved by the Director of Planning.

2. Tree Preservation Plan Exhibit Requirements

A Tree Preservation Plan shall be prepared by a registered engineer, arborist, surveyor, architect, or landscape architect and include the following:

- a. The location of any tree with a diameter at breast height (DBH) of six inches and greater;
- b. The proposed and existing contours;
- c. The property lines, with dimensions;
- d. The location of all rights-of-way, and easements (existing and proposed);
- e. The location of all buildings, structures, pools, parking and vehicular maneuvering areas, utilities, sidewalks, and other improvements (existing and proposed);
- f. The adjacent land uses, and zoning of adjacent properties;
- g. The creeks, lakes, and other water features (existing and proposed);
- h. The location of FEMA 100-year floodplain, the 100-year fully developed floodplain, and erosion hazard setback easement (existing and proposed);
- i. The major site construction features;
- j. Any proposed non-disturbance area;
- k. Identification of the DBH, species, and location of trees that are to remain;
- l. Identification of the DBH, species, and location of trees to be removed;
- m. the following standard notations:
 - I. Tree trunks must be cut at ground level where removal of a tree may damage root systems of an adjacent tree.
 - II. All roots two inches or larger in caliper, which are exposed as a result of trenching or other excavation, shall be cut off square.
- n. The tree protection measures; and
- o. Summary tables and mitigation information tables (if required).

3. Aerial Tree Exhibit Requirements (if applicability qualifications are met)

- a. An Aerial Tree Exhibit shall be submitted in conformance with the following requirements and processed in accordance with §203A, *Standard Procedures*.
- b. An aerial exhibit which includes a transparent overlay of the proposed plat or site plan at the same scale as a color-aerial image of the property with all non-disturbance areas, floodplain limits, and tree protection measures clearly identified.
- c. An Aerial Tree Exhibit shall include the same information required by a Tree Preservation Plan as described in provisions a. through o. in the preceding subsection, for the following areas:
 - I. Area(s) identified as a required Perimeter Tree Zone(s) unless a 30-foot non-disturbance area is identified along the property line of the proposed development and any existing, platted single family residential development; and
 - II. Area(s) identified as floodplain if reclamation or land disturbing activities are to occur within said areas. The mitigation requirements of §405, Tree Replacement and Mitigation, for the areas being disturbed shall still apply.

4. Approval Procedure

The Director of Planning shall have the authority to approve or deny a Tree Preservation Plan or Aerial Tree Exhibit as part of the development or building permit process.

5. Expiration

A Tree Preservation Plan shall expire at the same time as the development or building permit expires, whichever expires first.

D. Limited Purpose Tree Permit Process

1. Limited Purpose Tree Permit Application

a. A Limited Purpose Tree Permit shall be submitted to perform the following types of work on a property located within the City:

I. Building demolition;

II. Selective thinning;

III. Grubbing under drip lines; and

IV. Clearing underbrush with mechanical equipment, not including hand tools.

b. An application for a Limited Purpose Tree Permit shall include the following:

I. Application;

II. Submittal fees (see Appendix A – Schedule of Fees);

III. Affidavit certifying how the work is to be done and any unauthorized protected trees;

IV. Exhibit showing the limits of work;

V. the following standard notations:

a. Tree trunks must be cut at ground level where removal of a tree may damage root systems of an adjacent tree.

b. All roots two inches or larger in caliper, which are exposed as a result of trenching or other excavation, shall be cut off square.

VI. Tree protection measures; and

VII. Additional information deemed necessary by the Director of Planning.

c. The Director of Planning, at their sole discretion, may in limited instances exempt requirements for a permit that are deemed unnecessary.

2. Approval Procedures

The Director of Planning shall have the authority to issue a Limited Purpose Tree Permit if it complies with all the regulations of this Code.

3. Appeals

If the Director of Planning denies the request for a Limited Purpose Tree Permit, the owner/applicant may appeal the decision to the Board of Adjustment in accordance with 203F.1, *Administrative Appeals*.

4. Expiration

A limited use permit shall expire 90 days after the permit was issued if work has not started.

403405 Tree Mitigation and Replacement

A. **Generally Applicability**

~~Unless specifically exempted, t~~The following tree mitigation requirements shall ~~be applied~~ when a protected tree, including specimen trees, to any person who critically alters or removes a quality tree for which a Tree Permit or Development Permit is required, ~~is critically altered or removed~~. Replacement trees shall be provided in accordance with the requirements of this section and shown on pursuant to an approved Tree Preservation landscape Plan or another similar plan approved by the Director of Planning, and shall be in addition to trees otherwise The replacement trees shall be in addition to trees otherwise required by ~~§306A206A, Landscaping~~, of this Article.

1. **Exemptions**

~~The following shall be exempt from the tree mitigation and replacement requirements described in §101A, Tree Replacement and Mitigation:-~~ herein:

a. **Public parks, infrastructure, and improvements**

- I. Public projects including the construction of hike/bike trails;
- II. City-owned parks and sports fields open for public use;
- III. Construction of master planned public utilities within permanent utility easements;
- IV. Stabilization of creeks and streams; and
- V. Construction of thoroughfares as shown on the Master Thoroughfare Plan within the limits of the right-of-way when approved by the Director of Parks and Recreation or the Director of Engineering.

b. **Development Activities and Improvements**

- I. Install and maintain any utility lines;
- II. Dedicate public rights-of-way;
- III. Construct any public or private streets or alleys at the minimum required width only;
- IV. Provide any required easement up to the minimum width needed to accommodate the required service;
- V. Construct any fire lanes at the minimum required width only;
- VI. Construct any sidewalks;
- VII. Construct any driveways;
- VIII. Construct fences and screening walls;
- IX. Construct patios;
- X. Construct swimming pools and associated deck areas;
- XI. Construct required parking;
- XII. Install a building pad site;
- XIII. Construct any hike/bike trails; or
- XIV. Achieve cut and fill drainage as designed in master drainage construction plan, including required detention or retention ponds. Transitional slopes to the original grade, which are less steep than the maximum allowed slope shall not be exempt.

c. **Demolition**

~~The critical alteration of a quality~~ protected tree is permitted if such critical alteration is necessary to allow demolition of a structure. The protected quality tree covered by the permit shall be exempt from the tree replacement and tree protection requirements of this section.

d. **Selective Thinning**

~~Selective thinning of certain quality~~ protected trees from a densely forested area in a manner specified by a certified arborist in a management plan that will enhance the likelihood of survival for the

remaining trees is permitted. The ~~quality~~protected trees covered by the permit shall be exempt from the tree replacement and tree protection requirements of this section.

e. Grubbing under Drip Lines

Clearing and grubbing of brush located within or under the drip lines of ~~quality~~protected trees is permitted with a management plan specified by a certified arborist that will enhance the likelihood of survival for the remaining trees.

f. Diseased Trees

A diseased ~~quality~~protected tree may be critically altered to reduce the chances of spreading the disease to adjacent healthy trees. The ~~protected~~~~quality~~ trees covered by the ~~a~~ Tree Permit shall be exempt from the tree replacement and protection requirements of this section.

B. Responsibility

The property owner shall be responsible for replacing a ~~quality-protected~~ tree, including specimen trees, subject to the provisions of this section if the tree is critically altered, removed, or dies.

C. Size and Number

A sufficient number of canopy trees shall be planted to equal or exceed the ~~quality-protected~~ trees, including specimen trees, that are critically altered, pursuant to Table 4-4, Tree Replacement Requirements, -below.

Table 4-~~44-4~~: Tree Replacement Requirements

Single-Family Residential Uses		
DBH of critically altered tree [1]	Replacement ratio (number of trees)	Minimum size of replacement tree (at time of planting) [2]
27 inches and greater	1:1	4 inches in caliper and 12 feet in height
Non-Residential, Manufactured Home, and Multi-Family Uses		
DBH of critically altered tree [1]	Replacement ratio (DBH removed: caliper inch replaced)	Minimum size of replacement tree (at time of planting) [2]
6-16 inches	1:1	4 inches in caliper and 12 feet in height
17-41 inches	1:2	6 inches in caliper and 12 feet in height
42 inches and greater	1:2	6 inches in caliper and 12 feet in height

[1] When determining the diameter of each tree(s) being critically altered, individual fractional numbers shall be rounded to the nearest whole number.
[2] Caliper for replacement trees shall be measured at 6 inches above the ground.

D. Tree Preservation Credit

When trees are preserved that would otherwise have been exempt from the tree ~~replacement and~~ mitigation and replacement requirements, credit toward mitigation may be approved on an inch-per-inch basis. Credits for the size of trees preserved (DBH) can be applied to those trees of an equal or lesser size category, as listed in Table 4-4, Tree Replacement Requirements~~Error! Reference source not found.~~. Trees being preserved to meet landscape requirements cannot be used towards mitigation credits.

E. Location

Each replacement tree shall be planted on the same property as the tree that was critically altered. However, if the Director of Planning deems that the replacement tree cannot be planted on the same property in accordance with acceptable arboriculture standards, the following may be allowed:

1. Replacement on public property;
2. Replacement on private property if also approved by the ~~Chief Building Official~~Director of Planning; or
3. Require payment to the Tree Reforestation Fund in accordance with subsection ~~406101A.G.~~ of this section.

F. Timing

1. For Development Permits: Replacement trees shall be planted prior to receiving Final Acceptance of public infrastructure or a Certificate of Occupancy for the development.
2. For Tree Permits: Replacement trees shall be planted within 90 days of critical alteration. If replacement trees cannot be planted within 90 days of critical alteration, the Director of Planning may approve a delay in replacement of up to six months after the date of critical alteration, provided the following conditions are met:
 - a. The applicant provides an affidavit that all replacement trees will be planted within six months.
 - b. The Director of Planning may require a cash deposit or surety bond in the approximate amount of the cost to replace the trees.

G. Tree Replacement Payment

If an applicant cannot replace trees on the same property or gain approval to plant on an alternate site, a mitigation payment into the Tree Reforestation Fund shall be required, prior to the issuance of a tree permit or development permit, as follows.

1. The amount of payment required for each replacement tree shall be calculated based on a schedule published and reviewed annually by the Director of Planning which sets forth the average cost of a quality tree added to the average cost of planting a tree.

~~2.1. It shall be the responsibility of the Director of Planning to develop and administer a Tree Reforestation Plan for the planting, growing, replanting, and appropriate irrigation of trees on all municipal and public domain property. The Director of Planning shall present the Reforestation Plan to the City Council and, when adopted by the Council, the plan shall represent the Reforestation Plan for the City.~~

~~3.1. Reforestation funds shall be expended only for purchasing, planting, growing and/or irrigating trees as per the City's Reforestation Plan. Tree reforestation funds shall not be used for routine maintenance.~~

- ~~4. Funds paid into the Tree Reforestation Fund shall be spent within 10 years of payment or shall be returned to the payer.~~
- ~~5. The Director of Planning shall submit periodic reports of the deposits and disbursements from the Tree Reforestation Fund to the Tree Board and City Council.~~

~~6. Tree Protection~~

~~The following procedures shall apply to all trees being preserved on- or off-site, unless specifically exempted.~~

~~a. Construction Plan Requirements~~

~~All construction plans shall indicate tree protection measures.~~

~~b. Activities Prohibited in Critical Root Zone~~

~~The following activities are prohibited within the limits of the critical root zone of any tree being preserved subject to the requirements of this section.~~

~~i. Material Storage~~

~~No materials intended for use in construction or waste materials shall be placed within the limits of the critical root zone of any tree being preserved.~~

~~II. Equipment Cleaning/Liquid Disposal~~

~~No cleaning or other liquids shall be deposited or allowed to flow over land within the limits of the critical root zone of any tree being preserved. This includes, but is not limited to paint, oil, solvents, asphalt, concrete, mortar or similar materials.~~

~~III. Tree Attachments~~

~~No signs, wires or other attachments, other than those of a protective nature, shall be attached to any tree being preserved.~~

~~IV. Construction Equipment/Vehicular Traffic~~

~~Unless otherwise approved by the Director of Planning, no vehicular and/or construction equipment traffic or parking shall take place within the limits of the critical root zone of any tree being preserved other than on existing street pavement. This restriction does not apply to single incident 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, emergency restoration of utility service, or routine mowing operations. No heavy equipment including trucks and tractors shall be allowed inside the drip-line of any quality tree on any construction site without the specific approval of the Director of Planning.~~

~~V. Grade Changes~~

~~Unless specifically allowed by this section, no grade changes shall be allowed within the limits of the critical root zone of any tree being preserved unless the Director of Planning and/or the Director of Engineering approves adequate construction methods.~~

~~VI. Impervious Paving Near Nonexempt Trees~~

~~Unless a health, safety, and welfare issue arises due to access and circulation requirements, no paving with asphalt, concrete, or other impervious materials may be placed within 75 percent of the limits of the critical root zone of a quality tree except as otherwise allowed in this section.~~

~~VII. Impervious Paving Near Exempt Trees~~

~~Unless otherwise approved by the Director of Planning, for any exempt tree that is being preserved, the following shall apply:~~

- ~~a. No paving with asphalt, concrete, or other impervious materials may be placed within a 5-foot radius of the trunk; and~~
- ~~b. A total of 400 square feet of area on the critical root zone shall be kept free of impervious materials. This pervious area may be in the shape of a circle, rectangle, or other shape, and shall include and be contiguous with the area within a 5-foot radius of the trunk.~~

~~c. Protective Measures Required Prior to Construction~~

~~Prior to the commencement of any site work or construction, the contractor shall construct and maintain a protective fence and bark protection around each tree being protected by the provisions of this section, where necessary, until all work on-site has been completed as shown in Appendix 2A:D.~~

~~d. Construction Methods~~

~~I. Boring~~

~~Where it is not possible to trench around the critical root zone of the quality tree, boring of utilities under quality trees shall be required. 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.~~

~~II. Grade Change~~

~~The Director of Planning and/or the Director of Engineering may approve a grade change within the critical root zone of a quality tree as per this section.~~

~~III. Trenching~~

~~Trenching shall be designed to avoid the critical root zone of any quality tree, unless otherwise approved by the Director of Planning. Mechanical trenching within the critical root zone shall be prohibited. Trenching by hand shall not critically alter the root system. The placement of irrigation systems and underground utility lines such as electric, phone, gas, etc., shall be located outside of~~

~~the critical root zone of quality trees. The minimum required single head supply line for irrigation systems is allowed to extend into the critical root zone perpendicular to the tree trunk and in the manner that has the least possible encroachment into the critical root zone.~~

IV. Root Pruning

~~All roots two inches or larger in caliper, which are exposed as a result of trenching or other excavation, shall be cut off square.~~

404406 Violations

A. Tree Preservation

B.A. Violation

A violation shall occur when any tree that is ~~otherwise preserved or~~ protected by this code is critically altered ~~without authorization. Violation of this ordinance shall not constitute an exemption to the replacement requirements contained herein.~~

C.B. Occurrence

Each tree that is critically altered shall be considered a separate occurrence. If individual trees cannot be identified but there is evidence of a violation, ~~every~~ ~~ach~~ 1,200 gross square feet of tree canopy removed, as identified on an aerial image within the last 12 months, ~~tree~~ shall be considered a separate occurrence.

D.C. Reforestation Fund Payment Required

1. For every occurrence (tree), a payment as specified in [Appendix A – Schedule of Fees](#) of the Code of Ordinances, shall be paid into the Reforestation Fund.
2. For every occurrence (tree) found to include a Specimen Tree, a payment as specified in [Appendix A – Schedule of Fees](#) of the Code of Ordinances, shall be paid into the Reforestation Fund.
3. For every occurrence (tree canopy), a payment as specified in [Appendix A – Schedule of Fees](#) of the Code of Ordinances, shall be paid into the Reforestation Fund.

407 Tree Reforestation Fund

- A. Reforestation funds shall be expended only for purchasing, planting, growing and/or irrigating trees as per the City's Reforestation Plan. Tree reforestation funds shall not be used for routine maintenance.
- B. It shall be the responsibility of the Director of Planning to develop and administer a Tree Reforestation Plan for the planting, growing, replanting, and appropriate irrigation of trees on all municipal and public domain property. The Director of Planning shall present the Reforestation Plan to the City Council and, when adopted by the Council, the plan shall represent the Reforestation Plan for the City.
- C. Funds paid into the Tree Reforestation Fund shall be spent within 10 years of payment or shall be returned to the payer.
- D. The Director of Planning shall submit periodic reports of the deposits and disbursements from the Tree Reforestation Fund to the Tree Board and City Council.