## SEC. 6.3.004 PROTECTED & HERITAGE TREES

- (a) Tree Determinations: Protected or heritage tree designations are determined by measuring at the height of the tree at 4.5 feet above the ground or Diameter at Breast Height (DBH), for various tree species for purposes of applying the Standards of this section. Multi-trunk trees are to be measured with the largest trunk counting for full DBH inches plus 50 percent of the DBH sum of the additional trunks, if the tree is classified as protected or heritage.
  - When the trunk branches or splits less than 4.5 feet from the ground, measure the smallest circumference below the lowest branch. See Figure 6.3B. If the tree has a branch or a bump at 4.5 feet, it is better to measure the diameter slightly below or above the branch/bump.
- (b) No grading or tree removal shall take place on any undeveloped property without obtaining a permit unless exempted from this code

# (c) Tree Survey

- (1) A tree survey and preservation plan for all areas of soil disturbance and construction activity including all work within rights-of-way and easements shall be submitted within a zoning concept scheme application. If rezoning is not applicable for a property, then this document shall be submitted at the time of public improvement plans or site development plans, whichever is first.
- (2) The tree survey and preservation plan shall be approved and signed by an ISA certified Arborist and licensed surveyor and the information submitted shall not be older than two years.
- (3) The tree survey and preservation plan must be reviewed
- (4) The requirement of a tree survey and preservation plan may be appealed to the Planning and Zoning Commission. If sufficient information is provided to review the various provisions of this Code and the Commission determines that a tree survey and preservation plan is not necessary, the Commission may recommend that this requirement may be waived by the City Council the City Council shall make the final decision on whether a tree survey and preservation plan is necessary for development.

## (d) Protected Trees:

- (1) Tree species listed in the Preferred Plant List in the B3 Technical Manual with a <del>13 caliper inch 10-inch caliper</del> diameter or greater measured at the DBH.
- (2) Protected trees must be preserved, protected, and integrated in the Development of the property.
- (3) Proposed Removal of healthy protected trees must be submitted for approval to the DRC.

(4) Granted Removal of protected trees shall be replaced by planting trees from the Preferred Plant List in the B3 Technical Manual, on the property equal to the total caliper inches of the trees removed, measured at 12 inches in height from the ground.

# **Option 1 Strict**

i. Said replacement trees shall be a minimum of four-inch (4") diameter (measured at twelve [12"] above ground) and seven (7') in height when planted.

Option 2 Moderate (Parks board recommendation, italicized shows parks board changes)

i. A sufficient number of trees shall be planted to equal, in caliper, the caliper of the tree removed. Said replacement trees shall be a minimum of three (3) inches caliper when planted.

ii. If an ISA certified arborist deems a replacement tree as dead or dying within five years of the date it was planted, it must be replaced by another replacement tree in compliance with this code.

- (5) Alternative compliance may be submitted to the DRC for approval or a fee in lieu shall be paid if the Site cannot meet the Standards of this section. See the City Fee Schedule for tree replacement cost.
- (6) This mitigative measure is not meant to supplant good site planning. Tree replacement will be considered only after all design alternatives, which could save more existing trees, have been evaluated and reasonably rejected.

### (e) Heritage Trees:

- (1) Tree species listed in Preferred Plant List in the B3 Technical Manual with a 24 caliper inch circumference or greater measured DBH.
- (2) Heritage trees must be preserved, protected, and integrated in the Development of the property.
- (3) Proposed Removal of healthy heritage trees must be submitted for approval to the DRC.
- (4) Granted Removal of heritage trees shall be replaced by planting trees from the Preferred Plant List in the B3 Technical Manual, on the property equal to the total caliper inches removed, measured at 12 inches in height from the ground.

#### Option 1 Strict

i. Said replacement trees shall be a minimum of four-inch (4") diameter (measured at twelve [12"] above ground) and seven (7') in height when planted.

Option 2 Moderate (<u>Parks board recommendation, italicized shows parks board changes</u>)

- i. A sufficient number of trees shall be planted to equal, in caliper, the caliper of the tree removed. Said replacement trees shall be a minimum of three (3) inches caliper when planted.
- ii. If an ISA certified arborist deems a replacement tree as dead or dying within five years of the date it was planted, it must be replaced by another replacement tree in compliance with this code.
- ii. A replacement tree that dies within two years of the date it was planted must be replaced by another replacement tree in compliance with this Code.
- (5) Alternative compliance may be submitted to the DRC for approval or a fee in lieu shall be paid if the Site can not meet the Standards of this section. See the City Fee Schedule for tree replacement cost.
- (6) This mitigative measure is not meant to supplant good site planning. Tree replacement will be considered only after all design alternatives, which could save more existing trees, have been evaluated and reasonably rejected.
- (g) Tree Preservation Credits.
- (1) For every healthy protected tree ten (10) inches caliper or larger) located outside of the flood plain that is preserved, the developer shall be given credit, according to the following chart. When interior parking lot landscaping is also required, only those trees preserved in the parking area shall be considered for credit for the parking area, according to the following:
  - i. Trees ten (10) inches to twenty-four (24) inches caliper: one and one-half (1½") inches credit for each one (1) inch preserved.
  - ii. Trees over twenty-four (24) inches caliper: Two (2) inches credit for each one (1) inch preserved.
  - iii. Healthy unprotected trees, over twelve (12) inches in size, located outside the flood plain, may be considered for tree credits only when individually field inspected and approved by a designated representative of the City of Bastrop.

# (h) Replacement of Trees.

- (1) In the event it is necessary to remove a tree six (6) inches caliper or larger, the developer, builder or property owner shall be required to replace the tree to be removed with comparable or better spacious trees somewhere within the planned development or subdivision. The City Council may allow such trees to be located to other areas in the City if it is deemed necessary by City staff, and space is available. Otherwise, the developer, builder or property owner shall, at the City's option, escrow funds sufficient to meet the requirements of this Ordinance
- (2) Trees planted to satisfy landscape requirements that are indicated herein, and successfully transplanted trees, shall count toward the tree replacement

requirements, inch for inch. Transplanted trees must successfully survive one (1) full year after planting to count as a preserved tree.

# (f) Exempt Trees:

- (1) Any protected or heritage trees determined to be diseased, overly-mature, dying or dead, by an ISA certified arborist are exempted from the Standards of this Code.
- (2) All invasive species identified by an ISA certified arborist will receive invasive species credits, ½ credit for every inch of invasive tree being removed.

# Definitions to be added to Chapter 10:

Native Plants - are plants that have been growing in a particular habitat and region, typically for thousands of years or much longer. Also called indigenous, they are well adapted to the climate, light, and soil conditions that characterize their ecosystem. Within this system, they have evolved tremendously important co-evolutionary relationships with the other plants, animals, fungi, and bacteria present, and these very complex relationships keep that particular ecosystem stable.

Invasive Plants - plants that are not native to a particular habitat, and once introduced, they move aggressively into a habitat and monopolize resources such as light, nutrients, water, and space to the detriment of other species.

ISA-Certified Arborist - International Society of Arboriculture tested and certified to have a professional level of knowledge and skill in the field of arboriculture.

# Technical Manual Changes (Tree list recommended by Parks Board)

American Elm L Bald Cypress 7 Bigtooth Maple / Black Jack Oak C Box Elder /	tive Trees Ulmus americana Taxodium distichum Acer grandidentatum	Ash (all except Texas Ash)	<mark>/asive Trees</mark> Fraxinus Sp.	Apple	e Non-Native Plants
Bald Cypress  Bigtooth Maple  Black Jack Oak  Box Elder	Taxodium distichum				Malus sp.
Bigtooth Maple  Black Jack Oak  Box Elder		Australian Pine	Casuarina equisetifolia	Crepe Myrtle	Lagerstroemia sp.
Black Jack Oak Box Elder		Beach Sheoak	Casuarina equisetifolia	Fig	Ficus sp.
Box Elder	Quercus marilandica	Bottlebrush Tree	Melaleuca quinguenervia	Grape	Vitis Sp.
	Acer negundo	Brazilian Pepper Tree	Schinus tevabintifolius	Loguat	Eriobotrya japonica
	Quercus macrocarpa	Camphor Tree	Cinnamomum camphora	Peach, Plum	Prunus sp.
Cedar Elm l	Ulmus crassifolia	Carrotwood Tree	Cupaniopsis anacardiodes	Pear	Pyrus sp.
	Quercus muhlenbergii	China Berry	Melia azedarach	Pomegranate	Punica granatum
	Chilopsis linearis	Chinese Elm	Ulmus pumila	Rose	Rosa sp.
	Populus deltoides	Chinese Parasol	Firmiana simplex	Zoysia Grass	Zoysia sp.
	Juniperus virginiana	Chinese Parasol Tree	Firmiana simplex	Loysia Grass	Loyola op.
	Sideroxylon lanuginosum	Chinese Pistache	Pistacia chinensis		
	Celtis laevigata	Chinese Tallow	Triadica sebifera		
	Quercus virginiana	Chinese Wisteria	Wisteria sinensis		
	Pinus taeda	Golden Rain Tree	Koelreuteria paniculata	Native La	andscaping Plants
	Ungnadia speciosa	Ligustrum, Privet	Ligustrum lucidum, Ligustrum sp.	Evergreen Sumac	Rhus virens
	Prunus mexicana	Mimosa Tree	Albizia julibrissin	Eve's Necklace	Styphnolobium affine
	Maclura pomifera	Paper Mulberry	Broussonetia papyrifera	Flameleaf Sumac	Rhus lanceolata
	Carya illinoinensis	Peepul Tree	Ficus religiosa	Mountain Laurel	Sophora secundiflora
	Quercus stellata	Popinac	Leucaena leucocephala	Possumhaw	llex decidua
	Parkinsonia aculeate	Princess Tree	Paulownia tomentosa	Red Buckeye	Aesculus pavia
· · · · · · · · · · · · · · · · · · ·	Cercis canadensis var.	Fillicess free	Faulowilla tomentosa	Red buckeye	Aesculus pavia
INEU DUU	texensis	Russian, Autumn Olive	Elaeagnus unbellata	Southern Wax Myrtle	Myrica cerifera
	Acer rubrum	Salt Cedar	Tamarix sp.	Texas Buckeye	Aesculus glabra
	Morus rubra	Tree of Heaven	Ailanthus altissima	Texas Lantana	Lantana urticoides
	Cornus drummondii	True Cedar Tree	Cedrus sp.	Yellow Bells	Tecoma stans
	Catalpa bignonioides	Vitex	Vitex agnus-castus		
•	Platanus occidentalis	Bradford pear	Pyrus calleryana		
,	Fraxinus texensis	·	caping Plants and Grasses		
	Carya texana	Japanese Honeysuckle	Lonicera japonica	Native Landscaping Grasses	
	Diospyros texana	Nandina	Nandina domestica	Buffalo Grass	Bouteloua dactyloides
	Quercus texana	Lantana	Lantana camera	Curly Mesquite	Hilaria berlangeri
	Juglans microcarpa	Bermuda Grass	Cynodon dactylon	Little Bluestem	Schizachyrium scoparium
	Zanthoxylum hirsutum	Buffelgrass	Cenchrus ciliaris	Inland Sea Oats	Chasmanthium latifolium
	Sapindus saponaria var.	Duncigrass	OCHOHUS CHIANS	mand oca oats	Onasmantinum latifolium
y	drummondii	Common Reed	Phragmites austalis	SideOats Gramma	Bouteloua curtipendula
	Prunus serotina	English Ivy	Hedera helix	Muhly Grasses	Muhlenbergia sp.
	Ulmus alata	Giant Reed	Arundo donax	Eastern Gamma Grass	Tripsacum dactyloides
		Bamboo	Phyllostachys sp., Bambusa sp.	Indian Grass	Sorghastrum nutans
		Multiflora rose	Rosa multiflora		
		Rose of Sharon	Hibiscus syriacus		
		Annual Bluegrass	Poa annua		
		Carpet Grass	Axonopus sp.		
		Rye Grass	Lolium Sp		
		red Fescue	Festuca rubra		
		154 1 65046	, octava rabra		

# Appendix A-

Tree Mitigation Fee- \$600 per 4 caliper inch Tree \$150 per 1 caliper inch. (Parks Board recommends increasing fee to \$250)

# Penalty.

Option 1 - Strict (Parks Board Recommendation with Changes italicized)

Penalties for Unauthorized Removal of Trees. If any tree is removed from any real property, including injury to a tree resulting from the owner's failure to follow required tree protection guidelines, that results in or may reasonably be expected to result in the death of the subject tree(s), the property owner shall be determined to be in violation of this Ordinance.

Any person or corporation violating any of the provisions of this ordinance shall upon conviction be fined the sum of two thousand dollars (\$2,000.00) per day; (In addition Certificate of Occupancy shall not be issued until the fees/penalties are paid in full.) and each and every day that the provisions of this ordinance are violated shall constitute a separate and distinct offense. In addition to the said penalty provided for, the right is hereby conferred and extended upon any property owner owning property in any district where such property owner may be affected or invaded by a violation of the terms of the ordinance to bring suit in such court or courts having jurisdiction thereof and obtain such remedies as may be available at law and equity in the protection of the rights of such property owners.

## Option 2-Moderate

- 1. Any person, firm, corporation, agent, or employee thereof who violates the provisions of this Code by removing trees without a permit shall be guilty of a misdemeanor and upon conviction hereof shall be fined in an amount not to exceed two hundred and fifty dollars (\$250.00) per caliper inch of the tree(s) removed not to exceed two thousand dollars (\$2,000) per incident.
- 2. A person firm, corporation, agent, or employee thereof violates any other provisions of this Code shall be guilty of a misdemeanor and upon conviction hereof shall be fined a minimum of five hundred dollars (\$500.00) but not to exceed two thousand dollars (\$2,000) per incident. The unlawful injury, destruction or removal of each protected tree shall be considered a separate incident and each incident subjects the violator to the maximum penalty set forth herein per tree.