

CHAPTER 10

LANDSCAPING SITE DEVELOPMENT STANDARDS

11-1001. STATEMENT OF PURPOSE

A. General Purpose

The purposes of this ordinance are to promote the health, safety, and public welfare in the City of Brownsville, and be consistent with forestry policy and practice for urban areas promulgated by the Division of Forestry of the State of Tennessee: (1) To encourage the planting of trees and landscaping in the City of Brownsville, (2) To encourage the maintenance and protection of existing trees, and, (3) To encourage the removal of undesirable or diseased trees.

B. Standards

The standards herein are hereby established in order to lessen air pollution, to promote clean air quality by increasing dust filtration, to reduce noise, heat, and glare, to prevent soil erosion, to improve surface drainage and minimize flooding, to ensure that activities in one area do not adversely affect activities within adjacent areas, to emphasize the importance of trees as a visual screen, to beautify and enhance improved and undeveloped land, to maintain the ambiance of the City, to ensure that tree planting and removal does not reduce property values, and to minimize the cost of construction and maintenance of drainage systems necessitated by the increased flow and diversion of surface waters.

11-1002. DEFINITIONS

- A. **AAN** - American Association of Nurseryman upon which the quality and measurement of plant materials for this ordinance shall be based.
- B. **Caliper Inches** – For trees larger than four inches (4"), the quantity in inches of the diameter of a tree measured one foot above the ground. For trees up to and including four inches (4"), the quantity in inches of the diameter of the tree measured six inches (6") above the ground.
- C. **Canopy or Shade Tree** – Any deciduous tree maturing at a height of at least thirty (30) feet or greater that would occupy the upper canopy of a forest.
- D. **Conifer Tree** - Any tree with needle leaves and a woody cone fruit.
- E. **Deciduous Tree** - Any tree which sheds its leaves in the fall or winter.
- F. **Drip Line** - A vertical line extending from the outermost portion of a tree to the ground.
- G. **Endangered Species** - Those trees which are under the protection of State and/or Federal law.
- H. **Evergreen** - Those trees, including broad-leaf and conifer trees that maintain their leaves year round.
- I. **Landscape Surface Area** - The area of the site not devoted to paving or buildings. Fountains and retention facilities shall be counted as part of the landscape area.
- J. **Line Clearance** - Removal of limbs and branches within a set distance of utility lines.
- K. **Private Tree** - Any tree in an area owned by a private individual, business, company, industry, or institution, or in any area not owned by a governmental entity.
- L. **Pruning** - Selective removal of the upper portions of any tree, taking into account the natural shape and structure of the tree.
- M. **Public Tree** - Any tree in an area owned by a governmental entity.
- N. **Replacement Tree** - Any tree being planted on a site to replace a tree that has been removed or destroyed for any reason.
- O. **Street Tree** - Any tree within a public right-of-way along a road, street, median, or in a similar area in which the public right-of-way borders areas owned by private citizens.
- P. **Supplemental Tree** - Any tree being planted on a site which is in addition to existing trees and replacement trees.
- Q. **Topping** - The non-selective removal of the top portions of any tree without regard to the natural shape and structure of the tree.
- R. **Tree** - Any living, self-supporting woody or fibrous plant that is a conifer, evergreen, deciduous, or ornamental, as defined herein.

- S. Understory Tree - Any deciduous tree maturing at a height of less than thirty (30) feet that would occupy the understory of a forest.

11-1003. TREE PLANTING

A. Public Tree Planting

Tree planting shall be undertaken by the city in all public areas in a systematic manner to assure diversity of age, classes, and species. Areas to be planted, density, appropriate species, and other aspects of the planting function shall be determined by the "Tree Commission".

B. Private Tree Planting

Planting of trees on private property is encouraged, especially in areas where the public may have an extraordinary interest.

C. Planning Commission Requirements

1. The Planning Commission shall in the normal course of its approval process, require the planting of public trees or private trees to replace trees which have been removed, destroyed, or severely damaged during the courses of development or construction, except that in no case shall replacement trees be required in excess of the minimum established in this ordinance.
2. The Planning Commission shall in the normal course of its approval process, require the planting of public trees or private trees to supplement the trees on any site proposed for development, except that in no case shall supplemental trees be required in excess of this ordinance.

11-1004. TREE PROTECTION

A. Public Trees

It shall be unlawful for any person to remove or cause to be removed any public tree or other wood plant, whether such plants are trees as defined herein, or smaller flora which are part of the understory, shrub layer, or herb layer, of any size or of any species without first obtaining the permission of the Planning Commission or its designee.

11-1005. LANDSCAPE PLAN

A. Requirement

A Landscape Plan shall be required for all new development projects requiring a site plan or preliminary/final subdivision approval.

B. Approval

An approved Landscape Plan as defined in this Chapter shall be required for the entire premises, prior to issue of development permits.

11-1006. ADMINISTRATION AND ENFORCEMENT

A. Standards

A Landscape Plan that complies with the minimum standards set forth in this Chapter shall be submitted to the Planning Commission and Building Inspector, as appropriate, along with the proposed property development plans.

B. Review Time

The Landscape Plan shall be reviewed and approved or disapproved within thirty (30) days from submission to the Planning Commission. If disapproved, the reason(s) for such action shall be transmitted to the applicant in writing. Corrections shall be made re-submitted for review at the next scheduled Planning Commission.

C. Appeal

Any person aggrieved by a decision of the Building Inspector in the enforcement of the requirements of this Chapter may appeal the decision to the Board of Zoning Appeals. The requirements of site development plans approved by the Planning Commission can not be appealed.

D. Permitting

A Landscape Plan is required for a Building Permit. The landscaping must be installed completely and approved by the Planning Commission prior to issuance of a Certificate of Occupancy by the Building Inspector.

11-1007. MAINTENANCE**A. Private Property**

The owner of private property shall be responsible for the maintenance, repair, and replacement of all landscaping materials required by this Chapter.

B. Time Period

All plant material shall be tended and maintained in a healthy growing condition, replaced when dead, and kept free of weeds, refuse, and debris for two (2) years. A citation will be issued when necessary to advise the owner that corrective action is necessary, and how many days will be allowed for this work to occur.

C. Public Property

The Public Works Department shall be responsible for pruning, watering, fertilizing, insect and disease control, and other tree care to keep all public trees reasonably healthy and to minimize the risk of hazard to residents and visitors to the city.

D. Encouragement

Care and maintenance of private trees are encouraged to minimize health and safety risks to people.

E. Right of Way

The Public Works Department may remove, prune, fertilize, water, or otherwise treat with insecticides, fungicides, herbicides, or other means, any private tree which overhangs any public right-of-way, comes in contact with overhead utility lines, creates any traffic hazard by restricting visibility, or poses a health risk to other plants, animals, or person by disease or insect infestation.

F. Proper Pruning

Proper pruning with branch removal at branch or trunk junctures is required for all public trees, and strongly encouraged for all private trees.

11-1008. LANDSCAPE PLAN AND PLANTING REQUIREMENTS**A. Scale**

The Landscape Plan shall be drawn to a scale of no less than 1"=50' and may be a part of the Grading Plan, Site Plan, or on a separate drawing labeled Landscape Plan.

B. Plant List

All existing and proposed landscape materials shall be labeled as to size, quantity, and name on the Landscape Plan.

D. Existing Trees

All existing trees 8" caliper and greater shall be denoted on the Grading Plan or Site Plan. Trees to be removed shall be clearly labeled.

E. Tree Preservation Credit

Total credit shall be given for trees preserved during the development and construction process.

F. Replacement of Preserved Trees

Trees marked for preservation and damaged or destroyed during construction, or that die subsequently during the first 24 months, shall be replaced with an equivalent caliper inches of trees.

G. Landscape Integration

Landscaping shall be integrated into building arrangements, topography, parking, and buffering requirements. Landscaping shall include trees, shrubs, ground cover, and the use of building and paving materials in a manner that respects the natural topographic features and natural resources of the site.

H. Utility Avoidance

1. Trees shall not be planted within 5 feet of underground utilities. Street or canopy trees shall not be planted within 10 feet of the alignment of overhead utility lines.
2. Trees shall not be planted closer than 10 feet to a fire hydrant, utility pole, or street light.

Visibility

A "clear site triangle" shall be maintained at the intersections of driveways and streets and where streets intersect (see Section 11-105 B.).

1. The only planting allowed within the "clear site triangle" is grass, ground cover, or shrubs maintained at 30 inches or less. No trees shall be allowed within the triangle. Foliage from adjacent trees should be cleared and maintained to a height of 6 feet above the ground surface to insure visibility.
2. Where a driveway intersects a street, the triangle shall be measured 10 feet each way from the point of intersection at the right-of-way (see illustration A).
3. Where a street intersects a street, the triangle shall be measured 35 feet back from the point of intersection of the roadways (see illustration B). A driver should have a clear sight area along the intersecting road from the corner for 250 feet.

11-1009. PLANT MATERIALS STANDARDS**A. Required Size**

Minimum plant sizes shall be the following:

1. Deciduous canopy trees shall be a minimum of 2" caliper,
2. Understory trees shall be a minimum of 1½" caliper,
3. Evergreen trees shall be a minimum of 5 feet height,
4. Shrubs shall be a minimum of 18 inches in height.

11-1010. TREE PRESERVATION**A. Developer Responsibility**

The developer should make an effort to preserve significant trees of 8" caliper or greater. This may include modifications to the site or building plan, which may be requested by the Planning Commission.

B. Variance

In order to preserve significant trees, a variance may be given to or requested by a developer to aid in site or building plan changes. This shall occur through the Planning Commission.

C. Health

Preserved trees shall be sound and healthy and should not exhibit advanced stages of decay or disease, severe damage to major branches or trunks, broken limbs, lost leaders, topping, or poor pruning.

D. Tree Protection

Tree protection shall be provided for trees in good condition worthy of preservation. Tree protection during construction shall consist of posts, fencing, and flags. There shall be no dumping or storage of construction materials, parking, or change of grade in the tree protection zone. The tree protection zone shall be:

1. The drip line for trees with a drip line radius of 20 feet or less;
2. Trees with a drip line of 20 feet or more shall have a minimum tree protection zone of 20 feet or more as determined by the Planning Commission.

11-1011. LANDSCAPING REGULATIONS FOR MULTI-FAMILY (WITH MORE THAN 3 UNITS), COMMERCIAL AND INDUSTRIAL SITES**A. Landscaping Requirements:**

1. Each acre of landscape surface area (rounded to the nearest whole number) not presently forested shall be landscaped as follows:

<u>Min. Number of Trees/Shrubs</u>	<u>Minimum Size</u>
12 trees	2 inch caliper
25 shrubs	18 inches high

2. In Commercial and Industrial Districts with a proposed building of 10,000 square feet or more, each acre of landscape surface area (rounded to the nearest whole number) not presently forested shall be landscaped as follows:

<u>Min. Number of Trees/Shrubs</u>	<u>Minimum Size</u>
8 trees	2 inch caliper
20 shrubs	18 inches high

3. Credit shall be given toward required trees for trees 2" caliper or larger preserved during construction. For example, a 6" tree shall count as three 2" trees. See the following example.

EXAMPLE: SITE DEVELOPMENT

Site Acreage 6.1
 Trees Required $6 \times 12 = 72$ trees or, $72 \times 2" = 144$ caliper inches (CI)
 Shrubs Required $6 \times 25 = 150$ shrubs
 Trees Preserved $3 \text{ trees} \times 2" = 6$ caliper inches
 $2 \text{ trees} \times 6" = +12$ caliper inches
 TOTAL CI Preserved = 18 caliper inches
 Trees Required 144" CI
 Trees Preserved -18"
 Actual Trees Required 126" CI
 Actual Trees Required 126" = 63 trees
 2" (minimum tree size)
 (NOTE: CI = caliper inches)

B. Landscape Zones

1. All site boundaries fronting onto streets shall have a Landscape Zone consisting of an unpaved area planted in grass or mulched with bark. The area shall be landscaped with trees (and shrubs if the developer so desires). The zone shall be a minimum of 10 feet wide facing two lane streets and 20 feet wide facing four lane streets. This shall be behind the property line between right-of-way and any paving. No parking or structures (except signs) will be allowed in the Landscape Zone. At least one tree for every 30 linear feet or portion thereof shall be planted in the landscaped strip; however, this shall not be construed as requiring the planting of trees on thirty (30) foot centers.
2. The preferred trees for Landscape Zones facing streets are canopy or shade trees. In the event overhead, underground utilities or other conditions are present, understory trees may be planted.
3. All site boundaries facing adjacent properties shall have an unpaved Landscape Zone. At least one tree for every 30 linear feet or portion thereof shall be planted in the landscaped strip. A minimum zone five (5') wide shall be provided for parcels less than two (2) acres; a minimum zone to (10') wide shall be provided for parcels two (2) acres or more. The Landscape Zone shall be increased if there is a larger buffer required because of a zoning or land use difference between properties.
4. The preferred trees for Landscape Zones facing adjacent properties are canopy or shade trees and evergreen trees. In the event overhead or underground utilities are present, 1½" caliper understory trees may be planted.
5. In the event the proper number of trees can not be planted in the Landscape Zones because of utilities or site development problems, the trees shall be placed elsewhere on the property.

C. Parking Lot Landscaping

1. Landscaped parking islands shall be provided at the end of all rows of parking.
2. Parking islands shall be covered with 2-3" shredded bark or turf. Paving or covering islands with rock shall not be acceptable. Landscape parking islands shall have a minimum of 18" deep topsoil and built with a minimum interior width of 5 feet.
3. One (1) canopy tree per eighteen (18) linear feet of island shall be required. Other landscape materials and understory trees may compliment the island plantings. Where utilities present a problem, understory trees may be substituted for the canopy trees.

D. Screening

1. A 6 foot height screen shall be planted and/or fence shall be erected between parcels of land with different uses such as commercial and residential, and to screen unsightly elements such as dumpsters, air conditioner units, or storage areas. A landscape screen shall consist of a minimum of 6 foot height evergreen shrubs or trees planted a maximum of 8 feet on center.
2. Additional screening may be requested at the discretion of the Planning Commission or request of Planning Staff.

11-1012. TREE LIST

Recommended Tree List:

Ash	Linden
Beech	Locust (improved varieties)
Crape Myrtle	Magnolia
Flowering Crabapple	Maple
Ginkgo (male only)	Oak
Pine	Spruce
Goldenrain Tree	Sweetgum (improved variety)
Hemlock	Redbud
Holly	Tulip Poplar
Hornbeam	Zelkova
Leyland Cypress	

Undesirable Tree List: These trees shall not be allowed as new plantings. However, if they are existing trees in good condition, they may remain as a part of the Landscape Plan.

Black Locust	Siberian Elm
Black Walnut	Silver Maple
Cottonwood	Weeping Willow
Osage Orange (Bodak or Horse Apple)	White Birch
Poplar (Lombardy)	