

ARTICLE 10
LANDSCAPING AND TREE PROTECTION

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SECTION 10.1
GENERAL PROVISIONS

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Section 10.1.1 Purpose and Intent

The landscaping requirements of this Article are intended to protect adjoining land uses, particularly residential uses, from the noise, heat, dust, lights, and aesthetic impacts of more intense land uses. The tree protection requirements of this Article are intended to provide a means to preserve and manage significant wooded areas and specimen trees in the Town.

The purposes of this Article are to:

1. Maintain and enhance property values;
2. To preserve and enhance the visual appearance of the Town;
3. To reduce the impact of development on the Town's stormwater;
4. To aid in noise, glare, and heat abatement;
5. To provide visual buffering; and
6. To prevent the indiscriminate removal of trees and facilitate replacement in new and existing developments.

Section 10.1.2 Definitions

For the purposes of this Article, the following definitions shall apply. All other words or phrases as appropriate to the context of their uses shall be interpreted as defined in Article 3, *Definitions*, of this Zoning Ordinance.

Caliper – Measurement of the diameter of a tree; measurement is taken four (4) feet above ground level.

Ground Cover – Any plant less than three (3) feet in height at maturity.

Shrub – Any plant between three (3) feet and fifteen (15) feet in height at maturity.

Sketch Plan – An informal landscape plan submitted to the Planning Director in conjunction with plans to subdivide land, alter an existing drainage system, construct or alter a building (Building Permit) or begin site development. The sketch plan is a rough drawing that shows the site information specified in Section 10.1.5, *Plans Required*, of this Article.

Specimen Tree – Any perennial woody plant, such as a large shade or pine tree, which usually has one main stem or trunk and the following caliper measurements:

Hardwood Tree – Eight (8) inches

Pine Tree – Twelve (12) inches

Small Flowering Tree (i.e. Dogwood) – four (4) inches

Street Yard – The area of a parcel immediately adjacent to a street right-of-way and reserved for planting. The minimum dimension is ten (10) feet.

Tree – Any plant greater than fifteen (15) feet in height at maturity.

Wooded Area – Any vegetated area of seventy-five (75) square feet or more consisting of trees, shrubs, and/or ground cover where trees are the predominant form of vegetation.

Section 10.1.3 Applicability

1. Except as specifically exempted in Section 10.1.4 of this Article, compliance with the terms and provisions of this Article shall be verified prior to receiving a CZC to commence one (1) or more of the following activities:
 - a. Minor or major subdivision of property;
 - b. Alteration of an existing drainage system;
 - c. Receipt of a building permit; and/or
 - d. Site development.
2. No CZC shall be issued until it is determined that the proposed project is in conformance with the provisions of this Article.
3. Substantial compliance with this Article and an approved Landscape Plan, where applicable, is required prior to issuance of a CO or recording of a final plat.

Section 10.1.4 Exemptions

1. Agricultural activities that do not involve artificial drainage of land.

2. The maintenance, alteration, or improvement of an existing structure that does not involve an increase in impervious surface.

Section 10.1.5 Plans Required

1. A Landscape Plan must be submitted to the Planning Director to:
 - a. Receive approval for a subdivision plan;
 - b. Alter an existing drainage system;
 - c. Receive a building permit;
 - d. Start site development
2. Plan submittal, review, and approval is mandatory for individual single family and two-family residences; however, compliance with the plan for these uses is voluntary. Compliance with a previously approved subdivision Landscape Plan shall be mandatory for lots established within a subdivision that is subject to a previously approved Landscape Plan meeting the requirements of this Article.
3. Plan submittal, review, and approval is mandatory for major residential uses (multi-family dwellings, townhouses, and condominiums), institutional uses, commercial uses, and subdivisions.
4. Compliance with the requirements of this Article shall be verified through the submittal of a sketch plan. The sketch plan may be prepared in conjunction with the stormwater plan required by the Stormwater Ordinance and must include the following information (applicants may use photographs in conjunction with the sketch plan to indicate the location of existing vegetation):
 - a. Location of wooded areas and specimen trees;
 - b. Location of any wooded areas and specimen trees that will be removed or destroyed during development or construction;
 - c. Location of wooded areas and specimen trees that will be retained after development or construction;
 - d. Location and type of vegetation that will be replaced after development or construction;
 - e. Location of any required buffer strips, existing and proposed;
 - f. Location of any screening, existing and proposed; and
 - g. Location and composition of any landscape islands, existing and proposed.

Section 10.1.6 Plan Review

Landscape Plans shall be reviewed by the Planning Director according to the requirements and guidelines provided in this Article.

**SECTION 10.2
BUFFERS**

- Section 10.2.1 Landscape Buffers Required
Section 10.2.2 Specific Requirements

Section 10.2.1 Landscape Buffers Required

Landscape buffers shall be required and provided along all side and rear property lines of a lot zoned MF, MH, BR, CBD, BH, I, or PI when such property lines abut property located in the R-10 or R-15 zoning district. The more intense use and/or district shall be required to provide the buffer as part of its yard requirements. Landscape buffer strips shall be required along side and rear property lines adjacent to a residential use and/or zoning district

Section 10.2.2 Specific Requirements

The following requirements shall be met for buffers strips and the yards in which buffers are required:

- A. Location of Buffer Strips: Buffer strips shall be required to provide a screen between attached housing developments, mobile home parks, high-density developments, planned developments or commercial and industrial zones, and any detached residential development.
- B. Width of Buffer Strips: Buffer strips shall be provided along all side and rear property lines of a lot, as identified in Section 10.2.1. The width of buffer strips shall be determined by composition as defined in Section 10.2.2 (E) below.
- C. Allowance for Setback Decrease: The setback for structures may be decreased if the base width of the buffer strip is increased by the same amount.
- D. Uses in the Buffer: No activities or uses shall occur or be located in a buffer strip, with the exception of maintenance of the buffer or the installation or maintenance of water, sewer, electrical and other utility systems where the installation causes minimal disturbance of existing vegetation.
- E. Composition of Buffer Strips: Buffer strips shall provide approximately seventy-five (75) percent opacity. Buffer strips may be occupied only by natural and/or planted vegetation, berms, or fencing, as specified below.
 - 1. Natural vegetation shall be retained. One or more of the following means shall be used to supplement the natural vegetation as necessary or to provide an adequate buffer where no vegetation exists:
 - a. Planted Buffer Strips – Three rows of planted materials shall be provided. Within two (2) years of planting, planted buffer strips shall be at least six (6) feet in height and provide approximately seventy-five percent (75%) visual opacity. Planted Buffer Strips shall be a minimum of twenty (20)

feet in width.

- b. Planted Buffer Strips with Fencing – Fences shall have a minimum height of six (6) feet and a maximum height of ten (10) feet. Fences shall be located interior to the buffer strip (*i.e.* fences shall be located on the building side of the buffer strip). Two rows of planted materials shall be provided, at a minimum height of three (3) feet and providing at least fifty (50) percent opacity of the fence at initial planting. Within two (2) years of planting, planted buffer strips shall provide approximately seventy-five percent (75%) visual opacity of fencing. Planted Buffer Strips with Fencing shall be a minimum of ten (10) feet in width.
- c. Planted Buffer Strip with Berm: Berms shall only be used in conjunction with Planted Buffer Strips or Planted Buffer Strips with Fencing, as specified above. The slope of a berm shall be stabilized with vegetation and no steeper than 2:1. The height of a berm shall be not less than three (3) feet and no greater than six feet (6') ~~or less~~, with a level or rounded area on top of the berm. The berm shall be constructed of compacted earth. Within two (2) years of planting, the combined height of a berm with plantings shall be at least six (6) feet in height and provide approximately seventy-five percent (75%) visual opacity. Planted Buffer Strips with Berm shall be a minimum of fourteen (14) feet in width.

In situations where specimen trees exist in the location of a proposed berm, tree wells and/or similar implements shall be used to protect such trees. Prior to the Town's approval of such measures, an applicant shall submit a report by a Certified Arborist that indicates that such measures will not endanger or compromise the survivability of the specimen tree.

SECTION 10.3 SCREENING

The following features located on commercially or industrially zoned or used property shall be screened from the view of property lines abutting a residential use/district or right-of-way, through the use of plantings and/or fencing that provide seventy-five percent (75%) opacity within two (2) years of planting:

- A. Dumpsters or other trash holding areas.
- B. Outside storage areas.
- C. Loading/unloading areas.
- D. Heating/air conditioning units, including roof mounted units.
- E. Lights shall be shielded in such a manner that light from the fixture will not directly radiate into the buffer strip or beyond.

SECTION 10.4 LANDSCAPING

Section 10.4.1	Street Yard Landscaping
Section 10.4.2	Parking Lot Landscaping

Section 10.4.1 Street Yard Landscaping

1. A street yard landscape strip of at least ten (10) feet in width shall be provided on all lots which are undergoing development, including the new construction of principal structures or the expansion of such structures. No street yard landscape strip shall be required for those portions of a lot's frontage used for perpendicular driveway crossings.
2. Street yard landscape strips shall be planted in accordance with one (1) of the following standards:
 - a. Minimum Standards – For every fifty (50) feet of linear street frontage, or fraction thereof, the street yard landscape strip shall contain the following:
 - i. Either one (1) overstory tree eight (8) feet in height or three (3) understory trees five (5) feet in height; appropriate overstory and understory tree species shall be as listed in Table 10.5.1, *Tree Species Selection List*.
 - ii. In addition to the required tree plantings, every fifty (50) feet of the landscape strip shall be planted with at least six (6) shrubs, twelve (12) inches in height.
 - b. Creative Standards – To promote creative designs, street yard landscape strips shall consist of trees and shrubbery which covers at least fifty percent (50%) of the area of the landscape strip.
3. Existing trees located in the area of the proposed street yard landscape strip may be counted as credits towards meeting Section 10.5, *Tree Protection*.
4. All street yard landscape strips shall be planted with a combination of live vegetation, groundcover, grass, trees, and/or shrubs. No portion of the street yard landscape strip shall remain or be maintained without vegetation.
5. Plantings and vegetation in the street yard landscape strip shall be maintained in compliance with this Article and the approved Landscape Plan. The owner of the subject property shall ensure that the material in the landscape strip continues to live and prosper.

Section 10.4.2 Parking Lot Landscaping

Landscaping is required for parking lots for the purposes of reducing aesthetic impacts of

paving or removing the natural vegetation from large areas, and to reduce the noise, heat, and dust associated with parking lots. Parking areas with twenty (20) or more parking spaces shall be landscaped in the following manner:

- A. Buffer strips shall be required as per Section 10.2, *Buffers*, of this Article.
- B. A landscape island comprising an area equaling that of one (1) parking space shall be located at the end of each row of parking and be planted with one (1) shade tree, a minimum of three (3) inches in caliper and sod.
- C. The interior of a row of parking shall be landscaped in one (1) of the following manners:
 - i. One (1) landscape island shall be located after every tenth (10th) parking space within a row; rows with fifteen (15) parking spaces or less shall locate the landscape island in the middle or approximate middle of the row. Such landscape islands shall be planted with one (1) shade tree, a minimum of three (3) inches in caliper.
 - ii. A landscape island/strip, five (5) feet in width, shall be located along the entire length of a row of parking with eleven (11) or more spaces. Such landscape islands/strips shall be planted with one (1) shade tree, a minimum of three (3) inches in caliper, every sixty (60) feet.
- D. All parking areas visible from a public or private right-of-way shall be screened from view. Parking areas located in a side yard shall have the portion of the lot that fronts the street screened up to a height of three (3) feet using shrubs, masonry walls (using material that matches the adjacent building), wrought iron fencing, or any combination thereof. If landscaping is used, the minimum planting area width shall not be less than four (4) feet.

SECTION 10.5 TREE PROTECTION

Section 10.5.1	Permit Required
Section 10.5.2	Exemptions
Section 10.5.3	Plans Required
Section 10.5.4	Tree Preservation and Replacement
Section 10.5.5	Flexible Setbacks
Section 10.5.6	Use of Vegetated Areas for On-Site Stormwater Containment
Section 10.5.7	Enforcement and Penalties for Violations

Section 10.5.1 Permit Required

The clearing or removal of trees (4) inches in caliper or greater in size shall be prohibited without a CZC and a valid building permit, utility construction permit, septic tank permit, site development permit, or an approved preliminary subdivision plat.

Section 10.5.2 Exemptions

The following activities are exempt from the requirements of Section 10.5.1, *Permit Required*, of this Article:

- a. Bona fide forestry and agricultural practices;
- b. Hobby farms (such as vegetable or flower gardens and nurseries);
- c. Gardening or landscaping maintenance;
- d. Minor clearing of vegetation for line-of-site surveying and foot paths; and
- e. Minor clearing and/or cutting of grasses, weeds, vines, and similar vegetation, as required for responsible property maintenance.

Section 10.5.3 Plans Required

The Landscape Plan required by Section 10.1.5 of this Article shall also comply with Section 10.5, *Tree Protection*. Plans shall comply with the following guidelines:

1. Provide for the retention and protection of existing specimen trees, except when the Planning Director determines that one (1) or more of the following conditions exist:
 - a. For new construction, essential site improvements cannot be installed without removal of specimen tree(s). Examples of essential site improvements are the principal/accessory building(s), required off-street parking, driveway, storm water management facilities, and septic system.
 - b. The specimen tree is dead, severely diseased, injured, or in danger of falling close to existing or proposed structures.
 - c. The specimen tree poses an identifiable threat to individuals or public safety.
 - d. Removal of the specimen tree is necessary to enhance or protect the health or condition of adjacent trees.
 - e. Moving specimen trees is encouraged if adequate care is taken to ensure survival of the tree.

The Planning Director shall only make such a determination regarding the above conditions at the request of a property owner or his/her/their representative. With regard to conditions b., c., d., and e., the Planning Director may request that the property owner or his/her/their representative submit a report from a Certified Arborist prior to determining that such a condition(s) exists.

2. Preserve and protect as much wooded area on the site as is practical. Where existing trees and shrubs are being preserved or replaced, applicants are encouraged to provide continuous planted areas of at least fifty (50) square feet.
3. Incorporate existing vegetation, wooded areas, and specimen trees into required

shoreline, wetland, and visual buffers where possible.

4. Applicants are encouraged not to completely clear shrubs and grasses in preserved wooded areas.

Section 10.5.4 Tree Preservation and Replacement

1. For tree preservation and replacement, a project must meet one of the minimum standards listed below:
 - a. If a specimen tree exists in the front, rear or side yard of any development affected by this Article, it shall be retained, except as provided in Section 10.5.3. The total number of trees to be retained shall be at least fifteen (15) specimen trees per acre. For sites proposed for partial development, only the acreage of that portion of the site to be developed shall be utilized in calculating the number of trees to be preserved. The undeveloped portion shall not be utilized in calculating the number of trees to be preserved or in determining the number of retained specimen trees.
 - b. If there are less than fifteen (15) specimen trees per acre on the site, then the difference shall be replaced with new or existing trees, to a total of fifteen (15) trees per acre equaling at least two (2) caliper inches per tree planted or retained.
 - c. If there are no regulated trees on the site, then at least fifteen (15) new or existing trees per acre equaling at least thirty (30) inches shall be planted or retained.
2. If any new or retained specimen tree, shown on the approved site plan, dies within twelve (12) months after the issuance of a CO, then it shall be replaced by planting a new tree, having a minimum of two (2) inches in caliper. For unauthorized removal of a new or retained specimen tree during construction or after the issuance of a CO, its replacement shall be the planting of a new tree with a minimum caliper of five (5) inches, in addition to any other enforcement provisions available within this Ordinance.
3. For the purposes of this section, and other sections as referenced in this Ordinance, all new trees shall be of a species as listed in Table 10.5.1, *Tree Species Selection List*.

Table 10.5.1 Tree Species Selection List	
Overstory Trees	
Common Name	Scientific Name
American Beech	<i>Fagus grandifolia</i>

American Holly	<i>Ilex Opaca</i>
American Yellowwood	<i>Cladrastis lutea</i>
Bald Cypress	<i>Taxodium disticum</i>
Black Gum, Black Tupelo	<i>Nyssa sylvatica</i>
Black Locust	<i>Robinia pseudoacacia</i>
Carolina Silverbell	<i>Halesia carolina</i>
Chinese Chestnut	<i>Castanea mollissima</i>
Common Chinafir	<i>Cunninghamia lanceolata</i>
Cryptomeria	<i>Cryptomeria Japonica</i>
Dawn Redwood	<i>Metasequoia glyptostroboides</i>
Eastern Red Cedar	<i>Juniperus virginiana</i>
Florida Maple or Southern Sugar Maple	<i>Acer floridanum</i>
Gingko	<i>Gingko biloba</i>
Green Ash	<i>Fraxinus pennsylvanica</i>
Hackberry	<i>Celtis occidentalis</i>
Hickories, Pecans	<i>Carya species</i>
Japanese Pagodatree	<i>Sophora japonica</i>
Japanese Zelkova	<i>Zelkova serrata</i>
Katsura Tree	<i>Cercidiphyllum japonicum</i>
Leyland Cypress	<i>Cupressocyparis leylandii</i>
Loblolly Pine	<i>Pinua taeda</i>
Oaks, including Live Oaks	<i>Quercus species</i>
Red Maple	<i>Acer rubrum</i>
River Birch	<i>Betula nigra</i>
Slash Pine	<i>Pinus elliotii</i>
Southern Magnolia	<i>Magnolia grandiflora</i>
Sycamore	<i>Platanus occidentalis</i>
Sugar Maple	<i>Acer saccharum</i>
Sweetgum	<i>Liquidambar styraciflua</i>
True Japanese Elm	<i>Ulmus parvifolia</i>
Virginia Pine	<i>Pinus virginiana</i>
White Ash	<i>Fraxinus americana</i>
White Pine	<i>Pinus strobes</i>
Yellow Poplar, Tulip Poplar	<i>Liriodendron tulipifera</i>
Understory Trees	
Common Name	Scientific Name
American Hornbean	<i>Carpinus caroliniana</i>
American Smoketree	<i>Continus obovatus</i>
Chinese Pistache	<i>Ptachia chinensis</i>
Crapemyrtle species	<i>Largerstroemia species</i>
Dogwoods	<i>Cornus species</i>
Eastern Redbud	<i>Cercis canadensis</i>
Florida Anise-tree	<i>Illicium floridanum</i>
Flowering Crabapple	<i>Malus species</i>
Fringe tree, Grancy Graybeard	<i>Chionanthus virginicus</i>

Golden Raintree	<i>Koelreuteria paniculata</i>
Holly	<i>Ilex species</i>
Ironwood	<i>Ostrya virginia</i>
Japanese Flowering Cherry	<i>Prunus serrulata</i>
Sassafras	<i>Sassafras albidum</i>
Serviceberry	<i>Amelanchier arborea</i>
Sourwood	<i>Oxydendrum aboreum</i>
Star Magnolia	<i>Magnolia stellata</i>
Trident Maple	<i>Acer buergerianum</i>
Washington Hawthorne	<i>Crataegus phaenopyrum</i>
Waxmyrtle	<i>Myrica cerifera</i>
Witch-Hazel	<i>Hamamelis virginiana</i>
Yoshino Cherry	<i>Prunus x yedoensis</i>

Section 10.5.5 Flexible Setbacks

The allowable building area on each lot or parcel may be moved toward one side lot line and either the rear lot line or the front street line a distance of up to twenty-five percent (25%) of the required setback for the zoning district for the purpose of preserving wooded areas and/or specimen trees. This Article does not increase the maximum permitted length and width of the allowable building area. If the applicant elects to use the flexible setback option for a lot(s) used for a single family or two-family residence, compliance with the approved Landscape Plan is mandatory.

Section 10.5.6 Use of Vegetated Areas for On-Site Stormwater Containment

Where site conditions, such as soil conditions and slope, permit, applicants are encouraged to use areas of preserved woods and other on-site vegetation for on-site storm water containment areas in lieu of construction of devices.

Section 10.5.7 Enforcement and Penalties for Violations

Any person removing vegetation from a lot or tract in violation of the requirements of this ordinance shall be subject to a civil penalty of \$500. The Board may stay enforcement of the civil penalty if the offender replants the disturbed area in accordance with the provisions of this Article.