

ORDINANCE 05-08

**AN ORDINANCE TO AMEND ZONING ORDINANCE
ARTICLE VI, SECTION 23, TREE ORDINANCE, AND
ARTICLE VI, SECTION 19, FENCES AND
TO AMEND THE SIGN ORDINANCE REGARDING
LANDSCAPING AROUND MONUMENT SIGNS**

BE IT HEREBY ORDAINED by the City of Bartlett Board of Mayor and Aldermen as follows:

SECTION 1. Zoning Ordinance Article VI, Section 23 is hereby amended to read as shown in Attachment A.

SECTION 2. Zoning Ordinance Article VI, Section 19 is hereby amended to read as shown in Attachment B.

SECTION 3. The Sign Ordinance, Title 09, Section 9-0954, Ground Sign Restrictions, part 8 is amended to include and to refer to the landscaping drawing in Attachment C.

SECTION 4. SEVERABILITY. Should any provision or part of this Ordinance be rendered void or unenforceable by any court of law, statute or other authority, the rest and remainder of this Ordinance shall remain in full force and effect.

SECTION 5. EFFECTIVE DATE. This Ordinance shall take effect from and after its final passage, the public welfare requiring it.

FIRST READING: July 12, 2005
SECOND READING: August 23, 2005
THIRD READING: October 25, 2005

David Parsons, Register to the Board of Mayor and Aldermen

A. Keith McDonald, Mayor

Attachment A

Section 23 – Tree and Landscaping Ordinance

PART I. GENERAL PROVISIONS

A. Purpose

The purpose of this Section 23 is

- to regulate and control planting of trees and woody vegetation in the City of Bartlett,
- to vigorously encourage the protection of existing trees and root systems,
- to regulate the preservation, replacement and indiscriminate removal of trees, and
- to establish procedures and practices and minimum design standards for fulfilling these purposes.

B. Applicability

This Section 23 shall be applicable to all grading, earth moving, changing of elevation, new construction, additions, or remodeling for all land development and construction, including residential, office, commercial, and industrial; with the following exception: Construction of additions, accessory buildings (including swimming pools), or private drives on a lot with an existing single-family home. That is, this Section 23 is applicable to construction of new single-family homes.

Where the following have been approved by the Planning Commission or the Code Enforcement Department no later than October 25, 2005 and are still in effect following that date, such plans may be continued in the manner approved:

- Subdivision Master Plans (that have not lapsed per Subdivision Ordinance Article II, Section 3.E), Construction Plans, or Final Plans.
- Plot plans for construction of single-family houses.
- Site plans for non-single-family-residential development.

C. Definitions

1. Caliper Inches (CI) - Quantity in inches of the diameter of supplemental and replacement trees measured at the height of twelve inches (12") above the ground. (Caliper Inches shall be used in measuring newly planted material).
2. Certified Arborist – A professional who is certified as possessing the technical competence through experience and related training to provide for or supervise the maintenance of trees and other woody plants in the residential, commercial, and public landscape; which certification is by an organization recognized by the City as qualified to do so.
3. Champion Tree – A tree, among the 263 species that are native or common to Tennessee, that earns the most points for its species under a statewide program, based on its circumference, height, and crown spread.
4. Conifer Tree - Any tree with needle leaves and a woody cone fruit.
5. Cultivar - a cultivated variety designated by single quotes (e.g., ‘October Glory’). (A variety or subspecies, in contrast, is found in nature and is a subdivision of a species.)
6. Deciduous - Those trees that shed their leaves in the fall or winter.
7. Density Units (DU) - The actual measured inches of tree trunk diameter (DBH or CI).
8. Diameter at Breast Height (DBH) - The diameter in inches of a tree measured at four and one-half (4 1/2) feet above the existing grade. (DBH shall be used to measure existing trees to remain.)
9. Drip Line - A vertical line extending from the outermost portion of the tree canopy to the ground.
10. Endangered Species - Those trees that are under the protection of State and/or Federal law.
11. Evergreen - Those trees, including broad-leaf and conifer evergreens, that maintain their leaves year-round.
12. Green/Open Space – That space on a lot that is landscaped.

13. Historic Tree – A tree or grove of trees so designated by the Tennessee Urban Forestry Council.
14. Landmark Tree - A tree or grove of trees so designated by the Tennessee Urban Forestry Council.
15. Ornamental tree – A tree distinguished by one or more unique characteristics, such as flowers, foliage, bark or the form of the tree.
16. Overstory - Those trees that compose the top layer or canopy of vegetation.
17. Pruning – Selective removal of certain limbs based on the structure and growth pattern of the tree. See also “topping.”
18. Replacement Planting - The planting of trees on a site that before development had more than the minimum standard of trees per acre, but would be less than the minimum after development.
19. Street Tree - a tree that tolerates stresses common near roads such as soil compaction, confined root zones, drought, air pollution, high salt levels, and high heat levels.
20. Supplemental Planting - The planting of trees on a site that prior to development had less than the minimum standard of trees per acre.
21. Topping – Excessive and arbitrary removal of all parts of the tree above and beyond a certain height with no regard for the structure or growth pattern of the tree. See also “pruning.”
22. Tree – Any living, self-supporting woody or fibrous plant which is a conifer, evergreen, deciduous or ornamental, as defined herein.
23. Tree, Private – A tree located on private property, including property owned in common by more than one private (non-governmental) owner.
24. Tree, public – A tree located on public property, such as a park.
25. Tree, street – A tree placed in a row of trees lining a street, which row may be on public property or in a landscape easement on private property.
26. Tree Protection Zone - The area around a tree corresponding to the drip line and a minimum

of ten (10) feet in all directions from the trunk, wherein no disturbance to or compaction of the soil is permitted.

27. Understory - Those trees that grow beneath the overstory.

D. Administration

The City tree ordinance shall be administered by the Code Enforcement Department.

The Forester shall have the same enforcement power as a Code Enforcement officer with regard to this Section 23.

Specific areas of responsibility are assigned as follows:

1. Engineering Department
 - a. Provide, by the Forester, determinations as to whether proposed measures regarding existing and new trees are in compliance with the requirements of this Section 23.
 - b. Review development plans in accordance with the provisions of this Section 23 as a part of the review process of site development plans.
 - c. Coordinate donations of trees or money to purchase trees.
 - d. Provide inspection of development sites to ensure compliance with grading and tree protection requirements.
 - e. Upon release of residential lots to Code Enforcement for issuance of building permits, transfer to Code Enforcement the locations of trees to be saved on lots.
2. Code Enforcement Department

Provide overall enforcement of this Section 23 through the Director of Code Enforcement, upon determinations by the Forester as to compliance.
3. Planning Department

Review development plans in accordance with the provisions of this Section 23 as a part of the review process of site development plans.

4. Planning Commission and Design Review Commission
Review development plans for conformance with this ordinance.
5. City Beautiful Commission
 - a. Recognize groups and individuals completing tree projects.
 - b. Perform other tree related duties and opportunities as requested by the Mayor.

PART II. TREE PROTECTION

A. Protection of Existing Tree Cover

Commercial and residential developments within the City shall reflect the City's commitment to trees. This includes the preservation of existing trees where practical and the judicious planting of new tree materials.

1. Any construction work covered by this Section 23 that will remove or damage existing trees shall be subject to the requirements of parts
 - III.D.2, Development Other than Single-Family Residential,
 - III.F, Residential Subdivision Development, and
 - III.G, Grading Plan Review.
2. Adequate protection shall be given to trees scheduled to be preserved on a construction site, as follows:
 - a. Grading or filling and drainage design shall be adjusted to avoid disturbance to drainage or roots and to avoid soil compaction in the Tree Protection Zone.
 - b. All trees on public property or on private construction sites that are scheduled for preservation shall be guarded by a four-foot-high (4') (minimum) fence at a distance from the trunk corresponding to the Tree Protection Zone. The area within the fence shall be identified as a Tree Protection Zone, and no building material, dirt, other debris or any equipment or vehicles shall be allowed inside the barrier. This protection shall remain in place through the entire development process, from

before initial clearing of the site through completion and final use and occupancy approval of the house or other building construction.

B. Tree Maintenance

The City shall have authority to require maintenance needed to keep both public trees and private trees reasonably healthy and to minimize the risk of injury to people or property. Care of public trees may be accomplished by City personnel, by contract with commercial tree care companies, or by adjacent property owners, as required by the City. Tree maintenance may include pruning, fertilization, watering, insect and disease control, tree surgery or other related activities.

1. Responsibility for Maintenance

It shall be the responsibility of each owner of property within the City to maintain in good condition trees and other landscaping (a) on the public right-of-way abutting the owner's property and (b) close enough to said right-of-way to affect public safety. The Code Enforcement Department, when it determines that such trees or other landscaping require maintenance, may order the same to be done.

Where an owner of property will be responsible, through a homeowners or property owners association, for the maintenance of commonly-owned property, then

- required maintenance of trees and other landscaping on the public right-of-way adjacent to such property shall become the responsibility of such association upon approval of the development by the City, and
- such requirement shall be included in conditions of approval of the development.

2. Notice of Required Maintenance

The Forester or the Director of Code Enforcement or his designee (hereinafter the "Code Enforcement officer") shall serve notice in writing upon the owner or owners of the property abutting or containing the trees or other landscaping to conduct such maintenance as requested within the time period provided herein from the date of notification. Such

maintenance shall conform to all standards currently adopted and enforced through the zoning ordinance, subdivision regulations, and other codes of the City.

No permit shall be required to conduct maintenance required herein on trees or other landscaping. However, the Code Enforcement Department shall be notified prior to conducting such maintenance on the public right-of-way, and an inspection prior to and following such maintenance will be made by that Department to ensure compliance with City standards.

3. Tree Topping Prohibited

The practice of tree topping is prohibited on all public trees, street trees, and trees in non-single-family residential development and is strongly discouraged as a tree care practice for trees on single-family residential lots.

Crape myrtles shall be maintained as trees in non-single-family-residential development if they were presented as trees in the landscape plan. Crape myrtles on single-family residential lots are not affected by this part B.3.

Proper pruning with branch removal at branch or trunk junctures is the best practice for limb removal.

4. Pruning

Tree pruning shall be performed in a manner that protects the public.

- a. Street, public and private trees growing along streets and sidewalks must be pruned free of limbs to a height of eight (8) feet for sidewalks and twelve (12) feet for streets, with no lateral growth permitted onto the sidewalk or street below this height.
- b. Tree branches shall not obstruct the view of any street lamp, street sign or stop sign. Likewise, tree or shrub vegetation shall not obstruct any street intersection and shall be pruned such that a driver has a clear line of vision of traffic coming from either direction.
- c. Private trees shall be kept pruned of any dead, diseased or dangerous limbs or

branches which could fall into the right-of-way or onto public property and thereby constitute a menace to public safety.

C. Tree Removal

1. Trees that pose a safety or health risk to the public or to other trees shall be removed by the responsible party in a timely manner.
2. The City shall have the right to cause the property owner to remove any dead, diseased or structurally damaged trees on public or private property when such trees constitute a potential hazard to life and property within the right-of-way or on public property.
3. As a normal procedure, all stumps of public and street trees shall be removed below the surface of the ground by grinding or other methods.

D. Trees of Historic or Special Significance

Champion, Landmark, and Historic Trees can constitute a unique asset to the community. A tree so designated will be given special protection, maintenance and recognition as the situation warrants.

E. Enforcement

1. Reporting

Whenever a complaint is filed charging that any property is in violation of this Section 23 and/or whenever it appears to the Code Enforcement officer that any property is in violation of this Section 23, the Code Enforcement officer shall issue and cause to be served upon the owner of and parties in interest in such property a written notice of the existing violations, as provided in parts II.B.2 and II.C.2. The owner of and parties having an interest in said property shall have ten (10) calendar days from the receipt of such notice to (a) perform the maintenance to be in compliance with this Section 23 or (b) request more time to perform the maintenance or (c) exercise the right to appeal to the Property Maintenance Code Board of Appeals.

Complaints, orders and notices issued by the Code Enforcement officer shall be served per-

sonally or by registered mail. If the person to be served cannot be found, in the exercise of reasonable diligence, the Forester or the Code Enforcement officer shall make an affidavit to that effect. Then the serving of such complaint or order upon such persons may be made by publishing the same in a newspaper of general circulation in the City of Bartlett. A copy of such complaint, notice or order shall be posted in a conspicuous place on the premises affected by the complaint, notice or order.

2. Right of Appeal

If, upon receiving such notice, the person or persons notified disagree with the decision of the Code Enforcement officer, then they shall have the right of appeal to the Property Maintenance Code Board of Appeals within ten (10) calendar days. An application for appeal shall be based on a claim that the true intent of this Section 23 has been incorrectly interpreted, the provisions of this Section 23 do not fully apply, or the requirements of this Section 23 are adequately satisfied by other means, or that the strict application of any requirement of this Section 23 would cause an undue hardship. The Property Maintenance Code Board of Appeals may affirm, reverse or modify the decision of the Code Enforcement officer.

3. Failure to comply

If the owner fails to comply with an order to conduct the required maintenance, the Forester or the Code Enforcement officer may cause such maintenance to be conducted or may contract for the same.

4. Cost Assessed to Property Owner

The owner of the property where the Code Enforcement officer had the maintenance performed shall be liable for all costs incurred by the Forester or the Code Enforcement officer on behalf of the city relating to such action. The city attorney shall take steps to collect such actual costs plus an administrative fee equal to the greater of five (5) percent of the costs or one hundred dollars (\$100), and to protect the city's interests in collecting such costs.

5. Notice to Finance Department

The Forester or the Code Enforcement Department shall provide to the Finance Department a record of required maintenance as inspections occur. Such notice shall be filed with the tax records for the property, so that any person purchasing such property, upon inquiring as to taxes due on the property, will receive notice of the obligation to pay the cost of such maintenance.

F. Fees and Penalties

Damage to or unapproved removal of an existing tree intended to be retained on a site will be subject to the maximum penalty allowed by state law.

A Subdivision Development Contract shall require a fee of \$500 each for damage to or unapproved removal of an existing tree intended to be retained on a site.

For land disturbance or building on a lot where (1) a Subdivision Development Contract is not required and (2) a grading or building permit is required for an activity (under “ III.G, Grading Plan Review”), an additional permit fee of \$500 each shall be applied for damage to or unapproved removal of an existing tree intended to be retained on a site.

PART III. CONSTRUCTION REQUIREMENTS AND APPROVALS

A. General Requirements

For the purposes of this Section 23, public areas shall be defined as land owned by the City of Bartlett.

Tree planting shall be a required activity on public areas and on private property to which this Section 23 is applicable.

A planting program shall be developed by the City for all public areas and conducted in a systematic manner to assure diversity of age, classes, and species.

1. Sizes Defined

For the purpose of this ordinance, trees reaching up to twenty-five (25) feet in height at maturity are designated as small-density trees. Medium-density trees will mature at twenty-five (25) to fifty (50) feet. Large-density trees

will mature at heights greater than fifty (50) feet.

2. Protection of Overhead and Other Utilities

- a. Street trees with a mature height of up to twenty-five (25) feet shall be planted at least twenty (20) feet from any overhead utility wire.

Street trees with a mature height of more than twenty-five (25) feet and up to fifty (50) feet shall be planted at least twenty-five (25) feet from any overhead utility wire.

Street trees with a mature height of more than fifty (50) feet shall be planted at least forty (40) feet from any overhead utility wire.

- b. No tree shall be planted within a utility easement.

3. Location Restrictions

- a. In street plantings, no tree shall be planted closer than ten (10) feet to a fire hydrant, utility pole or street light. No tree shall be planted within fifteen (15) feet of a driveway/street intersection, or within a visibility triangle as defined under Article VI, Section 15 of this Ordinance.
- b. Trees planted adjacent to sidewalks or curbs should not be planted any closer to either structure than two (2) feet for small trees, three (3) feet for medium trees and four (4) feet for large trees. However, trees planted in proper tree wells are not subject to these limitations.

4. Maintenance

The trees and plant material required by this Section 23 for land uses other than single-family residential homes on individual lots shall be maintained in perpetuity by the owner (including a homeowners or property owners association), until a new site plan is approved and executed. This maintenance includes mowing, trimming, pruning, disease and pest control, weed control, fertilizing, watering, and dead plant replacement. If any such tree or plant material dies or is topped or is

removed for any reason, it shall be replaced by the owner.

B. Trees to be Planted

1. Compatibility

Trees scheduled for planting for residential and non-residential developments must be quality specimens whose physical site requirements are compatible with the intended development.

2. Species Selection

- a. All trees planted under the requirements of this Section 23 shall be of a species referenced on the City's recommended tree list (Attachment A) or approved by the Forester.
- b. A minimum of twenty percent (20%) of all tree plantings shall be evergreen / coniferous species.
- c. Species selection for the circumstances of a particular site is subject to site plan review and approval by the Forester.

3. Condition

All trees shall be free of insects, diseases, or mechanical injuries and have straight trunk(s) and a form characteristic of the species.

4. Minimum size when planted

Except as otherwise provided herein or specified by a licensed landscape architect for particular species, small-density trees shall be 6' to 8' high when planted, and medium-density trees shall be 8' to 10' high when planted. Large density trees planted for residential and non-residential developments shall be no smaller than 2" - 2½" caliper (measured at 12" above the ground, and in accordance with American Standards for Nursery Stock, ANSI Z60.1-1996). Street and parking lot trees shall be no smaller than 2.5"-3" caliper, to assure minimum limb clearance height adjacent to streets, parking lots, and drives at the time of planting.

C. Official City Trees

It is hereby decreed that the Cherrybark oak shall be the official City tree. This selection is made because of its history, superior form and shape,

and its strength of structure and lifespan in our geographic area. While it is not recommended that this species be selected over other species in planting on public or private property, it is recommended that the tree be recognized as a symbol of the Bartlett community.

Further, seasonal City Trees are hereby designated, to offer citizens and businesses seasonal color and a wider range of suggestions, as follows:

- *Spring*: Yoshino cherry
- *Summer*: Crape myrtle (Natchez or Muskogee)
- *Fall*: Black tupelo
- *Winter*: Ilex deciduas (deciduous holly)

D. Development Other than Single-Family-Residential

On all new development other than single-family residential, planting areas shall be provided as described herein.

1. Landscape Architect

Landscape planting, irrigation, and site amenity plans in compliance with these requirements shall be drawn by a registered landscape architect.

2. Landscaping Plan

Plans shall demonstrate compliance with this Section 23 and shall include the following:

- a. Scale of 1"=20' or a scale approved by the Planning and Economic Development Department.
- b. North arrow, graphic and written scale.
- c. Name and address of owner.
- d. Name and address of person preparing plan.
- e. Plant Schedule including species, common and botanical names, caliper, planting height, spread, quantities.
- f. Locations of all proposed plant materials.
- g. Tree survey as required in part III.H, "Tree Survey."

- h. Calculations demonstrating compliance with density requirements.
- i. Visibility triangles for entrances and intersecting streets.
- j. All existing and proposed utilities and utility easements.
- k. Seal and dated signature of Landscape Architect.

3. Frontage planting area

On all street frontages, a landscaped depth of at least twenty (20) feet from the right-of-way line shall be provided, with or without berms, depending on topography. Plates 23A, 23B, and 23C shall be used as guidelines for planting patterns. The landscaped depth may be increased and the Plates adjusted to accommodate overhead wires in accordance with part III.A.2," Protection of Overhead and Other Utilities."

4. Parking areas

- a. A maximum of fifteen (15) parking spaces shall be allowed between planting islands along the street frontage.
- b. A mixture of shrubs, deciduous as well as evergreen, shall be provided.
- c. A planting island shall have a minimum area of 400 square feet for a large density tree (20' square or 22.5' diameter), 300 square feet for a medium density tree (17.3' square or 19.5' diameter), and 200 square feet for a small density tree (14.1' square or 16' diameter).
- d. All parking spaces shall be within a maximum distance of seventy-five feet (75') from a tree.

5. Green/open space generally

- a. A minimum of thirty-five percent (35%) of the total land area of the lot, excluding building footprints, shall be in green / open space.
- b. Green / open space shall be distributed over the lot in proportion to the land areas between the building and the property lines.

- c. Where land will be subdivided in a manner that distribution of green / open space required under 5.a and 5.b above on each lot is impractical, such distribution may be approved through submittal and approval by the Planning Commission of a Master Plan for compliance with these requirements over the entirety of the property to be developed.
- d. Trees shall be planted in green / open space in accordance with part III.E, "Site Plan Review."
- e. One percent (1%) of the green / open space shall be planted in seasonal color.
- f. Irrigation of the green / open space shall be required on the site of construction of a new building. Installation of irrigation shall not be required on the site of change of occupancy or additions to or renovation of an existing building.

The irrigation system shall be in compliance with the following:

- Automatic controlled with timer.
- Sufficient coverage of all landscaped areas.
- Shall not spray onto paved areas, including sidewalks, driveways, streets, and parking and loading areas.
- Equipped with a reduced pressure principle backflow prevention device, which shall be inspected annually by a certified tester.
- Low-volume water conservation measures encouraged.

For a site with a landscaped area small enough that it can be maintained without an irrigation system, the irrigation requirement may be waived by the Board of Mayor and Aldermen upon submittal in the landscaping plan of reasonable alternative means of watering the area.

Drought-tolerant plant materials are encouraged.

6. Screen between Single-Family Residential and All Other Land Uses

A twenty-foot-deep (20') landscape screen, Plate 23D, shall be provided at the boundary between single-family residential use (or zoning, if the land is vacant) and all other land uses, on the property of the other use.

- a. The landscape screen shall have the following configuration:
 - 6' wood fence at the property line, with 2'-square brick or stone columns at not more than 20' on centers, including at the property corners of the adjacent residential lots. Spacing of the brick or stone columns shall be determined in the same manner as in Article VI, Section 19, Fences, part F.6.
 - Face of the columns and face of the fence flush at the residential property line.

The fence shall be of shadowbox design unless a solid fence, with the smooth side toward the single-family-residential use, is approved by the Design Review Commission.
 - Large evergreen shrubs at 6' on centers.
 - Large-density deciduous shade trees, 2½" caliper, at 50' on centers.
 - Between each pair of large-density trees, five (5) evergreen trees at 12' on centers (double rows, offset), 6'-8' height when planted.
- b. Use multiple layers of plant materials to provide a visually interesting mix, including consideration of berms.
- c. Provide topography on the landscape plan, and show grades relative to adjacent residential lots.
- d. Where irrigation of the green / open space is required in accordance with part III.D.5.f, irrigation of the landscape screen also shall be required.

Cross-reference: See also the requirements for screening of double-frontage residential lots, Article VI, Section 19, Fences.

7. Stormwater detention basins

Detention basin landscaping may be required by Engineering staff. Such landscaping may include a mix of deciduous, evergreen, and ornamental trees, shrubs, and groundcover. Areas not covered by plantings shall be seeded or sodded to minimize erosion. These areas may require irrigation depending on plant material selection. (See 8.d below.)

8. Recommended plant materials

In addition to Attachment A, lists of recommended plant materials are available as follows:

- a. Shrubs by category (deciduous, semi-evergreen, and evergreen) and size (small, medium, large).
- b. Landscape screening plants (shrubs and trees).
- c. The City of Bartlett Plant Index listing and describing trees; shrubs and vines; ornamental grasses, groundcovers, and ferns; perennials; and annuals.

For a detention basin, a template and specific list of plants may be provided by the Forester; or he may review the plant selection provided by the developer's engineer.

9. Bond

The developer will bond with the Engineering department the cost of landscaping prior to starting construction.

Such bond shall be in the amount of the bid price or the contract price for the work, whichever is determined by the Forester to be the best representation of the work. A cost estimate for the work shall be submitted for review by the Forester.

E. Site Plan Review

On developments that are required to have site plan approval by the Planning Commission and Design Review Commission, the quantity of trees on a site must meet a minimum tree density crite-

tion in addition to the trees required in the frontage planting areas.

1. The site requirement is twenty (20) density units per acre.
2. Both existing trees and newly planted trees contribute to the total density, with the minimum tree size considered for existing trees to be six (6) inches DBH and the maximum tree size for existing trees to be forty (40) inches DBH.

F. Residential Subdivision Development

1. Tree Survey

A tree survey in accordance with part III.H, "Tree Survey," shall be prepared and submitted with a subdivision Master Plan application.

2. Trees to be Removed

The following trees may be shown as "to be removed":

- a. Any tree lying within the proposed buildable area of a lot (bounded by the minimum yards) or within a proposed street right-of-way.
- b. Any tree in an area that must be filled or cut, as determined by the City Engineer.
- c. Any other tree where the Forester confirms that
 - roots within the drip line of the tree are likely to be damaged by construction of a house, driveway, street, sidewalk, or utility lines to the degree that the tree will not survive, or
 - limbs will have to be pruned away from a house to the degree that the tree will be so disfigured as to be of significantly less value, or
 - the tree will cause functional problems for use of the house, such as blocking doorways or windows or the ability to pass through a side yard, such determination to be made in consultation with the Forester and the Director of Code Enforcement.

- d. Trees in or adjacent to public sanitary sewer, water, and stormwater drainage easements where removal is determined by the City Engineer to be necessary.

Removal of trees under “a” and “b” above and especially other trees shall be subject to a determination of the Planning Commission that the following are not feasible:

- Adjust the layout of lots and streets or grading of lots to retain specific trees proposed to be removed.
- Retain groups of trees or larger individual trees by enlarging one or more adjoining lots or creating common open space, a park, or a landscaped median or cul-de-sac island around such trees or groups of trees.

3. Grading

Development of a subdivision as well as preparation of a lot for and construction of a single-family house is subject to part III.G, “Grading Plan Review.”

4. Yard Trees

In residential subdivisions, at least one tree from the approved list with a minimum of 1.5 caliper-inches shall either exist or shall be planted in the front yard of every lot prior to issuance of a final permit approval.

5. Street Trees

On collector and arterial streets, where

- single-family residential lots face the street and
- depth is added to the right-of-way on each side to provide for a planting strip deeper than the conventional 4.5 feet between the sidewalk and curb,

place at least one street tree per lot in the additional depth. Use species indicated by the City to be suitable as street trees.

G. Grading Plan Review

1. Applicability

A grading or building permit shall be required for all grading, earth-moving, changing of

elevation of property, or removal of live trees. This requirement applies to all such work, including the following:

- Work for which a site plan or a subdivision Construction Plan or Final Plan is required and has been approved by the Planning Commission. Application for a permit shall be to the Engineering Department.
- Work on a single-family residential lot for which a plot plan for a new house is required and has been approved by the Code Enforcement Department. Application for a permit shall be to the Code Enforcement Department.
- Work on any other lot where the owner has not obtained a permit for a site plan, subdivision, or plot plan for a house. Application for a permit shall be to the Code Enforcement Department.

2. Submittals

Permits may be obtained after the submittal of a written statement of the purpose of the work and a grading plan, site plan, or plot plan prepared by a licensed surveyor, landscape architect, architect, or engineer.

The grading plan, site plan, or plot plan shall include the following (see also parts III.D and III.F):

- a. A tree survey in accordance with part III.H, “Tree Survey.”
- b. The nature and extent of the proposed grading, earth-moving or change in elevation.
- c. Applicant’s plans for controlling on-site-generated sedimentation, erosion and runoff.

3. Approval

A grading permit application shall be approved if the department authorized to accept the application determines that the following criteria are met:

- a. The grading plan, including tree removal, has been prepared and will be performed in accordance with good

- flood, erosion, and sedimentation control practices and good forestry practices.
- b. The application addresses the saving of existing trees when warranted.
- c. The application provides for sufficient and timely replanting of trees to compensate for the removal of trees and foliage.
- d. Preserved and replanted trees meet the minimum tree density, where applicable.
- e. The applicant intends to complete development according to a time schedule or has taken steps to prevent any negative impacts resulting from the work proposed.

H. Tree Survey

A tree survey shall be submitted for subdivision or site plan development. The survey shall include the entire property and not less than 25 feet outside the perimeter of any area to be disturbed by development.

1. Preliminary Master Plan Survey

A preliminary survey shall be submitted as part of the Master Plan for the development, which shall show the boundary of clusters of trees, based on aerial photography. Individual trees within the clusters need not be shown, but isolated individual trees shall be shown. A Certified Arborist shall review the clusters or isolated trees and designate “trees worthy of retention,” in accordance with the following criteria:

- a. *Listed.* The tree is on Attachment A below, the recommended list of trees by category (deciduous or evergreen) and size.
- b. *Height.* The tree has attained a significant portion of the mature height characteristic of the species; that is, so many years’ growth are invested that the tree should be considered for retention rather than replaced elsewhere on the site. (See the small-, medium-, and large-density trees in Attachment A.)

- c. *Form.* If a tree meeting criteria #1 and #2 is isolated or likely to become isolated by removal of surrounding trees, the tree has attained a form (branching pattern, including symmetry) characteristic of a free-standing tree of that species.
- d. *Designation.* A tree is designated a Champion, Landmark, or Historic Tree.

The tree survey shall be prepared on a sheet with existing topography and the proposed subdivision street and lot layout or proposed site plan. The City Forester may require additional tree survey work if, after a site visit and review of the tree survey submitted, the Forester determines that all trees meeting the above criteria are not shown.

No survey shall be required in required buffers for state-protected streams, but protective plans shall be developed to ensure that no damage occurs to these trees.

2. Final Construction Plan Survey

The survey at the Construction Plan level shall show three types of areas:

- a. Trees worthy of retention (trees not to be disturbed). All trees in the zone shall be saved by the developer and builder.
- b. Marginal coverage (trees to be taken out only with a permit at the builder level). The developer shall save these trees; and the builder shall submit a plan to Code Enforcement justifying removal of individual trees.
- c. Removal zone (take-out zone). The trees may be removed by the developer.

The three types of tree construction activity shall be located with an accurate survey shown on the plan. A protection plan will be devised for trees to be saved and submitted with construction Plans for approval. The protection plan will be reviewed and signed by the arborist and surveyor. All trees worthy of protection and groups of trees to be protected shall be delineated on the plat for protection. An additional sheet will be added to the final plat designating “trees worthy of retention” and “marginal” areas.

Attachment A. Trees by Category and Size

(bold type – Recommended street trees * - Recommended for use under and adjacent to overhead utility lines)

This list may be amended by Resolution of the Board of Mayor and Aldermen.

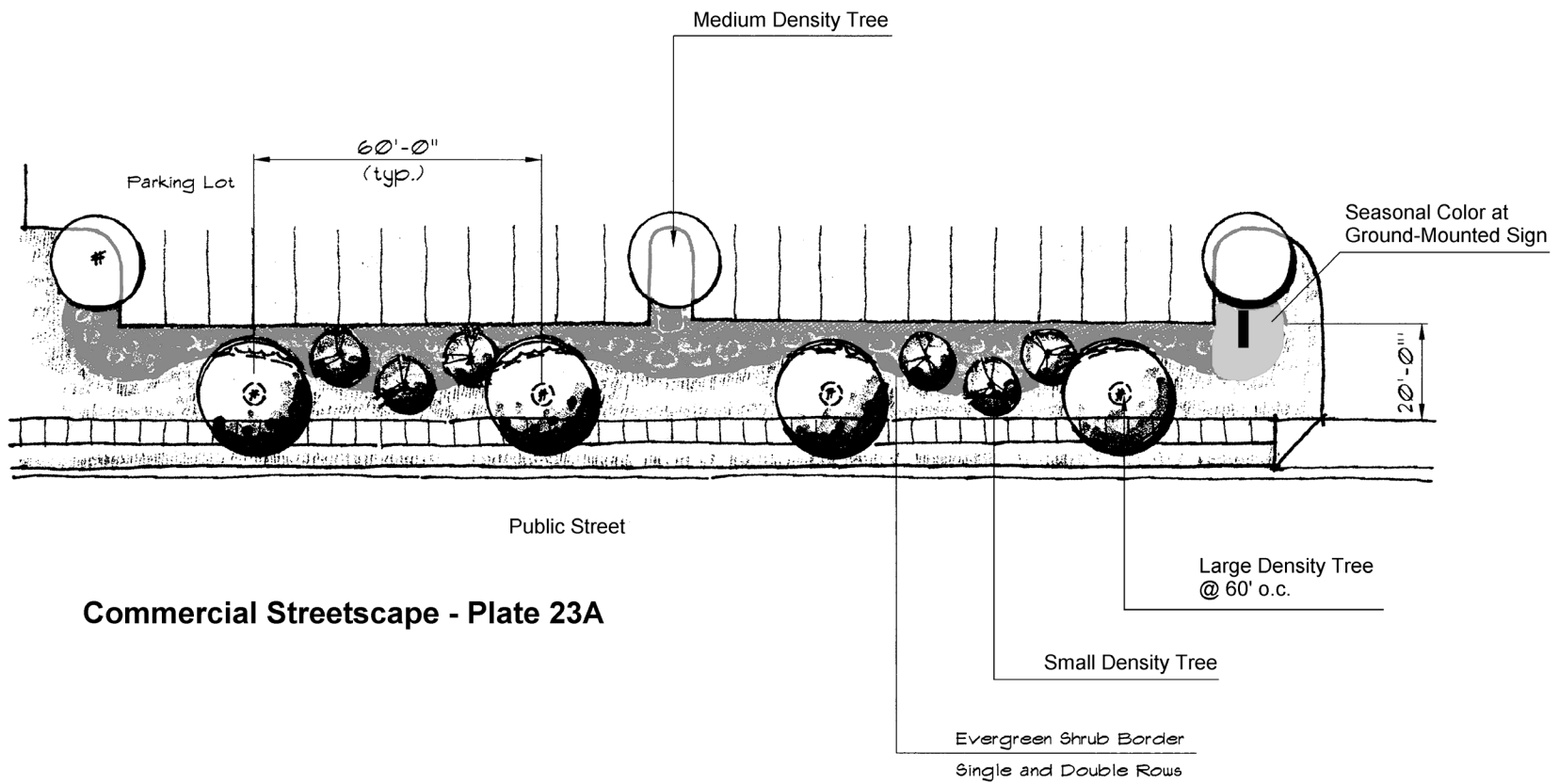
	Deciduous		Evergreen	
Small Density	Bloodgood Japanese maple* Coral bark Japanese maple* Serviceberry* Forest Pansy redbud Smoketree* Kousa dogwood* Winter King hawthorne* Deciduous holly (possum haw)..... Carolina Beauty crape myrtle* ... Catawba crape myrtle* Muskogee crape myrtle* Star magnolia* Royal Star magnolia Carolina cherrylaurel* Flowering plum* Weeping Higan cherry Okame cherry Chastetree	<i>acer palmatum</i> 'Bloodgood' <i>acer palmatum</i> 'Sango-kaku' <i>amelanchier</i> spp. 'Autumn Brilliance,' 'Robin Hill,' 'Tradition' <i>cercis canadensis</i> 'Forest Pansy' <i>continus coggygria</i> <i>cornus kousa</i> <i>crataegus viridis</i> 'Winter King' <i>ilex deciduas</i> <i>lagerstroemia indica</i> 'Carolina Beauty' <i>lagerstroemia indica</i> 'Catawba' <i>lagerstroemia indica</i> 'Muskogee' <i>magnolia stellata</i> <i>magnolia stellata</i> 'Royal Star' <i>prunus caroliniana</i> <i>prunus cerasifera</i> <i>prunus subhirtella</i> 'Pendula' <i>prunus x 'Okame'</i> <i>vitex</i>	Burford holly (tree-form) Yaupon holly (tree-form) Nellie R. Stevens holly Mary Nell holly..... Emily Bruner holly Hollywood juniper Wax myrtle Emerald Green arborvitae	<i>ilex cornuta</i> 'Burfordi' <i>ilex vomitoria</i> <i>ilex x 'Nellie R. Stevens'</i> <i>ilex x 'Mary Nell'</i> <i>ilex x 'Emily Bruner'</i> <i>juniperus chinensis</i> 'Torulosa' <i>myrica cerifera</i> <i>thuja occidentalis</i> 'Emerald Green'
Medium Density	Trident maple* Hedge maple* Amur maple Bowhall red maple Eastern redbud* Red, white, pink dogwood Thornless hawthorne* Golden raintree* Natchez crape myrtle* Saucer magnolia* Sweetbay magnolia Crabapple (various)* Pistachio..... Kwanzan cherry* Yoshino cherry* Cleveland Select pear Greenspire linden	<i>acer buergeranum</i> <i>acer campestre</i> <i>acer ginnala</i> <i>acer rubrum</i> 'Bowhall' <i>cercis canadensis</i> <i>cornus florida</i> <i>crataegus</i> spp. <i>koelreuteria paniculata</i> <i>lagerstroemia indica</i> 'Natchez' <i>magnolia x soulangiana</i> <i>magnolia virginiana</i> <i>malus</i> species <i>pisticia vera</i> <i>prunus serrulata</i> 'Kwanzan' <i>prunus serrulata</i> 'Yoshino' <i>pyrus calleryana</i> 'Cleveland Select' <i>tilia cordata</i> 'Greenspire'	Deodar cedar Hinoki cypress Savannah holly..... Fosters holly Burki juniper Little Gem magnolia Leyland cypress	<i>cedrus deodora</i> <i>chamaecyparis obtusa</i> <i>ilex x 'Savannah'</i> <i>ilex x attenuata</i> 'Fosteri #2' <i>juniperus virginiana</i> 'Burki' <i>magnolia grandiflora</i> 'Little Gem' <i>x cupressocyparis Leylandii</i>

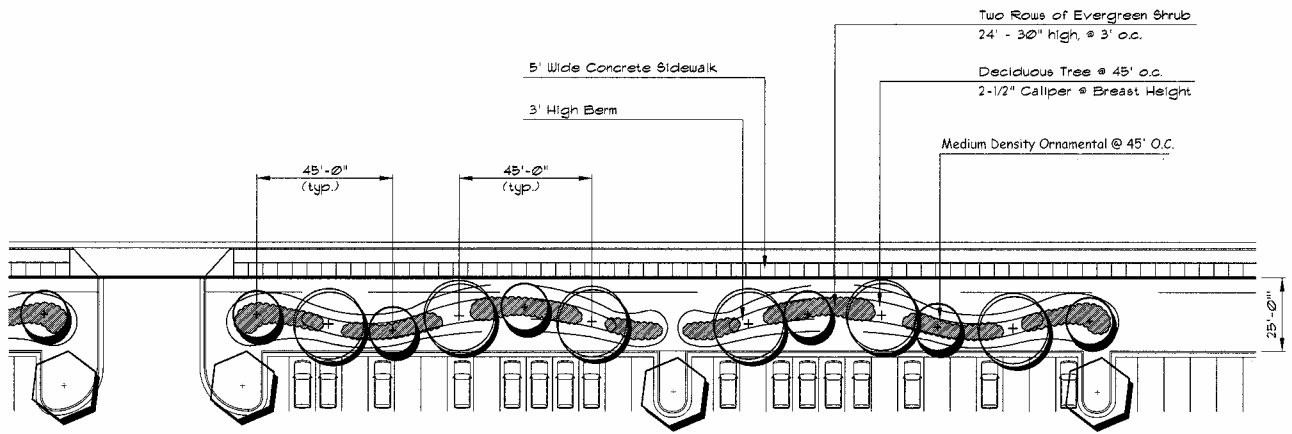
Attachment A. Trees by Category and Size

(bold type – Recommended street trees * - Recommended for use under and adjacent to overhead utility lines)

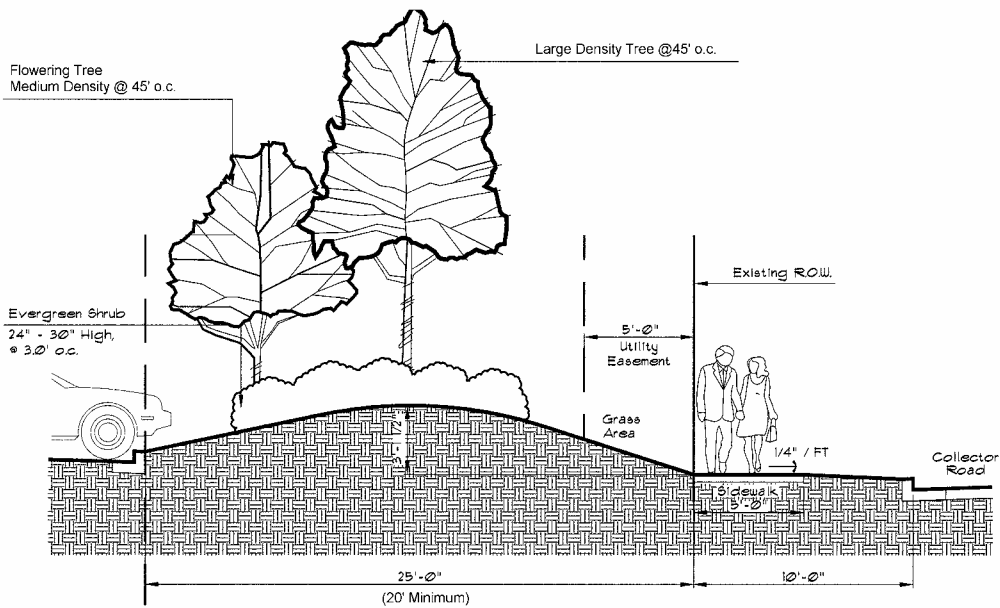
This list may be amended by Resolution of the Board of Mayor and Aldermen.

	Deciduous		Evergreen	
Large Density	Columnar Norway maple	<i>acer platanoides</i> ‘Columnar’	Blue Nootka false cypress.....	<i>chamaecyparis nootkatensis</i> ‘glauca’
	Armstrong red maple.....	<i>acer rubrum</i> ‘Armstrong’	Southern magnolia	<i>magnolia grandiflora</i>
	October Glory red maple	<i>acer rubrum</i> ‘October Glory’	Eastern red cedar.....	<i>juniperus virginiana</i>
	Autumn Blaze maple	<i>acer x freemanii</i>	Japanese black pine	<i>pinus thunbergiana</i>
	American Yellowwood	<i>cladrastis lutea</i>	Virginia pine	<i>pinus virginiana</i>
	Persimmon	<i>diospyros virginiana</i>		
	Green ash (hybrids)	<i>fraxinus pennsylvanica</i>		
	Ginkgo (male only)	<i>ginkgo biloba</i>		
	Thornless honeylocust	<i>gleditsia triacanthos</i> var. <i>inermis</i>		
	Seedless sweetgum	<i>liquidambar styraciflua</i> ‘Rotundiloba’		
	Tulip tree or yellow-poplar	<i>liriodendron tulipifera</i>		
	Dawn redwood	<i>metasequoia glyptostroboides</i>		
	Black tupelo.....	<i>nyssa sylvatica</i>		
	London planetree	<i>platanus x acerifolia</i>		
	Sawtooth oak	<i>quercus acutissima</i>		
	Swamp white oak	<i>quercus bicolor</i>		
	Southern red oak.....	<i>quercus falcate</i>		
	Shingle oak	<i>quercus imbricaria</i>		
	Burr oak.....	<i>quercus macrocarpa</i>		
	Chinkapin oak	<i>quercus muehlenbergii</i>		
	Water oak.....	<i>quercus nigra</i>		
	Nuttall oak	<i>quercus nuttallii</i>		
	Cherrybark oak.....	<i>quercus pagoda</i>		
	Pin oak	<i>quercus palustris</i>		
	Willow oak	<i>quercus phellos</i>		
	English oak	<i>quercus robur</i> ‘Skyrocket,’ ‘Pyramich,’ ‘Fastigiata’		
	Northern red Oak	<i>quercus rubra</i>		
Bald-cypress	<i>taxodium distichum</i>			
American elm	<i>ulmus americana</i>			
Lace bark (or Chinese) elm	<i>ulmus parvifolia</i>			
Japanese zelkova	<i>zelkova serrata</i>			

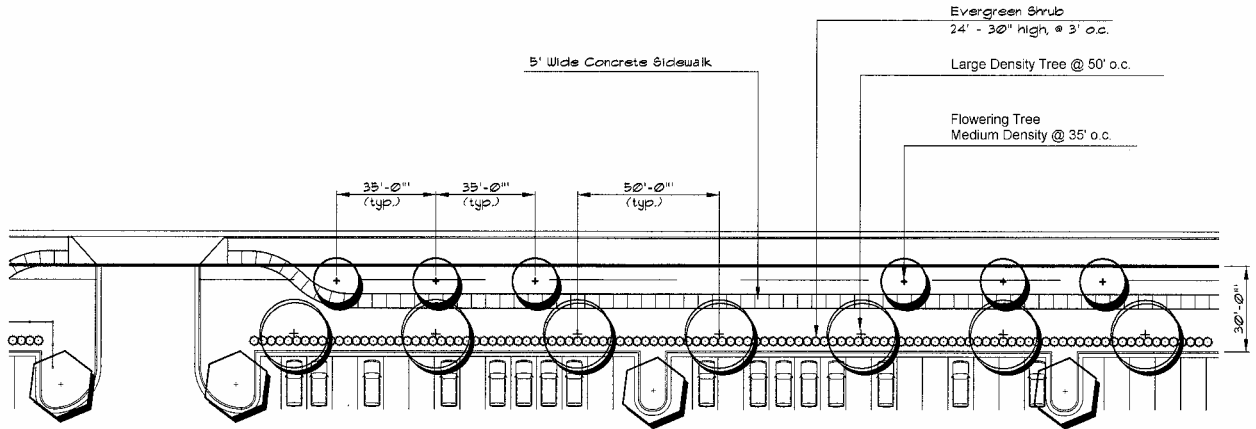




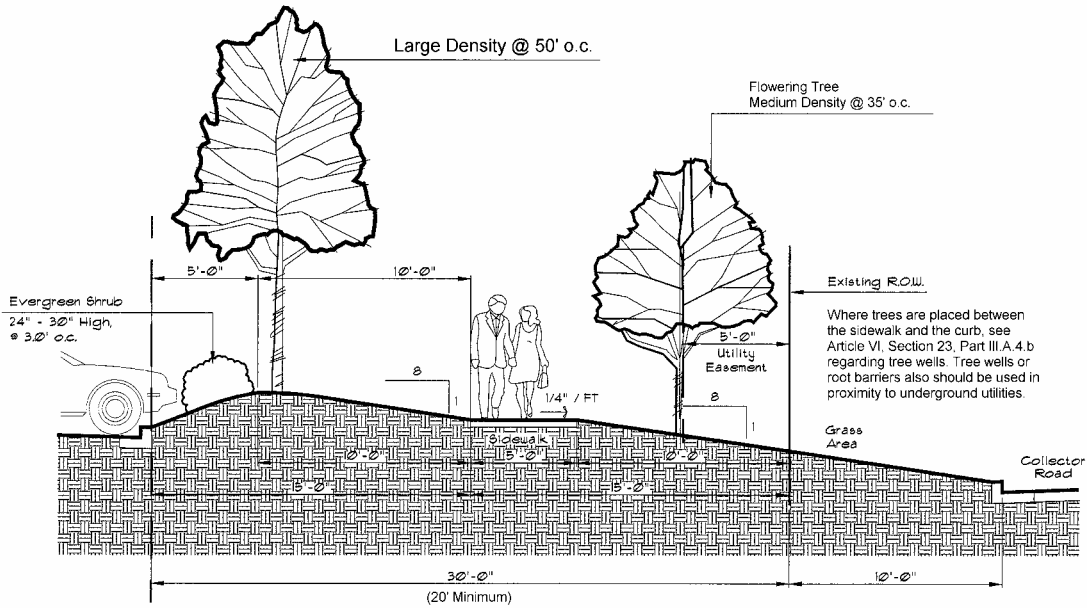
Commercial Streetscape Plate 23B



Commercial Streetscape Plate 23B



Commercial Streetscape Plate 23C



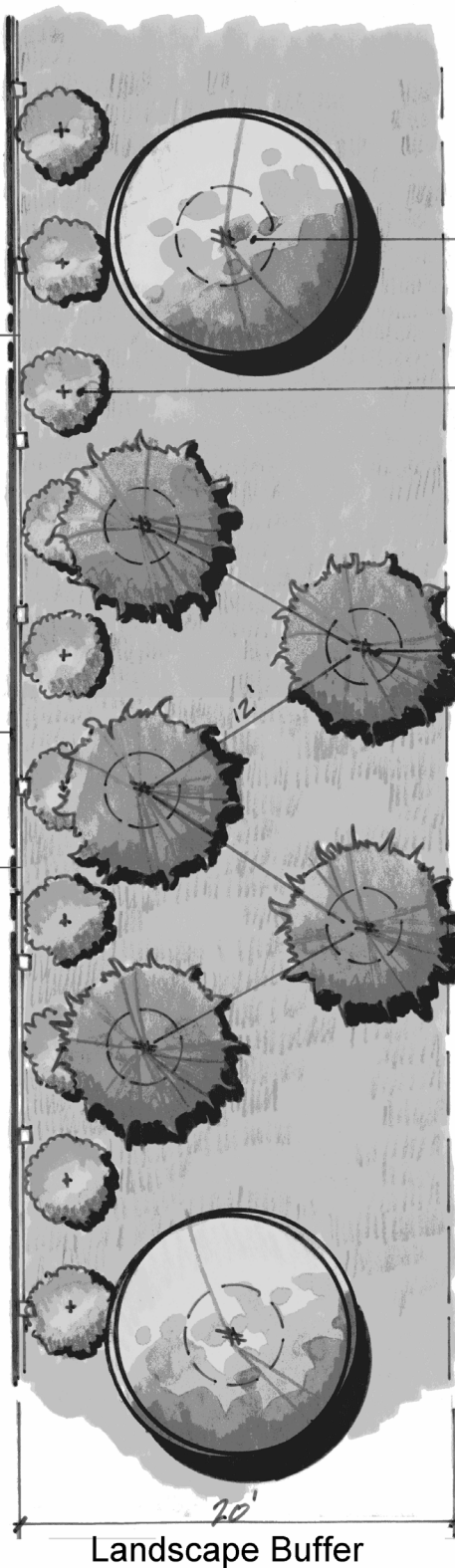
Commercial Streetscape Plate 23C

6' High Brick or Stone
Columns, 2' Square,
20' on Centers

Interim Wood Posts
Equally Spaced
for Stringer Length
Not Exceeding 8'

Property Line

6' High Shadowbox
Wood Fence w/4 Stringers
Including in Cap



Large Density
Shade Tree
2-1/2" cal @ 50' o.c.

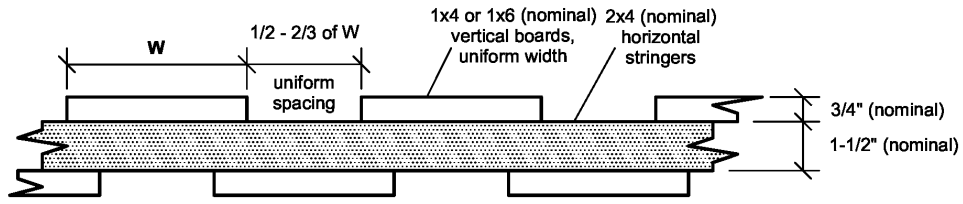
Large Density
Evergreen Shrub
@6' o.c.

Medium Density
Evergreen Tree
@ 12' o.c., 6'-8' Ht.
when planted

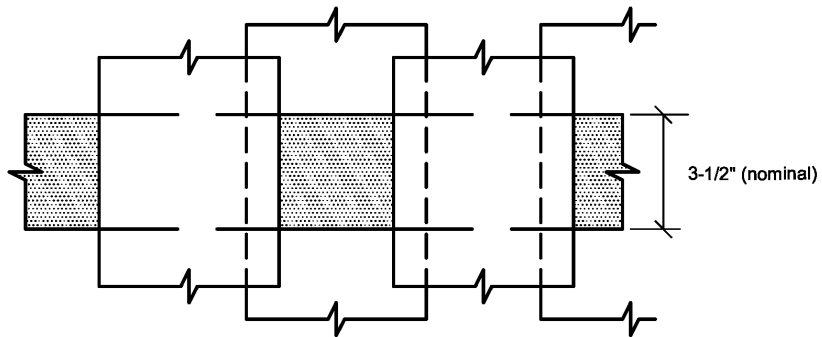
Landscape Buffer

**Screen Between Single-Family Residential
and All Other Land Uses
Plate 23D**

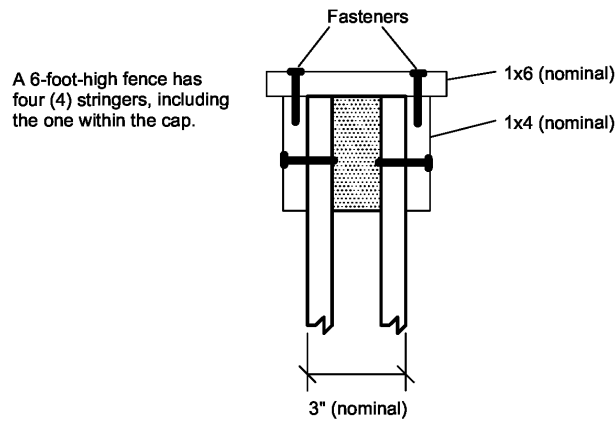
Shadowbox Fence Detail for Plate 19C



TOP VIEW, WITHOUT CAP



SIDE VIEW AT STRINGER



A 6-foot-high fence has four (4) stringers, including the one within the cap.

CROSS SECTION WITH CAP