

SECTION 66.32 CRITERIA MANUAL

City OF Piney Point, Texas

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IMPORTANT NOTICE

This manual is to be used and interpreted in accordance with the City's Ordinance on urban forest preservation and enhancement. Unless the context indicates that another meaning is intended, terms used in this manual have the same meanings as in said Ordinance.

SECTION 66.46: ON SITE TREE SURVEY STANDARDS **REQUIRED DATA FOR TREE SURVEY**

The Tree Disposition Plan must be prepared and signed by a degreed Forester. Required Tree Data for a Tree Disposition Plan must be obtained from an on-the-ground survey. The Tree Disposition Plan must include tree locations, trunk diameters, types (species), and crown area (Critical Root Zone), as explained below:

1. Location

A. Tree Surveys must be as accurate as possible, but need not be certified, but must be accurate to comply with the City Tree Ordinance and construction specifications.

B. Trees on City easements adjoining the site must be surveyed.

Trees with 30% or more of their Critical Root Zones extending from an adjoining property must be surveyed.

2. Tree Identification on Site

Trees must be tagged & numbered on site. Orange plastic tape placed around the trunk for removal. Green plastic tape placed around the trunk for protection. The tree numbers must be consistent to tree numbers noted on the survey & the tree report submitted.

3. Diameter Measurements

Diameter measurement shall be the distance around the perimeter of the tree trunk as measured four and one-half feet (4.5') above the ground using an ordinary measuring tape, if a diameter tape is not available. For multiple-trunk trees, the trunk diameter is deemed to be equal to the diameter of the largest trunk plus half the diameter of each additional trunk. Measurements should be accurate to the nearest 1 inch. For conversion from circumference to diameter can be divided by 3.142.

4. Type (Species)

Tree types should be accurate to the species level be listed by both common names and botanical names (e.g. Post Oak or *Quercus stellata*.)

5. Critical Root Zone; Crown

The Critical Root Zone (CRZ) means, for any given tree, the area within a circle centered on the trunk location. The CRZ is calculated in feet to the number of inches of the tree trunk diameter measured at DBH.

Example: A 20" diameter tree would have a 20 foot Critical Root Zone.

The Critical Root Zone and crown information is useful in assessing the impact of projected construction.

6. Condition

The degreed Forester hired to do the survey and tree disposition plan must detail the condition of the trees surveyed in the report submitted. The ratings noted as "good", "fair, and "poor".

SECTION 66-47: SPECIFICATIONS FOR TREE DISPOSITION PLAN REPORT **REQUIREMENTS FOR TREE DISPOSITION PLAN REPORT**

The standard tree graphics discussed below are important to provide consistent information in the most useful format for an efficient plan review.

1. Trunk Location

A. The trunk location on the plan must represent the center of the tree trunk at ground level.

B. The tree located on the site plan must be numbered as same tree number on site.

2. Critical Root Zone (CRZ); Crown; Retained Trees

A. Trunk locations of trees proposed to remain are to be represented by solid circle or green dots, while trees proposed to be removed are to be represented by "x" or orange dots.

B. The critical root zone should be indicated by a circle centered on the trunk.

3. Tree Sizes and Species Identification

A. Tree diameters and species must also be shown in the plan. For sites with a large number of trees, this data should be shown in a legend or excel format referenced by a tree number adjacent to each trunk location. Legends can be useful because they allow for the presentation of other data such as species, size, crown configuration & condition, etc.

4. Tree Protection Fencing

A. The Tree Protection Fencing must be drawn on the site plan and /or survey submitted with the tree disposition plan.

B. Number & placement of signs posted on the Tree Protection Fencing must be included in the Forester's Report.

C. A copy of the Tree Protection Sign is found in Appendix B.

SECTION 66-48: TREE REPLACEMENT SPECIFICATIONS **TREE REPLACEMENT REQUIREMENTS**

1. Required Minimum Density (RMD) specifications:

One (1) tree equal or greater than 3"DBH (Diameter at Breast Height) per 2000 Square Feet.

2. Required 25% rule. 25% of the RMD trees must be located within 20 feet inside the perimeter of the property.

3. Replacement Tree is a 3" caliper tree from the Quality Tree List (Appendix B), measured 6" from ground level.

4. Replacement tree(s) must be planted before Certificate of Occupancy is issued.

5. Liability for replacement trees and/or replacement inches will transfer from with change in ownership of the property.

6. Replacement trees must survive for one year starting from Certificate of Occupancy.

SECTION 66-49: PROTECTION OF REMAINING TREES

A. SPECIFICATION FOR TREE PROTECTION

1. The Tree Protection Fencing must be **chain link** at least 4 feet high with posts no more than 6 feet apart.
2. Two signs must be posted on site on the tree protection fencing – generally one sign in the front and one sign in the back. (Appendix C)
3. Mulch – at least 6 inches of organic wood chip covered by ¾” plywood where soil compaction could occur in the critical root zone that can not be protected by fencing.
4. Trunk Protection – Areas where fencing can not be placed-tree trunks may be protected by wood slats (at least 8 ‘ high) loosely wrapped with wire. (no nails)
5. Construction Pruning – Branches low over construction sight may be pruned in accordance to National Association of Arborists Standards.
6. Watering is mandatory during and after construction – Supplemental watering during drought, low rainfall, high temperatures.
7. Design Constraints – minimum encroachment in to critical root zone of tree.
 - a. Change in Grade procedures
 - (1) No cut or fill of the ambient grade greater than 2” and covers no more than one-half the radius of the critical root zone (CRZ)
 - (2) Construction activity causes standing water or wet soil conditions detrimental to the protected tree on lot or adjacent lot. Provide adequate drainage to prevent root rot and /or root suffocation.
 - b. Underground Utilities: Boring for installation at a minimum of 30” is preferred. If trenching is the only option the following procedures must be adhered:
 - (1) Root Prune at least two weeks prior to any trenching
 - (a) Root Prune means to clean cut the tree roots and not leave them shredded.
 - (b) The utility trench should be back filled within 24 hours after it is dug.
 - (c) Irrigation systems: Designs should avoid digging inside critical root zones. “Hand Dig” means to cut no roots larger than one inch. All irrigation systems should be installed in tree root zones using the “Hand Dig” method.
 - (d) Paving & Impervious Materials: A maximum of 25% of the Critical Root Zone of a Protected Tree may be covered with impenetrable material, such as but not limited to concrete, tar, & asphalt. The following procedures must be adhered to:
 - (2) Root Prune shall be done 6” to 1’ from the proposed construction and shall take place at least 2 weeks prior to the cut.
 - (3) A plastic vapor barrier of construction grade shall be installed between the roots and the impervious material to inhibit leaching of lime into the soil.
 - (4) A root remediation schedule shall be included in the Tree Disposition Plan.

B. PROHIBITED ACTIVITIES

1. Material Storage. No construction or waste materials shall be placed within the limits of the Critical Root Zones of any Protected Tree.
2. Equipment cleaning/liquid disposal. No equipment shall be cleaned or liquids deposited within the Critical Root Zone of a Protected Tree. This includes but is not limited to: paint, oil, solvents, asphalt, concrete, lime, mortar, & other materials.
3. Tree Attachments. No signs, wires, nails, shall be attached to Protected Trees, unless approved in the Tree Disposition Plan.
4. Vehicular Traffic. No vehicle or any construction equipment may be stored or parked in the Critical Root Zone of a Protected Tree unless specified in the Tree Disposition Plan.
5. Trash. Throwing trash inside the Tree Protection Fencing area is prohibited.
6. Removal of Tree Protection Fences. No Tree Protection Fencing may be altered or removed without permission from the City of Piney Point Village.

DEVIATIONS FROM THE CRITERIA MANUAL:

These criteria represent minimum standards for determining whether or not a tree is “preserved.” Greater impacts may be allowed, provided that all design alternatives have been proven unfeasible and that some acceptable form of mitigation such as a remedial care program is negotiated. Conversely, some cases may require that a larger area of root area be preserved to increase the survival potential of particularly valuable trees.

These design criteria are enforced in the field as well as on the plan. Plan adjustments made during construction must be reviewed and approved by the City’s Urban Forester prior to the adjustments being made.

APPENDIX A: PROTECTED TREE LIST

REPLACEMENT TREES:

Minimum Criteria for Replacement Trees

Caliper of at least three (3) inches measured six (6) inches above grade

Section 66-33 Qualified Trees

Large Trees:

Ash, Green
Ash, White
Cedar, Eastern Red
Cypress, Bald
Cypress, Montezuma
Elm, Cedar
Elm, Lacebark
Elm, Winged
Hickory
Magnolia
Maple, Drummond Red
Maple, Trident
Gingko, male
Oak, Bur
Oak, Chinkapin
Oak, Laurel
Oak, Live
Oak, Nuttall
Oak, Mexican White
Oak, Post
Oak, Overcup
Oak, Shumard
Oak, Swamp Chestnut
Oak, White

Pecan
Pine, Loblolly
Sycamore
Sweetgum
Walnut, Black

Small Trees

Birch, River
Buckeye, Mexican
Holly, East Palatka
Holly, Savannah
Fringe Tree
Laurel, Cherry
Laurel, Texas Mountain
Pistache, Chinese
Plum, Mexican
Redbud, Eastern
Yew, Japanese (single stem)

APPENDIX B

WARNING SIGN REQUIRED FOR TREE PROTECTION FENCING

*****SIZE OF SIGN 12 X 18 INCHES*****

TREE PROTECTION FENCING

Required by Code of Ordinances City of Piney Point Village

DO NOT REMOVE FENCE OR SIGN!

FINE UP TO \$500. JOB MAY BE SHUT DOWN

CERCAS PARA PROTECCIÓN de ARBOLES

Require por Ordenaciones de la Ciudad de Piney Point Village

NO QUITAR REGLA O FIRMAR!

MULTA DE HASTA \$500. TRABAJO PUEDE SER APAGADO