

## Article 29. Tree Protection

- 29.1 PURPOSE
- 29.2 AUTHORITY AND APPLICABILITY
- 29.3 MAINTENANCE AND PROTECTION OF TREES
- 29.4 PLAN SUBMITTAL AND PROCESS
- 29.5 GREEN AREA
- 29.6 FRONTAGE TREE PLANTING REQUIREMENT
- 29.7 TREE PLANTING REQUIREMENTS
- 29.8 TREE MITIGATION FUNDS
- 29.9 ADMINISTRATIVE ADJUSTMENTS AND EMERGENCIES
- 29.10 ADMINISTRATION
- 29.11 CHARLOTTE TREE ADVISORY COMMISSION
- 29.12 CHIEF URBAN FORESTER

### 29.1 PURPOSE

A. The purpose of this Article is to preserve, protect and promote the health, safety, and welfare of the public by providing for the regulation of the planting, maintenance, and removal of trees located on property owned or controlled by the City and on new developments and alterations to previous developments on private property within the City and extraterritorial jurisdiction (ETJ).

B. The intent of this Article is 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 tree cover.
6. Maintain moisture levels in the air of lands with tree cover.
7. Emphasize the importance of safeguarding native ecosystems through native tree preservation.
8. Preserve underground water reservoirs and facilitate the return of precipitation to the groundwater strata.
9. Prevent soil erosion.
10. Provide shade.
11. 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 stormwater drainage problems.
12. Conserve natural resources, including adequate air and water.
13. Maintain and enhance the tree canopy cover across the City.

### 29.2 AUTHORITY AND APPLICABILITY

#### A. Authority

The City of Charlotte is authorized to adopt ordinances for the regulation of removal, replacement, and preservation of trees within its boundaries pursuant to North Carolina S.L. 1975-115.

## B. Applicability

### 1. General Applicability

a. The requirements of this Article shall apply to all development and redevelopment activity, including grading in anticipation of such development, within the corporate limits of the City and the City's extraterritorial jurisdiction (ETJ), whenever development or redevelopment would result in:

- i. New construction of a principal structure.
- ii. Cumulative increase in built-upon area (BUA) or building coverage equal to or greater than 5% or 1,000 square feet, whichever is less.
- iii. Approval of a subdivision as defined by Article 31.3.A.

### 2. Specific Applicability

In addition to item 1 above, the following shall comply with specific sections of this Article as specified below:

#### a. Conditional Zoning Map Amendment Review

Section 29.4.A shall apply to all conditional zoning map amendment petitions.

#### b. Tree Protection and/or Planting Required on Public Property

This Article shall apply to public entities and owners of public property when projects do any of the following:

- i. Increase building coverage.
- ii. Impact existing trees required or protected by this Article.

Where a project does not meet any of the criteria above, tree protection and permitting shall not be subject to this Article but shall be subject to interdepartmental agreements and land development standards pursuant to the Charlotte Tree Manual.

c. All properties within the City of Charlotte shall comply with the requirements for maintenance and protection of trees pursuant to Section 29.3.

### 3. Exemptions

The following activities are exempt from the requirements of this Article as specified below:

a. Construction of a new single-family detached, duplex, triplex, or quadraplex structure is exempt from Sections 29.5 and 29.7 below, unless such construction is part of an approval of a new subdivision as defined by Section 31.3.A. This exemption does not apply to any tree planting and tree preservation requirements that are a condition of a previously approved subdivision.

b. An activity undertaken on forestland for the production and harvesting of timber and timber products and conducted in accordance with standards defined by the Forest Practice Guidelines Related to Water Quality (Best Management Practices), as adopted by the North Carolina Department of Agriculture and Consumer Services. If the activity undertaken on forestland for the production and harvesting of timber and timber products is not conducted in accordance with standards defined by the Forest Practice Guidelines Related to Water Quality, the provisions of this Article shall apply to such activity and any related activity on the site.

## 29.3 MAINTENANCE AND PROTECTION OF TREES

### A. Applicability

The requirements of this section shall apply to all properties.

### B. Trees on Public Property

Trees located on City property and on public street right-of-way are considered assets of the City of Charlotte and are always protected by this Article. The City manages city trees to provide the highest level of benefits possible to the Charlotte community while maintaining a high standard of public safety and acceptable risk.

1. No person shall perform a tree disturbing activity to any city tree, without first obtaining a tree work permit from the City. The provisions of said permit and of this Article shall be strictly complied with. Failure to comply with the provisions of an issued tree work permit shall constitute a willful violation of this Article.
2. No person shall plant any tree or shrub on any public street rights-of-way or City property without first obtaining a tree work permit from the City and without complying strictly with the provisions of said permit and the provisions of this Article.
3. 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.
4. All building materials, equipment, dirt, and debris shall be kept outside the critical root zone. Any tree protection fence, frame, or box required by this Article shall not be removed unless or until the City authorizes such removal.
5. It shall be the duty of the property owner to plant required perimeter trees in public street rights-of-way as required by a City-approved development plan pursuant to the Charlotte Tree Manual. Trees required by this Article, or trees protected by this Article as a condition of a previously approved development plan, which die, are missing, or are otherwise deemed unhealthy by the City, shall be removed and replaced by the property owner normally during the next planting season which is November through March. New owners of properties already in compliance shall 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 required to use large maturing shade trees as replacements whenever 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 they have voluntarily done so in the past.
6. It shall be the duty of the property owner to maintain and/or replace required amenity zone streetscape elements, including tree pits, installed in public street rights-of-way as required by a City-approved development plan pursuant to the Charlotte Tree Manual.
7. The removal of city trees may be subject to mitigation payment and/or planting, pursuant to the Charlotte Tree Manual. Collected fees from city tree mitigation shall be deposited in the Street Tree Planting Fund per Section 29.8.A.2

#### **C. Trees on Private Property**

1. 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 maintain or prune such trees, pursuant to the Charlotte Tree Manual, in a manner that they will not do any of the following:
  - a. Obstruct or shade the streetlights or pedestrian lights in public rights-of-way.
  - b. Obstruct or interfere with the passage of pedestrians or bicyclists on sidewalks, shared-use paths, greenways, bicycle lanes, and other similar multimodal transportation facilities.
  - c. Obstruct vision of traffic signs or signals.
  - d. Obstruct views of any street or alley intersection.
2. Any person owning or occupying real property bordering on any public street, city park, or other City 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 any person or domestic animal.
3. No tree disturbing activity may impact any tree equal to or larger than two inches caliper within a required green area, any tree equal to or larger than eight inches caliper within a tree protection zone, any heritage tree, and/or any other tree required by this Article prior to approval and issuance of applicable tree work permits by the City.

4. It shall be the duty of the property owner to maintain, plant, and/or replace required and protected trees on private property as required by this Article, including heritage trees in item 5 below, and perimeter trees planted in network-required private streets. Trees shall be allowed to grow to their natural height and form. Topping is prohibited.

5. Heritage trees shall be protected at all times, subject to the requirements of this Article as follows:

a. No heritage tree shall be removed unless a City-issued tree work permit is requested and approved. No removal activities shall commence until such permit is issued. Owners and persons who remove a heritage tree or disturb the critical root zone of a heritage tree without a tree work permit are subject to the civil penalties set forth in Article 40. For purposes of this subsection, a development plan approved by the City constitutes a tree work permit. Tree work permits for the removal of heritage trees shall be granted only where any of the following occur:

i. The tree and critical root zone are located within the buildable area where a structure or improvement may be placed and there is no other reasonable location. Mitigation, per item b below, shall be required.

ii. Preservation of the tree would unreasonably restrict use of the property. Mitigation, per item b below, shall be required.

iii. The tree is sufficiently diseased, injured, dead, in danger of falling, creates unsafe sight distance, or conflicts with other sections of this Ordinance or provisions of other ordinances or regulations. Mitigation shall not be required.

b. Owners and persons authorized by the City to remove a heritage tree, per the conditions stated in Section 29.3.C.5.a.i. or ii, above, shall comply with one of the following mitigation actions:

**i. Tree Planting Option**

One or more trees shall be planted on the property where the tree loss occurred in mitigation pursuant to the Charlotte Tree Manual.

**ii. Heritage Tree Mitigation Payment**

A heritage tree mitigation payment shall be required for every heritage tree removed per the fee set by the Charlotte Tree Manual.

(A) Collected fees from mitigation per this item shall be deposited into the Canopy Care Fund as establish in Section 29.8.A.3.

6. Trees required by this Article, or trees protected by this Article as a condition of a previously approved development plan, which die, are missing, or are otherwise deemed unhealthy by the City, shall be removed and replaced by the property owner, normally during the next planting season which is November through March.

Parcels that are already in compliance shall maintain that compliance with these standards. Trees of the same approved species as those existing may be used to replace dead, missing, or unhealthy trees. The property owner is required to use large maturing shade trees as replacements whenever 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 they have voluntarily done so in the past.

**D. Tree Work Permits**

1. Persons requesting to perform any tree disturbing activity to trees subject to this Article, or trees protected as a condition of a previously approved development plan, shall obtain a tree work permit from the General Services Department or the Planning Department before the activities commence, pursuant to the Charlotte Tree Manual. For purposes of this section, a development plan subject to the applicability of this Article that is approved by the City constitutes a tree work permit.

2. The City shall have the authority to review all requests for tree work permits and to grant, deny, or attach reasonable conditions to such permits.

3. Individual tree work permits shall not be required for Charlotte Department of Transportation (CDOT), Charlotte Area Transit Services (CATS), and North Carolina Department of Transportation (NCDOT) projects so long as tree preservation and protection requirements are included in the project plans.

#### **E. Tree Planting Delay Requests**

Requests for a delay in complying with this Article due to poor weather conditions for planting shall be considered following a written request directed to the Planning Department. Permit holds shall be released upon approval of a planting delay. Denied tree planting delay requests shall not change the timeframe during which the planting shall be completed. Failure to comply shall be deemed a willful violation of this Article and shall result in penalties as provided for in Article 40.

#### **F. Utilities**

1. Public and private utilities that install aboveground or underground utilities shall be required to accomplish all work on property subject to this Article in accordance with the utility company's written pruning and trenching specifications or as mutually agreeable to the property owner, the City, and the utility.
2. 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 Charlotte Tree Advisory Commission (CTAC) for necessary improvements and modifications as required by this Article. Upon approval of its specifications, a utility shall not be required to obtain a tree work permit for routine trenching and pruning operations affecting a City tree 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 shall be deemed a willful violation of this Article.
3. Refer to Section 29.7 for light pole location requirements.

### **29.4 PLAN SUBMITTAL AND PROCESS**

#### **A. Tree Survey for Conditional Zoning Map Amendment**

A tree survey shall be required for all Conditional Zoning Map Amendments. A tree survey required by this section shall include identification of the following:

1. All City trees of three inches DBH or greater and all City trees planted six feet in height or greater.
2. All existing heritage trees on the property.
3. Any existing areas of the site used for credit toward meeting previously approved tree save or green area requirements.

#### **B. Tree Compliance Plan**

All applications for land development approval subject to the applicability of this Article shall be required to submit to the Planning Department a tree compliance plan which shall include a tree survey, a tree and critical root zone protection plan, and tree planting and green area plan for all City trees, heritage trees, specimen trees, tree save areas, areas subject to green area requirements, and tree protection zones.

##### **1. Tree Survey for Land Development Approval**

A tree survey required by this section shall include identification of the following:

- a. All City trees of three inches DBH or greater and all City trees planted six feet in height or greater.
- b. Any trees of two inch caliper or larger being saved for credit toward planting requirements.
- c. All existing heritage trees on the property, and their critical root zones.
- d. All existing specimen trees that are used for tree save or green area credit and their critical root zones.
- e. Any existing areas of the site used for credit toward meeting previously approved tree save or green area requirements

- f. Any area of the site to be used for credit toward meeting new green area requirements per Section 29.5.B. Green roof and green wall area used for credit toward green area requirements shall be delineated by unique identifiers on the plan from other green area credits used to achieve required on-site green area.

**2. Tree and Critical Root Zone Protection Plan**

A tree and critical root zone protection plan pursuant to the Charlotte Tree Manual shall include identification of and protection plan for the following trees and their critical root zones:

- a. All City trees of three inches DBH or greater and all City trees planted six feet in height or greater.
- b. Any existing trees of two-inch caliper and larger in any tree save or green area.
- c. Any trees of two-inch caliper or larger being saved for credit toward planting requirements.
- d. Any existing heritage trees.
- e. Any existing specimen trees that will be used for green area credit.

**3. Tree Planting and Green Area Plan**

All applications for land development approval subject to the applicability of this Article shall include a tree planting and green area plan. The tree planting and green area plan shall include all trees required to be planted or preserved pursuant to the requirements of this Article and shall be submitted to the Planning Department in written/design form and shall conform to the provisions of this Article and all specifications set out in the Charlotte Land Development Standards Manual (CLDSM) and Charlotte Tree Manual.

**C. Tree As-Built Plan**

To certify completion of a development project, applicants shall submit “tree as-built” plans as specified in the CLDSM, and Charlotte Tree Manual for all required perimeter trees, internal trees, mitigation trees, and green area credits. “Tree as-built” plans shall be submitted to the Planning Department prior to release of permit holds.

**D. Platting and Recording of Green Area**

Prior to issuance of certificates of occupancy, tree save boundaries shall be required to be surveyed and be described in metes and bounds and be recorded on the final plat.

**29.5 GREEN AREA**

**A. Applicability of Standards by Tier**

Green area, perimeter planting and internal planting requirements are differentiated by Place Type as designated within the four tiers established within Table 29-1 below:

Table 29-1: Tier Assignment of Place Types			
Tier 1 Place Types	Tier 2 Place Types	Tier 3 Place Types	Tier 4 Place Types
Regional Activity Center Place Type	Manufacturing and Logistics Place Type	Neighborhood 2 Place Type - All zoning districts other than N2-C Zoning District	Neighborhood 1 Place Type
Community Activity Center Place Type	Neighborhood Activity Center Place Type		
Campus Place Type - If zoned IC-2 Zoning District	Commercial Place Type	Campus Place Type - All zoning districts other than IC-2 Zoning District	Parks and Preserves Place Type
	Innovation Mixed-Use Place Type		
	Neighborhood 2 Place Type - If zoned N2-C Zoning District		

**B. Required Green Area**

15% or more of a development or redevelopment site that is subject to the applicability of this Article shall be green area to be credited as provided for in Table 29-2: Green Area Credits.

**C. Green Area Credits**

The standards and methods for calculating required green area for sites shall be as follows:

1. Green area credits shall be used to achieve the required 15% green area pursuant to item B above. Green area credits are based on the corresponding multipliers for each credit and found in Table 29-2.
2. The process for calculating a property’s green area credit shall be as follows:
  - a. The area of each green area credit is multiplied by its corresponding multiplier.
  - b. The resulting green area credits are added together.
  - c. The sum of these green area credits is then divided by the total land area of the development or redevelopment site to determine the green area percentage, which shall constitute at least 15% of the site per item B above.
3. All Green Area Credits shall comply with technical standards per the Charlotte Tree Manual.

Table 29-2: Green Area Credits				
Green Area Credits	Multipliers			
	Tier 1	Tier 2	Tier 3	Tier 4
Tree save - Preservation of existing on-site contiguous tree canopy (See Section 29.5.D)	1	1	1	1
Planting trees at 36 trees per acre - where less than 15% of the site has existing trees	1	1	1	1
Replanting trees at 36 trees per acre to replace trees that were removed	1	0.67	See footnote 1	See footnote 1
Land donation to the City’s Tree Canopy Preservation Program (TCPP), both on-site or off-site, per site requirements in the Charlotte Tree Manual	1.25	1.25		
Green roof /terrace – planted over at least 2 inches but less than 4 inches of growth medium	0.5	0.25		
Green roof /terrace - planted over at least 4 inches but less than 8 inches of growth medium	0.75	0.5		
Green roof /terrace - planted over at least 8 inches of growth medium	1	0.75		
Green walls (not to exceed 50% of green area credits)	0.5	0.25		
Off-site mitigation <sup>2</sup>	1	0.67		
Amenitized tree areas	1	0.67		
Payment in Lieu (See Section 29.5.E) <sup>2</sup>	1	0.5		
High-Quality Tree Incentives				
Preservation of specimen trees (calculated by drip line)	2	2	2	2
Preservation of existing on-site tree canopy contiguous with existing tree save or conservation agreement areas on adjacent property	1.25	1.25	1.25	1.25
Preservation of existing on-site tree canopy contiguous with intermittent and perennial streams <sup>3</sup>	1.25	1.25	1.25	1.25
Preservation of existing on-site tree canopy on steep slope in excess of 33%	1.25	1.25	1.25	1.25

<sup>1</sup> In Tier 3 and Tier 4, as part of the required green area, the removal of existing trees may only be approved by the Chief Urban Forester when the tree and critical root zone are located within the buildable area where a structure or improvement will be placed and there is no other reasonable location, and/or preservation would unreasonably restrict use of the property. The area of existing trees removed shall be replanted with trees at 150% of the area removed at 36 trees per acre.

<sup>2</sup> Payment in Lieu and off-site mitigation may not be used in combination to meet the requirements of this section.

<sup>3</sup> Intermittent and perennial streams within the project boundary shall be delineated by a certified professional using U.S. Army Corps of Engineers and N.C. Division of Water Quality methodology and shall be shown in the Tree Planting and Green Area Plan along with all areas where this green area option is to be used.

#### **D. Tree Save Standards**

The following standards shall apply to all tree save areas within the required green area.

1. Tree save areas shall be free of invasive plant species unless otherwise approved by the Chief Urban Forester. 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 final plat approval for subdivisions. If there is no final plat for a project, the invasive plant species shall be removed prior to the issuance of the final certificate of occupancy. Invasive plant species are considered removed if they are no longer living in or under the tree canopy. Property owners are required to maintain this condition for compliance with this Article.
2. Pursuant to the Charlotte Tree Manual, any alterations to the tree save area in Tier 3 and Tier 4 Place Types shall be accomplished without mechanized tools and vehicular equipment and made of organic, environmentally friendly materials, unless otherwise approved by the Chief Urban Forester. For sites located in Tier 1 or Tier 2 Place Types, 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 shall be made in a manner that is not detrimental to the saved trees or their critical root zone. Alterations and addition of any amenities shall be approved by the Chief Urban Forester.
3. Any tree save area less than 30 feet in width shall be delineated on site with boundary and property lines by a licensed surveyor prior to the first submittal of plans.
4. No structure shall be allowed within ten feet of the tree save area. A building restriction note shall be indicated on the record plat pursuant to the Charlotte Tree Manual. For sites located in Tier 1 or Tier 2 Place Types, 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 building restriction area.
5. Additional amenity elements including, but not limited to, benches, trails, gazebos, sheds, fences, may be permitted by the Chief Urban Forester pursuant to the Charlotte Tree Manual.
6. Tree save areas may include areas dedicated to Mecklenburg County Park and Recreation for greenways or the City of Charlotte for the Urban Arboretum Trail or other City trail projects. Greenway and trail placement shall be coordinated with the Chief Urban Forester pursuant to the Charlotte Tree Manual so that the effective tree save area required is achieved and maintained.
7. Tree save areas on sites in Tier 1, 2, and 3 Place Types or nonresidential sites in Tier 4 Place Types may include existing tree canopy which overhangs existing underground utility easements based upon adherence to the Charlotte Tree Manual and approval by the Chief Urban Forester.
8. Tree save areas may include the planting of small maturing trees in accordance with Duke Energy's, or its successor's, approved planting list, within 25 feet of power distribution lines. This allowance shall only be granted where planting is in adherence with the Charlotte Tree Manual and approved by the Chief Urban Forester.
9. In local historic districts designated by a Historic District Overlay (Section 14.1) and Neighborhood Character Overlay Districts as designated by a Neighborhood Character Overlay (Section 14.2), the requirements of overlay districts apply in addition to the regulations of this section.
10. The following additional standards apply only to tree save areas for single-family, duplex, triplex, and quadraplex residential development or redevelopment subject to subdivision regulations.

##### **a. Tree Save Area Method for Calculation**

Square footage for existing and dedicated street rights-of-way and utility easements and for existing ponds and lakes shall be subtracted from the total site area before the required percent of the green area is calculated.

##### **b. Additional Trees**

In instances where tree save is used to meet green area requirements, where groups of trees within a tree save area have gaps that are not expected to fill in with time, as determined by the Chief Urban Forester, additional trees shall be planted for the entire area to qualify as tree save area, pursuant to approval by the Chief Urban Forester. A planted shade tree shall be equivalent to 2,500 square feet of saved area. 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 being protected shall be included in the calculated tree save area.



**c. Criteria for New Trees**

New trees planted in common open spaces to satisfy the requisite tree save area requirement shall be at least 0.75 inch caliper shade trees. New trees planted within individual lots to satisfy the requirement shall be at least 1.50 inch caliper trees.

**E. Payment-In-Lieu**

A payment may be made by a developer or a property owner to a City administered tree preservation fund, per item 1 below. The payment shall be a percentage of the tax value of the land being developed pursuant to the Charlotte Tree Manual. The tax value of the land being developed shall not exceed 90% of the average tax value of land in the City limits and of the ETJ, excluding the land within the boundaries of I-77/I-277 and in accordance with the Charlotte Tree Manual. The City shall update the average tax value of the land for this formula with each County property revaluation. Payment-in-lieu may be used for a portion of the required 15% green area or the entire required green area in accordance with the requirements of this section.

1. Collected monies from mitigation and payment-in-lieu processes per this item shall be deposited into the Tree Conservation Fund established in Section 29.8.A.1

**F. Off-Site Mitigation**

An applicant may convey or protect, at no cost to the City, an amount of land equal to the required green area acreage, or a portion thereof, within the City or ETJ, to a land conservation group or the City, for the purpose of preserving off-site tree canopy to meet the requirements of this section, per Table 29-2. Mitigation shall be:

1. Approved by the Chief Urban Forester.
2. Acceptable to a land conservation group listed in the Charlotte Tree Manual.
3. In compliance with the Charlotte Tree Manual.

**G. Amenitized Tree Area**

Amenitized tree areas shall be subject to the following requirements:

1. Trees shall 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 Chief Urban Forester. Planting in alternative locations shall be per the Charlotte Land Development Standards Manual (CLDSM) 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 Chief Urban Forester.

**29.6 FRONTAGE TREE PLANTING REQUIREMENT**

**A.** Construction of a new single-family, duplex, triplex or quadraplex structure within the N1-A, N1-B, N1-C, N1-D, and N1-E Zoning Districts, except as part of an approval of a new subdivision as defined by Section 31.3.A, shall be required to plant a minimum of one tree for every 40 feet of lot width between the residential building and the public street right-of-way, pursuant to the Charlotte Tree Manual. Trees may be planted within the right-of-way to meet the requirements of this section unless the project is adjacent to NCDOT right-of-way. A minimum of one tree per lot shall be required.

**B.** Existing large maturing shade trees two-inch caliper or greater preserved between the building and the public street right-of-way may be counted towards this requirement if they are adequately protected during construction.

**C.** Trees planted to meet this requirement shall be a minimum of two inch caliper.

**29.7 TREE PLANTING REQUIREMENTS**

**A. General Requirements**

1. All trees planted pursuant to this Article shall be planted in amended soils and shall be included as an approved plant species within the CLDSM. All trees shall comply with the current edition of the American Standard for Nursery Stock, published by the American Association of Nurserymen.
  - a. Where two inch minimum caliper trees are specified, the minimum height for single stem trees shall be eight feet and multi-stem trees shall have three to five stems and be a minimum height of eight feet.
  - b. Where three inch minimum caliper trees are specified, the minimum height for single stem trees shall be ten feet, and multi-stem trees shall have three to five stems and be a minimum height of ten feet.
2. The entire planting area for all trees shall contain amended on-site soil or a soil mix and provide the minimum planting area as specified in the Charlotte Tree Manual.
3. At least 50% of new required trees shall be native species. Sites required to plant more than 20 trees shall plant multiple species pursuant to the Charlotte Tree Manual.
4. Small maturing trees may be planted where overhead power distribution lines would interfere with normal growth of large maturing trees. Trees shall not be placed within 25 feet of overhead power distribution lines or within any electric utility rights-of-way for overhead transmission lines.
5. Required trees shall be located at least ten feet from buildings unless otherwise approved by the Chief Urban Forester.
6. Required trees shall be located at least ten feet from on-site underground utilities unless otherwise approved by the Chief Urban Forester. For the purposes of this standard, underground utilities mean primary service lines for water, sewer, City-maintained stormwater, electric, gas, cable TV, and data transmission lines.
7. The required separation between site lighting and trees on a site shall conform to the standards of Table 29-3: Site Lighting and Tree Separation Requirements below.

Tier (Per Table 29-1)	Height of Site Lighting	Minimum Distance Required
Tier 1 & Tier 2	15' or above	20'
	Less than 15'	10'
Tier 3 & Tier 4	15' or above	30'
	Less than 15'	15'

**B. Perimeter Planting**

Perimeter trees are located in planting strips, amenity zones, or planting areas along or otherwise adjacent to public streets and network required private streets. These trees are intended to provide shade and other environmental benefits along streets for pedestrians and other users of public rights-of-way.

**1. General Perimeter Planting Requirements**

For all projects subject to the applicability of this Article, large maturing trees per the CLDSM shall comprise 75% of the required perimeter trees planted in locations without overhead power distribution lines that obstruct normal growth. Small maturing trees per the CLDSM shall be planted where overhead power distribution lines obstruct normal growth of large maturing trees.

**2. Tier 1, 2, and 3 Perimeter Planting Requirements**

- a. The requirements of this section apply to development and redevelopment within the Place Types listed under Tier 1, 2, or 3 per Table 29-1 above. For development and redevelopment subject to this section, large maturing or small maturing trees shall be planted subject to the location and spacing standards below. Trees shall be of a minimum two inch caliper for Tier 3 sites and a minimum three inch caliper for Tier 1 and Tier 2 sites.

**b. Perimeter Planting Location**

Trees shall be planted in any planting strip or amenity zone established pursuant to Article 34 unless the project is subject to item 4.c below. Any trees in an established amenity zone may be planted using tree pits or curbed planters as detailed in CLDSM.

**c. Perimeter Planting Quantity and Spacing**

i. If large maturing trees are planted:

(A) One tree shall be planted for every 40 feet of frontage or fraction thereof.

(B) The minimum spacing shall be 40 feet.

ii. If small maturing trees are planted:

(A) One tree shall be planted for every 30 feet of frontage or fraction thereof.

(B) The minimum spacing shall be 30 feet.

**3. Tier 4 Perimeter Planting Requirements**

**a. Applicability**

The requirements of this section apply to development and redevelopment within the Place Types listed under Tier 4 per Table 29-1 above. For development and redevelopment subject to this section, large maturing or small maturing trees shall be planted subject to the location and spacing standards below and shall be of a minimum two inch caliper.

**b. Perimeter Planting Location**

Trees shall plant trees in the planting strip or amenity zone pursuant to Article 34 unless the project is subject to item 4.c below. If trees cannot be planted within the planting strip or amenity zone due to an insufficient planting area or soil volume, then trees shall be planted within 20 feet from the back of curb, subject to the requirements of this Article.

**c. Perimeter Planting Quantity and Spacing**

i. If large maturing trees are planted:

(A) One tree shall be planted for every 40 feet of frontage or fraction thereof.

(B) The minimum spacing shall be 40 feet.

ii. If small maturing trees are planted:

(A) One tree shall be planted for every 30 feet of frontage or fraction thereof.

(B) The minimum spacing shall be 30 feet.

**d. Alternative to Perimeter Planting**

Existing large maturing trees two inch caliper or greater within 20 feet of the back of the curb may be counted towards the perimeter planting requirement if they are preserved and adequately protected during construction per the CLDSM, Charlotte Tree Manual, and Section 29.3 above

**4. Special Conditions**

Modification to perimeter planting requirements for any tier may be granted for the following special circumstances:

**a. Site Constraints**

If the required number of trees cannot be planted as required above due to site constraints, the alternatives listed below, either 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 Chief Urban Forester.

- i. 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. For any reduced spacing, only species listed in the Charlotte Tree Manual or approved by the Chief Urban Forester shall be planted.
- ii. If tree planting in the planting strip or amenity zone is infeasible, alternative locations for tree planting shall be considered. However, in all instances, trees required by this section shall be planted within 20 feet of the back of curb.

Where these options are not feasible as determined by the Chief Urban Forester, a payment-in-lieu may be made to the City for perimeter trees that cannot be planted in the planting strip or amenity zone pursuant to the Charlotte Tree Manual. The site may not opt out of all required perimeter trees. Collected fees from mitigation and payment-in-lieu processes per this item shall be deposited into the Street Tree Planting Fund as established in Section 29.8.A.2

**b. 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 shall still be met.

**c. NCDOT Maintained Street Rights-of-Way**

When NCDOT planting guidelines or other standards prohibit perimeter tree planting within NCDOT-maintained street rights-of-way, the perimeter tree planting requirement shall still be met as specified below:

- i. In Tier 1, 2, or 3 Place Types (per Table 29-1), trees shall be planted on-site in alternative locations within 20 feet of the right-of-way, or in locations otherwise approved by the Chief Urban Forester.
- ii. In Tier 4 Place Types (per Table 29-1) located within Charlotte's ETJ, all required perimeter trees are allowed to be planted in the required frontage setback.

**C. Internal Planting**

Internal trees are located on private property outside of public rights-of-way. These trees are intended to provide shade and other environmental benefits in parking lots and other locations internal to sites. 75% of trees planted in parking areas shall be large maturing trees. The remainder of the trees may be either small or large maturing trees. Requirements for internal planting are as follows:

**1. Tier 1 and 2 Internal Planting Requirements**

The requirements of this section apply to development and redevelopment within the Place Types listed under Tier 1 and 2 per Table 29-1 above.

**a. Internal Planting Area and Quantity**

Whenever the built upon area exceeds 10,000 square feet, a planting area is required as follows:

- i. A planting area equal to 10% of the total built upon area shall be provided. This planting area shall be located on private property and shall be in addition to any perimeter planting and green area requirements. This planting area requirement may be reduced in the following instances:

(A) In Regional Activity Centers, the planting area may be reduced to 5% of the total built upon area.

- ii. One large maturing tree shall be planted per 10,000 square feet of built upon area or fraction thereof. Additional trees may also be required to satisfy the locational requirements of Section 29.7.C.1.b, below. A sufficient number of trees shall be planted to satisfy both requirements.

**b. Internal Planting Location**

Trees required by this section may be located anywhere on the site including on rooftops, in permanent planters, on raised or at grade plazas, on the top open-air level of a parking structure, or other locations approved by the Chief Urban Forester. However, each internal surface parking space shall be no more than 40 feet from a tree trunk. Planting standards shall be per the Charlotte Land Development Standards Manual (CLDSM) or as otherwise approved by the Chief Urban Forester.

## 2. Tier 3 and Tier 4 Internal Planting Requirements

The requirements of this section apply to development and redevelopment within the Place Types listed under Tier 3 and Tier 4 per Table 29-1 above.

### a. Internal Planting Area and Quantity

Whenever the built upon area of a site exceeds 10,000 square feet, a planting area is required as follows:

- i. A planting area equal to 10% of the total built upon area shall be provided. This planting area shall be located on private property and shall be in addition to any perimeter planting and green area requirements.
- ii. One large maturing tree shall be planted per 10,000 square feet of built upon area or fraction thereof. Additional trees may also be required in addition to this quantity to satisfy the locational requirements of Section 29.7.C.1.b, below. A sufficient number of trees shall be planted to satisfy both of these requirements.

### b. Internal Planting Location

Tree plantings required by this section may be located anywhere on the site, however, each internal surface parking space shall be no more than 40 feet from a tree trunk. Modifications of strict adherence to these requirements are granted for the following:

- i. The distance requirement may increase to 60 feet from a tree trunk if continuous islands, running the length of the parking area, are provided at a minimum width of eight feet.
- ii. Bus and tractor-trailer lots are not required to meet the 40 foot distance requirement above when trees are planted 40 feet apart around the edge of the parking area in a minimum ten foot wide planting area. Trees planted pursuant to this requirement may count as trees required per Section 21.6.

## 3. Special Conditions

Modification to internal planting requirements may be granted for the following special circumstances:

### a. Townhouse and Multi-Family Planting

For parking spaces located in driveways for individual townhouse dwellings or multi-family attached dwellings, the required trees may be located elsewhere on the site as approved by the Chief Urban Forester. The number of trees shall equal the quantity required by Section 29.7.C.2.a, above.

### b. Existing Trees

In meeting these internal planting requirements, credit may be given for existing trees subject to the following:

- i. Credit shall only be granted if the following conditions are met:
  - (A) The applicant includes in the tree survey referenced in Section 29.4, all existing trees of two-inch DBH or greater which are proposed to satisfy the planting requirements of this section.
  - (B) The applicant provides for the protection of healthy trees identified and proposed to satisfy the planting requirements of this section, during the entire development period, beginning prior to the commencement of site work and continuing through to issuance of the certificate of occupancy pursuant to approved tree protection requirements per CLDSM, the Charlotte Tree Manual, and Section 29.3.
- ii. The Chief Urban Forester may deem trees to be ineligible for this credit if the minimum protection standards are not met, or if trees are observed to be injured or threatened.

## 29.8 TREE MITIGATION FUNDS

A. The City of Charlotte shall maintain the following funds for the purpose of collecting and spending mitigation fees pursuant to the requirements of this Article and the Charlotte Tree Manual. These funds shall include the following:

### 1. Tree Conservation Fund

The City of Charlotte shall establish a Tree Conservation Fund to support the acquisition, protection, management, and long-term conservation of land in the City of Charlotte and its ETJ for the purposes of tree canopy conservation. The Tree Conservation Fund shall directly fund the City's Tree Canopy Preservation Program (TCPP). Collected fees will be allocated as designated in the Tree Canopy Preservation Program Manual. Collected fees from the mitigation and payment-in-lieu processes, as specified by this Article, shall be deposited into the Tree Conservation Fund. Fees collected shall only be spent on the following funding areas:

#### a. Acquisition of Property

The Tree Conservation Fund shall be used to purchase forested property and/or property that may be reforested following the guidance set forth in the TCPP Manual. The purchase of property for inclusion into the TCPP shall be authorized by the City Council and explicitly protected and preserved in perpetuity as forested land. All Urban Arboretum Trail sites shall be assigned an official conservation designation.

#### b. Property Management

The Tree Conservation Fund shall be used to support TCPP property management needs to ensure properties are maintained adequately to align with the City's comprehensive plan, and as required by the Unified Development Ordinance, applicable conservation easements, management plans and the TCPP Manual.

#### c. Program Management/Staff Support

The Tree Conservation Fund shall be used to support the salary and benefit costs for up to 3 full-time equivalent (FTE) staff positions and 1 intern position to assist in managing TCPP.

#### d. Long-Term Stewardship

The Tree Conservation Fund shall support long-term property management needs in the event annual property management funding level is insufficient to adequately maintain TCPP sites.

#### e. Urban Arboretum Trail (UAT)

The Tree Conservation Fund shall be used to support procurement of plant material, design services, site preparation services, installation services and other tree canopy and/or tree-themed program development items for UAT.

### 2. Street Tree Planting Fund

The City of Charlotte shall establish a Street Tree Planting Fund to support City-managed public tree planting and public tree inventory initiatives in the City of Charlotte's corporate limits. Collected fees from mitigation and payment-in-lieu processes, as specified above, shall be deposited into the Street Tree Planting Fund. Funds collected shall be used to supplement the City of Charlotte's public street tree planting program and street tree inventory objectives.

### 3. Canopy Care Fund

The City of Charlotte shall establish a canopy care fund to support the sustainable preservation, maintenance, and/or regeneration of Charlotte's tree canopy. Canopy Care Funds shall also be used to increase awareness of the trees and other tree canopy resources in the City of Charlotte. Collected monies shall be allocated as designated pursuant to the Charlotte Tree Manual (Canopy Care Funding Framework). Collected monies from mitigation and payment-in-lieu processes, as specified above, shall be deposited into the Canopy Care Fund. Funds collected shall be spent in the following funding areas:

#### a. Large Tree Assistance Program

The Canopy Care Fund shall be used to support a City-managed assistance program to help residents maintain tree canopy on private property.

**b. Canopy Care Grant Program Establishment**

The Canopy Care Fund shall be used to support a City-managed canopy care grant fund targeting tree planting or tree care on private property, cankerworm banding, and other tree canopy management needs pursuant to the Charlotte Tree Manual. All non-profit organizations, places of worship, and neighborhood and homeowners' associations within the City of Charlotte and its ETJ are eligible.

**29.9 ADMINISTRATIVE ADJUSTMENTS AND EMERGENCIES**

**A. Administrative Adjustments**

1. Administrative adjustments to quantitative standards may be requested in accordance with Section 38.4.A. Requests for administrative adjustments of quantitative standards shall only be considered for the following standards included within Table 29-4: Tree Protection Adjustments.

Table 29-4: Tree Protection Adjustments		
Section Eligible for Adjustment	Standard to be Adjusted	Decision Maker
Section 29.3	Tree Protection Requirements	Chief Urban Forester
Section 29.5	Green Area	Chief Urban Forester
Section 29.6	Minimum Caliper Requirements	Chief Urban Forester
Section 29.7	Tree Planting, Spacing and Quantity	Chief Urban Forester
Section 29.7	Site Lighting and Tree Separation	Chief Urban Forester
Section 29.7	Alternative to Perimeter Planting	Chief Urban Forester

2. If strict compliance with the standards of this Article conflict with existing federal or state statutory or regulatory requirements the developer may submit a specific alternate plan for planting to the Chief Urban Forester for consideration. This plan shall meet the purposes and standards of this Article but may suggest measures other than those in Section 29.5. In addition, if the developer seeks a modification of planting requirements based upon a contention that the planting required by this Article would pose a threat to health and safety due to a conflict with existing federal or state statutory or regulatory requirements, a modification shall 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 Chief Urban Forester 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 Article 38.

**B. Appeals**

Any determinations and decisions pursuant to this section may be appealed to the UDO Board of Adjustment as per Article 38.

**C. Emergencies**

In an emergency such as a windstorm, ice storm, fire, or other disaster, the requirements of this Article may be waived by the City during the emergency period so that the requirements of this Article shall 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 Article.

**29.10 ADMINISTRATION**

A. Appeals and variances of this Article shall be subject to Article 38.

B. Inspections and enforcement actions of this Article shall be subject to Article 40.

**29.11 CHARLOTTE TREE ADVISORY COMMISSION**

**A. Powers and Duties**

1. To serve in an advisory role in developing tree-related policy.
2. To review and provide guidance on best practices and education to sustain Charlotte's Tree Canopy.

3. To select and award recognition to exemplary trees and efforts to sustain tree canopy across the City of Charlotte.
4. To adopt bylaws necessary for the administration of its responsibilities not inconsistent with these regulations.

**B. Membership, Hearings, and Procedures**

1. The Charlotte Tree Advisory Commission shall be composed of 12 members, a majority of whom shall be residents of the City.
  - a. Seven of the members shall be appointed by the City Council.
  - b. Three of the members shall be appointed by the Mayor.
  - c. The remaining two members shall be representatives of the Planning Department and Department of General Services and shall be ex officio (non-voting) members. These members shall be the Chief Urban Forester or their designee and the City Arborist or their designee.
2. The Commission may nominate prospective members to City Council and the Mayor based on the following experience and background:
  - a. Professional horticulturist or landscape contractor with five years of experience.
  - b. Registered landscape architect with five years of experience.
  - c. Professional with five years of experience in city planning, urban design, government ordinance and regulations.
  - d. Member of a natural resources advocacy group.
  - e. Member of the International Society of Arboriculture.
  - f. Representative of sustainable development community.
  - g. Representative of citizen interest group.
  - h. Representative of public utilities.
  - i. Representative of neighborhood group.
3. 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.

**C. Meetings**

1. Regular meetings shall be held periodically at a time and place determined by the Charlotte Tree Advisory Commission.
2. The adopted bylaws, where not inconsistent with this Ordinance, shall govern the procedures for meetings.

**D. Staff**

Staff for the Tree Advisory Committee shall be provided by the following or their designee:

1. City Arborist
2. Chief Urban Forester



## **29.12 CHIEF URBAN FORESTER**

The Chief Urban Forester shall be charged with the following duties:

- A.** To interpret, administer and enforce the provisions of Article 29.
- B.** To lead and supervise the work and activities of staff, and supervise the tree regulation review, enforcement, and compliance.
- C.** To lead City-wide and department urban forestry goals and initiatives.
- D.** To serve as a liaison for the Charlotte Tree Advisory Commission, and interdepartmental committees.
- E.** To interpret and translate information to the public on regulatory processes, planning initiatives, and land use policies related to urban forestry and tree canopy.