

**35-523. Tree Preservation.**

**STATEMENT OF PURPOSE**

While allowing the reasonable improvement of land within the city and city's ETJ, it is stated public policy of the city to maintain, to the greatest extent possible, existing trees within the city and the ETJ, and to add to the tree population within the city and the ETJ. The planting of additional trees and preservation of existing trees in the city and the ETJ is intended to accomplish, where possible, the following objectives:

- To preserve trees as an important public resource enhancing the quality of life and the general welfare of the city and enhancing its unique character and physical, historical and aesthetic environment.
- To encourage the preservation of trees for the enjoyment of future generations.
- To encourage the preservation of trees to provide health benefits by the cleansing and cooling of the air and contributing to psychological wellness.
- To encourage the preservation of trees to provide environmental elements by adding value to property, and reduction of energy costs through passive solar design utilizing trees.
- To encourage the preservation of trees to provide environmental elements necessary to reduce the amount of pollutants entering streams and to provide elements crucial to establishment of the local ecosystem.
- To provide tree preservation requirements and incentives to exceed those requirements that encourage the maximum preservation of trees.
- To promote and protect the health, safety and welfare of the public by creating an urban environment that is aesthetically pleasing and that promotes economic development through an enhanced quality of life.
- To encourage the preservation of environmentally sensitive areas that protect and enhance the water quality, ecosystem and the overall environment.

This section implements the following provisions of the master plan:  
 Neighborhoods, Policy 3c: Continue to implement the tree preservation ordinance and strengthen as needed.

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(e) Minimum Tree Preservation Requirements.

(1) Generally. Table 523-1 establishes the minimum percentage of all diameter inches or percent tree canopy of significant or heritage trees that must be preserved or mitigated. In environmentally sensitive areas the minimum percentage shall include the understory of the preserved trees. For single-family dwellings, developers and builders may elect to preserve trees at the platting or permitting stage; if a developer or builder elects to preserve at the platting stage, this method must be used throughout completion of the project.

**Table 523-1**

	Single-Family Dwellings	Multi-family and Nonresidential Uses
Significant Trees	35% within each platted lot, excluding street right-of-way and easements. Plus each builder on a single-family dwelling lot shall also be required to plant two (2) one and one-half (1.5) inch caliper new trees, which trees shall generally be native, large canopy trees.	40% within the entire site excluding the street rights-of-way and easements.
Significant Trees	35% within each <del>platted</del> <del>planted</del> lot,	40% within the entire site, excluding

under 6" DBH	excluding the street right-of-way and easements or 35% of the number of total count of all such trees.	street right-of-way and easements; or 40% of the number of total count of all such trees; or for athletic fields, 25% of the entire site to be developed as such.
Heritage Trees	100% within each platted lot	100% within the entire site.
100-year floodplain(s)	80% of all the trees within the floodplain, which shall not apply toward preservation requirements on the remainder of the lot.	80% of the trees within the floodplain, which shall not apply toward preservation requirements on the remainder of the site.
<u>Environmentally Sensitive Areas</u>	<u>80% of all the trees within the environmentally sensitive area including easements and rights-of-ways. Such areas shall apply toward preservation on the remainder of the site.</u>	<u>80% of the trees within the environmentally sensitive area including easements and rights-of-ways. Such areas shall apply toward preservation on the remainder of the site.</u>
Mitigation Maximum	Up to 90% of significant and heritage trees may be mitigated rather than preserved.	Up to 90% of significant and heritage trees may be mitigated rather than preserved.

(2) Calculation of Preservation Ratios. All percentages relating to preservation stated within this section shall be based on the initial tree survey. Any subsequent redevelopment of property must minimally preserve the applicable percentage of the total diameter inches of protected trees as indicated by the initial tree survey. To receive preservation credit in environmentally sensitive areas when using the tree survey or tree canopy method, the canopy area can be converted into diameter inches utilizing the following formula based on the dominant tree species in the area(s). Canopy area divided by shade value (Appendix E) equals number of trees, times the radius of the shade value area which will equal the diameter inches present in the environmentally sensitive area.

Formula:

$$\text{Number of trees} = \text{Canopy Area (sq-ft)} / \text{Shade Value (sq-ft/tree)}$$

$$\text{Radius} = \text{Square Root}(\text{Shade Value Area} \div 3.14)$$

$$\text{Diameter (inches)} = \text{Number of Trees} \times \text{Radius}$$

(3) Tree Stand Delineation Alternative.

A. Standards. As an alternative to a tree survey, a tree stand delineation (no heritage tree survey is required) may be used to meet the preservation requirements (see submittal requirements section 35-B125). In order to utilize this provision the site must have area(s) of tree canopy that meet the woodlands criteria as set forth in Appendix A and must contain existing native understory vegetation. The application of this provision will be based on the gross tree canopy of a site or project outside the 100-year floodplain and environmentally sensitive areas, with no exclusions for rights-of-way or easements. A tree stand delineation shall meet the following standards:

- A tree preservation plan submitted at the master development plan stage must preserve a minimum of thirty (30) percent of contiguous tree canopy with the understory.
- If the tree preservation plan is delayed until subdivision review or any subsequent stages of development, the preservation requirement is thirty-five (35) percent of contiguous canopy with understory vegetation.
- Tree save areas will be a minimum of twenty thousand (20,000) square feet with any dimension being not less than thirty-five (35) feet.
- Tree save areas must be designated as such when the area is platted.
- Tree canopy area(s) to be preserved as tree save area(s) must include tree canopy in environmentally sensitive areas if such are present on site; ~~including steep slopes, drainage areas, aquifer recharge features, riparian buffers and corridors along arterial and collector streets.~~ These environmentally sensitive areas shall count toward preservation on the remainder of the site.
- The trees in the environmentally sensitive areas within the project boundaries are to be preserved at eighty (80) percent for significant trees and one hundred (100) percent for heritage trees.
- The 100-year floodplain areas within the project are to be preserved at eighty (80) percent for significant trees and one hundred (100) percent for heritage trees. The trees or tree canopy in the floodplain may not be used to meet preservation requirements set forth above for the developable portion of the land.
- The minimum requirements must be met without mitigation to utilize this option.

B. Subsequent Removal.

- Removal of the tree save area or any portion thereof will require the applicant to reforest to the required preservation amount. Mitigation trees will be as set forth in the standards of Table 523-2 using the shade value in Appendix E.

(4) Mitigation. Protected trees that are required to be preserved are to be mitigated at the ratio described in Table 523-2.

(5) Diversity and Desirability. As the particular site conditions warrant, the applicant shall make a reasonable effort to preserve a diversity of species of trees as determined by the city arborist.

(6) Site Design. The location of all proposed buildings and improvements shall be oriented by the applicant, to the extent the applicant determines possible, in a manner which allows for preserving of the greatest number of trees and in doing so the applicant is encouraged to design by taking into consideration the site's limitations and assets. Trees located within the existing right-of-way shall not be counted as it pertains to the minimum preservation percentage. Applicants are encouraged to preserve trees to meet the landscape and streetscape standards which could reduce or eliminate the irrigation requirements.

(7) Rights-of-Way. Unless otherwise allowed by this division, trees located within existing rights-of-way or easements may be damaged, destroyed, or removed only if prior approval is granted by the city arborist. If tree(s) are approved to be removed, mitigation will be at 1:1 unless Heritage-size which are mitigated at 3:1 (with the exception of species listed in Table 523-2, Column B, Row 1 which will be mitigated at 1:1) and are to be maintained by the project applicant.

(8) Trees on Public Property. The city shall have the right to maintain trees, plants, and shrubs within the lines of all public property as may be necessary to ensure the safety, protect facilities and improvements, and maintain the health and aesthetics of such public grounds. In order to achieve the above, the city or its municipal utility entities may remove or cause or order to be removed any tree which is located on public property and determined to be in conflict with a public purpose or to be a public hazard through coordination with the city arborist.

Unless specifically authorized by the city, no person shall knowingly cut, carve, transplant, or remove any tree; attach any rope, wire, nails, advertising posters, or other contrivances to any tree; or allow any substance, solid, liquid, gas, or fire to injure any tree or portion thereof on public property.

(9) Historic Trees. In order to protect historic trees, as defined, the city arborist shall defer the approval of tree preservation plans to review by the historic preservation officer ~~director of planning~~ who shall seek the advice of the historic design and review commission in instances where a historic tree is proposed to be removed. The commission may recommend additional replacement standards, recommend a cash payment to be deposited to the tree replacement fund to offset the cost of future tree planting on public property, or recommend that the application for permit and tree preservation plan be denied. Provided, however that no later than thirty (30) days after the final application for removal of the historic tree was received, the director of planning and development services shall advise the applicant by certified mail, return requested, or hand delivery of his decision. The final application will be deemed approved if not acted upon by the historic preservation officer ~~director of planning~~ before the expiration of the thirty-day time period herein established. Such action may be appealed pursuant to section 35-489 of this chapter.

(f) Mitigation/Alternative Mitigation Methods. Significant or heritage trees may be removed in excess of the minimum preservation requirement contained in subsection (e) provided the excess removal is properly mitigated. If mitigation is required to compensate for removing trees in excess of the number of diameter inches allowed to be removed within the surveyed area to be calculated for tree preservation under the minimum preservation requirements, the mitigation may be achieved in one of the ways prescribed in Table 523-2, below:

**Table 523-2 Mitigation**

(A) Method	(B) Description	(C) Restrictions
1. Establishment and maintenance of new trees at the required ratio on-site	Significant 1:1 Heritage 3:1 All tree species of Ash (all Fraxinus species) Hackberry (all Celtis species) Huisache, Ashe Juniper and Mesquite will be mitigated at 1:1.	No more than twenty-five (25) percent of the replacement trees shall be of the same species for the purposes of mitigation. Replacement trees must be at least three-inch diameter.
2. Payment to the tree mitigation fund	See subsection (n) of this section.	See subsection (n) of this section.
3. Protection and maintenance of smaller trees within surveyed area	Protection and maintenance of existing trees within the surveyed area that are smaller than the size requirements for a protected tree.	Such trees must be at least two and one-half (2 1/2) inches DBH. See column B ratios for diameter-inches required.
4. Protection and maintenance of natural	Protection and maintenance of existing natural areas, i.e.,	Area(s) must contain desirable plants as determined by the city arborist

areas within the surveyed area	prairie, steep slope, etc.	and/or by Texas Parks and Wildlife Dept.
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In considering a mitigation method, the city arborist may weigh the value of smaller trees, clumps of trees, and natural vegetation that could be retained to meet the requirements of this section, such as mitigation method above, or the amount of vegetation to be retained on the site and/or added according to a landscape plan to determine the extent additional trees may not be required. For these reasons, indiscriminate clearing of smaller trees and shrubs or understory is discouraged. Small tree species shall be mitigated based on the one trunk that is five (5) inches or greater for significant status and the one trunk that is twelve (12) inches or greater for heritage status. Small tree species that achieve heritage status shall be mitigated on a 1:1 basis.

(g) 100-Year Floodplain(s) and environmentally sensitive areas. Significant trees shall be preserved at eighty (80) percent preservation within both the 100-year floodplains and environmentally sensitive areas. Heritage trees shall be preserved at one hundred (100) percent preservation within both the 100-year floodplains and environmentally sensitive areas. The 100-year floodplain shall be determined by the floodplain administrator. ~~Such trees shall be mitigated as defined in Table 523-2. Mitigation shall be prohibited in floodplains and environmentally sensitive areas except by variance.~~ If trees are required to be removed by a governmental entity due to existing off-site conditions, then mitigation shall not be required by the applicant. The city arborist, the director of public works, the director of planning and development services, and one (1) representative from the Cibolo Creek Watershed, the Leon Creek Coalition, the Salado Creek Foundation, the San Antonio River Oversight Committee, and the Land Heritage Institute (for the Medina River) shall recommend ~~agree on~~ a standard for treatment of drainageways, which standard shall be approved by the ~~urban affairs committee~~ of city council.

(h) Tree Preservation Incentives. An individual may apply for, and subject to verification, shall receive incentives for tree preservation as follows:

(1) Parking Space Reduction. Upon application and verification by the city arborist, an individual shall be entitled to a reduction in the minimum parking requirements of section 35-526 of this chapter to help meet the minimum tree preservation requirements. For the purpose of providing an incentive, the said minimum parking requirements of section 35-526 of this chapter may be reduced by one (1) parking space for every four (4) diameter inches of trees that have been protected or mitigated on a site. The city arborist shall issue a certificate to the appropriate city department(s) confirming that a reduction has been earned under this section. Up to fifteen (15) percent of the required spaces may be waived, however, a waiver in excess of fifteen (15) percent of the required spaces must be approved by the director of planning and development services or his designee, and no waiver may exceed thirty (30) percent of the required spaces. A waiver of up to fifty (50) percent of the minimum parking spaces required by Table 526-3 may be granted if the plan will result in the preservation of woodlands or significant stands of trees in a natural state as in section 35-526. If used, the incentive provided by this subsection shall control over any other conflicting provision of this chapter.

(2) Sidewalks. Where the director of planning and development services determines that preservation of trees warrants the elimination, reduction in width, or modification to the sidewalk and curb requirements in accordance with the tree preservation standards, a waiver may be granted.

(3) Tree Cluster(s). In order to emphasize the importance of preserving trees in a cluster during development, additional tree preservation credit will be given as follows:

- A. Cluster(s) of three (3) or more trees less than ten (10) feet apart without existing understory will be calculated at one hundred five (105) percent for each tree within the cluster with a minimum size of two and one-half (2 1/2) inch diameter.
- B. Cluster(s) of three (3) or more trees less than ten (10) feet apart with existing understory will be calculated at one hundred fifteen (115) percent for each tree within the cluster with a minimum size of two and one-half (2 1/2) inch diameter.

(4) Landscape Credits. Landscape credits may be awarded as provided in section 35-511, above.

(5) Understory. The city arborist may determine that the preservation of native understory plants together with trees grouped in significant stands may result in a reduction of new plantings needed to meet the landscape requirements and/or an increase of credit given for elective points and/or the elimination of an irrigation system requirement of section 35-511. Emphasis is on the preservation of said significant stands and accompanying native understory plants and therefore, the smaller tree diameters may be counted one (1) for one (1) in terms of meeting the minimum tree preservation requirements. It is at the discretion of the city arborist as to the maximum number of trees, less than the significant tree size, that may be allowed to be used for obtaining additional landscape points under this incentive.

(6) Minimum Lot Size and Setbacks. The board of adjustment may waive the minimum lot size and setback requirements of the applicable zoning district for an individual lot or lots where the applicant demonstrates the following:

- A. Compliance with the minimum lot size or setback requirement is needed to preserve a significant tree or heritage tree; and
- B. If the tree permit application is pursuant to a proposed subdivision plat, the average lot size of the proposed subdivision will equal or exceed that of the applicable zoning district; and
- C. The public purpose involved in protecting the tree exceeds the public purpose of complying with minimum lot size or setback requirements; and
- D. The resulting lot sizes or setbacks do not violate the master plan or the applicable neighborhood plan.

(7) State Certification in Lieu of Compliance. The city arborist shall assist those who wish a site certified under the Texas Parks and Wildlife, Texas Wildscape Program in lieu of meeting city requirements in this division as long as twenty (20) percent of existing trees on-site are preserved.

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(g) Definitions. Definitions that appear below shall apply only to this section and shall prevail if in conflict with definitions found elsewhere in this chapter.

Environmentally sensitive areas. Areas that require protection of native landscape, plant life, wildlife or ecological values. Environmentally sensitive areas shall include steep slopes and riparian buffers.

Riparian Buffer. Vegetated areas, including buffer strips, adjacent to the regulatory floodplain that help to shade and partially protect a stream, creek or tributary from the impact of adjacent land uses. Riparian buffers are measured as follows:

- 1) A 60 foot wide tree and understory preserve area parallel to the 100-year floodplain in the Edwards Aquifer Recharge Zone or Contributing Zone.

2) A 30 foot wide tree and understory preserve area parallel to the 100-year floodplain outside of the Edwards Aquifer Recharge Zone or Contributing Zone.

Steep slope. A slope exceeding twenty (20) percent or 1 foot vertical for every 5 feet horizontal.

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**35-B123. Tree Permit--Tree Preservation Plan Option.**

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(c) Contents.

(1) The tree preservation plan contains three (3) components: a tree survey, the tree inventory, and the tree protection notes.

A. Multi-family residential, commercial and other development:

1. The Tree Survey. The tree survey shall, at a minimum, provide the following:

- i. A vicinity map, project name, street address (or plat #, parcel #, or legal description), date, scale, north arrow and the names, addresses and telephone numbers of the person(s) preparing the plan;
- ii. The location, species and size in diameter inches of each significant, heritage, (see subsection 35-523(d)) or mitigation trees, and any cluster or natural areas used to meet the requirements within the project area. Each tree is to be given a unique number which cross references or identifies the trees in the inventory. Warranty trees are to be clearly labeled on plan and inventory.
- iii. The location of property lines, existing site grades and proposed site grades, location and width of existing and proposed streets and alleys, utility easements, driveways, parkways, and sidewalks on or adjacent to the project;
- iv. Approximate centerlines of existing watercourses and the location of the 100-year floodplain; approximate location of significant drainage features and any major topographical features, including environmentally sensitive areas such as steep slopes, regulatory floodplain or riparian buffers with the applicable 60 or 30 foot preserve area.
- v. The location and dimensions of all staging areas and/or designated parking areas for the parking and maintenance of all vehicles, trailers, construction equipment, and related items as well as stockpile areas for the storage of construction supplies and materials; and
- vi. The location of all improvements and their proximity to significant or heritage trees.

(2). The Tree Inventory. A tree inventory shall include:

- i. The diameter inches of and species of each significant, heritage, (see subsection 35-523(d)) or mitigation trees and optional cluster trees; tree number, species, DBH, location, and disposition of each tree;
- ii. Reasons for removal of any such trees;
- iii. Calculations indicating total diameter inches, inches preserved, and percent preservation, with a delineation of significant and heritage trees; and

- iv. The tree designation (significant or heritage tree) and desirability percentage.
- (3). The Tree Protection Notes. The tree protection notes shall include written information containing acceptable activities on the site and within the root protection zone of each tree, cluster or natural area to be preserved to meet the requirements for this standard, including:
- i. Details and graphics illustrating the protective measures such as fencing and alternative construction methods; and
  - ii. Specifications denoting the criteria for methods and materials used for tree protection.

B. Residential:

1. The Tree Survey. For lots located inside the city limits, the developer or property owner must provide a tree survey of the area contained in the front and rear yard setbacks, as established in the lot layout standards of this chapter, of the lots that are to be made ready for construction. For such lots located in a planned unit development, the developer or property owner must provide a tree survey of that portion of the front and rear yards within twenty (20) feet of the front and rear property lines respectively. For lots that are to be made ready for construction located outside the city limits, but in the ETJ and/or a planned unit development, the developer or property owner must provide a tree survey of that portion of the front and rear yards within twenty (20) feet of the front and rear property lines respectively. The tree survey shall, at a minimum, provide the following:
  - i. A vicinity map, project name, street address (or plat #, parcel #, or legal description), date, scale, north arrow and the names, addresses and telephone numbers of the person(s) preparing the plan;
  - ii. A current aerial photograph (a minimum resolution of six-inch pixels) with an overlay of the development, an outline of the tree area(s) and the tree area(s) and understory that are to be preserved to meet the requirement standards;
  - iii. The location of property lines, existing grades and proposed grades, location and width of existing and proposed streets and alleys, utility easements, driveways, parkways, and sidewalks on or adjacent to the project;
  - iv. Approximate centerlines of existing watercourses and the location of the 100-year floodplain; approximate location of significant drainage features and any major topographical features, including environmentally sensitive areas such as steep slopes and riparian buffers with the applicable 60 or 30 foot preserve area.
  - v. The location and dimensions of all staging areas and/or designated parking areas for the parking and maintenance of all vehicles, trailers, construction equipment, and related items as well as stockpile areas for the storage of construction supplies and materials;
  - vi. The location of all improvements and their proximity to significant or heritage trees; and
  - vii. Location, size, and species of all heritage trees.
2. The Tree Inventory. A tree inventory shall include:
  - i. The calculations for the preservation ratio of trees to be preserved; and
  - ii. Reasons for removal of any such trees.
3. The Tree Protection Notes. The tree protection notes shall include written information containing acceptable activities on the site and within the root protection zone of each tree, cluster or natural area to be preserved to meet

the requirements for this standard, including details and graphics illustrating the protective measures such as alternative construction methods.

**35-B125. Tree Permit--Tree Stand Delineation Plan Option.**

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(c) Contents.

- (1) The location of property lines, existing grades and proposed grades, location and widths of existing and proposed streets and alleys, utility easements, driveways, parkways, and sidewalks on or adjacent to the project;
- (2) Approximate centerlines of existing watercourses and the location of the 100-year floodplain; approximate location of significant drainage features and any major topographical features, including environmentally sensitive areas such as steep slopes and riparian buffers with the applicable 60 or 30 foot preserve area.
- (3) Basic descriptive information regarding the vegetation type(s) that are within the existing tree area(s) and within those areas that are to be preserved; and
- (4) Tree protection notes, details and specifications that include the written and graphic information of acceptable and non-acceptable activities on the site and within the tree save areas to be preserved to meet the requirements for this standard.

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**Sec. 35-B127. Tree Permit--Public Project Preservation Plan.**

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(c) Contents. The tree preservation plan shall include the following information:

- (1) A current aerial photographs (where applicable) at a minimum of six-inch pixel with an overlay of the project alignment and all easements;
- (2) A vicinity map, existing grades and proposed grades, location of project lines, and dimensions of the project rights-of-ways and/or all easements, and delineation of the proposed limit of clearance;
- (3) Project name, street address, legal description, date, scale, north arrow and the names, addresses and telephone numbers of the person(s) preparing the plan;
- (4) The location, species and size in diameter inches of each Significant or Heritage trees within the project area as defined in subsection 35-523(d). Each tree is to be given a unique number which cross references or identifies the trees in the inventory;
- (5) Location of any mitigation trees to be planted within the project area;
- (6) Approximate centerlines of existing watercourses and the location of the 100-year floodplain; approximate location of significant drainage features and any major topographical features, including environmentally sensitive areas such as steep slopes and riparian buffers with the applicable 60 or 30 foot preserve area..
- (7) The location and width of existing and proposed streets and alleys, utility easements, driveways, parkways, and sidewalks on or adjacent to the project;
- (8) A summary table indicating the total number, diameter inches, and species of protected trees to be removed within the project area;
- (9) Description of tree and tree clusters that may be impacted by any construction activity or fifteen (15) feet from any proposed improvements;
- (10) Location and dimensions of all staging areas and/or designated parking areas for the parking and maintenance of all vehicles, trailers, construction equipment, and related items as well as stockpile areas for the storage of construction supplies and materials;

- (11) For applications that require boring of utilities, show bore pit areas so that the minimum distance of the bore is outside the canopy of the trees or tree clusters and that the minimum depth of the bore shall be twenty-four (24) inches or greater; and
- (12) Tree and understory preservation notes, specifications, and details.

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