

**TOWN OF SWANSBORO
PLANNING BOARD
REGULAR MEETING AGENDA**

May 4, 2021

Tuesday, 5:30 PM

***Regular Meeting Zoom Link:** <https://us02web.zoom.us/j/86082103395>

1. Call to Order

2. Minutes

A. April 6, 2021 Regular Meeting Minutes

3. Business

Tree Preservation and Replacement

After review at the April 19, 2021 Special Meeting, the Board asked for example ordinances from other communities and to continue discussion at the next regular meeting.

Action Needed: Continue discussion from the April 19, 2021, Special Meeting and/or recommended amendments to the UDO.

4. Chairman/Board Thoughts/Staff Comments

5. Public Comments

6. Adjournment

**TOWN OF SWANSBORO
PLANNING BOARD
REGULAR MEETING MINUTES
APRIL 6, 2021**

Call to Order

The meeting was called to order at 5:30 pm. Board members in attendance were Michael Favata, Christina Ramsey, Scott Chadwick, Jeff Conaway, and Brad Buckley. The board had 1 vacancy and Ed McHale was on a leave of absence and was excused.

It was noted that member, Brad Buckley attended via ZOOM, an electronic platform put into place to allow virtual meetings due to the COVID-19 pandemic that had recently taken a huge toll on the United States and other parts of the world requiring social distancing and limited public appearances.

Minutes

On a motion by Mr. Conaway, seconded by Mrs. Ramsey the minutes for November 16, 2020 Special Meeting, March 2, 2021 Regular Meeting, and March 15, 2021 Special Meeting were approved unanimously.

Business

The Blazin' Bird Special Use Permit

Planner, Jennifer Ansell reviewed that Chase Hanford had submitted an application for special use to utilize the property at 632 W. Corbett Ave, the former Seaside Coney Island, as a restaurant. Though the property was previously used as a restaurant, "Restaurants (including take-out only establishments)" now required a special use in the B-2 General Business zoning district. Because the property has been vacant due to damage from Hurricane Florence in September 2018, the use had been discontinued for more than 180 days, and a special use was required.

Mrs. Ansell reviewed the following related to the property and application:

- *Signage.* No new signage has been proposed at this time; and
- *Parking.* Based on the square footage of the restaurant and proposed outdoor seating area, 17 parking spaces were required; 20 would be provided; and
- *Sidewalks.* Sidewalks were not required as it was not a redevelopment of the property; and
- *Traffic Impact Study.* In conversation with Justin Lins, Engineering Specialist II with NCDOT, the number of trips per day will not exceed 200 and would not necessitate a traffic impact study; and
- *Landscaping.* The requirements are not applicable to this project, the repairs/improvements would not change the use or alter the existing building.

Applicant, Chase Hanford addressed the board and clarified the follow details and inquiries from the board:

- Parking along the rear would be improved
- Dumpster and gas tank would be moved to back corner of property; and
- Business would adhere to all Town Plans and requirements; and
- Would address signage changes if needed/required in future; and
- There would not be any live music performances

The Board reviewed the proposed special use permit request and evaluated the application based on the criteria under Section 152.210 of the Unified Development Ordinance. The consensus was that the proposal met the criteria. Mr. Buckley was the only board member that opposed several of the criteria.

On a motion by Mr. Chadwick, seconded by Mrs. Ramsey, The Blazin' Bird Special Use Permit was unanimously recommended for approval to the Board of Commissioners and was found consistent with the Comprehensive plan.

Mr. Buckley shared his opinion that he did not feel the Board was "doing the right thing." He indicated that he was not one to deny a business in town, therefore he would vote yes to recommend the permit for approval.

Chapter 160D Amendments

Mrs. Ansell reviewed that Chapter 160D of the North Carolina General Statutes consolidates current statutes for local development regulations (now in Chapter 160A) into a single, unified chapter, and places these statutes into a more logical, coherent organization. It refines procedures, aligns terminology, and confirms authority that was presumed under old statutes.

The consolidation required that all city and county zoning, subdivision, and other development regulations, including unified development ordinances, be updated and reflect the necessary references by July 1, 2021.

Mrs. Ansell highlighted the following details/changes for the Board's knowledge:

- Some new definitions were added that were in 160D but not in the Town UDO
- Reorganized some sections to be more logical
- Removed language that was contradictory to sections
- Historic Appendix would be updated and referred to as "Standards" instead of "Guidelines"
- Wireless tower requirements were added

On an inquiry from the Board, Mrs. Ansell clarified that the changes are mandated and come from Chapter 160D of the North Carolina General Statutes.

On a motion by Mr. Chadwick, seconded by Mr. Conaway, the proposed changes to the Town Code of Ordinances and Unified Development Ordinance related to the N.C.G.S. Chapter 160D Amendments was recommended for approval to the Board of Commissioners and were found consistent with the Comprehensive plan. The motion passed 4:1.

Ayes: Chadwick, Ramsey, Favata, Conaway

No: Buckley

Mr. Buckley inquired as to what amendments were being approved and insisted that they all be read for the hearing. Chairman Chadwick explained that all amendments as provided in the Board agenda packet and reviewed by Planner Jennifer Ansell, were being recommended for approval to the Board of Commissioners.

Adjournment

On a motion by Mr. Favata, seconded by Mr. Conaway, the meeting adjourned at 6:17 pm.

Appendix I

PREFACE

The Regulated Tree List is intended to help the developer, as well as Town and ETJ Citizens, in identifying and preserving one of our most precious resources; The indigenous trees of Eastern North Carolina. It is not intended to prevent or hinder the full enjoyment and use of one's property. Preserving what we have today will insure that we can enjoy it tomorrow.

(Ord. 2005-O3, passed 3-15-2005) (Am. Ord. 2013-O15, passed 7-16-2013)

Regulated Trees							
Botanical Name	Common Name	Height	Spread	Form	Foliage	Flowers	Fruit
Acer Platanoides	Maple	50 ft	50 ft	Oval	Dark Green	Yellow/Green	Seed
Acer Rubrum	Red Maple	70 ft	40 ft	Round	Medium Green	Red	Seed
Quercus Stellata	Post Oak	60 ft	40 ft	Round	Green	Yellow/Red	Acorn
Carya Cordiformis	Hickory	60-70 ft	25-35 ft	Oblong	Yellow Green	Yellowish	Nut
Liquidambar Ciflua	Sweet Gum	60 ft	40 ft	Upright	Dark green	Greenish	Spiny Ball
Ilex Opaca	Holly	40 ft	20 ft	Pyramidal	Dark Green		Red Berry
Pinus Tarta	Loblolly Pine	60-85 ft	40 ft	Upright	Light Green	Green/Yellow	Cone
Botula Nigra	Birch	60 ft	40 ft	Oval	Medium Green	Catkins	Catkins
Cornus Florida	Dogwood	15-20 ft	10-20 ft	Oval	Medium Green	White	Red Berry
Grand Floria	Magnolia	40-60 ft	30 ft	Round	Bright Green	White	Red Berry
Morus Alba	Mulberry	60 ft	60 ft	Round Top	Dark Green	Greenish	Berries
Juniperus Virginana	Cedar	45 ft	15 ft	Pyramidal	Green		
Taxodium Species	Cypress	70 ft	25 ft	Pyramidal	Green		
Quercus Alba	White Oak	70 ft	70 ft	Round	Dark Green	Yellow/Red	Acorns
Liriodendron tulipifera	Poplar	80 ft	40 ft	Pyramidal	Med Green	Green/Yellow	Seed
Oxydendrum Arboreum	Sourwood	20-30 ft	10-15 ft	Pyramidal	Green	White	Seed

(Ord. 2005-O3, passed 3-15-2005) (Am. Ord. 2013-O15, passed 7-16-2013)

APPROVED PLANT LIST

The following recommended list of plants has been chosen for use in the town due to their survival rate in certain planting scenarios in the county:

- (1) *Canopy trees for buffer yards.*
 - (a) Southern Magnolia (*Magnolia grandiflora*).
 - (b) Longleaf Pine (*Pinus palustris*).
 - (c) Live Oak (*Quercus virginiana*).
 - (d) Sweetgum (fruitless) (*Liquidambar styraciflua* (*Rotundiloba*)).
 - (e) Black Tupelo (*Nyssa sylvatica*).
- (2) *Understory trees for buffer yards.*

- (a) Loquat (*Eriobotrya japonica*).
- (b) Dahoon (*Ilex cassine*).
- (c) Foster Holly (*Ilex x attenuate* Fosteri).
- (d) American Holly (*Ilex opaca*).
- (e) Flowering Dogwood (*Cornus florida*).
- (f) Crape Myrtle (*Lagerstroemia indica*, *Lagerstroemia faurieri* and hybrids between the two such as Natchez).

(3) *Street trees.*

- (a) Trident Maple (*Acer buergerianum*).
- (b) Crape Myrtle (*Lagerstroemia indica*, *Lagerstroemia fauriei*, and hybrids between the two such as Natchez).
- (c) Chinese Pistache (*Pistacia chinensis*).
- (d) Shumard Oak (*Quercus shumardii*).
- (e) Nuttall Oak (*Quercus nuttallii*).
- (f) Chinese Fringetree (*Chionanthus retusus*).
- (g) White Fringetree (*Chionanthus virginicus*).
- (h) Savannah Holly and Foster Holly (cultivars of *Ilex x attenuate*).
- (i) Zelkova (*Zelkova serrata*).
- (j) Lacebark Elm (*Ulmus parvifolia*).
- (k) Eastern Redcedar (*Juniperus virginiana*).
- (l) Chanticleer Callery Pear (*Pyrus calleryana* Chanticleer).
- (m) Hibiscus Syriacus - known as Rose of Sharon or Althea.
- (n) *Ilex Vomitoria* - the weeping form.
- (o) Chinese Snowball Viburnum (*Viburnum macrocephalum*).

(4) *Shrubs used within buffer yards.*

- (a) Indian Azalea (*Azalea indica*).
- (b) Camellia (*Camellia japonica*).
- (c) Sasanqua Camellia (*Camellia sasanqua*).
- (d) Chinese Holly (*Ilex cornuta*).
- (e) Dwarf Burford Holly (*Ilex cornuta* Burfordii).
- (f) Lusterleaf Holly (*Ilex latifolia*).
- (g) Nellie R. Stevens Holly (*Ilex* Nellie R. Stevens).
- (h) Loropetalum (*Loropetalum chinense*).
- (i) Wax-Myrtle (*Myrica cerifera*).

(5) *Shrubs within street yards.*

- (a) Dwarf Yaupon (*Ilex vomitoria* Nana).
- (b) Nandina (*Nandina domestica*).

(6) *Shrubs within 40 feet of driveway.*

- (a) Alexandrian Laurel (*Danae racemosa*).
- (b) Dwarf Gardenia (*Gardenia jasminoides* radicans).
- (c) Dwarf Horned Holly (*Ilex cornuta* Rotunda).
- (d) Rosemary (*Rosmarinus officinalis*).
- (e) David Viburnum (*Viburnum davidii*).

(7) *Parking lot buffer yards (side and rear yards).*

- (a) Camellia (*Camellia japonica*).

- (b) Sasanqua Camellia (*Camellia sasanqua*).
 - (c) Cleyera (*Cleyera japonica*).
 - (d) Chinese Holly (*Ilex cornuta*).
 - (e) Dwarf Burford Holly (*Ilex cornuta Burfordii*).
 - (f) Lusterleaf Holly (*Ilex cornuta Burfordii*).
 - (g) Anisetree (*Illicium anisatum*).
 - (h) Loropetalum (*Loropetalum chinense*).
 - (l) Wax Myrtle (*Myrica cerifera*).
 - (j) Oleander (*Nerium oleander*).
 - (k) Pittosporum (*Pittosporum tobira*).
- (8) *Parking lot islands and planter areas.*
- (a) Abelia (*Abelia x grandiflora*).
 - (b) Crape Myrtle (*Lagerstroemia indica*, *Lagerstroemia faurieri* and hybrids between the two such as Natchez).
 - (c) Dwarf Horned Holly (*Ilex cornuta Rotunda*).
 - (d) Dwarf Yaupon (*Ilex vomitoria Nana*).
 - (e) Nandina (*Nandina domestica*).

ARTICLE XIX. - TREE CANOPY PRESERVATION.

Sec. 7-19-1. - Applicability.

The requirements of this article shall apply to any of the following development activities:

- (1) *Single family residential.*
 - a. Any major or minor subdivision of land.
 - b. Removal of trees within any steep slope zone or an aquatic buffer.
- (2) *Multifamily residential and non-residential.*
 - a. Any major or minor subdivision of land.
 - b. New building construction.
 - c. New open uses of land.
 - d. Expansion of existing buildings by over 1,500 square feet.
 - e. Expansion of open uses of land by over 3,000 square feet.

(Ord. No. 4824, § 1h, 9-8-20)

Sec. 7-19-2. - Tree canopy preservation requirements.

- (a) The tree canopy on a development site shall meet the applicable standards according to the site's Resource Management Overlay District, proposed land use, and the amount of tree canopy preservation, as set forth in Tables 7-19.1, 7-19.2 and 7-19.3 below. (Percentages refer to the relation of tree canopy requirement to gross site area in square feet.)
- (b) Residential subdivisions and multi-lot commercial developments may group trees in clusters throughout the development rather than meeting the canopy requirements on a lot-by-lot basis.
- (c) Trees preserved to satisfy the planting requirements of section 7-11-3 shall be permitted to satisfy the requirements of this section when such trees are existing wholly on the property and not within the public right-of-way.
- (d) All trees used to meet requirements must be healthy, non-hazardous and non-invasive.
- (e) Areas designated as tree canopy protection areas shall remain as such in perpetuity. Tree removal shall be prohibited in these areas unless otherwise permitted.
- (f) Excluded areas: Tree canopy protection areas shall not include any of the following:
 - (1) Drainage easements;
 - (2) Cross access easements;
 - (3) Governmental and utility easements that prohibit trees;
 - (4) Any easement authorizing tree disturbing activities;
 - (5) Areas devoted to future transportation (including greenways) and/or stormwater infrastructure.
- (g) No structures or improvements are permitted to be installed within designated tree canopy preservation areas.

Table 7-19.1 - Tree Canopy Requirement Classification

Land Use	Resource Management District		
	Downtown	Urban	Suburban
Residential Subdivision	Class A	Class C	Class C
Multi-Family & Office	Class A	Class B	Class C
Institutional	Class A	Class C	Class C
Commercial	Class A	Class B	Class C

Industrial	Class A	Class B	Class C
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Table 7-19.2 - Class Based Canopy Requirement, Classes A & B*

Canopy Requirement Class	Existing Tree Canopy Preserved	New Tree Canopy Installation Required	Total Tree Canopy Required
Class A	5%	0%	5%
	4%	2%	6%
	3%	4%	7%
	2%	6%	8%
	1%	8%	9%
	0%	10%	10%
Class B	10%	0%	10%
	8%	3%	11%
	6%	6%	12%
	4%	9%	13%
	2%	12%	14%
	0%	15%	15%

*Percentages not shown on this table are rounded down to the nearest whole entry.

Table 7-19.3 - Class Based Canopy Requirement, Class C***

Canopy Requirement Class	Existing Tree Canopy Preservation Requirement	New Tree Canopy Installation Requirement	Total Tree Canopy Requirement
Class C, Sites with 76-100% existing canopy coverage	15%	0%	15%
	12%	6%	18%
	9%	12%	21%
	6%	18%	24%
	3%	24%	27%

	0%	30%	30%
Class C, Sites with 41-75% existing canopy coverage	15%	0%	15%
	12%	5%	17%
	9%	10%	19%
	6%	15%	21%
	3%	20%	23%
	0%	25%	25%
Class C, Sites with 0%-40% existing canopy coverage	15%	0%	15%
	12%	4%	16%
	9%	8%	17%
	6%	12%	18%
	3%	16%	19%
	0%**	20%	20%**

***Percentages not shown on this table are rounded down to the nearest whole entry.

(Ord. No. 4824, § 1h, 9-8-20)

Sec. 7-19-3. - Calculation of tree canopy area.

- (a) Any development site greater than two acres in size shall be permitted to determine the area of existing tree canopy coverage to be preserved by ground checking or aerial analysis according to the most recent data provided by the city. Tree canopy calculated by aerial analysis shall be limited to that within the boundary of the subject property. If ground checking is utilized, credit for existing trees intended to be retained may be calculated in either of two ways:
 - (1) Measurement of the trunk of each individual tree (i.e. a tree not grouped with other trees or a part of a tree stand) to determine its DBH and the credit given for that tree shall be in accordance with Table 7-19.4, below; or
 - (2) The dripline may be plotted on the site plan and tree canopy credit given for the square footage of the site within the dripline.
- (b) For any development site two acres or less in size the area of tree canopy coverage for any group of trees to be retained in order to meet the tree canopy requirements of this Part shall be determined by ground checking. Credit for existing trees intended to be retained may be calculated in either of two ways:
 - (1) Measurement of the trunk to determine its caliper and the credit given for that tree shall be in accordance with Table 7-19.4, below; or
 - (2) The dripline may be plotted on the site plan and tree canopy credit given for the square footage of the site within the dripline.
- (c) Trees planted within one calendar year of the date of development application shall not be included in the calculation of existing tree canopy.
- (d) The calculation must be conducted and certified by a land surveyor, civil engineer, landscape architect licensed by the State of North Carolina or Arborist certified by the International Society of Arboriculture.

Table 7-19.4 - Tree Canopy Credit for Preserved Trees

DBH	Size Classification*	Canopy Credit
Over 10 inches	Large	1,600 sq ft
	Medium	900 sq ft
	Small	400 sq ft
3 inches to 9 inches	Large	960 sq ft
	Medium	576 sq ft
	Small	142 sq ft
1 ¾ inches to less than 3 inches	Large	720 sq ft
	Medium	432 sq ft
	Small	106 sq ft

As found in [recommended species list](#)

Table 7-19.5 - Tree Canopy Credit for Newly Installed Trees	
Size Classification*	Canopy Credit
Large	560 sq ft
Medium	315 sq ft
Small	140 sq ft

As found in [recommended species list](#)

(Ord. No. 4824, § 1h, 9-8-20)

Sec. 7-19-4. - Documentation and plan review.

(a) *Tree canopy protection plan.*

- (1) The tree canopy protection plan shall be drawn on a separate plan sheet in addition to all other required submissions.
- (2) The tree canopy protection plan shall show all designated tree canopy protection areas and shall identify the total site acreage as well as the protected tree canopy percentage.
- (3) The tree canopy protection plan shall show all trees on the development site.
 - a. If ground checking is utilized to calculate the tree canopy area, trees shown on the plan shall be labeled as to their diameter at breast height and species.
 - b. If aerial analysis is utilized to calculate the tree canopy area, tree canopy area shall be shown, labeled and described on the plan.
- (4) Plans shall display the following required note: Areas designated as tree canopy protection areas shall remain as such in perpetuity. Tree removal shall be prohibited in these areas unless otherwise permitted.

- (5) The approved tree canopy protection plan must be recorded with the Buncombe County Register of Deeds.
- (6) A copy of the recorded tree canopy protection plan shall be provided to the city prior to the issuance of the certificate of occupancy or certificate of compliance.
- (b) *All plats for affected properties:*
 - (1) TCPA shall be shown on all subdivision final plats
 - (2) Plats shall display the following required note: Areas designated as tree canopy protection areas shall remain as such in perpetuity. Tree removal shall be prohibited in these areas unless otherwise permitted.

(Ord. No. 4824, § 1h, 9-8-20)

Sec. 7-19-5. - Payment in lieu of compliance.

- (a) Payment may be made in lieu of compliance to fulfill the new tree canopy installation requirements for a site as found in Table 7-19.2 and 7-19.3.
- (b) Payments in lieu of compliance received in relation to properties within a given Resource Management Overlay District shall be used to acquire land and plant or preserve trees within that same Resource Management Overlay District.
- (c) Exclusions: Payment in lieu of compliance shall not be accepted for:
 - (1) Areas containing aquatic buffers.
 - (2) Areas defined as steep slope zone A or B as defined by section 7-12-4.
- (d) Calculation of payment amounts.
 - (1) The payment amount in lieu of planting shall be based on values listed in the current year fees and charges manual.

(Ord. No. 4824, § 1h, 9-8-20)

Sec. 7-19-6. - Permitting.

- (a) *Tree removal permits.*
 - (1) A permit shall be required for the following activities
 - a. The removal of any trees on properties within any steep slope zone or an aquatic buffer.
 - b. The removal of any tree within an established tree canopy protection area.
 - (2) Fees
 - a. Fees for tree removal permit applications shall be established and listed in the current year fees and charges manual.
- (b) *Application requirements:*
 - (1) The applicant for a tree removal permit shall supply, at a minimum:
 - a. A photo of the tree to be removed;
 - b. A site plan showing the location of the tree to be removed;
 - c. Copies of any site plans showing required tree canopy preservation area;
 - d. A letter from a certified arborist recommending removal of the tree and the facts supporting that recommendation. Reasons may include but are not limited to:
 - 1. Trees that are dead, diseased or dying; or
 - 2. Trees that pose a threat to life or property safety.
 - e. A replanting plan showing the installation of tree canopy equivalent to that being removed as defined by Table 7-19.4.
 - (2) Staff shall either approve or deny the application within ten business days.
- (c) *Appeals.*
 - (1) Appeals of staff decisions will be conducted as detailed in section 7-6-2.

(Ord. No. 4824, § 1h, 9-8-20)

Sec. 7-19-7. - Enforcement.

- (a) Violations of this article shall be enforced as specified in article 18 of this chapter.
- (b) A violation of section 7-19-3(4) shall be subject to a civil penalty in the amount specified in appendix B.
- (c) Remediation-replanting in addition to fines.

- (1) In addition to any fines assessed, the violator shall install a new tree or trees with a canopy area equivalent to that which was removed as Table 7-19.4.

(Ord. No. 4824, § 1h, 9-8-20)

CHAPTER 8. - TREE PROTECTION AND LANDSCAPING

8.1. - Purpose and intent.

Tree protection and landscaping are as essential as the design of each individual building to the built urban form of the city. These requirements are therefore intended to aid in preserving ecological balance by contributing to the preservation of wildlife habitat, the promotion of natural diversity, air quality, groundwater recharge, energy conservation, and stormwater runoff, while reducing noise, glare, and heat.

The appropriate use of existing and supplemental landscaping enhances the aesthetic appearance of new development and blends new development with the natural landscape. The use of native evergreen and deciduous plant materials blend the built environment with new construction while maintaining the aesthetic character of the city.

Through the protection of trees and existing vegetation, the city encourages new development to be creative in design and placement of buildings, structures, parking and other impervious surfaces as to preserve natural features and to compliment the existing topography when practical.

8.2. - General provisions.

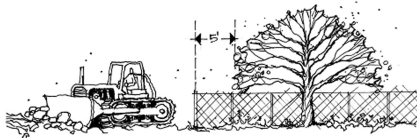
- A. *Maintenance of existing built and vacant lots:* Every owner, occupant, agent or person in control of property shall cut down and remove from the property all weeds, grass, vines and other growth which endangers the property or any other property, or which is likely to burn. This requirement shall not require the clearance of surface water protection areas or the removal of significant or protected tree and shrub species.
- B. *Pre-construction conference:* Prior to the commencement of any new development activities an on-site pre-construction conference shall take place with the developer and the administrator to review procedures for the protection and management of all protected landscape elements identified on the landscape protection plan.
- C. *Existing vegetation, fences, walls, and berms:* The use of existing trees or shrubs to satisfy the landscaping requirements of this section is strongly encouraged. Existing significant vegetation within the landscaped area shall be preserved and credited toward standards for the type of perimeter landscaping required, unless otherwise approved by the City of Brevard at the time of site plan approval. Existing berms, walls, or fences within the landscaped area but not including chain link fencing, may be used to fulfill the standards for the type of perimeter landscaping required, provided that these elements are healthy and/or in a condition of good repair. Other existing site features within the required perimeter landscaped area which do not otherwise function to meet the standards for the required landscaping shall be screened from the view of other properties or removed, as determined during review and approval of the site plan.
- D. *Installation of new vegetation and other features:* New plant material should complement existing vegetation native to the site. If existing significant vegetation and other site features do not fully meet the standards for the type of landscaping required, then additional vegetation and/or site features (including fences) shall be planted or installed within the required landscaping area. The use of indigenous, native and/or regionally grown species of trees, shrubs, vines, groundcovers and perennials is encouraged in order to make planted areas compatible with existing native habitats. The introduction of invasive-exotic species shall be prohibited (See subsection P. of this section for reference).
- E. *Grading and development in required landscape areas:* The required landscaping shall not contain any development, impervious surfaces, or site features that do not function to meet these standards or that require removal of existing significant vegetation. No grading, development, or land-disturbing activities shall occur within this area if forest canopy, specimen trees, or significant vegetation exists within the buffer yard, unless approved by the administrator. If grading within a buffer yard is proposed, slopes of 3:1 or less are encouraged to ensure the proper transition of grades to the adjacent property and to facilitate landscaping and maintenance.
- F. *Easements and rights-of-way:* Nothing shall be planted or installed within an underground or overhead utility easement or a drainage easement without the consent of the city and the easement holder at the time of site plan approval.
- G. *Protection during surveying:* No tree greater than 12 inches in diameter at breast height (DBH) located on public property or within a required tree protection area shall be removed for the purpose of surveying without an approval from the administrator.
- H. *Tree trimming:* Every owner of any tree overhanging any street or right-of-way within the city shall trim the branches so that such branches shall not obstruct the light from any street lamp or obstruct the view of any street intersection and so that there shall be a clear space of eight feet above the surface of the street or sidewalk. Said owners shall remove all dead, diseased or dangerous trees, or broken or decayed limbs which constitute a menace to the safety of the public. The public works director and utilities director are authorized to remove and/or trim trees and shrubs from public properties and public rights-of-way. North Carolina Department of Transportation is authorized to remove and/or trim trees and shrubs in the public rights-of-way owned by the State of North Carolina. Approval is required to trim a tree in a tree protection area, required landscaping area, or buffer yard more than 25 percent of its overall canopy.
- I. *Trimming and removal by utility companies:* Trees to be removed from the public right-of-way by electric utilities and other overhead utilities must be replaced by such entity in equal quantity and minimum caliper size with an approved species.
- J. *Tree topping:* Tree topping shall be prohibited on all trees on public property, designated rights-of-way, required tree protection areas, landscaping, and buffer yards unless otherwise approved by the administrator. Trees severely damaged by storms or other causes, or certain trees under utility lines or other obstructions where other pruning practices are impractical may be exempted from this article at the

determination of the administrator.

- K. *Removal of dead trees on public property:* Approval by the administrator shall be issued for trees that are dead, infected by disease, or determined to be a hazard to public safety and welfare. Should any tree designated in a tree protection area, required landscaping area, or buffer yard die, the agency shall replace it within 180 days with a tree(s) [of] equal size.
- L. *Tree removal on private property:* The city may require removal of any dead or diseased trees or trees harboring insects, on private property when such trees constitute a threat to public property. The administrator will notify in writing the owner(s) of such trees. Removal shall be done at the owner(s) expense within 60 days after the date of service of notice. In the event of failure of the owner(s) to comply with such provisions, the city shall have the authority to remove such trees and charge the cost of removal as a lien on the owner's property taxes.
- M. *Stumps:* All stumps of trees and park trees shall be removed so that the top of the stump does not project above the surface of the ground.
- N. *Use of off-site landscape easements:* Permanent off-site landscape easements may be used to meet required buffer yards provided that the size or shape of the parcel significantly restricts the ability to reasonably use the property and meet the buffer yard requirements. These easements must be recorded prior to or in conjunction with the approval of the site or subdivision plan.
- O. *Protective measures during construction:* Protective barricades shall be placed around all protected trees designated to be saved prior to the start of development activities or grading. Barricades shall be erected five feet past the drip line for any tree to be saved or tree save areas. Protective barricades shall remain in place until development activities are completed. The area within the protective barricade shall remain free of all building materials, dirt or other construction debris, construction traffic, storage of vehicles and materials, and grading shall not take place within five feet of the drip line of the existing trees to be protected.

Except for driveway access points, sidewalks, curb and gutter; no paving with concrete or other impervious materials within five feet of a tree drip

line shall be allowed unless otherwise approved.



Protective Barricade

- P. *Invasive-exotic plant species:* The administrator shall maintain a current list of invasive-exotic plant species by taking guidance from the latest edition of, "A Management Guide for Invasive Plants in Southern Forests," published by the United States Department of Agriculture Forest Services Southern Research Station, as applicable to the western North Carolina region, and by submitting periodic text amendments to reflect these changes. The introduction of the following shall be prohibited:
 1. *Trees:* Mimosa (*Albizia julibrissin*), Princess Tree (*Paulonia tomentosa*), Russian Olive (*Elaeagnus angustifolia*), Tree of Heaven (*Ailanthus altissima*), Bradford Pear (*Pyrus calleryana*), Japanese Privet (*Ligustrum japonicum*), Norway Maple (*Acer platanoides*), Paper Mulberry (*Broussonetia papyrifera*), Thorny Olive (*Elaeagnus pungens*), White Mulberry (*Morus alba*), White Poplar (*Populus alba*), Chinese Elm (*Ulmus parvifolia*), Silver Maple (*Acer saccharinum*), Lombardy Poplar (*Populus nigra*), Chinese Tallow (*Triadica sebiferum*), Chinaberry (*Melia azedarach*).
 2. *Shrubs:* Autumn Olive (*Eleagnus umbellata*), Chinese Privet (*Ligustrum sinense*), Multiflora Rose (*Rosa multiflora*), Winter Honeysuckle (*Lonicera fragrantissima*), Amur Honeysuckle (*Lonicera maackii*), Common privet (*Ligustrum vulgare*), Glossy Privet (*Ligustrum lucidum*), Japanese Barberry (*Berberis thunbergii*), Japanese Spiraea (*Spiraea japonica*), Morrow's Honeysuckle (*Lonicera morrowii*), Tatarian Honeysuckle (*Lonicera tatarica*), Sacred Bamboo (*Nandina domestica*), Burning Bush (*Euonymus alata*), Leatherleaf Mahonia (*Mahonia bealei*).
 3. *Vines:* Chinese Wisteria (*Wisteria sinensis*), English Ivy (*Hedera helix*), Japanese Honeysuckle (*Lonicera japonica*), Kudzu (*Pueraria Montana*), Bittersweet (*Celastrus obiculatus*), Bigleaf Periwinkle (*Vinca major*), Common Periwinkle (*Vinca minor*), Fiveleaf Akebia (*Akebia quinata*), Japanese Wisteria (*Wisteria floribunda*), Porcelain Berry (*Ampelopsis brevipedunculata*), Sweet Autumn Clematis (*Clematis terniflora*), Wintercreeper (*Euonymus fortunei*).
 4. *Herbaceous plants:* Garlic Mustard (*Alliaria petiolata*), Japanese Knotweed (*Polygonum cuspidatum*), Japanese Stiltgrass (*Microstegium vimineum*), Korean or Chinese Lespedeza (*Lespedeza cuneata*), Shrubby Lespedeza (*Lespedeza bicolor*), Bamboo (*Bambusa* and *Phyllostachya*), Chinese Silvergrass (*Miscanthus sinensis*), Crownvetch (*Securigera varia*), Johnsongrass (*Sorghum halepense*), Purple Loosestrife (*Lythrum salicaria*), Queen Anne's Lace (*Daucus carota*).

(Ord. No. 2015-27, § 01, 10-19-15; Ord. No. 2016-28, § 2(Exh. B), 9-19-16)

8.3. - Tree protection.

A. *Applicability:*

1. The provisions of the tree protection section of this chapter shall be applicable to any tree that falls within one or more of the following categories:
 - i. Any tree which has a trunk six inches or more in diameter at one foot above the ground; or is of a horticultural variety or is highly

ornamental (such as a dogwood, redbud, crab apple, sourwood, flowering cherry, holly or any like or similar such plant) and has a trunk diameter of three inches or more at one foot above the ground.

- ii. Any tree that is noted as part of a development plan or that is required as part of a special use permit, group development, planned development, Conditional Zoning District, or other development approval.
- iii. Any tree located within a historic district or any property containing a historically designated structure.
- iv. Any tree located within an RMX, NMX, DMX, CMX, GI, GR, or IC Zoning District or associated Conditional District, and any other property containing a non-residential use.
- v. Any tree subject to D, below.

B. Exemptions:

1. Trees located on properties developed for single family or duplex uses located within GR districts shall be exempt from the tree protection provisions of this chapter, except for those trees subject to A.1.ii.—iii., above, and trees and other vegetation in protection areas set forth in Chapter 6 and listed as Tier 1 trees in Section 8.3(D), below.
2. The following trees are exempt from the provisions of this Chapter: Mimosa (Albizia julibrissin), Princess Tree (Paulonia tomentosa), Russian Olive (Elaeagnus angustifolia), Tree of Heaven (Ailanthus altissima), Bradford Pear (Pyrus calleryana), Japanese Privet (Ligustrum japonicum), Norway Maple (Acer platanoides), Paper Mulberry (Broussonetia papyrifera), Thorney Olive (Elaeagnus pungens), White Mulberry (Morus alba), White Poplar (Populus alba), Chinese Elm (Ulmus parvifolia), Silver Maple (Acer saccharinum), Lombardy Poplar (Populus nigra), Chinese Tallow (Triadica sebiferum), Chinaberry (Melia azedarach).
3. Pruning trees as normal maintenance provided such pruning does not result in the mutilation, death or destruction of the tree.
4. All trees which are grown by a licensed plant or tree nursery or tree farm, provided such trees are planted and grown on the licensee's premises for the sale or intended sale to the general public in the ordinary course of the licensee's business.
5. All trees which have been destroyed or harmed by a storm or similar act of nature or casualty loss; provided the administrator is notified of such intended removal, replacement or relocation at least two business days prior to removal, replacement or relocation of any tree. The administrator shall approve or deny the request within the two-day period, and may require replacement subject to the requirements of this ordinance. There shall be no fee for this inspection and review.

C. Permit required: It shall be unlawful for any person to remove, replace or relocate any tree within the city until an application for a permit has been submitted to the administrator. In determining whether a permit should be issued, the administrator shall consider the following criteria:

1. The condition of the trees with respect to disease, danger of falling, proximity to existing or proposed structures, and interference with utility services.
2. The necessity to remove trees in order to construct proposed improvements to allow economic enjoyment of the property.
3. Topography of the land and the effect of tree removal on erosion, soil retention and the diversion or increased flow of surface waters, and coordination with the city's drainage plans and recommendations on drainage patterns.
4. Number of trees existing in the neighborhood on improved property. Administrator shall be guided by the effect of tree removal upon property, as well as aesthetic values, in the area.

In all cases, the administrator may require the relocation or replacement of the trees as a condition of issuing the permit, on a one-for-one basis, with replacement trees having a caliper of two-inches or more in diameter at one foot above the ground

D. Required tree protection areas: Trees and existing vegetation shall be preserved in accordance with the table below. Exceptions to tree protection in Tier 2 and Tier 3 areas shall be reviewed by the board of adjustment on a case-by-case basis.

	Priority Tree Protection Area	Required Protection
Tier 1	Special Flood Hazard Areas Required Surface Water Protection Area Required Buffer Yard Slope Areas 25 percent or greater Wetlands	All Vegetation and Soil to Remain Undisturbed <i>In some cases, limited disturbance may occur within the areas to be protected provided all necessary approvals are obtained. Such activities include, but are not limited to the following:</i> • Mitigation of development activities. • Restoration of previously disturb areas. • Stream restoration. • Utility installations and emergency public safety activities. • Construction of a trail or pedestrian walkway that will provide public access. • <i>Required street or driveway connections.</i>

Tier 2	Front Setback Areas Required Landscaping Areas Required Open Space Slope Areas of 15—25 percent	All Trees Greater than 12" DBH <i>Replacement trees, if permitted, shall be planted at a rate of one tree per each 12" DBH</i>
Tier 3	All Other Locations	All Trees Greater than 24" DBH <i>Replacement trees, if permitted, shall be planted at a rate of 1 tree per each 12" DBH</i>

E. *Credits for preservation of existing trees in parking areas:* Trees that are saved in a parking lot area (other than those in Tier 1 or Tier 2 Tree Save Areas in Section B above) can be used towards the interior tree landscape requirement in Section 8.7. Note that each tree preserved will require a minimum pervious area around it equal to its drip line.

Size of Preserved Trees	Deduction from Required Plantings
For Each Tree 6—12" DBH	One Required Parking Lot Tree
For Each Tree 13—24" DBH	Two Required Parking Lot Trees
For Each Tree 25" DBH or Greater	Three Required Parking Lot Trees

(Ord. No. 15-08, § 21, 12-5-08; Ord. No. 2016-28, § 2(Exh. B), 9-19-16)

8.4. - Buffers and screening.

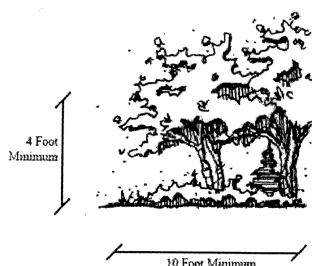
A. *Applicability:*

1. These regulations shall apply to the following:
 - i. All newly developed properties
 - ii. When expansions or changes in use result in the expansion of gross floor area of an existing building and/or parking and loading area of over 25 percent, and any property containing an existing structure undergoes significant or substantial improvement as defined in Chapter 19 of this ordinance, then the parcel shall comply with the landscaping requirements of this section to the maximum extent practical.
 - iii. When the zoning district classification changes for an existing use or parcel at the request of the property owner or representative thereof, then the parcel shall comply with the landscaping requirements of this section to the maximum extent practical.
2. The administrator may waive or modify landscaping requirements in situations where pre-existing conditions make it impossible to comply with subsections ii and iii above.
3. Applicants are encouraged to design buffer and other landscape areas in such a way as to satisfy stormwater management requirements as set forth in Chapter 6 of this ordinance.

B. *Buffer yard types:*

1. *Type A buffer yard:*
 - a. Minimum width: 10 feet.
 - b. Minimum height and opacity: Ground to 6 feet - *Semi-Opaque Screen*.
 - c. Maximum horizontal openings: 20 feet.
 - d. Performance Standard: A buffer which is ten feet in width and contains screening materials which at maturity provide intermittent visual obstruction from the ground to a height of four feet as well as intermittent visual obstruction from a height of four feet up to a height of 30 feet. Vegetative screening materials within intermittent visual obstruction areas shall contain horizontal openings no greater than 20 feet in width upon the plants' maturity.

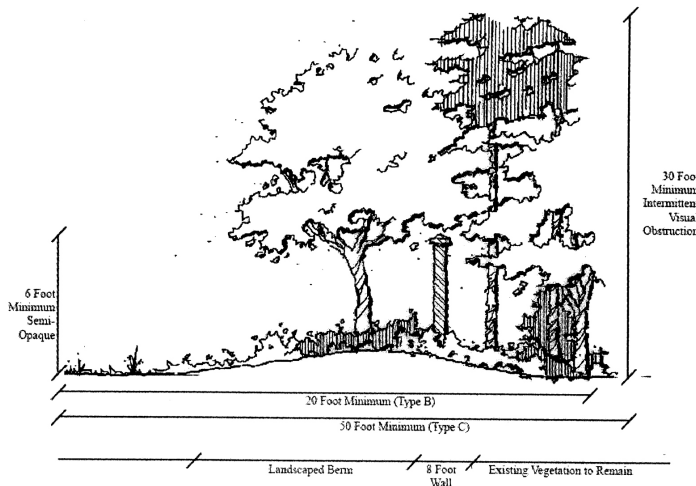
2.



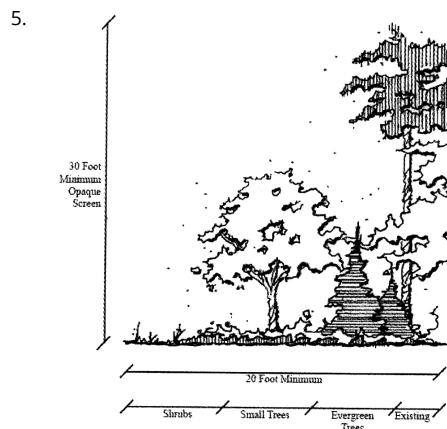
Type B buffer yard:

- a. Minimum width: 20 feet.
 - b. Minimum height and opacity: Ground to 6 feet - *Semi-Opaque Screen*; 6—30 feet - *Intermittent Visual Obstruction*.
 - c. Maximum Horizontal Openings: 15 feet - *Semi-Opaque Screen Areas*; 20 feet - *Intermittent Visual Obstruction Areas*.
 - d. Performance standard: A buffer which is 20 feet in width and contains screening materials which at maturity provide semi-opacity from the ground to a height of six feet, and intermittent visual obstruction from a height of six feet up to a height of 30 feet. Vegetative screening materials within intermittent visual obstruction areas shall contain horizontal openings no greater than 20 feet in width; and vegetative screening materials within semi-opaque areas shall contain horizontal openings no greater than 15 feet in width upon the plants' maturity.
3. *Type C buffer yard:*

- a. Minimum width: 50 feet.
- b. Minimum height and opacity: Ground to 6 feet - *Semi-Opaque Screen*; 6—30 feet - *Intermittent Visual Obstruction*.
- c. Maximum horizontal openings: 15 feet - *Semi-Opaque Screen Areas*; 20 feet - *Intermittent Visual Obstruction Areas*.
- d. Performance standard: A buffer which is 50 feet in width and contains screening materials which at maturity provides semi-opacity from the ground to a height of six feet, and intermittent visual obstruction from a height of six height up to a height of 30 feet. Vegetative screening materials within intermittent visual obstruction areas shall contain horizontal openings no greater than 20 feet in width; Vegetative screening materials within semi-opaque areas shall contain no horizontal openings greater than 15 feet in width upon the plants' maturity.



4. *Type D buffer yard:*
- a. Minimum width: 30 feet.
 - b. Minimum height and opacity: Ground to 30 feet - *Opaque*.
 - c. Maximum horizontal openings: None permitted.
 - d. Performance standard: A buffer which is 30 feet in width and contains screening materials which at maturity provides opacity from the ground to a height of 30 feet. Vegetative screening materials within opaque areas shall contain no horizontal openings upon the plants' maturity.

*Type E buffer yard.*

- a. Minimum width: 25 feet.

- b. Minimum height and opacity: Ground to 30 feet - Opaque.
- c. Maximum horizontal openings: None permitted.
- d. Performance standard: A buffer which is 25 feet in width and contains screening materials which at maturity provides opacity from the ground to a height of 30 feet. Vegetative screen materials within opaque areas shall contain no horizontal openings upon the plants' maturity.

C. *Fences, walls, and berms:* Fences, walls, or earthen berms may be substituted for all or a portion of the shrub requirement in all buffer types. In addition, existing vegetation within the buffer shall be maintained and may receive partial or total credit towards screening requirements. All berms, if provided, shall not exceed a slope with maximum rise of one foot to a run of two feet (a ratio of 1:2) and a maximum height of four feet. All berms, regardless of size, shall be stabilized with a ground cover or other suitable vegetation or permanent slope retention device. Berms taller than four feet shall be approved by the administrator on a case by case basis.

D. *Required buffer yards:*

1. A buffer yard is intended to give spatial separation and to decrease visual contact between incompatible uses. Buffer yards shall be required in accordance with the tables below when any use is being established on a property that abuts an existing developed lot or less intense zoning district. More stringent buffer yard requirements may apply to certain specified uses as set forth in Chapter 3 of this ordinance.
2. Buffer yards shall be required along the perimeter of proposed projects within certain zoning districts (and associated conditional districts) when such project lies *adjacent* to a zoning district (or conditional district) of lesser intensity:

		Adjacent District						
		GR	RMX	NMX	DMX	IC	CMX	GI
District in Which Development is Located								
	GR	None	None	None	None	None	B	D
	RMX	B	None	None	None	None	None	D
	NMX	B	A	None	None	None	None	D
	DMX	B	A	A	None	None	None	D
	IC	C	C	C	C	None	None	None
	CMX	D	D	D	D	None	None	None
	GI	E	E	E	E	None	None	None

3. In addition to the buffer yards required between districts as set forth above, buffer yards shall be required for certain types of development *within* certain zoning districts and associated conditional districts, as follows. This requirement applies regardless of the adjacent district. However, where conflicts occur between 8.4(D(2)), above, and this section, the more restrictive requirement shall apply.

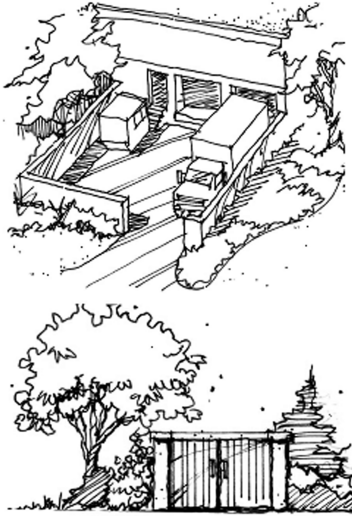
		Type of Proposed Development		
		New Residential Subdivision/Group Development (see i, below)	Mixed-Use/Non-Residential Subdivision/Planned Development and Group Development	Special Use Permit (see ii, below)
	GR	B	B	B
	RMX	B	B	B
	NMX	B	B	A

District in Which Development is Located	DMX	B	B	A
	CMX	B	D	B
	IC	B	C	B
	GI	NA	E	B

- i. This requirement shall apply to any new residential project where ten or more lots or dwelling units are proposed, as well as any new town home or condominium development, multifamily development, or group development.
 - ii. This requirement shall apply to any project for which a Special Use Permit is issued for an individual use or structure on a distinct parcel of land as set forth above, unless a more restrictive buffer yard is otherwise required in Chapter 3 of this ordinance. No individual buffer yard shall be required for a use or structure permitted within a group development, or conditional district, for which project-wide buffering and general landscaping is required, unless such individual buffer yard is specifically required in Chapter 3 of this ordinance.
4. The approving authority may require alternative buffers or landscaping, including locations other than those typically required, when a modification to the requirements of this section is warranted in order to meet the intent of the specified standards.
5. Buffer yards are intended to be constructed along the perimeter of the property or project; however, when there are irregular topographic conditions (such as the perimeter of the property is at a lower grade than the use being screened) the approving authority may require the relocation of the required buffer yard in order to better serve its purpose.
6. Natural vegetation, vegetation required for tree protection, riparian buffer areas, and other forms of existing vegetation may be utilized to satisfy these requirements when such natural and existing vegetation clearly satisfies the purpose of this section.
7. Off-site vegetation:
 - i. Existing plant material on adjacent property may be credited toward buffer requirements, provided that such material is in a permanently protected area such as a conservation easement or similarly preserved area.
 - ii. Plant material, existing or proposed, on an adjacent property may be credited toward buffer requirements through use of a landscape easement.
8. Buffer requirements *may* be reduced or waived by the approving authority in the following circumstances:
 - i. Such requirements would pose a safety hazard.
 - ii. The plantings or planting area would conflict with utilities, easements, or overhead power lines, or encroach upon city trees, as recommended by the city horticulturalist.
 - iii. Special use permits based solely upon building height or building ground floor square footage size, where such requirement would serve no useful purpose.
 - iv. When projects to which these requirements apply exhibit unifying architectural and landscape design characteristics that integrate the project into surrounding development, and when the landscape design of such a project clearly meets and exceeds the goal of these requirements such that these requirements become unnecessary.
9. Fences, walls and berms in buffers
 - a. Where walls and berms are built within any required project boundary buffer, they shall meet the following requirements.
 - (i) Walls and berms within a buffer may be used to permit a reduction in the buffer up to 25 percent of the required width.
 - (ii) Walls and berms shall not be permitted within surface water protection areas, flood plains, and floodways.
 - (iii) Walls and berms shall conform to other applicable requirements of this ordinance.
 - (iv) All walls, when located within a buffer, shall be planted on the face towards the adjacent property with at least one upright shrub for every six feet of wall length.
 - (v) Berms shall have side slopes of not less than three feet horizontal for each one foot vertical and a minimum crown width of two feet.
 - (vi) Prior to issuance of the first certificate of compliance, berms shall be planted to ensure coverage by live plant material within three to five years.

(vii) The applicant shall be required to demonstrate provision for access and maintenance of landscaping and the wall, berm, or fence structural landscape plan approval.

(viii) Chain link and concertina wire fences shall be buffered by a Type A buffer yard on all sides.



Images depicting appropriate screening requirements of dumpsters (below), and loading areas (above) in accordance with Section 8.6(D).

(Ord. No. 15-08, §§ 22, 23, 25, 12-5-08; Ord. No. 2018-22, § 1(Att. B), 9-17-18)

8.5. - Street tree plantings.

- A. Street trees shall be required along all public and private streets for the following categories of development:
 1. All non-residential and mixed use development.
 2. All projects approved as a conditional zoning district, special use permit, planned development, or group development.
 3. All residential subdivisions for which new streets are required.
 4. New residential subdivisions or projects for where more than two lots or dwelling units are proposed.
- B. Large canopy trees shall be installed at a minimum average distance of 40 feet on-center in a planting strip a minimum of six feet in width. Such trees shall be a minimum of 1½ inches in caliper at planting. Where overhead utilities exist prior to development, ornamental trees may be substituted.
- C. Street trees shall be placed at least eight feet from light poles and ten feet from electrical transformers in order to allow these utilities to be safely serviced (ornamental trees may be placed within five feet of such devices). A minimum of 300 square feet of pervious ground area per canopy tree shall be provided unless they are planted in irrigated tree wells.
- D. Street trees shall be deciduous hardwoods and shall meet the standards set forth in the American Standard for Nursery Stock by the American Association of Nurserymen as well all applicable standards of this ordinance.

(Ord. No. 15-08, § 24, 12-5-08)

8.6. - Parking lot screening.

- A. *Applicability:* Perimeter yard of all parking areas visible from the street. (Except one and two family homes)
- B. *Minimum planting:* Semi-opaque screen from the ground to at least a height of three feet for screening of car lights and glare. (Minimum width: Ten feet).
- C. *Performance standard:* This type functions as a semi-opaque screen around the parameter of a parking lot from the ground to at least three feet for the screening of car lights and glare. This shall only be required along the parking area that fronts the public right-of-way or any side of a parking lot that is not protected by a required buffer yard. The location of such yards shall be determined by the administrator upon review. Effective screening devices may include solid decorative brick walls, wood fences, earth berms, tight evergreen hedges which shall reach the required height within two years of planting, or any combination of the above. Plantings which can achieve a mature height exceeding 30 inches shall not be planted in the sight triangle on each side of drives or streets.
- D. *Screening of open storage, above ground utilities, and dumpsters:* Any open storage of merchandise, equipment, materials or goods other than those on display for retail sales, above ground utilities, and dumpsters areas shall been screened from view from any street right-of-way in accordance with the ratios (but not necessarily the minimum dimension) prescribed for type C buffer yards.

8.7. - Parking lot landscaping.

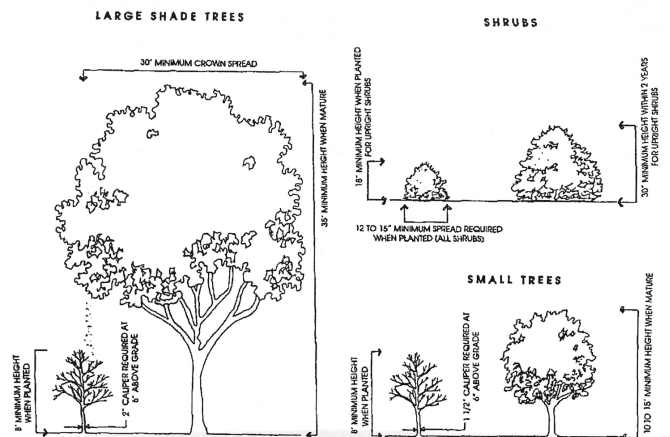
- A. *Applicability:* Interiors of all parking areas with more than 16 parking spaces.
- B. *[Stormwater management requirements:]* Applicants are encouraged to design buffer and other landscape areas in such a way as to satisfy stormwater management requirements as set forth in Chapter 6 of this ordinance.
- C. *Minimum plantings:*
 - 1. No parking space shall be more than 50 feet from the base of a canopy tree.
 - 2. One 15-to-18-inch minimum height evergreen or deciduous shrub shall be required per 250 square feet of required landscaped vehicular use area. This rate may be varied by the administrator considering alternate shrub heights, ground covers, or other factors.
- D. *Performance standard:* This type functions as a tree ceiling over a parking area providing shelter from sun and rain and minimizing the impact of runoff by providing "green" surface area on which to collect. Large maturing canopy trees shall be planted in a manner that provides shade for the entire parking area at maturity. All landscaped areas shall be separated from parking spaces. The use of differing species around the parking area is encouraged to promote diversity in the overall urban tree canopy. The use of existing vegetation to satisfy this requirement is encouraged. Supplemental plantings may be required in addition to native materials.

8.8. - General non-residential and mixed-use landscaping.

- A. In addition to the street tree and parking lot landscaping requirements of this chapter, non-residential and mixed use projects shall meet the following requirements.
- B. No less than five percent of the lot or parcel or project area to which this chapter applies shall be landscaped. This requirement shall be met in addition to any street tree requirements.
- C. Landscaping consisting of trees, shrubs, and other plantings of a variety of sizes, shapes, and arrangements shall be located throughout the property, among buildings, and between the front facade of all structures and streets.
- D. Landscaping along major corridors:
 - 1. A type A buffer yard shall be maintained along the entire length of the street frontage of any parcel of land fronting the following streets:
 - i. US Highway 64/US 276/NC 280 (Asheville Highway), north from the intersection of Lambo Creek (beginning at the top of the northern bank) and Asheville Highway, to the intersection of the city's Extra-Territorial Jurisdiction and NC 280.
 - ii. US Highway 64 (Rosman Highway), south from the intersection of Rosman Highway and Caldwell Street to the intersection of city's Extra-Territorial Jurisdiction and Rosman Highway.
 - 2. This requirement shall be in addition to any other requirement of this ordinance, including but not limited to street trees, infrastructure improvements, setbacks, and others. The required type A buffer yard shall not be located in the right-of-way and shall be unbroken except for ground signs, driveways and streets approved in accordance with this ordinance.
 - 3. This requirement shall apply to all properties irrespective of size or uses.
 - 4. Deviations from this requirement shall only be granted as a variance by the zoning board of adjustment in situations where the subject parcel would be made unusable by the strict implementation of this requirement. Deviations from other sections of this chapter shall first be considered prior to granting a variance from this subsection.

8.9. - General installation and maintenance standards.

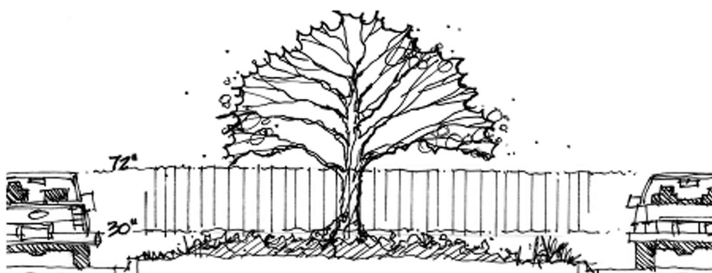
- A. Applicants are encouraged to design buffer and other landscape areas in such a way as to satisfy stormwater management requirements as set forth in Chapter 6 of this ordinance.
- B. Plant material classifications:
 - 1. *Large shade trees:* Large shade trees must be a locally adapted species with an expected mature height of 30 feet or greater and an expected mature crown spread of at least 30 feet or greater. Large shade trees, existing or planted, must be a minimum of eight feet high, and have a minimum caliper of two inches measured six inches above grade. Shade trees may be deciduous or evergreen. In the case of overhead power lines, relief from the large shade tree requirement may be given by the administrator.
 - 2. *Small trees:* All required small trees must be a minimum of eight feet high and have a minimum caliper of 1½ inches measured six inches above grade. When mature, small trees should be ten to 15 feet or higher. Small trees may be deciduous or evergreen.
 - 3. *Shrubs:* Upright shrubs must be a minimum of 18 inches tall when planted and must reach a minimum height of 30 inches within two years. All shrubs must have a minimum spread of 12 to 15 inches when planted. At least 50 percent of the required shrubs must be evergreen.
 - 4. *Groundcover:* All required groundcover type plants must be a minimum of 1½ to 2½-inch pots with a four inch minimum length. Groundcover must be planted with on-center spacing equivalent to the average mature spread for each particular species.



Plant Material

C. Standards for new plantings:

1. Landscaping should be of sufficient size so that mature appearance will be achieved within three to five years of installation.
2. Where new landscape materials are to be installed, the type of material used shall be complimentary to plant materials existing on the property and on adjoining properties. Use of native plant materials is encouraged.
3. The use of drought tolerant vegetation that is native to the area is encouraged to reduce dependency upon irrigation.
4. All portions of the landscaping area not planted with shrubs and trees or covered by a wall or other screening device shall be planted with ground cover and/or grass, or covered with natural mulch with a minimum depth of two inches.
5. All new plant material shall be of good quality, free from disease, installed in a sound condition. All trees shall be properly guyed and staked at the time of planting, and mulched (three—four inch layer) and meet the standards set forth in the American Standard for Nursery Stock by the American Association of Nurserymen. Contractor shall warrant all new plant material for one year from time of installation. The selection of plants, planting methods, minimum height, root ball and container size, number of branches, and width, shall conform to the American Standard for Nursery Stock published by the American Association of Nurserymen for that type of tree or shrub at the time of installation.
6. Groves of trees are encouraged. Adequate drainage and mulching shall be provided for planting medians and islands. Each canopy tree shall be provided with a minimum pervious ground area of 300 square feet for root growth (exception: Street Trees) and should be planted on slopes not to exceed 4:1 horizontal to vertical distance.
7. At installation, large maturing trees shall not be less than eight feet in height with a minimum two inch caliper. Small maturing trees shall be a minimum of 1 1/4-inch caliper and have a minimum height of six feet. Installation and construction practices shall be utilized which preserve and replace existing topsoil or amend the soil to reduce compaction. At installation, evergreen trees shall not be less than six feet in height with a minimum two inch caliper. Multi-stemmed trees shall have at least three stalks and eight feet in height.
8. Where large maturing trees are required and overhead utility lines exist, small maturing trees planted one per 20 linear feet shall be substituted with the approval of the administrator.
9. All large required shrubs at installation shall be at least three gallons in container size and three feet above ground level and shall reach the height required for performance within two to four years after installation. Small shrubs shall be at least two gallons in container size and two feet above ground level and shall reach the height required for performance within three to five years. Installation and construction practices shall be utilized which preserve existing topsoil or amend the soil to reduce compaction.
10. No trees or shrubs shall be planted within the sight distance triangle at an intersection, or driveway access point unless an unobstructed view between 30 inches and 72 inches in height is maintained.



Images depicting required visual clearance for landscape in the sight distance triangle.

11. Landscaped areas within parking lots shall be separated from parking spaces, driveways, and maneuvering areas by an 18 inch standard curb

designed to minimize damage by vehicles to plants located in the landscaped area. For an area to be considered as satisfying the landscaping provision of this ordinance, it must contain a minimum contiguous area of 300 square feet.

D. Preservation of existing vegetation during construction:

1. Protective barricades shall be placed around all trees designated to be saved, prior to the start of development activities or grading. The following is recommended:
 - a. Barricades may consist of 2" x 4" posts with 1" x 4" rails, orange safety fence, or a similar treatment and shall remain in place until development activities are complete.
 - b. The barricaded area shall remain free of all building materials, stockpiled soil or other construction debris.
 - c. Construction traffic, storage of vehicles and materials, and grading shall not take place within the protective areas of the existing trees.
 - d. Barricades shall be erected at a recommended minimum distance from the base of protected trees according to the following standards:
 - e. For trees ten inches or less in caliper: Place at a minimum distance of ten feet from the base of each protected tree, or outside the dripline, whichever is greater.
 - f. For trees greater than ten inches in caliper: Place at a minimum distance equal to ten feet from the base of a protected tree plus an additional one foot for each additional one inch in caliper greater than ten inches in caliper, or outside the dripline, whichever is greater.
2. Construction access to a site should occur where an existing or proposed entrance/exit is located.
3. Land disturbance within a tree dripline is discouraged except for driveway access points, sidewalks, curb and gutter.
4. Where grading within a tree dripline cannot be avoided, cut and fill shall be limited to ¼ to ½ of the area within the dripline, and tree roots must be pruned with clean cuts at the edge of the disturbed area. (No fill shall be placed within the dripline of a tree without venting to allow air and water to reach the roots.)
5. Storage of construction materials and any other construction activities that contribute to the compaction should be limited to areas of the site within the limits of construction.

E. Irrigation:

1. The use of irrigation is permitted in all required landscaping areas as required by this Chapter. The use of moisture metering devices and automatic timers is required. The use of xeriscape practices and drip irrigation is also encouraged, unless otherwise required.
 - a. The use of irrigation systems and lawn turf is generally discouraged but may be permitted if connected to a private well, other private water source, or public reclaimed water system.
 - b. If automatic irrigation systems are permitted, moisture sensor regulators, soil moisture regulators, or drip irrigation shall be used.
 - c. Irrigation systems may connect to the main water connection for the building unless otherwise restricted through other city ordinances or policies.

F. Installation time and permitted delays:

1. *Time limit:* All landscaping, mulching and seeding shall be completed in accordance with the approved site plan prior to issuance of a Certificate of Occupancy for the site.
2. *Requests for delay:* Requests for a delay in complying with this section due to poor weather or planting conditions will be considered following a written request directed to the administrator. Certificates of Occupancy will be issued with the approval of a request for planting delay, if deemed reasonable. Such request for a delay shall note the timeframe during which the planting shall be completed. A bond shall be posted in accordance with Subpart 3 below. Failure to comply will result in penalties provided for in this ordinance.
 - i. Exceptions may be granted due to circumstances beyond the developer's or property owner's control, such as incomplete construction or utility work to occur in a proposed landscaped area within 30 days after expected site completion, unusual environmental conditions such as drought, ice, over saturated soil (deep mud), or inappropriate planting, and other factors at the discretion of the administrator. Extensions shall only be provided when the developer or the property owner provides the city with a surety bond ensuring the installation of the remaining landscape materials. In such cases, the city may authorize Transylvania County to issue a Temporary Certificate of Occupancy for a period of 30 to 180 days, relative to the next planting season. Exceptions may be granted due to circumstances beyond the developer's or property owner's control, such as incomplete construction or utility work to occur in a proposed landscaped area within 30 days after expected site completion. Exceptions may be granted provided that the developer or property owner submits a letter from the utility company to the city stating the estimated installation date, and provides a cash bond to ensure installation of the required landscaping. In such cases, the City of Brevard may authorize Transylvania County to issue a Temporary Certificate of Occupancy for a period not to exceed 30 days.
 - ii. Exceptions may be granted provided that the developer or property owner submits a letter from the utility company to the city stating the estimated installation date, and provides a cash bond to ensure installation of the required landscaping. In such cases, the City of Brevard may authorize Transylvania County to issue a Temporary Certificate of Occupancy for a period not to exceed 30 days.
3. *Bonds:* Any bond posted as surety for exceptions bond shall be accompanied by documentation of the estimated cost of the remaining landscaping to be completed. This documentation may be a landscaping contractor's bid or contract, a nurseryman's bill, or a similar

document. The amount of the bond shall be one and one-quarter times the cost of the plant material yet to be installed, based on the highest estimate received. The administrator is authorized to release part of any security posted as the improvements are completed and approved by the City of Brevard. Such funds shall be released within ten days after planting has been completed and approved by the administrator. Once the time has matured on the Temporary Certificate of Occupancy the City of Brevard has the authority to cash such bond in and complete the work.

G. Maintenance:

1. *Maintenance responsibility:* The owners of the property shall be responsible for the preservation and maintenance of all vegetation and physical features required by this Section in a healthy growing condition, for replacing them when necessary, and for keeping the area free of refuse and debris. All plant materials should be allowed to reach their mature size and maintained at their mature size. All required landscaped areas shall be free of refuse and debris in accordance with the site or subdivision and shall be maintained so as to prevent debris from washing onto streets and sidewalks.
2. *Inspection of sites:* The administrator may inspect the site once a year after the issuance of a Permanent Certificate of Occupancy in order to ensure compliance with the approved site plan and to ensure that the landscape is properly maintained. The administrator may issue a notice of violation to comply with the provisions of this ordinance if warranted upon an inspection under the provisions of Section 8.11 of this chapter.

A Certificate of Occupancy shall not be issued unless the landscaping required under this chapter is installed in accordance with these standards and in accordance with the approved site plan or subdivision plat.

3. *Replacement of disturbed and damaged vegetation:*
 - i. The disturbance of any landscaped area or vegetation required by this chapter shall constitute a violation of the site or subdivision plan. All disturbed landscaped areas and vegetation shall be replanted to meet the standards of this section as well as the approved site plan.
 - ii. Any dead, unhealthy, missing vegetation, or vegetation disfigured by severe pruning, shall be replaced with vegetation which conforms to the standards of this section. In the event that any required vegetation is severely damaged due to an unusual weather occurrence or natural catastrophe, the owner shall have one growing season to replace or replant after reconstruction is complete.
 - iii. Where the vegetation that has been disturbed or damaged on the site at the time the development was approved, all replacement vegetation shall meet the standards set forth in this Chapter taking into account any unique site conditions and significant vegetation remaining within the landscaped area. Trees or vegetation that dies within one year of construction completion shall be removed and replaced with new vegetation of equal or greater size.
 - iv. Existing vegetation required to be preserved that has been damaged or destroyed during the course of development activity may be subject to civil penalty and replaced in accordance with the requirements of Section 8.11 and Chapter 18 of this ordinance.
4. *Steps for replacement of vegetation:* The disturbance of any landscaped area or vegetation required by this chapter shall constitute a violation of the site or subdivision plan. All disturbed landscaped areas and vegetation shall be replanted to meet the standards of this section as well as the approved site plan. Replacement consists of one or a combination of any of the following measures:
 - i. A replanting plan denoting the proposed installation shall be submitted to the City of Brevard for approval. The administrator may elect to present the replanting plan to the planning board for final approval.
 - ii. Replace damaged or destroyed vegetation in both buffer yard and or interior landscaped areas with an equal amount of new vegetation according to the size of vegetation removed. Any tree with a caliper of at least eight inches which is damaged or removed shall be replaced with one or more trees which have a caliper of at least two and one half inches and a cumulative caliper equal to or greater than the original tree. Trees damaged or destroyed less than eight inches in diameter shall be replaced to satisfy the performance criteria of this section. Understory plantings may also be required to restore the buffer performance criteria for the disturbed area. A re-vegetation plan denoting the proposed installation shall be submitted to the City of Brevard for approval. The administrator may elect to present the re-vegetation plan to the tree advisory board or board with approving authority for final approval. This requirement may be modified by the administrator based upon site conditions.
 - iii. For all other cases where existing vegetation is damaged or removed, the type and amount of replacement vegetation required shall be of the type and amount that is necessary to provide the type of landscaping required under this section or interior preservation area identified on the landscape plan.

8.10. - Penalties.

- A. Any act constituting a violation of this chapter resulting in the destruction or removal of vegetation shall subject the landowner to a civil penalty of actual cost of replacement based upon a qualified estimate. In addition, trees that are destroyed shall be replaced in accordance with an approved re-vegetation plan.
- B. It shall be the duty of the property owner to demonstrate that the development activities are in compliance with the permit issued. Unless otherwise specified in this chapter, the City of Brevard shall enforce the provisions of this chapter in accordance with the procedures, penalties, and remedies described in Chapter 18.

C. Stop work orders shall also apply for damaged and/or destroyed vegetation, interior significant growth, landscape, buffer yards, or tree save areas.

8.11. - Emergencies.

In the case of emergencies such as windstorms, ice storms, fire, or other disasters, the requirements of this tree protection and landscaping chapter may be waived by the city during the emergency period so that the requirements of this ordinance will in no way hamper private or public work to restore order in the city. This shall not be interpreted to be a general waiver of the intent of this ordinance.

8.12. - Modifications to standards.

Where necessary to accommodate creativity in site design, or where topographic or physical site conditions are not feasible, the administrator may modify these requirements, provided that the type and amount of landscaping or other features are equivalent in effectiveness.

5.7. - Tree protection.

5.7.1 *General Provisions.*

- (a) *Short title.* This section shall be known and may be cited as the Chapel Hill Tree Protection Ordinance.
- (b) *Purpose.* The intent of this section is to preserve, maintain, and increase tree canopy to protect the public health, safety, and welfare and enhance the quality of life in Chapel Hill.
- (c) *Applicability and permits.* The provisions of this article apply to all land in the town's zoning jurisdiction. For tree canopy coverage standards, see section 5.7.2.
- (1) *Activities that require a zoning compliance permit:*
- All work impacting trees on lots designated for non-residential, multi-family residential, and mixed use, and
 - All work impacting trees on lots designated for single- and two-family residential use where total land disturbance exceeds five thousand (5,000) square feet.
- (2) *Activities that require review and approval by the town's urban forester:*
- Private work on public land, and
 - The practice of forestry as defined by North Carolina General Statute 105-277.2-.7 which is permitted only after an applicant submits a plan for harvesting and replanting consistent with the most current Forest Practices Guidelines Related to Water Quality published by the N.C. Department of Natural Resources and Community Development, or its successor agency.
- (d) *Exceptions not subject to the provisions of this article are:*
- Land in the town's Town Center and Office/Institutional-4 zoning districts, provided, however, that subsection 5.7.4 of this article shall apply;
 - Routine maintenance of existing trees outside the public right-of-way, including pruning done in a manner consistent with established arboricultural standards;
 - The removal of dead, severely damaged or diseased trees that have been diagnosed and, if applicable, determined by a certified arborist to be beyond treatment or recovery, the burden of proof being placed on the remover;
 - Land surveying provided no trees greater than six (6) inches dbh are damaged or removed; and
 - Eradication of exotic, non-native, and invasive or otherwise undesirable species listed in subsection 5.7.6(d).
- (e) *Emergency waiver.* The provisions of this section are waived if compliance would impede the rescue of life or property from immediate danger or the repair of utilities in the event of emergencies such as wind storms, ice storms, or other disasters. Any emergency work shall follow as closely as possible the standards outlined in the town's landscape standards and specifications.

5.7.2 *Tree Canopy Coverage Standards.*

- (a) *Minimum canopy coverage standards.* The town desires to maintain the maximum practical tree canopy cover across all land uses within the town's jurisdiction.

Tree canopy coverage standards are required for applications proposing tree removal that require council approval, including special use permits, and major special use permit modifications, and conditional zoning district rezonings.

For residential Neighborhood Conservation Districts, the district may request from the town council that tree protection regulations apply as per [section 5.7](#) using a canopy coverage standard consistent with the existing neighborhood character.

When tree canopy is subject to the provisions of this section, the following minimum tree canopy coverage percentages are required within the zoning lot boundaries exclusive of public right-of-way:

Table 1: Minimum Tree Canopy Coverage
Standards

Land Use	Minimum Canopy Coverage
Multi-Family Residential	30%

Commercial (Use Group C and: Business, Office; Clinic; Funeral Home, and Hotel/Motel)	30%
Institutional (Use Group B)	40%
Mixed Use, Other	40%
All Uses in Innovative, Light Industrial Conditional Zoning District (LI-CZD)	20%

(b) *Modifications to canopy coverage standards.* The town council may allow a modification to these regulations when public purposes are met and canopy removal supports other goals of the town, including but not limited to:

- Goals of the Comprehensive Plan
- LEED or "green" building and low impact development, including solar access and "daylighting"
- Affordable housing
- Stormwater management
- Community character of adjoining property, or established managed landscapes, or established streetscapes

(c) *Implementation of standards.* The highest priority for all projects shall be the maintenance and replacement of canopy on-site. Mitigation payments shall be used when providing canopy on-site is not practicable.

Compliance with canopy protection and replacement standards of subsection 5.7.2 is demonstrated by the following:

- (1) Approval and implementation of a landscape protection plan prepared in accordance with subsection 5.7.3(b).
- (2) Approval and implementation of a planting plan prepared in accordance with landscape architectural standards and the town's design manual.
- (3) Maintenance of protected and planted trees.
- (4) Tree mitigation payments as per subsection 5.7.2(d)3.

Compliance with the canopy coverage standards in Table 1 shall be accomplished by the following methods:

- (1) *Protection of existing tree canopy.* The extent of existing tree canopy coverage retained at the time of permit application may be documented by survey or by using current aerial photographs available on the town's web page or similar resource.
 - i. Required cleared active recreation areas, water bodies, access easements, public and private right-of-way, stormwater and utility easements shall not be included in the total land area used in the canopy coverage calculation.
 - ii. Trees planted in a town right-of-way as part of an approved street tree planting plan may count toward total tree canopy coverage.
- (2) *Replacement of canopy.* If the existing protected tree canopy is less than the minimum standard as shown in Table 1, the required minimum canopy shall be established. The tree canopy deficit is determined by subtracting the area of retained tree canopy as shown on the landscape protection plan from the minimum area of canopy coverage required in Table 1 in subsection 5.7.2.
 - i. One (1) replacement tree per five hundred (500) square feet of tree canopy coverage deficit shall be planted in accordance with an approved planting plan.
 - ii. All canopy trees planted in accordance with the town's design manual to meet the town's buffer and parking lot shading standards can all be counted when calculating replacement canopy trees provided.
 - iii. Supplemental canopy trees planted to complete the canopy coverage requirements shall be planted no less than twenty (20) feet from any other proposed or existing canopy tree.
 - iv. Replacement trees that are planted in an adjacent right-of-way may count toward total tree canopy.
 - v. *Installation and maintenance.*

Plantings. All required plantings shown on an approved planting plan shall be prepared, installed and maintained according to the town's landscaping standards and specifications and must be planted or an accepted performance guarantee placed with the town in order to satisfy compliance with the requirements of this section.

- (a) Replacement tree caliper shall be two and one-half (2.5) inches at installation.
- (b) Upon approval by the town manager, a replacement tree with a caliper of four (4) inches or greater may count for two (2) replacement trees.

Maintenance. The property owner is responsible for assuring that the lot in its entirety will continue to meet minimum tree canopy coverage after issuance of a certificate of occupancy.

Trees that are damaged or decline in health during construction shall be assessed for viability and safety.

- (a) Viable trees shall be treated to promote their continued health and safety.
 - (b) If the town manager determines a protected tree in a required buffer or other required planting is dead or dying at the time of the issuance of a certificate of occupancy, replacement of the tree may be required.
- (3) *Mitigation.* If the applicant chooses not to plant replacement canopy trees, payments to the Town of Chapel Hill Tree Mitigation Fund shall be calculated according to the current development fee schedule approved by the town council.
- (4) *Tree mitigation fund.* A primary objective of the tree mitigation fund is to use payments for the installation and maintenance of trees on public property. The town shall also use all such payments for the cost associated with implementation of this ordinance, for town sponsored tree management programs, and for the study, inventory, maintenance or treatment of public trees requiring the services of a certified arborist or other qualified consultant. Mitigation funds will not be used in lieu of general fund support for the existing urban forest management program.

5.7.3 Landscape Protection Plan.

(a) *Activities requiring a landscape protection plan.*

- (1) Zoning compliance permit applications, required per subsection 5.7.1(c), shall include a landscape protection plan unless otherwise exempted.
- (2) Work limited to the removal of trees may require a landscape protection plan and shall conform to the required tree replacement and mitigation standards as described in subsection 5.7.2.

(b) *Landscape protection plan standards.*

- (1) The town manager shall prescribe the contents of landscape protection plans and the information that may be reasonably required to determine compliance with this article, with sufficient copies for necessary referrals and records. Minimum requirements for the landscape protection plan include the following information:
 - i. The size, location, and type of all existing rare and specimen trees as defined in subsection 5.7.6 within fifty (50) feet of proposed land disturbance.
 - ii. All significant trees stands, as defined in subsection 5.7.5.
 - iii. Areas where trees, vegetation, and soils are to be protected and preserved and areas where trees, vegetation, and soils are to be removed or modified. This includes indicating proposed grading, utilities, and improvements as well as access, staging, and storage areas. The plan shall graphically identify each tree to be saved or removed.
 - iv. The critical root zones (CRZ) of all existing rare and specimen trees within or overlapping the disturbed area, and the measures of tree, vegetation, and soil protection and management that will be used before, during, and after all construction activities to promote the survival or retention of such elements. The CRZ is defined as a circular area surrounding a tree, of which the center is the center of the tree trunk and which has a radius of at least one (1) foot for every inch of trunk diameter (dbh) taken at four and one-half (4.5) feet above grade.
 CRZ radius = diameter breast height (inches) × one (1) foot
 - v. The percentage of the property with tree canopy coverage to be protected, if subject to minimum tree canopy standards. The town manager may require that a certified arborist and/or a licensed landscape architect confirm the accuracy of this information.
 - vi. The location of tree protection fencing along the limits of disturbance with a detail of the tree protection fence and a note indicating that a pre-construction meeting with the town's urban forester will be scheduled prior to the start of work.

(c) *Implementation of landscape protection plan.*

- (1) Protective fencing. Fences, or other equally effective measures as determined by the town manager, shall be used to protect areas identified on an approved landscape protection plan during demolition and construction activity. Protective fencing shall be installed according to town standards. Field adjustments may be allowed subject to prior approval by the town manager. All land disturbing activity, storage of equipment, building material, soil, and other debris shall be kept outside the protected areas.
- (2) Landscaping activities taking place after the removal of protective fencing shall be accomplished with light machinery or hand labor and in accordance with the town's landscaping standards and specifications. This requirement should be noted on the plans.
- (3) Pre-construction conference. Prior to the commencement of any activities requiring a zoning compliance permit, a pre-construction conference with the town's urban forester or landscape architect shall take place to review procedures for protection and management of all protected landscape elements identified on the landscape protection plan.
- (4) On-site supervision. For all development other than that related to single-family and two-family dwellings on individual zoning lots, the following on-site supervision is required:
 - i. The applicant shall designate as landscape protection supervisors one or more persons who have completed instruction in landscape protection procedures with the town.
 - ii. It shall be the duty of the landscape protection supervisor to ensure the protection of new or existing landscape elements, as defined in the landscape protection plan. The approved landscape protection supervisor shall supervise all site work to assure that development activity conforms to provisions of the approved landscape protection plan. At least one (1) identified landscape protection supervisor shall be present on the development site at all times when activity that could damage or disturb soil and adjacent landscape elements occurs such as:

- Clearing and grubbing;
- Any excavation, grading, trenching or moving of soil;
- Removal, installation, or maintenance of all landscape elements and landscape protection devices; or
- Delivery, transporting, and placement of construction materials and equipment on site.

(d) *Public hazard.*

- (1) A certificate of occupancy may be denied for any development if the town manager determines that a public hazard as defined in this article exists on said lot, until that public hazard is abated.
- (2) A street dedicated to the town may not be accepted for maintenance at the end of the warranty period until any public hazard related to a tree in the right-of-way is abated.

(e) *Enforcement.*

- (1) The town manager shall have development sites inspected frequently to assure that work is conforming to the approved landscape protection plan and the applicable sections of this article.
- (2) Absence of a landscape protection supervisor(s) from the site at times when development activity is taking place that has the potential to adversely affect trees to be preserved may result in the issuance of a stop-work order until a landscape protection supervisor is present.

5.7.4. Trees in Public Rights-of-Way.(a) *Tree planting.*

- (1) Trees may be planted on any public street right-of-way provided they are consistent with plans for public landscaping that have been approved and permitted by the State of North Carolina or the Town of Chapel Hill, they will not hinder the repair or construction of public utilities and a permit has been issued by the town manager when required.
- (2) Trees planted on any public street right-of-way may be of a species and in a location desired by the abutting property owner except that no trees or shrubs shall be planted close enough to any public street intersection to interfere with the sight distance at the intersection or with streets, sidewalks, signs, street lights, or above- and below-ground utility lines as specified in the town's landscaping standards and specifications.
- (3) All planting of trees and shrubs on public property shall be subject to general considerations of public health, safety and convenience, and the material and aesthetic value accruing to the whole community. Planting shall be restricted to the species known to be suited to the local climate and environment and shall be intended to preserve and enhance the beauty and variety of the public landscape as recommended in the town's landscaping standards and specifications.

- (b) *Prohibited trees.* Notwithstanding subsection 5.7.4.a, it shall be unlawful to plant in any public right-of-way any of the following:
- (1) Any trees which by the nature of their fruit, root system, brittleness of wood, or susceptibility to disease are deemed undesirable as specified in the town's landscaping standards and specifications;
 - (2) Any invasive exotic plant materials as identified in the design manual and in subsection 5.7.6(d).
- (c) *Public hazards.*
- (1) It shall be the duty of the owner of the property wherein or whereupon a public hazard exists, to abate the hazard by removing or trimming the growth.
 - (2) Where the roots of a public tree constitute a hazard to private property, or where trees on private property may damage sidewalks, curbs, or public streets or whose roots may enter public sewers or water mains shall be considered a public hazard and shall be pruned or removed by the town's public works department, as deemed necessary by the town manager.
 - (3) If the owner of property, after being notified of the existence of a public hazard on their property, fails to abate the hazard within thirty (30) days, the town manager shall have the hazard abated and assess the exact cost to the owner as provided by law in the case of special assessments or liens.
 - (4) Where the growth and limbs of public trees constitute a hazard to private property, the town, upon notice, shall correct the condition or permit affected property owners to correct the condition using established arboricultural standards.
 - (5) Where the growth of trees interferes with public utilities, such conditions shall be corrected by proper pruning, removal, or replacement of the tree causing the interference. Corrective measures shall be carried out in accordance with the provisions of this article and the town's landscaping standards and specifications.
- (d) *Removal of trees.*
- (1) Private parties shall not remove trees from public property or public street rights-of-way without approval by the town's urban forester.
 - (2) The town may remove dead or diseased trees or trees that interfere with the proper maintenance or improvement of a public street right-of-way, easement owned or maintained by the town or any public street or highway. A tree on the right-of-way line that is half or more than halfway on the right-of-way at its base will be considered to be on the right-of-way and, therefore, a public tree.
 - (3) The town retains the right to remove any tree except that no rare tree shall be removed from land or easements owned by the town unless the town manager determines there is no reasonable way the tree can be saved.

5.7.5 Significant Tree Stands.

- (a) *Significant tree stand defined.* For purposes of this section, a "Significant Tree Stand" means an area of contiguous mature woods greater than five thousand (5,000) square feet in size where over half of the canopy is provided by hardwoods with a diameter breast height (dbh) greater than twenty-four (24) inches.
- (b) *Applicability.* The provisions of this section apply to any application requiring a landscape protection plan.
- (c) *Submittal requirements.* A landscape protection plan shall delineate the boundaries of all significant tree stands and describe their dominant plant species. All plans shall also show the proposed clearing limit lines and calculate the percentage of significant tree stand areas that are proposed to be cleared.
- (d) *Preservation of significant tree stands.* The significant tree stand delineation shall be used during the design review process to determine the most suitable and practical areas for woodland conservation. To the extent practicable, significant tree stands shall be preserved and incorporated into site design. Areas designated for preservation on approved plans shall be protected during construction.

5.7.6 Rare and Specimen Trees.

- (a) *Rare and specimen tree defined.* With the exception of invasive exotic species listed in subsection 5.7.6(d),
- (1) A rare tree is:
 - i. Any healthy living pine tree that has a trunk diameter of thirty-six (36) inches or more, or any other species that:
 - ii. Has a trunk diameter at breast height (dbh) of twenty-four (24) inches or more; or
 - iii. Has a trunk dbh of twelve (12) inches or more in the case of North Carolina native species from the list of genera in this section; or
 - iv. Is listed as a State or National Champion by the North Carolina Forest Service or the American Forestry Association; or

- v. Provides unique habitat for any endangered or threatened wildlife species protected by federal law; or
- vi. Has been cited by the town council as being historically significant; or
- vii. Represents an uncommon species, such as Long Leaf Pine, Live Oak, or Sequoia Redwood, that the town manager considers to be desirable and not to pose a threat to the local ecological balance.

(2) A specimen tree is:

- i. Any healthy living pine tree that has a trunk diameter of eighteen (18) inches or more, or any other species that:
- ii. Has a trunk diameter at breast height (dbh) of twelve (12) inches or more; or
- iii. A trunk dbh of six (6) inches or more in the case of the North Carolina native species from a following list of genera:

(3) North Carolina Native Genera:

Aesculus (Buckeye)

Amelanchier (Serviceberry)

Asimina (Pawpaw)

Carpinus (Hornbeam)

Cercis (Redbud)

Chionanthus (Fringetree)

Cornus (Dogwood)

Crataegus (Hawthorn)

Diospyros (Persimmon)

Fagus (Beech)

Halesia (Silverbell)

Hamamelis (Witch-hazel)

Ilex (Holly)

Juniperus (Cedar)

Ostrya (Hophornbeam)

Oxydendrum (Sourwood)

Sassafras (Sassafras)

Tsuga (Hemlock)

(b) *Rare and specimen trees on developing land.*

- (1) Rare and specimen trees shall be shown on all landscape protection plans if such trees are within fifty (50) feet of areas of proposed soil disturbance or construction activity. These trees shall be identified and located by survey on the approved landscape protection plan if such trees are located on the development site or adjacent public property. The town urban forester may visit the site to determine the accuracy of identification.
- (2) Proposed development should maximize the preservation of rare and specimen trees. Flexible approaches such as adjustments to lot layout, placement of buildings and paved surfaces and location of utilities should be pursued in order to save rare and specimen trees.
- (3) Notwithstanding any provision of the Land Use Management Ordinance to the contrary, saving of a rare or specimen tree shall constitute sufficient evidence that subsections 4.12.2(a)–(e) have been met in any variance application.
- (4) No rare tree shall be removed unless the town manager determines there is no reasonable way the property can be otherwise developed, improved or properly maintained, and the tree saved.

(c) *Voluntary protection of rare trees on private land.*

- (1) Rare trees shall be protected if voluntarily registered by the property owner.
- (2) Registration of such trees shall survive transfer of ownership if language is contained in the document transferring ownership and shall extend the coverage hereof and render the owner of the lot subject to the following privileges:
 - i. The owner shall be entitled to consultation with the town urban forester concerning proper care of the tree at no charge.
 - ii. If a permitted auxiliary structure or addition to a house is being planned, notwithstanding any provision of the Land Use Management Ordinance to the contrary, saving of a rare or specimen tree shall constitute sufficient evidence that subsection 4.12.2 of the Land Use Management Ordinance has been met in any variance application.
 - iii. Subject to approval by the town manager, the voluntary listing and protection of rare trees on a site may be considered in lieu of all or a portion of the tree canopy mitigation requirements included in this section of the ordinance that may otherwise be required on that site.
- (3) Once so registered, trees may be removed from the register at a later date at the request of the property owner.
- (d) *Invasive exotic species.* The following invasive exotic species are not required to be shown on proposed landscape protection plans, regardless of size. These species cannot be planted in a public right-of-way or to satisfy any town landscaping requirements and are recommended for removal and replacement, should they be identified on developing property:

Acer platanoides (Norway Maple)

Alianthus altissima (Tree of Heaven)

Albizia julibrissin (Mimosa)

Broussonetia papyrifera (Paper Mulberry)

Melia azadarach (Chinaberry)

Morus alba (White Mulberry)

Paulownia tomentosa (Princess Tree)

Populus alba (White Poplar)

Pyrus calleryana (Callery/Bradford Pear)

Quercus accutissima (Sawtooth Oak)

Ulmus pumilia (Siberian Elm)

5.7.7 Administrative Mechanisms.

- (a) *Fees.* Reasonable fees sufficient to cover the costs of administration, inspection, appraisal, and publication of notice shall be charged to applicants for zoning compliance permits established by this article. The amount of such fees shall be fixed by the town council.
- (b) *Penalties.*
 - (1) In the event that other mitigation measures contained herein are determined by the town manager to be insufficient, any act constituting a violation of this article resulting in the loss or destruction of trees may subject the landowner to a civil penalty up to one and one-half (1.5) times the monetary value of the trees removed or destroyed up to a maximum of twenty thousand dollars (\$20,000.00). For purposes of such determination, the town manager shall apply the most current formula of the council of tree and landscape appraisers, or a similar method in common use and accepted by courts of law.
 - (2) Development activity which has taken place in compliance with conditions of the zoning compliance permit issued for that activity shall establish a presumption that the property owner has met the requirements of this section. It shall be the duty of the permit holder to demonstrate that the activity was in compliance with the issued permit.
 - (3) Unless otherwise specified in this article, the Town of Chapel Hill shall enforce the provisions of this article in accordance with procedures, penalties, and remedies described in article 4 of the Land Use Management Ordinance.
- (c) *Appeals.* Unless otherwise specified in this article, interpretations, appeals, and variances of or from provisions of this article shall be pursuant to the provisions of article 4 of this chapter.

(Ord. No. 2007-06-11/O-7, §§ 1, 2; Ord. No. 2010-12-06/O-9, § 1; Ord. No. 2017-04-05/O-7, § 15)

Chapter 21 - TREES

Footnotes:

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Editor's note— Ord. No. 4521, § 1, adopted September 27, 2010, amended chapter 21 in its entirety to read as herein set out. Formerly, chapter 21, articles I—V pertained to similar subject matter, and derived from the Code of 1985, §§ 21-1—21-20, art. III, and Ord. No. 2447, § 11, adopted November 24, 2003. Section 2 of Ord. No. 4521 states the following: "Section 2. These amendments shall apply to all development and additions to existing sites within the corporate limits of this city and its extraterritorial jurisdiction, unless one of the following exemptions applies as of the effective date: (1) Residential and nonresidential development and additions to existing sites submitted and accepted for review; (2) Zoning use application submitted and accepted for review for uses that do not require a building permit; (3) Valid building permit issued pursuant to G.S. 153A-344 or G.S. 160A-385, so long as the permit remains valid, unexpired, and unrevoked; (4) Common law vested right established (e.g., the substantial expenditure of resources (time, labor, money) based on a good faith reliance upon having received a valid governmental approval to proceed with a project); and/or (5) A conditional zoning district (including those districts which previously were described variously as conditional district, conditional use district, parallel conditional district and parallel conditional use district) approved, provided formal plan submission has been made and accepted for review prior to the date that the vested rights for the conditional zoning district expire pursuant to G.S. 160A-385.1 and Sec. 1.110 of the Charlotte zoning ordinance.

Charter reference— Trees, § 6.221.

Cross reference— Buildings and building regulations, ch. 5; streets, sidewalks and other public places, ch. 19; subdivisions, ch. 20.

State Law reference— Cutting, injuring or removing timber, G.S. 14-135.

ARTICLE I. - IN GENERAL

Sec. 21-1. - Short title.

This chapter will be known and may be cited as the "Charlotte Tree Ordinance."

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-2. - Definitions.

Words and phrases used in this chapter that are not specifically defined in this section shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application. The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Amenitized tree area means an area that serves to meet the tree save requirement for urban sites and includes planted trees and amenities, such as irrigation, landscaping, grass, seating, pathways and lighting or other items, as approved by the city.

Caliper means the diameter measurement of the trunk taken six inches above ground level for trees up to and including four-inch caliper size. Measurement shall be taken 12 inches above the ground level for larger trees.

City means the city engineer, the city arborist or the senior urban forestry specialist, or their designated agent.

Commission means the city tree advisory commission.

dbh (diameter at breast height) means the diameter of a tree four and one-half feet above the average ground level.

Corridors are identified on the centers and corridors map as part of the transportation action plan (adopted in 2006), or any adopted updates to this map.

Designated mixed-use centers are identified on the centers and corridors map as part of the transportation action plan (adopted in 2006), or any adopted updates to this map.

Drip line means a vertical line running through the outermost portions of the tree crown extending to the ground.

Existing tree canopy means tree canopy that has existed for at least two years prior to development as evidenced by city or county aerial photographs, or a tree survey of trees one-inch caliper and larger.

Heritage tree means any tree that is listed in the North Carolina Big Trees List, the American Forest Association's Champion Tree list or any tree that would measure 80 percent of the points of a tree on the North Carolina Big Trees List.

Homeowner means an owner of an existing single-family or duplex residence.

Impervious cover means buildings, structures and other paved, compacted gravel or compacted areas which by their dense nature do not allow the passage of sufficient oxygen and moisture to support and sustain healthy root growth.

Internal planting area means a planting area located on private property outside the public right-of-way.

Invasive plant species means plant species that spread rapidly with little or no assistance. For the purposes of this chapter the following plant species are considered invasive: Bushkiller-Cayratia japonica, Chinese wisteria-Wisteria sinensis, English ivy- Hedera helix Japanese wisteria-Wisteria floribunda, Japanese honeysuckle- Lonicera japonica, Kudzu-Pueraria montana.

Land conservation group means a nonprofit land trust or similar organization approved by the city that permanently protects land, water, trees and wildlife habitat to enhance quality of life in Charlotte and Mecklenburg County.

Off-site mitigation means requirement of the developer and the property owner to convey at no cost to the city an equal amount of land in Mecklenburg County with a mature tree canopy to Mecklenburg County or to a land conservation group pursuant to the tree ordinance guidelines. The land shall be conveyed subject to either a permanent conservation easement or deed restrictions for the purpose of preserving tree canopy. The conveyance and its terms must be:

- (1) Approved by the city;
- (2) Be acceptable to either Mecklenburg County or a land conservation group; and
- (3) Comply with the tree ordinance guidelines.

Paved area means any ground surface covered with concrete, asphalt, stone, compacted gravel, brick, or other paving material.

Payment in lieu means contribution by the developer and the property owner to a city administered tree preservation fund a dollar amount equal to a percentage of the tax value of the land being developed at the time of the plan approval in accordance with section 21-94 and the tree ordinance guidelines. The tax value shall not exceed 90 percent of the average tax value of land in the city limits of and the ETJ, excluding the land within the boundaries of I-277 and in accordance with the tree ordinance guidelines.

Pedestrian scale lighting means lighting that is specifically intended to illuminate the sidewalk, as opposed to vehicular travel ways, and shall not exceed 15 feet in height.

Perimeter planting strip means a planting strip that abuts a public street or transportation right-of-way.

Person means a public or private individual, corporation, company, firm, association, trust, estate, commission, board, public or private institution, utility cooperative, or other legal entity.

Planting strip and *planting area* means ground surface free of impervious cover and/or paved material which is reserved for landscaping purposes.

Renovation means any construction activity to an existing structure which changes its square footage, changes its footprint, or modifies the exterior wall material excluding cosmetic maintenance and repairs.

Root protection zone means, generally, 18 inches to 24 inches deep and a distance from the trunk of a tree equal to one-half its height or its drip line, whichever is greater.

Single-family development shall refer to any single-family detached dwelling or duplex dwelling submitted for review subject to the subdivision ordinance.

Specimen tree means a tree or group of trees considered to be an important community asset due to its unique or noteworthy characteristics or values. A tree may be considered a specimen tree based on its size, age, rarity or special historical or ecological significance as determined by the city. Examples include large hardwoods (e.g., oaks, poplars, maples, etc.) and softwoods (e.g., pine species) in good or better condition with a dbh of 24 inches or greater, and smaller understory trees (e.g., dogwoods, redbuds, sourwoods, persimmons, etc.) in good or better condition with a dbh of ten inches or greater.

Streetscape plan means a plan that specifies planting strips, tree species, sidewalk locations, building setbacks and other design aspects for streets within the city. Such plans are effective following approval by the city council.

Suburban commercial zones mean all zoning districts other than single-family development and urban zones as defined in this section.

Topping means any pruning practices that result in more than one-third of the foliage and limbs being removed. This includes pruning that leads to the disfigurement of the normal shape of the tree.

Transit station area means high density area within approximately one-half mile of an existing or planned rapid transit station as designated by the city planning department.

Tree, large maturing means any tree the height of which is 35 feet or greater at maturity.

Tree, large maturing shade means any tree the height of which is 35 feet or greater at maturity and has a limb spread of 30 feet or more at maturity.

Tree, small maturing means any tree the height of which is less than 35 feet at maturity.

Tree evaluation formula means a formula for determining the value of trees and shrubs as published by the International Society of Arboriculture.

Tree ordinance guidelines means instructions and specifications of tree planting and tree protection as published by the city and subject to amendment from time to time by the city.

Tree protection zone mean a distance equal to the designated zoning district setback or 40 feet from the front property line, whichever is less, or from the side lot line on a corner lot. For urban zones, the tree protection zone shall be the same as the planting strip required for the associated zoning district or as designated in a streetscape plan. This definition does not apply to single-family development.

Tree save area means an area measured in square feet containing existing healthy tree canopy in a single-family subdivision or an area containing existing or mitigated off site healthy tree canopy in a commercial development. The area may include up to five feet beyond the drip line of the tree.

Urban retail site means any building site for a building that includes ground-floor nonresidential use.

Urban zones means property zoned as any of the following zoning districts: UMUD (uptown mixed use district), MUDD (mixed use development district), TOD (transit oriented development), UR (urban residential), and NS (neighborhood services), as well as any zoning district with a PED (pedestrian overlay) or TS (transit supportive) overlay. Urban zones do not include single-family development, even if developed under an urban zoning district.

Wedges are those areas shown on the centers and corridors map as part of the transportation action plan (adopted in 2006), or any adopted updates to this map.

(Ord. No. 4521, § 1, 9-27-2010; Ord. No. 8093, § 1, 8-22-2016; Ord. No. 9671, § 1.A.1, 10-21-2019)

Cross reference— Definitions generally, § 1-2.

Sec. 21-3. - Purpose and intent.

- (a) It is the purpose of this chapter to preserve, protect and promote the health, safety and general welfare of the public by providing for the regulation of the planting, maintenance and removal of trees located on roadways, parks and public areas owned or controlled by the city and on new developments and alterations to previous developments on private property.
- (b) It is the intent of this chapter to:
 - (1) Protect, facilitate and enhance the aesthetic qualities of the community to ensure that tree removal does not reduce property values.
 - (2) Emphasize the importance of trees and vegetation as both visual and physical buffers.
 - (3) Promote clean air quality by reducing air pollution and carbon dioxide levels in the atmosphere, returning pure oxygen to the atmosphere and increasing dust filtration.
 - (4) Reduce the harmful effects of wind and air turbulence, heat and noise, and the glare of motor vehicle lights.
 - (5) Minimize increases in temperatures on lands with natural and planted tree cover.
 - (6) Maintain moisture levels in the air of lands with natural tree cover.
 - (7) Preserve underground water reservoirs and permit the return of precipitation to the groundwater strata.
 - (8) Prevent soil erosion.
 - (9) Provide shade.
 - (10) Minimize the cost of construction and maintenance of drainage systems necessitated by the increased flow and diversion of surface waters by facilitating a natural drainage system and amelioration of storm water drainage problems.
 - (11) Conserve natural resources, including adequate air and water.
 - (12) Require the preservation and planting of trees on site to maintain and enlarge the tree canopy cover across the city.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-4. - Applicability and exemptions.

This chapter shall apply to all developers and/or owners of real property involved with the erection, repair, alteration or removal of any building or structure as well as the grading in anticipation of such development. Compliance with this chapter will be required in the following circumstances:

- (1) New development.
- (2) In the case of the following cumulative (since January 2011) additions or changes:
 - a. Additions to existing sites that are equal to or greater than five percent of the site's existing building square footage or the addition of 1,000 square feet or more of building;
 - b. When ten or more parking spaces are added to the site with no building; or
 - c. Facade changes to ten percent or more of any building wall facing a vehicular way intended for public travel regardless of ownership (e.g., adding or eliminating doors, windows, closings, openings, or increased wall area).

(3) The following are excluded from the requirements of sections 21-94, 21-95 and 21-96:

- a. The homeowner of a single-family or duplex residence.
- b. Property which as altered does not meet the requirements of subsection (2).

(Ord. No. 4521, § 1, 9-27-2010)

Secs. 21-5—21-30. - Reserved.

ARTICLE II. - ADMINISTRATION

Footnotes:

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Cross reference— *Administration, ch. 2.*

Sec. 21-31. - Tree advisory commission.

- (a) The city council may establish a tree advisory commission. This commission may from time to time make recommendations relative to trees to the city manager or his authorized representative and perform other duties as designated in this chapter.
- (b) The tree advisory commission shall be composed of 12 members, a majority of whom shall be residents of the city. Seven of the members shall be appointed by the city council, and three of the members shall be appointed by the mayor. The remaining two members shall be representatives of the city engineering and property management department and shall be ex officio members.
- (c) Those members appointed by the mayor and city council shall serve three years, and no member appointed by the mayor and city council shall be eligible to serve more than two consecutive full terms. Member terms shall be appointed on a staggered basis so that no more than five of the ten appointed seats become vacant at one time.
- (d) Any member who fails to attend the requisite number of meetings as set out in the boards and commission's attendance policy adopted by the city council shall be automatically removed from the commission. Vacancies resulting from a member's failure to attend the required number of meetings shall be filled as provided in this section. The chair of the commission will notify the proper appointing authority if a member is absent the requisite number of the meetings, and appointment will be made by the appointing authority to fill that vacancy.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-32. - City jurisdiction and authority.

- (a) The city shall have the jurisdiction, authority, control, supervision and direction over all trees planted or growing in the city, except where exempted in this chapter.
- (b) The city shall prepare and publish guidelines and specifications for tree planting, care, maintenance, removal and landscape design in a document entitled "Tree Ordinance Guidelines" for reference and use by property owners, developers, consultants and the general public in furtherance of the requirements and intent of this chapter. This document shall be reviewed periodically by the city's engineering department and the tree advisory commission.
- (c) The city shall review all applications for permits for any planting, removal and/or trimming or cutting of trees subject to this chapter and shall have the authority to grant or deny permits and to attach reasonable conditions to the granting of a permit.

(Ord. No. 4521, § 1, 9-27-2010)

Secs. 21-33—21-60. - Reserved.

ARTICLE III. - MAINTENANCE AND PROTECTION OF TREES

Sec. 21-61. - Trees on public property.

- (a) No person shall spray, fertilize, remove, destroy, cut, top, or otherwise severely prune, including the root system, or treat any tree or shrub having all or any portion of its trunk in or upon any public property without first obtaining a written permit from the city and without complying strictly with the provisions of the permit and this chapter.
- (b) No person shall plant any tree or shrub on any public street right-of-way or public property without first obtaining a permit from the city and without complying strictly with the provisions of the permit and the provisions of this chapter.
- (c) No person shall damage, cut, or carve any tree or shrub having all or any portion of its trunk in or upon any public property; attach any object,

including, but not limited to, rope, wire, nail, chain or sign, to any such tree or shrub or attach any such object to the guard or stake intended for the protection of such tree.

- (d) No person shall place, store, deposit, or maintain, upon the ground in any public street or public place, any compacted stone, cement, brick, sand or other materials which may impede or obstruct the free passage of air, water and fertilizer to the roots of any tree or shrub growing in any such street or place without written authorization from the city.
- (e) No person shall change the natural drainage; excavate any ditches, tunnels, or trenches; or lay any drive within the root protection zone of any tree having all or any portion of its trunk in or upon any public property without obtaining a permit from the city and without strictly complying with the provisions of the permit and provisions of this chapter.
- (f) No person shall perform, or contract with another to perform, excavation or construction work within the drip line of any tree having all or any portion of its trunk in or upon any public property without first installing a fence, frame or box in a manner and of a type and size satisfactory to the city to protect the tree during the excavation or construction work. All building materials, equipment, dirt or other debris shall be kept outside the root protection zone. The tree protection fence, frame or box shall not be removed unless or until the city authorizes it to be removed.
- (g) Liability for damages or injuries to any tree or shrub having all or any portion of its trunk in or upon public property resulting from a violation of this article shall be determined by the city in accordance with section 21-124. The person performing the work, the property owner and the person contracting for the performance shall be jointly and severally liable for any penalties or other enforcement action imposed pursuant to this chapter or other provisions of law on account of work performed in violation of this article. However, no claims shall be made more than five years after damage can be proven to have occurred.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-62. - Trees on private property.

- (a) Any person owning or occupying real property bordering on any street where trees have branches, limbs, trunks, or other parts projecting into the public street or property shall prune such trees or keep them trimmed in such a manner that they will not obstruct or shade the streetlights, obstruct or interfere with the passage of pedestrians on sidewalks, obstruct vision of traffic signs, or obstruct views of any street or alley intersection.
- (b) Any person owning or occupying real property bordering on any street, park or other public property, on which there may be trees that are diseased or insect infested, shall remove, spray or treat any such trees in a manner that will not infect or damage nearby public vegetation or cause harm to the community or citizens therein.
- (c) No tree equal to or larger than two inches caliper may be trimmed, pruned, or removed from the tree save area, and no tree equal to or larger than eight inches caliper may be trimmed, pruned, or removed from the tree protection zone, without a permit. No grading, demolition, trenching, or other activity which may adversely affect trees in this zone may proceed prior to approval and issuance of necessary permits by the city.
- (d) It shall be the duty of the property owner to maintain all trees planted pursuant to, or protected by, this chapter in a healthy condition in accordance with this section and the tree ordinance guidelines developed by the city. Trees shall be allowed to grow to their natural height and form. Topping is prohibited.
- (e) When trees that are subject to or protected by this chapter die, are missing, or are otherwise deemed unhealthy by the city, they shall be removed and replaced by the property owner to comply with any existing streetscape plan or as directed by the city, normally during the next planting season which is November through March. New owners of properties already in compliance must maintain that compliance. Trees of the same, approved species as those existing may be used to replace dead, missing or unhealthy trees. The property owner is encouraged to use large maturing shade trees as replacements when possible. Nothing in this section is intended to impose a requirement that the property owner maintain more trees than those required for the site even if he has voluntarily done so in the past.
- (f) If the owner or occupant of such property does not perform the duties set out in subsections (a), (b) and (e), the city may order the pruning, removal or treatment of trees on private property that cause obstructions, present insect or disease problems or otherwise present a danger to public health or safety. The order shall be in writing to the owner or occupant responsible for such condition and shall be acted upon within 30 days from the time of the receipt of the order. If, after 30 days, the owner or occupant has not responded or acted to prune, remove or treat the trees, the city shall have the authority to enter upon the property to perform the work necessary to correct the condition and bill the owner or occupant for the actual costs incurred. In situations deemed necessary to the public health, safety, or welfare, the city may act without prior notification to the property owner or occupant.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-63. - Permits.

- (a) Persons requesting to do any planting, removal, trimming, or cutting of trees subject to this chapter, or any of the activities prohibited by this

article, shall secure a permit for tree work from the city engineering and property management department before the activities commence. For purposes of this subsection, a landscape plan approved by the city constitutes a permit.

- (b) The city shall have the authority to review all requests for permits and to grant or deny permits or attach reasonable conditions to the permits.
- (c) Individual permits will not be required for city and state department of transportation projects so long as tree preservation and protection requirements are included in the project plans.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-64. - Utilities.

- (a) Public and private utilities which install overhead and underground utilities, including CATV installations and water and sewer installations by or at the direction of the Charlotte-Mecklenburg Utilities, shall be required to accomplish all work on property subject to this article in accordance with the company's written pruning and trenching specifications or as mutually agreeable to the property owner, the city and the utility.
- (b) Public and private utilities shall submit written specifications for pruning and trenching operations to the city for approval. Specifications shall be reviewed periodically by the city and the tree advisory commission for necessary improvements and as required by modifications in this chapter. Upon approval of its specifications, a utility shall not be required to obtain a permit for routine trenching and pruning operations affecting a tree having all or any portion of its trunk in or upon any public property so long as such work is done in strict accordance with the approved specifications. Requests for the removal of trees shall be handled on an individual permit basis. Failure to comply with the approved specifications is a violation of this chapter.
- (c) Refer to section 21-96 for light pole location requirements.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-65. - Tree protection and/or planting required on public property.

This chapter shall apply to public entities and owners of public property, and it shall be unlawful for such owners to fail to comply with all sections of this chapter unless specifically exempted therefrom.

(Ord. No. 4521, § 1, 9-27-2010)

Secs. 21-66—21-90. - Reserved.

ARTICLE IV. - GENERAL LAND DEVELOPMENT REQUIREMENTS

Sec. 21-91. - Tree survey.

Tree save area boundaries shall be required to be surveyed and be described in meets and bounds and be recorded on the final plat.

All applications for grading, building, demolition, land use, change of use or rezoning permits on all property, except single-family development shall require a tree survey. The survey shall identify all trees of eight-inch dbh or greater and all planted trees of two-inch caliper or greater and six feet in height that grow partially or wholly within the city right-of-way.

All applications for grading, building, demolition, land use, change of use or rezoning permits on all property, except single-family subdivision, subject to subsection 21-94(d)(1) [21-96(f)(1)] shall require a tree survey. The survey shall identify all trees of eight-inch dbh or greater within the tree protection zone.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-92. - Tree protection plan.

- (a) All applications for grading, building, demolition, land use, change of use, or rezoning shall include a tree protection plan of all tree save areas and tree protection zones. On sites where less than one acre is being graded, tree protection is still required and may be incorporated in the tree planting plan submitted in accordance with section 21-94. A tree protection plan shall include the following:
 - (1) A tree and root protection zone plan for any existing trees having all or any portion of their trunks in or upon any public property, which are:
 - a. All trees of eight-inch dbh or larger; and
 - b. Any planted trees of two-inch caliper or larger.

(2) A tree and root protection zone plan for the following:

- a. Existing trees of two-inch caliper and larger in the tree protection zone and tree save area; and
- b. Any trees of two-inch caliper or larger being saved for credit toward planting requirements.

(b) All applications for single-family development shall include a tree and root protection zone plan for the following:

- (1) Heritage trees;
- (2) Specimen trees; and/or

(3) Tree save areas being protected for credit toward the tree save requirement for single-family development.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-93. - General tree save requirements.

- (a) Tree save areas shall be free of invasive plant species unless approved otherwise by the city. If an area proposed for tree save contains invasive plant species at the time of such proposal, such invasive plant species shall be removed prior to the issuance of final certificate of occupancy for commercial and multi-family properties or at final plat approval for subdivisions. Invasive plant species are considered removed if they are no longer living in the tree canopy. Subsequent property owners are required to maintain this condition for compliance with the chapter.
- (b) Tree removal in a tree save area will require a permit from the city pursuant to section 21-63 and may require mitigation. Invasive plant species and hazardous trees may be removed without city approval.
- (c) Pursuant to the tree ordinance guidelines, any alterations to the tree save area must be accomplished without mechanized equipment and made of organic, environmentally friendly materials, unless approved otherwise by the city. For sites located in urban zones, alterations to the tree save area do not have to meet the above standard. However, if alterations are made or amenities are added, these changes must be made in a manner that is not detrimental to the saved trees or their critical root zone. Alterations and amenitization must be approved by the city.
- (d) Any tree save area less than 30 feet in width must have boundary and property lines delineated on site by a surveyor prior to the first submittal of plans.
- (e) No structure will be allowed within ten feet of the tree save area. A building restriction must be noted on the record plat in accordance with the tree ordinance guidelines. For urban zones the ten-foot building restriction may be counted toward the tree save area requirement as long as this area continuously and directly abuts a tree save area, and remains pervious. However, regulatory trees may not be planted within this ten-foot area.
- (f) Tree save areas may include Mecklenburg County Park and Recreation Greenways. Trail placement must be coordinated with the city so that the effective tree save area required is maintained.
- (g) Tree save areas on commercial properties may include existing tree canopy which overhangs existing underground utility easements based upon adherence to the tree ordinance guidelines and approval by the city.
- (h) On commercial properties in cases where no other viable tree save areas exist and based upon adherence to the tree ordinance guidelines and approval by the city, tree save areas may include the planting of small maturing trees in accordance with Duke Energy's, or its successor's, approved planting list and within 20 feet of the centerline of power distribution easements that are accessible for maintenance by mechanical equipment.
- (i) In local historic districts designated by a historic district overlay (see chapter 10, part 2 of the zoning ordinance), the requirements of the Historic District Overlay apply in addition to the regulations of this section.

(Ord. No. 4521, § 1, 9-27-2010; Ord. No. 9671, § 1.B.1—3, 10-21-2019)

Sec. 21-94. - Tree save area and tree protection zone requirements for commercial development.

- (a) A minimum of 15 percent of the overall commercial site must be preserved as tree save area (hereinafter for purposes of this section, "commercial tree save area"). If less than 15 percent of the site has existing trees, additional trees shall be planted at a rate of 36 trees per acre to meet the commercial tree save area requirement. In the event any area of the commercial tree save area cannot be protected, tree save area must be provided at 150 percent of the area removed. Replacement trees must be planted at 36 trees per acre.

Additions to existing sites that meet the criteria in subsection 21-4(2) shall protect all trees of eight-inch dbh or greater within the tree protection zone or maintain existing tree save areas for sites developed in accordance with the effective date of the ordinance from which this chapter derives.

- (b) In all cases, any perimeter tree and parking area planting requirements must still be met in accordance with section 21-96.

The following exceptions and alternatives to the tree save area requirement apply:

- (1) UMUD and UMUD-O within the I-277 loop and any TOD, MUDD or UMUD zoned parcels in transit station areas, as designated in a transit

station area plan, are exempt. If no transit station area plan has been adopted, the transit station area will be designated as the property within one-half mile of an existing or proposed transit station location identified on the approved Metro Transit Commission (MTC) System Plan.

- (2) In transit station areas, designated mixed-use centers, NS zoning districts (for sites of 12 acres or less), and I-1 and I-2 zoning districts, the following measures may be chosen, individually or in combination, such that the measures are equal to 100 percent of any portion of the commercial tree save area not preserved as required above:
 - a. Plant or replant trees at a rate of 36 trees per acre on-site.
 - b. Install and maintain a living green roof on the project to be maintained in perpetuity. The owner shall submit an annual inspection and maintenance report pursuant to the tree ordinance guidelines.
 - c. Undertake either off-site mitigation, or payment in lieu. Off-site mitigation and payment in lieu may not be used together to meet this requirement.
 - d. In urban zones, create amenitized tree areas that include 36 trees per acre on-site and meet the following:
 1. Planting areas shall be a minimum of ten feet wide, unless otherwise approved by the city.
 2. No more than 25 percent of impervious paved areas within the amenitized tree area will be allowed. Gravel pathways in amenitized tree areas will be considered pervious.
 3. Trees may be planted in alternative locations, such as but not limited to rooftops, permanent planters, raised or at grade plazas, over parking decks, or other locations approved by the city. Planting in alternative locations shall be per the Land Development Standards Manual or as approved by the city.
 4. Amenities may include, but are not limited to irrigation, landscaping, grass, seating, pathways and lighting or other items, as approved by the city.
- (3) In corridors that are outside of transit station areas the following measures may be chosen, individually or in combination, such that the measures are equal in area to 150 percent of any portion of the required commercial tree save area not preserved as required above:
 - a. Install and maintain a living green roof on the project to be maintained in perpetuity. The owner shall submit an annual inspection and maintenance report pursuant to the tree ordinance guidelines.
 - b. Undertake either off-site mitigation or payment in lieu. Off-site mitigation and payment in lieu may not be used together to meet this requirement.
 - c. In urban zones, create amenitized tree areas that include 36 trees per acre on-site and meet the following:
 1. Planting areas shall be a minimum of ten feet wide unless otherwise approved by the city.
 2. No more than 25 percent of impervious paved areas within the amenitized tree area will be allowed. Gravel pathways in amenitized tree areas will be considered pervious.
 3. Trees may be planted in alternative locations, such as but not limited to rooftops, permanent planters, raised or at grade plazas, over parking decks, or other locations approved by the city. Planting in alternative locations shall be per the Land Development Standards Manual or as otherwise approved by the city.
 4. Amenities may include, but are not limited to irrigation, landscaping, grass, seating, pathways and lighting or other items, as otherwise approved by the city.
- (4) In urban zones located in wedge areas, a minimum of 15 percent of the overall commercial site must be preserved as tree save area. For any tree save area not preserved the following measures may be chosen, individually or in combination, such that the measures are equal to 150 percent of any portion of the commercial tree save area not preserved as required above.
 - a. Plant or replant trees at a rate of 36 trees per acre on-site.
 - b. Provide amenitized tree area that meets the following:
 1. Trees must be planted at 36 trees per acre on-site.
 2. Planting areas shall be a minimum of ten feet wide.
 3. No more than 25 percent of impervious paved areas within the amenitized tree area will be allowed. Gravel pathways in amenitized tree areas will be considered pervious.
 4. Trees may be planted in alternative locations, such as but not limited to rooftops, permanent planters, raised or at grade plazas, over parking decks, or other locations approved by the city. Planting in alternative locations shall be per the Land Development Standards Manual or as approved by the city.
 5. Amenities may include, but are not limited to irrigation, landscaping, grass, seating, pathways and lighting or other items, as approved by the city.

Sec. 21-95. - Tree save requirements for single-family development.

- (a) *Percentage of area required.* Whenever the existing tree canopy of a single-family development site is at least ten percent of the total property area, a tree save area equal to ten percent of the total property area must be saved during development of the site. If the existing tree canopy of the site is less than ten percent but more than five percent, a tree save area equal to ten percent of the total property area must be achieved by saving the entire existing tree canopy and planting new trees to reach the required percentage area. Single-family development sites with an existing tree canopy of less than five percent of the total property area must have a tree save area equal to five percent of the total property area, which may be achieved by saving the existing tree canopy and planting new trees.
- (b) *Tree save area method for calculation.* Square footage for existing and dedicated road rights-of-way and utility easements and for existing ponds and lakes will be subtracted from the total site area before the required percent of the tree save area is calculated. Where there are groups of trees that have areas within the group that are not expected to fill in with time, additional trees can be planted, pursuant to city approval, so that the entire area can qualify as a tree save area. A planted shade tree shall be equivalent to 2,500 square feet of saved area and new trees must be planted at a rate of 18 per acre. If root disturbance or construction activities occur within the drip line of any tree designated as protected in the tree protection plan, only the area actually being protected will be included in the calculated tree save area. Credit received for trees designated as heritage or specimen trees will be one and one-half times the actual square footage of the drip line. The city may adjust applicable land development standards to protect and preserve heritage or specimen trees.
- (c) *Criteria for new trees.* New trees planted in common open spaces to satisfy the requisite tree save area requirement must be at least three-fourths-inch caliper shade trees. New trees planted within individual lots to satisfy the requirement must be at least one and one-half inch caliper trees. Trees planted for mitigation where the existing tree canopy must be removed due to conflicting design criteria or hardship approved by the city must be planted in accordance with this section to obtain the required percentage.
- (d) *Heritage trees.* A person requesting to remove a heritage tree must obtain a permit from the city before the activities commence. Owners and persons who remove a heritage tree without a permit are subject to the civil penalties set out in section 21-124. For purposes of this subsection, a landscape plan approved by the city constitutes a permit. Permits for the removal of Heritage trees will be granted only where:
- (1) The tree is located in the buildable area or yard area where a structure or improvement may be placed and there is no other reasonable location and/or preservation would unreasonably restrict use of the property.
 - (2) The tree is diseased, injured, in danger of falling, creates unsafe sight distance or conflicts with other sections of this Code or provisions of other ordinances or regulations.
 - (3) One five-inch caliper tree or three two-inch caliper trees are planted in mitigation for the removal of each healthy tree under this subsection.
- (e) *Incentives for increasing area.* Incentives for increasing tree save areas are designed to achieve the specific objective to:
- (1) Enhance the city's tree canopy in residential settings.
 - (2) Improve the overall quality of life within the larger single-family developments.
 - (3) Further the land use policies of the city, including encouragement of open spaces and the preservation of wooded sites.
 - (4) Discourage clear cutting of sites before and during construction of single-family development.
- (f) The following incentives apply to single-family development as defined by this chapter.
- (1) *Reduced yards.* For single-family development requiring a tree save area, setback requirements as specified in subsections 12.805(3)(a), (b), and (c) of the zoning ordinance are reduced as follows:
 - a. Front setbacks can be reduced to a minimum of 15 feet for all lots; front loaded garages must maintain a minimum setback of 20 feet; and
 - b. Rear yards can be reduced to 30 feet on all internal lots. Rear yards forming the outer boundary of a project must conform to the minimum rear yard of subsection 9.025(1)(g) for the zoning district in which the development is located.
 - (2) *Density bonus.* Single-family development sites may be granted a density bonus provided the entire tree save area is dedicated to common open space. Such dedication must be to a homeowners' association or a public or private agency that agrees to accept ownership and maintenance responsibilities for the space. The density bonus is calculated as follows: the entire dedicated tree save area in acres multiplied by the maximum residential density number of the underlying zoning district.
 - (3) *Reduced lot sizes.* A development need not meet the minimum lot area and lot width requirements set forth in table 9.205 of the zoning ordinance if it complies with one of the following incentives:
 - a. Sites with more than ten percent and up to 25 percent of tree save area(s) in common open space may apply the cluster provisions for lot size and lot width of that zoning category.
 - b. Sites with greater than 25 percent of tree save area(s) in common open space, including the buffer area and where the perimeter protection is provided either by perimeter lots that meet the underlying zoning cluster provisions or by a minimum 20-foot perimeter tree save area, may apply the cluster provisions for lot size and width of the next lower zoning category as shown in the following table

and in accordance with section 9.205(5) of the zoning ordinance.

	R-3	R-3 Cluster	R-4	R-4 Cluster	R-5	R-5 Cluster	R-6	R-6 Cluster
Min. Lot Area	10,000	8,000	8,000	6,000	6,000	4,500	4,500	3,500
Min. Lot Width	70'	60'	60'	50'	50'	40'	40'	40'

(g) *New supplemental plantings.* If the existing tree canopy is insufficient to meet the desired incentive level, new supplemental plantings may be used to reach the desired level. This only applies for sites that have less than ten percent existing tree canopy prior to development or for sites that have more than ten percent existing tree canopy and the entire canopy is being saved.

(Ord. No. 4521, § 1, 9-27-2010; Ord. No. 4766, § 1, 10-17-2011; Ord. No. 8093, §§ 1, 2, 8-22-16)

Note— Ord. No. 8093, § 2, adopted August 22, 2016, states "That this ordinance shall become effective upon its adoption, with the exception of the revised text for Section 2 I-95(f)(3)(b) that reads, "including the buffer area and where the perimeter protection is provided either by perimeter lots that meet the underlying zoning cluster provisions or by a minimum 20 foot perimeter tree save area." The revised section shall become effective on November 22, 2016."

Sec. 21-96. - Tree planting requirements.

- (a) Tree planting plan. All applications for building permits or land use permits shall include a tree planting plan. The tree planting plan shall be submitted in written/design form and shall conform to the general provisions of this section and all specifications set out in the applicable tree ordinance guidelines as issued by the city.
- (b) Tree and soil specifications. All trees planted pursuant to this article must be planted in amended soils as specified in the tree ordinance guidelines. The trees also must be from an approved list supplied by the city. Trees not on the list may be approved by the city on a case-by-case basis. Where trees are specified to be two-inch caliper, the minimum height shall be eight feet. If a multi-stem tree is used, it must have three to five stems and be eight to ten feet tall at the time of planting. Where three-inch caliper trees are specified, the minimum height shall be ten feet tall, and multi-stem trees shall be ten to 12 feet tall. All trees must comply with the American Standard for Nursery Stock, published by the American Association of Nurserymen.
- (c) A minimum of 50 percent of new trees must be native species, and sites with more than 20 trees required will have to install multiple species pursuant to the tree ordinance guidelines.
- (d) Site lighting must be a minimum 30 feet away from a tree. If pedestrian scale lighting is being used, then lighting must be a minimum of 15 feet away from a tree, unless approved otherwise by the city. However, for urban zones, the following standards apply. Light poles taller than 15 feet must be a minimum of 20 feet away from a tree, and light poles 15 feet or less in height must be at least 10 feet away from a tree.
- (e) For urban zones, the following standards apply:
 - (1) Required trees, with the exception of perimeter trees, must be located at least ten feet from on-site underground utilities unless otherwise approved by the city. For the purposes of this standard, underground utilities means main service lines for water, sewer, city-maintained stormwater, electric and gas lines.
 - (2) Required trees must be located at least ten feet from buildings unless otherwise approved by the city.
 - (3) The minimum spacing between large maturing trees may be reduced from 40 feet to 30 feet. The minimum spacing between small maturing trees may be reduced from 30 feet to 20 feet. Tree species identified for reduced spacing may be found in the tree ordinance guidelines or as otherwise approved by the city.
- (f) Perimeter planting requirements. Requirements for perimeter planting are as follows:
 - (1) *Single-family development zones.* Trees of a minimum two-inch caliper must be planted within 20 feet of the back of the curb on new streets, and any existing streets with lot frontage, in new single-family development. Trees may be planted between the sidewalk and the curb if a minimum six-foot planting strip is provided. Spacing will be an average of 40 to 50 feet apart for large maturing shade trees, and 30 to 40 feet apart for small maturing shade trees. Where a single-family development is directly across the street from multifamily

development, the spacing between trees will be an average of 40 feet. Existing two-inch caliper or greater large maturing shade trees preserved within 20 feet of the back of the curb may be counted towards the street tree requirement if they are adequately protected during construction. The city may grant a modification for other existing trees on a case-by-case basis.

- (2) *Suburban commercial zones.* A continuous perimeter planting strip, located in the public right-of-way between the curb and sidewalk or on private property abutting the public right-of-way, with a minimum width of eight feet, shall be required. If large maturing trees are planted, each tree shall have a minimum two-inch caliper. One such tree shall be planted for every 40 feet of frontage or fraction thereof. If small maturing trees are planted, the same conditions apply, but the increment drops to 30 feet.
- (3) *Urban zones.* Planting requirements for urban zones are as follows:
 - a. *Planting strip.* A continuous perimeter planting strip, located between the street and sidewalk, with a minimum width of eight feet, shall be required. The planting strip requirement may be met using tree pits as detailed in Charlotte Land Development Standards 4000 series.
 1. If large maturing trees are planted, each tree shall have a minimum three-inch caliper. One such tree shall be planted for every 40 feet of frontage or fraction thereof. If small maturing trees are planted, each tree shall have a minimum two-inch caliper. One such tree shall be planted for every 30 feet of frontage or fraction thereof.
 2. If the required number of trees cannot be planted as required by section 21-96(f)(3)a.1 due to site constraints, the alternatives listed below, individually or in combination, may be used. Site constraints include, but are not limited to, driveway locations, sight triangles, sight lines, and above ground utility locations, as determined by the city.
 - i. Spacing between large maturing trees may be reduced to 30 feet. Spacing between small maturing trees may be reduced to 20 feet. Tree species identified for reduced spacing may be found in the tree ordinance guidelines or as otherwise approved by the city.
 - ii. Trees that cannot be planted in the perimeter planting strip may be planted in alternative locations within 20 feet of the future back of curb, or in locations otherwise approved by the city.
 - iii. A payment in lieu may be made to the city for trees that cannot be planted in the perimeter planting strip.
 - b. *Urban retail sites.* The following options are available for urban retail developments:
 1. *Relocation of trees.* The number of perimeter trees required in subsection (f)(3) may be reduced by up to 50 percent if the same quantity of trees reduced are planted elsewhere on the site and at least one perimeter tree is installed.
 2. *Tree pits.* The perimeter trees required in subsection (f)(3) may be installed in tree pits with irrigation and sub-drainage as specified in the tree ordinance guidelines in lieu of a continuous perimeter planting strip. If large maturing trees are planted in the pits, each tree shall have a minimum three-inch caliper. One such tree shall be planted for every 40 feet of frontage or fraction thereof. If small maturing trees are planted in the pits, each tree shall have a minimum two-inch caliper. One such tree shall be planted for every 30 feet of frontage or fraction thereof and as long as at least one perimeter tree is installed.
- (4) *Renovated sites.* When a building permit is requested for renovation of a previously developed site where the required perimeter planting strip does not exist, trees are still required. However, in lieu of a minimum eight-foot wide planting strip, a pavement cutout equal to 200 square feet and with a minimum width of five feet may be substituted.
- (5) *Railroad or utility rights-of-way.* When a railroad or utility right-of-way separates the perimeter planting strip from a city right-of-way, the perimeter planting strip and tree planting requirements must still be met.
- (6) *Large shade trees required.* In locations without overhead power distribution lines that obstruct normal growth, 75 percent of the trees required under subsections (f)(1), (2), and (3) shall be large maturing shade trees.
- (7) *Streetscape plans.* In applicable cases where the city council has approved a streetscape plan, its provisions shall supersede those set forth in subsections (f)(2), (3) and (5).
- (g) Internal planting requirements, excluding single-family development. Requirements for internal planting, excluding single-family development, are as follows:
 - (1) *Planting areas.*
 - a. *Suburban commercial zones.* Whenever the impervious cover exceeds 10,000 square feet, a planting area equal to ten percent of the total impervious surface must be provided for landscape purposes and tree planting. Internal tree planting is required at the rate of one large maturing shade tree per 10,000 square feet of impervious cover or fraction thereof. This planting area must be located on private property and shall be in addition to any perimeter planting and tree save area requirements.
 - b. *Urban zones.* Whenever the impervious cover exceeds 10,000 square feet, a planting area for landscape purposes and tree planting is required as follows:
 1. The planting area shall equal ten percent of the total impervious surface for all urban zoning districts except for UMUD and MUDD.
 2. In MUDD and UMUD zoning districts outside the I-277/I-77 loop, the planting area may equal five percent of the total impervious

surface. The planting requirements for UMUD zoning districts within the I-277/I-77 expressway loop are set out in subsection 9.906(4)(e) of the zoning ordinance in appendix A to this Code.

3. Internal tree planting is required at the rate of one large maturing shade tree per 10,000 square feet of impervious cover or fraction thereof. This planting area must be located on private property and shall be in addition to any perimeter planting, tree save area, and tree amenity area requirements.
 4. Trees may be planted in alternative locations, such as but not limited to rooftops, permanent planters, raised or at grade plazas, over parking decks, or other locations approved by the city. Planting in alternative locations shall be per the Land Development Standards Manual or as otherwise approved by the city.
- (2) *Parking areas.* Internal planting requirements for parking areas are as follows:
- a. *Suburban commercial zones.* Planting in suburban commercial zones shall be in accordance with the following:
 1. Trees must be planted so that each parking space is no more than 40 feet from a tree trunk, unless the parking lot has continuous islands running the length of the parking lot with minimum eight feet width; then the requirement will increase to 60 feet from a tree trunk.
 2. Bus and tractor-trailer lots will be required to plant trees 40 feet apart around the perimeter of the parking lot in a minimum ten-foot wide planting strip. If there is parking on the perimeter of the bus and tractor-trailer lots, bollards or wheel stops are required.
 3. Seventy-five percent of the trees planted must be large maturing shade trees except as provided in subsection (g)(2)a.4. Minimum planting area per tree shall be 274 square feet with a minimum width of eight feet. The entire planting area must contain amended on-site soil or a soil mix, as specified in the tree ordinance guidelines, to a depth of 18 inches.
 4. Where small maturing shade trees are used, the minimum planting area shall be 200 square feet, with a minimum width of eight feet. The entire planting area must contain amended on-site soil or a soil mix, as specified in the tree ordinance guidelines, to a depth of 18 inches. Small maturing shade trees may be planted where overhead power distribution lines would interfere with normal growth (normally within 25 feet of overhead power distribution lines or within the Duke Power right-of-way for overhead transmission lines).
 - b. *Urban zones.* Planting in urban zones shall be in accordance with the following:
 1. Trees must be planted so that each parking space is no more than 40 feet from a tree trunk. Trees planted must be large maturing shade trees except as provided in subsection (g)(2)b.2.
 - i. Minimum planting area per large maturing shade tree shall be 274 square feet with a minimum dimension of eight feet. The entire planting area must contain amended on-site soil, as specified in the tree ordinance guidelines, to a depth of 18 inches.
 - ii. Minimum planting area per large maturing shade tree may be reduced to a minimum surface area and a minimum dimension of eight feet, if the entire planting area contains an approved soil mix, as specified in the tree ordinance guidelines, to a depth of 18 inches.
 - iii. For parking spaces located in driveways for individual single-family attached dwellings or multi-family attached dwellings (as defined by chapter 15 of the zoning ordinance), the required trees may be located elsewhere on the site as approved by the city. The number of trees shall equal the quantity required by section 21-96(g)(2)b.1.
 2. Small maturing trees may be planted where overhead power distribution lines would interfere with normal growth. Minimum planting area per small maturing tree shall be 200 square feet with a minimum dimension of eight feet. The entire planting area must contain amended on-site soil, as specified in the tree ordinance guidelines, to a depth of 18 inches.
- (3) *Renovated sites.* When a building permit is requested for the renovation of a site previously developed, internal tree planting is still required, and the minimum planting area shall be 200 square feet per tree. However, only five percent of the total impervious cover must be set aside for landscape purposes.
- (4) *Existing trees.* In meeting these internal planting requirements, credit may be given for existing trees if the following are met:
- a. The property owner must include in the tree survey referenced in section 21-91 all existing trees of two-inch dbh or greater which he/she proposes to satisfy these planting requirements.
 - b. Only healthy trees and those that have been protected during the entire development period, beginning prior to the commencement of site work and continuing through to issuance of the certificate of occupancy in accordance with approved tree protection requirements, may satisfy these tree planting requirements.
 - c. If the minimum protection standards are not met, or if trees are observed by the city to be injured or threatened, it may be deemed ineligible for meeting these requirements. The city shall have the authority to modify the planting requirements of this subsection to preserve existing trees.

Secs. 21-97—21-120. - Reserved.

ARTICLE V. - MODIFICATION, INSPECTION, ENFORCEMENT AND APPEAL

Sec. 21-121. - Modifications.

- (a) If strict compliance with the standards of this chapter conflict with existing federal or state statutory or regulatory requirements, or when planting is required by this chapter and the site design, topography, natural vegetation, or other special considerations exist relative to the proposed development, the developer may submit a specific alternate plan for planting to the city for consideration. This plan must meet the purposes and standards of this chapter, but may suggest measures other than those in article IV. In addition, if the developer seeks a modification of planting requirements based upon a contention that the planting required by this chapter would pose a threat to health and safety due to a conflict with existing federal or state statutory or regulatory requirements, a modification will only be considered upon receipt of a written explanation of the alleged conflict created by the planting requirement and a copy of the statute or regulation that creates the conflict. The city shall review the alternate proposal and advise the applicant of the disposition of the request within 15 working days of submission by the applicant. Any appeals by the applicant shall be in accordance with section 21-126.
- (b) Requests for a delay in complying with this chapter due to poor weather conditions for planting will be considered following a written request directed to the city's engineering and property management department. Certificates of occupancy will be issued upon approval of a request for planting delay. Such request for a delay will not change the timeframe during which the planting will be completed. Failure to comply will result in penalties as provided for in section 21-124.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-122. - Inspections and investigations of sites.

- (a) Agents, officials or other qualified persons designated by the city are authorized to inspect the sites subject to this chapter to determine compliance with this chapter or rules or orders adopted or issued pursuant to this chapter.
- (b) No person shall refuse entry or access to any authorized city representative or agent who requests entry for the purpose of inspection, nor shall any person resist, delay, obstruct or interfere with such authorized representative while in the process of carrying out official duties.
- (c) If, through inspection, it is determined that a property owner or person in control of the land has failed to comply or is no longer in compliance with this chapter or rules or orders issued pursuant to this chapter, the city will serve a written notice of violation. The notice may be served by any means authorized under G.S. 1A-1, rule 4, or any other means reasonably calculated to give actual notice, such as facsimile or hand delivery. A notice of violation shall identify the nature of the violation and shall set forth the measures necessary to achieve compliance with this chapter. The notice shall inform the person whether a civil penalty will be assessed immediately or shall specify a date by which the person must comply with this chapter. The notice shall advise that failure to correct the violation within the time specified will subject that person to the civil penalties as provided in section 21-124 or any other authorized enforcement action.
- (d) The city shall have the power to conduct such investigation as it may reasonably deem necessary to carry out its duties as prescribed in this chapter, and for this purpose may enter at reasonable times upon any property, public or private, for the purpose of investigating and inspecting the sites subject to this chapter.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-123. - Emergencies.

In an emergency such as a windstorm, ice storm, fire or other disaster, the requirements of this chapter may be waived by the city during the emergency period so that the requirements of this chapter will in no way hamper private or public work to restore order in the city. This shall not be interpreted to be a general waiver of the intent of this chapter.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-124. - Penalties.

- (a) *Generally.* Any person who violates any of the sections of this chapter, or rules or orders adopted or issued pursuant to this chapter, shall be subject to any one, all or a combination of the civil penalties prescribed by this section. Penalties assessed under this chapter are in addition to and not in lieu of compliance with the requirements of this chapter. The person performing the work, the property owner and the person contracting for the performance shall be jointly and severally liable for any penalty or other enforcement action imposed pursuant to this chapter or other provisions of law on account of work performed in violation of this chapter.
- (b) *Civil penalties.* Civil penalties for violations of this chapter shall be assessed pursuant to the following:

- (1) Failure to plant original or replacement trees in accordance with this chapter shall be \$50.00 for each tree not planted. No civil penalty shall be assessed until the person alleged to be in violation has been notified of the violation as provided in section 21-122. If the site is not brought into compliance within the time specified in the notice of violation, a civil penalty may be assessed from the date the notice of violation is received. The failure to plant individual tree shall constitute a separate, daily and continuing violation.
- (2) Injury or damage to, or destruction of, trees and shrubs protected by sections 21-61 and 21-62 that result in the total loss of the tree or shrub shall be assessed in accordance with the tree evaluation formula or other generally accepted industry evaluation methods. However, the maximum civil penalty for each tree injured, damaged or destroyed shall not exceed \$20,000.00. No notice of violation is needed prior to the assessment of a civil penalty issued pursuant to this subsection.
- (3) Injury or damage to, or destruction of, trees and shrubs protected by sections 21-61 and 21-62 that do not result in the total loss of the trees shall be assessed for each tree or shrub in accordance with the tree evaluation formula or other generally accepted industry evaluation methods. However, the maximum amount of the penalty shall not exceed \$1,000.00. No notice of violation is needed prior to the assessment of a civil penalty issued pursuant to this subsection.
- (4) Failure to install or maintain required tree protection measures in accordance with section 21-92 shall be \$1,000.00. No civil penalty shall be assessed until the person has been notified of the violation as provided in section 21-122. If the site is not brought into compliance within the time specified in the notice of violation, a civil penalty may be assessed from the date the notice of violation is received. The failure to install the required tree protection measures shall constitute a separate, daily and continuing violation. Injury or damage to, or destruction of, trees in the tree protection zone and tree save area resulting from inadequate or omitted tree protection measures constitutes a separate violation which may subject the violator to any other applicable penalty set forth in this section.
- (5) Any other action that constitutes a violation of this chapter may subject the violator to a civil penalty of \$50.00, and each day of continuing violation shall constitute a separate violation. However, the maximum amount of the penalty shall not exceed \$1,000.00.
- (c) *Nonmonetary penalty.* A nonmonetary penalty, in the form of increased or additional planting requirements, may be assessed in addition to or in lieu of any monetary penalties prescribed under this section.
- (d) *Notice.* The city shall determine the amount of the civil penalty and shall notify the person who is assessed the civil penalty of the amount of the penalty and the reason for assessing the penalty. The notice of assessment shall be served by any means authorized under G.S. 1A-1, rule 4, and shall direct the violator to either pay the assessment or contest the assessment as specified in section 21-126. If payment of assessed penalties is not received within 30 days after it is due, or if no request for a hearing has been made as provided in section 21-126, the assessment shall be considered a debt due and owing to the city, and the matter shall be referred to the city attorney for institution of a civil action to recover the amount of the debt. The civil action may be brought in the Mecklenburg County Superior Court or in any other court of competent jurisdiction.
- (e) *Civil action for unpaid assessment.* A civil action must be filed within three years of the date the assessment was due. An assessment that is not contested is due when the violator is served with a notice of assessment. An assessment that is contested is due at the conclusion of the administrative and judicial review of the assessment.
- (f) *Use of civil penalties collected.* Civil penalties collected pursuant to this chapter shall be credited to the general fund as a nontax revenue and shall be used to further the purposes, intent and requirements of this chapter. The commission shall be consulted with regard to use of collected funds.
- (g) *Criminal penalties.* Any person who knowingly or willfully violates any section of this chapter shall be guilty of a Class 2 misdemeanor and may, upon conviction thereof, be subject to punishment as provided in section 2-21. This remedy is in addition to any civil penalties that may be assessed.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-125. - Injunctive relief.

- (a) Whenever the city has reasonable cause to believe that any person is violating or threatening to violate this chapter or any rule or order adopted or issued pursuant to this chapter, or any term, condition or provision of an approved permit, it may, either before or after the institution of any other action or proceeding authorized by this chapter, authorize the city attorney to institute a civil action in the name of the city for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the county superior court or any other court of competent jurisdiction.
- (b) Upon determination of a court that an alleged violation is occurring or is threatened, the court shall enter such orders or judgments as are necessary to abate the violation. The institution of an action for injunctive relief under this section shall not relieve any party to such proceedings from any civil or criminal penalty prescribed for violation of this chapter.

(Ord. No. 4521, § 1, 9-27-2010)

Sec. 21-126. - Hearings and appeals.

- (a) *Requests for variance.* Procedures for a request for a variance from this chapter are as follows:
- (1) The decision of the city arborist or senior urban forester to deny an application for a variance from the requirements of this chapter shall entitle the person submitting the application (petitioner) to a public hearing before the commission if such person submits a written request for a hearing to the chair of the commission within ten working days of receipt of the decision denying the variance. As soon as possible after the receipt of the request, the chair of the commission will set a date, time and place for the hearing and notify the petitioner of the hearing by mail. The time specified for the hearing shall be either at the next regularly scheduled meeting of the commission from the submission of the request, as soon thereafter as practical, or at a special meeting. The chair may appoint a three-member board selected from the appointed members of the commission to act as an appeal board and hear the request of the petitioner. The hearing shall be conducted by the commission in accordance with subsection (d).
 - (2) The commission or its designated appeal board may grant a variance from the requirements of this chapter upon a finding that:
 - a. Practical difficulties or unnecessary hardship would result if the strict letter of the law were followed; and
 - b. The variance is in accordance with the general purpose and intent of this chapter.
- (b) *Appeals of decisions, notices of violation and assessments of civil penalties.* Any party dissatisfied with a decision of the city adversely affecting such party in the application or enforcement of this chapter, including notices of violations and assessments of civil penalties, may request a public hearing before the commission. Procedures for such hearings are as follows:
- (1) The issuance of a decision, including a notice of violation or assessment of a civil penalty by the city, shall entitle the person subject to the decision or responsible for the violation (petitioner) to a public hearing before the commission if such person submits a written request for a hearing to the chair of the commission within 30 days of the receipt of a decision, notice of violation or assessment of a civil penalty.
 - (2) As soon as possible after the receipt of the request, the chair shall set a time and place for the hearing and notify the petitioner by mail of the date, time and place of the hearing. The time specified for the hearing shall be either at the next regularly scheduled meeting of the commission from the submission of the request, as soon thereafter as practical, or at a special meeting. The hearing shall be conducted pursuant to subsection (d).
- (c) *Petition for review of commission's decision.* Any party aggrieved by the decision of the commission shall have 30 days from the receipt of the decision to file a petition for review in the nature of certiorari with the clerk of Mecklenburg County Superior Court.
- (d) *Hearing procedure.* The following shall be applicable to any hearing conducted by the commission pursuant to subsection (a) or (b):
- (1) At the hearing, the petitioner and the city shall have the right to:
 - a. Be present and be heard;
 - b. Be represented by counsel; and
 - c. Present evidence through witnesses and competent testimony relevant to the issues before the commission.
 - (2) Rules of evidence shall not apply to a hearing conducted pursuant to this section, and the commission may give probative effect to competent, substantial and material evidence.
 - (3) At least seven days before the hearing, the parties shall exchange a list of witnesses intended to be present at the hearing and a copy of any documentary evidence intended to be presented. Additional witnesses or documentary evidence may not be presented except upon consent of both parties or upon a majority vote of the commission.
 - (4) Witnesses shall testify under oath or affirmation to be administered by the court reporter or another duly authorized official.
 - (5) The procedure at the hearing shall be such as to permit and secure a full, fair and orderly hearing and to permit all relevant, competent, substantial and material evidence to be received therein. A full record shall be kept of all evidence taken or offered at such hearing. Both the representative for the city and for the petitioner shall have the right to cross examine witnesses.
 - (6) At the conclusion of the hearing, the commission shall render its decision on the evidence submitted at such hearing and not otherwise.
 - a. If, after considering the evidence presented at the hearing, the commission concludes by a preponderance of the evidence that the grounds for the city's actions are true and substantiated, the commission shall, as it sees fit, uphold the city's action.
 - b. If, after considering the evidence presented at the hearing, the commission concludes by a preponderance of the evidence that the grounds for the city's actions are not true and substantiated, the commission may, as it sees fit, reverse or modify any order, requirement, decision or determination of the city. The commission bylaws will determine the number of concurring votes needed to reverse any order, requirement, decision or determination of the city.
 - (7) The commission shall keep minutes of its proceedings, showing the vote of each member upon each question and the absence or failure of any member to vote. The decision of the commission shall be based on findings of fact and conclusions of law to support its decision.
 - (8) The commission shall send a copy of its findings and decision to the petitioner and the city. If either party contemplates an appeal to a court of law, the party may request and obtain, at his own cost, a transcript of the proceedings.
 - (9) The decision of the commission shall constitute a final decision.

3-4 - LANDSCAPING AND TREE PRESERVATION STANDARDS

3-4.1 GENERAL REQUIREMENTS

- (A) PurposeIt is the intent of this section to enhance the appearance and environmental quality of both public and private development sites in the Village of Clemmons by requiring the planting of new trees, large canopy where appropriate, and the preservation and maintenance of high-quality existing trees, in order to:
- (1) Preserve environmental character, protect and enhance the natural environment;
 - (2) Establish and maintain tree cover;
 - (3) Promote healthy managed forest;
 - (4) Increase site stormwater infiltration capacity, improve groundwater recharge, reduce flooding and reduce erosion and urban runoff pollution hazard by preserving vegetated areas to slow and absorb stormwater run-off;
 - (5) Improve air quality (i.e. air pollution, carbon dioxide, greenhouse gases);
 - (6) Improve the appearance of motor vehicle use areas within close proximity of vehicular rights-of-way;
 - (7) Improve appearance of large areas;
 - (8) Enhance property values and protect public and private investments by emphasizing the importance of trees and vegetation as visual and physical bufferyards to property values on adjacent properties;
 - (9) Provide architectural interest and human scale and comfort by providing shade, reducing solar heat absorption, and reducing noise levels;
 - (10) Improve the appearance of public properties from vehicular rights-of-way and adjacent properties, as well as for users on the properties.
- (B) Applicability of Landscaping StandardsUnless otherwise provided in this section, an occupancy permit shall not be issued until all required planting and landscaping materials are installed. The following motor vehicle use areas are required to be landscaped:
- (1) Motor vehicle surface areas;
 - (2) Motor vehicle display areas;
 - (3) Outdoor storage areas;
 - (4) Utility service areas;
 - (5) Parking buildings or structures; and,
 - (6) Public or private schools.
- (C) ExclusionsThe following uses shall be exempt from the landscaping and preservation requirements of Section B-3.4.2.1:
- (1) A single family detached dwelling on its own lot;
 - (2) An attached dwelling unit which possesses an individually separated driveway and/or garage; and,
 - (3) Fire hydrants and other utility devices whose visibility is vital to public safety.
 - (4) Additional exclusions from the landscaping and tree preservation standards are cited in 3-4.1(A) and are applicable to all development and redevelopment unless otherwise exempted in B-4.1(C) and B.3-4.2.7(A).
- (D) Applicability of Tree Preservation and Planting Standards
- (1) The applicability of the tree preservation and planting standards is referenced in Section B.3-4.2.1

(C-UDO-58, § 2, 5-9-11)

3-4.2 APPLICATION PROCEDURES AND GENERAL REQUIREMENTS

- (A) ApplicationWhen an application is made for a land disturbing permit, on any land where the landscaping and tree preservation requirements of this section are applicable, the land disturbing permit application shall be accompanied by the information cited in Sections B.3-4.2(A)(1)—(4) and B.3-4.2.1. Additional information to be submitted with the application for land disturbing permit includes:
- (1) Storage, Surface, and Service Areas.A site plan indicating the location, dimensions, and square footage of motor vehicle surface areas, motor vehicle display areas, outdoor storage areas, private utility service areas, proposed parking space striping, and overhead utility lines;
 - (2) Landscaping.A site plan indicating existing and proposed landscaping used to satisfy the requirements of this section, including the number, species, location, and heights of trees, shrubs, and groundcover; the location and dimensions of planting areas and streetyards; the location and size of earthen berms; and, the location, size, and construction material of fences, walls, and wall planters;
 - (3) Existing Trees to be Preserved.A site plan and any associated documentation prepared by a professional meeting the requirements of Section B.7-3.4 shall be submitted and identify the number, location, species, height, and diameter breast height (DBH) of existing trees to be preserved for credit as per Section B.3-2.14 where individual trees are being preserved, and a general description of the character, species mixture, health and age of trees present in tree stands where tree stands are being preserved for credit; and,
 - (4) Barriers.The location and description of any barriers to be erected to protect any existing vegetation from damage during construction. Refer to Section B.3-4.2.1(A)(6).

- (B) Delay of LandscapingIf the required landscaping has not been installed at the time of a request for an occupancy permit, and the Zoning Officer determines that the unavailability of plant materials or adverse weather conditions prohibit the timely completion of planting, an occupancy permit n issued prior to installation of required landscaping, subject to the following:
- (1) Completion Schedule.The applicant shall sign a contract with the Village of Clemmons specifying that the work shall be completed within the six (6) months immediately following the date of application for an occupancy permit; and,
 - (2) Security.An improvement security in the form of an escrow account or other instrument (i.e. bond, letter of credit, etc.) shall be required prior to issuance of an occupancy permit. The improvement security shall be in an amount deemed sufficient by the Zoning Officer to cover all costs of required landscaping or screening which has not been installed. The security shall be addressed to the Village of Clemmons Finance Officer and updated until such improvements are installed. Such security shall be valid until the work is completed in accordance with the permit. The security shall be forfeited upon violation of this section and shall be used toward completion of all planned improvements. Any monies in excess of the cost of installing required landscaping shall be refunded to the applicant. The security shall be released when the Zoning Officer certifies that all requirements of this Ordinance have been met.
- (C) Compliance with Sight Easement RequirementsLandscaping required by this section shall comply with the minimum State or local sight easement requirements for street intersections and driveways.
- (D) Obstruction of Pedestrian RoutesRequired landscaping shall not obstruct or impede public pedestrian routes including sidewalks and greenway trails.
- (E) Protection of Planting AreasWhenever any planting areas required by this section are adjacent to motor vehicle surface areas, motor vehicle display areas, or outdoor storage areas, the planting areas shall be protected from motor vehicle intrusion or damage from excessive motor vehicle lubricants or fuels.
- (F) Stabilization of Soil SurfaceThe soil surface of all planting areas required by this section shall be stabilized to prevent erosion. In addition to required interior trees and shrubs, the soil surfaces of planting areas shall contain live groundcover, mulch, live shrubs, permeable pedestrian paver blocks, or a combination thereof.
- (G) Planting and MaintenanceThe planting and maintenance provisions of this Ordinance shall apply to new trees and existing trees planted after September 1, 1991 which satisfies the requirements of this Ordinance.
- (1) Planting and Maintenance Standards.The use of American National Standards Institute (ANSI) A300 standards shall be required for the planting and maintenance of all required landscaping. Please review the Village of Clemmons Planting Manual(reserved) for further information about planting and maintenance.
 - (2) Tree Topping.Topping of any tree required by this Ordinance as defined by the ANSI A300 standards shall be prohibited. This shall be reviewed and enforced by the Village Public Works Director or designee.
 - (3) Maintenance of Plantings Required by Section B.3-4.1.The landowner is responsible for maintaining all required plant materials in good health. Any dead or missing plants must be replaced with new planting which meets the minimum installation dimension standards of this section. Plant replacement shall take place within one month of written notification by the Zoning Officer or within the nearest acceptable planting season as determined by the Director of Inspections or designee. In the event that plant material is severely damaged due to an unusual weather occurrence or other act of nature, or if replacement plantings are unavailable within one month of written notification, the landowner will have six (6) months from the date of written notification to replace plantings.
- (H) Enforcement and Penalties
- (1) Enforcement.The Director of Inspections or designee shall conduct site inspections to ensure compliance with the provisions of this Ordinance prior to the issuance of grading permits as well as prior to the issuance of a Certificate of Occupancy (CO), except where existing trees in residential subdivisions are preserved in accordance with Section B.3-4.2.1(A), compliance shall only be ensured prior to plat approval.
 - (a) The Director of Inspections shall enforce the provision and fines of this Ordinance in accordance with Section B.3-4.2(H).
 - (2) Penalties.
 - (a) Penalties for the removal of or damage to trees, prior to the approval of the required landscape plan submittal under Section 3.4.1(A)(3) shall be five thousand dollars (\$5,000.00) per acre or fraction thereof not to exceed fifty thousand dollars (\$50,000.00) of the required tree save areas as outlined in Section 3.4.2.1.
 - (b) Removal or Damage to Individual Trees after Landscape Plan Approval: The penalty for removal of or damage to the Critical Root Zone (CRZ) of protected trees or area to be cordoned off as determined by the Winston-Salem/Forsyth County Inspections, after the issuance of a landscape plan within an approved TSA shall result in a civil penalty up to the amount shown in the chart below. In addition the replacement trees shall be on approved planting list or as approved by the Director of Inspections or designee up to the amount shown in the following chart:

DBH of Tree(s) Removed or Damaged (per tree)	Maximum Civil Penalty	(2" Caliper Maximum)

6—9 inches	\$800.00	1 tree
9.01—12 inches	\$1,600.00	2 trees
12.01—24 inches	\$2,400.00	3 trees
24.01—36 inches	\$3,200.00	4 trees
36.01 + inches	\$4,000.00	5 trees

(c) Failure to Install or Maintain Tree Protection Devices.There shall be a civil penalty of five hundred dollars (\$500.00) per day for failure to install or maintain approved tree protection measures sufficient to protect the TSA beginning ten (10) days after the citation is issued and ending when the site is in compliance.

(d) Destruction by Natural Event.In the occurrence of a natural event which destroys a required tree save area, the owner or lessee shall have one hundred eighty (180) days to replant. Replaced plant material must be in compliance with the minimum size, spacing and quantity standards of this section.

(I) Combining Landscaping, Tree Preservation, Planting Area and Bufferyard RequirementsWhere motor vehicle surface area plant materials and bufferyard plant materials are required on the same property, trees may be located in such a manner as to simultaneously satisfy all requirements. Required planting areas shall not be cumulative; however, the greater of the planting areas specified in Section B.3-5 or this section shall be the required planting area.

(J) Overhead Utility LinesThe location of overhead utility lines shall be considered during the placement or preservation of required trees. The maximum mature height of required trees shall be determined as follows: (Suggested plant materials are listed in Section B.3-4.10).

(1) Small varieties:Small variety trees shall be used when located twenty-five (25) feet, measured horizontally, from the nearest overhead utility lines(s).

(2) Small or medium varieties:Small or medium variety trees shall be used when located within twenty-five (25) to thirty-five (35) feet, measured horizontally, from the nearest overhead utility line(s).

(3) Small, medium, or large varieties:Small, medium, or large variety trees may be used when located more than thirty-five (35) feet, measured horizontally, from the nearest overhead utility line(s).

(K) Safety and SecuritySafety and security concerns should receive prominent consideration during the selection and placement of landscape materials.

(L) Fire Protection EquipmentA minimum five (5) foot radius containing no plant materials or structural elements other than groundcover plants shall be maintained around all fire protection equipment, including fire hydrants, post indicator valves, and Siamese connectors. Obvious sight lines to the fire protection equipment shall be maintained at all times.

(M) Off-Street Parking ReductionA reduction in the amount of required off-street parking is permitted in accordance with the alternatives and incentives provisions of the parking requirements Section B.3-3.5(H) for the installation of landscaping required by the landscaping requirements of this Ordinance.

(C-UDO-58, § 2, 5-9-11)

3-4.2.1 TREE PRESERVATION AND PLANTING STANDARDS

(A) Tree preservation and planting standards of this section are applicable for all development except as cited in Section 3-4.1(C) and as noted below:
The following are exempt from the tree preservation and planting requirements of this Ordinance:

(i) Development sites located in areas zoned CB, CI, sites zoned PB in Growth Management Area (GMA) 1, and all sites in GMA 5;

(ii) Individual residential lots platted prior to the adoption of this Ordinance;

(iii) Minor subdivisions;

(iv) Redevelopment of sites zoned PB, GB, MU-S, and C which demonstrate a pedestrian-oriented urban form in accordance with Section B.2-1.3(1). Redevelopment of sites zoned PB, GB, MU-S, and C shall be exempt from the requirements of Section B.3-4.2.1. Instead, such development shall include one large variety street tree, as allowed by overhead utilities or road ownership, per fifty (50) feet of street frontage. These trees shall be spaced forty (40) to sixty (60) feet apart and shall be located within the street right-of-way;

(v) Existing development and all development with plans or applications approved or accepted into the review process prior to the effective date of this Ordinance.

- (1) Purpose of the tree save area(s) (TSAs).The purpose of the TSA is to encourage the preservation and maintenance of one or more areas of healthy existing trees four (4) inches or greater in diameter breast height (DBH) (4.5 feet above ground) and/or healthy stands of trees containing a variety of species with trees of various ages, including mature and maturing trees, meeting the requirements of this Ordinance. Tree save areas may also include preservation flexibility options (B-4.2.1(B)) which satisfy the requirements of B.3-4.2.1(A)(4).
- (2) Calculation of Required Tree Save Area.Calculation for tree save areas (TSA) shall exclude the square footage areas for existing and proposed public street rights-of-way, existing or proposed utility easement, and existing water bodies and new water bodies required to satisfy the stormwater management requirements otherwise required by law or ordinance. The combined square footage of these areas shall be deleted from the total parcel area for new development and for the limits of disturbed areas for additional development to an already developed site before the required percentage of TSA is calculated. Tree save area shall be calculated as follows:
- Stands of Trees.The tree save area for a stand of trees shall be calculated as the acreage that stand of trees occupies. Stands of trees shall be exempt from the species requirements of this Ordinance (Section B.3-4.10) as long as a stand of trees is determined to meet the intent of the tree save area requirements of this Ordinance; however, no stand consisting primarily of species prohibited from ordinance credit in accordance with Section B.3-4.10(G) shall be counted towards the tree save area requirements of this Ordinance.
 - Individual Trees.The tree save area for an individual existing tree shall be defined as the critical root zone for that individual tree or sum of the critical root zones of multiple individual trees. The table below provides the square footage credit per tree size.

Individual Tree(s) (DBH)	TSA Credit (square footage)
6—9 inches	500
9.01—12 inches	750
12.01—24 inches	1,800
24.01—36 inches	3,000
36+ inches	4,000

- Either method of calculation listed above, or a combination of both methods, may be used to satisfy the tree save area requirements of this Ordinance.
- (3) Tree Save Area Selection.In selecting which existing tree stands/individual trees are to be designated as tree save areas, the developer shall give due consideration to building, parking lot, driveway, street and utility location(s) as they relate to the practicality of preservation and recommended use the following tree preservation priority list shall be considered:
- Existing stands/individual trees of mature hardwoods as highest priority then;
 - Existing stands/individual trees of younger hardwoods then;
 - Existing stands/individual trees of hardwoods and pine mix.
- The majority of preserved stands shall not be trees that are located on the prohibited tree planting list.
- (4) Steps in Meeting TSA Requirements.
- Areas off Limits to Development.Healthy stands/individual trees located in a portion of the floodplain, stream buffer or wetlands, designated as off-limits to development as directed by a governmental entity shall be preserved up to required TSA percentage by parcel size (Table B-3.12);
 - Existing Tree Located Elsewhere on the Site.If the total percentage of TSA is not met in areas off-limits to development then the property owner may choose to count stands/individual trees located anywhere on the site toward reaching the total TSA percentage.
 - Along Required Bufferyards or Property Lines.If the total percentage of TSA is not met by (a) and/or (b) above, then trees and their critical root zones located within a required bufferyard or within fifteen (15) feet of the side and rear property lines shall be preserved and counted toward total TSA.
 - Planting New Trees.If the total percentage of TSA is not met by (a), (b), and/or (c), then new trees shall be planted as outlined in the flexibility standards of Section 4.2.1(B). Sites without adequate existing trees shall plant supplementary new large variety plantings until the minimum tree save area requirements have been met. Each new large variety tree planted shall be equal to seven hundred fifty (750) square feet of required tree save area.

Table B.3.12

Tree Save Area Requirements

Commercial, Institutional and Industrial (including multifamily and schools)

Size of Parcel	Tree Save Area Required to Include
0—55,000 square feet	Eight percent (8%) of parcel area
55,001 square feet—5 acres	Nine percent (9%) of parcel area
5.01—10 acres	Ten percent (10%) of parcel area
Greater than 10 acres	Twelve percent (12%) of parcel area

Residential

Note: These requirements apply to major residential subdivisions not minor subdivisions or individual lot(s).

Size of Parcel	Tree Save Area Required to Include
0—55,000 square feet	Ten percent (10%) of lot area.
55,001 square feet—5 acres	Eleven percent (11%) of lot area.
5.01—10 acres	Twelve percent (12%) of lot area.
Greater than 10 acres	Fourteen percent (14%) of lot area.

(5) Tree Protection During Construction.To receive credit for existing trees proposed for preservation, the TSA must be protected from direct and indirect root damage, and trunk and crown disturbance. The tree protection area shall be reviewed by the Public Works Director and Director of Inspections and/or designee. The following standards shall apply:

- (a) The tree save area (TSA) shall include all area located within the Critical Root Zone or as delineated in the field by the Director of Inspections or designee.
- (b) Construction site activities, such as parking, material storage, dirt stockpiling, concrete washout, and other similar activities, shall not be permitted within a tree save area (TSA).
- (c) Protective barriers shall be installed around the tree save area (TSA) as necessary prior to the issuance of a grading permit.

(B) Tree Save Area Flexibility StandardsFlexibility can be granted to the required tree save area standards under the following circumstances as approved by the Village of Clemmons Planning Board, Village Planning Staff, Director of Inspections and/or the Village Public Works Director/designee or combination of the two, with the understanding that developer shall be required to reforest and/or replant the difference in percentages per Table B-3.12:

1. Land Dedication.Land dedicated to the Village of Clemmons may be used towards the tree preservation requirements.
2. Reforestation Credits.Reforestation efforts on the property requirements can be used to satisfy up to twenty percent (20%) of the required tree save area with the approval of the Village Public Works Director or designee and up to fifty percent (50%) of the required TSA with the approval of the Village Planning Board. The reforestation option must reforest the remainder of the square footage as required at the rate of one mixed variety seedling per one hundred (100) square feet.
3. Site layout as determined by the Village Planning Department and/or the Director of Inspections or designee, including whether there are reasonable site layout options available that would further minimize the need to waive or reduce the tree preservation requirements. Conformance of the proposed development with the Community Compass recommendations of community character, quality of life, responsible growth and sustainability as it relates to urban form in specific strategic corridors and Legacy recommendations of balancing open space preservation with encouraging urban form of development.

Items 4—7 shall be determined by the Director of Inspections and/or designee:

4. Topography.
5. The size, health, and species of existing trees to be removed.
6. Development proposals for recreational purposes which remove existing trees in floodplains that would otherwise be required to be saved in accordance with Section B.3-4.2.1(A)(3)(b) may be approved where existing trees meeting the requirements of Section B.3-4.2.1(A) are preserved elsewhere on site.
7. Other site development issues not identified in items 1—7.

(C) Incentives for Increased Tree Save Area

- (1) Setback Reduction for Increased Tree Save Area.Developments which set aside twenty percent (20%) or more of a site as tree save area in common open space shall receive reduced internal and side yard setbacks of up to thirty-five percent (35%) of requirements.
- (2) Ribbon Paving for Increased Tree Save Area.Developments which set aside thirty percent (30%) or more of a site as tree save area in common open space may utilize ribbon paving and reduced pavement widths for internal streets with the approval of the Assistant Village Manager of Public Works or NCDOT. Additionally, such development may use gravel or other approved soft surface as a substitute for paved sidewalks which are internal to the development.

(C-UDO-58, § 2, 5-9-11)

3-4.3 MOTOR VEHICLE SURFACE AREA LANDSCAPING STANDARDS

(A) General Requirements

- (1) Exemption.This section shall not apply to single family residential buildings.
- (2) Applicability.This section shall apply to any motor vehicle surface area or portions thereof built after September 1, 1991.
- (3) Expansion of Preexisting Motor Vehicle Surface Areas.When preexisting motor vehicle surface areas are expanded:
 - (a) Required Interior Plantings.Required interior plantings may be dispersed throughout the entire motor vehicle surface area in accordance with Section B.3-4.3(C)(9).
 - (b) Streetyard Width.Streetyard width may be reduced to a minimum of fifty percent (50%) of the required width, provided the minimum required streetyard area and plant quantities for the expansion are installed; and provided such streetyard trees shall be provided a planting area with a minimum radius of seven (7) feet.

(B) StreetyardsA landscaped streetyard shall be required for all motor vehicle surface areas located within one hundred (100) feet of a street right-of-way or vehicular right-of-way, including controlled access highways, whether or not it may provide access to the site, unless separated by an intervening building.

- (1) Width.Minimum streetyard width is ten (10) feet, and shall be measured perpendicular to the street right-of-way. The streetyard shall be positioned between the motor vehicle surface area and street right-of-way.
- (2) Impervious Surface Cover.A maximum of fifteen percent (15%) of the required streetyard may be covered with impervious surface cover which may be used for walkways, fountains, walls, wall planters, or utility meters and vaults, but may not be used for motor vehicle surface or display, outdoor storage, private utility service, or service areas.
- (3) Number and Spacing of Trees.Each streetyard shall contain a minimum of two (2) deciduous or evergreen large variety trees per one hundred (100) linear feet, excluding points of motor vehicle ingress or egress. In no case shall any streetyard contain less than one large variety tree. Required trees must be a minimum of eight (8) feet in height at installation and shall be at least two (2) inches in diameter measured six (6) inches above ground level. Where two (2) or more streetyard trees are required, all trees shall be planted with the center of the main trunks twenty(20) to seventy-five (75) feet apart. Existing deciduous trees located in the abutting street right-of-way may be used to satisfy the distribution requirement in this section. Small or medium variety trees may be used where overhead utility lines exist in accordance with Section B.3-4.2(J).
- (4) Other Streetyard Components.In addition to required trees, the landowner or developer shall use one of the following to satisfy streetyard requirements: natural shrubs, closed fences, walls, wall planters, earthen berms, or a combination thereof, as follows:
 - (a) Natural Shrubs.Streetyard shrubs must be a minimum of eighteen (18) inches in height at installation, with a minimum height of thirty-six (36) inches within three (3) years after installation. Shrubs must be a locally adapted species which retain foliage to within six (6) inches above ground level. Said shrubs shall be spaced no more than eighteen (18) inches, edge to edge. No more than thirty percent (30%) of streetyard shrubs shall be deciduous.
 - (b) Fences and Walls.A streetyard fence or wall shall be a minimum of thirty-six (36) inches in height, opaque, and shall be constructed of masonry, stone, or wooden material, or of the same material as that of the principal building.
 - (c) Wall Planters.A streetyard wall planter shall be constructed of masonry, stone, or other permanent material. At installation, the minimum combined height of wall planters and shrubs shall be twenty-four (24) inches. Within three (3) years after installation, the combined height of wall planters and shrubs shall be no less than thirty-six (36) inches. The effective planting width of a streetyard wall

planter shall be no less than thirty-six (36) inches; however, where required streetyard trees are installed in wall planters, the effective planting width of the wall planters shall be no less than seven (7) feet. A minimum of one shrub shall be required for every five (5) square feet of wall planter area.

- (d) Earthen Berms.At installation, streetyard berms shall have a minimum height of eighteen (18) inches, a minimum crown width of two (2) feet, and a side slope with a width to height ratio of no greater than two (2) to one (2:1). The entire berm shall be planted and covered with live vegetation. Berm shrubs shall be a minimum of one foot in height at installation and shall be spaced no greater than eighteen (18) inches, edge to edge. Within three (3) years after installation, the combined height of berm and shrubs must be at least thirty-six (36) inches. Streetyard berms which are thirty-six (36) inches or greater in height at installation shall not be required to contain shrubs; however, streetyard trees shall still be required as specified in this section.
- (5) CB and CI Districts.In the CB and CI Districts, a minimum two (2) foot wide strip planted with trees and shrubs in accordance with this section or a three (3) foot high decorative and finished masonry wall shall be provided. Unfinished concrete masonry unit (CMU) walls shall be prohibited. Split face CMU is permitted.
- (6) PB District.In the PB District within GMA 1, a minimum two (2) foot wide strip planted with trees and shrubs in accordance with this section shall be provided. Any required or provided trees within the streetyard shall be located within a minimum seven (7) foot wide, fifty (50) square foot planting area.
- (C) Interior Motor Vehicle Surface Area PlantingsIn addition to the required streetyard, all motor vehicle surface areas shall contain landscaped planting areas, as follows:
 - (1) Location of Plantings.Interior planting areas shall be located adjacent to motor vehicle surface area edges or within the interior as islands or medians, and may contain berms of the minimum dimensions specified in Section B.3-4.3(B)(4)(d).
 - (2) Size.Each planting area shall allocate a minimum of one hundred fifty (150) square feet per tree, with a minimum radius of seven (7) feet for small or medium variety trees. A minimum planting area of six hundred (600) square feet shall be required for each large variety tree.
 - (3) Required Trees in Planting Area.Each planting area shall contain at least one deciduous or evergreen large variety tree with a minimum height of eight (8) feet at the time of installation, and a minimum diameter of two (2) inches measured six (6) inches above ground level. Small or medium variety trees may be used where overhead utility lines exist in accordance with Section B.3-4.2(j) or next to buildings.
 - (4) Ratio.One large variety tree shall be used for every five thousand (5,000) square feet of motor vehicle surface area. One small or medium variety deciduous or evergreen tree shall be required for every two thousand five hundred (2,500) square feet of motor vehicle surface area where overhead utility lines exist in accordance with Section B.3-4.2(j).
 - (5) Distance of Parking Spaces to Trees.No parking space shall be located more than seventy-five (75) feet from the trunk of a required large variety tree, except where overhead utility lines exist in accordance with Section B.3- 4.2(j) no parking space shall be located more than fifty (50) feet from the trunk of a required small or medium variety tree, unless otherwise authorized in this Ordinance.
 - (6) Loading/Maneuvering Areas.For loading docks or other maneuvering areas where placement of trees in the interior of the site is impractical, the required number of trees may be clustered around the edge of such areas, with the approval of the Director of Inspections.
 - (7) Credit for Streetyard or Bufferyard Trees.Deciduous or broadleaf evergreen trees used as streetyard or bufferyard plantings may be used as credit toward interior planting area requirements, provided that streetyard or bufferyard plantings meet the size requirements of Section B.3-5.3(B) and the distance requirements of Section B.3-4.3(C)(5).
 - (8) Credit for Bufferyard Area.The landscaped bufferyard area provided to meet the requirements of Section B.3-5 and located adjacent to a motor vehicle use area may be counted toward the interior planting requirement.
 - (9) Expansion of Preexisting Areas.When preexisting motor vehicle surface areas are expanded, required interior plantings may be dispersed throughout the entire motor vehicle surface area if the landowner so desires, subject to the following conditions:
 - (a) The required plant material will be calculated with reference to the expansion area only;
 - (b) Such planting may be dispersed throughout the entire, combined, existing, and new motor vehicle surface area; and,
 - (c) The provisions of this section shall preempt the spacing requirement contained in Section B.3-4.3(C)(5).
 - (10) Alternative Compliance.An applicant whose contiguous parking area exceeds five hundred (500) spaces may propose a landscaping plan which varies from the strict application of the provisions of this section in order to accommodate unique characteristics of the site or to utilize innovative design. Application for alternative compliance shall include a site plan following the requirements specified in Section B.7 and shall be approved by the Planning Board only upon a finding that the proposed landscaping plan fulfills the intent and purposes of this section as well as or better than would strict conformance with the requirements of this section.

(C-UDO-52, § 1, 4-12-10)

3-4.4 MOTOR VEHICLE DISPLAY AREA LANDSCAPING STANDARDS

(A) GENERAL REQUIREMENTS

- (1) Applicability.This section shall apply to any motor vehicle display area, or portions thereof, built after October 17, 1988.
- (2) Expansion of Preexisting Motor Vehicle Surface Areas.When preexisting motor vehicle display areas are expanded, streetyard width may be

reduced to a minimum of five (5) feet, provided the minimum required streetyard area and plant quantities for the expansion are installed, and provided each streetyard tree shall be provided a planting area with a minimum radius of seven (7) feet.

(3) Landscaping Requirements.Motor vehicle display areas shall comply with the general landscaping requirements of Section B.3-4.3.

(B) StreetyardsA landscaped streetyard shall be required as specified in Section B.3-4.3(B) except:

(1) Natural Shrubs.Any streetyard shrubs, wall planters, earthen berms, or combinations thereof, shall be installed at a minimum height of eighteen (18) inches, and shall reach a minimum height of thirty (30) inches within three (3) years after installation.

(2) Fences and Walls.Closed fences or walls shall be installed at a minimum height of thirty (30) inches.

3-4.5 OUTDOOR STORAGE AREA SCREENING STANDARDS

(A) ApplicabilityAny outdoor storage area not screened from any public or private street by an intervening building built after the adoption of this Ordinance with a linear dimension of fifteen (15) feet or greater, or any dumpster with a linear dimension of five (5) feet or greater and not screened by an intervening building shall be screened from view from any street right-of-way or vehicular right-of-way including controlled access highways, whether or not it may provide access to the site, for its entire length except for necessary access.

(B) ScreeningOutdoor storage area screening shall be provided as specified in either of the conditions below or as a combination of the two (2) conditions:

(1) Fencing.A fence or wall may be used to screen an outdoor storage area. The fence or wall shall be at least six (6) feet in height, opaque and of masonry, stone or wooden material, or of the same material as that of the principal building.

(2) Plantings.Natural evergreen plant materials may also be used to screen an outdoor storage area as follows: (Suggested plant materials are listed in Section B.3-4.10.)

(a) Minimum Height.The minimum height of the plant material shall be six (6) feet at installation; and,

(b) Spacing.The spacing of the planting shall be in a double-row configuration, staggered, with five (5) foot spacing between the centers of the main trunks.

3-4.6 UTILITY SERVICE AREA SCREENING STANDARDS

(A) ApplicabilityUtility service area structures built after the adoption of this Ordinance are required to be screened from street rights-of-way or vehicular rights-of-way, whether or not it may provide access to the site, provided that said structures have vertical dimensions exceeding three (3) feet or horizontal dimensions in excess of five (5) feet, and are located less than one hundred (100) feet from the nearest street right-of-way.

(B) ScreeningWhere screening for utility service areas is not provided by an intervening building, said screening may be accomplished by locally adapted evergreen or deciduous plantings or an opaque fence or wall.

(1) Installation Height.Plantings shall have a minimum installation height of eighteen (18) inches, be spaced no more than eighteen (18) inches, edge to edge, and be expected to reach a height and width equal to or greater than the utility service structures that are being screened.

(2) Fences or Walls.Fences or walls shall be opaque, of masonry, stone, or wooden material, or of the same material as that of the principal building, if applicable, and of a height and width equal to or greater than the utility service structures that are being screened.

(C) Responsible PartyScreening for utility service areas in a street right-of-way is to be installed by the utility or party who installed the service; in all other instances the property owners shall install required screening. Where screening for public utility service areas is to be provided by private property owners, such screening shall be installed only after consultation with the utility who owns the device to be concealed. No screening shall be installed that would impair the safe operations, maintenance, or function of the utility equipment.

3-4.7 PARKING STRUCTURES OR BUILDINGS

Any parking structure or building, or expansion thereof, built after the adoption of this Ordinance that exceeds two thousand five hundred (2,500) square feet in gross floor area shall be provided with a landscaped streetyard as specified in Section B.3-4.3(B). This provision shall apply only to structures whose principal use is parking, and shall not apply to vertical expansion of preexisting parking structures.

3-4.8 PUBLIC TREES—MAINTENANCE AND PROTECTION

The following standards are hereby established for the maintenance and protection of public trees:

(A) Approved PersonnelNo person except an employee of a public utility or other approved public personnel shall cut, prune, or remove any living tree on or in a public highway, right-of-way, public park, sidewalk, or other public property; or cut or disturb or interfere in any way with the roots of any tree on public property, unless directed to do so by the Village Public Works Director or designee.

(B) Owner ResponsibilityEvery owner of any tree overhanging any street or right-of-way within the Village shall prune the branches so that such branches shall not significantly obstruct the view of any street intersection and so that there shall be a clear space of thirteen (13) feet above the street surface or eight (8) feet above the sidewalk surface. Said owners shall remove all dead, diseased or unsafe trees, or broken or decayed limbs that constitute a nuisance to the safety of the public. The Village shall have the right to prune any tree or shrub on private or public property when it constitutes a public safety hazard, interferes with pedestrian traffic or the visibility of any traffic control device, sign, or sight triangle.

(C) Placement of Materials Around PlantsNo person shall pile building or other material around any tree or shrub in a public right-of-way in any

manner that will injure such tree or shrub.

- (D) Paving Adjacent to TreesNo person shall pave or place gravel, soil, or other such material within twelve (12) feet of any tree on public property, unless approved by the Village Public Works Director or designee.
- (E) Dumping of Deleterious MatterNo person shall dump, pour or spill any oil, pesticide, or other deleterious matter upon any tree or tree space in any public rights-of-way, or keep or maintain upon any public rights-of-way, any receptacle from which any oil, pesticide, or other deleterious matter leaks or drips onto any soil, parking area, or concrete gutter so as to injure any tree on any public property.
- (F) Planting of Street TreesNo part of this section is intended to prohibit the planting of street trees by adjacent property owners providing that the selection and location of said trees is in accordance with planting specifications set forth in this section and that any such planting conducted under utility lines shall be limited to planting material taken from the list of recommended small-maturing trees in this Ordinance. The Director of Public Works or designee shall review and permit the planting of street trees in the public rights-of-way.

(C-UDO-58, § 2, 5-9-11)

3-4.9 VARIANCE

Applications for variances from the requirements of the landscaping and screening standards may be approved by the Board of Adjustment after such Board of Adjustment holds a duly advertised public hearing in each case. Said application for a variance will be governed by the procedures set forth in Section B.6-1.4(B).

(C-UDO-76, § 1, 9-11-17)

3-4.10 SUGGESTED PLANT MATERIALS LIST

The suggested plant materials list includes common trees and shrubs suitable for use in the Forsyth County area. Due to individual site, soil, moisture, and microclimate conditions, professional expertise should be sought to determine the appropriate plant materials for any particular development project. Other appropriate plants not included in this list may also be used with the approval of the Director of Inspections or designee.

(A) **Large Variety Trees** (mature height: thirty-five (35) feet or greater):

European Black Alder	<i>Alnus glutinosa</i> (Pyramidalis)
Bald Cypress	<i>Taxodium distichum</i> (Monarch of Illinois, Shawnee Brave)
Sugar Hackberry	<i>Celtis laevigata</i>
Chalkbark Maple	<i>Acer leucoderme</i>
Freeman Maple	<i>Acer x freemanii</i> (Armstrong, Autumn Blaze, Celebration, Scarlet Sentinel)
Green Mountain Sugar Maple	<i>Acer saccharum</i> "Green Mountain"
Hedge Maple	<i>Acer campestre</i>
Southern Sugar Maple	<i>Acer Barbatum</i>
Trident Maple	<i>Acer buergeranum</i>
Bur Oak	<i>Quercus macrocarpa</i>
Sawtooth Oak	<i>Quercus acutissima</i>
Shingle Oak	<i>Quercus imbricaria</i>
Swamp White Oak	<i>Quercus bicolor</i>
Northern Red Oak	<i>Quercus rubra</i>

Nutall Oak	Quercus nutalli
Overcup Oak	Quercus lyrata
Green Ash	Fraxinus pennsylvanica (Marshall Seedless, Newport, Patmore, Summit,Lakeview)
Kentucky Coffeetree	Gymnocladus dioicus
Japanese Pagodatree	Sophora japonica (PrincetonUpright, Regent)
Silver Linden	Tilia tomentosa (Green Mountain, Sterling)
Hybrid Elm	Ulmus spp. (Homestead, Pioneer, Urban)
Willow Oak	Quercus phellos
Sugar Maple	Acer saccharum
Red Maple	Acer rubrum (Autumn Flame, Bowhall, Karpick, Northwood,October Glory, Red Skin, Red Sunset)
Scarlet Oak	Quercus coccinea
Southern Magnolia	Magnolia grandiflora
London Plane-tree	Platanus acerifolia (Bloodgood,Colombia, Liberty)
River Birch	Betula nigra (Heritage, DuraHeat)
Japanese Zelkova	Zelkova serrata (Green Vase, Village Green)
Tulip Poplar	Liriodendron tulipifera
Pin Oak	Quercus palustris
Black Gum	Nyssa sylvatica
Littleleaf Linden	Tilia cordata (Glenleven, Greenspire)
White Oak	Quercus alba
Japanese Scholartree	Sophora japonicum
Gingko	Gingko biloba (Lakeview, Princeton Sentry)
English Oak	Quercus robur (Eastigiata)
Japanese Katsuratree	Cercidiphyllum japonicum
Schumard Oak	Quercus schumardi
Chinese Elm	Ulnus parviflora

(B) **Medium Variety Trees** (mature height: twenty-five (25) to thirty-five (35) feet):

Sourwood	Oxydendrum arboreum
Thornless Honeylocust	Gleditsia triacanthos "Inermis"
Eastern Redbud	Cercis canadensis
Yoshino Cherry	Prunus yedoensis
Golden-Rain-Tree	Koelreuteria paniculata
Saucer Magnolia	Magnolia soulangeana
Weeping Cherry	Prunus subhirtilla pendula
Kwansan Cherry	Prunus serrucata "Kwansan"
Yellowwood	Cladastris lutea
Ironwood	Carpinus carolineana
Pistache	Pistachia chinensis
Redmond Linden	Tilia americana "Redmond"
American Holly	Ilex opaca (East Palatka, Foster's #2, Nellie R. Stevens)
Eastern Red Cedar	Juniperus virginiana (Emerald Sentinel, Princeton Sentry, Pendula)
Little Gem Magnolia	Magnolia "Little gem"
Fall Blooming Cherry	Prunus autumnalis
Fruitless Sweetgum	Liquidambar styraciflua "Rotundaloba"
European Hornbeam	Carpinus betulus (Fastigiata)
Hophornbeam	Ostrya virginiana

(C) **Small Variety Trees** (mature height: less than twenty-five (25) feet):

Japanese Maple	Acer palmatum
Japanese Dogwood	Cornus kousa
Flowering Dogwood	Cornus florida
Smoketree	Cotinus coggyria (Daydream, Royal Purple)
Crape Myrtle	Lagerstroemia indica (Dallas Red, Lipan, Natchez, Sioux, Tonto, Yuma)

Crabapple (var.)	Malus hybrida (var.)
Amur Maple	Acer ginnala
Wax Myrtle	Myrica Cerifer
Star Magnolia	Magnolia stellata
Japanese Tree Lilac	Syringa reticulata
Green Hawthorn	Crataegus viridis
Carolina Cherrylaurel	Prunus caroliniana
Choke Cherry	Prunus virginiana
Sargent Cherry	Prunus sargentii (Columnaris, HillierSpire)

(D) **Streetyard and Interior Shrubs** (mature height: approximately thirty-six (36) inches):

(1) Supplemental Evergreen Shrubs.

Warty Barberry	Berberis verruculosa
Dwarf Burford Holly	Ilex cornuta "Burfordii" nana
Japanese Holly (var.)	Ilex crenata (var.)
Azalea (var.)	Azalea sp.
Mugo Pine	Pinus mugo
Juniper (var.)	Juniperus sp.
Euonymous (var.)	Euonymous sp.
Leatherleaf Viburnum	Viburnum rhytidophyllum

(2) Deciduous.

Forsythia	Forsythia sp.
Dwarf Burning Bush	Euonymous alatus "Compacta"
Thunberg Spirea	Spirea thunbergi
Viburnum (var.)	Viburnum sp.
Oakleaf Hydrangea	Hydrangea quercifolia
Japanese Flowering Quince	Chaenomeles japonic

Potentilla	Potentilla fruticosa
Ornamental Grass Varieties	Mahonia bealei
Oregonholly Grape	
Nandina	Nandina domestica
Dwarf Nandina	Nandina domestica nana

(E) Primary Evergreen Shrubs and Outdoor Storage Area Screening Plants (installation height: six (6) feet):

American Holly	Ilex opaca
Burford Holly	Ilex cornuta "Burfordii"
Nellie Stevens Holly	Ilex cornata "Nellie Stevens"
Wax Myrtle	Myrica cerifera
Hetz Juniper	Juniperus hetzi
Arborvitae	Thuja occidentalis
Eastern Red Cedar	Juniperus virginiana
Japanese Black Pine	Pinus thunbergiana

(F) Groundcovers (planting areas, berms, wall planters):

Lily-Turf	Liriope muscarii
Hybrid Daylily	Hemerocallis hybrida
Aaronsbeard	Hypericum calycinum
Rockspray Cotoneaster	Cotoneaster horizontalis

(G) The following trees shall not be credited toward the requirements of Section B.3-4.2.1:

Bradford Pear	Pyrus calleryana "Bradford"
Silver Maple	Acer saccharinum
Hybrid Poplars	Populus spp.
Tree of Heaven	Ailanthus altissima
Mimosa	Albizia julibrissin

Royal Paulownia	Paulownia tomentosa
Pine (var.)	Pinus sp.

(C-UDO-52, § 1, 4-12-10)

ARTICLE 11

LANDSCAPING AND BUFFERING STANDARDS

11.1. GENERAL STANDARDS FOR LANDSCAPING AND BUFFERING.

11.1.1. PURPOSE.

The purpose of these landscaping, screening, and buffer requirements is to provide standards that will protect the health, safety and general welfare of the public, enhance property values, improve the appearance of the community, and preserve natural resources, trees, and native plants. Planting yard regulations are established herein to minimize potential conflicts between abutting developments, enhance the appearance of buildings and parking lots, and create a unified and attractive streetscape. These requirements will be applied to all new development, redevelopment or building expansion projects including streetscaping of rights-of-ways. These minimum requirements will:

1. Reduce soil erosion and increase infiltration in permeable land areas essential to storm water management and aquifer recharge;
2. Mitigate air, dust, noise, heat and chemical pollution;
3. Reduce the “heat island” effect of impervious surfaces, such as parking lots, by cooling and shading the surface area and breaking up large expanses of pavement;
4. Establish a landscape theme including street trees and streetscape designs to be used throughout the City to promote the overall character and identity of the community;
5. Address the design of entryways into the City to express the community’s values;
6. Establish a streetscape program;
7. Preserve existing native vegetation as an integral part of the wildlife habitats, and incorporate native plants and ecosystems into landscape design;
8. Promote innovative and cost-conscious approaches to the design, installation, and maintenance of landscaping while encouraging water and energy conservation;
9. Promote planting techniques that ensures long term health of plant

materials;

10. Screen unsightly equipment or materials from the view of persons on public streets or adjoining properties and buffering from uncomplementary land uses;
11. Maintain and increase property values by requiring site appropriate landscaping to be incorporated into development that is designed and installed by a qualified landscape professional.
12. Promote walkable pedestrian-scale streetscapes, traditional neighborhoods, and compact centers by exempting uses which relate to each other functionally and visually from certain requirements of this Section.

11.1.2. GENERAL STANDARDS.

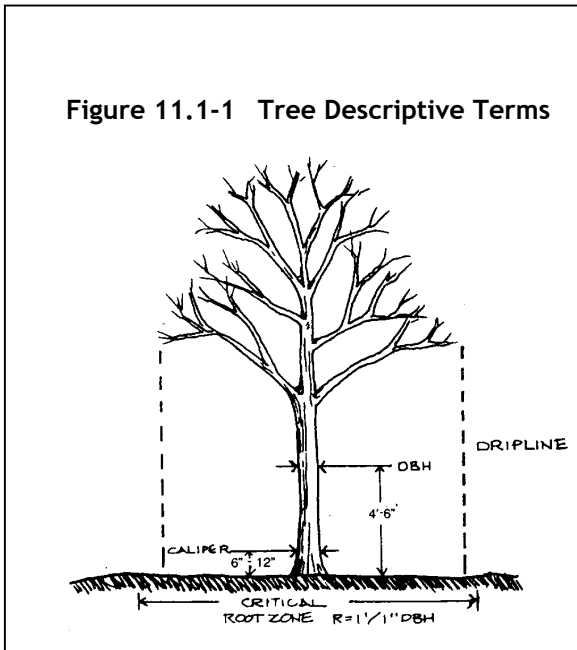
- A. **Retention of Existing Vegetation.** Existing trees, shrubs and ground cover shall be retained and incorporated into the landscape plan to the extent possible.
- B. **Qualified Designer and Installer Required.** Landscape materials shall be installed in conformance with the approved landscape plan prepared by in accordance with § 11.2.

11.1.3. INTERPRETATION OF LANDSCAPING TERMS.

Where necessary to interpret the precise meaning of technical landscaping terms used in this Section, reference shall be made to American Nursery and Landscape Association (“ANLA”)(formerly the American Association of Nurserymen), *The American Standard For Nursery Stock*, (1996), which document is hereby incorporated by reference.

- A. **Definitions.** In addition to the definitions set forth in Appendix A to this Ordinance, the following definitions shall apply to the regulation and control of landscaping within this Section.

Figure 11.1-1 Tree Descriptive Terms



1. **ARBORIST:** A qualified professional who has studied the science or art of cultivating trees especially for ornamental use.
2. **CALIPER:** A standard trunk diameter measurement for trees taken six to twelve inches above ground for up to and including four-inch caliper size and twelve inches above ground for larger sizes.
3. **CRITICAL ROOT ZONE (CRZ):** A circular region measured outward from a tree trunk representing the essential area of the roots that must be maintained in order for the tree's survival. The critical root zone is one foot of radial distance for every inch of tree DBH with a minimum of eight feet.
4. **CROWN:** The upper mass or head of a tree, shrub, or vine, including branches with foliage. (Source: G. Hightshoe, *Native Trees, Shrubs, and Vines for Urban and Rural America* (New York: Van Nostrand Reinhold & Co., 1988), at 790).
5. **DBH:** Diameter-at-breast-height is the tree trunk diameter measured in inches at a height of 4.5 feet above ground level.
6. **DECIDUOUS:** Plants that lose their leaves annually.
7. **DECIDUOUS TREE:** A tree which sheds or loses foliage at the end of the growing season. (Source: G. Hightshoe, *Native Trees*,

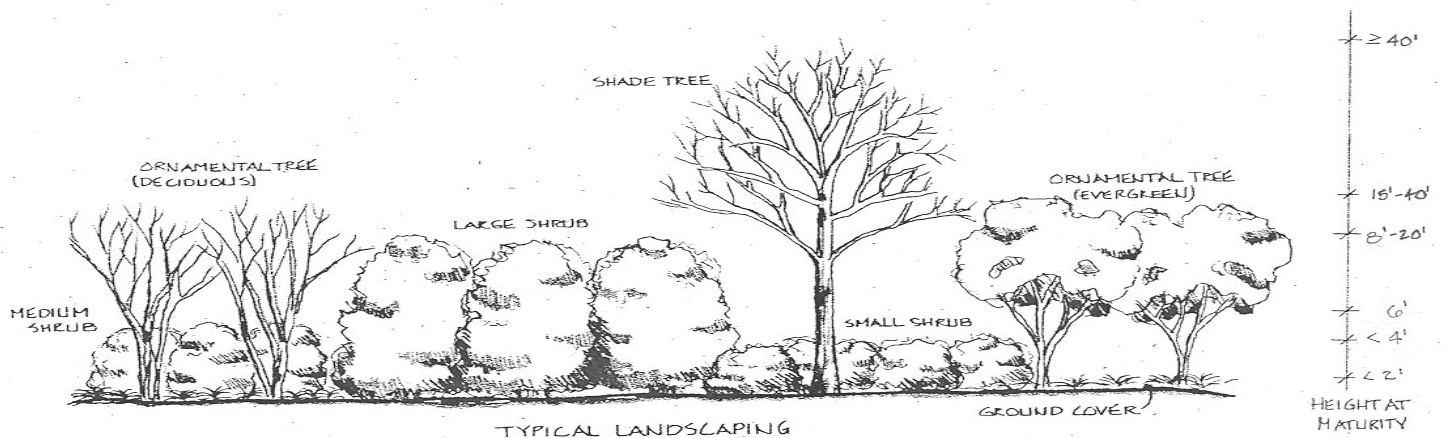
Shrubs, and Vines for Urban and Rural America (New York: Van Nostrand Reinhold & Co., 1988), at 790).

8. **DRIP LINE:** A vertical line from a tree canopy or shrub branch extending from the outermost edge to the ground.
9. **EVERGREEN:** Plants that retain their foliage throughout the year.
10. **EVERGREEN SCREEN:** A dense vegetative screen that grows to a minimum of 8 feet in height at maturity and retains foliage year round used for purposes of visual mitigation between zoning districts and/or uses.
11. **EVERGREEN TREE:** A tree which holds green leaves, either broadleaf or needle-shaped, throughout the year. (Source: G. Hightshoe, *Native Trees, Shrubs, and Vines for Urban and Rural America* (New York; Van Nostrand Reinhold & Co., 1988) at 791).
12. **GABION:** A wire basket containing primarily stones deposited to provide protection against erosion.
13. **GROUND COVER:** A prostrate plant growing less than 2 feet in height at maturity that is used for: a) ornamental purposes, b) alternatives to grasses, and c) erosion control on slopes.
14. **HORTICULTURIST:** A qualified professional who has studied the science or art of cultivating plants especially for ornamental use.
15. **LANDSCAPE ARCHITECT:** A landscape architect licensed pursuant to the North Carolina General Statutes.
16. **LANDSCAPE CONTRACTOR:** A landscape contractor, or nurseryman, certified pursuant to the NC Landscape Contractors Registration Board.
17. **LANDSCAPING:** The process or product of site development including grading, installation of plant materials and seeding of turf or ground cover.
18. **NON-LIVING MATERIALS:** Landscaping materials used to complement plants such as river rock, stone, bark, and similar materials.
19. **NUISANCE:** Any tree or shrub or part thereof that grows upon private or public property which 1) interferes with the use of any public area; 2) is infected with an infectious plant disease or insects; 3) is invasive and damaging to other plants; or 4) which endangers the life, health, or safety of persons or property.

- 20. PLANTING YARDS:** The required installation of landscaping and/or screening material between zoning districts and certain individual uses. The four Planting Yards are as follows:
- a. BUFFER YARD:** A planting yard comprised of a strip of land Containing landscaping and/or screening materials, having a varying minimum width, located along side and rear property lines between zoning districts and/or between certain individual uses, as specified in this Article.
 - b. BUILDING YARD:** A planting yard comprised of a strip of land Containing landscaping materials located along the front and/or sides of a building and having a varying minimum width, as specified in this Article.
 - c. PARKING LOT YARD:** A planting yard comprised of a strip, or strips of land containing landscaping materials located around and within a parking lot and having a varying width, as specified in this Article.
 - d. STREET YARD:** A planting yard comprised of a strip of land containing landscaping materials located along and parallel to a public street, or streets and having a varying minimum width, as specified in this Article.
- 21. SCREEN:** Vegetation, fence, wall, berm or a combination of any or all of these which partially or completely blocks the view of and provides spatial separation of a portion or all of a site from an adjacent property or right-of-way.
- 22. SHRUB, LARGE:** An upright plant growing to a mature height of more than 8 feet for use as natural ornamentation or screening.
- 23. SHRUB, MEDIUM:** An upright plant growing to a mature height of 4 to 8 feet.
- 24. SHRUB, SMALL:** An upright plant growing to a mature height of less than 4 feet.
- 25. SIGNIFICANT STANDS OF TREES OR SHRUBS:** A massing or group of trees or shrubs which are (1) in good condition and are established on the site, or (2) which may be among the earliest grown species of the area, or (3) which have been identified by the community with a particular area.
- 26. STREET TREE:** A tree planted along a public street or roadway behind or within the right-of-way.

- 27.TREE, ORNAMENTAL:** A small to medium tree, growing to a mature height of 15 to 40 feet and characterized by specific aesthetic qualities, such as colorful flowering, interesting bark or brilliant fall foliage.
- 28.TREE, SHADE:** A large tree growing to a height of 40 feet or more at maturity, usually deciduous, and characterized by its ability to provide canopy cover shade.
- 29.VINES:** A woody plant that spreads as it grows over the ground, walls or trellises.
- 30.XERISCAPE:** Landscaping with native plants that utilizes the existing environmental conditions to the best advantage, conserving water and protecting the native environment.

Figure 11.1.-2 Landscape Plants Typical Sizes



11.2 LANDSCAPE PLAN.

11.2.1. PLAN REQUIRED.

Landscape plans shall accompany any application for site plan approval. Landscape plans shall be submitted in conformance with the requirements of Table B-2, Appendix B to this Ordinance.

11.2.2. PERMITS REQUIRED.

All required landscaping materials shall be in place prior to the time of issuance of a final Certificate of Compliance (as required in Article 3).

Performance Guarantee. Subject to the conditions as specified in § 3.2.5.2.7 of this Ordinance, a temporary Certificate of Compliance may be issued for occupancy of a structure or initiation of a use prior to the completion of installation of all required planting yards.

11.3.3. VIOLATIONS.

Failure to maintain required landscaping or to adhere to an approved landscaping plan shall constitute a zoning violation, subject to any and all remedies set forth in § 1.6 of this Ordinance.

11.3 PLANTING YARDS.

11.3.1. PURPOSE.

Planting yards are intended to aesthetically enhance and separate different land uses and zoning districts from each other, as well as to beautify individual sites, the roadside or streetscape, and are intended to eliminate or minimize potential nuisances such as dirt, litter, glare of lights, and unsightly buildings or parking areas. Planting yards shall include the following:

1. Buffer Yards (see § 11.4)
2. Building Yards (see § 11.5)
3. Parking Lot Yards (see § 11.6)
4. Street Yards (see § 11.7)

11.3.2. APPLICABILITY. Planting yards shall be required for all uses except:

1. agricultural uses as listed in Table 11.6-1 of this Ordinance;
 2. any building or structure for which only a change of use in the same categories as the last permitted use, per Table 11.6-1, is requested (for expansions or additions to existing structures, see Section 3.2.4.1.2 for applicability);
 3. developments in the CC District (except that the Parking Lot yard requirements of § 11.6 shall apply);
 4. developments in a TND or PUD District, however, a Master Plan showing that proposed landscape in the development meets the intent of this Section 11.3, Planting Yards, shall be submitted at the time of rezoning;
 5. sites containing unoccupied public utility equipment that are less than 1,000 square feet in area, except that all electrical substations shall install a minimum Type B buffer per § 11.4.
- A. Expansion of Uses.** The expansion of an existing use, structure or parking lot shall be required to comply with this Section only for the expansion area. Applicants are encouraged, but not required, to landscape existing areas in conformance with this Section.
1. Different uses shall require different planting yards. Minimum dimensions shall apply and be measured horizontally. Plant quantities, in most cases, shall be based upon a point system.
 2. For the purpose of this section, building setbacks (as listed in Table 11.7-1) shall supersede planting yard requirements.
 3. Landscaping as required within a planting yard shall be counted for only that planting yard and shall not be used in calculating the minimum quantity for any other planting yard.

4. The point system, as partially illustrated in Table 11.3-1, is established to ensure that a minimum level of landscaping is achieved during development. It sets forth the points attributable to the five different plant types that are required in the three planting yards subject to the point system. Table 11.3-1 is to be used in conjunction with the other tables in this Article to determine total landscaping required. This table is applicable to planting yards, as well as in determining credits for tree preservation.
5. When calculating points, or quantities of plants, fractions shall be rounded upward to the higher whole number for decimals of .5 and higher. Decimals below .5 shall be rounded downward to the lower whole number.

Table 11.3-1: Points for Individual Plant Types

Type of Plant	Points
Shade Tree	12
Ornamental Tree	6
Large Shrub	3
Medium Shrub	2
Small Shrub	1

Total landscaping required for buffer yards, building yards and street yards is determined by multiplying the length of the respective planting yard by the minimum required points per linear foot shown in the landscaping requirements tables for each of the three planting yards subject to the point system. The resultant total point figure determines the total amount of landscaping required for the respective planting yard. In some cases, the tables which set forth the planting yard landscaping requirements include a minimum required number of individual plant types, such as shade trees, or large shrubs. In those instances, the minimum number of individual plants types required shall be considered included as part of the total landscaping required.

11.4. BUFFER YARDS.

11.4.1. PURPOSE. The purpose of buffer yards is to:

1. provide a transitional buffer between uses that may differ in development intensity and density; or
2. provide a minimum buffer between uses of similar intensity and density.

These landscaped planting yards are intended to ensure that a natural area of appropriate size and density of plantings is planted or preserved between zoning districts and/or uses. Buffer yards shall be of different types, based upon the relationship between the two adjacent land uses between which the buffer yard is to be located. The width of the buffer yard and the density of plantings shall increase as the difference between adjacent land uses increases. Minimum dimensions shall apply, and be measured, horizontally. Widths shall be measured from the respective property line, except where buffer yards are permitted to straddle property lines, as set forth in § 11.4.4.7. Where buffer yards turn at property corners, the length measurements determining plant quantities shall not be required to overlap.

11.4.2. YARD TYPES.

There shall be five different classes of land uses for purposes of determining the buffer yard type. Land use classes shall be based upon the specific land use to be developed, which is permitted either by right or conditionally, in the following groupings of zoning districts or land use groupings as listed in the Use Matrix of Table 8.6-1 of this Ordinance:

Class 1

AG Agricultural

RE Rural Estate

RL Residential Low Density

RM-1 Residential Medium Density

RM-2 Residential Medium Density

Residential uses - single-family detached homes and duplex only

Class 2

RV Residential Village

RC Residential Compact

Residential uses - other than Class 1

Class 3

B-1 Neighborhood Commercial/Office

O-I Office-Institutional

C-1 Light Commercial and Office

Institutional and Civic uses

Professional Office/Business Services uses

Class 4

C-2 General Commercial
CD Campus Development
PID Public Interest District
Retail Trade uses
Wholesale Trade uses

Class 5

I-1 Light Industrial
I-2 Heavy Industrial
Manufacturing and Industrial uses
Transportation, Warehousing and Utilities uses

- A. *Table 11.4-1 identifies the buffer yard type required for a given development, based on the relationship between the adjacent land uses. If an adjoining parcel is undeveloped, the minimum buffer shall be determined based on the zoning of the adjoining property. Table 11.4-2 contains the required plantings and dimensions of the respective buffer yard types. The width of the buffer yard and the density of plantings increase as the difference in the nature and intensity of development in the respective adjacent land uses increases.*

Table 11.4-1: Buffer Yard Chart

Buffer Yard Types For Adjacent Land Use Classes					
Land Use Class	1 EXISTING	2 EXISTING	3 EXISTING	4 EXISTING	5 EXISTING
1 PROPOSED	N/A	N/A	N/A (B ²)	N/A (C ²)	N/A (D ²)
2 PROPOSED	A	A	B	C	D
3 PROPOSED	B ¹	B ¹	A	A	C
4 PROPOSED	C ¹	C ¹	B ¹	A	B
5 PROPOSED	D ¹	D ¹	C ¹	B ¹	N/A

1. Complete visual separation is required through the use of densely planted landscaping that would provide complete visual separation within three (3) years of planting. See Section 11.4.4.8 regarding visual separation.
2. New single-family subdivisions shall provide the required buffer yard, if they abut existing non-residential developments which were constructed before the adoption of this Ordinance and lack the required buffer yard. If an adjacent non-residential development includes the required buffer yard, none shall be required of the residential subdivision.

Table 11.4-2: Buffer Yard Landscaping Requirements

Buffer Yard Type	Minimum Width	Min. Required Shade Trees	Min. Required Ornamental Trees	Min. Required Large Evergreen Shrubs	Min. Required Points per Linear Foot
A	8'	1/100'	Optional	Optional	0.2
B	15'	1/75'	1/100'	Optional	0.7
C	20'	1/50'	1/75'	Optional	1.0
D	50' or 25' w/ 6' high berm	1/50'	1/50'	Optional	1.2 or 0.9 w/ 6' high berm

11.4.3. EXEMPTIONS.

In addition to the exemptions as set forth in § 11.3.2, certain uses are exempt from the buffer requirements as described in this section. Exemptions include, but are not limited to the following:

- A. Lot or parcels on which the uses or buildings demonstrate compatible design elements and are linked to adjacent lots or buildings by a common system of sidewalks or other pedestrian walkways across property lines; and
- B. Lots or parcels separated by a public street right-of-way greater than 30 feet in width;
- C. Lots or parcels separated by a railroad right-of-way.
- D. Between similar land uses if one (1) of the following scenarios exists:
- E. In instances where similar or compatible land uses are immediately adjacent to one another and the installation of a Buffer Yard between the uses would negate the effectiveness of the development of those properties or impede the flow of traffic and pedestrians; or
- F. In instances where similar or compatible land uses are immediately adjacent to one another and the change in the topography is such that the installation of a Buffer Yard between the uses would negate the effectiveness of the requirement for a Buffer Yard.
- G. Such an exemption, if granted, would be subject to the following conditions:
 - 1. The developer would be required to provide the City of Concord Plan Review Service Center with sketches and calculations as outlined below:
 - a. A Sketch Plan for each of the individual properties that would be part of the proposed Coordinated Development that would show how the individual properties would meet the current CDO requirements for Screening and Buffer Yards. The developer must also provide calculations demonstrating the required quantity of plant materials and the ratio of pervious to impervious area; and
 - b. A Sketch Plan for a Coordinated Development. The Sketch Plan would have to show that the quantity of proposed landscaping for the Coordinated Development is equivalent to or greater than that which is indicated on the Sketch Plan(s) for the individual properties prepared per the current CDO requirements under item 1) above. The developer must also provide calculations showing that the ratio of pervious to impervious area is equivalent to or greater than the ratio of such as indicated on the Sketch Plan(s) for the individual properties prepared per the current CDO requirements under item above.
 - 1. The developer agrees that being exempted from the Buffer Yards requirements between similar land uses does not release a developer from providing the required number of equivalent points for landscaping or from meeting the required pervious to

impervious ratio.

2. The developer must provide written permission from the property owners involved in the Coordinated Development who have had the opportunity to review the Sketch Plan as required under Item 1.2) above and agree with the overall design and placement of landscaping materials.
3. The developer must understand and agree that all other standards as required under the CDO must be complied with.

Should a developer not agree to all of the above conditions, all Buffer Yards associated with development must be installed per the current requirements of the CDO.

11.4.4. STANDARDS FOR BUFFER YARD DEVELOPMENT.

- A. **Prohibited Uses.** The construction of any building or the placement of any mechanical equipment within the landscape buffer yard is not permitted except for equipment necessary for the provision of utilities. Signs may be placed within the buffer yard consistent with the Sign Regulations of this Ordinance. Active recreational uses, such as play fields, swimming pools, racquetball and tennis courts or other active, structured recreational uses, or circulation drives and parking lots, shall not be permitted in the buffer yard.
- B. **Permitted Uses.** The following other uses may be permitted in a buffer yard provided that none of the required plant material is eliminated, the intended screening is accomplished, the total width of the buffer yard is maintained, and all other requirements of this Section are met:
 1. passive recreation;
 2. Sculpture, outdoor furniture, picnic areas; pedestrian, bike or equestrian trails; golf courses,
 3. storm water retention basins;
 4. parks and open space.
- C. **Reduction in Required Buffer Yard Permitted.** Where a dedicated buffer yard exists on an abutting property, a reduction or elimination in a buffer yard for a property to be developed may be allowed subject to the following:
 1. the adjoining property owners have provided a written agreement restricting the use of the dedicated buffer yard to uses provided for in this Section

2. maintenance of the existing buffer yard consistent with the requirements of this Section, the Administrator may approve a reduction in the required buffer yard for the property to be developed
 3. the “net” buffer yard satisfies the minimum buffer yard requirements of this Section. The net buffer shall include the cumulative total for both required buffers.
- D. Existing Vegetation.** Existing healthy vegetation may be counted toward required landscaping. In order to do so, the landscape plan shall indicate the type, number and size of existing plants which are sufficient to comply with the respective buffer yard. It shall not be necessary to indicate the total inventory of existing plants. Only plants required to meet the provisions of this Ordinance shall be required to be listed.
- E. Application Toward Setback Requirement.** Buffer yard areas shall be counted towards required building setbacks.
- F. Designation of Buffer Yard as Landscaped Area.** Buffer yards shall be designated as landscaped areas on the application for development approval and as landscape easements when shown on a subdivision plat. The buffer yard shall be recorded with the title of the property as a landscape buffer yard easement.
- G. Buffer Yard On Property Line.** When platting abutting lots, the applicant may dedicate a buffer yard that straddles the property line, provided the cumulative buffer width is maintained for both yards.
- H. Visual Separation.** Where complete visual separation is required, that may be accomplished through the use of landscaping which provides year-round opaque screening within 3 years of planting, earth berms, or masonry walls, or a combination of two or more of these techniques.

11.5 BUILDING YARDS.

11.5.1. PURPOSE AND APPLICABILITY. The purpose of building yards is to aesthetically and visually enhance the appearance of buildings. Building yards shall be provided along the portion(s) of the building facing any adjacent off-street parking area, excluding loading/unloading areas. Minimum dimensions shall apply, and be measured, horizontally. Widths shall be measured from the respective building front wall. Where building yards turn at building corners, the length measurements determining plant quantities shall not be required to overlap. Building yards shall be of different types, based upon the size of the structure around which the building yard is to be located. The width of the building yard and the density of plantings shall increase as the size of the structure around which the building yard is to be located increases. Entrance walkways to buildings may cross building yards. The width of the entrance walkway shall not be calculated as part of the length of the building yard for purposes of determining the total required landscaping, provided, however, that the width deducted for the entrance walkway shall not exceed the width of the entrance to the building.

11.5.2. YARD TYPES.

There shall be four different categories of building size for purposes of determining the building yard type:

Category 1

Less than 2,500 Square Feet GFA (Gross Floor Area)

Category 2

2,500 Square Feet to 9,999 Square Feet GFA

Category 3

10,000 Square Feet to 99,999 Square Feet GFA

Category 4

100,000 Square Feet GFA and over

- A. Table 11.5-1 identifies the building yard required for a given development, based on the size of the structure around which the building yard is to be located, and specifies the required plantings and dimensions of the respective building yard.

Table 11.5-1: Building Yard Landscaping Requirements

Building Yard Category	Minimum Width	Min. Required Shade Trees	Min. Required Ornamental Trees	Min. Required Small or Medium Evergreen Shrubs	Min. Required Points per Linear Foot
1	6 feet	N/A	1 per 30 lin. Feet	8 per 30 lin. Feet	0.4
2	8 feet	N/A	1 per 30 lin. Feet	8 per 30 lin. Feet	0.5
3	12 feet	1 per 50 lin. Feet	1 per 50 lin. Feet	12 per 30 lin. Feet	0.8
4	16 feet	1 per 50 lin. Feet	1 per 50 lin. Feet	16 per 30 lin. Feet	1.0

11.6 PARKING LOT YARDS.

11.6.1 PURPOSE AND APPLICABILITY. The purpose of parking lot yards is to aesthetically and visually enhance the appearance of parking lots. Parking lot yards shall be located around and within parking lots and shall be of different sizes, based upon the size of the respective parking lot. The size of the parking lot yard shall increase as the size of the respective parking lot increases. Minimum dimensions shall apply, and be measured, horizontally. The requirements of this section shall apply to all new and expanded (10 or more added spaces) parking lots and parking lots of land uses that have substantially changed. If an existing parking lot (paved or unpaved) is expanded or improved to add 10 or more spaces, it shall comply with the parking lot landscaping requirements within the expanded or improved portion. If a parking lot is expanded or developed, then street yard, buffer yard and parking lot yard landscaping requirements shall be applicable.

11.6.2 DESIGN CRITERIA.

- A. Minimum Net Area of Landscaping.** Parking lots shall provide a minimum 10% net area of landscaping on the interior or exterior of parking lots.
- B. Minimum Quantity of Landscape Plantings.** Landscaped planting areas and islands for parking lot yards shall have one (1) shade tree, or two (2) ornamental trees, and eight (8) small shrubs per each ten (10) parking spaces.
- C. Minimum Planting Area Dimensional Requirements.** Planting areas and islands shall be not less than eight (8) feet in width and shall include a minimum of 150 square feet of open planting area for ornamental trees and 300 square feet for canopy trees. Shrubs, or ground covers may be planted within the required open planting area for trees without increasing the area. Planting areas and islands shall have a minimum prepared depth of 18 inches. All landscaped areas shall be protected from vehicular encroachment by concrete curb and gutter. Landscaped areas shall be covered with mulch, ground cover or grass between shrub and tree plantings.
- D. Location of Trees.** Required trees shall be located within or adjacent to parking lots as tree islands, medians, at the end of parking bays, traffic delineators, or between rows or parking spaces in a manner such that no parking space is located more than 60 feet from a parking lot tree.

11.6.3 EXCEPTIONS.

In instances where the strict interpretation of this Section will seriously limit the function of the parking area, increase stormwater runoff, or create ponding or pooling of water so as to impair the habitability of buildings or interfere with traffic circulation, the Administrator may permit a portion of the required landscaping to be located near the perimeter of the lot.

11.7 STREET YARDS.

- 11.7.1. **PURPOSE.** The purpose of street yards is to provide continuity of vegetation along the street right-of-way, creating a pleasing view from the road, and establishing a transition from vehicular thoroughfares, pedestrian areas or the built environment. Minimum dimensions shall apply, and be measured, horizontally. Widths shall be measured from the respective right-of-way/property line. Where street yards turn at street corners, the length measurements determining plant quantities shall not be required to overlap. Street yards shall be of different types, based upon the zoning of the property. The width of the street yard and the density of plantings shall increase as the intensity of the development increases. Street Yards shall not lie within any public utility easements for water, sewer, electric and/or telecommunication. Private utilities will be discouraged within street yards.
- 11.7.2. **APPLICABILITY.** Street yards shall be required for all developments subject to this Ordinance.
- 11.7.3. **YARD TYPE.** There shall be four different classes of street yard based on zoning or intended use for purposes of determining the street yard type.

The intent of Class 1 Street Yards is to create shade for sidewalks and public streets within residential neighborhoods. The intent of Class 2-4 Street Yard is to create an opaque screen between commercial development and street right of ways.

Class 1

RE Rural Estate
RL Residential Low Density
RM-1 Residential Medium Density
RM-2 Residential Medium Density
RV Residential Village
RC Residential Compact
Single family detached/attached residential use

Class 2

B-1 Neighborhood Commercial/Office
O-I Office Institutional
C-1 Light Commercial and Office
Multi-family residential
Institutional and Civic uses
Professional Office/Business Services uses

Class 3

C-2 - General Commercial

CD - Campus Development

PID - Public Interest District

*Retail Trade uses**Wholesale Trade uses***Class 4**

I-1 Light Industrial

I-2 Heavy Industrial

*Manufacturing and Industrial uses**Transportation, Warehousing and Utilities
uses*

- A. Table 11.7-1 contains the required plantings and dimensions of the respective street yard types.

Table 11.7-1: Street Yard Landscaping Requirements

Street Yard Level	Minimum Width	Min. Required Shade Trees**	Min. Required Points per Linear Foot
1 See 11.7.4	8'	1 per 40' to 50' depending on utilities and possible conflicts	0.24
2	8'	1 per 40' to 50' depending on utilities and conflicts	0.4
3	8'	1 per 40' to 50' depending on utilities and possible conflicts	0.5
4	12'	1 per 40' to 50' depending on utilities and possible conflicts	0.6

** The administration may approve the replacement of one shade tree with two ornamental trees if large shade trees will cause conflict with infrastructure. The conflicts must be identified by the applicant on the landscape plan.

11.7.4. Level 1 Residential Street Yard Requirements

1. Class 1 Residential Street Yards shall be located in the street right-of-way planting strip between the curb and sidewalk. The use of a level 1 Street Yard for commercial development would require Administrator approval.
2. Before planting, the soil within the planting strip shall be de-compacted by mechanical tillage to a minimum depth of 24 inches along the entire planting strip. The soil shall also meet the requirements of 11.8.3.

11.7.5 DESIGN CONSIDERATIONS.

- A. **Overhead Power Lines.** During redevelopment or upgrades to existing built sites, landscaping shall be improved to meet current requirements. The presence of existing overhead power lines within the street yard, will requires street yard trees to be ornamental trees. Larger shade tree varieties are encouraged where overhead power lines are not present. (see Fig. 11.7-1, below)

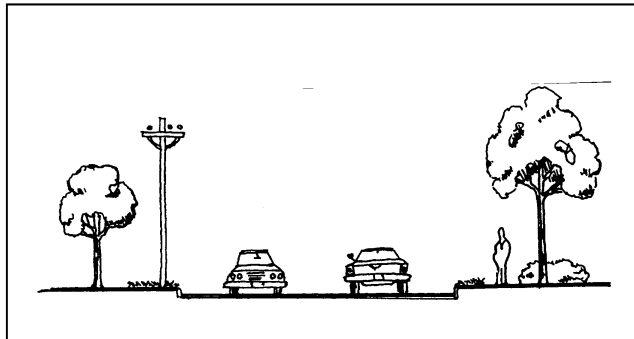
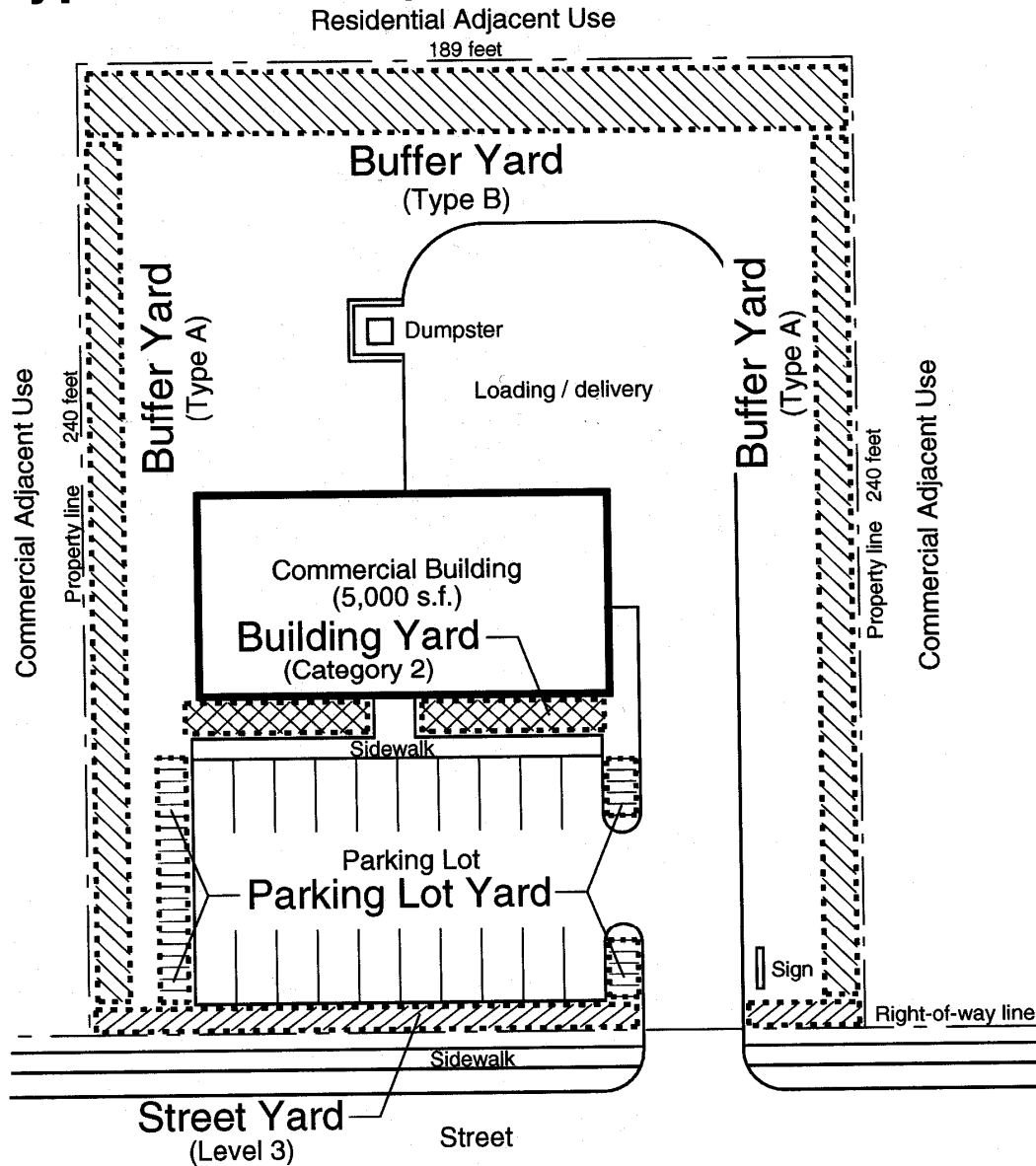


Figure 11.7-1

- B. **Site Triangles.** Corner lots, and in situations where driveways and alleys intersect with street rights-of-way, shall be kept free of landscaping and plant materials that interfere with the vision of a motorist or pedestrian. Street trees shall not be planted on public streets within 75' of a Stop condition.

Figure 11.7-2 Planting Yards Typical Diagram

Typical Planting Yard Illustration



Planting Yards

Buffer Yard - To separate and buffer different land uses

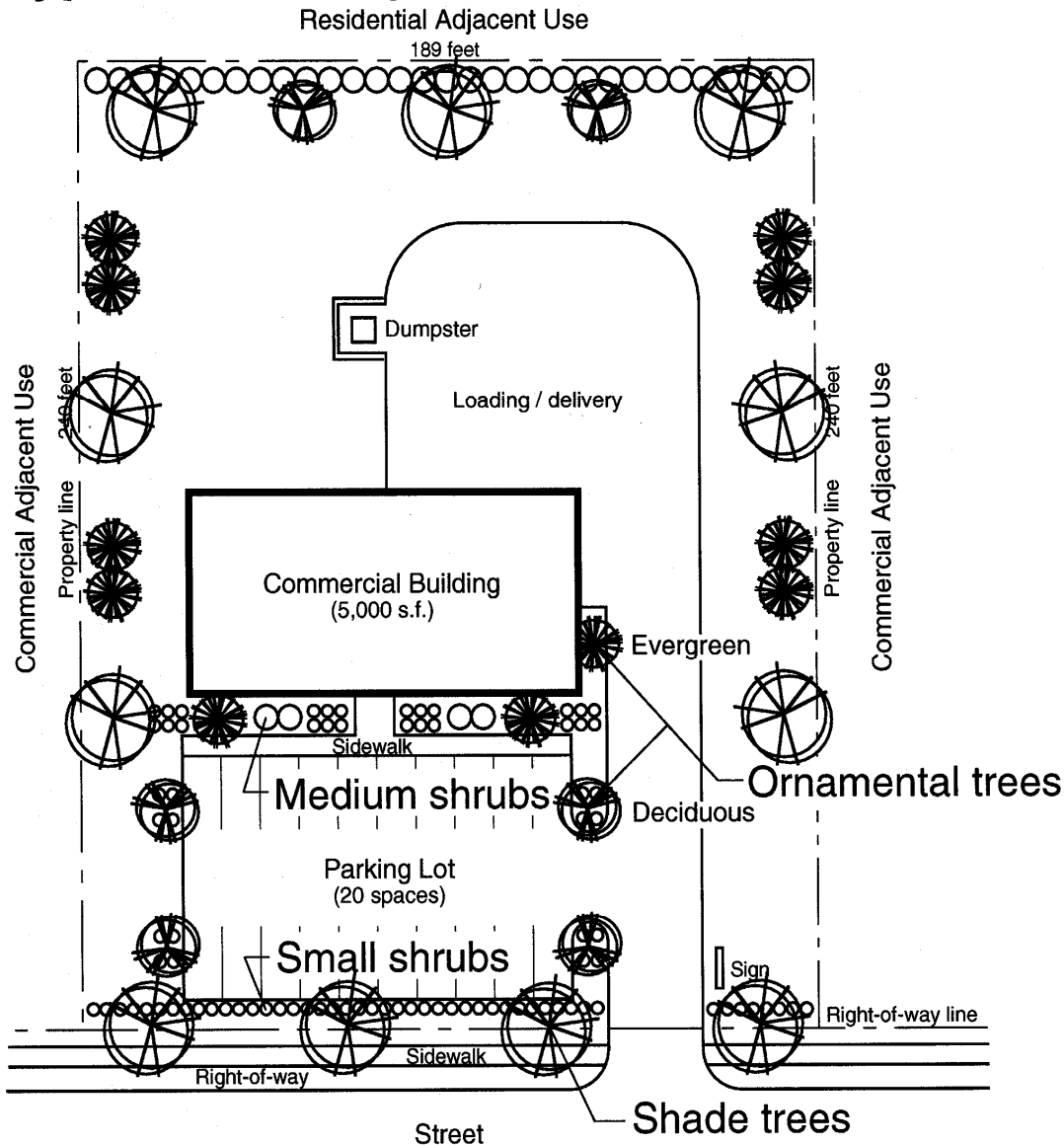
Building Yard - To enhance the aesthetic appearance of buildings

Parking Lot Yard - To enhance the aesthetic appearance of parking lots

Street Yard - To establish a coordinated pattern of tree plantings and other landscaping along streets

Figure 11.7.3 Planting Yards Typical Plan

Typical Planting Yard Illustration



Planting Yards - Commercial abutting residential and commercial

Buffer Yard - Type B - 1 shade tree per 40 feet as part of 0.8 points per foot

Building Yard - Category 2 - 1 ornamental tree and 8 small shrubs per 30 feet as part of 0.5 points per foot

Parking Lot Yard - 2 ornamental trees and 8 shrubs per 10 parking spaces

Street Yard - Level 2 - 1 shade trees per 50 feet as part of 0.5 points per foot

11.8. SPECIFICATIONS FOR PLANT MATERIALS AND INSTALLATION.

11.8.1. SIZE STANDARDS.

The minimum allowable plant size for new installations shall be as set forth herein. Due to the variation between genus and species, the caliper or height necessary for newly installed plant materials may vary. As a general rule, the caliper or diameter of trees shall be measured 6 inches from the ground level up to a 4-inch caliper diameter and at 12 inches for 4-inch caliper diameter or greater. The height of shrubs shall be a minimum of 24 inches as measured at ground level to the top of the densest portion of the top of the shrub or hedge.

- A. **Shade Trees.** Shade trees shall measure a minimum 2 to 2.5-inches in caliper, and 10 to 12 feet in height at the time of planting.
- B. **Ornamental Trees.** Ornamental trees shall measure a minimum 1.5 to 2-inches in caliper for single-stem trees or 1 to 1.5-inches in caliper for multi-stem trees, and 6 to 8 feet in height at the time of planting.
- C. **Large Shrubs.** Large shrubs, normally planted for screening, shall measure a minimum of 3 to 3½ feet in height at the time of planting. Shrubs planted for screening purposes shall form the required density to block visibility within three (3) years from the date of installation.
- D. **Small Shrubs.** Small shrubs shall measure a minimum of 18 to 24 inches in spread and/or height at the time of planting. A mix of deciduous and evergreen shrubs is encouraged in order to obtain a variety of color and texture throughout the year.
- E. **Ground Cover (Organic).** Organic ground covers shall provide 100 percent coverage on the ground within three (3) years of installation. Except for seeding, grass or turf shall provide 100 percent coverage upon installation. Organic mulch may be used around plantings to maintain soil moisture and prevent the growth of weeds.
- F. **Ground Cover (Inorganic).** Inorganic ground covers consisting of river rock or similar materials may be used provided they do not exceed 20 percent coverage of the required landscape planting area.

11.8.2 SELECTION OF PLANT MATERIALS.

All plant material, except Ground Covers, shall be selected from Table 11.1-1 Acceptable Plant Species. Consideration shall be given to the environmental conditions of the site, such as soil, topography, climate, microclimate, pattern of sun movement, prevailing winds and precipitation, and air movement to ensure that plant materials will be established successfully. Tree selection for

street yards, or other locations within utility rights-of-way, shall consider the presence or planned addition of overhead utility lines. Such trees shall be small and medium trees that are pest- and disease-resistant and are slow growing.

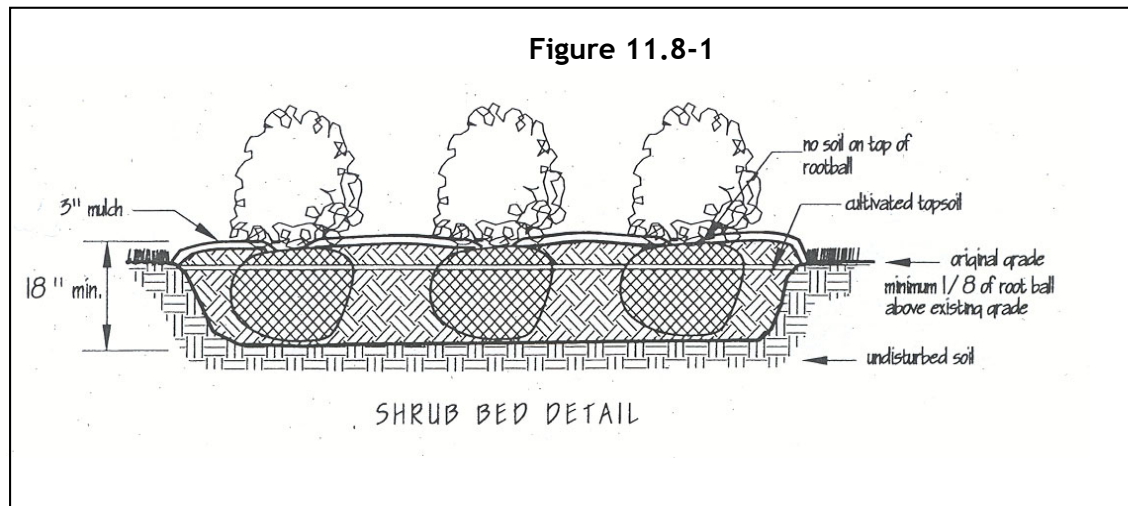
A. Substitution of Plant Materials. The Administrator shall have the authority to approve the installation of comparable substitution plant materials to satisfy the requirements of the approved landscape plan when the approved plants and landscape materials are not available at the time that installations are to occur, or when other unforeseen conditions prevent the use of the exact materials shown on the approved landscape plan. Significant changes that require the replacement and relocation of more than 25 percent of the plant materials shall require a new landscape plan and approval through the plan review process.

B. Mix of Genus and Species Encouraged. Except for Street Yard trees (§ 11.7), a mix of genus and species of trees, shrubs, ground covering, perennials and annuals is encouraged in order to avoid potential loss due to infectious disease, blight, or insect infestation. Street Yard Trees should retained a reasonably uniform pattern along both sides of a street within the same block or corridor.

11.8.3. STANDARDS FOR INSTALLATION OF LANDSCAPING MATERIALS.

1. Plant Pit, Hedge Trench and Shrub Bed Preparation. Preparation of plant pits, hedge trenches and shrub beds shall be done in conformance with Leaflet No: 601, *Planting Techniques for Trees and Shrubs*, North Carolina Cooperative Extension Service, (1997), which is incorporated by reference hereto and the following procedures:

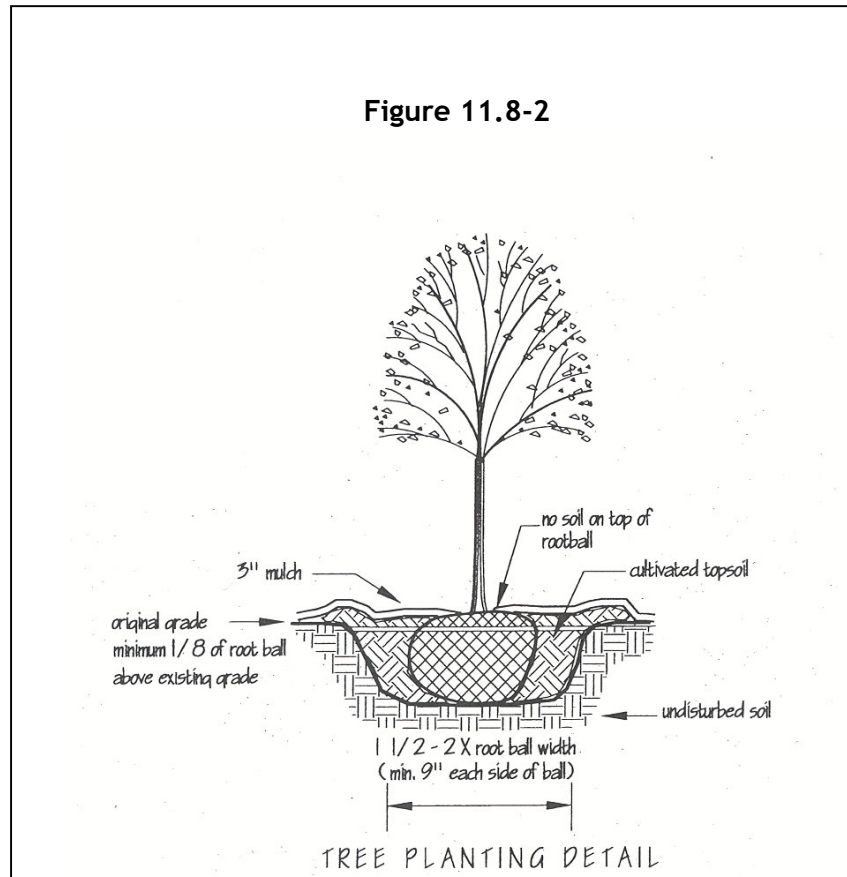
2. Site Maintenance During Construction. Equipment, wood and similar objects shall not be stored or laid upon the critical root zone area during or after construction. Chemicals and liquid construction wastes shall not be dumped, poured or spilled in the area of any plant materials. Washing of concrete mixers shall not be done near the site.



- A. Excavate pits with vertical sides approximately the depth of the rootball and with a circular outline which shall be approximately 2 to 3 times wider than the rootball. For planting pits, beds or trenches which are to be developed where paving existed previously, all paving and base stone shall be removed as part of the excavation.
- B. Remove rock, debris, inorganic compositions and chemical residues from soil in planting pits.
- C. Cultivate shrub planting pits to a minimum depth of 18 inches. Ground cover and vine planting pits shall be cultivated to a minimum depth of 12 inches.
- D. Install root ball on a flat, compact surface of undisturbed soil and remove any inorganic ties on top of the rootball. Remove the top 1/3 of wire baskets.
- E. Leave the top of the tree root ball exposed, to be covered by mulch only.
- F. Finish the planting with a minimum 3-inch layer of mulch of pine needles, tree bark or similar materials distributed around the tree trunk.
- G. Prepare soil, plant, fertilize, mulch, and control insects and disease in conformance with the North Carolina Cooperative Extension Service, *Landscape Management Calendar*, which is incorporated by reference hereto.

- H. Re-establish native plants salvaged from the site or relocated as a result of grading in conformance with the recommendations of the North Carolina Cooperative Extension Service.
- I. Support trees and shrubs adequately when planted in order to avoid interference with their typical growing patterns.

Figure 11.8-2



11.8.4. GENERAL MAINTENANCE OF LANDSCAPING AND SITE.

1. The applicant, property owner, and/or subsequent or successor owner, and their agents, including tenants, shall be jointly and severally responsible for maintenance of landscaping on the property on a continuing basis for the life of the development as specified in this Section. All required landscaping shall be maintained in a neat and orderly manner at all times. This shall include, but not be limited to, mowing, edging, pruning, fertilizing, watering, weeding and other activities common to the maintenance of landscaping. Landscaped areas shall be kept free of trash, litter, weeds and other materials or plants not a part of the landscaping.
2. Required landscaping shall be maintained in perpetuity, in accordance with § 11.8.4.1. After initial installation, it shall be the responsibility of the

owner and/or tenant of the property upon which the landscaping is installed to maintain all required plantings in a healthy, vigorous and attractive state, or replace dead, diseased or deteriorated plants. Within residential subdivisions, the maintenance of street trees in planting strips between curbs and sidewalks which are within the street right-of-way shall be the responsibility of the respective homeowners association, or the abutting homeowner, in the absence of a homeowners association.

3. If after three (3) years following installation of required screening plant materials, the plants have not formed an effective screen, or if an effective screen is not maintained, the Administrator may require that another type of screen be added or additional plantings be installed. Landscaped areas shall require protection from vehicular encroachment. The Administrator shall inspect all landscaping and no Certificate of Occupancy or similar authorization will be issued unless the landscaping meets the requirements of this Ordinance.
4. All required plant material shall be maintained in a healthy, growing condition as is appropriate for the season. Plant materials which exhibit evidence of insect pests, disease and/or damage shall be appropriately treated. Dead plants shall be promptly removed and replaced within the next planting season after removal. If replacement is necessary, all plants and other non-living landscape materials shall be equal in size, density and appearance as originally required at the time of the approval of the development permit.

11.8.5. UTILITY RIGHT-OF-WAY TREE TRIMMING.

Utility crews and companies are encouraged to do directional pruning of branches interfering with utility lines to prevent damage, disfigurement and heavy suckering and reduce future pruning needs. Utility tree trimmers are encouraged to remove branches to laterals (drop-crotching) in order to direct tree growth away from utility lines. Directional pruning includes top trimming, side trimming, under trimming and through trimming.

Table 11.8-1 Acceptable Plant Species.

The following list of plant species includes shade trees, ornamental trees and shrubs which are acceptable for landscaping in this area of North Carolina. A few species are labeled as “discouraged” due to marginal hardiness in this zone, to disease susceptibility, or to overuse.

Shade Trees

<u>Botanical Name</u>	<u>Common Name</u>
Acer rubrum	Red maple
Acer saccharum	Sugar maple
Amelanchier canadensis	Serviceberry
Betula nigra	River birch
Carya illinoensis	Pecan
Carya ovata	Shagbark hickory
Carya glabra	Pignut hickory
Carya cordiformis	Bitternut hickory
Cedrus deodara	Deodar cedar
Celtis occidentalis	Hackberry
Cupressocyparis leylandii	Leyland cypress (discouraged)
Diospyros virginiana	Persimmon
Fagus grandiflora	American beech
Fraxinus americana	White ash
Fraxinus pennsylvanica	Green ash
Ginkgo biloba	Ginkgo
Juniperus virginiana	Eastern red cedar
Liquidambar styraciflua	Sweetgum
Liriodendron tulipifera	Tulip poplar
Magnolia grandiflora	Southern magnolia
Nyssa sylvatica	Black gum
Pinus echinata	Short leaf pine
Pinus nigra	Austrian pine
Pinus thunbergii	Japanese black pine
Pinus taeda	Loblolly pine
Pinus virginiana	Virginia pine
Platanus acerifolia	London planetree
Quercus acutissima	Sawtooth oak
Quercus alba	White oak
Quercus bicolor	Swamp white oak
Quercus coccinea	Scarlet oak
Quercus falcata	Southern red oak
Quercus laurifolia	Laurel oak
Quercus nigra	Water oak
Quercus phellos	Willow oak
Quercus borealis	Northern red oak
Quercus shumardi	Shumard oak
Quercus velutina	Black oak
Quercus virginiana	Live oak
Sophora japonica regent	Japanese pagoda tree
Taxodium distichum	Bald cypress
Ulmus parvifolia	Lacebark elm
Ulmus alata	Winged elm
Zelkova serrata	Japanese zelkova

Ornamental Trees

<u>Botanical Name</u>	<u>Common Name</u>
Acer buergeranum	Trident maple
Acer campestre	Hedge maple
Acer palmatum	Japanese maple
Carpinus betulus	European hornbeam
Carpinus caroliniana	American hornbeam
Cercis canadensis	Eastern redbud
Cornus florida	Flowering dogwood
Cornus kousa	Kousa dogwood
Crataegus phaenopyrum	Washington hawthorne
Elegans angustifolia	Russian olive
Halesia carolina	Carolina silverbell
Hammamelis mollis	Chinese witch-hazel
Ilex fosteri	Foster holly
Ilex opaca	American holly
Ilex opaca hume	Hume holly
Ilex x attenuata savannah	Savannah holly
Koelreutaria paniculata	Golden rain-tree
Lagerstroemia indica	Crape myrtle
Magnolia soulangeana	Saucer magnolia
Magnolia stellata	Star magnolia
Malus hybrids	Flowering crabapple
Ostrya virginiana	Ironwood
Oxydendrum arboreum	Sourwood
Prunus cerasifera pissardii	Purpleleaf plum
Prunus serrulata kwanzan	Kwanzan cherry
Prunus subhirtella pendula	Weeping cherry
Prunus yedoensis	Yoshino cherry
Prunus caroliniana	Carolina cherry laurel
Pyrus calleryana 'Redspire'	Redspire pear (discouraged)
Pyrus calleryana 'Capital'	Capital pear (discouraged)

Shrubs

<u>Botanical Name</u>	<u>Common Name</u>
Abelia grandiflora	Glossy abelia
Aucuba japonica	Japanese aucuba
Azalea hybrida	Glenn dale azalea
Azalea indica	Indian azalea
Azalea obtusum Kaempferi	Kaempferi azalea
Bambusa multiplex	Hedge bamboo
Berberis julianae	Wintergreen barberry
Berberis thunbergii	Japanese barberry
Camellia japonica	Camellia
Camellia sasanqua	Sasanqua Camellia
Chaenomeles speciosa	Flowering quince
Cleyera japonica	Cleyera
Euonymus alatus	Winged euonymus
Euonymus japonicus	Evergreen euonymus
Eleagnus pungens	Eleagnus
Forsythia intermedia	Forsythia
Hammamelis virginiana	Witch-hazel
Hydrangea quercifolia	Oakleaf hydrangea
Ilex aquifolium	English holly
Ilex cornuta	Chinese holly
Ilex cornuta burfordi	Burford holly
Ilex cornuta burfordi nana	Dwarf burford holly
Ilex crenata 'convexa'	Convex japanese holly
Ilex crenata 'hetzi'	Hetzi japanese holly
Ilex crenata 'rotundifolia'	Roundleaf japanese holly
Ilex "Emily Brunner"	Emily brunner holly
Ilex glabra	Inkberry holly
Ilex latifolia	Lusterleaf holly
Ilex pernyi	Perny holly
Ilex vomitoria	Yaupon holly
Juniperus chinensis pfitzeriana	Pfitzer juniper
Juniperus chinensis hetzi	Hetzi juniper
Laurus nobilis	Laurel
Ligustrum japonicum	Japanese privet
Ligustrum lucidum	Glossy privet
Ligustrum vicaryi	Vicary golden privet
Loropetalum chinense	Lotopetalum
Mahonia bealei	Leatherleaf mahonia
Myrica cerifera	Wax myrtle
Nandina domestica	Nandina
Osmanthus fortunei	Fortune tea olive
Osmanthus fragrans	Fragrant tea olive
Osmanthus heterophyllus	Holly osmanthus
Osmanthus heterophyllus rotundifolius	Curly leaf tea olive
Pieris floribunda	Mountain andromeda

Pieris japonica	Japanese andromeda
Pittosporum tobira	Pittosporum (discouraged)
Prunus laurocerasus	English laurel
Prunus laurocerasus "Zabel"	"Zabel" Skip laurel
Podocarpus macrophyllus maki	Podocarpus (discouraged)
Prunus laurocerasus angustifolia	Narrow leafed english laurel
Pyracantha coccinea	Scarlet firethorn
Raphiolepis umbellata	Yeddo-hawthorn
Raphiolepis indica	India hawthorn
Spirea cantoniensis	Reves spirea
Spirea thunbergi	Thunberg spirea
Spirea prunifolia plena	Bridalwreath spirea
Spirea vanhouttei	Vanhoutte spirea
Taxus cuspidata	Japanese yew
Viburnum rhytidophyllum	Leatherleaf viburnum
Viburnum tinus	Laurestinus viburnum

11.9 TREE PRESERVATION**11.9.1. PURPOSE**

The purpose of this section is to establish a series of standards and measures necessary to preserve tree canopy cover and significant trees, which provide aesthetic and environmental benefits, as part of the development process. Requirements for tree save areas are designed to enhance and preserve the City's tree canopy and wooded sites and improve the overall quality of life.

11.9.2. APPLICABILITY

- A. The standards in this section shall apply to:
 - 1. All new residential subdivisions containing thirty (30) dwelling units or more in one or more phases of contiguous development
 - 2. Existing residential subdivisions containing thirty (30) dwelling units or more that are expanded by an amount equal to or greater than five (5) percent of the existing site area shall be required to comply with this section only for the expansion area.
- B. Single-family detached dwellings on individual lots of record are exempt from the provisions of this section.

11.9.3. MODIFICATIONS

- A. Where necessary to accommodate creativity in site design or where topographic or physical site conditions make strict adherence impractical, the Administrator reserves the right to review unique situations on a case by case basis and to make necessary modifications provided they meet the performance goals as set forth in this section, Section 9.10.8 Tree Protection Guidelines, Section 10.5 Open Space Standards, and Article 11 Landscape and Buffering Standards. The Administrator shall also have the authority to modify certain standards in this section in either of the following instances:
 - 1. Topographic or physical site conditions make adherence to these standards wholly impractical.
 - 2. Due to existing unusual or unique site characteristics, adhering to these standards would create an undue or unreasonable hardship.
- A. A written request shall be submitted to the City along with any necessary site plans to demonstrate the hardship. The findings of the Administrator shall be final and binding to all parties. Appeals of the Administrator's decisions may be made to the Board of Adjustment.
- B. The provisions of this ordinance may be modified during a period of emergency (such as a major storm, hurricane, tornado, other severe natural disaster, medical emergency, etc.) if compliance would impede the preservation of health and safety, rescue of life, protection of property from immediate danger, or the repair of utilities. Any emergency work shall follow as closely as possible the standards outline herein.

This provision shall not be interpreted to be a general waiver of the intent of this chapter.

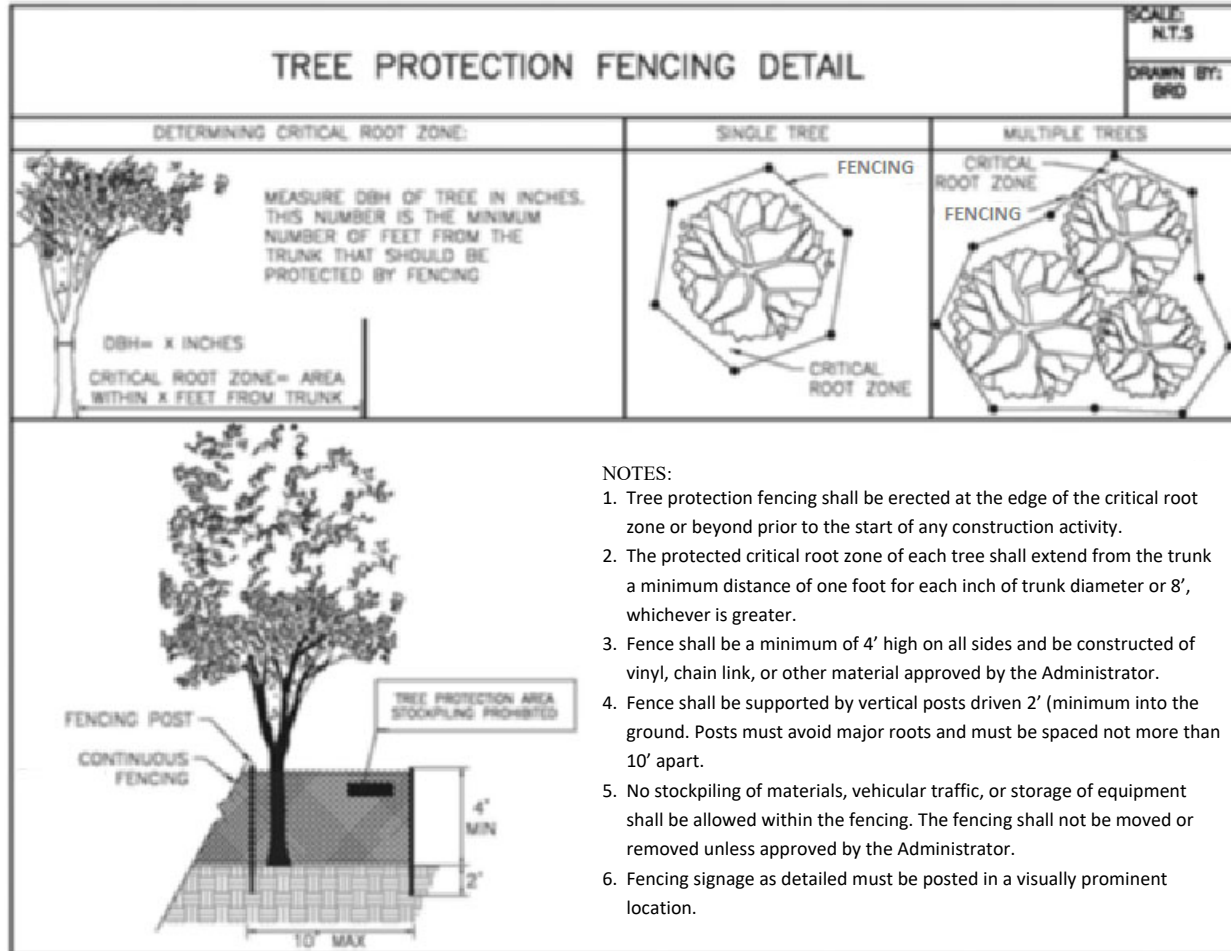
11.9.4. TREE PRESERVATION REQUIREMENTS

To protect the existing tree canopy of wooded areas and to enhance the tree canopy of areas of diminished canopy, the following tree preservation and tree planting provisions are required:

- A. An informal site assessment of existing tree canopies using aerial photography, aerial drones, or other methods approved by the Administrator prior to site preparation or development/redevelopment activities. The site assessment shall also include an inventory of significant trees on the site. No tree removal or land clearing shall be permitted on a site prior to the tree canopy assessment unless approved through the modification process or early grading has been approved through the Site Plan review process.
- B. For residential subdivisions, at least fifty (50) percent of the required open space as set forth in Table 10.5-1 shall be comprised of tree canopies identified during the informal site assessment that are contiguous to the extent possible, with priority given to canopied areas that include significant trees, and designated as a tree save area. Tree save areas shall count towards passive open space and shall be provided in a manner consistent with provisions in Section 10.5.
- C. Trees may be excluded from preservation requirements in the event that they are dead, diseased or unsafe as determined by the Administrator, or at the general discretion of the Administrator.
- D. If the tree save area does not meet the minimum required percentage of open space from canopies identified during the site assessment, then additional trees must be planted at a spacing of thirty-five (35) feet by thirty-five (35) feet and in compliance with materials and installation provisions in Article VII of the City's Technical Standards Manual and additional installation provisions of this section.
- E. Results from the initial site assessment for tree canopies and significant trees, identified tree save areas, and identified areas where trees, vegetation, and soils may be removed or modified shall be submitted as part of the landscape plan requirements in Section 11.2.1. The approval of this plan shall require an enforceable restriction on property usage that runs with the land to ensure that future activities maintain the tree save area consistent with the approved project plans.
- F. Tree save areas shall not be disturbed, cut, damaged, or removed, except for in instances described in Section 11.9.3.
- G. Protective barricades shall be placed around the tree save areas at least one (1) foot of radial distance from trunks of perimeter trees for every inch of tree DBH of the perimeter trees or at least eight (8) feet radial distance from trunks of perimeter trees, whichever is greater, prior to the start of development activities or grading.

Refer to (Figure 11.9-1) for tree protection fencing specifications. The protective barricades shall be identified on the landscape plan as per Section 11.2.1.

Figure 11.9-1: Tree Protection Fencing Detail (Source: City of Concord)



- H. To prevent unintended compaction of soil, the area within the protective barricade shall remain free of all building materials, dirt or other construction debris, construction traffic, storage of vehicles and materials, and mass grading.
- I. Except for driveway access points, sidewalks curb and gutter, no paving with concrete or other impervious materials within five (5) feet of protective barricades are allowed unless otherwise approved by the Administrator.

11.9.5. INSPECTIONS

The City Arborist, landscape architect or other qualified persons designated by the City are authorized to inspect the tree save areas. These designees are authorized to:

- A. Inspect the tree save areas at any time during construction.

- B. Inspect the tree save areas once a year after the issuance of a Certificate of Occupancy in order to ensure compliance with the approved site plan and to ensure that the tree save areas are properly maintained.
- C. The Administrator may issue a Notice of Violation for developments found to be in violation to comply with the provisions of this section.

11.9.6. TREE REPLACEMENT

- A. The following replanting requirements apply to those who commit a violation of these provisions resulting in the removal, damage, or death of trees in a tree save area. Trees removed in the tree save area due to emergencies, as specified in Section 11.9.3(C), and death by natural causes are excluded from these requirements.
 - 1. If tree save area affected by the violation is less than one (1) acre and tree stumps are present, replace at a one-to-one (1:1) ratio each removed, damaged, or dead tree with a tree of the same species.
 - 2. If tree save area affected by the violation is less than one (1) acre and tree stumps are not present, replant trees in the affected area based on the requirements specified in Section 11.9.4.(D).
 - 3. If tree save area affected by the violation is one (1) acre or more, replant trees in the affected area based on the requirements specified in Section 11.9.4.(D).
- B. Trees planted within the tree save area during site development/redevelopment activity and that die within one (1) year of construction completion shall be removed and replaced by the applicant.
- C. A plan denoting the proposed location and species of replacements shall be submitted to the Administrator for approval.

TREE CANOPY LANDSCAPING & SCREENING

9

9.1 PURPOSE & INTENTION

The purpose and intent of this ordinance¹ is to establish minimum standards for the preservation of existing and the planting of new trees and shrubbery in order to:

- Better control soil erosion;
- Protect and improve the existing tree canopy in order to enhance the health and quality of life of citizens;
- Maintain or increase the tree cover in all areas of the planning jurisdiction;
- Preserve and enhance the natural environment;
- Increase species and age diversity of the urban forest;
- Protect specimen trees;
- Provide habitat resources to native plants and animals;
- Promote use of non-invasive and native plant materials;
- Ensure compatibility between vegetation and adjacent infrastructure or utility systems;
- Better control soil erosion;
- Reduce the hazards of flooding;
- Stabilize ground water tables;
- Capture, treat, or store carbon dioxide, particulate matter, and other pollutants;
- Provide shade for cooling;

¹ As used herein, "ordinance" shall refer to Section 9, including all subsections thereof, of the Davidson Planning Ordinance, unless specifically noted otherwise.

SECTIONS

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- Screen noise, dust, and glare;
- Provide architectural interest and human scale;
- Maintain and/or improve aesthetic values;
- Enhance property values
- Balance preservation of tree canopy with recognition of private property rights.

9.2 APPLICABILITY & ADMINISTRATION

9.2.1 APPLICABILITY

Except as set forth in exemptions specified in this ordinance, the provisions of this ordinance shall apply to all land within the town's zoning jurisdiction, both public and private, according to the following:

- A. New Development:** All provisions of this ordinance shall apply.
- B. Existing Development:** All provisions of this ordinance shall apply to changes of use and/or expansions of existing conforming and non-conforming development. For tree removal on individual lots, see 9.3.3.

9.2.2 ADMINISTRATION

- A. Administration:** The Public Works Department shall assist the Planning Director and Board of Commissioners in the above Purposes & Intention. Additionally, an advisory board(s) shall assist in the periodic review and update of the standards in this section. As needed, the Planning Director may allocate responsibilities to town staff, authorized representatives, and/or the Arborist (as defined below) in order to administer this ordinance.
- B. Arborist:** The town may retain one or more certified arborists ("Arborist") to assist with maintaining a town-wide tree inventory, developing and approving plans for the development of property (both public and private) consistent with the provisions of this ordinance, conducting inspections, and such other matters related to the administration of this ordinance as the Planning Director may request.
- C. Documents & Approvals:**
 - 1. Permits and Inspections:** Permits and inspections shall be required for the activities as set forth in this ordinance.
 - 2. Landscape Plans:** Site work proposed as part of a Conditional Planning Area, Master Plan, or Individual Building process requires approval of plans and participation in activities as described in this ordinance.
 - a. Plan:** All plans shall meet the documentation standards set forth in this ordinance and, to the extent required by Section 14, the criteria for Landscape Schematic Design or Landscape Construction Documents set forth in Section 14. Depending on site conditions or characteristics, the documents may

require additional site or building information to be displayed.

- b. Specimen Tree Preservation:** In addition to the required landscape plan, any specimen trees as defined in this ordinance shall require a specific care plan developed in concert with the Arborist. The care plan shall be consistent with the practices set forth by the International Society of Arboriculture.

- 3. Revisions to Approved Landscape Plans:** Revisions may be requested by a property owner or required by the Town of Davidson prior to release of landscape bonds. All revisions to landscape plans must be approved by the Planning Director, who may consult with the Arborist.

All revisions should ensure that:

- There is no significant change in quantity, size, or location of plant materials, as determined in the discretion of the Planning Director or the Arborist; and
- The new plants are of the same general category (i.e., shade tree, ornamental tree, evergreen, or shrub) and have the same general features (mature height, crown spread) as the materials being replaced.

- 1. Major Revisions:** Include but are not limited to: grading changes, buffer alterations, and/or changes to more than 20% of the approved plant quantities, types, or species. These changes may require approval by Mecklenburg County in addition to approval by the Planning Director.

- 2. Minor Revisions:** Include but are not limited to: seasonal planting problems, lack of plant availability, and/or any identified site issues (i.e., dead and/or diseased trees, constrained/inadequate planting conditions).

- D. Final Plat:** Final Plat documents shall reflect all relevant site details pertaining to trees and vegetation in accordance with DPO 14, including: Designated tree save and/or open space areas; buffers; and, easements.

E. Landscape Maintenance Bond:

- 1. Bond:** Prior to the approval of Final Plat documents or the Initial Inspection for Certificate of Occupancy, a landscape maintenance bond shall be posted to ensure timely and proper completion of improvements identified in the approved landscape plan. The following projects and/or permits require bonds: All Conditional Planning Area, Master Plan, or Individual Building projects; site plan approvals; or, as determined by the Planning Director in consultation with the Arborist, building permits involving site work and/or features that must meet the requirements of this ordinance. Note: Per DPO 14.3.D, single-family houses are not considered Individual Building projects.
- 2. Requirements:** The bond shall meet all applicable bonding requirements of Mecklenburg County, as well as the following criteria:
 - The bond shall be obtained from an AA-rated surety bonding company authorized to do business in North Carolina and approved by the Planning Director or their designee; and

- The bond shall be payable to the town or its designee and shall be in an amount equal to 125% of the estimated cost to complete the improvements identified in the approved landscape plan.

F. Inspections:

1. **Site Visits:** Both before and after occupancy the Planning Director, the Arborist or authorized representatives of the town may periodically inspect sites subject to the provisions of this ordinance to confirm compliance therewith.
2. **Initial Inspection for Certificate of Occupancy:** After initial improvements required by the approved plans are complete, the Arborist shall inspect the tree and vegetative installations to confirm compliance with this ordinance and, as applicable, the American Standard for Nursery Stock, published by the American Association of Nurserymen. A Certificate of Occupancy for the building(s) or final plat for the development shall not be issued unless:
 - a. The landscaping required under this section is installed in accordance with these standards and in accordance with the approved permit, landscape plan or preliminary plat, as certified by the Arborist; and,
 - b. A Landscape Maintenance Bond is posted as required by section 9.2.2.E, above.
3. **Warranty Period:** After initial installation of all required plantings, a twenty-four (24) month warranty period for trees and eighteen (18) month warranty period for all other plantings shall commence from the date of notification to the town that initial installation of all required plantings is complete. Required replantings will not trigger the commencement of a new warranty period, but remain subject to the original warranty.
4. **Second Inspection & Release of Bond:** At the end of the warranty period, the Arborist shall re-inspect the required improvements for continued compliance with the approved landscape plan and to ensure that the landscaping is properly maintained. If any installations or areas require remedy, the town shall notify the owner in writing of (i) the necessary remedies, and (ii) a reasonable time period within which such remedies shall be completed by the owner (such time period to be determined by the Arborist or Planning Director or designee, but it shall in no event be less than 30 days or a timeline agreed to by all parties). If no remedies are required, the bond shall be released to the owner.
5. **Remedies:** If the owner fails to complete the requested remedies within the time period determined by the Arborist or Planning Director in accordance with section 9.2.2.E.4, above, the town may obtain and use such portion of the bond funds as necessary to complete the remedies based on actual costs. The town shall return any bond funds not spent in completing such work. Prior to using any bond funds, the town shall notify the owner, in writing, of its intention to do so if the owner fails to complete the required remedies within ten (10) days. If the owner has not completed the required remedies (or, in the case that the required

remedies reasonably cannot be completed within such time, has commenced and is diligently continuing work toward completing them) within ten (10) days of such notice, the town may obtain and use bond funds for the required remedies.

G. Replacement of Disturbed, Removed or Damaged Vegetation (Post-Warranty):

Any landscape areas and vegetation preserved or planted as part of an approved landscape plan or permit shall be continually maintained in good condition by the property owner. Failure to adequately maintain approved vegetation, including trees, or to comply with the replacement provisions of this ordinance may result in a civil penalty. Replacement requirements, processes, and civil penalties are listed in Section 15.3 Landscaping Violations.

9.3 TREE COVERAGE & PRESERVATION

9.3.1 TREE COVERAGE

- A. Minimum Tree Coverage:** All Conditional Planning Area, Master Plan, or Individual Building projects shall maintain or establish a minimum tree coverage according to their planning area classification as listed in Table 9-1. The minimum project canopy coverage can be met through a combination of preserved areas, required plantings (e.g., street trees, etc.), and other plantings. For the purposes of this requirement, project area refers to the entire area within the project scope that is not encumbered by easements, uses, or other features that prohibit tree plantings.

TABLE 9-1: TREE COVERAGE REQUIREMENT	
PLANNING AREA	MINIMUM PROJECT CANOPY COVERAGE
RPA	60%
NE	50%
EC1/EC2/CC	40%
NG	30%
VI	20%
LK/VC/VE/VCOM/NC1/ NC2/CBD/NS	15%

B. Requirements:

- 1. Applicability:** The tree coverage standards listed in Table 9-1 apply to all Conditional Planning Area, Master Plan, and Individual Building development proposals. The following are exempt from the tree coverage standards: Permitted work related to single-family detached and duplex houses outside of the aforementioned processes; Recreation Facility - Outdoor; Stable/Riding Academy, Horse Farm, Agriculture, Farm and substantially similar uses as determined by the Planning Director. For these uses, the tree coverage standards shall serve as a guide for each Planning Area.
- 2. Measurement:** The table assumes an average canopy area of: 1,000 square feet for large maturing trees; 800 square feet for medium maturing trees; and, 200 square feet for small maturing trees. Proposals must utilize these values unless the Arborist approves alternative values. For a description of each tree type, see 16.3 Definitions under Tree.

3. **Caliper & Height:** Trees planted to satisfy the Tree Coverage Requirement must have a minimum caliper of at least 2.5-3 inches and a minimum height of eight feet at the time of planting.
4. **Canopy Coverage:** For canopy preservation requirements see 9.3.2.
 - a. **Minimum:** No more than 50% of the minimum project canopy coverage in Table 9-1 may come from required preservation areas listed in 9.3.2. This requirement does not apply in the following planning areas: LK/VC/VE/VCOM/NC1/NC2/CBD/NS.
 - b. **Payment-in-Lieu :** For projects located in the LK/VC/VE/VCOM/NC1/NC2/CBD/NS Planning Areas, the minimum project canopy coverage may be met through payment-in-lieu so long as all applicable street tree and parking lot planting requirements are met and the payment-in-lieu option is approved by the Planning Director based on existing and proposed site features and the provisions of this ordinance. For payment-in-lieu values, see the Town of Davidson Fee Schedule. Note: In calculating the payment-in-lieu value a 1:1 credit per square foot shall be given for the following: Areas eradicated of invasive species (as determined by the Arborist) and replanted; or areas eradicated of invasive species and preserved for viewsheds as part of an approved plan. The decision to award credit shall be made by the Planning Director in consultation with the Arborist.

C. Credit Toward Coverage Requirement:

1. **Preserved/Planted Species:** All trees preserved or planted to satisfy the requirements of this ordinance, as well as other tree plantings included as part of an approved plan, may count toward the minimum project canopy coverage requirements established above. This means that the requirements may be met through the preservation of existing tree vegetation, new tree plantings, or a combination of both; however, every reasonable effort shall be made to meet the coverage requirement through the preservation of existing trees.
2. **Viewshed Preservation:** In calculating the canopy coverage requirement, areas maintained or restored to preserve a publicly-accessible viewshed documented as part of an approved plan may receive a 1:1 credit per square foot, not to exceed 10 percent of the total project area.

9.3.2 PRESERVATION OF EXISTING VEGETATION FOR CONDITIONAL PLANNING AREA, MASTER PLAN, AND INDIVIDUAL BUILDING DEVELOPMENT PROPOSALS

A. Required Preservation Areas: The following shall be preserved:

1. Trees and undergrowth (excluding invasive species and/or other vegetation that compromises the health of the surrounding ecosystem) in designated open space and primary conservation areas in an approved plan (see DPO 7.5), except for permitted pathways or site features as approved by the Planning Director in consultation with the Arborist.

2. Mature trees as defined by this ordinance within the right-of-way or shading the street. If the preservation of mature trees is in conflict with setback requirements, exceptions may be granted on a case-by-case basis by the Planning Director in consultation with the Arborist.
3. Specimen trees as defined by this ordinance and approved by the Planning Director in consultation with the Arborist.
4. A minimum percent of the existing mature tree canopy shall be preserved as specified in Table 9-2.

TABLE 9-2 : TREE PRESERVATION REQUIREMENT	
PLANNING AREA	MINIMUM PRESERVATION AREA
NE/RPA	40%
EC1/EC2/CC	30%
NG/VI	20%
LK/VC/VE/ VCOM/NC1/ NC2/CBD/NS	10%*

*Payment-in-Lieu : For projects located in the LK, VC, VE, VCOM, NC1, NC2, CBD, NS Planning Areas, the minimum preservation area requirement may be met through payment-in-lieu if approved by the Planning Director based on existing and proposed site features and the provisions of this ordinance. For payment-in-lieu values , see the Town of Davidson Fee Schedule.

B. Other Preservation Areas: Existing vegetation in other areas shall be preserved whenever feasible according to the following standards:

1. The decision to preserve trees and vegetation shown on the Environmental Inventory shall be made jointly by the Planning Director, the Arborist, the developer, and design team during the project approval process.
2. When selecting which trees and vegetation to preserve, the following shall be considered: Existing grading; age, condition and type of tree; whether the tree is invasive; proximity to water bodies and similar features; and, location of site improvements and utility connections.
3. Properties in the Local Historic District are subject to the Historic District Design Guideline's tree preservation requirements.

C. Prohibited Locations: No tree save area may be located within a utility right-of-way or easement without written permission from the utility agency. Additionally, preservation areas may not be located on portions of private lots unless: 1. Approved by the Planning Director based on site conditions; and, 2. Protected by a permanent easement.

D. Credit Toward Required Plantings: Existing vegetation which is designated for preservation may be applied toward the requirements of this ordinance.

E. Construction Standards :

1. **Access:** Construction access to a site should occur where an existing or proposed

entrance/exit is located. Except for driveway access points, sidewalks and curb and gutter, land disturbance within a tree dripline is prohibited as outlined below.

2. Prohibited Activity:

- Trenching, placing backfill in the critical root zone (CRZ), driving or parking equipment in the CRZ, and dumping of trash, oil, paint or other materials detrimental to plant health in close proximity of the trees to be preserved is prohibited.
- Construction traffic, storage of vehicles and materials, grading, and unapproved site disturbance shall not take place within the CRZ of the existing trees. The areas shall remain free of all building materials, stockpiled soil or other construction debris.

3. Protection Requirements:

- a. Location:** Protective barricades shall be placed around all trees designated to be saved prior to the start of development activities or grading. Such barricades shall be erected at a radial recommended minimum distance of 1.5 feet for every inch of trunk diameter at breast height (DBH) or the dripline, whichever is greater and outside the CRZ as approved by the Arborist, unless the Arborist approves a different distance based on the approved development plan or site circumstances. For example, a 12-inch diameter tree trunk at breast height should have a minimal radial protection zone of 18 feet. The circular diameter of protection around the trunk would be 36 feet from the base of the tree. Prior to approval of construction beginning, the Arborist must approve and inspect the barricade designs and installation.
- b. Materials:** Protective barricades shall consist of 2" x 4" posts with 1" x 4" rails or orange safety fence.
- c. Duration:** Protective barricades shall remain in place until development activities are complete.
- d. Grading Protocol:** Where grading within a tree dripline cannot be avoided and is approved by the Planning Director and/or Arborist, cut and fill shall be limited to 1/4 to 1/3 of the area within the dripline. Tree roots must be pruned with clean cuts at the edge of the disturbed area, and no fill shall be placed within the dripline of a tree without venting to allow air and water to reach the roots. In the case of an approved construction or grading permit within the CRZ, the Arborist shall provide and ensure recommendations to protect the affected trees are implemented.

- F. Replacement of Preserved or Planted Trees:** The proper care and protection of trees throughout and beyond the development process is critical. Penalties for violations range from \$50.00 to \$ 1,000.00 or more per tree or \$ 5.00 to \$10.00 per square foot disturbed and, depending on the penalty, may be enforced on landowners as well as parties executing work. For information on replacement plantings and civil penalties, see Section 15.3 Landscaping Violations.

9.3.3 TREE REMOVAL FOR LOTS NOT SUBJECT TO AN APPROVED PLAN

A. Applicability: The following standards apply to lots (whether existing or created subsequent to this ordinance's effective date) within the town's incorporated limits (i.e., excluding the extraterritorial jurisdiction) that are not subject to an approved Conditional Planning Area, Master Plan, or Individual Building development proposal. Notwithstanding the foregoing, lots located on Catawba Ave. but outside the town's incorporated limits are subject to these standards, and all lots are subject to the prohibitions listed in 9.3.3.B.7.

1. **General/Purpose:** No tree larger than twelve inches in diameter at breast height (DBH) may be removed without a permit from the town. A removal permit shall be issued by the Planning Director only after an applicant has met with the Arborist and received site-specific information on tree protection, care, and removal.
2. **Local Historic District:** Removal of a mature tree(s) within in a locally designated historic district requires a tree permit in accordance with this ordinance. **Additionally,** a Certificate of Appropriateness shall be required for removal of a mature tree within a locally designated historic district wherein the subject tree is specifically identified as significant in a historic district report or in the landmark designation ordinance (see Section 22). Mature trees shall be replaced by a tree of similar species, type, and must meet the requirements of Section 9.8.

B. Approval Process:

1. **Permit Required:** An approved permit, including fee payment (if applicable), shall be required for the removal or destruction of a tree(s) larger than twelve inches on any property, whether publicly or privately owned, as described above.
2. **Fee:** Development and permitting fees are as set forth in the Town of Davidson Fee Schedule . Note: A fee is not required for a tree removal permit unrelated to any other building activity on a site.
3. **Site Information:** The permit shall include a site plan illustrating the lot area, building and development footprints, and subject tree(s) intended for removal or that may be impacted by work. Work impacting the critical root zone (CRZ) of any tree over twelve inches must be described and/or shown on the plan. Based on site conditions the Arborist may require dimensions/measurements, an official survey, and/or other relevant information such as existing conditions, topography, easement location, etcetera.
4. **Site Visit:** The permit approval may require an on-site consultation between the applicant and Arborist in order to identify existing conditions and exploration of best practices for preservation and/or removal. The site visit should occur within 14 days of the receipt of a complete application (including fee, if applicable).
5. **Arborist Findings:** Within 14 days of the site visit the Arborist shall prepare and issue a written report describing the applicant's intended work, site and tree characteristics, and recommended practices or potential alternatives to the proposed scope of work (if applicable). Emergency situations may warrant expedited review or, in select cases, removal prior to permit approval. The Planning

Director, in consultation with the Arborist, shall determine whether a civil penalty is assessed in those situations.

Factors that may be considered in the Arborist's findings include but are not limited to whether the tree(s):

a. Health/Endangerment:

- Is dead, diseased, irreparably damaged, or the tree imminently endangers the health or safety of the general public or structures on the property or adjacent properties;
- Has not been appropriately maintained such that its current condition is compromised and cannot be corrected through reasonable care practices;

b. Characteristics:

- Is not a specimen tree, as defined by this ordinance;
- Has officially-documented historic or cultural value and requires approval by the Historic Preservation Commission.

c. Location:

- Is within a designated conservation area, such as common open space or property protected by conservation easement;
- Is located within the permitted building envelope;
- If removed will negate the lot's ability to meet the minimum tree canopy coverage listed in Table 9-1;
- Is part of a greater development plan for which an approved landscape plan has been issued pursuant to this section; an approved development plan for which an approved grading and landscape plan has been issued shall serve as the tree removal permit.

6. Permit Issued: The permit shall be issued when the Planning Director, in consultation with the Arborist, has determined that the process requirements set forth in Section 9.3.3.B have been satisfied.

7. Prohibitions:

- a. Tree-Topping:** The topping of trees and similar practices is strictly prohibited in areas regulated by approved plans; outside of site areas approved for pre-application clearing; in designated tree save or preservation areas or, within the public right-of-way. Topping is the practice of reducing a tree's size using heading cuts that shorten limbs or branches back to a predetermined crown limit (ANSI A300 Part 1 Pruning, Tree Care Industry Association).
- b. Root Zone Disturbance:** No activity affecting the critical root zone of a tree(s) in a conservation easement or dedicated open space areas may proceed without a tree permit.
- c. Unapproved Tree Removal:** The removal of a tree larger than twelve inches without an approved tree permit is strictly prohibited. This includes clear-

cutting or selective tree removal without an approved plan or permit. Tree removal related to site survey or development work must be approved by the Planning Director in consultation with the Arborist prior to the work beginning, and the removal of trees to avoid ordinance requirements is prohibited. See Section 15 Violations for further information.

C. Violations: See Section 15.3 Violations.

9.3.4 TREE REMOVAL FOR LOTS OR OPEN SPACE SUBJECT TO AN APPROVED PLAN

A. Applicability: The following standards apply to lots (whether existing or created subsequent to this ordinance's effective date), common areas, and/or open spaces subject to an approved Conditional Planning Area, Master Plan, or Individual Building development proposal (or any site plan requiring approval by the Town of Davidson).

1. General/Purpose:

- a. **Lots:** Lots created pursuant to an approved plan are subject to the conditions of that plan approval until the lot is sold (i.e., after Final Plat approval), at which point a lot becomes subject to the provisions of Section 9.3.3.

Note: Unless otherwise specified, lots created pursuant to an approved plan as noted above are subject to any enduring conditions and/or easements associated with that development and recorded on the plat that pertain to tree and vegetation preservation/removal.

- b. **Open Space/Common Areas:** Vegetation and trees within areas designated as open space and/or common areas are required to be maintained continually per the approved plan and/or applicable easements. Such areas and plantings must meet the post-warranty provisions of this ordinance, maintain approved buffers and easements, and are subject to Section 15.3 Violations.

- 2. **Local Historic District:** Lots within a local historic district are subject to the approved plan standards and the applicable historic district criteria as described in 9.3.3.A.2 above.

B. Approval Process:

- 1. **Permit Required:** Designated common areas/open spaces and lots created pursuant to an approved plan are subject to the permit approval process outlined in Section 9.3.3. above.

2. Prohibitions:

- a. **Tree-Topping:** The topping of trees and similar practices is strictly prohibited in areas regulated by approved plans; outside of site areas approved for pre-application clearing; in designated tree save or preservation areas or, within the public right-of-way. Topping is the practice of reducing a tree's size using heading cuts that shorten limbs or branches back to a predetermined crown limit (ANSI A300 Part 1 Pruning, Tree Care Industry Association).
- b. **Root Zone Disturbance:** No activity affecting the critical root zone of a tree(s) in a conservation easement or dedicated open space areas may proceed

without a tree permit.

- c. **Unapproved Tree Removal:** The removal of a tree larger than twelve inches without an approved tree permit is strictly prohibited. This includes clear-cutting or selective tree removal without an approved plan or permit. Tree removal related to site survey or development work must be approved by the Planning Director in consultation with the Arborist prior to the work beginning, and the removal of trees to avoid ordinance requirements is prohibited. See Section 15 Violations for further information.

C. Violations: See Section 15.3 Violations.

9.4 STREET TREE PLANTINGS

9.4.1 STREET TREE REQUIREMENTS

- A. Location:** Except along a rural road, alley, or the park side of a parkway (See Section 6 - Town Street Classifications), trees shall be planted wherever a new street right-of-way is constructed, or where new construction occurs along an existing street right-of-way. For certain street types, as specified in the Town Street Classifications in Section 6, street trees must be planted in tree wells in the sidewalk.
- B. Minimum Number:**
 1. Where at least an eight-foot planting strip has been permitted and no overhead power lines are located within 15 feet of the on-center planting location, a minimum of one large maturing tree shall be planted every 40-50 feet on average linear feet, or as otherwise approved by the Arborist. With Arborist approval, existing trees may be applied toward this requirement.
 2. For planting strips four to less than eight feet wide or those on-center planting locations within 15 feet of an overhead power line, trees shall consist of one small maturing tree per 25-30 feet on average, or as otherwise approved by the Arborist.
 3. Large maturing trees may be planted on the back side of sidewalk when the planting strip is less than eight feet.
- C. Planting Strip:** In general, the minimum planting strip width for street trees shall be the width indicated for the applicable street type in Section 6. However, the Planning Director in consultation with the Arborist may require a minimum planting strip width of eight feet to accommodate large canopy trees, including but not limited to willow oaks and red maples.
- D. Planting Specifications:** Street trees shall be installed in accordance with Section 9.8 Installation and Maintenance Standards, Section 9.10 Tree Specification List, and the American Standard for Nursery Stock, published by the American Association of Nurserymen. Additionally, street trees shall be planted in amended soils and, where determined necessary by the Arborist, in tree pits. Large and medium maturing trees shall have a minimum caliper of three inches; small maturing trees shall have a minimum caliper of two inches. The Arborist may approve or require varying caliper sizes as appropriate.

- E. Species:** Street tree species shall be selected from the Tree Specification List in consultation with the Arborist as follows:
1. Streets in commercial areas shall have trees which complement the face of the buildings and which shade the sidewalk.
 2. Streets in residential areas shall provide for an appropriate canopy, which shades both the street and sidewalk.
 3. High canopy trees are preferred for emergency vehicle maneuvering.
 4. A diversity of tree species shall be utilized to prevent the spread of pests and disease.

9.5 SITE LANDSCAPING

9.5.1 APPLICABILITY

The following standards apply to Conditional Planning Area, Master Plan, or Individual Building development proposals. These provisions for site landscaping shall apply to all buildings with a setback less than five feet as defined in Section 2, except where such buildings have a zero-foot setback from the public sidewalk.

9.5.2 MINIMUM REQUIREMENTS

- A. Documentation Standards:** New landscape materials and preserved vegetation shall be noted on the Landscape Schematic Design as part of the Preliminary Plat and shall include at a minimum the following information:
1. **Scale:** Landscape plan shall be drawn to scale no smaller than 1-inch equals 100 feet and include a north arrow and necessary interpretive legends.
 2. **Existing Vegetation:**
 - a. Location: General location, type and quantity of existing plant materials.
 - b. Undisturbed & Protected Areas: Existing plant materials, areas to be left undisturbed, and areas that will be protected.
 - c. Protection Requirements: Methods and details for protecting the critical root zone (CRZ) of existing plant materials and areas to be left undisturbed.
 3. **Proposed Vegetation:**
 - a. Identification: Locations, size and labels for all proposed plant materials.
 - b. Table/Schedule: Plant lists with common name, botanical name, quantity, and spacing and size of all proposed landscape material at the time of planting.
 - c. Planting and installation details as necessary to ensure conformance with all required standards.
 4. **Other Landscape Improvements:** Location and description of all other landscape improvements, including but not limited to earth berms, walls, fences, screens,

sculptures, fountains, lights, courtyards, walks or paved areas.

5. Other Site Improvements/Features:

- a. Connections & Limits: Connections to existing and future properties, along with property boundaries.
- b. Site Features: Location of any proposed buildings, driveways, parking areas, required parking spaces, roads and other hard surface elements; location of signage; and, location of overhead and underground utilities.

6. Certification: Notes indicating compliance with the ordinance.

B. Minimum Required Area: A minimum five-foot wide area, measured perpendicular from the building, shall be provided for landscaping along any side of the building facing a public right-of-way way or park. This does not apply to portions of buildings featuring a zero-foot setback from the public sidewalk as listed in Section 2. Buildings with frontage along a street or park may, at the discretion of the Planning Director, be exempt from this requirement in order to provide entrance walkways and/or plazas.

C. Minimum Required Landscaping: The minimum required landscaping shall consist of one of the following every 40 linear feet along the property boundary where a buffer is not required:

- 1. Two small maturing trees;
- 2. 10 shrubs; or
- 3. Any equivalent combination thereof, subject to Planning Director or Arborist approval.

D. Location of Plantings: In locating the minimum required landscaping care shall be taken to ensure that adequate space is provided for the width of tree spread, height and root system requirements.

E. Preferred Species: Native plants and wildlife supporting species are generally preferred in all landscape settings; however, at the discretion of the Arborist, alternative species may be planted. See the Tree Specification List and Shrub Specification List for approved species.

9.6 PARKING AREA LANDSCAPING

Parking lots are necessary features of the built environment. However, they shall be designed to integrate natural features within parking areas in order to mitigate environmental impacts and create welcoming places for vehicles and pedestrians.

9.6.1 APPLICABILITY

The parking area landscaping standards of this section shall apply according to the following standards. For a list of tree specifications, approved tree species and prohibited vegetation, see the Tree & Shrub Specification Lists.

- A. Existing Parking Lots:** All expansions of impervious surfaces in existing parking lots with five or more spaces shall comply with this ordinance.
- B. New Parking Lots:** All new parking lots shall comply with this ordinance.
- C. Small Parking Lots:** For small lots (36 spaces or less), landscaping shall be required at the perimeter only, according to the standards of Section 9.6.2.
- D. Large Parking Lots:** For large lots (more than 36 spaces), landscaping shall be at the perimeter and the interior, according to the standards of Sections 9.6.2 and 9.6.3. In large lots, the landscaping shall be placed to break the lot into parking modules of not more than 36 spaces.
- E. Other Areas:** All other components of parking lot areas not specifically dedicated to vehicular parking or circulation shall be landscaped in accordance with this ordinance.

9.6.2 PARKING LOTS - PERIMETER LANDSCAPING & SCREENING

- A. Minimum Width:** Perimeter landscape areas shall be a minimum of eight feet in width adjacent to all parking spaces and travel areas.
- B. Required Trees:** Large maturing canopy trees shall be planted not more than 40 feet on center. Any deviation from this standard, including the use of alternative planting intervals and/or small maturing trees if necessitated by site conditions, must be approved by the Planning Director in consultation with the Arborist.
- C. Required Shrubs:** A continuous row or staggered row of evergreen shrubs, with a minimum expected height at maturity of three feet, shall be installed at not more than six feet on center. If used in addition to a wall or fence, the evergreen shrubs shall be planted on the exterior side of such features. See wall and fence requirements below.
- D. Additional Requirements for Parking Lots Adjacent to Street Frontage:** A masonry wall or garden hedge (minimum three feet in height) shall be installed along any street frontage adjacent to parking areas and the finished side of the wall or fence shall face the exterior right-of-way or neighboring property. At sidewalks with extensive pedestrian use, the masonry wall installed at the back of the sidewalk, is required but an alternate location may be approved based on site conditions.
- E. Additional Requirements for Parking Lots Adjacent to Detached and Attached Houses:** Off-street parking areas adjacent to Detached and Attached Houses, shall be screened from such uses by one of the following:
 1. A garden wall, fence or hedge (minimum six feet in height); or
 2. Evergreen shrubs planted at no more than of six feet on center and a minimum of three feet in height at the time of planting with an expected maturity height of at least six feet; or
 3. A combination of the above options.
- F. Natural Buffers:** Where a natural buffer exists adjacent to parking areas, it is to remain undisturbed. Generally, only dead wood is allowed to be removed. The removal of undergrowth and limbing up of trees is prohibited unless approved by the Planning

Director in consultation with the Arborist. All buffers required by the watershed protection regulations in Section 17 and the stream buffer overlay standards in Section 21 shall remain completely undisturbed, except as provided for in those sections .

- G. Existing Vegetation:** Existing vegetation located in the perimeter landscape area which is designated for preservation may be applied toward the requirements of this section.

9.6.3 PARKING LOTS - INTERIOR LANDSCAPING

A. Landscape Islands

1. Landscape islands within parking lots shall be located so as to define and direct vehicular movement.
2. When located adjacent to parking spaces on both sides, landscape islands shall have a minimum width of eight feet.
3. Landscape islands with large maturing trees shall include a minimum of 200 square feet of pervious space per tree.
4. In large lots, the landscaping shall be placed to break the lot into parking modules of not more than 36 spaces.

- B. Minimum Spacing:** Large maturing trees shall be planted within the interior landscape islands of parking lots so that no part of any parking space is more than 40 feet from a tree.

- C. Other Landscaping Areas:** All other components of parking lot areas not specifically dedicated to vehicular parking or circulation shall be landscaped in accordance with this ordinance.

9.7 SCREENING

The following requirements apply to landscape screens. See Section 4 Site & Building Design Standards for non-landscape screening requirements.

9.7.1 LANDSCAPE SCREENS

- A. Applicability:** Landscape screens shall be required anywhere Section 3 - Uses with Additional Requirements specify a requirement for a landscape screen. Where landscape screens are required, they shall be installed in accordance with the provisions below.
- B. Minimum Width:** For a landscape screen, a minimum 15-foot wide pervious space shall be provided, unless based on site conditions another width is deemed appropriate by the Planning Director in consultation with the Arborist.

C. Minimum Required Landscaping:

1. A minimum of six large maturing trees and 40 shrubs shall be planted for each 100 linear feet of landscape screen area to provide continuous coverage.
2. Trees shall be a minimum 50 percent evergreen.
3. Shrubs shall be a minimum 75 percent evergreen.

D. Existing Vegetation: Existing vegetation located in the required landscape screen area may be counted toward the minimum required landscaping for landscape screens provided it is:

1. Designated for preservation; and,
2. Approved by the Planning Director in consultation with the Arborist.

9.8 INSTALLATION & MAINTENANCE STANDARDS

All trees and shrubs required by this ordinance shall meet the planting specifications provided below.

9.8.1 GENERAL STANDARDS

- A. Quality of Plantings:** All new plant material shall be of good quality, installed in a sound, workmanlike manner and meet the standards set forth in the American Standard for Nursery Stock by AmericanHort.
- B. Contractor Warranty:** The contractor shall warrant all new plant material as follows: Twenty-four (24) month warranty period for trees and eighteen (18) month warranty period for all other plantings.
- C. Soil Compaction:** Installation and construction practices shall be utilized which preserve existing topsoil or amend the soil to reduce compaction.
- D. Staking and Groundcover:** All trees shall be properly guyed or staked and mulched (3-4 inch layer) in accordance with accepted practices in the landscape industry, to prevent winds from loosening the roots.
- E. Chain Link Fencing:** Chain link and similar fencing materials, if used, shall be landscaped on their exterior side with evergreen shrubs minimum three feet in height and six feet on center at installation.
- F. Sight Distance Triangles:** No plants shall be planted within the sight distance triangle at an intersection, or driveway access points unless an unobstructed view between 30 inches and 72 inches in height is maintained.
- G. Overhead Utility Lines:** Public and private utilities which install overhead and underground utilities shall be subject to this ordinance and the industry's best pruning and trenching specifications. Where large maturing trees are required and overhead utility lines exist, small maturing trees planted one per 30 linear feet shall be substituted with the approval of the Planning Director.
- H. Encroachment Agreement:** No irrigation lines may be installed within the planting

strip, or other portions of the public right-of-way, without an encroachment agreement executed by the town or NCDOT as appropriate.

9.9 ALTERNATE METHODS OF COMPLIANCE

9.9.1 ADMINISTRATION

Select circumstances may warrant alternative approaches to meeting the intent and purpose set forth in this ordinance. In such cases, the following shall apply:

- A. Alternate Compliance Conditions:** Alternate landscaping plans, plant materials, or planting methods may be used where the strict application of landscaping requirements set forth in this ordinance would be unreasonable or impractical, or where it is necessary to protect existing vegetation. Such situations may result from streams, natural rock formations, topography, or other physical conditions; or from lot configuration, utility easements, unified development design, or unusual site conditions.
- B. Plan Standards:**
 - 1. Intent:** All proposed alternate landscaping plans shall be evaluated by the Planning Director, in consultation with the Arborist, to determine if the alternate plan meets the intent and purpose of this ordinance. This determination shall take into account the land use classification of adjacent property, number of plantings, species, arrangement and coverage, location of plantings on the lots, and the level of screening height, spread, and canopy of the planting(s) at maturity.
 - 2. Equivalency:** The Planning Director, in consultation with the Arborist, may approve an alternate plan that proposes different plant materials or methods provided that quality, effectiveness, durability, and performance are equivalent to those required by this ordinance.
 - 3. Administration & Documentation:** All administration, documentation, and other pertinent standards of this ordinance shall be met through the approval process for projects pursuing an alternate method of compliance, unless otherwise approved by the Planning Director in consultation with the Arborist.

9.10 PLANTING SPECIFICATIONS & APPENDICES

9.10.1 ADMINISTRATION

The following documents inform this ordinance's standards and shall apply to all proposals unless otherwise determined by the Planning Director in consultation with the Arborist.

9.10.2 PLANTING SPECIFICATIONS

- A. Tree Specification List:** This document contains a list of approved species, including growth characteristics and features, permitted to be considered for proposals.
- B. Shrub Specification List:** This document contains a list of approved species, including growth characteristics and features, permitted to be considered for proposals.

- C. **DPO Tree Planting & Mix Guidelines:** This document contains guidance on the appropriate distribution of trees, shrubs, and vegetation based on canopy coverage, square footage, and other factors.

9.10.3 APPENDICES

- A. **Tree Care Guidelines:** This document contains a list of terms, methodologies, and best practices related to tree establishment, maintenance, and preservation.
- B. **American Standard for Nursery Stock:** Produced by AmericanHort, this document establishes common techniques for managing the cultivation, sale, and installation of plants. Among other things, this includes standards for: Measuring plants; specifying and stating the size of plants; and determining the proper relationship between height and caliper, or height and width. <https://www.americanhort.org/page/standards>

ARTICLE I-A. - ENVIRONMENTAL PROTECTION ORDINANCE FOR THE TOWN OF INDIAN BEACH

Section 1. - Preamble.

Whereas, the Town of Indian Beach, being located on a barrier island between the waters of Bogue Sound and the Atlantic Ocean is environmentally sensitive owing to the nature of barrier islands on the North Carolina coast; and

Whereas, owing to the nature of the dynamics of barrier islands, use of individual properties within the Town is likely to detrimentally affect surrounding properties should the existing environmental balance be disturbed; and

Whereas, natural vegetation within the Town of Indian Beach is most desirable as promoting the existing environmental balance within said Town; and

Whereas, in areas where natural vegetation has heretofore been destroyed, a re-vegetation is highly desirable to promote the said environmental balance; and

Whereas, the Town, respecting the right of private ownership of property, wishes to encourage responsible development within the said Town for the enhancement of public safety and general welfare to the people within the Town of Indian Beach;

Now, therefore, the Town of Indian beach, does adopt as a part of its Zoning Ordinance, this Article which shall be referred to as the Environmental Protection Ordinance of the Town of Indian Beach.

Section 2. - Applicability.

The provisions of this Article shall be applicable to all existing districts within the Town of Indian Beach including the general business district, the civic and municipal district, the general residential district, the single-family residential district, and the residential resort district, and any future districts that may be created hereinafter, regardless of whether specifically incorporated in or referenced in dimensional, area, use, or other requirements set forth for the said district.

Section 3. - Vegetation requirements.

- 3.1. There shall remain intact on each lot or parcel of land within the Town of Indian Beach at least forty (40%) percent of the existing trees or shrubs whose trunks or main stems equal or exceed one (1") inch in diameter at grade.
- 3.2. Forty (40%) percent of all natural vegetation shall remain intact on each lot or parcel of land. However, with the prior consent of the Zoning Board of Adjustment, disturbance within these natural areas may be allowed so long as the required percentages of protective trees and shrubs as set forth in the preceding Section are not disturbed and so long as the property owner agrees to replace or install topsoil and re-vegetate the property so that forty (40%) percent of the same is covered.

Section 4. - Re-vegetation of previously disturbed areas.

In areas of the Town of Indian Beach that have been previously developed so that natural vegetation no longer covers forty (40%) percent of a lot or parcel of land, upon issuance of any building permit for additional development, the owner of said property must agree with the Town of Indian Beach in writing to install or replace topsoil and re-vegetate the lot or parcel of land so that at least forty (40%) percent of the said property is covered by vegetation at the conclusion of construction.

Section 5. - Use within vegetated areas.

- 5.1. There shall be no use made within the vegetated area set forth in Section 3, above, other than recreation which in no way will disturb said vegetation.
- 5.2. All structures shall be designed to blend in or suit natural features of surrounding land. In no case shall sensitive environmental topographical features be disturbed.
- 5.3. Should the requirements of this Article cause undue hardship on a property owner, the Zoning Board of Adjustment may grant a variance of the requirements hereof as long as said Board is satisfied that the variance will not be detrimental to the environment of adjoining property and to the Town of Indian Beach. However, a variance shall be granted only to the extent necessary to allow a property owner reasonable use and enjoyment of his property.

Section 6. - Permit required.

- 6.1. Issuance of Landscape Permit. No lot or tract of land, in whole or in part, in Indian Beach may be cleared, excavated, graded or filled and no improvements commenced on any property until the building inspector has issued a landscape permit; however, no landscape permit is needed for routine yard work or trimming and pruning of trees and shrubs which activity is neither intended nor likely to cause the death of trees and shrubs whose main stems equal or exceed two (2) inches in diameter at grade.
- 6.2. Application for Landscape Permit. The application to the building inspector for a landscape permit shall be accompanied by a plan or plat drawn to scale and showing the following in sufficient detail to enable the building inspector to ascertain whether the proposed activity is in compliance with this Article:
 - (a) The actual shape, location, and dimensions of the lot or tract of land.
 - (b) The shape, size, and location of all buildings or other structures to be erected, altered or moved and of any building or other structures already on the lot.
 - (c) All existing or proposed conditions on the property that are not natural. (For example, driveways, parking lots, utility lines, septic tank, etc.)
 - (d) The existing and intended use of all buildings or other structures on or proposed for the property.
 - (e) All areas of existing vegetation.
 - (f) The areas on the property where vegetation will be cut or removed.
 - (g) Such other information concerning the lot or property as required by the building inspector for determining whether the provisions of this article are being observed.

Section 7. - Town authorized to issue landscape permits.

- 7.1. The Town Manager is hereby vested to administer this Article to the same extent as the Building Inspector, specifically including but not being limited to, the issuance of landscape permits required under Section 6.
- 7.2. Appeals. Decisions of the Town Manager in administering this Article are subject to appeal to the Board of Adjustment pursuant to G.S. 160A-388(b), as said statute may be amended from time to time, and pursuant to Article VIII, Section 4 of the Indian Beach Zoning Ordinance.

Sec. 74-59. - Types and purpose.

Five types of municipal permits may apply to the different types of work to be performed on a property in addition to any county, state or federal environmental permits that may be required:

- (1) *Tree removal and oceanfront pruning permit.* Tree removal and oceanfront pruning permit applies only when trees are to be removed to protect a structure or improvement on a property, to promote the health and growth of other more desirable vegetation, or to remove dead or diseased trees, or to improve the appearance and/or livability of the property without significantly destabilizing the soil thereon or of adjacent properties; or for pruning oceanfront maritime vegetation. No earth movement other than minor leveling of soil after tree removal is required. This permit is issued by the building inspector after approval by the community appearance commission.
- (2) *Landscape permits.* Landscape permits are of three types, one of which is required for all construction activity in the Town of Pine Knoll Shores. Any activity that may increase or has the potential to increase current or future impervious surface coverage will be subject to one of these permits and the requirements of sections 74-289, 74-315, or section 74-334 as applicable.
 - a. *Minor landscape permit:* Applies when development activity takes place having little or no land disturbance, no adverse drainage impact on adjacent properties, little or no tree removal, nor other adverse impact on adjacent properties. This permit is usually used for minor property improvements as determined by the zoning administrator, or his authorized agent.
 - b. *Major landscape permit:* Applies for all development activity, other than activity on lots zoned for detached single family residential use, when there is a significant change in topography of a parcel lot that may affect off-site drainage and/or vistas of adjacent properties, or when tree removal is proposed. Examples of this permit include new commercial construction, multi-family construction and subdivision development,
 - c. *Single-family landscape permit:* Applies when there is activity on a lot zoned for detached single-family residential use when there is a significant change in topography of a lot that may affect off-site drainage and/or vistas of adjacent properties or when tree removal is proposed. Examples of this permit include new single-family residential construction and may also apply to substantial additions to existing single-family residential homes and a new swimming pool.

Landscape permits may be issued in conjunction with a building permit. The zoning administrator, or his authorized agent, after reviewing the proposed project and its impact on the site and adjacent properties, will determine which permit is required to approve the development activity. No landscape permit will be issued until the applicant has also applied for and been issued a building permit, if applicable for the construction activity necessitating a landscape permit

- (3) *Building permit.* Building permit applies to erection of a structure on a site or any other building activity, which according to the applicable NC Building Code, requires a building permit. It is issued by the building inspector.
- (4) *Wireless telecommunications service facilities permit.* There are three types of wireless telecommunications service facilities permits:
 - a. *Expedited permits.* Applications for wireless telecommunications service facilities are eligible for expedited permits when they are eligible facilities requests or collocations as defined in section 74-2. However, collocations that meet the definition of "substantial modifications" shall have to submit the application requirements for a "substantial modification."
 - b. *Substantial modification permit.* Applications for wireless telecommunications service facilities must be administered through the full review permit process when they are "substantial modifications" or otherwise do not meet the definition of "eligible facilities request."

- c. *Wireless support structure permit.* Applications for a new wireless support structure must be administered through the wireless support structure permitting process.
 - d. *Exemption.* The permitting and approval requirements of this chapter do not apply to routine maintenance and does not limit the performance of routine maintenance on wireless support facilities, including in-kind replacement of wireless facilities. Routine maintenance includes activities associated with regular and general upkeep of transmission equipment, including the replacement of existing wireless facilities with facilities of the same size.
- (5) *Sign permit.* Unless specifically excluded by the terms of this chapter, no sign may be constructed without issuance of a permit by the town, and payment of a fee to the town as set by the board of commissioners in the town's fee schedule. The sign permit process is set forth in 74-168.

(Ord. No. 2010-22, § X, 11-9-2010; Ord. No. 2011-07, § I, 9-13-2011; Ord. No. 2013-14, pt. I, 9-12-2013; Ord. No. 2016-02, Art. 2.B, 2-5-2016; Ord. No. 2016-07, Art. II.n., 6-8-2016; Ord. No. 2016-16, Art. II, d., 12-7-2016; Ord. No. 2019-08, 6-26-2019)

Sec. 74-64. - Tree preservation, protection and replacement.

- (a) *Purpose.* The purpose of this section is to promote the preservation, maintenance, and planting of trees, plants and shrubs on private property to: Safeguard and enhance real estate values; reduce noise, glare, and heat; conserve energy; buffer noise and wind; mitigate stormwater runoff; protect properties from erosion; provide habitats for animals; and encourage the most appropriate use of land throughout the town. Compliance of landscape plans with tree preservation and protection standards is required before any permit will be issued. Before a certificate of occupancy will be issued, all landscaping must be completed in accordance with the approved landscape plan. Exceptions may be granted in accordance with the provisions of subsection 74-64(d)(8). Violations of any of the provisions of this section are subject to the penalties and remedies listed in section 74-28.
- (b) Lot owners shall strive to assure that any proposed new construction, development or redevelopment will make effective use of existing terrain and environment, preserve to the extent possible the maritime forest and shrubbery indigenous to the town and employ exterior designs and materials that harmonize well with the natural environment.
- (c) *Designation and protection of native plants and plants of special concern.* It shall be the policy of the town to protect to the maximum extent feasible those trees and shrubs native to the maritime forest in which the town is located. All structures, walls, decks, drives or other property improvements shall be designed in such a way so as to minimize the destruction of native plants and plants of special concern, and to preserve and to protect those remaining as much as practicable. Where landscaping is required by this division 2 Permits, it shall be accomplished as much as feasible through utilizing the existing topography and environment of the property and the use of those plants which naturally occur within this area or plants of special concern. The town hereby designates the following plants as plants of special concern which are listed in the pamphlet "Building and Landscaping in Pine Knoll Shores", available at Town Hall:

American Beach Grass	Laurel Oak
American Holly	Live Oak
American Olive	Loblolly Pine
Bayberry	Magnolia
Black Cherry	Mimosa
Black Gum	Northern Bayberry
Black Locust	Panigrass (Bitter Panicum)
Cherry Laurel	Purpleleaf Plum
Chickasaw Plum	Smilax
Chinese Holly	Red Maple
Common Crepe myrtle	Sea Oats
Crabapple	Southern Waxmyrtle
Dogwood	Sweet Gum
Eastern Red Cedar	Virginia Creeper
Hickory	Yaupon Holly
Ironwood	Water Oak
Japanese Black Pine	White Poplar
Japanese Maple	Willow Oak

(d) *Tree preservation standards.*

- (1) If a property has been timbered or clear-cut, it cannot be subdivided or redeveloped for three years after removal of the trees to prevent subversion of the intent of the ordinance from which this section derives, as permitted by G.S. 160A-458.5(c)(1).
- (2) On each property for which a major landscape plan or single-family landscape plan is required, the landscape plan must specify that new and existing trees that meet the standard of regulated trees that are anticipated to survive the development process, but do not, must be replaced by new 1.5" diameter trees at measurement height of special concern or an equivalent as specifically approved by the community appearance commission. The community appearance commission shall review and determine the additional trees, if any, needed. The property owner shall be responsible for maintaining all replacement trees required by this section in a healthy condition for a period of two years from planting. Any dead, unhealthy or missing trees shall be replaced and replacement shall occur at the earliest suitable planting season as determined by the town.
- (3) On each property for which a tree plan is required by this section, the tree plan must allow for a minimum tree density standard as follows: For each 1,000 square feet of pervious surface, excluding septic field, two trees, six inches in diameter or greater measured at diameter breast height or 3.5 feet above natural grade, as applicable. New and/or existing trees that do not survive the development process must be replaced by new 1.5" diameter trees at measurement height as specifically approved by the community appearance commission so that the minimum standard tree density is maintained. The property owner shall be responsible for maintaining all replacement trees required by this section in a healthy condition for a period of two years from planting. Any dead, unhealthy or missing trees shall be replaced and replacement shall occur at the earliest suitable planting season as determined by the town. Palm trees may not be used to meet the minimum density requirement. In the event that an oceanfront property cannot meet the required tree density based on six inch trees, the community appearance commission may recommend that the tree density be considered based on three inch trees.
- (4) Landscape plans for properties subject to the ordinance from which this section derives shall show the existing trees to be removed for development of the property. No regulated tree shall be destroyed outside the clearing limits indicated on the major landscape permit or single-family landscape permit request unless written approval has been granted by the zoning administrator, or his authorized agent during the landscape plan and final plat approval process.
- (5) Planting of trees native to eastern North Carolina and/or adaptable to the coastal conditions and climate of Pine Knoll Shores is strongly encouraged. As a resource for development of landscape plans, the town shall maintain and make available a list of desirable trees based on mature height.
- (6) Property owners shall preserve all existing heritage and specimen trees unless doing so presents an economic hardship that denies property owners reasonable use of their property.
- (7) The planting of invasive and noxious plants, including, but not limited to *Vitex rotundifolia*, is prohibited. See section 38-12.
- (8) Requests for delay in completing the plantings called for in an approved major landscape plan and single-family landscape plan may be granted if such delays are caused by poor weather conditions for planting, delay in obtaining plant material or by other circumstances beyond the control of the owner or developer. Requests shall be submitted in writing to the town. Certificate of occupancy shall be issued upon approval of a request for planting delay. To receive an approval for this type of delay, the property owner shall post a bond or produce a certified check or an irrevocable letter of credit, any of which shall be 1½ times the estimated cost of the materials and planting. In any case, planting shall be completed within nine months from the approval of a request for a planting delay at which time the site will be inspected by the zoning administrator, or his authorized agent and community appearance commission.

(e) *Tree protection plans and standards.*

- (1) Tree protection plans shall be required for all applications for landscape permits.
- (2) All major landscape permit and single-family landscape permit applications shall show heritage trees, specimen trees, and existing trees being protected.
- (3) Adequate measures shall be taken to protect trees and their root systems. All trees to be preserved or protected and all newly planted trees shall be surrounded by protective barriers to safeguard tree roots and create the protected root zone. The minimum standard for barriers shall be fencing three feet high, clearly marked with tape. All construction activities: Excavating, trenching, construction storage and dumping, driving or parking of any vehicles and equipment, any change in grade due to excavation, soil placement or construction materials, or placement of any debris on tree roots shall be prohibited within these protected root zones. The zoning administrator, or his authorized agent will work with construction personnel to determine where construction equipment and materials may be placed on the lot. Barriers shall remain in place until all work is completed.
- (4) Tunneling shall be the preferred method of installing utilities if utilities cannot be routed around the tree and outside the protected root zone. Tunneling shall be offset to one side of the trunk and at a depth of greater than one foot. Based on guidelines that a tree requires a root ball of at least one foot for each one inch of trunk diameter, the area protected from tunneling should be calculated to determine the circumference area for tunneling.

(f) *Replacement of damaged shrubs and trees; time limit; violation.*

- (1) The zoning administrator, or his authorized agent along with a person(s) from the community appearance commission are authorized to inspect and subject to the ordinance from which this section derives to determine compliance. Members of the community appearance commission may conduct investigations deemed necessary to carry out the duties described herein.
- (2) Any sand, soil, dirt or earth which has been removed, relocated, graded, excavated, added to, filled or disturbed in violation of this chapter and any trees, shrubbery, grass or other vegetation which has been killed, damaged, destroyed or removed in violation of this chapter shall be restored or replaced within 60 days of notice from the zoning administrator, or his authorized agent. Each day after the 60-day period that the violator fails to perform such restoration or replacement shall constitute a new and separate violation. As required by provisions of this subdivision, any such replacement shall, where feasible, be accomplished through the use of plants which naturally occur within this area, with emphasis upon those plants of special concern.
- (3) Injury or destruction of trees protected by this section that result in total loss of a tree shall require replacement within six months of the notice of violation. Injuries shall be assessed by a professional arborist who will determine whether the tree can be treated. If untreatable, replacement of the injured tree(s) shall occur within six months at a ratio of one-to-one. The size of the replacement tree must be at least 1.5" diameter at measurement height as specifically approved by the community appearance commission. Replacement trees must be approved by the community appearance commission. The property owner shall be responsible for maintaining all replacement trees required by this section in a healthy condition for a period of two years from planting. Any dead, unhealthy or missing trees shall be replaced and replacement shall occur at the earliest suitable planting season as determined by the town.
- (4) If any trees in the property owner's landscape plan are designated as not being disturbed but are severely damaged during construction or should die within 24 months after project completion, the developer or property owner shall replace the trees at the owner's expense. Replacement shall occur at a ratio of one-to-one. The size of the replacement trees must be at least 1.5" diameter at measurement height as specifically approved by the community appearance commission. Replacement trees must be approved by the community appearance commission. The property owner shall be responsible for maintaining all replacement trees required by this section in a healthy condition for a period of two years from planting. Any dead, unhealthy or missing trees shall be replaced and replacement shall occur at the earliest suitable planting season as determined by the town.
- (5) In addition to the above penalties and remedies, the town may enforce any of the penalties listed in section 74-28, as applicable.

(Ord. No. 2010-22, § XIII, 11-9-2010; Ord. No. 2017, 12-13-2017; Ord. No. 2019-08, 6-26-2019; Ord. No. 2020-06, 7-8-2020)

Secs. 74-65—74-83. - Reserved.

Subdivision II. - Tree Removal and Oceanfront Pruning Permits

Sec. 74-84. - When required; procedure.

- (a) The building inspector shall issue a tree removal permit to remove any regulated trees or shrubs of three inches or more in diameter at DBH or trees that are otherwise subject to a fine under section 74-28, whether naturally occurring or planted by the property owner, only upon a determination by the community appearance commission after a site inspection during which photographs of the site have been taken that the activity will achieve one of the following purposes:
 - (1) Protect a structure or improvement on the property from imminent damage from tree roots or limbs.
 - (2) Promote the growth and health of other more desirable vegetation.
 - (3) Remove dead or diseased trees.

Approval or disapproval of the permit request must be completed within 30 days of receipt of the application by the building inspector. Any person aggrieved by the decision of the community appearance commission may appeal to the town manager.
- (b) The building inspector shall issue an oceanfront pruning permit to prune trees between an oceanfront structure and the beach, whether naturally occurring or planted by the property owner, only upon a determination by the community appearance commission after a site inspection during which photographs of the site have been taken that the activity will achieve one of the following purposes:
 - (1) Promote the growth and health of other more desirable vegetation.
 - (2) Remove dead or diseased trees.
 - (3) Improve the appearance and/or livability of the property without significantly destabilizing the soil thereon or of adjacent properties
 - (4) Protect the dunes
 - (5) Improve the vista from the property without causing damage to the maritime vegetation.

Beachfront tree pruning, shall only be permitted following application to the town.

- (1) Applications will only be considered for work to be performed during the period from November 1 through March 31. No pruning may occur during the period from April 1 through October 31.

- (2) The application shall describe the extent of the pruning desired and shall be accompanied by a pruning plan from a certified professional arborist that states that the pruning desired will not result in damage or death to the vegetation pruned.
- (3) Each application will be considered by the community appearance commission on its individual merit. Once a pruning permit is approved by the community appearance commission and building inspector, the pruning will be supervised by the certified professional. The community appearance commission and the building inspector will monitor this process.
- (c) Upon completion of the work requested by the tree removal and oceanfront pruning permit, the building inspector and the community appearance commission will re-inspect the site, take photographs, and ascertain compliance with the permit.
- (d) Shrubs may be pruned throughout the year without a permit to facilitate the owner's desire for clearance around structures, driveways, walkways, etc. and to promote or achieve a fuller shrub. It is recommended that shrubs that flower should be pruned after they bloom and at no more than 1/3 pruning at any one time.

(Ord. No. 2010-22, § XVI, 11-9-2010; Ord. No. 2017, 12-13-2017)

Subdivision III. - Landscape Permits

Sec. 74-85. - Authority; when required; procedure.

- (a) There are three types of landscape permits: 1) minor landscape permit; 2) major landscape permit; and (3) single-family landscape permit. The applicability of these permits is defined in subsection 74-59. The zoning administrator, or his authorized agent, shall have the authority to administer the provisions of this article, shall issue such permits as required by this subdivision, and shall be responsible for providing the overall enforcement of this subdivision. The community appearance commission shall review all applications for landscape permits in accordance with this article. The planning board will review all applications for major landscape permits in accordance with this article.
- (b) The community appearance commission shall review all applications for landscape permits within 30 days of the town's receipt of the same and, within such 30 day period, will and shall recommend to the zoning administrator, or his authorized agent, and the planning board for major landscape permits, approval, approval with conditions, or denial of the permit based on the requirements of this chapter. The community appearance commission will also conduct site visits (1) prior to the issuance by the zoning administrator, or his authorized agent of either a major landscape permit or a single-family landscape permit and (2) before a certificate of occupancy is issued by the building inspector, except under the conditions set forth in subsection 74-64(d)(8). At the request of the zoning administrator, or his authorized agent, the community appearance commission may make additional site visits. At his discretion, the zoning administrator, or his authorized agent may request one or more site consultation visits by the community appearance commission in connection with minor landscape permits. In any site visit, the community appearance committee may photograph site conditions. The community appearance should notify the zoning administrator, or his authorized agent in writing of any activity on a property that is not consistent with the landscape permit issued for the work.
- (c) The provisions of this article shall apply to new and redeveloped commercial construction, new and redeveloped residential subdivisions, new residential construction and external renovations or upgrades of an existing structure. Public and private utility companies which install overhead and underground utilities (including CATV) shall use care while performing all work affecting trees according to the provisions of subsection 74-64(e) and with as little damage to the tree's canopy, trunk, and root zone as possible. The provisions of chapter 70 regulate the planting, maintenance and removal of trees and shrubs in public areas.
- (d) It shall be unlawful to remove, relocate, grade, excavate, fill or disturb any sand, soil, dirt or earth, or damage, destroy or remove any trees or shrubbery unless such action is approved as provided herein and a landscape permit has been issued by the zoning administrator, or his authorized agent after approval by the community appearance commission and the planning board; provided, however, nothing herein shall be construed to prevent normal grass cutting or shrub and tree pruning or planting of trees, shrubs, flowers and vegetables, or the removal or relocation of vegetation that was not naturally occurring. The exclusions from the requirements for a landscape permit in this subsection (d) do not apply (i) on ocean frontal dunes or between such dunes and the primary structure on property adjacent to the ocean and the applicable landscape permit is required for the specified activities in those areas, or (ii) for trees planted under an order of the town to mitigate for the removal of trees without a permit.
- (e) For single-family landscape permit applications, notice will be sent by the zoning administrator, or his authorized agent by first class mail, or electronic mail, to the adjacent property owners at least one week before the zoning administrator, or his authorized agent issues such a permit. Following receipt of a recommendation from the community appearance commission regarding each permit application, the zoning administrator, or his authorized agent, will make a determination to approve, approve with conditions or deny a single-family landscape permit application. In order to grant a single-family landscape permit, the zoning administrator, or his authorized agent must find that the activities described in the application:
 - (1) Will not produce stormwater runoff that is adverse to adjacent or other properties, to include streets in town.
 - (2) Will not cause the removal or destruction of trees or vegetation in excess of the standards of this chapter; and
 - (3) Meets all requirements and standards of this chapter for single family homes and development on lots for the zoning district in which the property is located.

The applicant has the burden of persuasion for the required findings. In the event the zoning administrator, or his authorized agent have insufficient information to make the required findings, he shall have the authority to require the applicant to make the required findings, he shall have the authority to require the applicant, at the applicant's cost, to provide professional certifications or opinions on the question.

- (f) Upon completion of the work authorized in a single-family landscape permit or minor landscape permit, the zoning administrator, or his authorized agent shall re-inspect the site, and ascertain compliance with the permit. Additionally, upon completion of the work authorized in a major landscape permit or single-family landscape permit, the community appearance commission, or members there, will also re-inspect the site and advise the zoning administrator, or his authorized agent on compliance with the permit.
- (g) Any person with standing, including the town, aggrieved by the decision of the zoning administrator, or his authorized agent, regarding a single-family landscape permit or minor landscape permit may appeal to the board of adjustment. The board of adjustment shall determine whether to consider the appeal on the record generated by the zoning administrator, or his authorized agent, or whether to hold a de novo quasi-judicial hearing on the appeal. Any person aggrieved by the final decision of the board of adjustment may appeal to the Superior Court of Carteret County by a proceeding in the nature of certiorari.
- (h) For major landscape permit applications, upon receipt of the community appearance commission's recommendation, the planning board shall act on the application following its site inspection and quasi-judicial hearing. Such hearing shall be scheduled after all adjacent property owners have been sent written notice by registered mail return receipt at least 14 calendar days prior to the hearing. If an applicant is requesting that their building height limit be considered from approved grade rather than natural grade, the notice to adjacent property owners must so indicate and the request will be considered as part of the quasi-judicial hearing on the permit application. Approval of the major landscape permit application, including any request from height limit from approved grade, requires the planning board finding that:
 - (1) A stormwater plan has been submitted that meets the standards of this chapter; drainage patterns resulting from development will not produce runoff that is adverse to adjacent properties, to include town streets;
 - (2) Vegetation will not be unduly destroyed;
 - (3) Erosion will not result;
 - (4) The vista from other properties will not be unduly blocked by grade changes that may permit a taller structure to be constructed than on natural grade;
 - (5) That the resulting height of structures that will be permitted on the lot or tract as a result of grade changes will be compatible with the neighborhood; and
 - (6) All requirements and standards of this chapter have been met.

The applicant has the burden of persuasion for the required findings.
- (i) Appeals of the final decisions of the planning board regarding major landscape permits by any aggrieved person with standing, including the town, shall be to the Superior Court of Carteret County by a proceeding in the nature certiorari.

(Ord. No. 2010-22, § XVIII, 11-9-2010; Ord. No. 2016-04, Art. 2, 4-13-2016; Ord. No. 2016-16, Art. II, e., 12-7-2016; Ord. No. 2019-08, 6-26-2019)

Sec. 74-86. - Landscape plan.

- (a) All applications for: (1) major landscape permits; and (2) single-family landscape permits shall contain a site plan for the property drawn to a scale of one inch = 20 feet for all parcels and shall include the following:
 - (1) An inventory of existing trees, or groups of trees, having trunks with diameters of six inches in diameter or greater, measured at diameter breast height 3.5 feet above grade on the oceanfront;
 - (2) Existing trees, shrubs and other native plants proposed to be removed;
 - (3) Trees and other native plants proposed to be retained and methods to be utilized for the purpose of protecting existing vegetation; and, the tree density per 1,000 square feet of pervious area prior to development and the resulting tree density per 1,000 square feet of pervious area, excluding septic field area, after development;
 - (4) The location of proposed or existing structures on the property including driveways;
 - (5) The location and the design of proposed landscape areas and varieties and sizes of plant materials to be planted, including the size and quantity of trees and shrubs;
 - (6) Existing and proposed topography, clearly representing the extent of any proposed grading, excavation and fill;
 - (7) The impervious surface area calculation.
- (b) If the major landscape plan or single-family landscape plan is to include excavation (other than for building footers), fill, or grading (other than minor leveling of the construction site and installation of not more than four inches of topsoil following construction) the permit applicant must submit certification from a registered surveyor or professional engineer that normal and natural drainage patterns on adjacent properties (including streets) will not be changed and that the amount of stormwater runoff on or over adjacent properties (including streets) will not be increased.

- (c) All applications for a minor landscape permit shall include at least an 8½ inch × 11 inch sketch of the property, its current structures, the proposed improvement, current regulated trees near the proposed improvement, any of these trees to be disturbed, plantings to be added, any other pertinent information important to the approval process.
- (d) The landscape plan required by subdivision IV shall clearly define for oceanfront property those areas where existing dunes, berms, and maritime vegetative cover shall remain undisturbed and shall include plans for restabilizing and revegetating areas disturbed. Disturbance of the natural vegetation shall only be permitted in those circumstances in which such disturbance is reasonably necessary to allow safe construction of the proposed structure and its appurtenant facilities, such as septic tank and driveway (and in those circumstances in which property values would be significantly devalued by completely restricting view). Such special consideration must be given to preserving as much natural vegetation as possible.
- (e) Failure to comply with the requirements of the approved landscape plan is considered unlawful and the offender shall be subject to the immediate issuance of a stop work order by the zoning administrator, or his authorized agent and to the other procedures and remedies of section 74-28. (Ord. No. 2010-22, § XIX, 11-9-2010; Ord. No. 2017, 12-13-2017; Ord. No. 2019-08, 6-26-2019)

Sec. 74-87. - Stormwater plan: Non-single-family residential zoning districts and subdivisions.

For non-single-family residential zoning districts and subdivisions: Unless a waiver is granted in accordance with subsection (3) of this section or upon the granting of a variance in accordance with subsection (4) of this section, all applications for a major landscape permit or a subdivision must be accompanied by a stormwater management plan. The stormwater management plan must provide for the infiltration of the first two inches of rainfall or less in a 24-hour period from all impervious surfaces on-site. It is not necessary to control runoff from the liquid surface of swimming pools. Flow from gutters and downspouts may be diverted to dry wells or porous drainpipes in rock envelope. For structures without gutters and downspouts, gravel infiltration beds under roof overhangs may be provided. The stormwater management plan shall be prepared by a North Carolina licensed professional authorized under N.C. General Statutes to prepare stormwater plans. Typical designs of appropriate systems are provided for guidance in the Manual of Stormwater Management Practices as reflected in section 74-219.

- (1) *Application requirements.* The stormwater management plan shall contain the name, address and telephone number of the owner and the developer. In addition, the legal description of the property shall be provided, and its location with reference to such landmarks as major waterbodies, adjoining roads, or subdivisions shall be clearly identified by a map.
- (2) *Elements.* It is the responsibility of an applicant to include in the stormwater management plan sufficient information for the town or its agents to evaluate the environmental characteristics of the affected areas, the potential and predicted impacts of the proposed activity on area surface waters, and the effectiveness and acceptability of those measures proposed by the applicant for reducing adverse impacts. The stormwater management plan shall contain maps, charts, graphs, tables, photographs, narrative descriptions and explanations and citations to supporting references, as appropriate, to communicate the information required by this section.

All stormwater management plans must contain the following elements:

- a. The existing environmental and hydrologic conditions of the site and of receiving waters and wetlands shall be described in detail, including the following:
 - 1. The direction, flow rate and volume of stormwater runoff under existing conditions and, to the extent practicable, predevelopment conditions;
 - 2. The location of areas on the site where stormwater collects or percolates into the ground including the locations of any interdunal troughs;
 - 3. A description of all watercourses, waterbodies and wetlands on or adjacent to the site or into which stormwater flows. Information regarding their water quality and the current water quality classification, if any, given them by the state division of environmental management (NCDEM) shall be included;
 - 4. Groundwater levels, including seasonal fluctuations;
 - 5. Locations of floodplains;
 - 6. Vegetation;
 - 7. Topography;
 - 8. Soils, as delineated and described in the Soil Conservation Service Publication, Soil Survey of Carteret County, North Carolina or Soil Survey of the North Carolina Outer Banks.
- b. Proposed alterations of the site shall be described in detail, including:
 - 1. Changes in topography;
 - 2. Areas where vegetation will be cleared or otherwise killed;
 - 3. Areas that will be covered with an impervious surface and a description of the surfacing material;
 - 4. The size and location of any buildings or other structures.

- c. Predicted impacts of the proposed development on existing conditions shall be described in detail, including:
 - 1. Changes in water quality;
 - 2. Changes in groundwater levels;
 - 3. Changes in the incidence and duration of flooding on the site and upstream and downstream from it;
 - 4. Impacts on interdunal troughs, if any;
 - 5. Impacts on wetlands, if any;
 - 6. Impacts on vegetation.
- d. All components of the drainage system and any measures for the detention, retention or infiltration of water or for the protection of water quality shall be described in detail, including:
 - 1. The channel, direction, flow rate, volume and quality of stormwater that will be conveyed from the site with a comparison to existing conditions and, to the extent practicable, predevelopment/redevelopment conditions;
 - 2. Detention and retention areas, including plans for the discharge of contained waters, maintenance plans, and predictions of water quality in those areas;
 - 3. Areas of the site to be used or reserved for percolation, including a prediction of the impact on groundwater quality;
 - 4. A plan for the control of erosion and sedimentation, location of control measures, the stage of development/redevelopment which describes in detail the type and at which time they will be put into place or used, and provisions for their maintenance;
 - 5. Any other information which the developer or the town or its agents believes is reasonably necessary for an evaluation of the development/redevelopment proposal for compliance with this chapter.
- e. A statement from a North Carolina licensed professional authorized to prepare stormwater plans that: (i) the stormwater management system, if constructed as designed, will retain and infiltrate the requisite volume of stormwater runoff; and (ii) any grade elevation changes or construction on the site will neither increase the rate of flow, nor the volume of water discharged onto adjacent properties.

(3) *Waivers.*

- a. A waiver of the stormwater management plan requirement may be considered by submitting an application to the planning board on forms supplied by the town. The application shall contain:
 - 1. The name, address and telephone number of the developer and owner;
 - 2. A description and a drawing of the proposed development/redevelopment;
 - 3. The location of the development/redevelopment;
 - 4. Any other information requested by the town that is reasonably necessary to evaluate the proposed development.
- b. The planning board may grant a waiver if the application demonstrates the development/redevelopment is not likely to:
 - 1. Increase the rate or volume of surface water runoff;
 - 2. Have an adverse impact on an interdunal trough, wetland, watercourse or waterbody;
 - 3. Contribute to the degradation of water quality.
- c. The following types of development shall not be eligible to receive a waiver, unless they are subject to state stormwater permitting requirements and therefore meet the waiver allowance in subsection (e):
 - 1. Shopping center and office/professional;
 - 2. Commercial facilities;
- d. Within 30 working days after submission of the completed waiver application, the planning board shall notify the applicant whether the waiver has been approved or denied and whether a stormwater management plan must be submitted by the applicant. If the planning board has not rendered a decision within 30 days after plan submission, it shall inform the applicant of the status of the review process and the anticipated completion date.
- e. Any project which is subject to state stormwater permitting, shall be granted a waiver from the requirements of this section. However, the town would prefer that these projects contain and infiltrate the first two inches of rainfall in a 24-hour period from any proposed development.

(4) *Variances.* The board of adjustment may grant a written variance from any requirement of this chapter in accordance with the criteria listed below:

- a. There are special circumstances applicable to the subject property of its intended use;
- b. The granting of the variance will not:
 - 1. Increase the rate or volume of surface water runoff;
 - 2. Have an adverse impact on an interdunal trough, wetland, watercourse or waterbody;
 - 3. Contribute to the degradation of water quality;

4. Otherwise impair attainment of the objectives of this section:
 - (i) Encourage productive and enjoyable harmony between humanity and nature;
 - (ii) Protect, restore and maintain the chemical, physical and biological integrity of the waters of Bogue Sound, the canal system within the corporate limits and the Atlantic Ocean;
 - (iii) Prevent harm to the community by activities which adversely affect water resources;
 - (iv) Encourage the construction of drainage systems which aesthetically and functionally approximate natural systems;
 - (v) Encourage the protection of natural systems and the use of them in ways which do not impair their beneficial functioning;
 - (vi) Encourage the use of drainage systems which minimize the consumption of electrical energy or petroleum fuels to move water, remove pollutants, or maintain the systems;
 - (vii) Minimize the transport of pollutants to area surface waters;
 - (viii) Maintain or restore groundwater levels;
 - (ix) Protect, maintain or restore natural salinity levels in estuarine areas;
 - (x) Minimize erosion and sedimentation;
 - (xi) Prevent damage to wetlands and, insofar as possible, to the local natural recharge areas known as interdunal troughs;
 - (xii) Prevent damage from flooding, while recognizing that natural fluctuations in water level are beneficial;
 - (xiii) Protect, restore and maintain the habitat of fish and wildlife;
 - (xiv) Ensure the attainment of these objectives by requiring the approval and implementation of stormwater management plans for all activities which may have a significant adverse impact upon community waters;
 - (xv) Prevent or reverse salt water intrusion.
- c. There are special circumstances applicable to the subject property of its intended use. A written request for variance shall be provided and shall state specific variances sought and reasons for their granting.
- d. A variance from the terms of this chapter shall not be granted by the board of adjustment unless, and until, it shall make a finding:
 1. That special conditions and circumstances exist which are peculiar to the land, structure or building involved and which are not applicable to other lands, structures or buildings in the same district;
 2. That literal interpretation of the provisions would deprive the applicant of rights commonly enjoyed by other properties in the same district under terms of this chapter;
 3. That the special conditions and circumstances do not result from the actions of the applicant;
 4. That the hardship is of a physical nature and not economic;
 5. That granting the variance requested will not confer on the applicant any special privilege that is denied by this chapter to other land, structures or buildings in the same district.
- e. Additionally, the granting of the variance will not:
 1. Increase the rate or volume of surface water runoff;
 2. Have an adverse impact on an interdunal trough, basins, wetland, watercourse or waterbody;
 3. Contribute to the degradation of water quality;
 4. Otherwise impair attainment of the objectives of this chapter.
- f. In granting any variance, the board of adjustment may prescribe appropriate conditions and safeguards in conformity with this chapter.
- (5) *Exemptions.* The following development activities are exempt from stormwater management plan requirements:
 - a. Any maintenance, alteration, use or improvement to an existing structure not changing or affecting quality, rate, volume or location of surface water discharge.
 - b. Gardening and landscaping in connection with a single-family dwelling.
- (6) *Decisions.* Within 30 working days after submission of the completed stormwater management plan, the planning board shall approve, with or without specified conditions or modifications, or reject the plan, shall file such decision with the town clerk, and shall notify the applicant accordingly. If the plan is rejected or modified, the planning board shall state its reasons. While it is not customary for the planning board or town officials to actually design an acceptable project for the applicant, the board and town officials are encouraged to do all they can to work with the applicant to achieve an acceptable project plan in harmony with this chapter. Projects requiring formal planning board and town board review shall not be subject to the 30-day requirement. Approval of stormwater management plans for these projects shall be determined in conjunction with the planning board's and town board's formal review process. The stormwater management plan shall not be approved unless it clearly indicates that the proposed development will meet the performance standards described in section 74-216 and the design standards described in section 74-217, except where a variance has been granted pursuant to subsection 74-87(4), or where off-site management is approved pursuant to section 74-218.
- (7) *Inspections.* No stormwater management plan may be approved without adequate provision for inspection of the property before

development/redevelopment activity commences. The applicant shall arrange with the town's chief code enforcement official or his designated agent for scheduling the following inspections:

- a. *Initial inspection.* Prior to approval of the stormwater management plan;
- b. *Bury inspection.* Prior to burial of any underground drainage structure;
- c. *Erosion control inspection.* As necessary to ensure effective control of erosion and sedimentation;
- d. *Finish inspection.* When all work including installation of all drainage facilities has been completed.

The chief code enforcement official or his designated agent shall inspect the work and shall either approve it or notify the applicant in writing in what respects there has been a failure to comply with the requirements of the approved stormwater management plan. Any portion of the work which does not comply shall be promptly corrected by the applicant or the applicant will be subject to the penalty provisions of section 74-28.

- (8) *Appeal.* Any person aggrieved by the action of the planning board or of any official charged with the enforcement of this chapter, as the result of the disapproval of a properly filed application for a permit, issuance of a written notice of violation, or an alleged failure to properly file application for a permit, issuance of a written notice of violation, or an alleged failure to properly enforce the chapter in regard to a specific application shall have the right to appeal the action to the town board of adjustment. The appeal shall be filed in writing within 30 days of the date of official transmittal of the final decision or determination to the applicant, shall state clearly the grounds on which the appeal is based, and shall be processed in the manner prescribed for hearing administrative appeals under local and state statutes. Any person aggrieved by the action of the board of adjustment may appeal to the superior court pursuant to the provisions of G.S. 160A-388.

(Ord. No. 2015-13, Art. 2.B, 10-14-2015; Ord. No. 2016-16, Art. III.a., a., b., 12-7-2016; Ord. No. 2020-06, 7-8-2020)

Sec. 74-88. - Stormwater management plan: Single-family residential.

For single-family residential zoning districts: All applications for a major landscape permit and single-family landscape permit must be accompanied by a stormwater management plan. The stormwater management plan must provide for the infiltration of the first two inches of rainfall or less in a 24-hour period from all impervious surfaces on-site. It is not necessary to control runoff from swimming pools. Flow from gutters and downspouts may be diverted to dry wells or porous drainpipes in rock envelope. For structures without gutters and downspouts, gravel infiltration beds, or other approved methods under roof overhangs may be provided. The stormwater management plan shall be prepared by a North Carolina licensed professional authorized under N.C. General Statutes to prepare stormwater plans. Typical designs of appropriate systems are provided for guidance in the Manual of Stormwater Management Practices as reflected in section 74-219.

- (1) *Application requirements.* The stormwater management plan shall contain the name, address and telephone number of the owner and the developer. In addition, the legal description of the property shall be provided, and its location with reference to such landmarks as major waterbodies, adjoining roads or subdivisions shall be clearly identified by a map.
- (2) *Elements.* It is the responsibility of an applicant to include in the stormwater management plan sufficient information for the town or its agents to evaluate the environmental characteristics of the affected areas, the potential and predicted impacts of the proposed activity on area surface waters, and the effectiveness and acceptability of those measures proposed by the applicant for reducing adverse impacts.

All stormwater management plans must contain the following elements:

- a. The existing environmental and hydrologic conditions of the site shall be described in detail, including the following:
 1. The location of areas on the site where stormwater collects or percolates into the ground including the locations of any interdunal troughs;
 2. Seasonal water table levels;
 3. Locations of floodplains;
 4. Topography.
- b. Proposed alterations of the site shall be described in detail, including:
 1. Changes in topography;
 2. Areas where vegetation will be cleared or otherwise killed;
 3. Areas that will be covered with an impervious surface and a description of the surfacing material;
 4. The size and location of any buildings or other structures.
- c. All components of the drainage system and any measures for the detention, retention or infiltration of water or for the protection of water quality shall be described in detail, including:
 1. Detention and retention areas, including plans for the discharge of contained waters, maintenance plans, and predictions of water quality in those areas;
 2. Areas of the site to be used or reserved for percolation;
 3. A plan for the control of erosion and sedimentation, location of control measures, the stage of development/redevelopment which

describes in detail the type and at which time they will be put into place or used, and provisions for their maintenance;

4. Any other information which the developer or the town or its agents believes is reasonably necessary for an evaluation of the development/redevelopment proposal for compliance with this chapter.

- d. A statement from a North Carolina licensed professional authorized to prepare stormwater plans that the stormwater management system, if constructed as designed, will retain and infiltrate the requisite volume of stormwater runoff and any grade elevation changes or construction on the site will neither increase the rate of flow, nor the volume of water discharged on to adjacent properties.

(3) *Waivers.*

- a. A waiver of the stormwater management plan requirement may be considered by submitting an application to the planning board on forms supplied by the town. The application shall contain:

1. The name, address and telephone number of the developer and owner;
2. A description and a drawing of the proposed development/redevelopment;
3. The location of the development/redevelopment;
4. Any other information requested by the town that is reasonably necessary to evaluate the proposed development.

- b. The planning board may grant a waiver if the application demonstrates the development/redevelopment is not likely to:

1. Increase the rate or volume of surface water runoff;
2. Have an adverse impact on an interdunal trough, wetland, watercourse or waterbody;
3. Contribute to the degradation of water quality.

- c. Within 30 working days after submission of the completed waiver application, the planning board shall notify the applicant whether the waiver has been approved or denied and whether a stormwater management plan must be submitted by the applicant. If the planning board has not rendered a decision within 30 days after plan submission, it shall inform the applicant of the status of the review process and the anticipated completion date.

(4) *Variances.* The board of adjustment may grant a written variance from any requirement of this chapter in accordance with the criteria listed below:

- a. There are special circumstances applicable to the subject property of its intended use;

- b. The granting of the variance will not:

1. Increase the rate or volume of surface water runoff;
2. Have an adverse impact on an interdunal trough, wetland, watercourse or waterbody;
3. Contribute to the degradation of water quality;
4. Otherwise impair attainment of the objectives of this section:
 - (i) Encourage productive and enjoyable harmony between humanity and nature;
 - (ii) Protect, restore and maintain the chemical, physical and biological integrity of the waters of Bogue Sound, the canal system within the corporate limits and the Atlantic Ocean;
 - (iii) Prevent harm to the community by activities which adversely affect water resources;
 - (iv) Encourage the construction of drainage systems which aesthetically and functionally approximate natural systems;
 - (v) Encourage the protection of natural systems and the use of them in ways which do not impair their beneficial functioning;
 - (vi) Encourage the use of drainage systems which minimize the consumption of electrical energy or petroleum fuels to move water, remove pollutants, or maintain the systems;
 - (vii) Minimize the transport of pollutants to area surface waters;
 - (viii) Maintain or restore groundwater levels;
 - (ix) Protect, maintain or restore natural salinity levels in estuarine areas;
 - (x) Minimize erosion and sedimentation;
 - (xi) Prevent damage to wetlands and, insofar as possible, to the local natural recharge areas known as interdunal troughs;
 - (xii) Prevent damage from flooding, while recognizing that natural fluctuations in water level are beneficial;
 - (xiii) Protect, restore and maintain the habitat of fish and wildlife;
 - (xiv) Ensure the attainment of these objectives by requiring the approval and implementation of stormwater management plans for all activities which may have a significant adverse impact upon community waters;
 - (xv) Prevent or reverse salt water intrusion.

- c. There are special circumstances applicable to the subject property of its intended use. A written request for variance shall be provided and shall state specific variances sought and reasons for their granting.

- d. A variance from the terms of this chapter shall not be granted by the board of adjustment unless, and until, it shall make a finding:

1. That special conditions and circumstances exist which are peculiar to the land, structure or building involved and which are not applicable structures or buildings in the same district;
 2. That literal interpretation of the provisions would deprive the applicant of rights commonly enjoyed by other properties in the same district under terms of this chapter;
 3. That the special conditions and circumstances do not result from the actions of the applicant;
 4. That the hardship is of a physical nature and not economic;
 5. That granting the variance requested will not confer on the applicant any special privilege that is denied by this chapter to other land, structures or buildings in the same district.
- e. Additionally, the granting of the variance will not:
1. Increase the rate or volume of surface water runoff;
 2. Have an adverse impact on an interdunal trough, basins, wetland, watercourse or waterbody;
 3. Contribute to the degradation of water quality;
 4. Otherwise impair attainment of the objectives of this chapter.
- f. In granting any variance, the board of adjustment may prescribe appropriate conditions and safeguards in conformity with this chapter.
- (5) *Exemptions.* The following development activities are exempt from stormwater management plan requirements:
- a. Any maintenance, alteration, use or improvement to an existing structure not changing or affecting quality, rate, volume or location of surface water discharge.
 - b. Gardening and landscaping in connection with a single-family dwelling.
- (6) *Decisions.* Within 30 working days after submission of the completed stormwater management plan, the planning board shall approve, with or without specified conditions or modifications, or reject the plan, shall file such decision with the town clerk, and shall notify the applicant accordingly. If the plan is rejected or modified, the planning board shall state its reasons. While it is not customary for the planning board or town officials to actually design an acceptable project for the applicant, the board and town officials are encouraged to do all they can to work with the applicant to achieve an acceptable project plan in harmony with this chapter. Projects requiring formal planning board and town board review shall not be subject to the 30-day requirement. Approval of stormwater management plans for these projects shall be determined in conjunction with the planning board's and town board's formal review process. The stormwater management plan shall not be approved unless it clearly indicates that the proposed development will meet the performance standards described in section 74-216 and the design standards described in section 74-217, except where a variance has been granted pursuant to subsection 74-88(4), or where off-site management is approved pursuant to section 74-218.
- (7) *Inspections.* No stormwater management plan may be approved without adequate provision for inspection of the property before development/redevelopment activity commences. The applicant shall arrange with the town's chief code enforcement official or his designated agent for scheduling the following inspections:
- a. *Initial inspection.* Prior to approval of the stormwater management plan;
 - b. *Bury inspection.* Prior to burial of any underground drainage structure;
 - c. *Erosion control inspection.* As necessary to ensure effective control of erosion and sedimentation;
 - d. *Finish inspection.* When all work including installation of all drainage facilities has been completed.
- The chief code enforcement official or his designated agent shall inspect the work and shall either approve it or notify the applicant in writing in what respects there has been a failure to comply with the requirements of the approved stormwater management plan. Any portion of the work which does not comply shall be promptly corrected by the applicant or the applicant will be subject to the penalty provisions of section 74-28.
- (8) *Appeal.* Any person aggrieved by the action of the planning board or of any official charged with the enforcement of this chapter, as the result of the disapproval of a properly filed application for a permit, issuance of a written notice of violation, or an alleged failure to properly file application for a permit, issuance of a written notice of violation, or an alleged failure to properly enforce the chapter in regard to a specific application shall have the right to appeal the action to the town board of adjustment. The appeal shall be filed in writing within 30 days of the date of official transmittal of the final decision or determination to the applicant, shall state clearly the grounds on which the appeal is based, and shall be processed in the manner prescribed for hearing administrative appeals under local and state statutes. Any person aggrieved by the action of the board of adjustment may appeal to the Superior Court pursuant to the provisions of G.S. 160A-388.

(Ord. No. 2015-13, Art. 2.C, 10-14-2015; Ord. No. 2016-16, Art. III.a., c., 12-7-2016; Ord. No. 2019-08, 6-26-2019; Ord. No. 2020-06, 7-8-2020)

Secs. 74-89—74-112. - Reserved.

ARTICLE XIX - Screening and Trees

Part I. Screening

§295 Town Board findings concerning the need for screening requirements.

The Town Board finds that:

- (a) Screening between two lots lessens the transmission from one lot to another of noise, dust, and glare.
- (b) Screening can lessen the visual pollution that may otherwise occur within an urbanized area. Even minimal screening can provide an impression of separation of spaces, and more extensive screening can shield entirely one use from the usual assault of an adjacent use.
- (c) Screening can establish a greater sense of privacy from visual or physical intrusion, the degree of privacy varying with the intensity of the screening.
- (d) The provisions of this part are necessary to safeguard the public health, safety and welfare.

§296 General Screening Standard

Every development shall provide sufficient screening so that:

- (a) Neighborhood properties are shielded from any adverse external effects of that development;
- (b) The development is shielded from the negative impacts of adjacent uses such as streets or railroads.

§297 Compliance with Screening Standard

- (a) The table set forth in §299 (as the Table of Screening Requirements), in conjunction with the explanations in §298 concerning the types of screens, establishes screening requirements that satisfy the general standards established in §296.
- (b) The land use classification designations contained in the Table of Screening Requirements (see §299) are keyed to the Land Use Classification Table (see §299), and the letter designations refer to types of screening as described in §298. This table indicates the type of screening that is required between two uses. Where such screening is required, only the proposed uses are responsible for installing the screening. The use assigned this responsibility is referred to as the proposed use in the Table of Screening Requirements, and the other use is the adjoining existing use.
 - (1) To determine which type of screen is required to install:
 - i. First, find the proposed use in the Land Use Classification Table and note the Class number (Class 1, Class 2, etc.);
 - ii. Then, find the adjoining existing uses in the Land Use Classification Table and note each of the Class numbers;
 - iii. Next, find the proposed Class number in the first column of the Table of Screening Requirements and follow the row across to its intersection with the adjoining existing Class number(s) of each use that adjoins the property to be developed.
 - iv. For each intersecting square that contains a letter, the developer must install the level of screening indicated.
- (c) If, when the analysis described in this section is performed, the proposed use is an existing developed property but the required screening is not in place, then this lack of screening shall constitute a non-conforming situation, subject to all the provisions of Article VIII of this ordinance or possibly an exemption provided in §300.
- (d) Notwithstanding any other provision of this article, a multi-family development with 5 or more units shall be required, at the time of construction, to install any screening that is required between it and adjacent existing uses according to §299.

Amended November 21, 2016

§298 Descriptions of Screens

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The following three basic types of screens are hereby established and are used as the basis for the Table of Screening Requirements (see §299).

- (a) **Opaque Screen, Type A.** A screen that is substantially opaque from the ground to a height of at least six feet, with intermittent visual obstructions from above the opaque portion. A substantially opaque screen is intended to substantially exclude all visual contact between uses and to create a strong impression of special separation. The substantially opaque screen may be composed of all wall, fence, landscaped earth berm, planted vegetation, or existing vegetation. Compliance of planted vegetative screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species, or field observation of existing vegetation. The opaque portion of the screen must be substantially opaque in all seasons of the year. The portion of intermittent visual obstructions may contain deciduous plants. Suggested planting patterns that will achieve this standard are included in Appendix E-6.
- (b) **Semi-opaque Screen Type B.** A Screen that is composed of intermittent visual obstructions from the ground to a height of three feet, with intermittent visual obstruction from above the opaque portion. The semi-opaque screen is intended to partially block visual contact between uses and to create a moderate impression of the separation of spaces. The semi-opaque screen may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation, compliance of planted vegetative screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species, or field observation of existing vegetation. The zone of intermittent visual obstruction may contain deciduous plants. Suggested planting patterns which will achieve this standard are included in Appendix E-7.
- (c) **Broken Screen, Type C.** A screen composed of intermittent visual obstructions. The broken screen is intended to create the impression of a separation of spaces without necessarily eliminating visual contact between the spaces without necessarily eliminating visual contact between the spaces. It may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation. Compliance of planted vegetative screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species, or field observation of existing vegetation. The screen may contain deciduous plants. Suggested planting patterns which will achieve this standard are included in Appendix E-8.

Amended November 21, 2016, June 19, 2017, October 15, 2018

§299 Table of Screening Requirements and Land Use Classification Table

These tables are necessary to determine the screening type and subsequent requirements for proposed land use development.

(a) Table of Screening Requirements

Land Use Classification	Class 1 Adjoining Existing	Class 2 Adjoining Existing	Class 3 Adjoining Existing	Class 4 Adjoining Existing	Class 5 Adjoining Existing	Street
Class 1 Proposed	N/A	N/A	N/A	N/A	N/A	N/A
Class 2 Proposed	C	N/A	N/A	N/A	N/A	C
Class 3 Proposed	C	C	N/A	N/A	N/A	C
Class 4 Proposed	B	B	B	N/A	N/A	B
Class 5 Proposed	A	A	A	A	N/A	A

(b) Land Use Classification Table

- (1) Land Use Class General Descriptions
- (i) Class 1 – single/two-family residential and agriculture
 - (ii) Class 2 – residential other than Class 1
 - (iii) Class 3 – office, institutional, civic, neighborhood business
 - (iv) Class 4 – retail/wholesale trade, highway commercial
 - (v) Class 5 – manufacturing, industrial, utility
 - (vi) Street – public/private roads
- (2) See Land Use Classification Table on following page.

§300 Exemptions and Alternatives from this Article

- (a) Bona Fide Farm, as defined in the NC General Statutes.
- (b) Changes in use that result in no increase in volume (amount of space occupied) or scale (the relative size) to existing development, parking, or building.
- (c) Expansions or reconstructions that will result in development, parking, or building square footage increases of less than three thousand (3,000) square feet or fifty percent (50%), whichever is greater, of respective existing development, parking, or building square footage.
- (d) Redevelopments in which required perimeter tree planting is impracticable because the bufferyard:
 - (1) would be less than the required minimum bufferyard width;
 - (2) would reduce the existing access/drive aisle width below the required minimum;
 - (3) is located on a slope steeper than 3:1;
 - (4) is located over an existing underground utility;
 - (5) is located over an existing vehicle accommodation area;
 - (6) is located over existing pavement or building; or
 - (7) the bufferyard would have to be located within the street right-of-way.Except that opaque screen requirements (whether 3' or 6' tall) are not exempt.
- (e) Any site containing an unoccupied public utility equipment structure that is less than one thousand (1,000) square feet in area, except that all electrical substations shall install the required minimum Type screen.
- (f) Developments within or surrounded by the Central Business (CC) zoning district, except that in instances where off-street parking is provided, such parking area shall include the required minimum Type screen.
- (g) Single-family detached homes and individual duplexes on individual lots.
- (h) Multifamily developments containing four (4) or fewer dwelling units on a single zoning (building) lot.
- (i) Property lines abutting railroad rights-of-way and utility easements in excess of sixty (60) feet in width.
- (j) Property lines abutting dedicated street right-of-way that has remained unopened for a period of at least fifteen (15) years.
- (k) If the adjoining property is vacant, empty, unoccupied, or in agricultural use or forestry and in which there is no current development process, then no screen is required (a minimum 10' bufferyard must be preserved if applicable).
- (l) Reduction in parking requirement for pre-existing developments: To allow compliance with landscaping regulations, the number of required off-street parking spaces may be reduced by up to ten (10) percent.
- (m) If the adjoining property boundary line is owned by the same owner of property being developed, then no screen is required along the adjoining property boundary line (a minimum 10' bufferyard must be preserved if applicable).

Amended November 21, 2016, June 19, 2017

§301 Combination Uses

- (a) In determining the screening requirements that apply between a combination use and another use, the permit-issuing authority shall proceed as if the principal uses that comprise the combination use were not combined and reach its determination accordingly, relying on §299 interpreted in the light of §300.

- (b) When two or more principal uses are combined to create a combination use, screening shall not be required between the component principal uses unless they are clearly separated physically and screening is determined to be necessary to satisfy the standard set forth in §296.

Amended November 21, 2016

§302 Subdivisions

When undeveloped land is subdivided and undeveloped lots only are sold, the subdivider shall not be required to install any screening. Screening shall be required, if at all, only when the lots are developed, and the responsibility for installing such screening shall be determined in accordance with the other requirements of this Article.

§303 through §304 Reserved

Part II. Shading

§305 Council Findings and Declaration of Policy on Shade Trees

- (a) The council finds that:
- (1) Trees are proven producers of oxygen, a necessary element for human survival,
 - (2) Trees appreciably reduce the ever increasing environmentally dangerous carbon dioxide content of the air and play a vital role in purifying the air we breathe,
 - (3) Trees transpire considerable amounts of water each day and thereby the air much like the air-washer devices used on commercial air conditioning systems,
 - (4) Trees have an important role in neutralizing waste water passing through the ground from the surface to ground water tables and lower aquifers,
 - (5) Trees, through their root systems, stabilize the ground water tables and play an important and effective part in soil conservation, erosion control, and flood control,
 - (6) Trees are an invaluable physical, aesthetic, and psychological counterpoint to the urban setting, making urban life more comfortable by providing shade and cooling the air and land, reducing noise levels and glare, and breaking the monotony of human developments on the land, particularly parking areas, and
 - (7) For the reasons indicated in §305(a)(6), trees have an important impact on the desirability of land and therefore on property values.
- (b) Based upon the findings set forth in §305(a), the council declares that it is not only desirable but essential to the health, safety, and welfare of all persons living or working within the city's planning jurisdiction to protect certain existing trees and, under the circumstances set forth in this article, to require the planting of new trees in certain types of developments.

§306 Required Trees Along Dedicated Streets

Along both sides of all newly created streets that are constructed in accordance with the public street standards set forth in Article, XIV, the developer shall either plant or retain sufficient trees so that between the right-of-way of the street and a line running parallel to and fifty (50) feet from the right-of-way of the street, there is for every fifty (50) feet of street frontage at least an average of one (1) deciduous tree (see planting list E-10a, E-10c, or E-10g) . When trees are planted by the developer pursuant to this section, the developer shall choose trees that meet the standards set forth in Appendix E.

Amended November 21, 2016

§307 Retention and Protection of Large Trees

- (a) Every development shall retain all existing trees eighteen (18) inches in diameter or more unless the retention of such trees would unreasonably burden the development.
- (b) No excavation or other subsurface disturbance may be undertaken within the drip line of any tree eighteen (18) inches in diameter or more (measured at five (5) feet above average grade), and no impervious surface (including, but not limited to, paving or buildings) may be located within twelve and one-half (12 ½) feet (measured from the center of the trunk) of any tree eighteen (18) inches in diameter or more unless compliance with this subsection would unreasonably burden the development. For purposes of this subsection, a drip line is defined as a perimeter formed by the points farthest away from the trunk of a tree where precipitation falling from the branches of that tree lands on the ground.

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- (c) The retention or protection of trees eighteen (18) inches in diameter or more as provided in §307(a) and §307(b) unreasonably burdens a development if, to accomplish such retention or protection, the desired location of improvements on a lot or the proposed activities on a lot would have to be substantially altered and such alteration would work an unreasonable hardship upon the developer.
 - (d) Incentives and Alternatives - If space that would otherwise be devoted to parking cannot be so used because of the requirements of §307(a) or §307(b), and, as a result, the parking requirements set forth in Article XVIII cannot be satisfied, the number of required spaces may be reduced by the number of spaces “lost” because of the provisions of §307(a) and §307(b), up to a maximum of fifteen (15) percent of the required spaces.
 - (e) Large trees located along the edge of construction corridors should be retained wherever possible. Disturbed areas should be re-seeded with mixtures beneficial to wildlife, i.e. native annual grains appropriate for the season.
 - (f) Exemptions
 - (1) Property within the A-R (Agricultural-Residential) and C-C (Central Business) zoning district.
 - (2) Existing or proposed single-family detached dwellings or two-family dwellings on individually owned lots.
 - (3) Multifamily developments containing less than five (5) dwelling units on a single zone lot.
 - (4) Lots smaller than one (1) acre.
 - (5) The removal of trees in conjunction with tree farms, agricultural practices, or commercial nurseries.
 - (6) Removal of trees that are dead, dying, diseased, or damaged from storms or other causes.
 - (7) Removal of trees that pose a risk to public health, safety, and welfare to the property.
 - (8) Tree removal to protect utilities or maintain utility right-of-ways.
 - (9) Trees located within a project’s future right-of-way, outline of a building envelope/footprint, project parking area.
 - (10) Blockage of stormwater control mechanisms.
 - (11) Forestry activity on forestland taxed on the basis of its present-use value as forestland under Article 12, Chapter 105, of the NC General Statutes.
 - (12) Activity conducted in accordance with a forest management plan prepared by a forester registered as prescribed in Chapter 89B of the NC General Statutes
 - (13) Notwithstanding any authority under G.S. §160A or any local act of the General Assembly, no ordinance regulating trees may be enforced on land owned or operated by a public airport authority.
 - (g) Tree Survey
 - (1) Tree survey is required prior to any land disturbing activity or any applications for grading, building, or rezoning.
 - (2) Tree survey must be submitted in conjunction with site review plan application.
 - (3) Tree survey is prepared by a surveyor, registered forester or certified arborist.
 - (4) Elements required as part of the tree survey include: location of trees, size of trees, species of trees, and where clear cutting activity occurred within the previous three (3) years
 - (5) All trees that were previously on the site need to be identified and quantified in some way.
 - (h) Credits for Retained Trees
 - (1) Trees retained may be used to satisfy streetscape, screening, and shading requirements and can receive credits according to the following: The developer shall receive credit toward planting requirements of four (4) trees for each retained tree that remains on site after construction that is eighteen (18) inches in diameter or greater.
 - (i) Mitigation for Trees Not Retained
 - (1) If a property owner/applicant cannot preserve trees eighteen (18) inches in diameter or greater, then the property owner/applicant shall replant at least the same number of existing trees that cannot be preserved that are eighteen (18) inches or greater; and/or
 - (2) Submit fee to the Town that totals the current nursery market value for required number of replacement trees plus associated cost of installation.
-

- (3) All required replanted trees shall be categorized as large trees as identified in Appendix E.
- (j) Trees Removed Prior to Site Plan and Zoning Permit Approval
 - (1) If the Town can determine the number of trees eighteen (18) inches or greater that were removed, then the owner/applicant shall be subject to the following:
 - i. For every tree that is removed that is eighteen (18) inches diameter or greater, the owner/applicant must replace four (4) times the number of trees that were removed; and/or
 - ii. Submit fee to the Town that totals the current nursery market value for required number of replacement trees plus associated cost of installation.
 - (2) If the Town cannot determine the number of trees that were removed that are eighteen (18) inches or greater, then the owner/applicant shall be subject to a fee equal to ten cent (\$.10) per square foot (\$4,356 per acre) of cleared property.
 - (3) All required replanted trees shall be categorized as large trees as identified in Appendix E.
- (k) Any fees collected will be deposited into the Town of Siler City Landscaping account.
 - (1) Funds shall be spent on landscaping located on public property including but not limited to: streetscape improvements, public parks, public spaces, public road right-of-ways, and public parking lots.
 - (2) Fee shall be paid prior to any development permits are issued.

Amended June 15, 2015, Amended January 21, 2021

§308 Shade Trees in Parking Areas

- (a) Vehicle accommodation areas that are required to be paved by §284 must be shaded by deciduous trees (either retained or planted by developer). When trees are planted by the developer to satisfy the requirements of this subsection, the developer shall choose trees that meet the standards set forth in Appendix E.
- (b) Each tree of the type described in §308(a) shall be presumed to shade a circular area having a radius of fifteen (15) feet with the trunk of the tree as the center, and there must be sufficient trees so that the vehicle accommodation area will be shaded.
- (c) No paving may be placed within twelve and one-half (12½) feet (measured from the center of the trunk) of any tree retained to comply with §308(a).
- (d) New trees planted to comply with §308(a) shall be located so that they are surrounded by at least one hundred fifty (150) square feet of unpaved area and interior planting islands shall be not less than nine (9) feet in width.
- (e) Unpaved area (landscaped areas) shall be covered with mulch, ground cover or grass.
- (f) Vehicle accommodation areas shall be laid out and detailed to prevent vehicles from striking trees. Vehicles will be presumed to have a body overhang of three (3) feet, six (6) inches.
- (g) The minimum quantity of shade trees shall be one (1) large or two (2) small trees per each twenty (20) parking spaces.
- (h) When determination of the number of trees requires a fractional tree, any fraction of one-half (1/2) or less may be disregarded, while a fraction in excess of one-half (1/2) shall be counted as one (1) shade tree.

Amended November 21, 2016

§309 Forestry Activities

- (a) The following definitions apply to forestry activities:
 - (1) Development. Any activity, including timber harvesting, that is associated with the conversion of forestland to nonforest use.
 - (2) Forest management plan. A document that defines a landowner's forest management objectives and describes specific measures to be taken to achieve those objectives. A forest management plan shall

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include silvicultural practices that both ensure optimal forest productivity and environmental protection of land by either commercially growing timber through the establishment of forest stands or by ensuring the proper regeneration of forest stands to commercial levels of production after the harvest of timber.

- (3) Forestland. Land that is devoted to growing trees for the production of timber, wood, and other forest products.
 - (4) Forestry. The professional practice embracing the science, business, and art of creating, conserving, and managing forests and forestland for the sustained use and enjoyment of their resources, materials, or other forest products.
 - (5) Forestry activity. Any activity associated with the growing, managing, harvesting, and related transportation, reforestation, or protection of trees and timber, provided that such activities comply with existing State rules and regulations pertaining to forestry.
- (b) The Town shall not adopt or enforce any ordinance, rule, regulation, or resolution that regulates either:
- (1) Forestry activity on forestland that is taxed on the basis of its present-use value as forest- land under Article 12 of Chapter 105 of the General Statutes.
 - (2) Forestry activity that is conducted in accordance with a forest management plan that is prepared or approved by a forester registered in accordance with Chapter 89B of the General Statutes.
- (c) This section shall not be construed to limit, expand, or otherwise alter the authority of the Town to:
- (1) Regulate activity associated with development. The Town may deny a building permit or refuse to approve a site or subdivision plan for either a period of up to:
 - (a) Three (3) years after the completion of a timber harvest if the harvest results in the removal of all or substantially all of the trees that were protected under Town regulations governing development from the tract of land for which the permit or approval is sought.
 - (b) Five (5) years after the completion of a timber harvest if the harvest results in the removal of all or substantially all of the trees that were protected under Town regulations governing development from the tract of land for which the permit or approval is sought and the harvest was a willful violation of the Town regulations.
 - (2) Regulate trees pursuant to any local act of the General Assembly.
 - (3) Adopt ordinances that are necessary to comply with any federal or State law, regulation, or rule.
 - (4) Exercise its planning or zoning authority under Chapter 160D.
 - (5) Regulate and protect streets.

Amended January 21, 2021

§310 Reserved

8 TREE PROTECTION, LANDSCAPING AND BUFFERS

8.1 PURPOSE

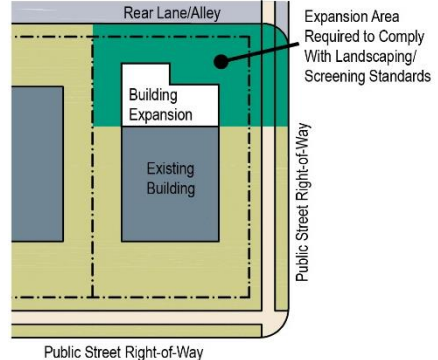
The appropriate use of existing and supplemental landscaping enhances the aesthetic appearance of Wilson. Trees and plants contribute to the overall quality of the community and provide aesthetic, environmental and economic benefits. The purpose of this section is to:

- Enhance appearance and increase property values in the City of Wilson.
- Provide visual buffers and transitions between dissimilar land uses and protect abutting properties from potential negative impacts of neighboring development and to preserve the character and value of a property and provide a sense of privacy.
- Improve the visual quality of the City of Wilson and minimize the potential impacts of development such as noise, dust, and glare of lights.
- Improve the quality and efficacy of stormwater run-off while also providing opportunities for climatic control and reduced electricity costs.
- Contribute to the overall quality of life and the built environment in Wilson.

8.2 APPLICABILITY

8.2.1 APPLICABILITY MATRIX

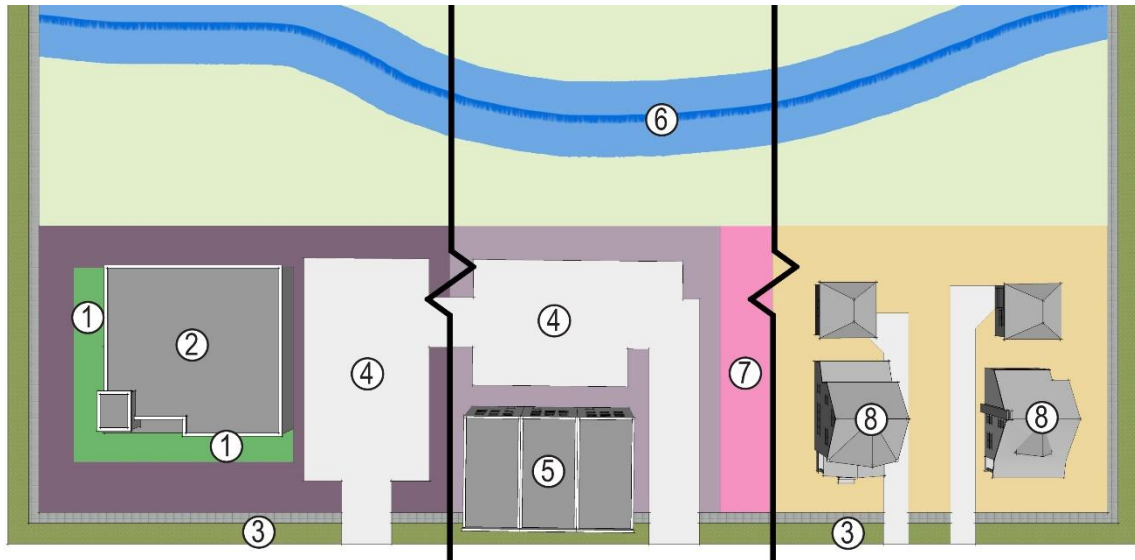
The standards contained in this chapter shall apply to the following development conditions:

Development Condition	Applicability
New Construction (Except Single-Family and Two-Family Dwellings on Previously Platted or residentially exempt Subdivision Lots)	All standards apply
Expansion of Parking Areas	(1) Small Expansions: All standards apply to the parking lot expansion areas where 12 or more new spaces are added (2) Large Expansions: in addition to requirements in (1), Street Trees shall be provided along street frontage when the parking lot expansion is 40% or greater in area or number of spaces. In addition, trees shall be required in any existing islands and grass areas where feasible.
Building Expansion (Less than 60% of Existing Floor Area)	All standards shall apply only to the area around the addition that is parallel to any edge of the expansion area and extending to the property line or street pavement edge. This includes required street trees. (See diagram) 
Building Expansion (60% or Greater of Existing Floor Area)	The entire site shall be brought into full compliance with this chapter.
Change of Use (From Residential to Non-Residential)	The entire site shall be brought into full compliance with this chapter.

Change of Use of 50% or greater of the floor area.(From Non-Residential to another Non-Residential)	The site shall be brought into compliance with Sections 8.4 and 8.5. If a buffer requirement increase due to the change of use, the buffer area shall meet the requirements to the greatest extent possible.
Building Interior and/or Exterior Renovations Only	Compliance with this chapter is not required.

8.2.2 REQUIRED SITE LANDSCAPING AREAS

The diagram below is intended to provide guidance by illustrating the type of landscaping areas and buffer yards required by this chapter. This diagram is not inclusive of the required landscaping and buffer areas for all development applications.



1. Building perimeter landscaping (NC, GC & HC Districts only, see Section 8.5.3)
2. Commercial building (NC District)
3. Planting strip (5-foot minimum width, see Section 8.5.1) and sidewalk (see Section 6.9)
4. Parking areas (see Section 8.6 for landscaping requirements)
5. Mixed-use buildings (NMX District)
6. Watercourse buffer (see Section 8.8)
7. Required buffer yard (see Section 8.7)
8. Single family detached residential lots (SR4 District)

8.2.3 LANDSCAPE PLAN REQUIRED

Prior to obtaining a Compliance Certificate, an applicant must receive approval of a landscaping plan that shall satisfy the requirements of this chapter.

8.2.4 REVISIONS TO LANDSCAPE PLAN

Revisions due to lack of plant availability may be approved by the Administrator if:

- A. There is no reduction in the quantity of plant material.
- B. There is no significant change in size or location of plant materials.
- C. The new plants are of the same general category (i.e., canopy trees, understory trees, shrubs, groundcover) and have the same general design characteristics (mature height, crown spread) as the materials being replaced.
- D. The new plants are appropriate to Wilson's local climatic conditions in terms of seasonal hardiness and ease of maintenance.

8.2.5 GENERAL PROVISIONS

- A. Landscaping must be installed, inspected and approved prior to the issuance of a Certificate of Occupancy. A Certificate of Occupancy accompanied by a bond as noted in B, below, may be granted to permit installation of required landscaping subsequent to occupancy of the building.
- B. If the season or weather conditions prohibit planting, the developer may provide a bond, an irrevocable letter of credit, or other financial surety in an amount equal to 125% of the cost of installing the required landscaping to guarantee the completion of the required planting. The financial surety shall be canceled and/or returned upon completion of the required landscaping.
- C. The owner of the property where required landscaping is planted shall be responsible for the maintenance and protection of all required plant and screening materials so as to continue their effectiveness. The owner shall replace any required plantings, which die or otherwise fail to satisfy the requirements of this chapter, within 180 calendar days with an equal or similar species and size. When plant material is severely damaged due to unusual weather conditions, disease, fire or unforeseen natural occurrences, the owner shall have up to 365 calendar days to replant with submittal of a guarantee. Failure to maintain or replace dead, damaged, or diseased material or to repair a broken fence or wall shall constitute a violation.
- D. If existing vegetation is to be used in complying with any part of this section, a plan for the protection of this vegetation during construction must be incorporated into the landscape plan and approved by the Administrator.
- E. If a wall, fence or berm is used in conjunction with any vegetation to satisfy any requirements of this chapter, 75% of the required vegetation shall be placed on the side of the fence or wall of the property(ies) adjacent to the development site under consideration.

8.2.6 ALTERNATIVE COMPLIANCE

- A. Landscape plans proposing alternative methods of compliance may be used where unreasonable or impractical situations would result from application of the specific landscaping requirements in this chapter. Such situations may result from streams, natural rock formations, topography or other physical conditions; or from lot configuration, utility easements or unusual site conditions.
- B. The Administrator may approve an alternate plan which proposes different plant materials or placement, provided that quality, effectiveness, durability, and performance are equivalent to that required by this section.
- C. Decisions of the staff regarding alternate methods of compliance may be appealed to the Board of Adjustment in accordance with Section 15.12.
- D. **Buffer Option for Compliance:** Any property that provides or retains the equivalence of the a 40-foot wide, Type C Buffer (see 8.7.2) around the perimeter of the property and the street trees requirement (see 8.5.1) shall be exempt from the remaining provisions of this chapter except that parking lots with 100 or more spaces shall comply with 8.6.4 and 8.6.7.

8.3 TREE PROTECTION ON PUBLIC PROPERTY

The purpose of this section is to regulate the planting, maintenance and removal of trees on public property and rights-of-way within the city and municipally-owned property wherever located. In order to protect and conserve trees on public property and rights-of-way, this chapter provides for the pruning,

treatment and removal of trees and shrubs on private property and the regulation of digging or other activities on private property which may endanger such trees. This section is also intended to provide for the trimming or removal of trees on private property when they obscure streetlights, interfere with utility lines or constitute a hazard to pedestrian or vehicular traffic, thus endangering the public health, safety or welfare. This chapter is enacted by authority of, and made applicable to the city by, Chapter 328 of the 1977 Session Laws of the General Assembly of North Carolina.

8.3.1 PLANTING, MAINTENANCE, OR REMOVAL (PERMIT REQUIRED)

- A. Maintenance or Removal of Trees on Public Property:** Any tree located within the public right-of-way or other public area is property of the City of Wilson and shall not be removed, fertilized, destroyed, cut, severely pruned (including the root system), treated or otherwise disturbed in any manner by any person or entity other than the City of Wilson, without permission from the Administrator authorizing such action. Any work performed under such permission must be done in strict accordance with any arboricultural specifications and standards of practice imposed by the city.
- B. Planting of Trees on Public Property:** Any person desiring to plant a tree or shrub upon any public right-of-way or public area must also obtain a permit from the Administrator.
- C. Treatment of Trees by Utility Companies:** When a permit is given by the Administrator to a public service corporation or utility to trim or perform other operations affecting trees on public areas and rights-of-way pursuant to this chapter, the amount of such trimming or extent of other operations shall be limited by the actual necessities of the service of the company or utility and such work shall be done in a neat and workmanlike manner and according to the specifications of the Administrator.
- D. Protection During Surveying:** No tree located on public property or within a required tree protection area shall be removed for the purpose of surveying without an approval from the Administrator.

8.3.2 INJURING TREES OR SHRUBBERY IN PUBLIC PLACES

- A. Impervious Material & Protecting Roots:** It shall be unlawful for any person, except with written permit, to place or maintain upon the ground in any public right-of-way or public area any stone, cement or other impervious substance as may obstruct the free access of air and water to the roots of any tree or shrub.
- B. Protecting Trees During Construction Activity:** It shall be the responsibility of the person in charge of the erection, repair, alteration or removal of any building or structure to place a guard or protector around any tree or shrub on public areas or rights-of-way so as to prevent injury to such tree or shrub. If the erection, repair, alteration or removal of any structure shall require the trimming, pruning or removal of any tree upon public areas or rights-of-way, a written permit shall be obtained. (See also Section 8.11.5)
- C. Tree Topping:** Tree topping and/or shearing shall be prohibited on all trees on public property, designated rights-of-way, required tree save areas, landscaping, and buffer yards unless otherwise approved by the Administrator.
- D. Prohibited Use of Attached Devices:** It shall be unlawful for any person to attach any item to any tree or shrub in or upon any public right-of-way or public area or to

the guard or stake intended for its protection, except for the purpose of protecting it or the public upon the written permission of the Administrator.

- E. Fires & Burning:** It shall be unlawful for any person to set fire to or permit any fire to burn where such fire or the heat will injure any tree or shrub in or upon any public area or right-of-way.
- F. Excavation:** It shall be unlawful for any person to excavate any ditches, tunnels or trenches or construct any drive within a radius of 10 feet from any trees on public areas and rights-of-way without first obtaining permission from the Administrator.

8.3.3 AUTHORITY TO TREAT & REMOVE TREES

- A. Trees and Shrubs on Public Areas:** The Administrator shall have the right to plant, trim, spray, preserve and remove trees and shrubs on all public rights-of-way and public areas or issue a permit for such action as may be necessary to ensure safety or preserve the appearance and beauty of such public areas.
- B. Trees and Shrubs on Private Areas:** The Administrator, under the power herein given, may also remove, trim, treat, or otherwise maintain any tree, shrub or part thereof on a private area which in some way endangers public health, safety or welfare on public property or which is injurious to sewers or other public improvements or is affected with any injurious disease, insect or other pest.
- C. Removal of Trees:** Removal of trees shall be selectively carried out based upon the following criteria:
 - 1. A showing of evidence that the tree constitutes a public safety problem,
 - 2. A showing of evidence that the tree constitutes a personal safety problem for an individual, including, but not limited to, the location, size or condition of a tree resulting in a recognizable safety problem for an individual's interest and not merely an inconvenience.
 - 3. The tree constitutes a problem for public improvements, including, but not limited to, the condition or location of the tree or parts thereof which are destructive or pose hazards to public improvements and public property including its use and safety.

8.3.4 EMERGENCIES

In case of emergencies, such as windstorms, ice storms or other disasters, the requirements of Section 8.3.1 may be waived by the Administrator during the emergency period so that the requirements of this chapter would in no way hamper private or public work to restore order in the city.

8.3.5 REPLACEMENT AND REMOVAL FEES

Where a tree, or a part(s) thereof, within a right-of-way does not meet the criteria of Section 8.3.3.C for removal, but is requested to be removed by a property owner and such removal is approved by the Administrator, the property owner shall be assessed a removal charge equal to the greater of \$500, or an amount equal to the total actual cost to the city of such removal as determined by the Administrator based upon documented labor and equipment cost.

8.4 TREE PROTECTION AND TREE CREDITS ON PRIVATE PROPERTY

The preservation of existing trees or shrubs to satisfy the landscaping requirements of this chapter is expected. New development, through the protection of trees and existing vegetation, should be creative in design and placement of buildings, structures, parking and other impervious surfaces as to preserve natural features and to complement the existing topography when practical.

8.4.1 PRESERVATION OF SPECIMEN TREES

It is the intent of this section to promote the preservation of trees which are of a significant size and/or of such a historic nature as to be an asset to the community as a whole. Where there exists one or more Specimen Trees on property subject to the regulations of this section, such trees shall be preserved and protected or, if it is necessary to remove such trees, they shall be replaced, according to the protection standards as outlined in this section.

A. Criteria for Specimen Trees: For the purposes of this section, Specimen Trees shall be defined as those trees which meet one or more of the following:

1. Any tree which equals or exceeds the following diameter at breast height (or approximately 4.5 feet above grade – DBH) or which otherwise is noteworthy because of species, age, size, or other exceptional quality, uniqueness and rarity:

Tree Type	Tree Diameter Size
Canopy	20" DBH
Understory	8" DBH*

* Reference ANSI Z60.1-2004 for multi-stem trees.

2. Designation as a Treasure Tree by the Wilson County Treasure Trees Awards Program
3. Designation as a Landmark Tree by the Wilson City Council according to the provisions of Section 8.5.2.C below

B. Condition of Specimen Trees: To qualify as a Specimen Tree, a certified arborist must determine the tree to be in fair or better condition according to the following minimum standards:

1. The tree must have a life expectancy of greater than 10 years;
2. The tree must have a relatively sound and solid trunk with no extensive decay or hollowness, and less than 20 percent radial trunk dieback;
3. The tree must have no more than one major and several minor dead limbs;
4. The tree must have no major insect or pathological problem.

C. Designation as a Landmark Tree by City Council: Upon petition by the owner of the property on which the tree(s) is located, and the recommendation of a certified arborist, the Wilson City Council may designate a specific tree or group of trees as a Landmark. In order to be designated as such, one of the following criteria must be demonstrated by the owner:

1. Using the measurement and point system established for state and national champion trees, a nominated tree must have a point total of at least 50% of the current state champion for the particular species; or be a highly-visible or recognizable tree or group of trees which has significance for the entire community; OR

2. The tree or group of trees must be at least 50 years old, and must be associated with a specific and significant historic event or individual; or contribute to the character of a historic building or property.

D. Credit for Preservation of Specimen Trees: Landscape credits shall be awarded for the preservation of specimen trees according to the following table:

Existing DBH of Preserved Tree(s)*	Number/Type (Canopy or Understory) of Tree Credits
8" + (Understory)	2 / Understory
20" – 30"	3 / Canopy
31" – 41"	4 / Canopy
42" +	5 / Canopy

**DBH shall be rounded off to the nearest inch.*

E. Replacement of Specimen Trees: When a specimen tree is removed from a site during construction, or dies within 5 years following construction, the applicant or developer shall replace such tree on the lot using one or more of the following methods as approved by the Administrator:

1. Trees may be replaced according to the chart below:

Tree Removed	Tree Replaced
12" to less than 18" caliper tree	Three 2.5" caliper trees
18" to 24" caliper tree	Four 2.5" caliper trees
24"+ caliper tree	Five 2.5" caliper trees

2. Trees may be replaced with trees and/or landscaping of equal value. Valuation of the tree removed or lost shall be determined by the Administrator in consultation with a person qualified by training or experience to have expert knowledge of the subject. Valuation of trees and vegetation shall be established in accordance with standards established by the Council of Tree and Landscape Appraisers (CLTA).
3. If replacement isn't feasible or desired, as determined by the Administrator, a monetary sum equal to the value of the lost or removed specimen tree(s) may be paid to a tree planting fund maintained by the City of Wilson for the purposes of planting and maintaining trees throughout the jurisdiction of the city.

8.4.2 ESTABLISHMENT OF TREE SAVE AREAS (TSA)

Trees survive the stress of construction best when they are left in stands or larger groupings. For that reason, it is encouraged that, wherever possible, development sites should be designed and developed so that Tree Save Areas (TSAs) are designated in a single, contiguous unit.

- A. Tree Credit Incentives:** Trees preserved in Tree Save Areas may be credited towards compliance with the requirements of this section according to the following calculation: 1 tree credit per 700 square feet of protected area. The extent of the canopy spread of the tree or trees at the outer edges of the Tree Save Area shall constitute the limits of the Tree Save Area for the purposes of this measurement. Watercourse buffer areas and wetlands are not eligible for the tree credit and the respective amount of parcel area is exempt from the baseline tree coverage requirement.
- B. Additional Incentives:** The following incentives are offered to encourage tree preservation within TSAs. Individual TSAs may only be counted toward one of the incentives listed below.

Action Taken		Incentive
1.	Establishment of a Tree Save Area Along a Street	Reduction by up to 50% of required street tree plantings at the rate of 1 less street tree for every 700 square feet of TSA established.
2.	Establishment of a Tree Save Area In or Adjacent to a Parking Area	Reduction by up to 50% of required parking lot plantings at the rate of 1 less canopy tree or 2 less understory trees for each 700 square feet of TSA established.
3.	Establishment of a Tree Save Area in or along a required buffer yard	Reduction by up to 50% of required buffer yard plantings at the rate of 1 less canopy tree or 2 less understory trees for each 700 square feet of TSA established. The remaining buffer yard must still meet the required opacity as established in Section 8.7.2.

C. Tree Save Area Requirements: In order to qualify for the incentives offered in A and B, above, designated Tree Save Areas must conform to the following standards:

1. **Minimum Tree Density:** The TSA shall contain, as determined by an informal site assessment, a minimum tree density of at least 1 tree of 2" diameter at breast height (DBH) and a minimum of 10' in height per 700 square feet.
2. **Tree Species:** In order to be established as a designated Tree Save Area, the trees contained in these areas shall primarily be a mixture of healthy and useful canopy deciduous trees.
3. **Maintenance & Ownership:** When a TSA is established in association with the incentives as listed in this section, it should be designated, where possible, as a dedicated open space, or in a conservation easement.
4. **Tree Removal Inside Tree Save Areas:** Trees that are in poor health, as determined by the Administrator, may be removed from Tree Save Areas. All tree removal within TSA must have prior approval by the Administrator pursuant to the provisions of this section. However, in an emergency situation due to storm damage, or to alleviate an imminent hazard to the health, safety and welfare of the citizens, or to repair property damage, prior approval for tree removal in previously approved designated areas is not required.
5. **Dead or Unhealthy Trees**
 - a. No credit will be allowed for any dead tree, any tree in poor health, or any tree subject to grade alterations.
 - b. The death or unhealthy state of any tree(s) used for tree credits, within 3 years of establishing the TSA, shall require the property owner to plant new trees equal to the number of credited trees.
 - c. If any tree(s) used for preservation credit is improperly protected or determined to be hazardous, the Administrator may require new trees be planted equal to the number of credit trees.
 - d. The Administrator may require trees left outside preservations areas to be removed if improperly protected or determined to be hazardous.

8.5 STREET TREE AND BUILDING PERIMETER PLANTINGS

It is the desire of the city to maintain tree-lined, pedestrian-friendly streets throughout the community. Street trees shade the pedestrian realm of the street, encourage cars to move more slowly, improve pedestrian safety by creating a buffer between the moving cars and the sidewalk, absorb stormwater, absorb pollutants from tailpipe emissions, and add value to the fronting properties.

8.5.1 STREET TREE PLANTING REQUIREMENTS

Street trees shall be planted in all rights-of-way adjacent to and within the development, between the street and the sidewalk or between the property line and street when a sidewalk doesn't exist, in accordance with the table and provisions below (The administrator may approve tree placement adjacent to the public right-of-way when right-of-way placement is impractical due to existing conditions – see 8.5.2 A.):

District	Requirement
R/A, OS Districts	Not required
MHR, SR4, SR6, GR6, UR, RMX Districts	Rate: 1 Canopy Tree for every 50 feet of street frontage. In a residential subdivision, street trees shall be provided at the rate of one per lot. Spacing: Maximum of 75 feet on-center Location: In Planting Strip (5-foot minimum width)*
NMX, IMX, CCMX, NC, GC, HC, ICD, LI, HI Districts	Rate: 1 Canopy Tree for every 50 feet of street frontage Spacing: Maximum of 75 feet on-center Location: In Planting Strip (5-foot minimum width)* or Tree Well (25-square-foot minimum area)
NMX, IMX, CCMX, NC, GC Districts with On-Street Parking & Ground Floor Retail	Rate: 1 Canopy Tree for every 50 feet of street frontage Spacing: Maximum of 75 feet on-center Location: Tree Well (25-square-foot minimum area)*
Existing Development with Non-Conforming Frontages	See Section 8.2*

* Understory Trees may be substituted for Canopy Trees in existing development with planting strips less than 5 feet wide or tree wells less than 25 square feet or where utility conflicts are present.

- A. Median Trees:** Whenever a boulevard street type is constructed, the developer or applicant shall also install trees in the boulevard median at the rate of 1 Canopy Tree for every 60 linear feet of road median. Understory Trees may be substituted for Canopy Trees in medians less than 12 feet wide. The maximum spacing between trees shall be 75 feet on-center.
- B. Existing City-Adopted Streetscape/Tree Planting Plan:** Where a city-approved existing tree pattern exists on a street, the placement of new trees shall be compatible with the established pattern/species.
- C. Private Drives for Commercial Development:** Private drives, including vehicular ways between parking areas and building frontages, which serve commercial lots shall meet the street tree planting requirements of Section 8.5.
- D. Residential Driveway/Alley:** Landscaping is not required along any residential driveway or alley.

8.5.2 STREET TREE SPECIFICATIONS

- A. Location:** Where street trees are required, such trees shall be within the right-of-way and be planted in a planting strip between the sidewalk and the traveled way or in tree wells located along the street/sidewalk, except where the Administrator determines this impossible due to insufficient right-of-way, topography, utility conflicts, or conflicts with NCDOT-operated roads. Where the Administrator determines that it is impractical for street trees to be located within the right of way,

compliance with this section may be achieved by planting street trees on private property as close to the right-of-way as practical.

- B. Tree Wells:** Where used, tree wells shall provide a root aeration zone around the base of a tree. If the adjacent sidewalk is less than 6 feet in width, tree grates shall be provided to cover the exposed area of soil and to widen the pedestrian passage zone along the sidewalk.
- C. Species:** Street trees must (unless approved by the Administrator) maintain the same species, spacing, and distance from the street along both sides of the street.
- D. Utility and Right-of-Way Conflicts:** The Administrator may approve the use of Understory Trees instead of Canopy Trees where such trees satisfy NCDOT requirements along State-owned roads or where utility conflicts exists.
- E. Substitutions:** Understory trees may be substituted for up to 1/3 of the canopy trees.

8.5.3 BUILDING PERIMETER LANDSCAPING

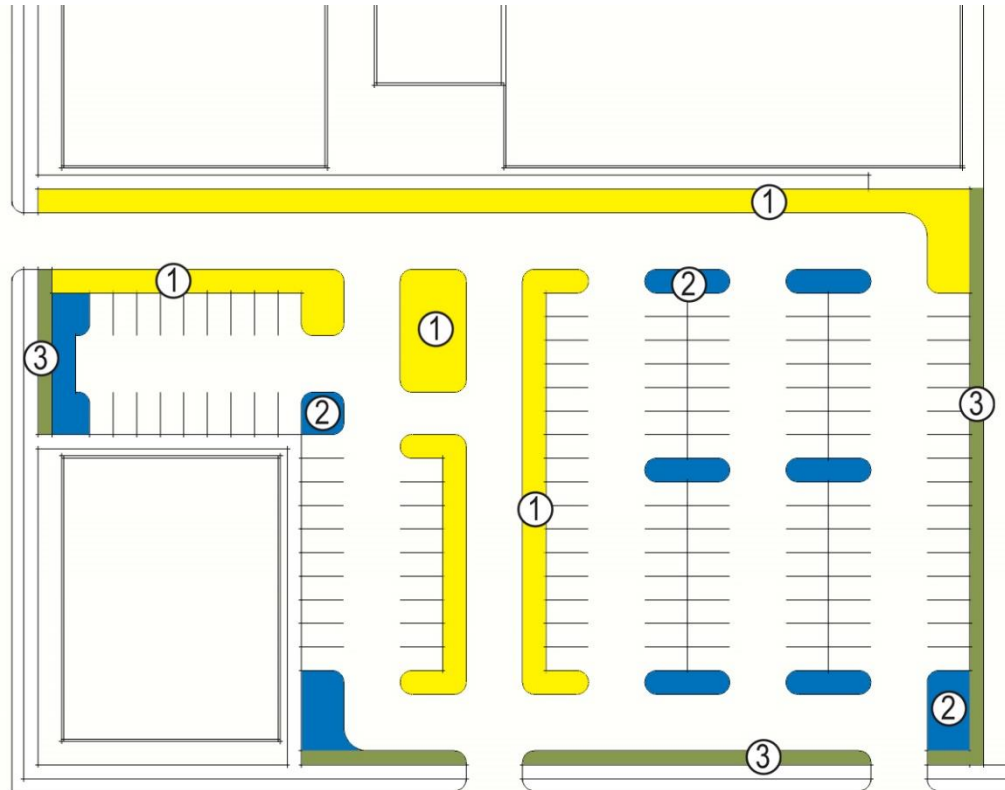
- A. Applicability:** The following provisions for building perimeter landscaping shall apply where buildings or portions of buildings do not meet the building design standards outlined in Chapter 5. In the case of a portion of the building not meeting design requirements, only that portion shall comply with this section. This shall not apply to single-family, duplex or townhome structures.
- B. Minimum Required Landscape Area:** A minimum 8 foot wide area shall be provided for landscaping along any side of the building facing a public right-of-way. Up to 25% of the building width along the street may be utilized for entrance walkways. Building yards shall extend around the side of buildings a minimum of 15 feet.
- C. Minimum Required Landscaping:** The minimum required landscaping shall consist of one of the following options every 40 linear feet:
 1. 2 understory trees along with 6 evergreen shrubs with a minimum mature height of 4 feet, or any equivalent combination thereof, or
 2. the minimum width of the planting area shall be 8 feet.

This 40 foot requirement shall only serve as a ratio for establishing the minimum required landscaping. In locating the minimum required landscaping care shall be taken to ensure that adequate space is provided for the width of tree spread, height and root system requirements.

8.6 PARKING LOT AREA LANDSCAPING

8.6.1 REQUIRED PARKING LOT LANDSCAPE AREAS

The diagram below is intended to provide guidance by illustrating the screening and landscape islands required by this chapter. This diagram is not inclusive of the required screening and landscaping islands for all new or expanded parking lots.



1. Private drive islands (see Section 8.6.4.C)
2. Parking lot islands / planting areas (see Section 8.6.4.B)
3. Parking lot perimeter screening area (see Section 8.6.3)

8.6.2 OPTIONAL COMPLIANCE FOR INDUSTRIAL AND AUTOMOTIVE USES

Parking lots which serve industrial and automotive uses, as designated in the Use Table in Section 2.7.3, (whether for display of new or used vehicles for rental/sales/lease or for employee or customer parking) shall be exempt from:

- A. **Parking Lot Interior Landscaping:** Interior landscaping and curbing requirements of Section 8.6.4 are not required if a 30 foot wide landscape area with a Type B buffer (see 8.7.2) is provided along any portion of the lot adjacent to a public or private street.
- B. **Parking Lot Perimeter Screening:** Perimeter landscaping as shown in 8.6.3 is only required where the industrial or automotive development is located adjacent to a Major Street as indicated in the City of Wilson GIS database. When applicable, the landscaping shall be required along the frontage of the major street only. Development exercising the option in 8.6.2.A have met their requirement for parking lot perimeter landscaping.

8.6.3 PARKING LOT PERIMETER SCREENING

- A. Applicability:** The following provisions for parking lot perimeter screening shall apply to all parking lots containing more than 20 spaces.
- B. Required Screen Along Streets:** Parking lots shall be screened from sidewalks and streets (public and private) by a semi-opaque screen to minimum height of 24 inches, along with canopy trees planted with a maximum spacing of 60 feet on-center, for screening of car lights and glare.
 - 1. Effective screening devices may include decorative brick walls, wood fences, earth berms, architectural features (e.g., façade extension, pergolas) and tight evergreen hedges which shall reach the required height within two years of planting, or any combination of the above.
 - 2. The height of the screen, except for trees, shall not exceed 4 feet at any time.
 - 3. Optional 8-foot openings shall be allowed every 50 feet to permit pedestrian passage where a formal connection to a sidewalk or pathway is provided. Openings for permitted driveways and their associated sight triangles, as well as freestanding signs are also permitted.
 - 4. 1/3 of the canopy trees may be substituted with understory trees.
- C. Required Screen Along Adjacent Properties:** Parking lots shall be screened from adjacent properties, in different ownership, by canopy trees planted with a maximum spacing of 60 feet on-center. This section does not apply along parking lot perimeters screened from view from adjacent properties by a required buffer (see Section 8.7) or where such plantings would serve no purpose (see 8.7.1.B).
- D. Minimum Width Reserved for Perimeter Screens:** 8 feet

8.6.4 PARKING LOT INTERIOR LANDSCAPING

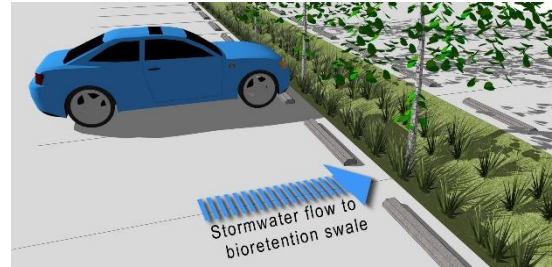
- A. Applicability:** The following provisions for parking lot interior landscaping shall apply to all parking lots containing 20 or more spaces.
- B. Parking Lot Islands / Planting Areas**
 - 1. The minimum number of trees shall be 1 canopy tree per 14 parking spaces. Two understory trees may be used to replace 1 canopy tree for no more than 1/3 of the required canopy trees.
 - 2. All trees and plantings shall be in planting areas or landscape islands, protected by curbs or wheel stops, with a minimum area of 180 square feet and a minimum width of 10 feet.
 - 3. Parking lot islands or planting areas with a minimum of 1 canopy tree or 2 understory trees shall be placed at the end of every row of parking.
 - 4. No parking space shall be more than 70 feet from the base of a tree. Parking lots fully designed using bioretention areas, as outlined in Section 8.6.6 below, are exempt from this requirement.
- C. Private Drive Islands:** All private drives that channel traffic within the parking area, including vehicular ways between parking areas and building frontages, shall be separated from adjacent sidewalks or rows of parking by a landscaped area with a minimum width of 6 feet, containing Canopy Trees planted at a maximum spacing of 40 feet on-center. Understory Trees may be substituted for Canopy Trees at the rate of 2 Understory Trees for every required Canopy Tree for up

to 1/3 of the total required Canopy Trees. Traffic control islands required by Department of Transportation (DOT) may be raised concrete or striped.

- D. Pedestrian Access:** Sidewalks or paths may be provided within required landscaped areas to address pedestrian needs.

8.6.5 CURBING

All parking areas and landscaped islands shall either be curbed using a vertical curb or wheel stops. Curbing may be discontinuous or perforated allowing stormwater to enter landscaped areas constructed for bioretention (rain gardens). Where bioretention areas are constructed, wheel stops may be used in place of curbing. Where landscaping is above grade, curbing must be continuous to prevent landscaping material from eroding into the parking area.

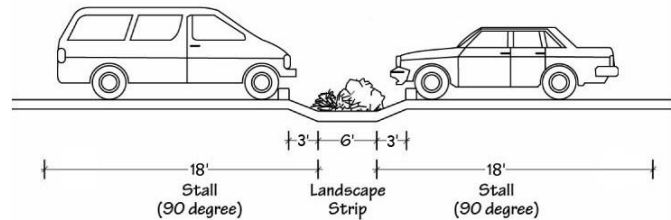


Discontinuous curbing or wheel stops are permitted to allow stormwater infiltration in bioretention areas.

8.6.6 BIORETENTION AREAS/RAIN GARDENS

A. Rain Gardens

Permitted: Required parking lot landscaping may be incorporated with one or more consolidated bioretention areas (rain gardens). Bioretention areas shall be located where it is most practical to capture stormwater, manage parking lot traffic and facilitate pedestrian use, including adjacent to and connecting with vegetated areas on the perimeter of a parking lot. Bioretention areas shall be designed and landscaped to trap and mitigate runoff from paved surfaces consistent with the description and intent of the North Carolina Division of Water Quality: Stormwater Best Management Practices Manual or equivalent, including NC Cooperative Extension Bulletin, Designing Rain Gardens (Bio-Retention Areas), 2001.



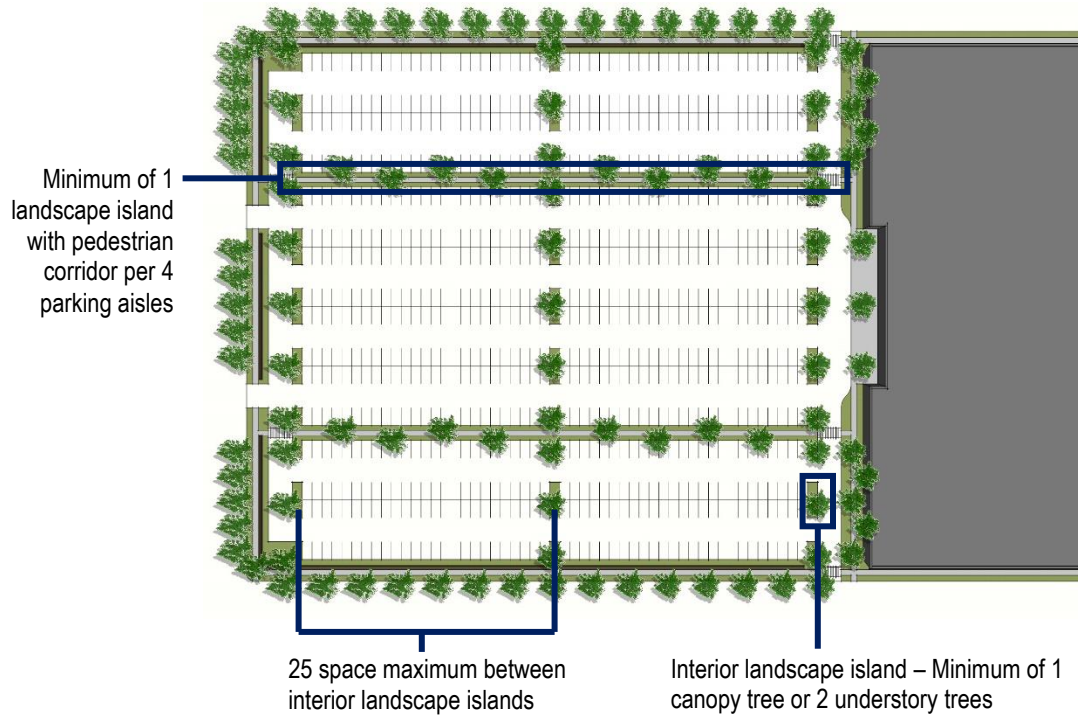
Required parking landscaped areas may include up to 3 feet of the front of a parking space as measured from a line parallel to the direction of the bumper of a vehicle using the space, as shown.

- B. Parking Dimension Bonus:** A portion of the space devoted to motor vehicle parking may be landscaped instead of paved, as follows:

1. A landscaped area may include up to 3 feet of the front of the parking space as measured from a line parallel to the direction of the bumper of a vehicle. The landscape strip shall be a minimum of 6 feet in width.
2. The landscaped area within the parking space counts toward parking lot landscaping requirements and toward any overall site landscaping requirements.
3. In order to utilize this parking dimension bonus, landscaping must be below grade and designed as a bio-retention area.

8.6.7 ADDITIONAL STANDARDS FOR LARGE PARKING LOTS (GREATER THAN 100 SPACES)

- A. Pedestrian Walkways:** For each group of buildings 40,000 square feet or more, one 5-foot wide pedestrian sidewalk shall be provided and shall extend the entire length of the parking bay or aisle. Crosswalks shall be provided across private drives/driveways from these pedestrian islands to connect to any adjacent building entrances, private walkways, and public sidewalks along the street frontage. Sidewalks shall reasonably lead someone to the main public entrance of an establishment.



8.7 BUFFERS AND SCREENING

Buffer yards are planting areas designed to separate incompatible adjacent uses and provide privacy and protection against potential adverse impacts of an adjoining incompatible use or zoning district.

8.7.1 REQUIRED BUFFER YARDS

- A. Required Yards by District:** Buffer yards shall be required in accordance with the table below, and the buffer yard types defined in Section 8.7.2.

		Adjacent Zoning District					
		R/A, OS, MHR, SR4, SR6, GR6	UR, RMX, ICD	NC, GC	NMX, IMX, CCMX	HC	LI, HI
District of Proposed Development	R/A, OS, MHR, SR4, SR6, GR6	X	X	X	X	B*	B*
	UR, RMX, ICD**	A	X	X	X	X	X
	NC, GC**	B	A	X	X	X	X
	NMX, IMX, CCMX	A	A	X	X	X	X
	HC	C	B	A	A	X	X
	LI, HI	C	C	B	B	A** *	X
	* Only required where adjacent, more intense use is pre-existing and no equivalent buffer is provided on the adjacent property ** Only multifamily and non-residential uses shall provide buffers between adjacent single family uses in detached homes *** Not required when adjacent to uses in the Automotive or Industrial Category (G & H of 2.7.3 Use Chart)						X = No Buffer Required

- B. Exceptions:** Buffers are not required adjacent to undeveloped agricultural lots greater than 5 acres or when an adjacent lot contains significant existing vegetation that renders the planting of the buffer unnecessary. The Administrator may waive buffer planting requirements when it would serve no purpose (i.e. adjacent to natural features like wetlands, floodplains or other undevelopable areas).
- C. Exceptions for Similar Uses:** When a buffer is required between two zones, but the adjacent use is the same or materially similar and of similar intensity (as determined by the Administrator), a buffer shall not be required.
- D. Required Buffer Yards around Existing Single Family Homes in the NC, GC, HC, LI and HI Districts:** A Type A buffer shall be required for any non-residential development that occurs immediately adjacent to an existing single family home located within the NC, GC, HC, LI and HI Districts. This buffer may be removed when the home changes to a multifamily or non-residential use.
- E. Additional Buffer and Screening Requirements for Specific Uses:** Additional buffer and screening requirements for certain specific uses are included in supplemental standards for each use found in Chapter 3.
- F. Location:** Buffer yards shall be constructed along the perimeter of the property; however, when there is irregular topographic conditions (i.e. perimeter of the property is at a lower grade than the use being screened), the Administrator may require the relocation of the required buffer yard in order to serve its purpose.
- G. Relationship to Required Yards and Setbacks:** Where front, side and rear yards are required by this chapter, buffer yards may be established within such yards. If a

yard requirement is less than the minimum buffer requirement, the buffer width requirement shall override the minimum yard requirement.

- H. More Restrictive to Apply:** Where a proposed use or development-type abuts multiple use types or zoning districts along the same side or rear yard, the largest buffer requirement will apply along the entire side or rear property line.
- I. Buffer Location Restrictions:** Buffers shall not be located on any portion of any existing or proposed street right-of-way or utility easement (unless permitted by the easement holder).

8.7.2 BUFFER YARD TYPES

- A. Type A Buffer Yard:** A Type A buffer yard is a planting strip intended to separate uses, provide vegetation in densely developed areas and enhance the appearance of individual properties.

Type A Buffer Yard Options	Minimum Depth	Minimum Plantings per 100 linear feet	Wall, Fence, or Berm	Required Opacity
Option 1	20 feet	1 Canopy Tree 2 Understory Trees 8 Evergreen Shrubs	Not Required	Semi-opaque (i.e., having only seasonal horizontal openings not exceeding 25% of the total width from the ground to a height of 6 feet within 2 years of planting)
Option 2	10 feet	2 Canopy Trees 2 Understory Trees 12 Evergreen Shrubs	Not Required	

- B. Type B Buffer Yard:** A Type B buffer yard is a medium density screen which is intended to create a visual separation between uses and zoning districts.

Type B Buffer Yard Options	Minimum Depth	Minimum Plantings per 100 linear feet	Wall, Fence, or Berm	Required Opacity
Option 1	20 feet	2 Evergreen Trees 1 Canopy Tree 2 Understory Trees 12 Evergreen Shrubs	Not Required	Semi-opaque (i.e., having only seasonal horizontal openings not exceeding 10% of the total width from the ground to a height of 8 feet within 2 years of planting)
Option 2	10 feet	1 Evergreen Tree 1 Canopy Tree 3 Understory Trees 24 Evergreen Shrubs	Not Required	

- C. Type C Buffer Yard:** A Type C buffer yard is intended to provide a very dense all-season sight barrier to significantly separate uses and zoning districts. It is intended to reduce intrusive lighting and noise from adjacent properties.

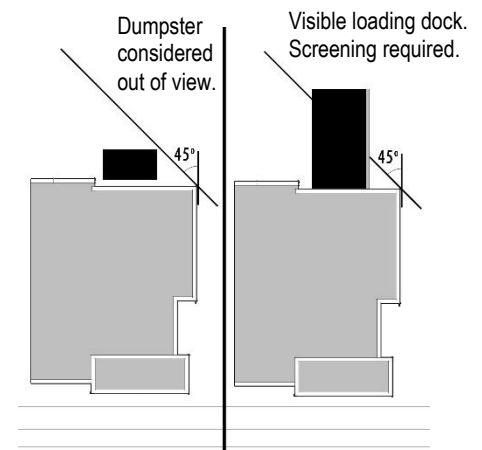
Type C Buffer Yard Options	Minimum Depth	Minimum Plantings per 100 linear feet	Wall, Fence, or Berm	Required Opacity
Option 1	40 feet	4 Evergreen Trees 4 Canopy Trees 4 Understory Trees 36 Evergreen Shrubs	Not Required	Completely opaque (i.e., having no horizontal openings from the ground to a height of 8 feet within 2 years of planting)
Option 2	25 feet	2 Evergreen Tree 2 Canopy Tree 2 Understory Tree 12 Evergreen Shrubs	Berm (See Section 8.7.3.A-B)	
Option 3	15 feet	4 Evergreen Tree 4 Canopy Tree 4 Understory Trees	Wall or Fence (See Section 8.7.3.A-B)	

8.7.3 BUFFER DETAILS

- A. Fences and Walls:** Any required 6-foot-tall privacy fence or wall shall be made of any combination of treated and stained wood, brick, stone, wrought iron, polymer, decorative face block or other composite material as approved by the Administrator and maintained in a like-new manner with the finished side facing towards the zone to be buffered (protected). The material(s) used shall provide an opaque fence. At least 75% of required vegetation shall be placed on the side of the fence or wall of the adjacent property. A chain link fence with slats is not considered a solid fence for purposes of this section.
- B. Berms:** All berms, if provided, shall not exceed a slope with maximum rise of 1 foot to a run of 2 feet (a ratio of 1:2) and provide a minimum height of 4 feet and a maximum height of 6 feet with a compacted flat top of at least 15 inches wide. All berms, regardless of size, shall be stabilized with a ground cover or other suitable vegetation or permanent slope retention device. A combination of trees and shrubs are to be installed in an appropriate design scheme along the berm for appearance, durability and maintenance as approved by the Administrator. Berms taller than 6 feet shall be approved by the Administrator on a case-by-case basis through consideration of the slope, drainage and adjacent land uses.
- C. Existing Vegetation, Fences, Walls, and Berms:** Existing vegetation berms, walls, or fences within the landscaped area, but not including chain link fencing, may be used to fulfill the standards for the type of landscaping required provided that these elements are in good condition as determined by the Administrator. Where existing vegetative areas are to be credited, they shall be shown on the plan with a certification by a licensed landscape architect that the existing vegetation fully complies with the landscape requirements.
- D. Riparian Buffer:** Any required riparian buffer may be used to satisfy other buffer requirements, provided the plants are equivalent in number and type required by the landscape ordinance. Additional plant materials shall be installed in the riparian buffer to satisfy any remaining plant requirements. Additional plantings shall meet best management practices as determined by the Administrator.

8.8 LOADING AREAS AND UTILITIES SCREENING**8.8.1 DUMPSTERS, MECHANICAL EQUIPMENT, UTILITIES AND STORAGE AREAS**

- A. Dumpsters, Loading Docks, Mechanical Equipment and Utility Structures:** All such structures shall be completely screened from view from public and publicly-accessed streets and any adjacent residential or mixed-use properties to a height of 1 foot above the structure or 8 feet, whichever is less, by a wall or planted hedge. A device is considered out of view of the public street if it is within the 45 degree angles projected from the building edges (see diagram at right), except on a corner lot or lot with public drives along more than one side. Where a Type B buffer exists or is installed along adjacent property lines, this shall be considered sufficient screening from adjacent properties.



- B. Outdoor Storage Areas:** All unenclosed outdoor storage areas greater than 100 square feet shall also be completely screened from adjacent properties and streets to a height of 8 feet by a wall or planted hedge. Where a Type B buffer exists or is installed along adjacent property lines, this shall be considered sufficient screening from adjacent properties.
- C. Materials for Dumpster Enclosures:** Where possible, enclosures for dumpsters are encouraged to be constructed with materials that are compatible with the design and materials of the principal building. Dumpster enclosures shall be installed according to the Wilson Manual of Specifications. Screening may be created through the use of the following materials:
 - 1. Brick fence, brick/split face block, or decorative block.**
 - 2. Chain-link fence with slats, solid-wood fence, or fabricated metal fence:** If these materials are used a semi opaque, continuous planting hedge must be installed around the enclosure with shrubs that will grow to a height of 6 feet with only seasonal horizontal openings within 5 years.
 - 3. Chain-link fence:** If this material is used a completely opaque, continuous planting hedge must be installed around the enclosure with shrubs that will grow to a height of 6 feet within 5 years.
- D. Exemptions:** Dumpsters, loading docks, mechanical equipment, utility structures and outdoor storage areas in the LI and HI districts, and for industrial uses in the HC district are not required to be screened from view from public streets, residential or mixed-use properties if they are located more than 150 feet away. An administrative exemption may also be granted from the screening requirements of this section if the Administrator determines that site specific constraints render compliance impracticable or screening adjacent to natural or built features would serve no practical purpose.

8.8.2 OTHER UTILITY STRUCTURES

Utility equipment and facilities associated with on-site electric, cable, telephone, gas or other similar utility, including ground-based electrical transformers and power meters, shall be placed in service areas on the sides or rear of buildings, and shall be screened, to the extent possible, with evergreen plantings or other acceptable alternative approved by the Administrator. Areas around this equipment and facilities shall remain clear based on each utility company's guidelines.

8.9 WATERCOURSE (RIPARIAN) BUFFER AREAS

8.9.1 ESTABLISHMENT OF BUFFERS

All protected drainageways shall have riparian buffers directly adjacent to such surface waters, excluding wetlands, of the width specified in 8.9.2, below.

- A. Location of Buffers:** For the purposes of this section, protected surface waters or drainageways shall include perennial and intermittent streams, water supply impoundments, lakes, ponds, upper watershed drainageways that drain more than 5 acres, and other bodies of water as indicated on the most recent version of the 1:24,000 scale (7.5 minutes) quadrangle topographic maps prepared by the United States Geological Survey (USGS), and all other surface waters as indicated by the most recent version of the Soil Survey of Wilson County, North Carolina.

- B. Buffer Measurement:** The width of each required riparian buffer shall be measured perpendicular to the banks of the protected drainageway, beginning at the most landward limit of the top of bank for intermittent streams and perennial streams and beginning at the top of bank or mean high water line for all other water bodies. Where obvious conflicts between actual field conditions and USGS and county soil survey maps exist, appeals may be made to the North Carolina Division of Water Quality.

8.9.2 WATERCOURSE BUFFER TABLE

- A. Watershed Protection District Buffers:** When subject to the requirements of the state designated Watershed Protection District, watercourse buffers shall be maintained according to the table below. Such buffers shall be measured landward from the bank of each side of a perennial stream and shall consist of a natural vegetated area. No new development shall be permitted to occur in such buffers except that water dependent structures, public projects, road crossings and greenways may be allowed where no practicable alternative exists, provided such activities minimize built-upon surface area, direct run-off away from the surface waters and maximize the utilization of best management practices (BMP's).

Buffers for Watershed Areas III and IV – Critical Area & Protected Area	Required Vegetative Buffer	Additional Standards
1. Perennial Stream	50 ft	See Section 2.8.5
2. Perennial Stream (w/High Impervious Development Option, See Section 2.8.5)	100 ft	

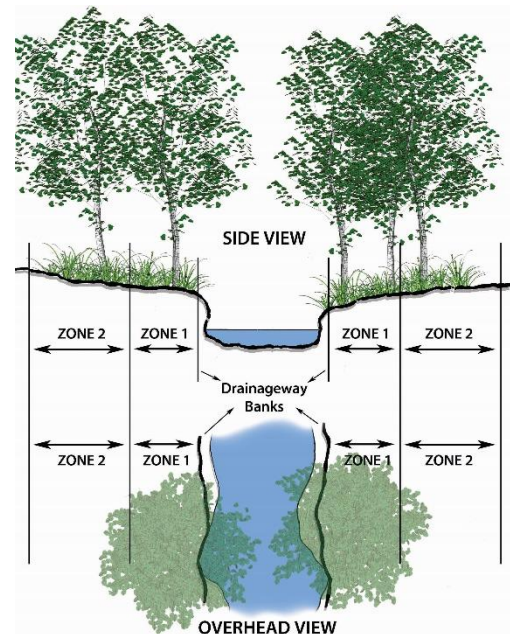
- B. Neuse River Basin Buffers:** The state regulations for water management in the Neuse River Basin (as outlined in 15 A NCAC 2B.0233 with changes as published 12:6 NCR 462-479) require buffers to be maintained along all perennial and intermittent surface waters according to the table below.

Neuse River Basin Required Riparian Buffer			Additional Standards
Total	Zone 1	Zone 2	See NC Environmental Management Commission Rule 15 A NCAC 2B.0233
50 feet min.	30 feet min.	20 feet min.	

C. Delineation of Buffer Zones

- Zone 1:** Zone 1 shall be a completely undisturbed area of forest vegetation. Zone 1 begins at the top of bank for intermittent streams and perennial streams and extends landward on all sides of the water body. For all other water bodies, Zone 1 begins at the top of bank or mean high water line.
- Zone 2:** Zone 2 shall be a maintained area of vegetation which consists of dense ground cover composed of herbaceous or woody species that provides for diffusion and infiltration of runoff and filtering of pollutants. Zone 2 begins at the outer edge of Zone 1 and extends landward.

- C. Activities Permitted in Zones 1 and 2:**
All required Zone 1 and Zone 2 buffers



shall remain natural, undisturbed and with the vegetation characteristics as outlined in Section 8.8.2.D, except as may be necessary to accommodate any of the uses and activities allowed by 15 A NCAC 2B.0233. These activities shall minimize built-upon surface area, direct run-off away from the surface waters and maximize the utilization of best management practices (BMP's).

- D. Description of Buffers on Development Plans:** Riparian buffers shall be shown on all approved site plans and subdivision plans. Where designated by the Administrator, the placement of "no mow" signs may be required to relay the buffer protection requirements to the public.
- E. Concurrency with Other Required Buffers:** The requirements of the Neuse River Riparian Buffer Rules (as outlined in 15 A NCAC 2B.0233) shall apply concurrently with the required drainageway buffers required above.

8.9.3 CONSTRUCTION BUFFER ZONE

- A. Standard Buffer:** No land-disturbing activity during periods of construction or improvement shall be permitted in proximity to a lake or natural watercourse unless natural or artificial means of confining visible siltation is provided along the margin of the watercourse so that such visible siltation is confined within the 25% of the buffer zone, as required in 8.9.1, nearest the land-disturbing activity.
- B. Projects On, Over or Under Water:** This section shall not apply to a land disturbing activity in connection with the construction of facilities to be located on, over, or under a lake or natural watercourse.
- C. Buffer Measurement:** Unless otherwise provided, the width of a buffer zone is measured horizontally from the top of bank for intermittent streams and perennial streams and beginning at the top of bank or mean high water line for all other water bodies.

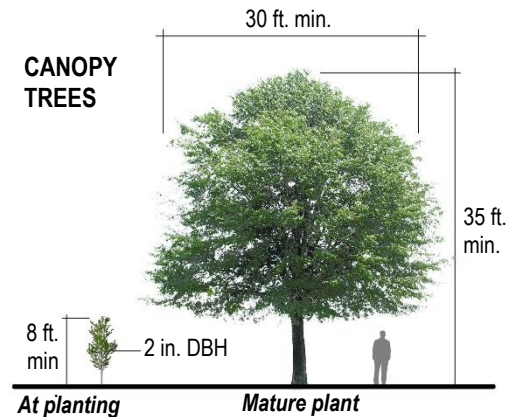
8.10 GENERAL INSTALLATION AND MAINTENANCE STANDARDS *[Revises Z-12.I]*

8.10.1 LANDSCAPE PLAN SUBMITTAL REQUIREMENTS

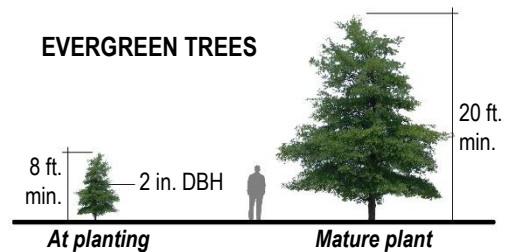
When a development application is made on any land where the landscaping requirements of this chapter are applicable, such site/subdivision plan application shall be accompanied by a landscape plan as outlined in the Submittal Checklist in the Appendix.

8.10.2 PLANT MATERIAL SPECIFICATIONS

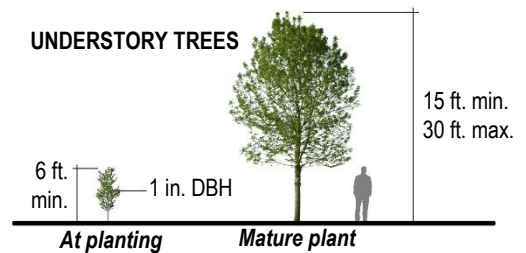
A. Canopy (Large Shade) Trees: All required canopy trees must be a native or locally-adapted species with an expected mature height of 35 feet or greater and an expected mature crown spread of 30 feet or greater. When planted, canopy trees must be a minimum of 8 feet high, and have a minimum caliper of 2 inches as measured at breast height (or approximately 4.5 feet above grade – DBH). Multi-stemmed trees shall have at least 3 stalks (minimum 1-inch DBH) and be at least 8 feet in height when planted.



B. Evergreen Trees: All required evergreen trees must be a native or locally-adapted species with green foliage that lasts through all seasons and an expected mature height of 20 feet or greater. Evergreen trees shall be a minimum of 8 feet in height and have a 2-inch DBH when planted.

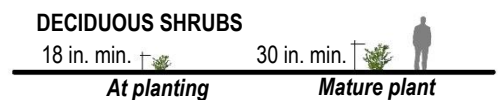


C. Understory (Small) Trees: All required understory trees must be a minimum of 6 feet high and 1-inch DBH when planted. When mature, understory trees shall be between 15 and 30 feet in height.

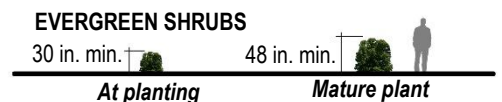


D. Shrubs: Shrubs planted as part of a required buffer yard, as outlined in Section 8.7, shall meet the following specifications.

1. Deciduous Shrubs: All deciduous shrubs shall be a minimum of 18 inches in height when planted and shall reach a height of 30 inches and a minimum spread of 30 inches within 2 years of planting (except those plants that do not mature to those dimensions).



2. Evergreen Shrubs: All evergreen shrubs shall be a minimum of 30 inches in height when planted and shall reach a height of 48 inches and a minimum spread of 36 inches within 2 years of planting.



E. Groundcover: All required groundcover plants must be a minimum of 1.5 to 2.5-inch pots with a 4-inch minimum length when planted. Groundcover must be planted with on-center spacing equivalent to the average mature spread for each particular species.

8.10.3 PLANT STANDARDS

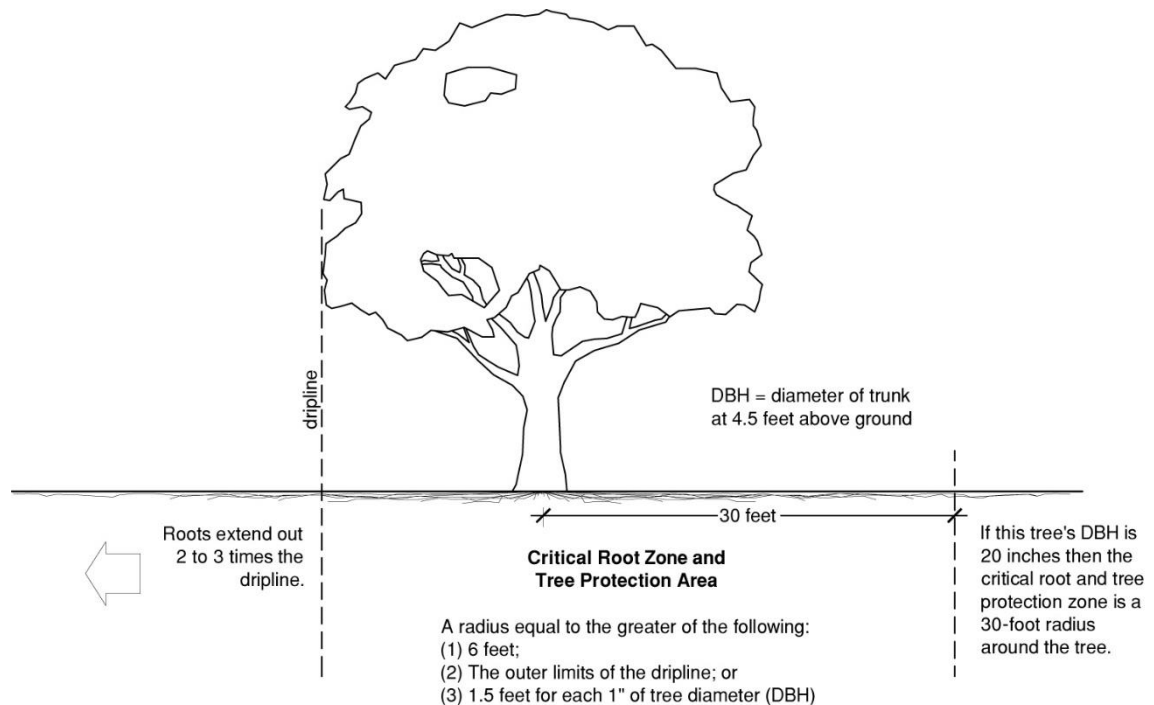
- A. **General Material Standards:** All plant materials shall be installed in accordance with the standards found in the latest edition of American Standards for Nursery Stock published by the American Association of Nurserymen. After installation, plant materials shall be mulched with a 3-inch layer of appropriate material.
- B. **Recommended Species List:** Plant materials utilized in meeting the requirements set forth in this section may be chosen from the City of Wilson Landscape Plant List maintained by the Administrator. The use of drought-tolerant vegetation that is native to the area is encouraged to reduce dependency upon irrigation.

8.10.4 GENERAL CONSTRUCTION STANDARDS

- A. **Easements & Right-of-Ways:** Nothing shall be planted or installed within an underground or overhead utility easement or a drainage easement without the consent of the Administrator and the easement holder at the time of site plan approval.
- B. **Grading and Development in Required Landscape Areas:** The required landscaping shall not contain any development, impervious surfaces, or site features that do not function to meet these standards or that require removal of existing significant vegetation. If grading within a planting yard is proposed, slopes of 3:1 or less are encouraged to ensure the proper transition of grades to the adjacent property and to facilitate landscaping and maintenance.
- C. **No Bare Soil Permitted:** All portions of the landscaping area not planted with shrubs and trees or covered by a wall or other screening device shall be planted with ground cover and/or grass, or covered with natural mulch with a minimum depth of 3 inches.
- D. **Overhead Power Lines:** Where overhead power lines are present, small trees (20 to 30 feet in height at maturity) must be utilized. One small maturing tree is required for every 35 feet of property abutting a street. (Utility lines such as cable and phone do not constitute a hazard, and large maturing trees should be used if only these are present.)
- E. **Sight Distance:** All trees planted within the sight distance triangle at an intersection, or driveway access point as defined in Chapter 9 shall be limbed-up to provide for clear sight lines between 2 feet and 7 feet above the finished grade. (Exception: NCDOT has separate provisions for state-maintained roadways.)

8.10.5 PROTECTION OF EXISTING TREES DURING CONSTRUCTION

- A. Protective barricades shall be placed around all trees designated to be saved, prior



to the start of development activities or grading. Protective barricades shall remain in place until development activities are completed. The following conditions are required:

1. Barricades may consist of 2 x 4 inch posts with 1 x 4 inch rails, orange safety fence, or a similar treatment and shall remain in place until development activities are complete.
 2. Signs indicating that the barricade is protecting a tree save area within which construction traffic and storage of materials are not permitted shall be placed at a rate of 1 sign for every 100 linear feet of barricade.
 3. The barricaded area shall remain free of all building materials, stockpiled soil or other construction debris.
 4. Construction traffic, storage of vehicles and materials, and grading shall not take place within the protective areas of the existing trees.
- B. Barricades shall be erected at a recommended minimum distance from the base of protected trees according to the following standards:
1. For trees 10 inches or less DBH: Place at a minimum distance of 6 feet from the base of each protected tree or outside the dripline, whichever is greater.
 2. For trees between 10 and 20 inches DBH: Place at a minimum distance equal to 1.5 feet for each 1 inch in caliper or outside the dripline, whichever is greater.
 3. For trees of 20 inches or greater DBH: Place at a minimum distance of 30 feet from the base of each protected tree or outside the dripline, whichever is greater.

- C. Land disturbance within a tree dripline is prohibited except for driveway access points, sidewalks, curb and gutter.
- D. Where grading within a tree dripline cannot be avoided, cut and fill shall be limited to 25 percent of the area within the dripline, and tree roots must be pruned with clean cuts at the edge of the disturbed area. (No fill shall be placed within the dripline of a tree without venting to allow air and water to reach the roots.)

8.10.6 TREE TRIMMING ON PRIVATE PROPERTY

It shall be the duty of any person owning or occupying real property to maintain any trees on such property bordering a public right of way such that they will not obstruct or shade the streetlights, obstruct the passage of pedestrians on sidewalks, obstruct vision of traffic signs or obstruct the view of any street or alley intersection. The minimum clearance of any overhanging portion shall be 8 feet over sidewalks and 12 feet over all streets except truck thoroughfares which shall have a clearance of 16 feet. Any tree or shrub in violation of this section, is hereby declared to be a hazardous and dangerous condition inimical to the public health and a public nuisance.

- A. **Notice to Trim:** Should any person owning real property bordering on any street fail to trim trees as hereinabove provided, the Administrator shall order such person, within 3 days after receipt of written notice, to so trim such trees.
- B. **Order Required:** The order required herein shall be served by mailing a copy of the order to the last known address of the property owner by registered mail, return receipt requested.
- C. **Failure to Comply:** When a person to whom an order is directed shall fail to comply within the specified time, it shall be lawful for the city to trim such trees, and the cost thereof shall be assessed to the owner as provided by law in the case of special assessments.

8.10.7 INSPECTION

The Administrator may inspect the site after the issuance of a Certificate of Occupancy in order to ensure compliance with the approved site plan and to ensure that the landscape is properly maintained. The Administrator may issue a Notice of Violation to comply with the provisions of this ordinance if warranted upon an inspection under the provisions of Chapter 16 of this ordinance.

8.10.8 REPLACEMENT OF DISTURBED AND DAMAGED VEGETATION

Without prior approval, the disturbance of any required landscaped area or vegetation required by this ordinance shall constitute a violation. All disturbed landscaped areas and vegetation shall be replanted to meet the standards of this section, the stormwater regulations in Chapter 12, and the approved site or sketch plan (landscape plan).



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ACTION ALERT: Urge Legislators to Oppose Latest Tree Ordinance Bill

North Carolina League of Municipalities sent this bulletin at 04/27/2021 02:59 PM EDT

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April 27, 2021 | [NCLM.org](https://www.ncclm.org)

ACTION ALERT: Urge Legislators to Oppose Latest Tree Ordinance Bill

Another bill restricting local tree ordinances is pending in the N.C. General Assembly, threatening to damage local efforts that create community character. HB 496 Property Owners' Rights/Tree Ordinances would require that all local ordinances regulating the removal of trees be permitted only with the express authorization of the General Assembly. It is expected to be heard in the House Committee on Local Government – Land Use, Planning and Development on Thursday.

Cities and towns oppose this bill that takes away local authority. We urge you to contact your state House member and let them know that HB 496 Property Owner's Rights/Tree Ordinances undermines local authority and harms local visions of community character that are critical to economic development and residents' quality of life.

It is also important to understand that this legislation – like other state mandates affecting local development – has the potential to restrict the ability of local officials to protect the rights of existing property owners from neighboring development that could harm their property values.

With that in mind, please make the following points to legislators:

- HB 496, by restricting local tree ordinances, damages local visions of community character that are crucial to economic development and residents' quality of life.
- Local officials are best positioned to determine how local tree ordinances should be created and applied, as they are responding to local voters and property owners and understand the differing needs of their communities.
- HB 496 limits the ability of local officials to protect the rights of all property owners, including those whose homes border new development and could potentially lose value based on how that development proceeds.

Please contact your state House member this week and let them know of your opposition to HB 496 Property Owners' Rights/Tree Ordinances. Ask that they vote against this legislation in any committee or floor votes, and that they oppose this latest attack on local control.



434 Fayetteville Street, Suite 1900, Raleigh, NC 27601 | Phone: (919) 715-4000

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