

A. *General Provisions.*

1. *Purpose.*

- (a) Establish rules and regulations governing the protection and preservation of desired native or established trees within Melissa.
- (b) Encourage the protection of healthy and desirable trees and provide for the replacement and/or replanting of trees that are necessarily removed during construction, development or redevelopment.
- (c) Provide for the preservation and protection of desired larger native or established trees, which provide a valuable amenity to the urban environment and which, once destroyed, can only be replaced after generations, if at all.
- (d) Provide for shade, windbreaks, beauty and the cooling of air.
- (e) Provide for open space and more efficient drainage of land, thereby, reducing the effects of soil erosion and the need for additional drainage facilities.
- (f) Prevent the clear-cutting of land containing trees of six (6) inches caliper or larger. The illegal cutting of each tree six (6) inches caliper or larger shall constitute a separate offense of this Ordinance.

2. *Definitions.*

- (a) "*Residential Use or District*" shall mean SF-1, SF-2, SF-3 Single Family Residential Districts, MF Multi Family Dwelling Districts and MH Manufactured Home Park Districts.
- (b) "*Non-Residential Use or Districts*" shall mean C-1 and C-2 Commercial Districts, I-1 and I-2 Industrial Districts.
- (c) "*PD Planned Development Districts*", "*Planned Development District*" or "*PD(s)*" shall be Residential or Non-Residential depending on the permitted uses in the Planned Development District.
- (d) "*Developed*" or "*Development*" shall mean any manmade change to improved or unimproved real estate, including but not limited to, buildings and/or other structures, paving, drainage, utilities, storage and/or agricultural activities.
- (e) "*Redeveloped*" or "*Redevelopment*" shall mean any zoning change and/or manmade change or alteration to a design and/or layout of an existing development(s) including but not limited to, repair, expansion and/or removal and replacement of existing building and/or structure, paving, drainage, utilities,

storage and/or agricultural activities. Property rendered non-conforming due to rezoning is exempt until such time as there is a change in ownership or usage.

- (f) *"Developer"* shall mean any person, firm, corporation or entity responsible for the development or redevelopment of property.

3. *Applicability.*

- (a) Requirements of this Ordinance shall apply to all property within the corporate limits of Melissa developed or redeveloped after the passage of this Ordinance. No site developed prior to the effective date of this Ordinance shall be required to conform to the landscaping requirements of this Ordinance unless the site is being redeveloped. Such property must, however comply with ordinances existing at the time of its development. Once a "Certificate of Occupancy" is issued for single family, manufactured or duplex home sites, the property becomes exempt from the developmental landscaping provisions of this Ordinance, but must continue to meet the landscaping maintenance and tree preservation provisions set forth herein.

- (b) Trees less than three (3) inches caliper are exempt from the tree preservation requirements of this Ordinance.

B. *Landscape Requirements.*

- 1. *Non-Residential Districts.* These standards shall apply to all Non-Residential Use or Districts. Any area within a planned development district containing landscaping standards shall be regulated by the more restrictive standards.

- (a) The minimum landscaping area for nonresidential districts shall be not less than ten (10) percent of the pavement area on the site. Landscaping shall include the following items as detailed in paragraphs (B)(1)(b), (c), (d) and (e) below:

- (1) Landscaping along street rights-of-way;
- (2) Interior parking lot landscaping;
- (3) Landscaping for corner lots; and
- (4) Landscaping/screening for parking lots adjacent to residential areas.

In the event that the total landscape area provided, per the requirements of paragraphs (B)(1)(b), (c), (d) and (e), is less than ten (10) percent of the pavement area of the site, additional landscaping shall be provided to meet the ten (10) percent requirement.

Example:

1. If (B)(1)(a)(1)--(4) above equal fifteen (15) percent of pavement, then requirement for ten (10) percent of pavement is satisfied.
2. If (B)(1)(a)(1)--(4) above equal eight (8) percent of pavement, then additional landscaping is required to equal ten (10) percent.

(b) Landscaping Along Street Rights-of-Way. All commercial, industrial and other non-residential districts shall comply with the following street scope requirements:

- (1) A landscaped edge shall be provided adjacent to all streets. The landscaped edge shall be a minimum width of ten (10) feet, exclusive of street rights-of-way. Within the landscaped edge, a minimum of one (1) shade tree (three (30 inches caliper minimum) or an approved ornamental tree shall be planted per five hundred (500) square feet of landscaped area. The ten-foot landscaped edge may be reduced in the Restricted Commercial (C-1) District to no less than two (2) feet where lots are less than two (2) acres. In such case, a minimum of one (1) shade tree (three (3) inches caliper minimum) or an approved ornamental tree shall be planted for every fifty (50) feet of frontage on any public street.
- (2) Where parking lots and drives abut the landscaped edge, ten (10) shrubs (five-gallon minimum) shall be placed per five hundred (500) square feet of landscaped edge. The number of required shrubs shall be calculated solely on the area of the required landscape edge. A berm may be placed within the landscaped edge in lieu of the required shrubs; however, a headlight screen must be accommodated if required. The berm must be forty-two (42) inches above the average grade of the street and parking lot curbs. The slope of the berm shall not exceed a 3 to 1 grade.
- (3) If the parking lot is located fifty (50) feet or more from the street right-of-way line, no shrubs or berms will be required unless required for a headlight screen.
- (4) The applicant is also encouraged to plant a variety of ornamental trees and flowers in addition to the required plantings. Any permeable surface not occupied by trees, shrubs, planting beds, signs or other permitted fixtures shall be planted with turf or other living ground cover.
- (5) The required width of landscaped edge may be reduced during plan review when public improvements are necessary.

(c) Interior Parking Lot Landscaping. Any non-residential parking area which contains more than twenty (20) parking spaces shall provide interior landscaping in addition to the required landscaped edge.

- (1) Interior landscaping shall include all areas within the paved boundaries of the parking lot as well as planting islands, curbed areas, corner lots, parking spaces and all interior driveways and aisles, except those with no parking spaces located on either side. Landscaped areas outside of the parking lot may not be used to meet the interior landscaping requirement.
 - (2) There shall be eight (8) square feet of interior landscaping for each parking space (one hundred eighty (180) square feet) or fraction thereof.
 - (3) There shall be a minimum of one (1) shade tree (three (3) inches caliper minimum) or an approved ornamental tree for every twenty (20) parking spaces unless approved by the City Council until the Director of Community Development is in place.
 - (4) All landscaped areas shall be protected by a raised six-inch concrete curb. Pavement shall not be placed in closer than the normal mature drip line of the tree, at time of installation, unless a city-approved root barrier is utilized.
 - (5) Where an existing parking area is altered or expanded to increase the number of spaces to more than twenty (20), interior landscaping shall be provided on the new portion of the lot in accordance with the above standards.
 - (6) The requirements listed above shall not apply to structured parking garages.
- (d) Landscaping For Corner Lots. Corner lots at the intersection of two (2) major or larger thoroughfares shall comply with the following landscaping requirements in addition to the required plantings for the landscaped edge and interior parking lot landscaping:
- (1) A minimum fifteen-foot wide landscaped edge shall be located along the street right-of-way beginning at the corner and extending one hundred seventy-five (175) feet or to the closest driveway. Beyond this point, the landscaped edge may be gradually reduced (over a distance of twenty-five (25) feet to ten (10) feet in width).
 - (2) Where the City Council (until the Community Development Department has been established) determines there is a need for a right-turn lane at a location, the landscaped edge may be reduced to a minimum of seven and one-half (7 1/2) feet (See Thoroughfare Design Standards in the Subdivision Ordinance, as it exits or may be amended).
 - (3) A minimum landscaped area of approximately nine hundred (900) square feet shall be located at the intersection corner of the lot. This landscaped area shall be provided within the area measured a minimum distance of

forty (40) feet from the projected corner of the intersection on both sides of the lot. No trees may be planted in this area.

(e) Landscaping/Screening for Parking Lots Adjacent to Residential Areas. Where parking is within fifty (50) feet of residentially zoned property and is not screened from view by a screening wall, a continuous screen of shrubs (five-gallon minimum) must be placed adjacent to the parking. The required landscaping shall comply with the following regulations:

- (1) The required shrubs shall create a minimum forty-two-inch high screen at time of installation.
- (2) Drought and freeze-resistant shrubs shall be used, including but not limited to:

Burford Holly

Chinese Holly

Eleagnus

Juniper (several varieties)

Nellie R. Stevens

Wax Myrtles

Yaupon Holly

Other plants may be used with Melissa staff approval.

(f) All materials must meet the American Association of Nurseryman, Inc. "American Standard for Nursery Stock" (latest edition).

2. Multi-Family Districts.

(a) A landscaped edge shall be provided adjacent to all streets. The landscaped edge shall be a minimum width of ten (10) feet, exclusive of street rights-of-way. Within the landscaped edge, one (1) shade tree, three (3) inches caliper, shall be planted per five hundred (500) square feet of landscaped edge. The number of required trees shall be calculated solely on the areas of the required landscaped edge.

(b) Where parking lots and drives abut the landscaped edge, ten (10) shrubs (five (5) gallon minimum) shall be planted per five hundred (500) square feet of landscaped edge. The number of required trees shall be calculated solely on the

area of the required landscaped edge. A berm may be placed within the landscaped edge in lieu of the required shrubs; however, a headlight screen must be accommodated if necessary. The berm must be forty-two (42) inches above the average grade of the street and parking lot curbs. The slope of the berm shall not exceed a 3 to 1 grade.

- (c) The applicant is also encouraged to plant a variety of ornamental trees and seasonal color in addition to the required plantings. Any permanent surface not occupied by trees, shrubs, planting beds, signs or other permitted textures shall be planted with turf or other living ground cover.
 - (d) If the parking lot is located fifty (50) feet or more from the street right-of-way line, no shrubs or berms will be required unless required for a headlight screen.
 - (e) The required width of landscaped edge may be reduced during plan review when public improvements are necessary.
 - (f) Parking areas shall be landscaped in addition to the required landscaped edge. Eight (8) square feet of landscaping for each parking space shall be provided within the paved boundaries, including one (1) shade tree (three (3) inches caliper minimum) or an approved ornamental tree per ten (10) parking spaces.
 - (g) All landscaped areas shall be protected by a raised six-inch concrete curb. Pavement shall not be placed closer than the normal mature drip line of the tree unless a Melissa staff approved root barrier is utilized.
 - (h) One (1) shade tree (three (3) inches caliper minimum) or an approved ornamental tree per one thousand (1,000) square feet of required open space shall be provided.
 - (i) All materials must meet the American Association of Nurseryman, Inc. "American Standard for Nursery Stock" (latest edition)
3. *Single Family Residential Districts, MH and Duplexes.* Any development that has 11.9 units per acre or less shall fall under this classification. Any area within a planned development district containing landscaping standards shall be regulated by the more restrictive standards. Residential lots in all zoning districts shall have a minimum of fifty (50) percent of the required front yard and required side yard adjacent to a side street devoted to landscaping.
- (a) A minimum of two (2) trees (three (3) inches caliper minimum) or approved ornamental trees, either existing or planted, is required in the combined front yard and side yard adjacent to a side street for each dwelling unit.
 - (b) All required trees must be planted prior to request for final building inspection of the dwelling unit. Planting of other landscape materials may be deferred,

however, up to one hundred eighty (180) days in case of incompatible climatic conditions. In this case, a conditional "Certificate of Occupancy" may, in Melissa's sole discretion, be issued.

- (c) All materials must meet the American Association of Nurseryman, Inc. "American Standard for Nursery Stock" (latest edition).
 - (d) Landscaping in harmony with the surrounding area adequate to minimize the visual monotony and barrenness shall be provided in the form of at least three (3) five-gallon or six (6) three-gallon shrubs.
 - (e) Turf, Sod or Ground Cover (living, growing material), not to exceed twelve (12) inches in height, which may be combined with aesthetic xeriscape landscaping which prevents soil erosion, shall be provided.
 - (f) Shrubs used in landscaping shall be in harmony with the surrounding area.
4. *Non-residential, SF, duplex, MH and MF districts within PDs* are subject to the respective restrictions described above.
- C. *Landscape Maintenance Requirements.* The following requirements are intended for all Single-Family, Multi-Family, Commercial and Industrial Districts. These requirements also apply for those areas which have a PD prefix and have an aforementioned zoning.
- 1. All plant materials shall be maintained in a healthy and growing condition and must be replaced with plant material of similar variety and size if damaged, destroyed or removed.
 - 2. Landscaped areas shall be kept free of trash, litter, weeds and other such materials or plants not a part of the landscaping.
 - 3. An automatic irrigation system must be installed in all required landscaped areas in commercial properties along thoroughfares.
 - 4. Any person, developer or entity desiring to install and maintain landscaping materials and irrigation facilities within the city right-of-way must first enter into and execute a "Median Right-of-Way Landscape and Irrigation Agreement."
 - 5. Landscape plans shall be submitted, reviewed and approved by Melissa for entryways to residential subdivisions or commercial properties within city rights-of-way. This requirement also applies to amenity features within city rights-of-way.
 - 6. Diameters of existing trees are measured at four (4) feet above grade. If the tree is on a slope, measure from the high side of the slope. In addition, measure above unusual swells in the trunk.

- (a) To determine the diameter of a multi-trunk tree, measure all the trunks; add the total diameter of the largest trunk to one-half (1/2) the diameter of each additional trunk. A multi-trunked tree is differentiated from individual trees growing from a common root stock if there is a visible connection between the trunks above ground.
- (b) Diameter measurements must be accurate to the nearest one-half (1/2) inch. This data is used in determination of tree significance and replacement value (if necessary).
- (c) Trees may be measured with a caliper, cruise stick, standard tape measure or diameter tape, all of which are available at forestry suppliers. Calipers are accurate, but difficult to handle. Cruise sticks are less accurate, but efficient for quick measurements. Standard tape measures are accurate, but require transposing from circumference to diameter. Diameter tapes are accurate and have the advantage of giving readings in diameter inches. End hooks and automatic recoiling on some models provide maximum efficiency.

D. *Landscape/Irrigation Plans.*

1. Landscape and irrigation plans shall be submitted with all nonresidential, multi-family and retirement housing development submissions. Landscape/irrigation plans shall ensure proper location of vegetation within public rights-of-way, preserve visibility triangles, maintain the overall integrity and intent of living screens and promote ornamental planting within Melissa.
2. Submission of landscape/irrigation plans for areas which include public rights-of-way, parks and greenbelts shall be made to the City Council until the following Departments are in place: Department of Community Development for review by Community Development, Public Works and Parks and Recreation. All other submissions shall be made to the City Council until the Community Development, Public Works and Parks and Recreation Departments are in place. The applicant shall be provided a landscape review checklist. Melissa staff shall evaluate the appropriateness of landscape and irrigation plans and may approve them or approve them subject to stipulations.
3. Landscape and irrigation "As Built" plans shall be submitted to Melissa for areas which include public rights-of-way, parks and greenbelts drawn to a suitable scale before a "Certificate of Occupancy" is issued.

E. Landscape Buffers. There shall be a twenty-five-foot root irrigated landscape buffer immediately adjacent to U.S. 75, SH 121 and SH 5 in which no building, structure or parking shall be permitted.

F. *Tree Preservation and Protection.*

1. The purpose of the following paragraphs is to establish incentives for the preservation of existing, healthy and protected trees within Melissa and to provide guidelines for the protection of trees.
2. Applicability. The terms and provisions of the following paragraphs relating to tree preservation and protection apply to real property as follows.
 - (a) All vacant and undeveloped properties are the responsibility of the owner(s).
 - (b) All property to be developed and redeveloped, including without limitation, any additions or alterations, is the responsibility of the developer or owner.
 - (c) Streets in residential developments, including, without limitation, associated landscaping, are the responsibility of the developer until accepted by Melissa or a property and/or home owners association.
3. Preliminary Development Plans. A general survey of natural vegetation showing tree groupings and anticipated tree losses shall be submitted with all preliminary site plans.
4. Final Development Plans. The landscape plan that is required with site plans and preliminary plat submissions shall also include the approximate location, size (caliper and height), condition and common name of each tree to be preserved if the applicant is requesting tree credits.
5. Tree Preservation Credits. For every healthy protected tree (six (6) 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:
 - (a) Trees six (6) inches to twelve (12) inches caliper: One (1) inch credit for each one (1) inch preserved.
 - (b) Trees twelve and one-tenths (12.1) inches to twenty-four (24) inches caliper: one and one-half (1 1/2") inches credit for each one (1) inch preserved.
 - (c) Trees over twenty-four (24) inches caliper: Two (2) inches credit for each one (1) inch preserved.
6. Only trees having been protected in accordance with the guidelines for tree protection (See paragraph (F)(13) below) shall be considered for credit. No locus, horse apple or similar tree shall be preserved for credit.
7. Tree credits may be applied at a maximum rate of one-third (1/3) for residential and one-half (1/2) for non-residential toward landscape and/or tree replacement.

8. 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 Melissa.
9. Determination of credits shall be made by the Melissa engineering staff until Community Development staff is in place and upon completion of site improvements. Field conditions may, in Melissa's sole discretion, warrant submittal of a revised landscape plan to determine the number of tree credits. Review may include, but not be limited to, a field inspection of the site, and the plan may be referred to other departments or consultants for review and recommendation(s).
10. Certain native and non-native trees are considered unprotected and will be considered exempt from the requirements of this Ordinance, except that a Tree Removal Permit, required herein, must be issued prior to removal. The following are considered unprotected trees:

TABLE INSET:

Arizona Ash	<i>Fraxinus velutina</i>
Bois D' Arc (Native)	<i>Maclura pomifera</i>
Chinese Tallow	<i>Sapium sebiferum</i>
Cottonwood (Native)	<i>Populus deltoids</i>
Hackberry (Native)	<i>Celtis occidentalis</i>
Honey Locust (Native)	<i>Gleditsia triacanthos</i>
Lombardy Poplar	<i>Populus nigra italica</i>
Mimosa	<i>Albizzia julibrissie</i>
Mulberry	<i>Morus alba</i>
Siberian Elm	<i>Ulmus pumila</i>
Silver Maple	<i>Acer saccharinum</i>
Sycamore	<i>Plantanus occidentalis</i>
Weeping Willow	<i>Salix babylonica</i>
Western Red Cedar	<i>Thuja plicata</i>
Mesquite	<i>Prosopis pubescens</i>

11. Other significantly-sized, unprotected trees will be considered for tree credits. These trees must be located outside of the floodplain, be over twelve (12) inches caliper in size and be individually field inspected by a designated representative of Melissa.
12. New and Unlisted Unprotected Trees. It is recognized that other unprotected native and non-native trees, not commonly found in this area, will be discovered on land to be developed or redeveloped in Melissa. In order to provide for such changes and

contingencies, a determination as to the appropriate classification of any new or unlisted unprotected tree shall be made as follows:

- (a) The City Council, until the Director of Community Development is in place, shall refer the question of any new or unlisted unprotected tree to the Planning and Zoning Commission requesting an interpretation as to the classification into which such tree should be placed. The referral of the interpretation question shall be accompanied by a statement of facts listing the overall characteristics of the tree to include whether it is a native tree, ability to resist drought, ability to resist disease, ability to resist destruction by pests common in this area, ability to resist freezing weather, expected life, unprotected features such as thorns or discharge of nuisance by-products and overall aesthetics.
- (b) The Planning and Zoning Commission shall consider the combination of characteristics of the tree as compared with the characteristics of the trees currently listed as "unprotected" and determine whether the tree should be added to the list.
- (c) The Planning and Zoning Commission shall transmit its findings and recommendations to the City Council as to the classification of the tree as "unprotected" or "protected". The City Council shall, by resolution, approve or disapprove of the recommendation(s).

13. Guidelines for Tree Protection. Developers shall adhere to the following tree protection guidelines on all construction sites as applicable:

- (a) Prior to construction or development, the developer shall clearly mark all trees to be preserved.
- (b) The developer shall erect a temporary fence around each tree or group of trees to prohibit the placement of debris, parking of vehicles or fill within the normal mature drip line of any tree.
- (c) During the construction stage of development, the developer shall prohibit cleaning of equipment or materials under the canopy of any tree or group of trees to remain. In addition, the developer shall not allow the disposal of any waste material such as, among other things, paint, oil, solvents, asphalt, concrete, mortar, etc. under the canopy of any tree or groups of trees to remain.
- (d) No attachments or wires of any kind, other than those of a protective nature, may be attached to any tree.
- (e) Major changes of grade one (1) inch or greater will require additional measures to maintain proper oxygen and water exchange with the roots. With major grade changes, a retaining wall or tree well of rock or brick must be constructed around the tree no closer than one-half (1/2) the distance between the trunk and the

normal mature drip line. The top of the retaining wall must be constructed at the new grade. Grade changes one (1) inch or greater may be made with Melissa staff approval.

- (f) If a patio, sidewalk, drive or parking lot must be placed within the normal mature drip line of an existing tree, material such as porous (turf) pavement that will allow the passage of water and oxygen must be used.
- (g) Fence row trees that exist primarily in nearly a straight line along older or existing property lines that generally, but not always, run parallel to a fence. Fence row trees six (6) inches caliper or greater in residential developments shall be preserved by providing a fifteen-foot protected area centered seven and one-half (7 1/2") feet on each side of the centerline, on and parallel to the fence row trees. No utility, trench (including irrigation trenches), alley paving or permanent structure shall be allowed within the area. Removal of trees six (6) inches caliper or larger is allowed where an alley has back-to-back residential lots and access is needed to one side of the area. These trees shall be identified and removal of such will not require replacement. All trees saved twelve (12) inches caliper and larger shall be considered for tree credit purposes. Fences that are installed within this area, which do not interfere with the existing trees, may be allowed. Fences proposed to be located in the area shall have the design and layout submitted to Melissa for review and approval.

- 14. The first floor of parking garages is the only area that should be used to determine landscaping requirements as established herein.
- 15. No tree six (6) inches caliper or larger shall be cut down without obtaining a Tree Removal Permit as required herein.

G. *Tree Removal Permits.*

- 1. Trees three (3) inches caliper or greater shall not be removed without issuance of a Tree Removal Permit. The City Administrator, or his/her designee, must approve the removal thereof. A no-fee permit may, in Melissa's sole discretion, be issued when a tree(s):
 - (a) Is/are injured, dying, diseased or infested with harmful insects;
 - (b) Is/are in danger of falling, interfere with utility service or create unsafe vision clearance;
 - (c) In any manner, create(s) a hazardous or dangerous condition, as solely determined by Melissa, so as to endanger the public health, welfare or safety; or
 - (d) Is/are located on real property having an Agriculture-Open Space zoned district classification or has/have an agriculture exemption for taxation purposes.

2. Under no circumstances shall the clear-cutting of trees on any real property within Melissa be allowed prior to the issuance of a Tree Removal Permit for said property. Any tree removed will be subject to the guidelines and requirements of this Ordinance.
 3. Application for Tree Removal Permit. Tree Removal Permits for the removal of trees shall be obtained by making application to Melissa, on a form provided by Melissa, and shall be subject to the following procedures:
 - (a) Review of Application for Tree Removal Permit. Upon receipt of a proper application for a Tree Removal Permit, accompanied by an administrative fee of twenty-five dollars (\$25.00) per permit application (unless exempt from the fee), the City Administrator, or his/her designee, shall review the application and may conduct field inspections of the development and/or refer the permit application to other departments for review and recommendation(s), as deemed necessary and appropriate solely by the City Administrator, or his/her designee.
 - (b) The application for a Tree Removal Permit, if required, shall be considered an integral part of the application for development plan approval, and no development plan for any development subject to the terms and provisions of this paragraph G shall be approved without said Tree Removal Permit.
 4. Once a Tree Removal Permit has been issued, the trees indicated to be cut down shall be completely removed from the site within ninety (90) days, including all portions of the tree(s) down to and including the trunk to below the finished or proposed finished grade on the site. All replacement trees, transplanted trees or escrow funds sufficient to comply with the requirements of this Ordinance shall be in place prior to the issuance of a "Certificate of Occupancy" or acceptance of any public improvements on the subject property by Melissa.
- H. *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, which 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.
- I. *Replacement of Trees.* 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 (See paragraphs (F)(5)--(11) for tree preservation credits). The City Council (until the Community Development Department is in place) may allow the trees to be located to other areas in Melissa if it is deemed necessary solely by Melissa staff, and space is available. Otherwise, the developer, builder or owner shall be required to escrow funds sufficient to meet the requirements of this Ordinance.

1. 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.
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.
3. Protected trees six (6) inches caliper or larger located in the Restricted Commercial District (C-1) will be replaced at the following rate:
 - (a) Trees twenty-four (24) inches caliper or greater--One hundred (100) percent replacement required.
 - (b) Trees less than twenty-four (24) inches caliper--Fifty (50) percent replacement required.
4. Credits may be applied as stated in paragraphs (F)(5)--(11) above.
- J. *Recommended Trees For New Plantings.* The following is a list of recommended high quality, long-living trees which are considered suitable for local soil conditions and climate. Other species may be acceptable with approval from the City Council (until the Community Development Department is established). Required trees shall be a minimum of three (3) inches caliper immediately after planting.

1. Over story (Shade) Trees: Height Range 30--60 Feet

TABLE INSET:

American Elm	Alums americana
Bald Cypress	Taxodium disticum
Bur Oak	Quercus macrocarpa
Cedar Elm	Ulmus crassifolia
Chinese Pistacke	Pistacia chinesis
Chinquapin Oak	Quercus muehlenbergii
Eastern Red Cedar	Juniperus virginiana
Green Ash	Fraxinus pennsylvanica "Marshall Seedless"
Green Ash Cultivare	Fraxinus pennsylvanica ssp.
Lacebark (Drake) Elm	Ulmus parvifolia "Drake"
Live Oak	Quercus virginiana
Pecan	Carya illinoensis
Pistachio	Pistaola chinesis

Red Oak	Quercus shumardii
Shumard or Texas Red Oak	Quercus shumardi or texana
Sweet Gum	Liquidambar styraciflua
Western Soapberry	Sapindus drummondii

- The following ornamental trees, with Melissa staff approval, may be substituted for the required shade trees. These ornamental trees shall have a minimum caliper of three (3) inches.

Accent (Ornamental) Trees: Height Range 10--20 Feet

TABLE INSET:

Afghan (Eldarica) Pine	Pinus eldarica
Chaste Tree	Vitex Agnus-castus
Crabapple	Malus augustifolia
Crape Myrtle	Lagerstroemia indica
Deciduous Holly	Ilex decidua
Desert Willow	Chilopsis linearis
Flowering Pear	Pyrus calleryana "Bradford", "Capital", "Aristocrat"
Japanese Black Pine	Pinus thunbergii
Mexican Buckeye	Ungnadia speciosa
Mexican Plum	Prunus mexicana
Purple Plum	Prunus cerasifera
Redbud	Cercis canadensis
Texas Sophora	Sophora affinis
Wax Myrtle	Myrica cerifera
Yaupon Holly	Ilex vomitaria

K. Installation Practices (for areas to be dedicated to Melissa).

- Grading.** All areas receiving new turf or sod shall be fine graded, eliminating all rocks and debris larger than one (1) inch in diameter. If necessary, use additional fertile soil for top dressing to promote healthy growth and positive drainage.
- Bed Preparation.** All beds shall be prepped with at least four (4) inches of amended or new soil. The beds must be crowned or sloped to create positive drainage. The beds shall be topped with two (2) inches of weed free mulch.
- Turf Requirements.** All turf areas must be established prior to Melissa's acceptance. The turf must have ninety (90) percent coverage and be weed free.

4. All site preparation, landscape and irrigation plans for areas to be turned over and/or dedicated to Melissa must be approved by the City Council, until the Parks and Recreation Department is in place.
5. All trees must be back filled with the native soil, and a mild fertilizer must be added to the backfill. The soil must be free of rocks and debris. All trees must be staked outside of the rootball.
6. Warranty. All required trees and plant materials shall be guaranteed for one (1) year. Sod and turf must be maintained by the developer, builder or owner, whichever is applicable, for at least one (1) year prior to Melissa's acceptance.

(Ord. No. 97-12, adopted 12-9-97, Sec. 1; Ord. No. 05-18, adopted 2-22-05, Sec. 2)