

Definitions

Caliper Inch refers to the diameter of the tree measured at 1 foot above grade level.

Critical Root Zone is the protected area that surrounds the tree and extends from the trunk to the dripline.

Diameter at Breast Height or DBH is the diameter of the trunk measured at 4.5 feet from base of the tree at grade level.

Disturbed, Altered, Removed (in relation to Tree Disposition) refers to any intentional or unintentional action that may result in decline and/or death of the tree, such as but not limited to: pruning of large limbs, topping, destruction of bark leading to scarring on trunk, or activities conducted within the Critical Root Zone (such as construction and/or soil compaction).

Significant Tree includes Oak and Pecans trees documented in the League City Historical Tree Registry that are thirty-eight (38") caliper or greater; ~~s-~~Significant Trees are also classified as Protected Trees.

Significant trees may not be removed unless a taking can be proven.

Invasive Tree refers to a tree that threatens native trees by competing for resources and habitat as noted in the Invasive Tree List

Large Tree is a tree that is protected at twelve inch (12") caliper or greater.

Park Tree includes trees, shrubs, bushes and all other woody vegetation that is planted in public parks and all areas owned by the City, or to which the public has free access as a park.

Street Tree includes trees, shrubs, bushes and all other woody vegetation that is planted between the curb and the sidewalk. These trees include those planted along public roadways, as well as on private streets. Street Trees within subdivisions shall be maintained by the individual property owner and/or the HOA.

Protected Tree includes trees on the Protected Tree List in relation to type and caliper requirements. Protected Trees are classified as Small Protected Trees and Large Protected Trees based upon typical growth cycles and includes all trees classified as Significant Trees.

Replacement Cost represents the cost to replace existing Protected Trees proposed to be removed from a site as measured in caliper inches.

Small Tree is a tree that is protected at six inch (6") caliper or greater.

Tree Canopy represents the total vertical transect of all trees on a single site or within a designated area beginning at DBH and extending to the crown of all trees within the area.

Sec. 102-12. Tree Preservation and Provisions, Tree Maintenance, and Street Trees

Tree Preservation and Provisions

- (a) **Applicability.** A Tree Disposition Permit shall be required prior to disturbance on any public or private property on which one or more trees will be disturbed, altered or removed that are six inch (6") caliper or greater for Small Trees and twelve inch (12") caliper or greater for Large Trees, except:
- (1). the site is located on a lot of record on which a single family residence legally exists and/or the site has an agricultural exemption through Galveston County Appraisal
 - (2). **Damaged Tree.** A tree disposition permit shall be issued to remove a Protected Tree if the tree is:
 - i. injured, dying, diseased or infested with harmful insects to the extent that it is not likely to survive as determined and documented by the City Arborist; or
 - ii. in danger of falling, interfering with utility service or other creating a hazardous or dangerous condition as determined and documented by the City Arborist.
 - (3). **Dangerous Conditions.** If the owner determines that an emergency situation exists that requires the immediate removal of a Protected Tree to protect the safety of persons or property, the owner may remove the tree without a Tree Disposition Permit, but only to the extent necessary to eliminate the dangerous situation. However, the owner must:
 - i. apply for a Tree Disposition Permit on the next working day; and
 - ii. provide documentation of the dangerous condition such as, but not limited to, a letter from a Certified Arborist and/or digital images
- (b) **Tree Disposition Permit.**
- (1) A Tree Disposition Permit shall be provided following submission and approval of a Tree Disposition Plan by the City Arborist.

- (2) A Tree Disposition Plan shall be certified by a licensed surveyor, a Certified Arborist or registered landscape architect.
- (3) A Tree Disposition Plan shall include identification of:
- i. Protected trees to be disturbed, altered, or removed from the site according to location, type and size;
 - ii. location and total caliper inches of invasive species to be removed, if seeking credit for elimination of invasive species;
 - iii. areas of construction or other activities to be performed within the Critical Root Zone of a Protected Tree, including site plans documenting measures to be taken for protection of each impacted Critical Root Zone;
 - iv. tables summarizing the total caliper inches of Protected Trees to be removed in size categories as follows:
 1. for Small Protected Trees:
 - a. six inch (6") to nine inch (9") caliper;
 - b. greater than nine inch (9") to twelve inch (12") caliper; and
 - c. greater than twelve inch (12") caliper.
 2. for Large Protected Trees
 - a. twelve inch (12") to fifteen inch (15") caliper;
 - b. greater than fifteen (15") to eighteen inch (18") caliper; and
 - c. greater than eighteen inch (18") caliper.
 - v. table summarizing plan for tree replacement according to percent and total caliper inches to be replaced on-site, off-site, or compensated through Payment in Lieu of replacement;
 - vi. total replacement caliper inches of Protected Trees prior to application of any available incentives;
 - vii. incentives to be applied for protection of natural and sensitive areas or elimination of invasive species;

viii. proposed plan for tree replacement by location, type and size; and

(c) Tree Replacement Calculation.

- (1) All trees that are not Significant Trees may be removed and replaced in accordance with the requirements of this Section, however it is preferred that, to the extent practical, Protected Trees remain in place. If trees are to be removed, then tree replacement calculations are based upon the following principles:
 - i. greater value is placed on Protected Trees of greater size, therefore caliper inch replacement is increased as the size of each tree increases;
 - ii. greater value is placed on maintaining trees on-site, therefore caliper inch replacement is increased if replacement occurs off-site or through Payment in Lieu of replacement;
 - iii. greater value is placed on maintaining large or interconnected conservation areas, therefore exceptions and incentives are available to maintain these areas;
 - iv. invasive species harm the native tree canopy, therefore incentives are available for elimination of species noted in the Invasive Tree List in this Section; and,
 - v. protection and maintenance of the community's tree canopy is more critical than equal replacement of individual trees, therefore replacement calculations result in a total number of caliper inches to be replaced as measured following application of the above principles.
- (2) Each Protected Tree to be removed from the site shall be measured at Diameter at Breast Height (DBH) to determine size according to caliper inches.
- (3) The applicant may choose from three methods of tree replacement as noted in Table XX as follows:
 - i. On site replacement in accordance to all standards and requirements of the City of League City;
 - ii. Off site replacement in parks, dedicated conservation areas or selected rights-of-way at the direction of the City Planner or City Arborist; or
 - iii. Payment in Lieu of replacement to the City Reforestation and Tree Management Fund to be used for public reforestation and maintenance of Protected Trees on public property or Significant Trees on public or private property.

(4) Caliper inch replacement of each Protected Tree shall be in accordance with [Table XX](#).

Table XX.		
Caliper Inch Replacement of a Protected Tree		
	On Site Replacement	Off Site Replacement or Payment in Lieu
Small Trees		
6" to 9"	100 percent	120 percent
9.1" to 12"	100 percent	13 40 percent
Greater than 12"	130 percent	140 percent
Large Trees		
12" to 15"	10 0 percent	12 90 percent
15.1" to 18"	100 percent	13 40 percent
Greater than 18"	130 percent	140 percent

(5) ~~Payment in Lieu shall be calculated at a rate of \$250.00 per caliper inch. Off site replacement or Payment in Lieu of replacement shall result in a ten percent (10%) increase in replacement cost for the total caliper inches of not to be replaced on site.~~

(6) ~~Replacement trees must be planted within a period of one (1) year from the date the Tree Disposition Permit is issued. If the replacement trees are not planted within this time, Payment in Lieu will be required to satisfy the mitigation requirements. The applicant is responsible for contacting the City Arborist for a follow-up inspection to make sure that the replacement trees have been planted and the mitigation requirements have been met.~~

(7) ~~6~~ The City Planner or City Arborist may reduce tree replacement requirements for projects in which Invasive Trees are removed in accordance with standards established by the City Arborist. Off site removal of Invasive Trees may be considered at the direction of the City Arborist. Reduction of caliper inch replacement may be granted in accordance with [Table XY](#).

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Table XY.

Reduction of Caliper Inch Replacement for Removal of Invasive Trees

Caliper Inches of Invasive Trees Removed	Percent Reduction in Total Caliper Inches
50" to 150"	5 percent
150.1" to 300"	10 percent
300.1" to 500"	15 percent
Greater than 500"	20 percent

~~(7) Fees associated with Payment in Lieu of replacement shall be in accordance with a fee schedule established annually by the City Arborist and approved by City Council.~~

(d) Tree Replacement Standards

- (1) Replacement trees shall be a minimum of three inches (3") in caliper measured one (1) foot above grade and seven feet (7') in height.
- (2) Replacement trees shall be selected from the Protected Tree List according to available planting space and specific environmental requirements of the tree.
- (3) Small Trees shall be planted at a minimum of fifteen feet (15') apart, and Large Trees shall be planted at a minimum of thirty feet (30') apart unless otherwise approved by a Certified Arborist or the City Arborist.
- (4) Trees shall be planted according to tree planting standards established by the International Society of Arboriculture.

~~(54)~~ Trees requiring support systems shall be secured according to type and size. Tree staking, cabling, and other materials shall remain in place only until the tree has been established in a time period not to exceed one (1) year.

(e) Tree Preservation Standards

- (1) No permit may be issued for disturbance, alteration, or removal of a Significant Tree unless:

~~i. the Owner establishes that preserving the Significant Tree constitutes an unreasonable financial hardship that exceeds seventy percent (70%) of the value of the tree accrued over a period not to exceed two (2) years; or~~

~~ii. the City Arborist will determine if the tree is diseased, damaged and/or constitutes a safety hazard, and/or ~~damaged to exceed seventy percent (70%) of the value of the tree.~~~~

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(2) Maintenance of a Protected Tree shall be in accordance with practices, such as but not limited to large limb pruning and canopy thinning, as approved by a Certified Arborist or the City Arborist.

(3) The area within the Critical Root Zone of a Protected Tree shall be preserved as follows:

- i. No materials intended for construction or waste materials accumulated due to grading, excavation or demolition.
- ii. No equipment shall be cleaned or other liquids deposited or allowed to flow overland and/or runoff into the Critical Root Zone.
- iii. No vehicular or construction equipment parking shall take place other than on an existing paved street.
- iv. No grade changes shall be allowed.
- v. A protective barrier, such as a temporary fence, shall be installed to protect the Critical Root Zone prior to and throughout the duration of any work and/or improvements that occur on a property containing a Protected Tree.

(4) Any utilities, which are installed below the canopy of a Protected Tree, shall be bored, not trenched, and should be indicated as such on the Tree Disposition Plan.

(f) Permit Validity. A Tree Disposition Permit ~~issued in conjunction with a building permit, subdivision plan or site plan shall be valid for the period of the building permit or site plan. A Tree Disposition Permit issued in conjunction with land disturbance other than that associated with a building permit, subdivision plan or site plan shall be valid for a period of ~~six~~ (6+) months year from the date beginning upon receipt of the Tree Disposition Permit ~~is issued.~~~~

(g) Non-liability of City. Nothing in this Chapter shall be deemed to impose any liability for damages or a duty of care and maintenance upon the City or upon any of its officers or employees. The person in possession of any public property or the owner of any private property shall have a duty to keep the

tree(s) upon their property and under their control in a safe and healthy condition. Except as otherwise provided in this Section, any person who feels a tree located on property possessed, owned or controlled by them is a danger to the safety of any persons or to structural improvements on-site or off-site, shall have an obligation to secure the area around the tree or support the tree as appropriate to safeguard both persons and improvements from harm.

(h) Enforcement and Restitution Related to Tree Disposition. Any person who intentionally disturbs, alters, or removes a Protected Tree without appropriate permits is responsible for proper restitution and is required to pay restitution to the City Reforestation and Tree Management Fund to be calculated by the City Arborist.

(1) To calculate replacement costs associated with removal of trees without appropriate permits the City Arborist shall:

- i. assume that each tree on site is a Large Protected Tree measured at 18 caliper inches with an individual tree canopy of 2,200 square feet;
- ii. determine total caliper inches to be replaced by measuring the total tree canopy covering the site prior to removal of trees using aerial imagery acceptable to the City of League City; and,
- iii. calculate replacement cost in accordance with Payment in Lieu requirements of this Section with an additional ~~one hundred twenty percent~~ (1020%) penalty.

(2) Restitution for disturbance or alteration of any Protected Tree without appropriate permits shall be:

- i. equal to Payment in Lieu requirements of this Section for Protected Trees that are not Significant Trees, as if the Protected Tree had been removed;
- ii. equal to Payment in Lieu requirements of this Section for Protected Trees in the case of Significant Trees with an additional ~~one hundred fifty~~ percent (1050%) penalty; or
- iii. a percentage of the restitution requirements of this Section, as established by the City Arborist, if the restitution is determined to be disproportionate to the level of disturbance or alteration.

(3) Restitution for removal of a Significant Tree without appropriate permits shall be equal to the value of the tree, as determined by the City Arborist, with an additional ~~two hundred fifty~~ percent (2050%) penalty.

(i) Fees. The City Planner shall submit for approval by motion of City Council a schedule of fees that shall be paid pursuant to this Section. Payment of any applicable fees is a condition of the processing of any application, renewal or amendment of a Tree Disposition Permit.

(j) Protected Tree List.

Large Trees	
Common Name	Botanical Name
American Sycamore	Plantanus occidentalis
Bald Cypress	Taxodium distichum
Bur Oak	Quercus macrocarpa
Chinquapin Oak	Quercus muehlenbergii
Live Oak	Quercus virginiana
Loblolly Pine	Pinus taeda
Longleaf Pine	Pinus palustris
Mexican Sycamore	Plantanus mexicana
Nutall Oak	Quercus nutallii
Overcup Oak	Quercus lyrata
Pecan	Carya illinoenses
Post Oak	Quercus stellata
Red Bay	Persea borbonia
Red Maple	Acer rubrum
River Birch	Betula nigra
Sawtooth Oak	Quercus acutissima
Shumard Oak	Quercus shumardii

Southern Magnolia	Magnolia grandiflora
Southern Red Oak	Quercus falcate
Swamp Chestnut Oak	Quercus michauxii
Sweet Bay Magnolia	Magnolia virginiana
Trident Red Maple	Acer Rubrum 'tridens'
Water Oak	Quercus nigra
White Oak	Quercus alba

Small Trees	
Common Name	Botanical Name
Chinese Pistache	Pistacia chinensis
Eastern Redbud	Cercis canadensis
Little Gem Magnolia	Magnolia grandiflor 'little gem'
Mexican Buckeye	Ungnadia speciosa
Mexican Redbud	Cercis canadensis 'mexicana'
Mexican Plum	Prunus mexicana
Texas Mountain Laurel	Sophoria secundiflora
Texas Pistache	Pistacia texana
Texas Persimmon	Diospyros texana
Texas Redbud	Cercis canadensis 'texensis'

(k) Invasive Tree List.

Common Name	Botanical Name
Chinaberry	Melia azedarach
Chinese Parasoltree	Firmiana simplex
Chinese Tallow	Triadica sebifera
Glossy Privet	Ligustrum lucidum
Golden Rain Tree	Koelreuteria paniculata
Lead Tree	Leucaena leucocephala
Mimosa/Silk Tree	Albizia julibrissin
Princess Tree	Paulownia tonentosa
Russian Olive	Elaeagnus angustifolia
Saltcedar	Tamarix spp.
Tree of Heaven	Ailanthus altissima

Tree Maintenance

- (a) *Maintenance of trees within the rights-of-way.* The owner(s) of any lot with frontage along a public street must maintain the street trees and other landscaping growing along the frontage or in the street right-of-way adjacent to the lot, including in any park or parking strip between the property line and the street line. The term owner also includes ownership by a homeowner's association.
- (b) *Tree Topping,* Topping (also referred to as heading, stubbing, rounding or dehorning) of any Street Tree, Park Tree, or other tree on public property is prohibited. Topping involves the severe cutting back of limbs to stubs larger than three inches in diameter within the tree's crown to such a degree so as to remove the normal canopy and disfigure the tree. The City Manager, upon the recommendation of the City Arborist, may specifically authorize in writing

topping of a specific tree, based on clear evidence of extraordinary circumstances that justify topping. Circumstances, may include but not be limited to, trees severely damaged by storms or other causes, or certain trees under utility wires or other obstructions where other pruning practices are impractical.

- (c) *Pruning, Corner Clearance.* The owner(s) of any tree overhanging any street or right-of-way within the City shall prune the branches so that such branches shall not obstruct the light from any street light, or obstruct the view of any street sign or intersection and so that there shall be a clear space of fifteen feet (15') above the surface of the street and/or sidewalk. Pruning includes crown cleaning, thinning, raising, reduction, and restoration. The pruning of trees must comply with tree trimming guidelines in the American National Standard for Tree Care Operations: Tree Shrub and Other Woody Plant Maintenance Standard Practices, or National Arborist Association's "Standards for Pruning of Shade Trees." Said owners shall also remove all dead, diseased or dangerous trees, or broken or decayed limbs which constitute a menace to the safety of the public.

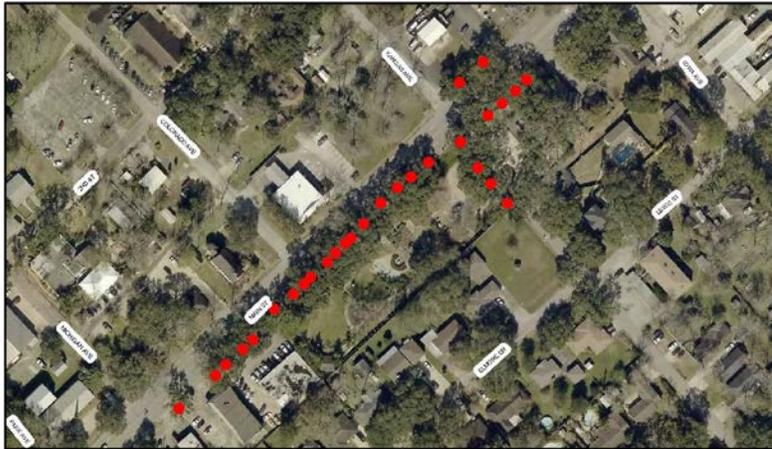
If the property owner fails to prune trees to provide clearances stated, the City shall notify in writing the owners of such trees. Pruning shall be done by said owners at their own expense within ten days after the date of service of notice. In the event of failure of owners to comply with such provisions, the City shall have the authority to prune such trees and charge the cost of removal to the owners.

- (d) *Removal of Dead or Diseased Trees on Private Property.* A Tree Disposition Permit is required to remove a Protected Tree (in accordance with Section 102-12, Tree Preservation and Provisions Ordinance). The City shall have the right to cause the removal of any dead or diseased trees on private property within the city, when such trees constitute a hazard to life and property, or harbor insects or disease which constitute a potential threat to other trees within the city. The City shall notify in writing the owners of such trees. Removal shall be done by said owners at their own expense within thirty (30) days after the date of service of notice. In the event of failure of owners to comply with such provisions, the City shall have the authority to remove such trees and charge the cost of removal to the owners.

~~(d)~~(e) Emergency Removal Provision. If the City Arborist determines that a tree poses a safety concern, the City may secure the surrounding area and/or remove the hazardous tree.

~~(e)~~(f) Removal of Stumps. All stumps of street and park trees shall be removed below the surface of the ground or ground with a stump grinder so that the top of the stump does not project above the surface of the ground.

~~(f)~~(g) Public Tree Care. The City currently maintains Live Oak trees in the right-of way on Main Street. The locations are as follows; twenty-two Live Oaks on the south side of Main Street between Michigan and Kansas, extending down Kansas to the southern-most boundary/fence line of Helen's Garden; four Live Oaks on the southside of Main street between Kansas and Iowa and two Live oaks on the north side of Main street between Kansas and Iowa. See the attached map.



The City shall have the right to plant, prune, maintain and remove trees, plants and shrubs within the lines of all streets, alleys, avenues, lanes, squares, rights-of-way and on property owned by the City, as necessary to insure public safety or to preserve or enhance the symmetry and beauty of

such public property. The City reserves the right to allow the City ~~Manager or~~ Arborist to authorize the pruning or removal of a street tree or park tree when immediate pruning or removal is necessary to protect against an imminent threat of substantial injury to persons or damage of property.

Street Trees

- (a) *Minimum Distance from Sidewalks and Curbs.* Trees shall be centered in the planting strip between the sidewalk and the street curb. If centering within the planting strip is not possible or desirable due to design considerations, the tree must be located at least two feet from the sidewalk edge or the curb edge. Trees within the City rights-of-way shall not be planted where the rooting space is less than four feet (4') in width without prior approval of the City Arborist. The minimum width of a planting site for each tree will be governed by the approved street tree list. Trees that commonly produce a large-buttress root system shall be planted in a site greater than ten feet (10') wide (i.e., *Quercus* species).

Tree root barriers shall be installed when new trees are planted to prevent uncontrollable spread of tree roots that may cause damage to hardscape/ infrastructure (sidewalks, driveways, storm sewers, streets). Root barriers may be either linear or surround in form, depending on the hardscape/infrastructure to be protected, and must be installed at a minimum depth of thirty inches (30").

On public streets without sidewalks, trees shall be located to accommodate future sidewalk placement and, current and future utility line corridors.



(b) *Minimum Street Tree Planting Clearances.*

<u>Feature</u>	<u>Small Tree</u> <u>(up to 35' height)</u>	<u>Medium Tree</u> <u>(up to 60' height)</u>	<u>Large Tree</u> <u>(over 60' height)</u>
Sidewalks	2 feet	3 feet	4 feet
Driveways	5 feet	5 feet	10 feet
Fire Hydrants	5 feet	5 feet	5 feet
Intersections	35 feet	35 feet	35 feet
Water Meters	5 feet	5 feet	5 feet
Utility Boxes	5 feet	5 feet	5 feet
Utility Poles	5 feet	10 feet	10 feet
Street Lights	10 feet	20 feet	30 feet
Stop Signs	35 feet	35 feet	35 feet

Regulatory Signs	Cannot block sign
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Also see Chapter 98 "Shrubs and Other Vegetation at Intersections," Article III, Sections 98-111 through 98-115.

(c) *Minimum Distance from Buried Utility Lines.* If buried utility lines traverse the planting strip, the following minimum distances apply:

8"-10" water and sewer line 10 feet

12"-16" water and sewer line 15 feet

18" + water and sewer line 20 feet

All other services 10 feet

(d) *Linear Spacing.* Trees shall be placed an average of every thirty feet (30'). Depending on the size, species, and variety, the City Arborist may approve planting distances which may be as close as ten feet (10') and as far as forty feet (40') to fifty feet (50') based on the size and growth habit of the tree.

(e) *Medians.* No tree shall be planted in any median that is less than ten feet (10') in width.

(f) *Overhead Utility Lines.* No tree with the potential of reaching a mature height of more than fifteen feet (15') shall be planted in the right-of-way under overhead wires.

(g) *Street Tree List.* The Street Tree list includes suggested species for street trees. The City Arborist may approve trees that do not appear on this list.

Small Trees	
Common Name	Botanical Name

American Holly	<i>Ilex opaca</i>
Bottlebrush	<i>Callistemon</i> sp.
Eagleston Holly	<i>Ilex</i> x <i>attenuate</i> 'Eagleston'
Possumhaw Holly	<i>Ilex decidua</i>
Texas Redbud	<i>Cercis canadensis</i> 'Texensis'
Vitex	<i>Vitex agnus-castus</i>
Yaupon Holly	<i>Ilex vomitoria</i>

Medium Trees	
Common Name	Botanical Name
Cathedral Oak	<i>Quercus virginiana</i> 'Cathedral'
Chinese Elm	<i>Ulmus parvifolia</i>
Chinese Pistache	<i>Pistacia chinenses</i>
Crape Myrtle	<i>Lagerstroemia indica</i>
Eve's Necklace	<i>Sophora affinis</i>
Highrise Oak	<i>Quercus virginiana</i> 'Highrise'
Little Gem Magnolia	<i>Magnolia grandiflora</i> 'Little Gem'
River Birch	<i>Betula nigra</i>
Sweetbay Magnolia	<i>Magnolia virginiana</i>
Teddy Bear Magnolia	<i>Magnolia grandiflora</i> 'Southern Charm'

Large Trees	
Common Name	Botanical Name
Bald Cypress	<i>Taxodium distichum</i>
Black Walnut	<i>Juglans nigra</i>
Bur Oak	<i>Quercus macrocarpa</i>
Cedar Elm	<i>Ulmus crassifolia</i>
Crabapple	<i>Malus sp.</i>
Live Oak	<i>Quercus virginiana</i>
Loblolly Pine	<i>Pinus taeda</i>
Mexican Plum	<i>Prunus mexicana</i>
Montezuma Bald Cypress	<i>Taxodium mucronatum</i>
Mulberry	<i>Morus sp.</i>
Pecan	<i>Carya illinoensis</i>
Shumard Oak	<i>Quercus shumardii</i>
Slash Pine	<i>Pinus elliotii</i>
Southern Magnolia	<i>Magnolia sp.</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Texas Palmetto	<i>Sabal texana</i>
Texas Persimmon	<i>Diospyros texana</i>
Texas Red Oak	<i>Quercus texana</i>
Water Oak	<i>Quercus nigra</i>