

Article 20. Landscape, Screening, & Tree Preservation

- 20.1 LANDSCAPING AND SCREENING PURPOSE**
- 20.2 SELECTION, INSTALLATION, AND MAINTENANCE**
- 20.3 LANDSCAPE PLANTINGS**
- 20.4 ALTERNATIVE LANDSCAPE REQUIREMENTS**
- 20.5 REQUIRED SCREENING FOR PARKING LOTS**
- 20.6 PARKING LOT INTERIOR LANDSCAPE**
- 20.7 PARKING FACILITY DRIVEWAY AND MANEUVERING AREA LANDSCAPE**
- 20.8 PARKING STRUCTURE LANDSCAPE AREA**
- 20.9 LANDSCAPE YARD**
- 20.10 LANDSCAPE YARD FOR RESIDENTIAL SUBDIVISIONS ABUTTING LIMITED ACCESS ROADS**
- 20.11 LANDSCAPE YARD FOR RESIDENTIAL THROUGH LOTS AND COMMON OPEN SPACE ALONG AVENUES, BOULEVARDS, AND PARKWAYS**
- 20.12 REQUIRED SCREENING FOR LOADING AND SERVICE AREAS**
- 20.13 TREE PROTECTION PURPOSE AND EXEMPTION**
- 20.14 HERITAGE TREES**
- 20.15 GREEN AREA**
- 20.16 FRONTAGE TREE PLANTING REQUIREMENT**
- 20.17 TREE PLANTING REQUIREMENTS**
- 20.18 TREE PROTECTION ADMINISTRATION AND PROCESS**

20.1 LANDSCAPING AND SCREENING PURPOSE

The landscape and screening requirements established by this Article are intended to:

- A.** Preserve and enhance the appearance and character of the City.
- B.** Increase the compatibility of adjacent uses and minimize the potential negative impacts to neighboring uses.
- C.** Create transitional areas between uses or zoning districts of different intensities.

20.2 SELECTION, INSTALLATION, AND MAINTENANCE

The following standards apply to the landscape areas per Section 20.5 through 20.12 of this Article.

A. Selection

- 1.** Only shrubs and trees listed on the Approved Plant Species list in the Charlotte Land Development Standards Manual (CLDSM) shall be used for any landscaping required by this Article.
- 2.** All plants shall meet minimum quality requirements and be free of defects, and of normal health, height, leaf density, and spread as defined by the American Standard for Nursery Stock, ANSI Z60.1, latest available edition, American Horticulture Industry Association (AmericanHort).

B. Installation

All landscaping shall be installed according to sound horticultural practices in a manner designed to encourage quick establishment and healthy growth, and consistent with the CLDSM.

C. Species Diversity

Diversity among required plant material is required for visual interest and to reduce the risk of losing a large population of plants due to disease.

- 1.** The species diversity requirements of this section apply as follows:
 - a.** Species diversity applies to landscape plantings required by Section 20.2 through 20.12 of this Article.
 - b.** Species diversity only applies to the installation of new plantings.

2. Table 20-1: Plant Diversity Requirements indicates the percentage of diversity required based on the total quantity of species being used. (For example, if a development requires 45 shade trees, no more than 18 trees (40%) can be of any one species, and there shall be a minimum of five different species within the 45 trees.)

Table 20-1: Plant Diversity Requirements		
Total Number of Plants per Plant Type	Maximum Number of Any One Species	Minimum Number of Species
1-4	100%	1
5-10	60%	2
11-15	45%	3
16-75	40%	5
76-500	25%	8
500-1,000	30%	10
1,000+	15%	15

D. Maintenance

1. Trees and vegetation, irrigation systems, fences, walls, and other similar items are considered landscape elements of a development.
2. All landscaping shall be free from disease, pests, weeds, and litter. All landscape elements shall be maintained in good repair or replaced periodically as needed to ensure their continued function, structural soundness, and aesthetically pleasing condition.
3. Any landscape element that dies or is seriously damaged, shall be removed and replaced within 30 days of the beginning of the subsequent growing season.
4. Any ornamental grasses or shrubs planted next to sidewalks shall be planted and maintained so that they do not encroach into sidewalks at maturity.

E. Existing Plantings

Existing plantings within the required landscape areas, such as the landscape yard, may be counted toward planting requirements of this Article, with the exception of trees planted pursuant to green area requirements per Section 20.15, frontage tree planting requirements per Section 20.16, and tree planting requirements per Section 20.17, with the approval of the Zoning Administrator in consultation with the Chief Urban Forester.

F. Additional Trees and Shrubs

Additional trees and shrubs may be installed in required landscape areas in excess of the requirements of this Article.

20.3 LANDSCAPE PLANTINGS

The following are the planting sizes required for each landscape area per Section 20.5 through 20.12 of this Article. All trees shall be allowed to grow to natural form and height.

A. Plantings Sizes for Parking Lot Screening

Shrubs shall be evergreen and shall be at least two feet in height when planted and an average height of three to four feet expected as normal growth within four years. A minimum spread of two feet shall be required at time of planting. However, such shrubs shall not exceed four feet in height at maturity.

B. Planting Sizes for Parking Structure Landscape Area

1. All trees, except for multiple stem small maturing trees, shall have a minimum trunk caliper of two inches and a minimum height of eight feet at planting.
2. Multiple stem small maturing trees shall be tree form, with three to a maximum of five trunks, and shall have a minimum height of ten feet at planting.
3. Shrubs shall be evergreen and shall be at least two feet in height when planted and an average height of five to six feet expected as normal growth within four years. A minimum spread of two feet shall be required at time of planting. Such shrubs shall be a minimum of six feet in height at maturity.

C. Planting Sizes for Landscape Yard

1. All trees, except for multiple stem small maturing trees, shall have a minimum trunk caliper of two inches and a minimum height of eight feet at planting.
2. Multiple stem small maturing trees shall be tree form, with three to a maximum of five trunks, and shall have a minimum height of ten feet at planting.
3. Shrubs shall be evergreen and shall be at least two feet in height when planted and an average height of five to six feet expected as normal growth within four years. A minimum spread of two feet shall be required at time of planting. Such shrubs shall be a minimum of six feet in height at maturity.

20.4 ALTERNATIVE LANDSCAPE REQUIREMENTS

A. The Zoning Administrator may alter the screening, landscape area, or landscape yards requirements of Section 20.1 through 20.12 of this Article per the Administrative Adjustment Standards in Section 37.4 in the event that one or more of the following conditions would make strict adherence to the requirements serve no meaningful purpose or would make it physically impossible to install and maintain the required landscape yard or screening:

1. The unusual topography or elevation of a development site.
2. The soil or other sub-surface conditions on the site.

B. The Zoning Administrator shall not alter the screening, landscape area, or landscape yard requirements of Section 20.1 through 20.12 of this Article unless the developer demonstrates that the modified landscape yard or screening will comply with the spirit and intent of this Article and that the existing site features and any additional landscape yard materials will screen the proposed use as effectively as the required landscape yard or screening.

20.5 REQUIRED SCREENING FOR PARKING LOTS

A. General Requirements

Screening for parking lots and associated maneuvering areas is required for parking lots of ten or more vehicle spaces at the edge of the parking lot.

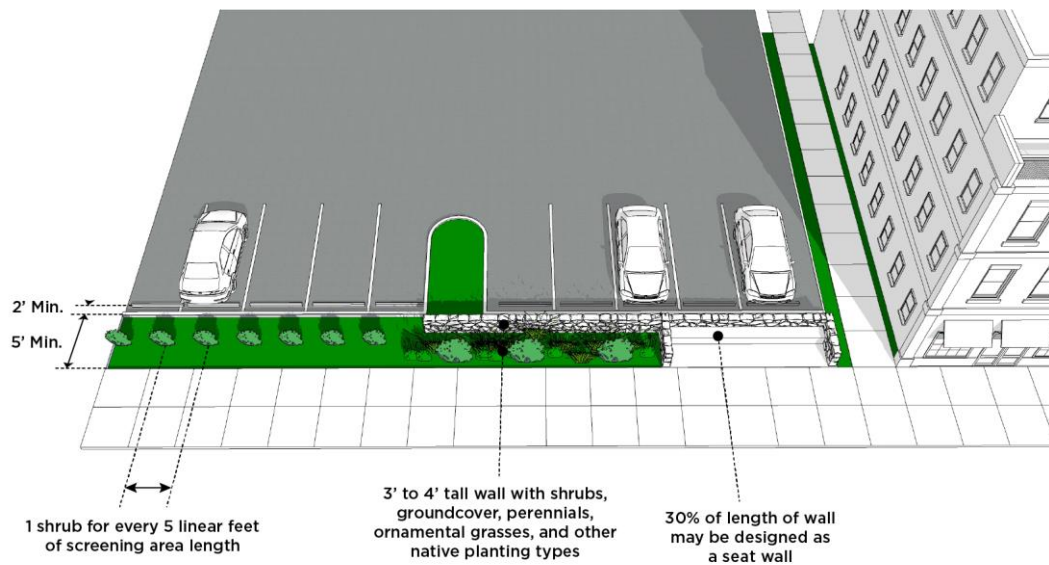
1. The following exceptions apply:
 - a. When parking areas are shared between properties, parking lot screening is not required along any shared lot line and/or cross-access connection area.
 - b. When parking lot screening is required between abutting properties and a landscape yard per Section 20.9 is also required, the requirements of the landscape yard control.
 - c. Vehicle dealerships are not required to install parking lot screening in those areas of the parking lot used to display vehicles for sale along a street frontage.
 - d. Parking lot screening is not required if the Zoning Administrator determines that adherence to this requirement would serve no meaningful purpose including, but not limited to, the grade on the site and the distance of the parking lot to adjacent properties.
2. Parking lot screening shall be installed when:
 - a. A new principal building is constructed.
 - b. A new parking lot of ten or more spaces is constructed.
 - c. Spaces are added to an existing parking lot where the total of existing and new spaces is ten or more spaces.
 - d. At least 50% of the parking lot area is reconstructed. Resealing, restriping, or resurfacing of an existing parking lot is considered normal maintenance and incidental repair, and not reconstruction.

B. Design of Screening Areas

The screening area shall be improved as follows:

1. The screening area shall be at least five feet in width.
2. There shall be an additional minimum linear distance of two feet between the screening area and any wheel stops or bollards to accommodate vehicle bumper overhang. This is not included in the minimum five foot calculation.
3. The parking lot screening area shall be landscaped and designed as one or more of the following installations. Any required tree planting shall comply with the tree planting requirements of Sections 20.16 and 20.17 below, where applicable.
 - a. One shrub shall be planted for every five linear feet of screening area length. However, shrubs shall not be planted within four feet of a tree.
 - b. As an alternate to the shrub plantings in item a above, for screening along a frontage a low pedestrian wall a minimum of three feet and a maximum of four feet in height constructed of masonry, concrete, or similar permanent material may be installed. In this alternative, the parking lot screening area may be reduced to three feet in width. The requirements of item 2 above shall also apply to this alternative.
 - i. Shrubs, groundcover, perennials, ornamental grasses, and other planting types of species native or naturalized non-invasive to North Carolina shall be planted in front of such wall, facing toward frontages or adjacent properties, covering a minimum of 40% of the total screening area.
 - ii. Up to 30% of the total length of such wall may be designed as a seating wall. Where seating areas are included, the minimum wall height does not apply and plantings are not required in front of the seating wall. Seating areas shall be oriented towards the frontage.
4. The following may cover any remaining unplanted area:
 - a. Shrubs, groundcover, perennials, ornamental grasses, and other planting types of species native or naturalized non-invasive to North Carolina.
 - b. Stone, mulch, or other permeable landscape materials.
5. A fence or wall may be used for screening in accordance with Section 17.2.D and as follows:
 - a. The area for the fence or wall shall be wide enough to accommodate the fence or wall and allow for its maintenance.
 - b. Any fences or walls used for screening shall be constructed in a durable fashion of brick, finished masonry, stone, wood posts and planks, metal, or other materials specifically designed as fencing materials, or any combination thereof as may be approved by the Zoning Administrator.
 - c. The fence or wall shall be a minimum of 75% opaque, and the finished side, as opposed to the side with the exposed structural supports, of the fence or wall shall face the abutting property. A chain link fence with metal, plastic, or wooden slats, or with fabric, shall not be used to meet any screening required by this Ordinance.
 - d. The minimum height of the fence or wall shall be four feet or whatever is sufficient to visually separate the uses.

PARKING LOT SCREENING



20.6 PARKING LOT INTERIOR LANDSCAPE

Interior parking lot landscaping is governed by Section 20.17 below.

20.7 PARKING FACILITY DRIVEWAY AND MANEUVERING AREA LANDSCAPE

A. The parking lot screening requirements of Section 20.5 shall apply to all driveway and maneuvering areas that are not adjacent to parking spaces for parking lots of ten or more spaces and for all driveway and maneuvering areas of parking structures.

B. When such driveway and maneuvering areas described in item A above are located within an established side or rear setback along an adjacent property line, a fence or wall a minimum of six feet to a maximum of eight feet may be used in place of the screening area except within the established setback along a frontage.

20.8 PARKING STRUCTURE LANDSCAPE AREA

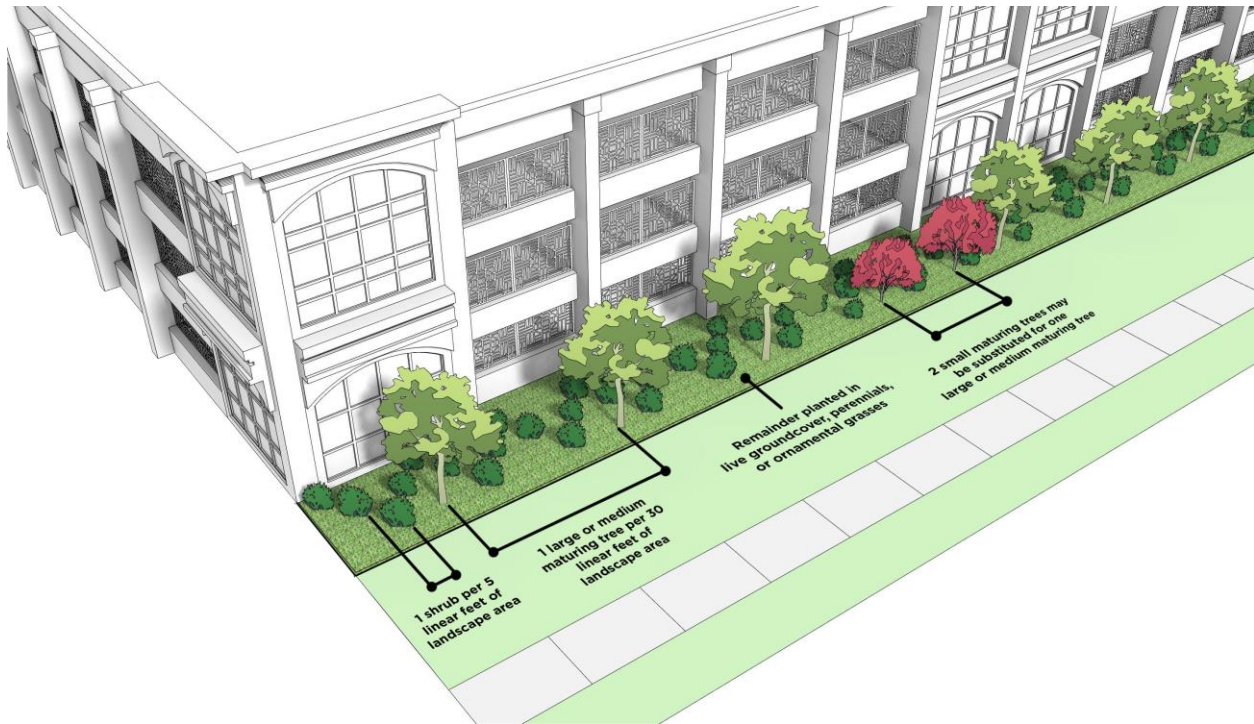
As required in Section 19.7 for the design of parking structures, when a landscape area is required, it shall be planted as follows:

A. One shrub shall be planted for every five linear feet of perimeter area. Shrubs may be varied in placement, rather than linearly spaced, but the total number of shrubs planted shall equal one shrub per five linear feet. However, shrubs shall not be planted within four feet of a tree.

B. A minimum of one large or medium maturing tree shall be provided for every 30 linear feet of the landscape area. Two small maturing trees may be substituted for one large or medium maturing tree. Trees may be spaced linearly on-center or grouped to complement an overall design concept.

C. The remainder of the required landscape area outside of shrub and tree masses shall be planted in groundcover, turf, perennials, ornamental grasses, and other planting types of species native or naturalized non-invasive to North Carolina.

PARKING STRUCTURE LANDSCAPE AREA



20.9 LANDSCAPE YARD

A. Certain uses or zoning districts, because of their character and/or intensity, may create adverse impacts when developed abutting other less intensive uses or zoning districts. A landscape yard provides a transition between these uses and/or zoning districts that minimizes adverse impacts.

B. When a landscape yard is required by this section, and a site does not have a landscape yard or the existing landscape yard on the site does not meet the standards of this section, a landscape yard shall be installed when any of the following actions occur:

1. Construction of a new principal structure or construction of a new accessory structure 500 square feet or greater.
2. An addition to an existing principal structure.
3. Establishment of a new principal or accessory use conducted primarily outdoors.
4. A change of use category within the Use Matrix found in Article 15, or an additional principal or accessory use is established on the site, when abutting a Neighborhood 1 Place Type.
5. Expansion of a parking lot by the addition of 10 or more parking spaces.

C. Upon an applicant's request, if the Zoning Administrator determines that the requirement for a landscape yard is unrelated to the proposed construction's anticipated impacts on adjacent properties, the Zoning Administrator may modify the landscape yard requirement, per the Administrative Adjustment Standards in Section 37.4, to the extent necessary to relate to the proposed construction's anticipated impacts and to make the requirement roughly proportional to those anticipated impacts. The Zoning Administrator may reduce the landscape yard requirement up to 50% of the required landscape yard width but to a remaining width of no less than 10'.

D. The Zoning Administrator may modify or eliminate the fence or wall requirements of Table 20-2 (below) upon an applicant's request in the event that one or more of the following would make strict adherence to the requirement serve no meaningful purpose or would make it physically impossible to install and maintain the required fence or wall:

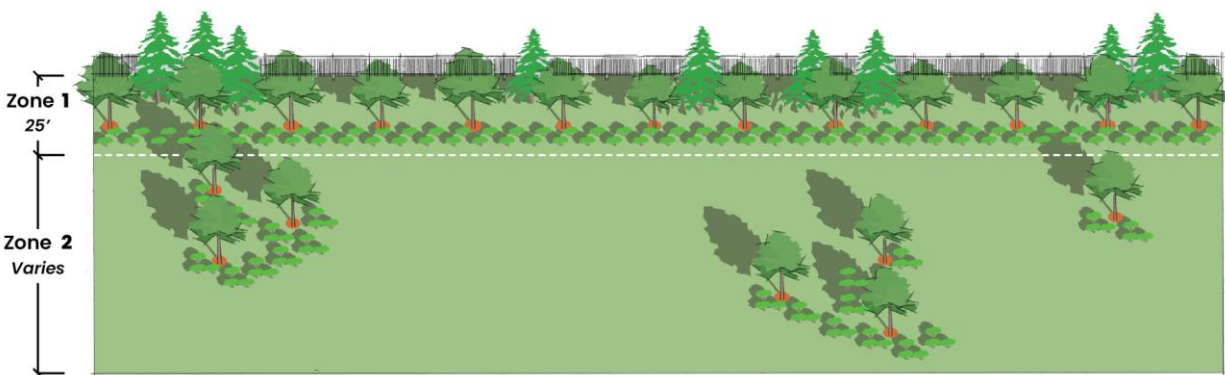
1. The topography or elevation of the development site in relation to the abutting site to be screened.
2. Creek crossings or creek buffers that do not allow a fence or wall.
3. Utility crossings that do not allow a fence or wall.
4. A tree save area that is both a minimum of 50 feet in width and 100 feet in length that meets the intent of the fence or wall. This shall only apply for the portion of the fence where the tree save area runs along the location(s) where a fence or wall is required.
5. An existing fence or wall located in the required landscape yard meets the height and material requirements per this ordinance.

E. When a landscape yard is required by item B above and there is insufficient area on the site for the required landscape yard, such landscape yard may be modified to install only a portion of the required landscape. The applicant is required to show that the landscape yard cannot be accommodated on the site. The Zoning Administrator will make the determination that a portion of required landscape yard does not have to be installed.

F. Table 20-2: Landscape Yard Class describes the width and design of each class of landscape yard. Table 20-3: Required Landscape Yards by Zoning District indicates when and which class of landscape yard is required. Where a use has prescribed conditions that require a specific class of landscape yard, those conditions control over the requirements of Table 20-3.

1. For the Class A landscape yard, the landscape yard is divided into Zone 1 and Zone 2 as follows:
 - a. Zone 1 comprises the first 25 feet of the landscape yard, measured perpendicularly from the rear or side lot line.
 - b. Zone 2 comprises the remainder of the required landscape yard outside of Zone 1. Within Zone 2, plantings may be grouped to complement an overall design concept. The remainder of the required landscape area in Zone 2 outside of required shrub and tree masses shall be planted in turf, groundcover, perennials, ornamental grasses, and other planting types of species native or naturalized non-invasive species to North Carolina.

CLASS A LANDSCAPE YARD: ZONE 1/ZONE 2

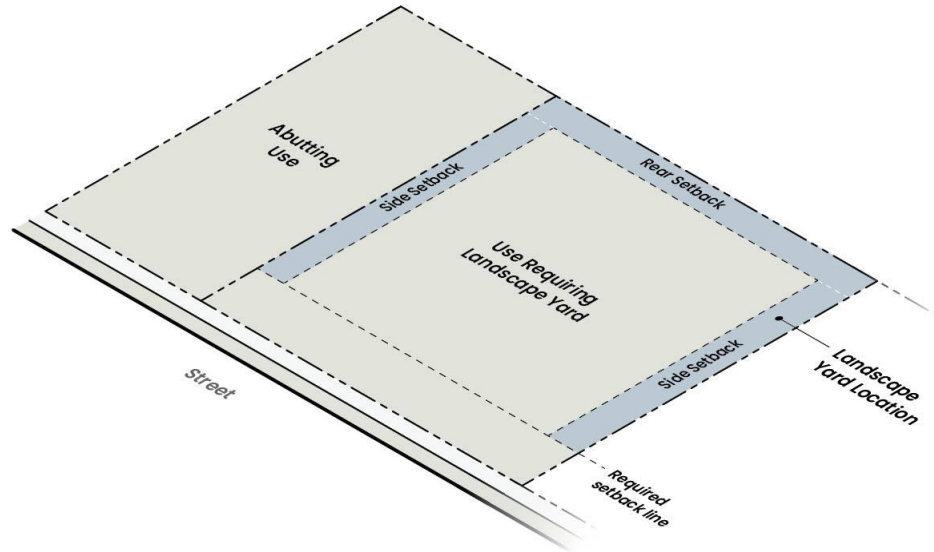


G. Landscape yards as required by Table 20-3 shall be located within the established rear setback and within the established side setback but behind the required front setback. The following also apply:

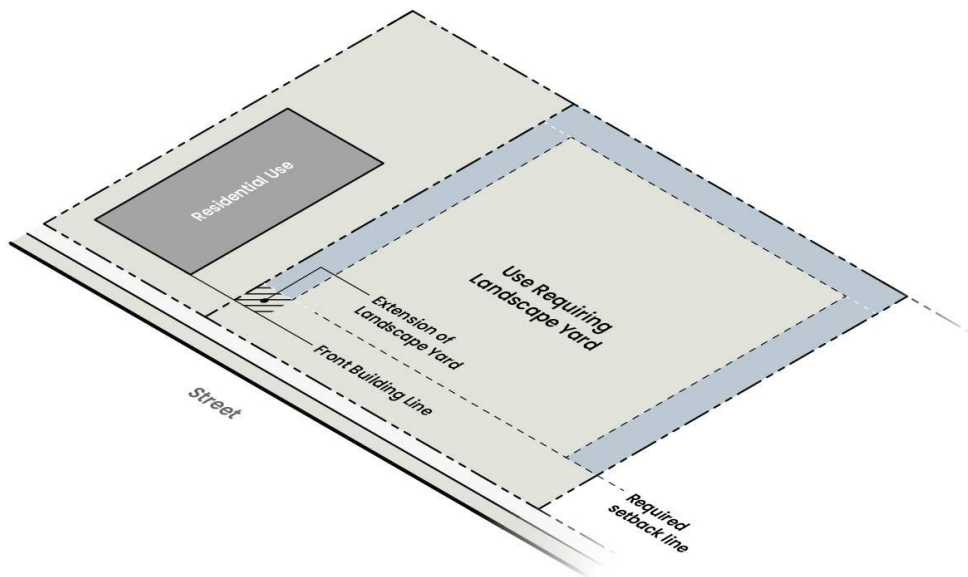
1. In certain circumstances in Table 20-3, landscape yards may be specifically required for other setback areas outside the side or rear setback.

2. For a nonresidential use that requires a landscape yard in a side setback because it abuts an existing residential use, and where the front building line of the residential use is located closer to the back of curb, the side setback landscape yard shall be extended to meet the front building line of the residential structure.

LOCATION OF LANDSCAPE YARDS



LANDSCAPE YARD WITH SIDE SETBACK EXTENSION



- H.** Landscape yards may be located within established setbacks and shall be reserved for the planting of material and installation of screening as required by this section unless other features are allowed by item I below. No parking, principal or accessory structures, outdoor storage, or required on-site open space, shall be located in the landscape yard area.

I. When a fence or wall is installed, it shall be a minimum of 75% opaque, constructed of wood posts and planks, vinyl, brick, finished masonry, or stone, and erected within 18 inches of the lot line along 100% of the landscape yard length with the exception of ingress/egress points. The finished side of the fence, as opposed to the side with exposed structural supports, shall face the abutting property.

J. The following shall also be permitted within a landscape yard:

1. Sidewalks and paths no greater than six feet in width designed perpendicular (90 degrees) or to an angle no less than 75 degrees to the landscape yard. A required off-street trail connection shall be permitted to exceed this six-foot dimension but shall be no wider than the rest of the trail on the site.
2. Within Zone 2 of the Class A landscape yard, limited amenities, not associated with any required on-site open space on the site, such as seating areas, walking paths, and picnic tables for the use of the on-site users.
3. Utility lines per item J below.
4. Stormwater facilities per item K below.
5. Cross-access connections between adjacent parcels.

K. Utility lines, including stormwater and water/sewer, within a landscape yard shall meet the following requirements:

1. Utility easements are permitted to cross a landscape yard perpendicularly (90 degrees) or to an angle no less than 75 degrees to the landscape yard.
2. The removal of any tree larger than eight inches in diameter to accommodate utility lines shall require the approval of the Zoning Administrator in consultation with the Chief Urban Forester.
3. If utility easements run at an angle between zero and up to 75 degrees within a landscape yard, the width of the landscape yard shall be increased by the width of the utility easement.

L. Certain elements of a required stormwater facility, designed in accordance with Part IX. Stormwater and other regulations of this Ordinance, may encroach into a required landscape yard for up to 25% of the required landscape yard width. These elements include, but are not limited to, the embankment, inlets, pipes, rip rap, and any stormwater related easement, or similar elements. Such encroachments shall be approved by the Zoning Administrator, in consultation with the Stormwater Administrator. Stormwater related easement, for the purposes of this article includes, but is not limited to, storm drainage easements (SDE), public storm drainage easements (PSDE), and conservation easements.

M. Any requirement to install a landscape yard abutting a park or greenway shall be waived in its entirety unless the property is located within the Commercial Place Type or Manufacturing and Logistics Place Type.

Table 20-2: Landscape Yard Class			
Requirements	Landscape Yard Class		
	A	B	C
Width of Landscape Yard	Development Site Size: Up to 3 acres: 40' 3+ acres up to 7 acres: 65' 7+ acres to 10 acres: 85' More than 10 acres: 100'	25'	10'
Shrubs	Zone 1: 1 evergreen shrub per 2 linear feet Zone 2: 1 evergreen shrub per 300sf	1 evergreen shrub per 3 linear feet	1 evergreen shrub per 5 linear feet
Large Maturing and Medium Maturing Trees	Zone 1: 1 tree per every 30 linear feet Zone 2: 1 tree per every 2,500sf of landscape yard area in Zone 2	1 tree per every 30 linear feet	1 tree per every 50 linear feet
Required % of Trees to be Evergreen Trees	Zone 1: 40% Zone 2: Not required	40%	40%
Small Maturing Tree Substitution <i>(Cannot substitute for required evergreen trees)</i>	Zone 1: Not permitted Zone 2: In lieu of planting 1 required tree, 2 small maturing trees may be planted	In lieu of planting 1 required tree, 2 small maturing trees may be planted	In lieu of planting 1 required tree, 2 small maturing trees may be planted
Fence/Wall	Zone 1: Optional Zone 2: Not permitted The width of Zone 2 may be reduced by 25% if a fence/wall is provided in Zone 1	Optional	Fence/wall required
Fence/Wall Height ¹	6' min.	6' min.	6' min.

¹ The Charlotte Douglas International Airport is not subject to minimum or maximum fence height requirements.

Table 20-3: Required Landscape Yards by Zoning District

Zoning District of Property Under Development	Development Type Required to Install Landscape Yard Per Section 20.9.B	Landscape Yard Required for Development When¹:	Landscape Yard Class Required
N1-A, N1-B, N1-C, N1-D, N1-E, N1-F	Nonresidential or mixed-use development	Abutting residential use, or abutting vacant parcel zoned: a Neighborhood 1 or a Neighborhood 2 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), R-8(CD), R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	B
	Residential development	Abutting an existing industrial or transportation use with no landscape yard	
	Multi-family, or multi-dwelling development	Abutting single-family, duplex, triplex, or quadraplex dwelling, or abutting vacant parcel zoned: a Neighborhood 1 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), or R-8(CD)	C
N2-A, N2-B	Nonresidential or mixed-use development	Abutting residential use, or abutting vacant parcel zoned: a Neighborhood 1 or a Neighborhood 2 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), R-8(CD), R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	B
	Residential development	Abutting an existing industrial or transportation use with no landscape yard	
	Multi-family, or multi-dwelling development use	Abutting single-family, duplex, triplex, or quadraplex dwelling, or abutting vacant parcel zoned: a Neighborhood 1 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), or R-8(CD)	C
N2-C	Nonresidential or mixed-use development	Abutting residential use, or abutting vacant parcel zoned: a Neighborhood 1 or a Neighborhood 2 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), R-8(CD), R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	B
	Multi-family, or multi-dwelling development use	Abutting single-family, duplex, triplex, or quadraplex dwelling, or abutting vacant parcel zoned: a Neighborhood 1 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), or R-8(CD)	
CG	Development in the zoning district	Abutting residential use, or abutting vacant parcel zoned: a Neighborhood 1 or a Neighborhood 2 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), R-8(CD), R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	B
CR	Development in the zoning district	Abutting residential use, or abutting vacant parcel zoned a Neighborhood 1 or a Neighborhood 2 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), R-8(CD), R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	A
TOD-NC, TOD-TR	Development in the zoning district	Abutting single-family, duplex, triplex, or quadraplex dwelling, or abutting vacant parcel zoned: a Neighborhood 1 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), or R-8(CD)	B
		Abutting multi-family, or multi-dwelling development, or abutting vacant parcel zoned: a Neighborhood 2 Zoning District (unless zoned N-	C

Table 20-3: Required Landscape Yards by Zoning District

Zoning District of Property Under Development	Development Type Required to Install Landscape Yard Per Section 20.9.B	Landscape Yard Required for Development When¹:	Landscape Yard Class Required
		2C), or R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	
TOD-UC, TOD-CC	Development in the zoning district	Abutting single-family, duplex, triplex, or quadraplex dwelling, or abutting vacant parcel zoned: a Neighborhood 1 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), or R-8(CD)	B
		Abutting multi-family, or multi-dwelling development, or abutting vacant parcel zoned: a Neighborhood 2 Zoning District (unless zoned N-2C), or R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	
NC	Development in the zoning district	Abutting single-family, duplex, triplex, or quadraplex dwelling, or abutting vacant parcel zoned: a Neighborhood 1 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), or R-8(CD)	B
		Abutting multi-family, or multi-dwelling development, or abutting vacant parcel zoned: a Neighborhood 2 Zoning District (unless zoned N-2C), or R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	C
CAC-1, CAC-2	Development in the zoning district	Abutting single-family, duplex, triplex, or quadraplex dwelling, or abutting vacant parcel zoned: a Neighborhood 1 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), or R-8(CD)	B
		Abutting multi-family, or multi-dwelling development, or abutting vacant parcel zoned: a Neighborhood 2 Zoning District (unless zoned N-2C), or R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	
RAC, UE	Development in the zoning district	Abutting single-family, duplex, triplex, or quadraplex dwelling, or abutting vacant parcel zoned: a Neighborhood 1 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), or R-8(CD)	B
		Abutting multi-family, or multi-dwelling development, or abutting vacant parcel zoned: a Neighborhood 2 Zoning District (unless zoned N-2C), or R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	
UC	Development in the zoning district	None required	
IC-1, IC-2, OFC, OG, RC	Development in the zoning district	Abutting single-family, duplex, triplex, or quadraplex dwelling, or abutting vacant parcel zoned: a Neighborhood 1 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), or R-8(CD)	B
		Abutting multi-family, or multi-dwelling development, or abutting vacant parcel zoned: a Neighborhood 2 Zoning District (unless zoned N-2C), or R-8MF(CD), R-12MF(CD), R-17MF(CD), R-	

Table 20-3: Required Landscape Yards by Zoning District			
Zoning District of Property Under Development	Development Type Required to Install Landscape Yard Per Section 20.9.B	Landscape Yard Required for Development When ¹ :	Landscape Yard Class Required
		22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	
IMU	Development of an industrial use in the zoning district	Abutting any other zoning district except ML-1, ML-2, I-1(CD), I-2(CD), or BD(CD) Zoning District	B
	Development in the zoning district	Abutting residential use, or abutting vacant parcel zoned: a Neighborhood 1 or a Neighborhood 2 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), R-8(CD), R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	
ML-1, ML-2	Development in the zoning district	Abutting any other zoning district except CG, CR, ML-1, ML-2, I-1(CD), I-2(CD), or BD(CD) Zoning District	A
	Development in the zoning district	Abutting CG or CR Zoning District	B
	Development in the zoning district - required for area along a street frontage	When located across a street with a right-of-way width of 100' or less from a residential use or from a vacant parcel zoned: a Neighborhood 1 or a Neighborhood 2 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), R-8(CD), R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	

¹ The Zoning Administrator will determine landscape yard applicability for any conditional zoning district not listed and established based on a Zoning Ordinance in effect prior to 1993.

N. Additional Landscape Yard Standards

The following may be located within landscape yards required by this article when they meet minimum requirements for this article and the articles listed below:

1. Open space per Article 16.
2. Tree save areas per Article 20 if any trees planted for tree save areas are in addition to any trees required for landscape areas per the requirements of this article.
3. Water supply water quality buffers per Article 23.
4. Post-construction water quality buffers per Article 25.
5. SWIM water quality buffers per Article 26.
6. Floodplains per Article 27.
7. Areas for greenways or parks per Article 32 offered for dedication and accepted by Mecklenburg County Park and Recreation.

20.10 LANDSCAPE YARD FOR RESIDENTIAL SUBDIVISIONS ABUTTING LIMITED ACCESS ROADS

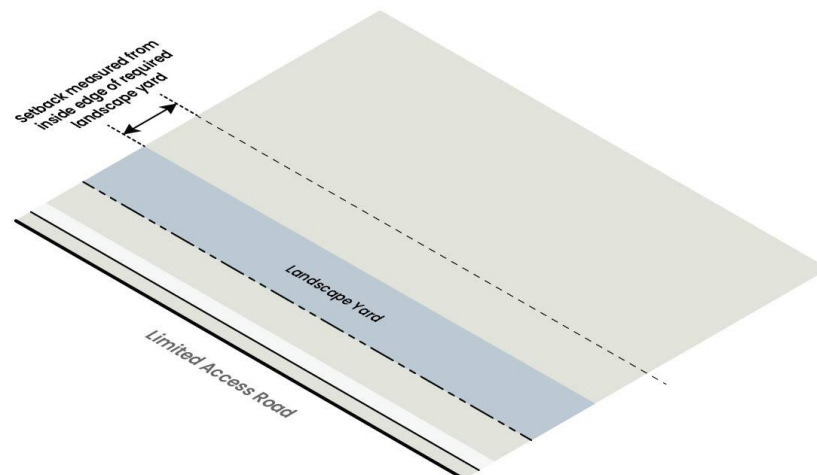
The following landscape requirements apply to residential subdivisions developed with single-family, duplex, and/or triplex dwellings that abut a Limited Access Road, unless a noise abatement or screening wall is provided.

A. A Class B landscape yard per Table 20-2 is required along the lot line that abuts the Limited Access Road. The landscape yard shall be shown on the plat and may be located within common open space or as an easement within lots. The landscape yard shall not be used for any purpose except for plantings, except for the following:

1. Utility lines per Section 20.9.I.
2. Stormwater facilities per Section 20.9.J.

B. Any required setback that abuts the landscape yard shall be measured from the inside edge of the landscape yard.

SETBACK MEASUREMENT FOR RESIDENTIAL SUBDIVISIONS ABUTTING LIMITED ACCESS



20.11 LANDSCAPE YARD FOR RESIDENTIAL THROUGH LOTS AND COMMON OPEN SPACE ALONG AVENUES, BOULEVARDS, AND PARKWAYS

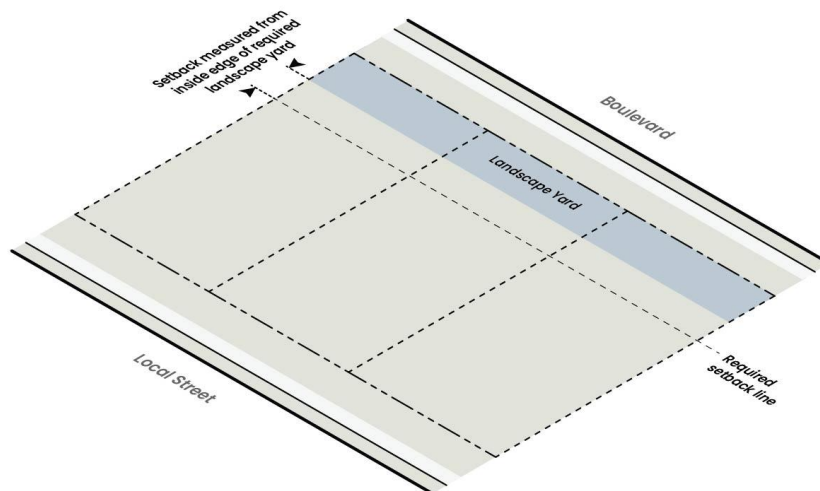
The following landscape requirements apply to residential subdivisions developed with through lots for single-family, duplex, and/or triplex dwellings, as well as common open space less than 50 feet in depth, unless a noise abatement or screening wall is provided. These requirements are applicable along Avenues, Boulevards, and Parkways.

A. A Class B landscape yard per Table 20-2 is required along the lot line that abuts the Avenue, Boulevard, or Parkway. The landscape yard shall not be used for any purpose except for plantings. The landscape yard shall be shown on the plat and may be located within common open space or as an easement within lots.

B. A berm shall be permitted in the landscape yard in addition to plantings. Berms shall be a minimum of four feet in height. Berms between four feet and six feet in height shall have a maximum slope of 2.5:1 as measured from the exterior property line. Berms over six feet in height shall have a maximum slope of 3.5:1 as measured from the exterior property line.

C. For residential through lots, the side or rear setback shall be measured from the inside edge of the landscape yard.

SIDE AND REAR SETBACK MEASUREMENT FOR RESIDENTIAL THROUGH LOTS



20.12 REQUIRED SCREENING FOR LOADING AND SERVICE AREAS

A. Certain principal uses, accessory uses, and accessory structures may require screening within their prescribed conditions and standards (Articles 15 and 17).

B. The following areas shall be screened from abutting lots and from view from a public or network-required private street:

1. Loading Areas

Screening of loading areas is not required if a landscape yard per Section 20.9 is provided along any frontage or along any setbacks where loading area screening would be required.

a. Screening - All Zoning Districts Except ML-1 and ML-2 Zoning Districts

Outdoor loading areas shall be screened along all frontages and along required side and rear setbacks with a minimum 75% opaque wall or fence that is a minimum of six feet and a maximum of eight feet in height. The wall or fence shall be constructed of wood posts and planks, brick, finished masonry, or stone and erected within 18 inches of the lot line. The finished side of the fence, as opposed to the side with exposed structural supports, shall face abutting properties or frontages. For uses that require only one loading space, and the loading space is located within a surface parking lot, the loading space may use the required screening for the parking lot per Section 20.5.

b. Screening - ML-1 and ML-2 Zoning Districts

Outdoor loading areas to the side or rear of buildings are not required to be screened. Any loading areas visible from a public or network-required street shall install parking lot screening per Section 20.5.

c. Internal Loading Areas

The doors for internal loading areas located along a frontage shall remain closed when not in use. This does not apply in the ML-1 and ML-2 Zoning Districts.

2. Waste Containers, Recycling Stations, and Solid Waste Service Areas

a. Screening

Large waste containers, rollout waste containers for nonresidential uses, recycling stations, and solid waste handling areas located outside of an enclosed structure are subject to the following standards. This does not apply to recycling collection centers as a principal use, which are addressed by Article 15.

i. Large waste containers, rollout waste containers for nonresidential uses, recycling stations, and solid waste handling areas shall be fully enclosed on three sides by a minimum 75% opaque fence or wall, which shall be constructed of wood posts and planks, brick, finished masonry, or stone, or a wall extension of the principal building, which does not have to be structural, a minimum of one foot above the height of the container to a maximum of two feet above the height of the container in height. A wall extension, which is not required to be structural, shall be constructed as an integral part of the building's architectural design.

(A) When below grade (deep well) refuse collection and recycling systems are used, they shall be screened by a decorative wall, solid fence, or year-round landscaping. The wall, fence, or plantings must be of a height equal to or greater than the above ground height of the refuse collection and recycling equipment being screened.

ii. The enclosure shall be gated. Such gate shall be a minimum 75% opaque and a minimum height to match the height required by item i above. The gate shall be maintained in good working order and shall remain closed except when pick-ups occur.

iii. When not being serviced, large waste containers, rollout waste containers for nonresidential uses, and recycling stations shall remain in the enclosure with the gate closed.

b. Internal Service Areas

The doors for internal service areas located along a frontage shall remain closed when not in use. This does not apply in the ML-1 and ML-2 Zoning Districts.

20.13 TREE PROTECTION PURPOSE AND EXEMPTION

A. The purpose of the tree protection provisions of this Article are 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 the tree protection standards of this Article are 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 and mitigate heat island effects.
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.

C. Exemption for Forestry Operations

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 shall be exempt from Sections 20.13 through 20.18 of this Article. 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.

20.14 HERITAGE TREES

A. Applicability

The requirements of this section shall apply to development activity, including grading in anticipation of such development, within the corporate limits of the City and the City's extraterritorial jurisdiction (ETJ), whenever development would result in any of the following:

1. New construction of a principal structure.
2. Cumulative increase in built-upon area (BUA) or building coverage equal to or greater than 5% or 1,000 square feet, whichever is less.
3. Approval of a standard subdivision as defined by Section 30.3.A or approval of a minor subdivision as defined by Section 30.3.D.

B. Heritage trees shall be protected to the greatest extent possible, as specified below:

1. Heritage trees may be removed when a City-issued tree work permit is requested and approved, or the standards listed under item 2 below are met. No removal activities shall commence until such permit is issued, any applicable mitigation payments have been received, and a planting plan has been approved, unless removal is permitted per item 2 below. 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 the Charlotte Tree Manual. The critical root zone of a heritage tree shall only include the root area located on the parcel or site where the trunk/main plant stem is rooted in the ground. 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 only be granted in the following instances subject to specified mitigation requirements below:

- a. The tree and/or critical root zone are located within an area where a structure or improvement may be placed and imposes a documented and confirmed conflict. A documented and confirmed conflict may include but not be limited to the location of structures, site design elements, and required streets as allowed or required by other articles of this Ordinance. Mitigation, per item 3 below, shall be required.
- b. Preservation of the tree would unreasonably restrict use of the property. An unreasonable restriction per this section shall mean, significant restriction or negative impact to public/private utility service, restriction of property access, restriction of the ability to remedy significant damage to an existing building or structure, or other restrictions of public infrastructure that reasonable maintenance cannot prevent. Mitigation, per item 3 below, shall be required.
- c. The tree is sufficiently diseased, injured, dead, in danger of falling, creates an imminent and undue hazard to life and property that reasonable maintenance cannot mitigate, creates unsafe sight distance, or conflicts with other sections of this Ordinance or provisions of other ordinances or regulations. Mitigation shall not be required.

2. Removal of heritage trees due to imminent or undue hazard or extreme poor health is permitted as specified below:

a. Imminent or Undue Hazard

Heritage trees may be removed due to imminent or undue hazard. Such removal shall be certified either by an ISA-Certified arborist or adequately documented through photographic, video, or other documentation to be submitted. Certification and documentation shall be completed prior to removal, if possible. To qualify for removal due to imminent or undue hazard a tree must be actively failing, or likelihood of failure is imminent and expected to occur in less than two weeks, and immediate action is required to protect people and property from harm pursuant to the Charlotte Tree Manual. Mitigation shall not be required for a heritage tree removed due to imminent or undue hazard.

b. Extreme Poor Health

Heritage trees may be removed due to extreme poor health. Removal of heritage trees due to extreme poor health shall require a City-issued tree work permit prior to the commencement of any removal work activity pursuant to the Charlotte Tree Manual. The City-issued tree work permit shall not include a cost to the applicant. Mitigation shall not be required for a heritage tree removed due to extreme poor health. For the purpose of this section, a heritage tree in "extreme poor health" shall mean:

- i. A heritage tree has been assessed by an ISA-Certified and Tree Risk Qualified arborist as having a high or extreme risk rating and can be expected to fall within a 2-year time period; or
- ii. A heritage tree with 25% or less live canopy (including dead heritage trees pursuant to the Charlotte Tree Manual. This condition may be assessed by an ISA-Certified arborist.

3. Mitigation

Owners and persons authorized by the City to remove a heritage tree, per the conditions stated in this section shall comply with the following mitigation actions:

a. Required Tree Replanting

One tree shall be planted on the property in mitigation pursuant to the Charlotte Tree Manual. Trees replanted to meet this mitigation requirement shall be in addition to other trees required by this article.

b. Heritage Tree Mitigation Payment

A heritage tree mitigation payment shall be required for every heritage tree removed per the fee established by City Council. The required mitigation payment may be reduced or eliminated where trees are replanted on the property in addition to those required by item a above and other tree replanting required by this Article. The rate of reduction shall be subject to the Charlotte Tree Manual.

- i. Collected fees from mitigation per this item shall be deposited into the account, or its equivalent, in the City's financial system as established in Section 20.18.D.1.c.

c. Specimen Tree Preservation

Specimen trees may be preserved to meet all Heritage Tree mitigation requirements specified above. Only large hardwoods and large softwoods, per the definition of this term in Article 2, shall be used to meet this mitigation option. One specimen tree preserved shall meet the mitigation requirements for the removal of one Heritage Tree approved for removal. The critical root zone of specimen trees preserved shall be identified and protected as a part of the required Tree Compliance Plan per Section 20.18 below, and pursuant to the Charlotte Tree Manual.

4. No tree disturbing activity may impact any heritage tree prior to approval and issuance of applicable tree work permits by the City. Certain impacts to critical root zones shall be permitted subject to Section 4.1 of the Charlotte Tree Manual and the CLDSM.

5. It shall be the duty of the property owner to maintain, plant, and/or replace mitigation and heritages trees on private property as required by this section. Trees shall be allowed to grow to their natural height and form. Pruning of these trees may be allowed where a tree work permit has been issued. Topping is prohibited. Property owners will not be held liable for any pruning conducted by utility providers.

20.15 GREEN AREA

A. Applicability and Exemptions

1. Applicability

The green area requirements of this section shall apply to all development activity, including grading in anticipation of such development, within the corporate limits of the City and the City's extraterritorial jurisdiction (ETJ), whenever development would result in any of the following:

- a. New construction of a principal structure.
- b. Cumulative increase in built-upon area (BUA) or building coverage equal to or greater than 5% or 1,000 square feet, whichever is less.
- c. Approval of a standard subdivision as defined by Section 30.3.A or approval of a minor subdivision as defined by Section 30.3.D.

2. Compliance

The intent of green area compliance is for a site to reach full compliance, even if an initial project(s) only requires proportional compliance. Green area requirement compliance shall be achieved as follows:

a. Full Compliance

Development activity that cumulatively impacts 75% or more of a site, with cumulative impact considered for all development permitted on June 1, 2023 or later, shall fully comply with green area requirements.

b. Proportional Compliance

The following development activities qualify for proportional compliance with green area requirements when a site retains an existing principal building and when there is less than 75% cumulative disturbance of the site area:

- i. Construction of an additional principal structure.
- ii. Expansion of an existing principal structure.
- iii. Removal and replacement of an existing structure.
- iv. Expansion of existing built-upon area.
- v. Any combination of items i through iv above.

Sites qualifying for proportional compliance shall provide, at a minimum, the same percentage of the required green area as the percentage of the site being disturbed by the subject development activity.

Tier 3 and Tier 4 sites, per Table 20-4 below, eligible for proportional compliance per this section may also meet the green area requirements of this section through Tier 1 Green Area Credit options per Table 20-5 (below) upon a determination by the Chief Urban Forester that compliance cannot otherwise feasibly be achieved via the Green Area Credit options provided to the site by its assigned Tier. The determination of the Chief Urban Forester shall be pursuant to the provisions of the Charlotte Tree Manual.

3. Exemptions

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

- a.** Increases in built-upon area (BUA) or building coverage on lots where the existing principal structure is a single-family detached home, duplex, triplex or quadraplex.
- b.** Construction of a new single-family detached home, duplex, triplex, or quadraplex as a principal structure on a single lot, unless such construction is any of the following:
 - i. Part of an approval of a new standard subdivision as defined by Section 30.3.A or approval of a minor subdivision as defined by Section 30.3.D,
 - ii. Constructed on three or more contiguous/adjacent lots, or
 - iii. Part of a multi-dwelling development.
- c.** Public infrastructure projects such as road expansion, public utility projects, and greenway trail construction, undertaken by public entities unless such projects include increased building coverage or parking lot expansion.

Where public infrastructure projects are exempt from this section but impact existing trees required or protected by Sections 20.14 through 20.17 or by legacy versions of the Charlotte Tree Ordinance, such projects shall be subject to interdepartmental or interagency agreements and land development standards pursuant to the Charlotte Tree Manual.

B. 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 20-4 below:

Table 20-4: 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 or RC Zoning District	Commercial Place Type	Campus Place Type - All zoning districts other than IC-2 or RC Zoning District	Parks and Preserves Place Type
	Innovation Mixed-Use Place Type		
	Neighborhood 2 Place Type - If zoned N2-C Zoning District		

C. Required Green Area

15% or more of a development site that is subject to the applicability of this section shall be green area to be credited as provided for in Table 20-5 Green Area Credits.

D. 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 20-5.
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 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.
4. **Green Area Method for Calculation**
 - a. Square footage for existing and dedicated street rights-of-way, railroad 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. Land clearing and inert debris (LCID) landfills may also be subtracted from the total site area subject to the following:
 - i. The landfill has a current permit from the N.C. Division of Waste Management, Solid Waste Division or has been decommissioned and the planting of trees on the landfill area is not recommended nor feasible.
 - ii. The property on which the landfill is located is not included in site calculations for any standards included in the UDO.
 - iii. The landfill area shall not be used to meet open space, parking, or stormwater requirements.
 - iv. No buildings shall be located on the landfill area.

Table 20-5 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 20.15.D) ¹	1	1	1	1
Replanted Tree Save- Planting trees at 36 trees per acre - where less than 15% of the site has existing trees	1	1	1	1
Replanted Tree Save Mitigation- Replanting trees at 36 trees per acre to replace trees that were removed	1	0.67	See footnote 2	See footnote 2
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	1.25	1.25
Land dedication to Mecklenburg County Park and Recreation (See Section 20.15.F) ³				1
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 (See Section 20.15.H) ⁴	1	0.67		
Amenitized tree areas (See Section 20.15.I)	1	0.67		
Payment-in-Lieu (See Section 20.15.G) ⁴	1	0.5		
High-Quality Tree Incentives				
Preservation of specimen or heritage 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 ⁵	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

¹ The Chief Urban Forester may approve preservation of non-contiguous fragments to meet the requirements of this section per the Charlotte Tree Manual, where the preservation of these existing trees would better meet the intent of this Ordinance.

² 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 pursuant to the Charlotte Tree Manual's Green Area Guideline when the tree and critical root zone are located within the buildable area where a site improvement and/or City-required structure will be placed and there is no other reasonable location, and/or preservation would unreasonably restrict use of and/or access to the property. The area of existing trees removed shall be replanted with trees at 150% of the area removed at 36 trees per acre.

³ Only permitted for residential development in N1-A, N1-B, N1-C, N1-D, and N1-E subject to the applicability of this section.

⁴ Payment-in-Lieu and off-site mitigation may not be used in combination to meet the requirements of this section.

⁵ 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.

E. 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 section.

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. Tree save areas shall be free of all structures and utilities. 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 parks or the City of Charlotte for the Tree Canopy Preservation Program, Urban Arboretum Trail, or other City trail projects. Dedicated tree save areas may include passive use recreation areas and additional amenity elements per Section 20.15.E.5 and per special agreement between the City and Mecklenburg County Park and Recreation. Greenway placement, trail placement, park design, and final location of all amenity elements 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 water, sewer, or storm water 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 14.2) and Neighborhood Character Overlay Districts as designated by a Neighborhood Character Overlay (Section 14.3), the requirements of overlay districts apply in addition to the regulations of this section.

10. Tree Save Standards Overlap

The following may be located within tree save areas when they meet minimum requirements for this article and the articles listed below:

- a. 50% of the open space per Article 16 may be tree save areas per Article 20, so long as such tree save area abuts the remaining required open space and includes allowed amenities to provide passive recreation.
- b. Landscape yards per Article 20 if trees planted or preserved are in addition to minimum tree save requirements.
- c. Water supply water quality buffers per Article 23.
- d. Post-construction water quality buffers per Article 25.
- e. SWIM water quality buffers per Article 26
- f. Floodplains per Article 27.
- g. Areas for greenways or parks per Article 32 offered for dedication and accepted by Mecklenburg County Park and Recreation.

11. The following additional standards apply only to tree save areas for single-family, duplex, triplex, and quadraplex residential development subject to approval of a new standard subdivision as defined by Article 30.3.A or approval of a minor subdivision as defined by Section 30.3.D.

a. Additional Trees- Canopy Voids

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. 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.

b. 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.

F. Land Dedication to Mecklenburg County Park and Recreation

As a green area credit option for required green area, the property owner may select one of the following options:

1. Dedicate 1/3 of land required for green area to Mecklenburg County Park and Recreation (Park and Recreation) for park development, so long as the land meets Park and Recreation standards and is accepted by Park and Recreation. If selecting this option, and dedicating 1/3 of the land required for green area, a reduction in minimum lot size by 5% would be allowed. This land shall be subject to special agreement between the City and Park and Recreation.
2. Dedicate all land required for green area to Mecklenburg County Park and Recreation (Park and Recreation) for park development, so long as the land meets Park and Recreation standards and is accepted by Park and Recreation. If selecting this option, and dedicating all of the land required for green area, a reduction in minimum lot size by 10% would be allowed. This land shall be subject to special agreement between the City and Park and Recreation, which shall preserve 2/3 of the land as on-site tree save. Park land and tree save shall be abutting.

G. Payment-In-Lieu

A payment may be made by a developer or a property owner to a City administered tree preservation account, per item 1 below. The payment shall be a percentage of the tax value of the land being developed pursuant to Section 4.1 of the UDO Zoning Administration 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 the green area payment-in-lieu process per this item shall be deposited into the account, or its equivalent, in the City's financial system as established in Section 20.18.D.1.a.

H. 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 20-5. Mitigation shall be:

1. Approved by the Chief Urban Forester.
2. In compliance with the Charlotte Tree Manual.

I. 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 will be allowed within amenitized tree areas. 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. Greater than 25 percent impervious paved area may be allowed within alternative locations being used to meet the amenitized tree area requirement if minimum soil volume, amended soil, subdrainage, irrigation, planting area, and other applicable design standards per the CLDSM, Charlotte Tree Manual, or as approved by the Chief Urban Forester, are met.

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.

6. Amenitized Tree Area Standards Overlap

The following may be located within amenitized tree areas when they meet minimum requirements for this article and the articles listed below:

- a. Open Space per Article 16.
- b. Landscape yards per Article 20.
- c. Water supply water quality buffers per Article 23.
- d. Post-construction water quality buffers per Article 25.
- e. SWIM water quality buffers per Article 26.
- f. Floodplains per Article 27.
- g. Areas for greenways or parks per Article 32 offered for dedication and accepted by Mecklenburg County Park and Recreation.

J. Trees required by this section, or protected 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 pursuant to the Charlotte Tree Manual.

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.

K. It shall be the duty of the property owner to maintain, plant, and/or replace trees required by this section. Trees shall be allowed to grow to their natural height and form. Pruning of these trees may be allowed where a tree work permit has been issued. Topping is prohibited. Property owners will not be held liable for any pruning conducted by utility providers.

20.16 FRONTAGE TREE PLANTING REQUIREMENT

A. Construction of a new single-family, duplex, triplex or quadraplex structure, except as part of an approval of a standard subdivision as defined by Section 30.3.A, approval of a minor subdivision as defined by Section 30.3.D, or as part of a multi-dwelling development, shall be required to plant a minimum of one large maturing tree for every 40 feet of lot width or one small maturing tree for every 30 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.

1. Sites with demonstrated constraints including water meters, sewer lines, driveways, sight triangles, and planting location conflicts related to other trees may meet this requirement through payment-in-lieu, or planting in alternate locations pursuant to the Charlotte Tree Manual.

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 in the public street right-of-way to meet this requirement shall be a minimum of two-inch caliper. Large maturing trees shall not be planted within 25 feet of overhead power distribution. Small maturing trees may be planted where overhead power distribution lines would interfere with normal growth of large maturing trees. Large and small maturing trees shall not be planted within any electric utility rights-of-way for overhead transmission lines, without documented and confirmed authorization of the corresponding utility provider.

D. Trees required by this section or protected 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 pursuant to the Charlotte Tree Manual.

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.

E. It shall be the duty of the property owner to maintain, plant, and/or replace trees required by this section. Trees shall be allowed to grow to their natural height and form. Pruning of these trees may be allowed where a tree work permit has been issued. Topping is prohibited. Property owners will not be held liable for any pruning conducted by utility providers.

20.17 TREE PLANTING REQUIREMENTS

A. Applicability and Exemptions

1. Applicability. The tree planting requirements of this section shall apply to all development activity, including grading in anticipation of such development, within the corporate limits of the City and the City's extraterritorial jurisdiction (ETJ), whenever development would result in any of the following:

- a.** New construction of a principal structure.
- b.** Cumulative increase in built-upon area (BUA) or building coverage equal to or greater than 5% or 1,000 square feet, whichever is less.
- c.** Approval of a standard subdivision as defined by Section 30.3.A or approval of a minor subdivision as defined by Section 30.3.D.

2. Compliance

The intent of tree planting compliance is for a site to reach full compliance, even if an initial project(s) only requires proportional compliance. Tree planting requirement compliance shall be achieved as follows:

- a. Full Compliance**
Development activity that cumulatively impacts 75% or more of a site, with cumulative impact considered for all development permitted on June 1, 2023 or later, shall fully comply with tree planting requirements.
- b. Proportional Compliance**
The following development activities qualify for proportional compliance with tree planting requirements when a site retains an existing principal building and when there is less than 75% cumulative disturbance of the site area:
 - i.** Construction of an additional principal structure.
 - ii.** Expansion of an existing principal structure.
 - iii.** Removal and replacement of an existing structure.
 - iv.** Expansion of existing built-upon area.
 - v.** Any combination of items i through iv above.

Sites qualifying for proportional compliance shall provide, at a minimum, the same percentage of the required tree plantings as the percentage of the site being disturbed by the subject development activity.

3. Exemptions. The following are exempt from the requirements of this section as specified below:

- a.** Increases in built-upon area (BUA) or building coverage on lots where the existing principal structure is a single-family detached home, duplex, triplex or quadraplex.
- b.** Construction of a new single-family detached home, duplex, triplex, or quadraplex as a principal structure on a single lot, unless such construction is any of the following:
 - i.** Part of an approval of a new standard subdivision as defined by Section 30.3.A or approval of a new minor subdivision as defined by Section 30.3.D,
 - ii.** Constructed on three or more contiguous/adjacent lots, or
 - iii.** Part of a multi-dwelling development.
- c.** Public infrastructure projects, such as road expansion, public utility projects, and greenway trail construction, undertaken by public entities unless such projects include increased building coverage or parking lot expansion.

Where public infrastructure projects are exempt from this section but impact existing trees required or protected by Sections 20.14 through 20.17 or legacy versions of the Charlotte Tree Ordinance, such projects shall be subject to interdepartmental agreements and land development standards pursuant to the Charlotte Tree Manual.

B. 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 latest available edition of the American Standard for Nursery Stock, ANSI Z60.1, American Horticulture Industry Association (AmericanHort).
 - 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 75% 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.** Large maturing trees shall not be planted within 25 feet of overhead power distribution. Small maturing trees may be planted where overhead power distribution lines would interfere with normal growth of large maturing trees. Large and small maturing trees shall not be planted within any electric utility rights-of-way for overhead transmission lines, without documented and confirmed authorization of the corresponding utility provider.
- 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 underground utilities, where feasible, unless otherwise approved by the Chief Urban Forester. For the purposes of this standard, underground utilities mean 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 20-6: Site Lighting and Tree Separation Requirements below.

8. Trees required by this section or protected 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 pursuant to the Charlotte Tree Manual.

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.

9. It shall be the duty of the property owner to maintain, plant, and/or replace trees required by this section. Trees shall be allowed to grow to their natural height and form. Pruning of these trees may be allowed where a tree work permit has been issued. Topping is prohibited. Property owners will not be held liable for any pruning conducted by utility providers.

Table 20-6: Site Lighting and Tree Separation Requirements		
Tier (Per Table 20-4)	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'

C. 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

a. 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.

b. 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, and the Charlotte Tree Manual.

c. Additional Perimeter Planting Standards

The following may be located within areas designated for perimeter planting when they meet minimum requirements for this article and the articles listed below:

- i. Water supply water quality buffers per Article 23.
- ii. Post-construction water quality buffers per Article 25.
- iii. SWIM water quality buffers per Article 26
- iv. Floodplains per Article 27.
- v. Areas for greenways or parks per Article 32 offered for dedication and accepted by Mecklenburg County Park and Recreation.

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

a. The requirements of this section apply to development within the Place Types listed under Tier 1, 2, or 3 per Table 20-4 above. For development 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 33 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 within the Place Types listed under Tier 4 per Table 20-4 above. For development 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 be planted 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.

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 City tree mitigation and payment-in-lieu processes per this item shall be deposited into the account, or its equivalent, in the City's financial system as established in Section 20.18.D.1.b.

b. Railroad, Transit, or Utility Rights-of-Way

When a railroad, transit, 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 20-4), 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 20-4) located within Charlotte's ETJ, all required perimeter trees are allowed to be planted in the required frontage setback.

D. 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 within the Place Types listed under Tier 1 and 2 per Table 20-4 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 instance:

(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 20.17.D.1.b, below. A sufficient number of trees shall be planted to satisfy both requirements.

b. Internal Planting Location

- i. 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.
- ii. In Tier 1 sites, trees required by this section may be located 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.

2. Tier 3 and Tier 4 Internal Planting Requirements

The requirements of this section apply to development within the Place Types listed under Tier 3 and Tier 4 per Table 20-4 above. This requirement does not apply to residential subdivisions of single-family, duplex, triplex and quadraplex homes in an Neighborhood 1 Place Type.

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 20.17.D.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.

3. Special Conditions

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

a. Multi-Family Planting

For parking spaces located in driveways for individual 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 20.17.D.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 20.18.A, 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 20.14.
- 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.

c. Bus and Tractor Trailer Lots

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 20.6.

4. Additional Internal Tree Standards

Internal trees may be located within the following areas when they meet minimum requirements for this article and the articles listed below:

- a. Open Space per Article 16.
- b. Landscape yards per Section 20.9 if internal trees planted or preserved are in addition to minimum landscape yard requirements.
- c. Water supply water quality buffers per Article 23.

- d. Post-construction water quality buffers per Article 25.
- e. SWIM water quality buffers per Article 26.
- f. Floodplains per Article 27.
- g. Areas for greenways or parks per Article 33 offered for dedication and accepted by Mecklenburg County Park and Recreation.

20.18 TREE PROTECTION ADMINISTRATION AND PROCESS

A. Plan Submittal and Process

1. 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:

- a. All City trees eight inches DBH or greater and all planted City trees.
- b. All existing heritage trees on the property.
- c. Any existing areas of the site used for credit toward meeting previously approved tree save or green area requirements.

2. Tree Compliance Plan

All applications for land development approval subject to the applicability of Section 20.15, Section 20.16, and Section 20.17 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, as applicable. All items required by Sections 20.14 through 20.17 of this Ordinance and all items required by the Charlotte Tree Manual shall be depicted on relevant plan sheets which shall include, but are not limited to, demolition, erosion control, grading, and landscaping plan sheets.

a. Tree Survey for Land Development Approval

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

- i. All City trees of eight inches DBH or greater and all planted City trees.
- ii. Any trees of two-inches caliper or larger being saved for credit toward planting requirements.
- iii. All existing heritage trees and their critical root zones on the property within 50 feet of proposed land disturbing activity or that are being used for green area credit.
- iv. All existing specimen trees that are used for tree save, green area credit, or heritage tree mitigation and their critical root zones.
- v. Any existing areas of the site used for credit toward meeting previously approved tree save or green area requirements
- vi. Any area of the site to be used for credit toward meeting new green area requirements per Section 20.15.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.

b. 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 location and protection plan for the following trees and their critical root zones:

- i. All City trees of eight inches DBH or greater and all planted City trees.
- ii. Any areas of the site used to meet tree save or green area.

iii. Any trees of two-inch caliper or larger being saved for credit toward planting requirements per Section 20.16 and 20.17.

iv. Any existing heritage trees being saved per Section 20.14.

v. Any existing specimen trees that will be used for green area credit or heritage tree mitigation.

c. Tree Planting and Green Area Plan

All applications for land development approval subject to the applicability of Section 20.14, 20.15, 20.16 and Section 20.17, shall include a tree planting and green area plan, as applicable. The tree planting and green area plan shall include all trees, including the location of each, required to be planted or preserved pursuant to the requirements of Section 20.14, 20.15, 20.16 and Section 20.17 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.

d. Tree Protection Installation

All tree protection required by this Article and required by the Charlotte Tree Manual shall be installed prior to the commencement of any development activity or tree disturbing activity on the site and pursuant to the specifications of the Charlotte Tree Manual.

3. Spatial Tree Data Plan

To certify completion of a development project, applicants shall submit "spatial tree data" plans as specified in the CLDSM, and Charlotte Tree Manual for all required perimeter trees, internal trees, mitigation trees, and green area credits. Trees planted pursuant to Section 20.16 shall not require a "spatial tree data" plan. "Spatial tree data" plans shall be submitted to the Planning Department prior to release of permit holds.

4. Platting and Recording of Green Area

Prior to issuance of certificates of occupancy, boundaries for tree save, amenitized tree area, replanted tree save, and any off-site mitigation area used to meet green area requirements shall be required to be surveyed and be described in metes and bounds and be recorded on the final plat.

B. Tree Work Permits

1. Persons requesting to perform any tree disturbing activity to trees subject to Section 20.14, Section 20.15, Section 20.16, or Section 20.17 of 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 System (CATS), and North Carolina Department of Transportation (NCDOT) projects so long as tree preservation and protection requirements are included in the project plans.

C. Tree Planting Delay Requests

Requests for a delay in complying with Section 20.14, Section 20.15, Section 20.16 or Section 20.17 of 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 39.

D. Tree Mitigation Accounts

Deposit of collected mitigation and/or payment-in-lieu revenue during permitting processes shall be deposited into City accounts or equivalents, as follows:

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

a. Tree Conservation Accounts

The City of Charlotte shall establish a Tree Conservation Account to support the acquisition, protection, management, and long-term conservation of land in the City of Charlotte and its ETJ solely for the purposes of tree canopy conservation. The Tree Conservation Account shall directly and only support the City's Tree Canopy Preservation Program (TCPP). Collected fees will be allocated as designated in Section 4.2 of the UDO Zoning Administration Manual (Tree Canopy Preservation Program Manual). Collected fees and monies from the green area payment-in-lieu process, per Section 20.15.F.1, and any collected fees from mitigation processes with the intent and purpose to support TCPP, any grant funding specified to support TCPP, and all other monies collected with the intent and purpose of supporting TCPP shall be deposited into the Tree Conservation Account. Fees collected shall only be spent on the following funding areas:

i. Acquisition of Property

The Tree Conservation Account shall be used to purchase forested property and/or property that may be reforested following the guidance set forth in Section 4.2 of the UDO Zoning Administration 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 TCPP and Urban Arboretum Trail sites shall be assigned an official conservation designation.

ii. Property Management

The Tree Conservation Account 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 Section 4.2 of the UDO Zoning Administration Manual.

iii. Program Management/Staff Support

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

iv. Long-Term Stewardship

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

v. Urban Arboretum Trail (UAT)

The Tree Conservation Account 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.

b. Street Tree Planting Account

The City of Charlotte shall establish a Street Tree Planting Account to support City-managed city tree planting, city tree maintenance, and city tree inventory initiatives in the City of Charlotte's corporate limits, and tree canopy assessment and policy initiatives. Collected fees and monies from City tree mitigation, planting strip payment-in-lieu processes, tree pit payment-in-lieu processes, and other monies collected with the intent and purpose of supporting the interests of city tree planting, city tree maintenance, city tree inventory, and tree canopy assessment and policy initiatives, shall be deposited into the Street Tree Planting Account.

c. Canopy Care Account

The City of Charlotte shall establish a Canopy Care Account to support the sustainable preservation, maintenance, and/or regeneration of Charlotte's tree canopy. Canopy Care funding may 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 heritage tree mitigation, payment-in-lieu processes collected with the intent and purpose of supporting the sustainable preservation, maintenance, and/or regeneration of Charlotte's tree canopy, and any other monies collected specified to support Canopy Care shall be deposited into the Canopy Care Account. Funds collected shall be spent in the following funding areas:

i. Large Tree Assistance Program

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

ii. Heritage Tree Mitigation Planting

The Canopy Care Account shall be used to support a City-managed assistance program to help residents plant mitigation trees and support general tree planting on private property.

iii. Program Management/Staff Support

The Canopy Care Account shall be used to support the salary, benefit costs, and general overhead costs for up to one full-time equivalent (FTE) staff position and one intern position to assist in managing Canopy Care Account supported programs.

iv. Canopy Care Grant Program Establishment

The Canopy Care Account shall be used to support a City-managed canopy care grant program 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, organized community groups, and neighborhood and homeowners' associations within the City of Charlotte and its ETJ are eligible.

E. Administrative Adjustments and Emergencies

1. Administrative Adjustments

a. Administrative adjustments to quantitative standards may be requested in accordance with Section 37.4.A. Requests for administrative adjustments of quantitative standards shall only be considered for the following standards included within Table 20-7 Tree Protection Adjustments.

Table 20-7: Tree Protection Adjustments		
Section Eligible for Adjustment	Standard to be Adjusted	Decision Maker
Section 20.14	Tree Protection Requirements	Chief Urban Forester
Section 20.15	Green Area	Chief Urban Forester
Section 20.16	Minimum Caliper Requirements	Chief Urban Forester
Section 20.17	Tree Planting, Spacing and Quantity	Chief Urban Forester
Section 20.17	Site Lighting and Tree Separation	Chief Urban Forester
Section 20.17	Alternative to Perimeter Planting	Chief Urban Forester

b. If strict compliance with the standards of Sections 20.13 through 20.18 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 20.15. In addition, if the developer seeks a modification of planting requirements based upon a contention that the planting required by Sections 20.13 through 20.18 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 37.

2. Appeals

Any determinations and decisions pursuant to this section may be appealed to the UDO Board of Adjustment as per Article 37.

3. Emergencies

In an emergency such as a windstorm, ice storm, fire, or other disaster, the requirements of this Section 20.13 through 20.18 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.

F. Administration

1. Appeals and variances of this Article shall be subject to Article 37.
2. Inspections and enforcement actions of this Article shall be subject to Article 39.

G. Chief Urban Forester

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

1. To interpret, administer and enforce the provisions of Sections 20.13 through 20.18 of this Article.
2. To lead and supervise the work and activities of staff, and supervise the tree regulation review, enforcement, and compliance.
3. To lead City-wide and department urban forestry goals and initiatives.
4. To serve as a liaison for the Charlotte Tree Advisory Commission, and interdepartmental committees.
5. To interpret and translate information to the public on regulatory processes, planning initiatives, and land use policies related to urban forestry and tree canopy.
6. Prepare and make available to the public a Charlotte Tree Manual which includes guidelines for compliance with this Article.
7. To designate appropriate other person(s) who shall carry out the powers and duties of the Chief Urban Forester.