DIVISION 2. TREE PRESERVATION REQUIREMENTS

Sec. 12-34-2-1. Purpose.

The purpose of the tree preservation ordinance is to set the standards for the preservation and protection of a diminishing natural resource, our native and other adapted existing site trees, and to encourage the planting of trees to replace and supplement our urban forest during the development, construction, and redevelopment processes.

(Ord. No. 91500-A-203)

Sec. 12-34-2-2. Intent.

It is the intent of the City Council of the City of Coppell that the terms of article 34, division 2 shall:

(A) Establish rules and regulations governing the protection and preservation of established trees growing within the city.

(B) Regulate the removal and replanting of trees during development, construction and redevelopment.

(C) Require a tree removal permit when removal is deemed necessary.
DIVISION 2. TREE PRESERVATION REQUIREMENTS

(D) Provide the administrative structure to monitor and enforce compliance with the tree preservation ordinance.

(E) Provide assistance to property owners, developers, and builders in understanding proper guidelines, methods, and regulations of tree preservation and protection within the city.

(F) Establish the City of Coppell Reforestation and Natural Areas Fund.

(Ord. No. 91500-A-203)

Sec. 12-34-2-3. Administration.

Administration and enforcement of the tree preservation ordinance shall be the responsibility of the department of leisure services, under the supervision of the city manager or his designee.

(A) The city manager or his designee will issue a notice of violation to persons, firms, and corporations failing to comply with provisions of the tree preservation ordinance which will be adjudicated through the municipal court system.

(B) The city manager or his designee, building official, or an authorized representative shall have the authority to place a stop work order on any activity which is effectively removing protected trees or is in violation of article 34, division 2.

(Ord. No. 91500-A-203)

Sec. 12-34-2-4. Definitions.

The following definitions shall apply to this chapter:

(A) Appraised value if applicable to these provisions, means the monetary value for a tree based on the current formula established by The Council of Tree and Landscape Appraisers (CTLA) and published by the International Society of Arboriculture.

(B) Bore utilities means The practice of tunneling at a depth below the effective root system of a tree, generally at a depth of 18 to 24 inches, for the purpose of running underground utilities.

(C) Critical root zone means the top 12 inches of undisturbed natural soil around the tree, defined by a concentric circle with a radius equal to the distance from the trunk to the outermost portion of the drip line, wherein roots critical to its survival are growing.

(D) DBH or diameter at breast height means the diameter, in inches, of a tree as measured through the main trunk at a point four and one-half feet above the natural ground level.

(E) Drip line means the periphery of the area encompassing a tree determined by dropping imaginary vertical lines from the outermost portion of its canopy to the ground.

(F) Historic tree means any tree that has been so designated by the city council, after public hearing and due notice to the owner, as a tree of notable historical interest or value to the city because of its location within or historical association to the community. A listing and map of all designated historic trees shall be maintained and updated by the department of leisure services and made available to the public upon request.

(G) Leaf litter means the normal organic matter lying on the forest floor.

(H) Mulch means pre-decomposed organic material.
Chapter 12 - ZONING
ARTICLE 34. - LANDSCAPE REGULATIONS

DIVISION 2. TREE PRESERVATION REQUIREMENTS

(I) Person means any corporation, partnership, firm, association or other artificial entity; or any individual; or any agent or employee of the foregoing.

(J) Protected tree means any living tree species, six inches DBH or larger, which is not on the "unprotected tree list" that shall be subject to the preservation, protection, and replanting requirements of article 34, division 2.

(K) Protective fencing means a barrier from entry, constructed from chain link, orange plastic, or other similar material at a minimum height of four feet above ground level, restricting access to a tree protection zone.

(L) Reforestation and natural areas fund means the fund established by the city for the purpose of collecting monetary reparation to provide for urban reforestation, purchase and preservation of natural areas.

(M) Replacement tree means a nursery-grown tree of a protected tree species, as defined in article 34, division 2, with a minimum DBH of three inches and height of seven feet.

(N) Specimen tree means a tree that has been designated as a tree of notable value because of its type, size, or other professional criteria. Any protected tree 12” caliper or larger. A listing and map of all designated specimen trees shall be maintained and updated by the department of leisure services and made available to the public upon request.

(O) Tree For the purposes of article 34, division 2, any self-supporting woody perennial plant which has a trunk DBH of six inches or greater which normally attains an overall height of at least 20 feet at maturity, usually with one main stem or trunk and many branches.

(P) Tree board A board, established by the city council, which is charged with advising the city manager or his designee in the administration of this division, as well as promoting tree awareness, tree planting, and urban forestry education and practice in the city.

(Q) Tree protection zone means any area designated, or required, for the sole purpose of preserving a protected tree, or group of trees, wherein no activities prohibited by article 34, division 2 shall take place.

(R) Tree removal permit a permit which must be approved by the city manager or his designee prior to the removal of any tree. (appendix, item I).

(S) Understory vegetation means forest plants or smaller trees which grow beneath the canopy of larger trees.

(T) Unprotected tree means a tree of an undesirable species, as determined by article 34, division 2, which does not require preservation, protection measures, or replanting.

(Ord. No. 91500-A-203)

Sec. 12-34-2-5. Applicability.

The terms and conditions of article 34, division 2 shall be applicable to all real property and development, construction, and redevelopment within the city including, but not limited to, the following:

(A) Subdivisions (single and multi-family).

(B) Non-residential.

(C) Undeveloped property.

(Ord. No. 91500-A-203)
Sec. 12-34-2-6. Exemptions.

Article 34, division 2 shall not apply to the following:

(A) Any property located in a residential development which has received preliminary plat approval or site plan approval and any non-residential use property which has received site plan approval prior to the effective date of this article.

(B) Any single family residential property after the first date that said residence was occupied, so long as said property is not being developed, redeveloped, platted, replatted, or subdivided.

(C) On that portion of property owned or operated by a plant and/or tree nursery, on which trees are planted and/or grown for commercial sale.

(D) Tree removal or trimming activities of public utility companies or other entities as may be authorized by prior agreements with the city.

(E) Trees which are diseased, injured, or determined by the city manager or his designee to be in a hazardous or dangerous condition so as to endanger the public health, welfare or safety and require immediate removal without delay.

(F) Actions deemed necessary in accordance with city policy during a period of emergency such as tornado, storm, flood or other act of God.

(G) Where this article and the Coppell Flood Plain Management Ordinance are in conflict, the flood plain management ordinance shall take precedence.

(H) Public utility construction and maintenance.


Sec. 12-34-2-6A. Municipal, schools and religious institutions.

(A) The City of Coppell, public school districts or any church, shall preserve all specimen and historic trees in order to preserve the natural beauty of environment as to provide for the safety, health, and welfare of the citizenry. In all cases a minimum of 5% of total canopy inches shall be preserved or replaced on site.

(B) Except as noted herein, article 34, division 2 shall not apply to any property owned, leased, controlled real property, development, constructed and/or redevelopment by the City of Coppell or public school districts; or to any church property owned, leased, controlled real property, development, constructed and/or redevelopment, provided that such uses is only for church purposes.

(C) In all development, construction, and/or redevelopment, except the construction, reconstruction, development of public roads, streets, rights-of-way, that is not funded or permitted, after the effective date of this ordinance, the City of Coppell, public school districts, or church shall comply with the provisions of section 12-34-2-7 protected tree designation, section 12-34-2-9 (a—c) guidelines for tree protection and section 12-34-2-10 prohibited activities, unless such requirements defeat or impede the public purpose of such municipal or school construction, development or redevelopment.

(Ord. No. 91500-A-203)
Sec. 12-34-2-7. Protected tree designation.

(A) Any tree which has a six inch DBH or greater, which is not listed as an unprotected tree species in section 1234-2-7B or not exempted in section 12-34-2-6, is a protected tree and must be retained and protected or replaced if removed.

(B) Protection and replacement will not be required for the following species of unprotected trees less than ten caliper inches. All tree species with 10 inches DBH will be considered protected.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cottonwood</td>
<td>Populus deltoides</td>
</tr>
<tr>
<td>Bois d'Arc</td>
<td>Maclura pomifera</td>
</tr>
<tr>
<td>Mimosa</td>
<td>Albizia julibrissin</td>
</tr>
<tr>
<td>Mesquite Trees</td>
<td>Prosopis glandulosa</td>
</tr>
</tbody>
</table>

This list is subject to change and will be periodically updated by the city manager or his designee with the approval of the park and recreation board.

(C) All protected trees on the development or construction site must be preserved and protected according to section 12-34-2-9, guidelines for tree protection, unless a tree removal permit has been obtained.


Sec. 12-34-2-8. Tree survey.

(A) *Purpose.* The tree survey is the heart of the tree preservation ordinance. Its purpose is not to penalize, but to aid those in protecting our valuable natural resources during development and construction. Additionally, the tree survey will also help determine the quantity of trees, if any, that must be removed or cannot be safely and adequately protected during the street, utility, and construction phases of development.

(B) *Scope.* A tree survey shall be conducted and be current to within the 24 months immediately prior to submission for any of the following:

1. Preliminary plat.
2. Re-plat.
3. Final plat and approval.
4. Site plan review.
5. Application for building permit.
DIVISION 2. TREE PRESERVATION REQUIREMENTS

(C) Detail:

1. The tree survey shall be performed by qualified personnel meeting the requirements of the City of Coppell. These persons must register and be approved by the city manager or his designee prior to the conducting of the tree survey. Minimum qualification must be one of the following:
   b. Texas Association of Nurserymen Member.
   c. A degree in a related field (i.e. forestry, landscape architecture, botany, horticulture) with five years field experience.

2. The tree survey shall include location, size (DBH), species, canopy type, ordinal points of canopy spread, and condition of all trees with a six-inch DBH or larger. Trees will be measured at four and one-half feet above natural ground level, or DBH (diameter at breast height). The tree survey information will be compiled in a tabular format with each tree identified by a number corresponding to a numbered tree on the site plan. (Appendices A, B and C).

3. The entire parcel being proposed for development shall be included in the tree survey, except for any portion located farther than 50 feet from any planned development or construction activities.

4. Once the tree survey has been accomplished and submitted to the city, all trees on the tree survey shall be classified as protected trees, with the exception of those unprotected tree species listed in subsection 12-34-2-7B or exempted by section 12-34-2-6.

5. The tree survey shall then be used to determine:
   a. The number of protected trees that must be removed for the development of essential streets, utilities, and building construction.
   b. Potential specimen or historic trees.
   c. The total amount of required tree replacement or reparation.
   d. The amount of tree preservation credit.

(Ord. No. 91500-A-203)


A major purpose of article 34, division 2 is to protect all existing quality site trees which are not required to be removed for approved development and construction to occur. The following are minimum requirements for the protection of all protected trees within 50 feet of all development and construction activities related, but not limited, to streets, parking lots, building sites, driveways, and sidewalks.

(A) Prior to construction or land development, the developer or builder must clearly mark all protected trees within 50 feet of all public rights-of-way, public easements, or construction areas. The protected trees will be flagged with bright, fluorescent survey ribbon wrapped around the main trunk at a height of four feet from natural grade such that the tape is very visible to construction workers and equipment operators.

(B) Prior to construction or land development, the developer or builder shall establish 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. After approval by the city manager or designee, the location and dimensions of said
DIVISION 2. TREE PRESERVATION REQUIREMENTS

designated areas shall be clearly identified on construction and site plans and at the construction site.

(C) In those situations where the drip line of a protected tree is not directly affected by construction but construction related activities may infringe on said drip-line, protective fencing shall be installed at minimum around the drip-line designating a tree protection zone. The fencing must be a minimum of four feet in height with silt fencing attached to the base of the fence. Bright, fluorescent survey ribbon must be attached to the protective fencing at ten-foot intervals. (appendices D and E).

(D) Bilingual (English and Spanish) signage will be conspicuously located on all protective fencing designating a tree protection zone. (appendix F).

(E) Every effort will be made to retain understory vegetation and leaf litter during all phases of development and construction. If understory vegetation and/or leaf litter is removed, the critical root zone within the tree protection zone will be mulched with three to six inches of organic material to aid in keeping soil temperatures down and in the retention of soil moisture.

(F) Underground utilities may be bored if the line of the utility passes within a tree protection or critical root zone. (appendix G).

(G) Grade changes in excess of four inches cut or fill within a tree protection or critical root zone will require a retaining wall or tree well, made of rock or brick, to be constructed around the protected tree no closer than 100 percent of the distance between the trunk and the drip line. The top of the retaining wall should be constructed at the new grade. Additional measures to maintain proper oxygen and water exchange with the protected tree roots may also be required. (appendix H).

(H) All protected trees shall be provided with a permeable surface under a minimum of 100 percent of the existing drip line of the tree(s).

(Ord. No. 91500-A-203)

Sec. 12-34-2-10. Prohibited activities.

The following activities shall be prohibited on any development or construction site within a tree protection zone or the drip line of any protected tree:

(A) No construction vehicle or equipment traffic or parking shall take place.

(B) No materials intended for use in development or construction, or waste materials accumulated due to excavation or demolition, shall be placed or stored.

(C) No equipment shall be cleaned or liquids deposited or allowed to flow overland. This includes, but is not limited to, paint, oil, solvents, asphalt, concrete, mortar, and similar materials.

(D) Grade changes in excess of four inches shall not be made unless properly protected by a retaining wall or tree well as described in section 12-34-2-9.

(E) No water, which accumulates due to construction-related activities, shall be permitted to remain around any protected tree.

(F) No signs, wires, or other attachments, other than those of a protective nature, shall be attached to any protected tree.

(G) Except for these aforesaid exemptions in section 12-34-2-6, under no circumstances shall there be a clear cutting of trees on a property for any purpose at any time.
(H) No person, directly or indirectly, shall cut down, destroy, effectively destroy through damaging, remove, or move any tree, protected tree, specimen tree, or historic tree without a tree removal permit at any time unless exempted by section 12-34-2-6.

(I) No person, directly or indirectly, shall act in concert with an owner, occupant, lessor, lessee or any person claiming an interest in property to enter into any agreement, contract, negotiation, letter of intent or any other type of arrangement to circumvent the prohibitions contained herein or to otherwise qualify for an exemption from the provisions of this ordinance.

Sec. 12-34-2-11. Tree removal permit.

(A) In the event it becomes necessary to remove a tree for development or construction, a tree removal permit will be required. Permits for tree removal may be requested by making application on a form prescribed by the city to the city manager or his designee. (appendix I).

(B) Upon receipt by the city of a completed tree removal permit application, an administrative fee shall be paid to the city by the applicant.

(C) The tree removal permit application shall be accompanied by a preliminary plat or site plan showing the exact location, size (DBH), common name, and reason for request of removal of each tree on site.

(D) Submission of a tree removal permit application to the city shall authorize the city manager or his designee to conduct field inspections of the site as necessary for purposes related to the provisions of the tree preservation ordinance.

(E) After thorough review of the tree removal permit application and accompanying documents, the city manager or his designee will approve, approve with conditions, or disapprove the application. Disapproved applications may be revised and resubmitted to the city free of charge.

(F) After permit is issued, higher mitigation fees will apply. Trees requested to be removed at this point will be mitigated at 2 times the standard fee.

(G) In all cases a minimum of 15% of the canopy inches shall be preserved or replaced on site.

Sec. 12-34-2-12. Protected tree replacement.

Removal of any protected tree(s) will require a tree removal permit and replacing or replanting of tree(s) on site or on public land, as designated by the city manager or his designee. Required tree replacement will be determined as follows:

(A) In as much as it is reasonable and feasible, replanting on the development or construction site will be made to restore the original natural landscape character of the site.

1. Protected trees will be replanted at a replacement ratio of two inch DBH of replacement tree for each one inch DBH of removed tree.

2. Specimen and historic trees will be replanted at a replacement ratio of three inches DBH of replacement tree for each one inch DBH of removed tree.

3. Replacement trees must be a minimum of three inches DBH, seven feet in height, and be of the same, or more desirable, protected species.
(B) To the extent that tree replacement is not feasible, the city manager or his designee shall determine the amount of indemnification to be paid by the developer. Upon determination of indemnification, said payment shall be made to the City of Coppell Reforestation and Natural Area Funds based on amounts indicated which is as follows:

1. For protected trees, reparation will be made in the amount of $200.00 per one inch DBH.
2. For specimen trees, reparation will be made in the amount of $300 per one inch DBH.

(C) If any protected and/or replacement tree dies within two years of initial planting or issuance of certificate of occupancy and is brought to the attention of the city manager or his designee, the original permit applicant shall be subject to the same replacement as a protected tree in section 12-34-2-12.

(D) Money paid in lieu of tree replacement made in compliance with article 34, division 2 shall be considered contributions to the City of Coppell Reforestation and Natural Areas Fund. This fund shall be used for purposes of, but not limited to:

1. Planting of trees in city parks, on public lands, and along public rights-of-way.
2. Purchasing of wooded, natural areas, particularly floodplain acreage, to preserve these highly-sensitive environmental areas for public protection and passive recreational enjoyment.

(E) Except for one six-month extension approved by the city manager or his designee due only to seasonal limitations that would make planting of trees impractical and require an escrow deposit in an amount equal to 110 percent of the estimated cost of tree planting, no certificate of occupancy will be issued for any building or structure on the development or construction site until all required tree replacement and/or monetary reparation has been made in full.

Sec. 12-34-2-13. Tree replacement credits.

Credits may be earned to reduce required tree replacement or money paid in lieu of tree replacement, if any, due to compliance with the tree preservation ordinance. (See appendix J)

(A) Non-residential property. The following credits shall be given to reduce the amount of reparation incurred, if any, from development and construction on non-residential property which is not adjacent to residential use (appendix K):

1. Preservation credit:
   a. A preservation credit, based on the percentage of protected trees (DBH) preserved on site, shall be given.
   b. Only those trees in good condition, with an excellent prospect for long-term survival and preserved in accordance with provision of this ordinance, shall be considered for preservation credit.
   c. Non-residential property which is adjacent to residential use may qualify for the preservation credit if a minimum 50 foot permanent buffer, meeting all tree protection zone requirements, is maintained adjacent to all residential property lines.
2. Landscaping credit.
   a. For each one inch DBH of approved species tree planted on site, a landscaping credit of one inch DBH shall be earned.
DIVISION 2. TREE PRESERVATION REQUIREMENTS

b. This credit shall include any trees planted to fulfill city landscaping requirements.

c. The landscaping credit may be applied to offset up to 50 percent of required reparation as provided in subsection 3.

3. These guidelines shall be adopted, and, may amended from time to time by resolution of the city council.

(B) Residential and adjacent non-residential properties. The following credits, in exceptional cases, as defined herein in section 12-34-2-13 (A) (3), shall be given to reduce the amount of reparation incurred, if any, from development and construction on residential properties and those non-residential properties adjacent to residential use that do not maintain a minimum of a 50-foot permanent buffer, as described in section 12-34-2-13A above (appendix L).

(C) Credit determination.

1. Determination of expected credit shall be made by the city manager or his designee upon approval of a tree removal permit application.

2. The city manager or his designee shall verify credits upon completion of the site improvements, and for this purpose, may include an field inspection of the site.

3. If actual landscaping and tree preservation is not in accordance with the plan on which credits were based, an adjustment shall be made and, if necessary, require the applicant to make additional reparation either in the form of additional tree planting or contribution to the City of Coppell Reforestation and Natural Areas Fund.

4. Only in exceptional cases may landscaping credit be given to reduce reparation incurred or in the event of tree removal for floodplain reclamation purposes.

(Ord. No. 91500-A-203)


Each unauthorized tree removed shall constitute a distinct and separate offense and shall also be punishable by the maximum fine allowed under law.

(Ord. No. 91500-A-203)
DIVISION 2. TREE PRESERVATION REQUIREMENTS

Sec. 12-34-2-15. Appendices.
DIVISION 2. TREE PRESERVATION REQUIREMENTS

The following appendices are adopted by the city.
DIVISION 2. TREE PRESERVATION REQUIREMENTS

Appendix A
Sample Tree Survey Conducted By Coppell Tree Board

<table>
<thead>
<tr>
<th>Location</th>
<th>Diameter (DBH)</th>
<th>Species</th>
<th>Canopy Points</th>
<th>Crown Class</th>
<th>% Live Crown</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>7 inches</td>
<td>Post Oak</td>
<td>9' 0' 3' 3'</td>
<td>Intermediate</td>
<td>20%</td>
</tr>
<tr>
<td>#2</td>
<td>10 inches</td>
<td>Chitwood Gum</td>
<td>18' 12' 15' 12'</td>
<td>Suppressed</td>
<td>30%</td>
</tr>
<tr>
<td>#3</td>
<td>8.5 inches</td>
<td>Post Oak</td>
<td>6' 3' 3' 10'</td>
<td>Suppressed</td>
<td>15%</td>
</tr>
<tr>
<td>#4</td>
<td>12 inches</td>
<td>Post Oak</td>
<td>18' 12' 9' 9'</td>
<td>Intermediate</td>
<td>50%</td>
</tr>
<tr>
<td>#5</td>
<td>11 inches</td>
<td>Post Oak</td>
<td>18' 13' 9' 9'</td>
<td>Intermediate</td>
<td>50%</td>
</tr>
<tr>
<td>#6</td>
<td>18 inches</td>
<td>Post Oak</td>
<td>9' 20' 15' 15'</td>
<td>CoDominate</td>
<td>60%</td>
</tr>
<tr>
<td>#7</td>
<td>17 inches</td>
<td>Post Oak</td>
<td>10' 15' 6' 10'</td>
<td>CoDominate</td>
<td>70%</td>
</tr>
<tr>
<td>#8</td>
<td>17 inches</td>
<td>Post Oak</td>
<td>15' 12' 15' 15'</td>
<td>CoDominate</td>
<td>60%</td>
</tr>
<tr>
<td>#9</td>
<td>18 inches</td>
<td>Post Oak</td>
<td>20' 15' 12' 6'</td>
<td>CoDominate</td>
<td>50%</td>
</tr>
<tr>
<td>#10</td>
<td>16 inches</td>
<td>Post Oak</td>
<td>12' 6' 10' 18'</td>
<td>Intermediate</td>
<td>40%</td>
</tr>
<tr>
<td>#11</td>
<td>18 inches</td>
<td>Post Oak</td>
<td>20' 9' 15' 15'</td>
<td>Dominate</td>
<td>80%</td>
</tr>
<tr>
<td>#12</td>
<td>13 inches</td>
<td>Post Oak</td>
<td>12' 12' 9' 15'</td>
<td>CoDominate</td>
<td>40%</td>
</tr>
<tr>
<td>#13</td>
<td>15 inches</td>
<td>Post Oak</td>
<td>17' 9' 8' 13'</td>
<td>Dominate</td>
<td>90%</td>
</tr>
<tr>
<td>#14</td>
<td>20 inches</td>
<td>Post Oak</td>
<td>24' 7' 20'</td>
<td>Dominate</td>
<td>90%</td>
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<td>#15</td>
<td>DEAD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#16</td>
<td>15 inches</td>
<td>Post Oak</td>
<td>12' 15' 15'</td>
<td>Dominate</td>
<td>80%</td>
</tr>
</tbody>
</table>

Appendix A—Sample Tree Survey
DIVISION 2. TREE PRESERVATION REQUIREMENTS

Appendix A (continued)
Sample Tree Survey

<table>
<thead>
<tr>
<th>No.</th>
<th>Diameter</th>
<th>Species</th>
<th>DBH</th>
<th>Height</th>
<th>Canopy</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>#17</td>
<td>11 inches</td>
<td>Post Oak</td>
<td>13'</td>
<td>15'</td>
<td>10'</td>
<td>CoDominate</td>
</tr>
<tr>
<td>#18</td>
<td>10 inches</td>
<td>Post Oak</td>
<td>3'</td>
<td>8'</td>
<td>16'</td>
<td>Intermediate</td>
</tr>
<tr>
<td>#19</td>
<td>9 inches</td>
<td>Post Oak</td>
<td>4'</td>
<td>4'</td>
<td>12'</td>
<td>Intermediate</td>
</tr>
</tbody>
</table>

Sample Tree Survey Conducted at Area Adjacent and North of Overton Bank, Coppell. Approximate Size of Area: 15,000 sq.ft.

North

West

South

Appendix A—Sample Tree Survey
Appendix B—Methods of Tree Measurement

*Diameter measurement:* The diameter of the protected tree shall be measured as shown. The diameter of a multi-trunk tree shall be determined by adding the total diameter of the largest trunk to one-half the diameter of each additional trunk.
Crown class is a description of the form of a tree relative to others in the stand, usually as dominant (D),
codominant (CO), intermediate (I) and suppressed (S).

**Appendix C—Crown Class**

Adapted from the Hazard Tree Assessment Program, Recreation and Park Department, City of San Francisco.

Live crown ratio is the ratio of the foliage canopy to the total height of the tree. Trees grown in stands usually have a lower live crown ratio than trees grown in the open.
Appendix C—Crown Ratio


Appendix D
Illustration of typical tree structure and physiology, in particular focusing on the root system.
DIVISION 2. TREE PRESERVATION REQUIREMENTS
DIVISION 2. TREE PRESERVATION REQUIREMENTS

Appendix D—Typical Tree Structure
DIVISION 2. TREE PRESERVATION REQUIREMENTS

Appendix E
Illustration of Acceptable Tree Protection Areas

[Diagram showing acceptable tree protection areas and fencing options]
DIVISION 2. TREE PRESERVATION REQUIREMENTS

Appendix E—Tree Protection Fencing Options

Appendix F
Illustration of Protective Signage

TREE PROTECTION ZONE

________________________
ZONA
de
CONSERVACION
ARBOLES
DIVISION 2. TREE PRESERVATION REQUIREMENTS

Appendix G

Illustration of Trenching versus Boring

Appendix G—Trenching versus Boring
Appendix H

Illustration of Methods to Ameliorate Grade Change

Cut & Fill Options
DIVISION 2. TREE PRESERVATION REQUIREMENTS

Appendix H—Cut and Fill Options

Appendix I
Tree Removal Permit Application

TREES REMOVAL PERMIT APPLICATION
City of Coppell, Texas

<table>
<thead>
<tr>
<th>Date:____________</th>
<th>Permit Number:____________</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Issued by City upon approval)</td>
</tr>
</tbody>
</table>

Property Location: ______
Applicant Name:____________
    Address:____________
        Phone:____________
Property Owner Name:___________
Contractor:____________

<table>
<thead>
<tr>
<th>TREE LOCATION/ID#</th>
<th>SIZE (DBH)</th>
<th>SPECIES</th>
<th>REASON FOR REMOVAL</th>
</tr>
</thead>
</table>

Attach additional sheets as necessary.
This application must be accompanied by a Plan or Preliminary Plat of the site.
Proposed new development must attach a Tree Survey.
DIVISION 2. TREE PRESERVATION REQUIREMENTS

I understand this application is subject to all rules and regulations pertaining to Section 34-11 of the Zoning Ordinance Code Book of the City of Coppell, Texas.

Applicant Signature: ________________

For Staff Use Only

Approved/Disapproved By: ________________ Date: ____________/__________/__________

Comments: ____________________________

Fee Paid: ________________ Receipt No. ________________

Appendix J

1. DETERMINATION of GROSS RETRIBUTION for PROTECTED TREES

<table>
<thead>
<tr>
<th>Determination in Inches:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INCHES (DBH) of TREE REMOVED</th>
<th>__________ inches (DBH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>times (×) 1 inch</td>
<td>× 1&quot;</td>
</tr>
<tr>
<td>equals (=)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GROSS RETRIBUTION in INCHES (DBH)</th>
<th>__________ inches (DBH)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Determination in Dollars:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GROSS RETRIBUTION in INCHES (DBH)</th>
<th>__________ inches (DBH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>times $100.00</td>
<td>× $100.00</td>
</tr>
<tr>
<td>equals (=)</td>
<td></td>
</tr>
</tbody>
</table>
## DIVISION 2. TREE PRESERVATION REQUIREMENTS

<table>
<thead>
<tr>
<th>GROSS RETRIBUTION in DOLLARS</th>
<th>$__________</th>
</tr>
</thead>
</table>

### 2. DETERMINATION of GROSS RETRIBUTION for SPECIMEN and HISTORIC TREES

**Determination in Inches:**

<table>
<thead>
<tr>
<th>INCHES (DBH) of TREE REMOVED</th>
<th>____________ inches (DBH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>times (x) 10 inches</td>
<td>× 10&quot;</td>
</tr>
<tr>
<td>equals (=)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GROSS RETRIBUTION in INCHES (DBH)</th>
<th>____________ inches (DBH)</th>
</tr>
</thead>
</table>

**Determination in Dollars:**

The appraised value of the tree as determined by the Council of Landscaping Tree Appraisers (CLTA) Guidelines.

---

Appendix K

DETERMINATION of RETRIBUTION CREDITS

Non-Residential Property
DIVISION 2. TREE PRESERVATION REQUIREMENTS

<table>
<thead>
<tr>
<th>GROSS RETRIBUTION</th>
<th>____________ inches (DBH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>minus (-)</td>
<td></td>
</tr>
<tr>
<td>PRESERVATION CREDIT:</td>
<td></td>
</tr>
<tr>
<td>Trees Preserved on Site</td>
<td>____________ inches (DBH)</td>
</tr>
<tr>
<td>divided by (*)</td>
<td></td>
</tr>
<tr>
<td>Total Trees on Site</td>
<td>____________ inches (DBH)</td>
</tr>
<tr>
<td>equals (=)</td>
<td></td>
</tr>
<tr>
<td>Preservation Percentage</td>
<td>____________ %</td>
</tr>
<tr>
<td>times (×)</td>
<td></td>
</tr>
<tr>
<td>Gross Retribution</td>
<td>____________ inches (DBH)</td>
</tr>
<tr>
<td>equals (=)</td>
<td></td>
</tr>
<tr>
<td>PRESERVATION CREDIT</td>
<td>- ____________ inches (DBH)</td>
</tr>
<tr>
<td>minus (-)</td>
<td></td>
</tr>
<tr>
<td>LANDSCAPING CREDIT</td>
<td>- ____________ inches (DBH)</td>
</tr>
</tbody>
</table>
DIVISION 2. TREE PRESERVATION REQUIREMENTS

<table>
<thead>
<tr>
<th>equals (=)</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>NET RETRIBUTION</th>
<th>__________ inches (DBH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>times (×) $100.00</td>
<td>× $100.00</td>
</tr>
<tr>
<td>equals(=)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONTRIBUTION to CITY of COPPELL REFORESTATION and NATURAL AREAS FUND</th>
<th>$__________</th>
</tr>
</thead>
</table>

### Appendix L

**DETERMINATION of RETRIBUTION CREDITS**

<table>
<thead>
<tr>
<th>Residential and Adjacent Non-residential Property</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>GROSS TREE RETRIBUTION</th>
<th>__________ inches (DBH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>minus (-)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LANDSCAPING CREDIT</th>
<th>- __________ inches (DBH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>equals (=)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NET RETRIBUTION</th>
<th>__________ inches (DBH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>times (×) $100.00</td>
<td>× $100.00</td>
</tr>
<tr>
<td>equals(=)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NET RETRIBUTION in DOLLARS</th>
<th>$__________</th>
</tr>
</thead>
</table>
**DEVELOPERS ONLY**

<table>
<thead>
<tr>
<th>NET RETRIBUTION in DOLLARS</th>
<th>$__________</th>
</tr>
</thead>
<tbody>
<tr>
<td>minus (-)</td>
<td></td>
</tr>
</tbody>
</table>

PARK IMPACT FEE CREDIT:

<table>
<thead>
<tr>
<th>Number of lots</th>
<th>___________ lots</th>
</tr>
</thead>
<tbody>
<tr>
<td>times (×)</td>
<td></td>
</tr>
<tr>
<td>Park Impact Fee</td>
<td>× $1,285 (or current fee)</td>
</tr>
</tbody>
</table>

equals (=)

<table>
<thead>
<tr>
<th>PARK IMPACT FEE CREDIT</th>
<th>$__________</th>
</tr>
</thead>
<tbody>
<tr>
<td>equals (=)</td>
<td></td>
</tr>
</tbody>
</table>

CONTRIBUTION to CITY of COPPELL REFORESTATION and NATURAL AREAS FUND

| $__________ |

(Ord. No. 91500-A-203)