SECTION 9
GENERAL PROVISIONS

The following general provisions shall apply in all situations unless otherwise indicated.

9.1 RELATIONSHIP OF BUILDING TO LOT

Every Building hereafter erected, moved or placed shall be located on a Lot and in no case shall there be more than one (1) principal residential Building on a Lot.

9.2 OPEN SPACE REQUIREMENTS

No part of a yard, court or other open space provided around any Building or Structure for the purpose of complying with the provision of this Ordinance shall be included as a part of a yard or other open space required under this Ordinance for another Building or Structure. Every part of a required yard shall be open and unobstructed from its lowest level to the sky, except for the ordinary projection of sills, chimneys, flues and eaves; provided, however, that none of the aforesaid projections shall project into a Minimum Side Yard more than one-third (1/3) of the width of such yard nor more than twenty-four (24) inches, whichever is the least. Open or lattice enclosed fire escapes, fire proof outside stairways, and balconies opening upon fire towers projecting into a yard not more than five (5) feet shall be permitted where placed so as not to obstruct light and ventilation. Driveways and sidewalks may be permitted also.

In addition, certain Structures are permitted to be placed in the Required Yard Area as provided for in the Schedule of District Regulations (for example parking areas, accessory structures, signs, etc.).

9.3 REDUCTION OF LOT AND YARD AREAS PROHIBITED

No yard or Lot existing at the time of passage of this Ordinance shall be reduced in size or area below the minimum requirements set forth in this Ordinance. Yards or Lots created after the effective date of this Ordinance shall meet at least the minimum requirements established by this Ordinance.

9.4 ACCESS TO PROPERTY

No Building, Structure or Use of land shall be established on a Lot nor shall any Lot be created that does not abut upon a Public Street to which it has legal access. The public access requirement shall not apply to land exempt from Public Street access by this Ordinance. Lots that were “grandfathered” are allowed to be developed so long as they have a dedicated

easement to a public road. Any "grandfathered" lot on which a non-residential use is to be established shall be served with a minimum of a 20' wide paved access way connecting said lot to a public street.

9.5 RESERVED

9.6 RESERVED

9.7 WATER AND SEWER REQUIREMENTS

The Lot sizes required for the various Districts in this Ordinance were drawn based upon the assumption that adequate water supply and sewage disposal systems are available to each and every Lot. The lack of adequate systems for one or both facilities, however, may require larger Lot areas or, in some instances, not permit development as intended.

9.8 BUFFERS, SCREENING AND LANDSCAPING

1. General Requirements

A. Purpose:

The intent of these requirements shall be to enhance the visual and aesthetic appearance of the Town; provide space definition and landscape continuity between the built environment and the natural environment; provide appropriate barriers and relief from traffic, noise, heat, glare and the spread of dust and debris; reduce the impact of development on the community's storm drainage system and reduce flooding; aid in the conservation of energy; replenish the atmosphere with oxygen; provide for a more pleasant and relaxing urban environment; and increase property values. Furthermore, the intent shall be to create a visual screen between residential zoning districts and other zoning districts, or to screen certain uses in order to minimize potential nuisances such as noise, dust, odor and light glare; to reduce the visual impact of unsightly aspects of adjacent development; to provide for the separation of spaces and to establish a sense of privacy.

B. Applicability

1. All uses subject to the requirements of this chapter shall provide a landscape buffer to separate that use from adjacent land uses in accordance with the following subsections. The buffer shall have the appropriate width, amount of vegetation, and other features to properly mitigate negative effects of contiguous land uses. Whenever new

landscape material must be used, such material shall consist of **drought tolerant** plantings to reduce the need for irrigation systems and / or supplemental watering.

2. Within the C-4 (Central Business) District the requirements of this section shall apply only to boundaries between properties located within the district and properties located outside the district, and not to boundaries between properties that are each located within the C-4 (Central Business) District.
3. If the Zoning Administrator determines that a vegetated buffer does not exist on the site in accordance with the standards specified in the Ordinance, or has been disturbed as allowed in this section, then a re-vegetated natural buffer shall be installed. The intent of the re-vegetated buffer is to restore the natural area (i.e., sufficient canopy trees to achieve a closed canopy in the future.)

C. Temporary Deferral: A certificate of compliance shall not be issued for any use located on a lot(s) upon which screening and/or landscaping are required, unless such screening and landscaping are provided on said lot(s) as herein specified. This provision may be temporarily deferred by the Zoning Administrator in cases where it is not reasonable for the developer to install certain species of plant material prior to occupancy due to the recommended planting season not occurring at an appropriate phase in construction. In such case, the time deadline for planting such materials shall be extended only to the nearest seasonal period suitable for planting such materials. The Zoning Administrator shall require that the applicant obtain a temporary waiver when water restrictions are in place preventing regular irrigation or watering of plant material.

1. If a temporary deferral is granted, the developer or property owner must provide the Town with a surety bond or such other financial security as approved by the Zoning Administrator ensuring the installation of screening/landscaping. The amount of the security shall be one and one-half (1 ½) times the cost of plants, plant material and installation. The developer or owner must submit documentation of the estimated installation costs of the deferred plantings. Suitable documentation may be in the form of a landscape contractor's bid or contract, a nurseryman's bill or a similar document, or a cost estimate by a registered landscape architect.
2. The Zoning Administrator is authorized to release part of any security posted as the improvements are completed. However, all landscaping shall be in place by the next growing season.

D. Landscape Plans

1. In order to implement the requirements of this section, landscape plans are required as part of each site plan required under Section 9 of this Ordinance. In addition, subdivision plans, conditional use permit and conditional zoning site plans which include buffers, streetscapes, or other landscape areas shall be required to provide a landscape plan. Plans shall be developed by individuals or professional firms having the competence and knowledge to prepare plans required by this Section.
2. Landscape Plans shall include typical planting details for trees and shrubs, with specifications for soil amendments to provide suitable long-term growing conditions.
3. Applicants shall familiarize themselves with existing site conditions, and are encouraged to meet with Waxhaw staff to discuss appropriate design options and alternatives for accomplishing screening and landscaping objectives of the Ordinance.

E. Buffers and Screening: Screening between certain uses may be called for in specific situations elsewhere in this Ordinance or as a condition in conjunction with a variance, Conditional Use Permit or through Conditional Zoning. Such screening requirements may be at levels different than those herein called for. Where conflicts or discrepancies occur between any of these requirements, the higher level of buffers and or screening shall be provided.

Buffers, screening, and / or landscaping shall be required when any of the following situations occur:

1. The initial development or occupancy of a non-residential use requiring screening and landscaping under Section 9.8 (1), (2), (3) and/or (4).
2. If a change in use or occupancy results from a change in the zoning classification to a zoning district which requires landscaping and screening, then the change cannot occur without the required screening or landscaping having first been provided on-site.
3. If an expansion of an existing use which is deficient in screening or landscaping on a lot less than 20,000 square feet, which increases the square footage of the building by more than 100 square feet, or 5%, whichever is smaller, then the expansion cannot occur without the required screening or landscaping having first been provided on-site. If the expansion is less than 100 square feet or 5%, whichever is smaller, and the use is adjacent to a residential district, then the Administrator shall determine the amount of screening to be provided to fulfill the intent and spirit of this Ordinance.

4. If an expansion of an existing use which is deficient in screening or landscaping on a lot having between 20,000 and 43,560 square feet increases the gross floor square footage by more than 250 square feet or 5%, whichever is smaller, then the expansion cannot occur without the required screening or landscaping having first been provided on-site.
5. If the expansion of an existing use deficient in screening or landscaping on a lot between 1-5 acres increases the gross floor square footage by more than 500 square feet or 5%, whichever is smaller, then the expansion cannot occur without the required screening or landscaping having first been provided on-site.
6. If the expansion of an existing use deficient in screening or landscaping on a lot greater than 5 acres increases the gross floor square footage by more than 5%, then the expansion cannot occur without the required screening or landscaping having first been provided on-site.
7. In the event a change in use or occupancy results from a change in zoning classification to a zoning district which requires landscaping and screening, or an expansion of an existing use is proposed, and unusual topography, location, and/ or size of the lot or buildings would make strict adherence to the requirements of this Section impossible to install or serve no meaningful purpose, the Zoning Administrator may alter the requirements of Section 9.8.1.E (1), (2), (3), (4), and (5), as long as the spirit and intent of Section 9.8 are maintained.

   Such an alteration may occur only at the request of the owner, who shall submit a plan to the Zoning Administrator showing existing site features that would screen the proposed use and expansion and any additional screen materials the applicant may propose to have installed. The Administrator shall have no authority to alter the screening and buffer requirements unless the owner demonstrates that existing site features and any additional screening materials will screen the expanded use as effectively as the required screen.
8. Parking areas for five (5) or more vehicles shall be screened from view from public streets. Please refer to Section 12.4.2 *Parking, Loading and Lighting: Parking Lot Landscaping* or Section 9.8.2 D *General Provisions: Parking Lot Landscaping* of the UDO for specific screening requirements.

F. <u>Buffers and landscaping</u> shall be required along-side and rear property lines between abutting uses and districts in accordance with tables 9.8.1.a and 9.8.1.b below:

Table 9.8.1.a REQUIRED BUFFER CLASSES

	EXISTING ABUTTING USES AND DISTRICTS				
DEVELOPING USES	SINGLE FAMILY ZONING/ USE CLASS	MULTI FAMILY ZONING	OIS ZONING*	COMMERCIAL ZONING	PARKS AND GREENWAYS
1. MULTIFAMILY Attached and multifamily in one building with more than 12 units; Planned multifamily and attached developments and Manufactured housing parks	B	C			C
2. INSTITUTIONAL Low Intensity: Government Facilities, Civic, service and fraternal organizations; cultural facilities; Day care center; Dormitories; Elementary schools*; Group homes with more than 6 residents; and Nursing homes, rest homes and homes for the aged.	C	C			C

	EXISTING ABUTTING USES AND DISTRICTS				
DEVELOPING USES	SINGLE FAMILY ZONING/ USE CLASS	MULTI FAMILY ZONING	OIS ZONING*	COMMERCIAL ZONING	PARKS AND GREENWAYS
Medium Intensity: Health institutions, less than 50,000 sq. ft.; Junior high and Middle schools*; Religious institutions, up to 750 seats; Stadiums and arenas, less than 5,000 seats and other institutional uses less than 50,000 sq. ft.	B	B	C		C
High Intensity: Health institutions, 50,000 sq. ft. or more; High schools*; Religious institutions, 750 seats or more; Stadiums and arenas, 5,000 seats or more; Universities, colleges and junior colleges; and other institutional uses more than 50,000 sq. ft.	B	B	C		B
3. OFFICE					
Clinics, up to 50,000 sq. ft	C	C			C

	EXISTING ABUTTING USES AND DISTRICTS				
DEVELOPING USES	SINGLE FAMILY ZONING/ USE	MULTI FAMILY ZONING	OIS ZONING*	COMMERCIAL ZONING	PARKS AND GREENWAYS
Clinics, more than 50,000 sq. ft	B	B			B
Offices, up to 50,000 sq. ft	C	C			C
Offices, more than 50,000 sq. ft	B	B	C		B
Other office uses, up to 50,000 sq. ft.	C	C			C
Other office uses, more than 50,000 sq. ft.	B	B	C		B
4. BUSINESS					
Amusement, commercial outdoor	B	B	C		C
Retail, Shopping Centers and Restaurants, up to 50,000 sq. ft.	B	B	C		C
Retail, Shopping Centers and Restaurants, more than 50,000 sq. ft.	B	B	C		C
Wholesale trade	B	B	C	C	C
Other business uses	B	B	C	C	B
5. INDUSTRIAL					
Airport	A	A	A	A	A
Heavy manufacturing	A	A	A	B	A
Light manufacturing	A	A	A	B	A
Warehousing	A	A	A	B	A
Other industrial uses	A	A	A	A	A

** In the event that a single family house is being occupied primarily as a residence in the OIS district, the parcel shall be deemed a single family use as it pertains to the above table.*

Table 9.8.1.b BUFFER WIDTHS AND PLANTING STANDARDS

	SITE AREA (ACRES)	> 2	2 >10	= or >10
A CLASS	WIDTH (ft)	30	55	75
	TREES (PER 100 ft)	5	6	9
	SHRUBS (PER 100 ft)	40	60	60
B CLASS	WIDTH (ft)	20	45	55
	TREES (PER 100 ft)	3	6	7
	SHRUBS (PER 100 ft)	30	40	40
C CLASS	WIDTH (ft)	10	25	45
	TREES (PER 100 ft)	2	3	6
	SHRUBS (PER 100 ft)	20	20	20

G. Landscape Areas Adjacent to Public Streets:
A continuous landscape area shall be provided adjacent to public street right of ways for all districts except single family districts. This landscape area shall be in accordance with table 9.8.1.c below:

Table 9.8.1.c

LANDSCAPE AREAS ADJACENT TO PUBLIC STREETS

USE	MIN. LANDSCAPE AREA WIDTH	PROPERTY SIZE
INDUSTRIAL		
	40 FEET	5 ACRES OR LARGER
	20 FEET	> 5 ACRES
BUSINESS OR OFFICE (EXCLUDING CENTRAL BUSINESS DISTRICT)		
	20 FEET	ANY SIZE
MULTI-FAMILY OR INSTITUTIONAL		
	20 FEET	2 ACRES OR LARGER
	10 FEET	> 2 ACRES
CENTRAL BUSINESS DISTRICT	NONE	

2. General Provisions

A. Screening Requirements for Open Storage and Unenclosed Structures

For open-air storage, or an unenclosed structure consisting of a roof, but no walls used for storage of materials, products, wastes or equipment associated with business or industrial uses located in any zoning district within one hundred fifty (150) feet of the street right-of-way or adjacent property line, screening must be provided on the subject property so as to materially screen said storage, in the form of a berm, wall or fence and / or an appropriate amount of landscape plantings to effectively screen the storage from view from any adjacent lot or street right-of-way.

B. Screening Requirements for All Zoning Districts

1. The following uses must be screened from abutting property and from public view from a public street. If shrubs are used for screening purposes, they shall be positioned to form a continuous, tight screen at mature growth. In lieu of shrubs, an opaque wall or fence of adequate height to shield use from public view shall be used for screening of the following:

    a. Dumpsters or trash handling areas;
    b. Service entrances or utility structures;
    c. Loading docks or spaces;
    d. Open air storage

2. Except as provided in Section 9.8.1, screening shall not be required between any two lots that contain principal single family residential uses.

C. Buffer and Screening Standards

1. To the extent that existing natural vegetation located on the same parcel of land as the proposed development can meet the required screening levels of this Section, the use of such materials is encouraged. In such case, the owner shall designate the land on which such materials are rooted, which shall contain at least the minimum width required for the designated buffer area. Additional planting shall be added, if the buffer is deficient in any way, as required to meet the standards indicated in Table 9.8.1.a.
2. Trees used to meet buffer planting requirements shall have a minimum trunk caliper (measured six (6) inches above ground) of two (2) inches for large maturing trees and one and one-half (1-1/2) inches for small maturing trees, and a minimum height of ten (10) feet. At least seventy-five percent (75%) of the trees in the buffer must be of the large maturing variety. Large maturing trees (those expected to grow over

thirty-five (35) feet in height under normal growing conditions) shall not be planted within twenty-five (25) feet of an overhead electrical distribution line. This requirement does not apply to overhead telephone or cablevision lines.

3. Shrubs used for buffers and / or perimeter screening shall be at least thirty (30) inches tall when planted, and be expected to grow to a minimum height of five (5) to six (6) feet when mature, with a minimum mature width four (4) feet. Shrubs used for screening along public streets shall be at least eighteen (18) inches tall and eighteen (18) inches wide when planted, and be expected to grow to a minimum height of three (3) to four (4) feet when mature.

    a. Buffer planting: To determine the total number of buffer plants required, the length of each side of the property requiring a screen/buffer, minus the area covered by a sight distance triangle as required in this Ordinance, shall be divided by 100 and multiplied by the number of plants listed for the required buffer in Table 9.8.1.b. When units of measurement determining the number of required trees and shrubs result in a fractional tree or shrub, any fraction of one-half (1/2) or more shall require one. At least seventy-five percent (75%) of the shrubs planted in the buffer must be evergreen.

    b. Screen planting along public streets: Shrubs used for screening shall be evergreen species, and shall be planted at a maximum spacing of 4 feet on center along the length of the required screening.

4. These requirements shall not prevent the owner from installing additional plantings beyond the minimum required quantities.
5. No required buffer shall extend nearer to a street than the street right-of-way line.
6. No structure other than a wall, fence, sidewalk, mailbox, sign, school bus shelter, or driveway cut shall be permitted within a required area. If a wall or fence is used as part of a screen, it shall comply with Section 9.19.3 of this ordinance. No off-street parking may take place in any required buffer or required landscape area adjacent to a public street.
7. The height of any screen material required by this Ordinance in the vicinity of a point of ingress and egress may not exceed two and one-half (2-1/2) feet in height within the sight triangle.
8. Solid brick, stone, or stucco walls, wood and vinyl fences shall be permitted within buffers, and shall comply with Section 9.19.3 of this ordinance. Walls or fences shall be located within the inner 25% of the interior (project side) of a buffer, and will not be allowed to cause significant damage to roots of existing trees to be saved within the buffer.

9. Security fencing shall comply with Section 9.19.3 of this ordinance.
10. Berms may be installed within buffers that do not have significant trees or existing vegetation, up to a maximum height of six feet and a 3:1 maximum slope. Where a berm will be utilized within a buffer or screening area, all required tree and shrub plantings shall still be provided. The slope of a berm shall be of a grade that it is suitable for maintenance and soil stability while taking into consideration the type of plantings and ground cover that will be utilized, but in no case shall a berm be less than two (2) feet in height. The use of Pueraria lobata (kudzu) for berm ground cover is not permitted nor are any other nuisance plants that have a tendency to spread to other properties.

D. Parking Lot Landscaping: Tree planting shall be provided for parking lots that contain five (5) or more parking spaces, as follows:

1. For every 1,000 square feet of vehicular use area, one (1) deciduous tree and four shrubs must be planted. At least seventy-five (75) percent of the required deciduous trees must large-maturing trees. The species must be from the approved species list in Section 9.21.15 of this Ordinance. Trees and shrubs must be planted within fifteen (15) feet of the vehicular use area to count as parking lot landscaping.
2. When a development contains more than twenty (20) or more parking spaces, fifty (50) percent of the trees and shrubs required by 9.8.2(D)(1) must be planted in islands or medians located within the parking lot. Tree islands shall be evenly distributed throughout the parking lot in order to provide an even tree canopy throughout the lot. At a minimum, such tree islands shall consist of an area equal in size to two (2) parking spaces side-by-side (324 square feet). Parking bays shall be broken up with landscaped islands or medians to avoid long monotonous rows of parking. Planting trees in groups is encouraged to increase the total amount of planting area for roots to grow.
3. Each parking space must be located within sixty (60) feet of a tree measured from the closest point of the parking space to the tree trunk.
4. Small maturing trees shall be planted where overhead electric lines would interfere with normal growth.
5. Structured parking facilities, or parking decks, shall be excused from the parking lot landscaping requirements contained in this section but shall comply with the provisions of this paragraph. In the event that any openings for ventilation, service or emergency access are located at the first floor level in the building façade, then they shall be an integral part of the overall building design. These openings as well as pedestrian and vehicular entrances shall be designed to minimize visibility of parked cars. All levels of a structured parking facility shall be designed and screened in such a way as to minimize visibility of parked cars. In no instance will rails or cabling alone be sufficient to meet this screening requirement.

6. Small lots, defined as lots with less than one-hundred (100) feet of frontage on a roadway or with less than one-hundred (100) feet of depth, may have site constraints which make strict compliance with the regulations contained in this section a hardship. In such cases, the Zoning Administrator may approve deviations from such regulations so long as the plans of development are consistent with the goals stated herein.
7. This section is replicated in Section 12.4.2 of this Ordinance.

E. Street Trees: Tree planting shall be provided within required landscape areas adjacent to public street right of ways as follows:

1. New trees are required wherever existing trees are not saved within 30 feet of the back of curb.
2. New trees shall be spaced between 40 feet and 65 feet on center.
3. New medium and large maturing trees shall be located within twenty five (25) feet of the back of curb, and shall be located outside of public street right-of-ways, and no closer than four (4) feet from sidewalks.
4. New small maturing trees shall be located inside rights-of-way. When available, small maturing trees shall be located inside planting strips.
5. New trees shall be canopy species, except where overhead utility lines exist within twenty five (25) feet of the street right-of-way, small maturing species shall be used.
6. New trees shall be 2-inch minimum caliper at planting.
7. New trees shall be selected from the approved Waxhaw tree species list (Section 9.21.15), provided that additional species may be used subject to specific approval of the Administrator.
8. Street trees may be installed prior to, during, or after construction on any lot, but in any case, street trees shall be installed prior to issuance of occupancy permits for each lot.

3. Ownership of Buffers

A. The Board of Commissioners may require that a buffer in a residential subdivision not be included within any single family lot, or that the buffer be wholly owned (in fee simple absolute) by the owner of an individual residential building lot zoned for residential uses. The buffers shall be owned by a homeowner's association, or be owned outright by a third party, or shall be otherwise divided so that the buffer is not removed, modified, or damaged. In the event there is no homeowners association, the buffer shall be provided on a permanent recorded landscape easement.

1. Any required buffer (including those required as part of a conditional use permit or conditional zoning) for a residential development shall

be credited toward meeting the lot size requirements but building setback requirements shall be determined based the lot dimensions and will not include the buffer area. However the preferred method is that the residential buffer be a separate lot and owned by a separate entity (e.g., a homeowners association).

2. Where control and/or ownership of the buffer is through a property owner's association, any modifications, removal, or damage to the buffer by an adjacent homeowner shall be prohibited.
3. The property owner's association or owner shall be responsible for any violation related to the buffers in accordance with Section 9.8.6, Maintenance Responsibility, Replacement of Damaged Vegetation, and Associated Fines.

B. The Zoning Administrator may allow buffers to be included within residential lots when all of the following conditions are met:

1. The subdivision is limited in size and has no homeowners association; and
2. There is no reason for the formation of a homeowner's association (e.g. covenants, other common areas or engineered storm water control structures); and
3. The buffer is placed within a permanent conservation easement or other legal instrument (required documents must be provided prior to recording the plat for the impacted area).

4. Side and Rear Yard Landscaping

A. Side and Rear Yard Landscaping: The following standards shall apply in side or rear yard areas where buffers are not required.

1. In the OIS District, there shall be a ten (10) foot landscaped area extending inward from the side and rear lot lines. This landscaped area shall run parallel with the lot lines, and shall not extend into any public street right of way.
2. In the C-1, C-2, C-3, I-1, and I-2 districts said landscaped area shall be increased to fifteen (15) feet in width.
3. Except as provided herein, the side or rear yard landscape area shall consist entirely of planted materials, and shall include trees, two (2) inch caliper tree, eight (8) feet in height at planting, placed twenty-five (25) feet to forty (40) feet on center. In addition, there shall be shrubs, a minimum of two (2) feet height at planting, and expected to reach 4 to 6 feet height at maturity, placed five (5) feet on center maximum. With the exception points of ingress and egress, there shall not be any impervious

surfaces (nor any off-street parking) allowed in the landscaped areas. Freestanding signs may be placed in the landscaped areas, so long as said signs are otherwise in compliance with the sign regulations contained in this Ordinance.

4. Said landscaped areas shall not substitute for any required screening areas, as called for in this Ordinance, unless the landscaped areas meet the required screening standards.

B. The Administrator may waive or modify these requirements in instances where due to a particular lot's size or shape, these requirements would serve no useful purpose.

5. Development within Required Buffers and Landscape Areas

A. Required buffers and landscape areas adjacent to public streets shall not contain any structures, impervious surfaces, or site features that do not meet the standards of section 9.8 of the ordinance, or that require removal of existing trees, unless otherwise permitted below.

1. Required buffer areas shall remain undisturbed where existing trees two (2) inches or larger in trunk diameter occur, unless otherwise approved by the Zoning Administrator. To obtain approval for grading or disturbance of a buffer area where existing trees occur, the following conditions below must be met.
2. Required landscape areas adjacent to public street right of ways shall remain undisturbed where existing trees eight (8) inches or larger in trunk diameter occur, unless otherwise approved by the Zoning Administrator. To obtain approval for grading or disturbance where existing trees occur, the following conditions below must be met.
3. The owner shall submit a landscape plan indicating proposed landscaping that will provide as good or better buffering and screening as the existing vegetation proposed for removal.
4. In no case shall more than 30% of a perimeter side or rear yard buffer width be disturbed (except as noted in section E below), and buffer disturbance may only occur on the interior side of the buffer.
5. Within required landscape areas adjacent to public street right of ways, existing trees 8" or larger in trunk diameter shall be saved, unless the owner can justify removal of existing trees due to requirements for installation of driveways or utilities, or due to unique grading requirements or site development constraints. Where existing trees are approved for removal, mitigation / replacement tree plantings shall be installed at a rate of (1) replacement tree with 2 ½" caliper for each eight (8) inches of cumulative existing trunk diameter removed. Mitigation /

replacement trees shall be installed in the general vicinity of the trees removed, unless approved otherwise by the Zoning Administrator.

B. Pedestrian walkways are allowed within buffers, subject to the following standards:

1. Walkways shall not exceed 5 feet in width,
2. Walkways may cross buffers at an angle between 60 and 90 degrees, and
3. Walkways may only run along the length of a buffer if the buffer is at least 40 feet in width, and the walkway is located within the inner 25% of the buffer.

C. Utilities are not permitted in buffers unless no reasonable alternative exists.

D. If utilities are placed in a buffer, they shall be located and installed in a way that minimizes disturbance of the buffer area: not parallel, but crossing at an angle between 60 and 90 degrees. If utilities, storm water drainage channels or piping, or other similar features are placed in a buffer at an angle less that 60 degrees, the buffer width shall be increased by the width of the utility easement or disturbance, or at least 10 feet, whichever is greater.

E. Bioretention or raingarden areas (but not storm detention basins) may be placed within buffers, provided the planting standards of the buffer is maintained, and existing trees are preserved in at least 50% of the buffer along the exterior perimeter, where existing trees occur.

F. Grading may occur within required buffers or landscape areas that do not contain existing trees or landscape screening material.

6. Maintenance of Required Buffers and Landscaping

A. Maintenance Responsibility

The owners of the property and their agents, heirs, or assigns shall be responsible for the installation, preservation, and maintenance of all planting and physical features (installed or vegetated natural areas) required under this section. Damage to these areas shall result in revegetation requirements.

B. Inspections After First and Fifth Year

The Zoning Administrator or his/her designee shall inspect the site one and five year(s) after the issuance of a permanent Certificate of Compliance in order to ensure compliance with the approved landscape and/or subdivision plan and to ensure that the landscaping is properly maintained. Failure to maintain required landscape areas (trees and shrubs) may result in fines according to Section 17.5 of this Ordinance.

C. Maintenance Responsibility, Replacement of Damaged Vegetation, and Associated Fines

1. Trees and shrubs shall be maintained to keep natural appearance. Limbing up trees and "topping" or shearing off trees shall be prohibited, unless required for public safety reasons approved by the zoning administrator. Any dead, unhealthy, or missing vegetation, or vegetation disfigured by severe or excessive pruning, shall be replaced with locally adapted vegetation that conforms to the standards of this Ordinance and the approved site and/or subdivision plan. In the case of removal of existing original vegetation from required vegetation protection areas, the replacement requirements described in paragraphs below shall apply.
2. In the event that any vegetation or physical element functioning to meet the standards of Section 9.8 of this Ordinance is severely damaged due to an unusual weather occurrence or natural catastrophe, or other natural occurrence such as damage by wild or domestic animals, the owner may be required to replant if the buffer standards are not being met. The owner shall have one growing season to replace or replant after receiving notice from the Zoning Administrator. The Zoning Administrator shall consider the type and location of the landscape buffer or required vegetation area as well as the propensity for natural revegetation in making a determination on the extent of replanting requirements.
3. Any appeal of the Zoning Administrator 's decision relating to the amount of required revegetation shall be made to the Board of Adjustment within fifteen (15) calendar days following the notice of decision, and the Board of Adjustment shall consider reduction requests at the next available regular meeting.
4. All required buffers, perimeter landscaping, and other landscaped areas shall be kept free of refuse and debris, shall be treated for pest/diseases in accordance with the approved landscape plan, and shall be maintained so as to prevent mulch, straw, dirt, or other materials from washing onto streets, sidewalks, and adjoining properties.
5. The owner should take actions to protect trees and landscaping from unnecessary damage during all facility and site maintenance operations. Plants must be maintained in a way that does not obstruct sight distances at roadway and drive intersections, obstruct traffic signs or devices, and/or interfere with the use of sidewalks or pedestrian pathways. Viable plants, whether located within undisturbed buffers, vegetation protection areas, or within planted areas (required by the site and/or subdivision plan) shall not be removed, damaged, cut or severely pruned so that their natural form is impaired (shrubs within landscape areas

adjacent to public streets may be pruned, but must maintain at least three feet in height).

6. In the event that existing required vegetation located within any required buffers, streetscapes, vehicular use or other landscape areas poses an immediate or imminent threat to improved structures on private or public property, severe pruning and/or removal of the vegetation is allowable provided prior approval from the Zoning Administrator is obtained, and the performance standard of the landscape area is maintained consistent with this Ordinance.

D. Landscape Maintenance Plan

The paragraph below regarding a landscape maintenance/ management plan shall be placed on the landscape plan prior to plan approval, along with any other notes applicable to site landscaping. This statement must be individualized based on each site and/or subdivision plan. The maintenance plan shall be prepared by a registered landscape architect or other qualified landscape professional.

"The owners of the property and their agents, heirs, or assigns shall be responsible for the installation, preservation, and maintenance of all planting and physical features shown on this plan. The owners shall be responsible for maintenance of the vegetation, including but not limited to:

1. Fertilization
2. Pruning
3. Pest control
4. Mulching
5. Mowing (if any)
6. Protection of the root zones from equipment, construction and storage of materials
7. Watering
8. Other continuing maintenance operations

Failure to maintain all plantings in accordance with this plan shall constitute a violation of the UDO and may result in fines."

E. Replacement of Disturbed or Damaged Vegetation

The disturbance or damage of vegetation within any required buffers, streetscapes, vehicular use areas, or other landscape areas required by this Ordinance, by a Conditional Use Permit or through Conditional Zoning shall constitute a violation of this Ordinance.

1. The natural death of existing vegetation within any required landscape area does not constitute a violation and would not require revegetation

to replace the plant material unless the required landscape area no longer achieves the required performance standards of this Ordinance.

2. All disturbed or damaged landscaped areas and natural vegetation shall be replanted so as to meet the standards of this Ordinance, as well as the approved site and/or subdivision plans, if applicable. A replacement planting plan shall be submitted for review and approval by the Zoning Administrator prior to replacement. This plan will ensure proper replacements are made.
3. In situations where existing required vegetation on a developed site or vacant site with an approved site and/or subdivision plan has been removed or damaged in violation of this Ordinance, the Zoning Administrator may require that the entire site be reviewed and revegetated consistent with the current provisions of this Ordinance, in addition to any applicable fines.

7. Fines and Replacement of Existing, Original, or Installed Vegetation

A. Unapproved removal of vegetation in a required buffer or landscape area, and /or severe or excessive pruning in non-emergency situations shall constitute a violation of the UDO and may result in the assessment of fines, penalties, and / or landscape replacement requirements indicated below. Violations shall be subject to enforcement provisions contained in Section 17.5 of this Ordinance.

B. When existing vegetation has been disturbed or damaged without obtaining required approval of a landscape plan or other form of approval from the Zoning Administrator, the owner shall be issued a notice of violation; shall be subject to a fine and / or stop work order; and shall be required to replace the disturbed or damaged vegetation in accordance with the standards set forth below, or as required in other parts of this Ordinance, taking into account any unique site conditions and existing vegetation remaining within the buffer or landscape area. Required vegetation replacement must occur within 45 calendar days from the date of the violation notice, which may be extended to September 30 if violation notice is issued between May 15 and July 30.

1. Where the size (trunk diameter) and quantity of damaged vegetation can be documented, an equal amount of new vegetation ("inch for inch") shall be used to quantify the replacement vegetation. Replacement vegetation shall meet or exceed the current requirements of this section. Fines and replacement shall consist of item (1) and any combination of the measures listed in paragraphs (2) and (3).
2. A base fine may be assessed by the Zoning Administrator, in an amount between $2.00 and $4.00 for every square foot of required buffer or

landscape area where unauthorized damage or removal of vegetation has occurred.

3. The base fine shall not exceed a total of $50,000 per site. In determining the amount of the fine, the Zoning Administrator shall consider the degree and extent of harm caused by the violation, the cost of rectifying the damage, and whether the violation was committed willfully.
4. Payment of fines shall be made to the Town within thirty (30) calendar days of receiving notice by the Zoning Administrator.
5. Damaged significant vegetation in both buffers and / or other required landscape areas shall be replaced with an equal amount of new vegetation according to the size of vegetation removed (also called "inch for inch" replacement, see below).
6. Inch for Inch Replacement
   Any tree with a trunk diameter of at least six inches at breast height that is damaged or removed without authorization shall be replaced with one or more trees that have a caliper of at least two inches and a cumulative caliper equal to or greater than the original tree.
7. Area Replacement
   For other cases where existing vegetation is damaged or removed, the type and amount of replacement vegetation required shall be of the type and amount that is necessary to provide the type of landscaped or natural buffer required under Section 9.8, as identified on an approved landscape plan; or as otherwise required by this Ordinance.
8. Area replacement shall include one or more of the following for each 2,000 square feet of disturbed area and prorated for any area less than the subsequent 2,000 square foot (the prorated value will be rounded up to the nearest whole number). If the area is less than 2,000 square feet, then a revegetation plan that meets the general intent of the requirements below may be approved by the Zoning Administrator.

   a. Two large maturing trees of at least two inches caliper and a minimum height of ten feet;
   b. Three small maturing trees of at least one and one-half inches caliper and at least eight feet height;
   c. Fourteen (14) shrubs at least 24" in height at installation (at least 75% evergreen);
   d. On slopes equal to or greater than two and one-half to one, 20 ground cover plants with a container size of one gallon at the time of installation.
   e. The specific quantities of plants listed above may be adjusted by the Zoning Administrator in order to meet the standards for the required buffer type based on location, topography and other site features.

9. Location of Replacement Trees:
Revegetation should be located within the general vicinity of the violation. If revegetation is not practical within the vicinity, a more suitable location on the site may be selected. If no suitable location can be found, a monetary payment to the Town may be required. This monetary payment will be based on the current market price for any replacement tree(s) and/or shrubs. This payment shall be used to fund plantings on public properties.

C. Conflict with Tree Preservation Policy
This Section 9.8 is to be read in conjunction with and in addition to the tree preservation terms and provisions in Section 9.21 of the UDO. In the event of any conflict between this Section 9.8 and Section 9.21, the stricter of the terms and provisions shall govern and control.

D. Appeals
Any party issued a notice of violation, fine, stop work order, or notice of replacement requirement from the Town under Section 9.8 of the Ordinance may file an appeal to the Zoning Board of Adjustment within fifteen (15) calendar days of receiving written notice from the Town. While an appeal is pending with the Zoning Board of Adjustment, enforcement actions for the violations in question shall be suspended.

If a violation is upheld by the Zoning Board of Adjustment, the offending party shall comply with all requirements of the ordinance, with any modifications approved by the Board of Adjustment, and shall pay any required fines within 30 calendar days of the decision by the Zoning Board of Adjustment.

9.9 HEIGHT LIMITATION EXCEPTIONS

Except as may otherwise be prohibited by the FAA Regulations, the height limitations of this Ordinance shall not apply to public buildings, church spires, belfries, cupolas and domes not intended for residential purposes, or to monuments, water towers, observation towers, power transmission towers, silos, grain elevators, chimneys, smokestacks, derricks, conveyors, flag poles, radio, masts, aerials and similar Structures, provided such Structures meet the required N.C. Building Code.

9.10 BUILDING SETBACK EXCEPTIONS

Setback distances shall be measured from the property line or street right-of-way line to the nearest portion of any building, or structure excluding:

1. The outermost four feet of any uncovered porch, step, eave, gutter, canopy, or similar fixture; and

2. A deck or patio if no portion of the same extends more than twelve inches off the ground;

3. Any structure that is a mere appendage to a building, such as a flagpole, or fountain; and

9.11 ONE PRINCIPAL BUILDING

1. Non-Residential Uses
Only one principal use per lot shall be allowed except as part of a planned shopping center, office building, or similar planned multi-tenant development as permitted in this Ordinance. More than one principal structure devoted to a non-residential use may be located on a lot provided that access is available from a public street or a twenty (20) foot easement is maintained from a public street to each building for use by service or emergency vehicles.

2. Residential Uses
No more than one principal building devoted to a residential use shall be allowed on a lot except as part of a multi-family development. However, accessory dwelling units are allowed provided the additional regulations set forth in Section 11.3.80 are met.

3. Mixed Uses
No lot shall be allowed to contain a principal residential and non-residential use, except as part of a PRD.

9.12 VIBRATIONS

No established use in any district shall be operated so as to generate inherent or recurring ground vibrations detectable at the property line that create a nuisance to any person of ordinary sensitivities on another property.

9.13 CURB, GUTTER, AND SIDEWALK REQUIREMENTS

All new development(s) except for a single family or duplex structure shall be required to provide a standard 2’-6” concrete curb and gutter and a minimum 5 ft. concrete sidewalk in all zoning districts as a condition of this ordinance. Sidewalks should be located within the street right-of-way. In order for a sidewalk to be located outside the public right-of-way, the Zoning Administrator must approve the location and an approved sidewalk easement must be recorded with the Union County Register of Deeds prior to issuance of final Zoning Compliance.

The sidewalks and curb and gutter shall be built to NCDOT and/or Waxhaw standards, whichever is most restrictive.

Curbing (two foot and six inches) shall also be required along the perimeter of:

1. All landscaped areas as required by Section 9.8.4;

2. The perimeter of driveways for all uses (except single-family and two-family dwellings) that provide access to off-street parking areas; and,

3. The perimeter of all designated off-street parking areas for all uses (except single- and two-family dwellings).

The Administrator may waive or modify these requirements in instances where due to a particular lot's size, location, shape, these requirements would serve no useful purpose.

9.14 PARKING OF COMMERCIAL AND RECREATIONAL VEHICLES

1. Recreational Vehicles

For purposes of this Ordinance, a recreational vehicle shall not be deemed a dwelling unit and the usage of a recreation vehicle for living, sleeping or housekeeping purposes and the connection of such vehicle to utility services (other than for periodic maintenance and/or repair purposes) shall be prohibited unless the vehicle is located in a camping and recreational vehicle park so designed to accommodate recreation vehicles.

2. Commercial Vehicles

A. On any lot of less than two (2) acres in size located in a Residential Zoning District, one commercial vehicle may be parked on an overnight basis on private property and shall be limited to Class 1 or Class 2 vehicles (gross vehicle weight of up to 10,000 pounds), providing that such vehicle is parked off the street and is used by a resident of the premises.

B. No person shall park or place construction or maintenance equipment, machinery or materials, or allow same to be parked or placed upon public property, streets, and right-of-way or upon private property in the Residential Zoning Districts.

9.15 RESERVED

9.16 RESERVED

9.17 RESERVED

9.18 DEVELOPMENT/SITE PLAN REQUIREMENTS

All developments, other than single-family detached and two-family dwellings and/or accessory buildings thereto on individual lots and/or tracts not proposed for subdivision, shall be in conformance with an approved Development Plan. Exception is taken to farming and/or agriculture whereby the principal use of the development meets the definition of a "Bona fide Farm" as per the North Carolina General Statutes.

1. Development Plan Requirements and Procedures

All Development Plans shall be required to satisfy the following requirements and procedures, and satisfy the requirements of the Section pertaining to Design Criteria for Land Development, herein.

2. Application and Approval Process in General

Applicants requesting a Zoning Permit for Development other than that specifically excepted herein shall submit a Development Plan (together with any and all required technical data specified and/or requested) for review by the Administrator or his/her authorized personnel. Approval of a satisfactory Development Plan is pre-requisite to the issuance of a Zoning Permit.

Applicants desiring input and/or recommendation from the Administrator or any other municipal official prior to submittal of a Development Plan are encouraged first to prepare a sketch plan of the proposed Development before meeting to discuss specifics with municipal officials. Guidelines for sketch plans are set forth in following herein.

The applicant is encouraged to incorporate the recommendations of the Administrator or authorized staff reviewer into the Development Plan before submittal. The sketch plan is only a courtesy intended to inform the applicant of the approval criteria prior to submittal of the Development Plan; furthermore, sketch plan approval does not constitute approval of the Development Plan and may not be substituted for any required approvals.

All Development Plans must bear the original signature of the Administrator to be deemed approved.

Upon submittal of a Development Plan and all required materials specified by the Administrator, the Administrator shall have up to twenty-one (21) days to make a decision on the plan. The Administrator shall notify the applicant of his decision. Notification may be verbal, but must be documented in writing within seven (7) days following the notification date. Each time a Development Plan is rejected, revised or returned for additional information, the timetable for official action shall begin anew.
Should a period of twenty-one (21) days elapse from submittal of a Development Plan

without a decision rendered by the Administrator, the Development Plan shall automatically be deemed approved

Applicants wishing to re-submit a rejected development plan or submit one that has been substantially revised as determined by the Administrator must re-apply and pay the associated review fees.

Applicants requesting Development Plan review/approval shall be required to pay a review fee as contained in the Fee Schedule adopted by the Board of Commissioners at the time of each Development Plan submittal and/or request for substantial revision. The Town shall bill the applicant for any engineering or other outside consultant fees charged to the Town in association with review of the Development Plan. The Town shall issue no zoning permit unless all requisite development plan fees have first been paid to the Town in full. Fees are not applicable to sketch plan review and/or record drawing (As-built) review. If after the third submittal of the development plan, the plan does not meet the requirements of the Town, the applicant must re-apply and pay the associated review fee again. This helps to keep the applicant from running up zoning and engineering fees incurred by the Town.

3. Effect of Development Plan Approval - Validity

Development Plan approval is valid for a period of six (6) months from the date of approval; however, approved revisions shall not constitute additional time unless specified in writing by the Administrator upon approval of said revisions. Substantial revision to a Development Plan requiring re-application as described above may constitute a new validation period.

4. Optional Sketch Plan Requirements/Recommendations and Procedure

The optional sketch plan is encouraged and should be drawn to scale, preferably the same scale as required for Development Plan submittal. Recommended information shall include the following:

A. Property Boundaries and total acreage;
B. Major topographical and physical features (i.e. creeks, slopes, buildings, streets, etc.);
C. Proposed streets, buildings and/or lot arrangements;
D. Existing and proposed land use with brief project description including building sizes, unit sizes, lot sizes, open space, amenities, etc.;
E. Name, address and telephone number of applicant and persons (firm) preparing the Development Plan;
F. Adjacent Street names, numbers, and right-of-way widths; and
G. Zoning district classification of site and surrounding properties, including those across streets.

The sketch plan shall be submitted providing at least three (3) copies.

5. Development Plan Requirements/Recommendations and Procedure

The Development Plan shall be submitted providing the minimum required information and should contain all applicable recommended information. The Development Plan hall be drawn to scale. The Administrator may waive required information; in addition, the Administrator may require other pertinent information, as deemed necessary on a case-by-case basis.

A. Required Information for Development/Site Plan:

(NOTE: THE ADMINISTRATOR MAY WAIVE CERTAIN REQUIREMENTS WHERE DEEMED APPROPRIATE)

1. Existing and proposed topographic contours at vertical intervals no greater than five feet of development area;
2. Stormwater drainage plan;
3. The location, use and outline of existing and proposed buildings and structures;
4. The location of proposed open spaces;
5. The location, name, pavement width and right-of-way width of existing streets;
6. The location, name, pavement width, curb type, right-of-way width, pavement type, sidewalk location and curb cuts of all proposed street and parking facilities and site improvements;
7. The location of all existing and proposed utilities including electrical, water, sewage, telephone and gas facilities (including easements);
8. The location of all existing and proposed drainage facilities necessary to serve the site (including easements);
9. Residential density (units per acre);
10. Schedule of building uses, by type, showing the number of bedrooms, number of units and floor area:
11. Buffer, landscaping, and screening devices proposed.
12. Proposed schedule of development for each phase of the project showing anticipated time for completion and estimated completion dates;
13. Property line survey and acreage data;
14. Vicinity map at a scale of no less than one inch equals four hundred (1" = 400') feet and encompassing an area no less than one-fourth mile in radius of the site and including:
15. Existing streets, existing water courses and Flood Hazard Areas, existing land uses on the site and in the area surrounding the site;
16. Written and graphic scale, north arrow and title;
17. Proposed name of the development;
18. Technical report containing:

a. A description of the project including general characteristics, development concept and amenities;
b. A general assessment of impact showing the proposed impact upon all affected utilities, transportation facilities, the environment, the local economy and local government; and
c. Engineering report to demonstrate adequacy of existing and proposed public facilities;

19. Name, address and telephone number of the applicant and persons (firm) preparing the development plan;
20. Zoning district classification of site and all abutting properties;
21. Names of property owners of all abutting properties.

The information listed above may be required as part of the site plan submittal for the Conditional Use Process.

The Development Plan shall be submitted providing at least five (5) copies. The Development Plan must be prepared by a professional engineer, architect, and/or land surveyor with his or her seal. Prior to construction, detailed plans and specifications shall be reviewed and approved by any other relevant entity (i.e., Union County) in accordance with their respective policies regarding said facilities and/or improvements. Approval of the Development Plan does not imply or satisfy approval requirements for such facilities and/or improvements.

9.19 FENCES AND WALLS

1. **Fence and Wall Regulations for Residential Uses**

A. On lots containing single-family, two-family, multi-family, and manufactured homes the following regulations apply:

1. Fences and walls may be located on the property line or in any portion of the required setbacks, under the following conditions:

a. If located in the required front yard, such fence or wall shall be no greater than four (4) feet in height.
b. If located in the required side or rear yard, such fence or wall shall be no greater than six (6) feet in height (unless otherwise used for screening purposes.)
c. Outside of the required setbacks and not otherwise used for screening purposes, fences and walls shall be no greater than four (4)

feet in height in the front yard and no greater than eight (8) feet in height in the side and rear yard.

2. Fences or walls may be built on the property line; however, it is strongly encouraged that the fence or wall be placed in such a manner so that the property owner has the ability to perform maintenance on the fence or wall without requiring access to an adjacent piece of property.

3. The following materials are permitted for fences or walls:

   a. Stone or imitation stone
   b. Brick or stucco
   c. Metal (wrought iron, welded steel, or aluminum)
   d. Wood or vinyl
   e. Chain link coated in black, dark green or dark brown vinyl (allowed in side and rear yard only)
   f. A combination of any of these materials designed to be compatible with the building façade

B. Residential Accessory Uses

1. Fences or walls used in conjunction with an accessory to a residential use shall meet the following requirements:

   a. Fences that are used at the periphery of a tennis court, basketball court, etc. (built per accessory structure requirements) shall be no greater than twelve (12) feet in height. Chain link fences shall be coated in black, dark green, or dark brown vinyl.
   b. Pools shall be enclosed from adjoining lots and/or adjoining dwelling units within the development by a protective fence or solid wall that is no less than four (4) feet in height. Chain link fences shall be coated in black, dark green, or dark brown vinyl.

2. **Fence and Wall Regulation for Non-Residential Uses**

A. On lots containing commercial, industrial, office, institutional, or specialty uses the following regulations apply:

1. Fences and walls may be located on the property line or in any portion of the required setback, under the following conditions:

a. If located within or outside the required front yard a fence or wall shall be no greater than four (4) feet in height.
b. If located within or outside the required side or rear yard a fence or wall shall be no greater than eight (8) feet in height.
c. A front yard fence greater than four (4) feet in height and a side or rear yard fence greater than eight (8) feet in height may only be allowed through securing a conditional use permit or conditional zoning.

2. The following materials are permitted for fences or walls of lots containing commercial, industrial, office, institutional, or specialty uses:

   a. Stone or imitation stone
   b. Brick or stucco
   c. Metal (wrought iron, welded steel, or aluminum)
   d. Wood or vinyl
   e. Chain link coated in black, dark Green or dark brown vinyl (allowed in side and rear yard only)
   f. A combination of any of these materials designed to be compatible with the building façade

3. Barbed wire or razors attached to fences are permitted in side and rear yards if screened from public view, according to the standards of Table 9.8.1.b, and not located within thirty (30) feet of a lot containing a principal residential use or any lot located in a Residential (R) District.

3. **Fence and Wall Regulations for Buffering and Screening**

A. Fences and walls located within landscaping buffers or used for screening purposes shall meet the following conditions:

1. If a fence or wall is used as part of a screen it shall be no less than six (6) feet in height and no greater than eight (8) feet in height.
2. A fence or wall located within a sight triangle shall be no greater than two and one-half (2-1/2) feet in height.
3. Security fencing, such as metal pickets, may be placed within a buffer.

B. Fences and walls shall be located within the inner 25% of the interior (project side) of a buffer and shall not cause significant damage to roots of existing trees to be saved within the buffer.

C. In lieu of shrubs, an opaque fence or wall of adequate height to shield use from public view shall be used for screening of the following:

1. Dumpsters or trash handling areas
2. Service entrances or utility structures
3. Loading docks or spaces
4. Open air storage areas

D. The following materials are permitted for fences or walls used within landscaping buffers or for screening of open air storage:

1. Brick, stone, or stucco
2. Wood or vinyl
3. Metal (wrought iron, welded steel, or aluminum)

9.20 ACCESSORY STRUCTURES

1. An Accessory Building/Structure located in either the R-1, R-2, R-3, R-4, RM-1, RM-2 or OIS Primary Zoning Districts shall not be located forward of the principal structure. Said Accessory Building and/or Structure shall not cover more than thirty (30) percent of the minimum lot size of any lot or tract. Notwithstanding, any accessory structure in these zones shall be located a minimum of five feet off any rear or side lot line, except 15 feet off any side or rear lot line abutting a public street. Said Accessory Building and/or Structure shall not be located closer than eight (8) feet from the Principal Building and/or any building and/or structure used for residential occupancy either on or off the lot and/or parcel. Accessory structure shall be of like material as the primary structure.

<u>Exceptions to Accessory Structure Regulations</u>

A. Exceptions to the Accessory Building/Structure setback from the Principal Building would include structures such as detached decks, detached pergolas and any other structure typically found immediately adjacent to a Primary Structure and approved as such by the Zoning Administrator.

B. Exception to the Accessory Building/Structure size limitation is taken where said accessory is located in the C-4 Primary Zoning District.

C. The Zoning Administrator may allow an accessory structure to be located in the front yard in situations where it is impracticable to locate said accessory structure in the side or rear yard. If a request for the accessory structure to be located in the front yard is denied, the applicant may appeal the decision to the Waxhaw Board of Adjustment as outlined in Section 15 of this Ordinance.

2. An Accessory Building/Structure located in either the C-1, C-2, C-3, C-4, I-1 or I-2 Primary Zoning Districts shall be subject to the requirements for Setback and/or Minimum Yard Width established in Article 5 of this Unified Development Ordinance and shall not be located closer than eight (8) feet from the Principal Building.

3. Tennis courts may only be located in the rear yard on any lot whose principal use if either a single-family dwelling or a manufactured home.

4. Irrespective of any of the regulations cited herein, outdoor in-ground swimming pools located on a residentially occupied lot (including those associated with multi-family, condominium, townhouse, or similar developments where such swimming pool is designed to be used by the residents of such residential development) shall meet the following requirements:

A. The pool shall be enclosed from adjoining lots (or from adjoining dwelling units within the development) by the principal building or accessory structure on the lot containing the pool or a solid wall or protective fence that shallcomply with Section 9.19.1.B.

B. All other distance separation requirements pertinent to accessory structures shall also apply to swimming pools.

5. Kennels located on lots containing a residential use shall meet the following requirements:

A. Kennels may be constructed of galvanized steel chain link fencing.

B. Kennels shall have a maximum height of 8 feet and be located in the side and rear yard only.

9.21 TREE PRESERVATION

1. Purpose

A. The purpose of this section is to protect trees within designated tree save areas. A tree save area is defined as one or more trees of a site which includes existing trees and their tree protection zone. The purpose of a tree save area is to encourage the preservation of healthy clusters of trees or heritage trees.

B. The Town Board finds it has been established that trees stabilize the soil and control water pollution by preventing soil erosion and flooding, reduce air pollution, provide oxygen, yield advantageous microclimatic effects, temper noise, provide a natural habitat for the wildlife of the town, and further, that unusual, large and old trees have unique aesthetic and historic values. Indiscriminate removal of trees causes deprivation of these benefits and disrupts the town's ecological systems. It is, therefore, the purpose of this chapter to prevent the indiscriminate or unnecessary destruction of trees within the Town of Waxhaw.

C. The town, furthermore, takes note of the findings of the North Carolina State Environmental Quality Review Act, among them being the obligation of the town to serve as a steward of air, water, land and living resources and the obligation to protect the environment for the users and further generate that it is the intent of the town to recognize these responsibilities in part by providing these procedures as well as to preserve the health and welfare and rural character of the community which is reflected in the woodlands of the Town of Waxhaw.

2. Applicability

A. <u>The provisions of this ordinance shall apply to the following:</u>

1. All new subdivisions, non-residential developments, and multifamily developments.

2. Changes in use, expansions, and new buildings for already existing non-residential or mixed land uses as per the following:
   a. Changes in use from residential to non-residential, such as a change from residential to commercial, or residential to industrial.
   b. Non-Residential Expansions – Any expansion of any existing land use (buildings, parking lots, etc) shall comply with the Tree Preservation and Protection Requirements in section 9.21.8 of this ordinance.

B. Site visits are required by the Zoning Administrator in conjunction with a North Carolina registered forester, registered landscape architect, ISA certified arborist, or certified tree and landscape appraiser for any situation requiring tree removal or mitigation of trees on sites being developed for non-residential, multi-family, single-family subdivision or non-agricultural use.

C. Exemptions: The requirements of this Section do not apply to any of the following:

1. Existing or proposed single family detached dwellings or two family dwellings on individually owned lots.
2. Trees may be removed as may be necessary to maintain town, county, state or utility rights of way or to control forest fires.
3. Activity that is conducted in accordance with a forest management plan that is prepared or approved by a forester registered in accordance with chapter 89B of the North Carolina General Statutes. Any such forest management plan shall be filed with the Zoning Administrator.

3. Administration and Enforcement

The Town Board hereby designates the Administrator to administer and enforce these regulations. The Administrator shall perform the following duties:

A. Receive and keep accurate records of tree removal permit applications.

B. Inspect the trees described in each application

C. Determine the disposition of the application based on the standards for granting permits described in Section 9.21.5(B) of this Ordinance.

D. Carry out such other duties as may be assigned from time to time by the Town Board.

4. Authority to Contract Arborist Services

The Zoning Administrator shall have the authority to contract services from a North Carolina registered urban forester, registered landscape architect, ISA certified arborist, or certified tree and landscape appraiser on a case-by-case basis as needed for education, review, and recommendation of tree preservation, protection, removal, cutting, pruning, treatment, removal of diseased or infected trees, or determining the monetary value of a specific tree. The applicant will be responsible for reimbursing the Town of Waxhaw for the expense associated with contracting the services of a certified arborist, registered landscape architect, registered forester, or certified tree and landscape appraiser.

5. Tree Removal Permit Required

A. General Regulations. A tree removal permit will be required before removing:

1. Trees eight (8) inches and larger DBH and any understory tree (e.g. Dogwood, Redbud, Ironwood, American Holly, etc.) with a caliper measurement of four (4) inches or more or on any parcels of land being developed for non-residential, multi-family, single-family subdivision or nonagricultural use
2. Trees growing on slopes over twenty-five percent (25%).
3. Any threatened or endangered species of tree as defined by the North Carolina State Department of Environmental Conservation regardless of size.

B. Standards for the granting of permits. The granting of a tree removal permit by the Administrator shall be based on the following criteria:

1. The physical condition of the tree, as determined by a North Carolina registered urban forester, registered landscape architect, or ISA certified arborist.
2. The proximity of trees to existing or proposed improvements if located: (a) Within fifteen (15) feet of a foundation wall; (b) Within three (3) feet of a sidewalk or driveway; (c) Within ten (10) feet of a cesspool, dry well, septic tank or other subsurface improvement; or, (d) Within five (5) feet of a roadway.
3. The effect of the removal on the ecological systems, including the erosion potential of the property.
4. The effect on the area of removal as determined by accepted tree management practices.
5. The effect of the removal on the property values of the neighborhood. Property values can increase as much as twenty (20) percent when trees are present.[1] The monetary value of an individual tree can be determined by an experienced appraiser.
6. The effect of the removal on the solar access of existing or proposed structures on the property.

C. Other permit deemed approval.

1. Where tree removal is proposed in connection with any site plan or subdivision application, trees shall be removed from the affected property only in conjunction with an approved preliminary subdivision plat or final site plan. The Planning Board and Town Board, in reviewing the plat, shall apply the same criteria and procedures set forth herein for tree permits granted by the Administrator.

[1] Kane, B. & Kirwan, J. (2006). *Value, Benefits, and Costs of Urban Trees*. Retrieved October 3, 2008, from Virginia Cooperative Extension Website: http://www.ext.vt.edu/pubs/forestry/420-181/420-181.html

2. Subdivision construction plans or site plans approved by the Town showing trees to be removed and trees to be preserved shall be deemed a tree removal permit for the removal of trees so designated.
3. The Town, in connection with any site plan or subdivision application, may require the planting of trees to replace trees removed from the affected property as part of the site plan or subdivision application. The Town may require moving or relocating other structures in order to preserve trees considered by the Town to have particular value. The Planning Board or Town Board may refer such subdivision construction plans or site plans to the Administrator for his recommendations. The Town may designate certain trees to be preserved and specify means for their preservation during construction.

6. Conditions for granting permit

The Administrator may, as a condition of granting a permit:

A. Require the reasonable relocation of proposed foundation walls, driveways, surface and subsurface improvements or drainage systems to preserve specific trees.

B. Regulate the days and hours of operations.

C. Require a performance bond to insure compliance with this chapter.

D. Require that each tree to be cut or removed has been marked at two (2) points, one (1) low enough on the stump to be visible after removal of the tree.

E. Require such safeguards as appropriate to minimize the environmental impact of such removal operations.

7. Tree Removal Permit Application

The applicant shall file three (3) copies of the tree removal permit application with the Administrator. The application shall include the following information:

A. Name and address of the applicant.

B. Address and Town Tax Map designation of the property on which the tree(s) is/are located.

C. Total land area involved in cutting operations.

D. The number of trees to be removed.

E. The purpose of the tree removal.

F. Tree Survey Requirements

A tree survey shall be required. The tree survey is intended to serve as the basis for formulating a tree protection plan. All tree surveys shall be prepared by a licensed surveyor, certified arborist, registered landscape architect, registered forester, or engineer registered in the state of North Carolina. The survey shall provide the following information.

1. Location, species, and size of all existing trees eight (8) inches or larger in diameter at breast height (DBH), and any understory tree (e.g. Dogwood, Redbud, Ironwood, American Holly, etc.) with a caliper measurement of four (4) inches or more within thirty (30) feet of all existing public street right-of- way.
2. Sites three (3) acres or larger: Location, species, and size of all existing trees eight (8) inches or larger in diameter at breast height (DBH), and any understory tree (e.g. Dogwood, Redbud, Ironwood, American Holly, etc.) with a caliper measurement of four (4) inches or more within perimeter yards or buffers, or within thirty (30) feet of exterior property lines, whichever is greater, and within proposed tree preservation areas.
3. Sites less than three (3) acres in size: Location, species, and size of all existing trees eight (8) inches or larger in diameter at breast height (DBH), and any understory tree (e.g. Dogwood, Redbud, Ironwood, American Holly, etc.) with a caliper measurement of four (4) inches or more.
4. Existing tree locations shown on tree removal application plans shall be accurate within two (2) feet of actual location.
5. Site Plans and Subdivision Plans: Existing tree information listed above shall be shown on site plans and subdivision plans when these plans are submitted to the Administrator as part of the subdivision plat submittal.

6. Where no site plan or subdivision plan is involved, the existing tree survey information listed above shall be provided as an independent drawing.

8. Tree Preservation and Protection Requirements

A. Tree Preservation Standards

Existing trees eight (8) inches or larger DBH and understory trees four (4) inches or larger DBH shall be preserved in accordance with the following standards. The Administrator may grant exceptions to these standards based on unique circumstances**,** please refer to section 9.21.13 for exception requirements. Any exceptions granted must fulfill the spirit and intent of Section 9.21.

Tree Protection Minimum Tree Canopy Requirements and Standards

(1) Commercial, Institutional, Multifamily, Industrial (uses other than single family residential and excluding agricultural)
a. Existing trees (8) inches or larger DBH and understory trees four (4) inches or larger DBH shall be preserved within required street setbacks and exterior landscape buffers**,** in accordance with Section 9.8 of the UDO. b. Internal areas on sites where 40% or more of the site is wooded, existing trees eight (8) inches or larger DBH and understory trees four (4) inches or larger DBH in diameter shall be preserved on a minimum of ten (10) percent of the internal property area. The total internal property area will be calculated by taking the square footage for the entire site and subtracting the square footage for required tree save areas in perimeter landscape buffers, any existing or proposed street or utility right-of-ways, existing street setback areas, and any area covered by existing ponds and lakes. Internal tree protection zones shall be no less than eight (8) feet in width in order to apply toward the required tree save requirement. The locations of these preservation areas shall be designated on the tree protection plan and site plan. c. Any request for parking above the maximum allowed, per section 12.3.4 of this Ordinance, must also provide an additional 5% of internal tree save. Where no internal tree save is required, a minimum of 10% internal tree save must be accomplished in order for the applicant to receive approval for the additional parking. d. Heritage or Specimen Trees: Existing trees 36” DBH or larger shall be preserved when feasible. The Administrator or his designee shall determine if it is unfeasible to preserve heritage or specimen trees on a case by case basis. A tree permit will be required if removal is necessary (see Tree Permit 9.21.7). Tree protection areas for heritage or specimen trees shall be counted at 1.5 times the actual area towards the required ten (10) percent interior tree protection area.
(2) Single Family Residential
a. Exterior Perimeter: Existing trees eight (8) inches or larger DBH and understory trees four (4) inches or larger DBH shall be preserved within thirty (30) feet of the exterior perimeter of any subdivision (excluding existing public street frontage). These perimeter tree preservation areas shall be established within common open space, or may occur within deeded lot areas with a permanent landscape preservation easement recorded on lots. b. Existing Street Frontage: Adjacent to existing public street frontage, where new lots are proposed that will not front on the existing street, existing trees eight (8) inches or larger DBH and understory trees four (4) inches or larger DBH shall be preserved within twenty (20) feet of the right of way.

c. Interior Trees:

1. On any site where twenty (20) % or more of the site has existing trees present, a minimum of twenty (20) % of the internal property area shall be preserved with existing trees within the site interior. The total internal property area will be calculated by taking the square footage for the entire site and subtracting the square footage for required tree save areas in perimeter landscape buffers, any existing or proposed street or utility right-of-ways, existing street setback areas, and any area covered by existing ponds and lakes. Internal tree protection zones shall be no less than eight (8) feet in width in order to apply toward the required tree save requirement.

2. The applicant shall designate the locations for tree preservation areas on the subdivision plans and tree removal plans. These interior tree protection areas shall be established within common open space, or may occur within deeded lot areas with a permanent landscape preservation easement recorded on the lots. This requirement may be waived for sites where less than 20% of the site is covered with existing trees, or in cases of hardship, as determined by the Administrator or Planning Board.

3. Interior tree protection areas shall contain no less than one (1) tree per 2500 square feet of tree protection area. Where existing trees are insufficient to meet this standard, new trees shall be planted to meet this minimum standard. New trees shall be a minimum of two (2) inch caliper at planting.

4. Heritage or Specimen Trees: Existing trees 36" DBH. or larger shall be preserved, unless a tree permit is submitted and approval to remove the tree is granted by the Administrator.

B. Tree Protection Zone (TPZ)

1. For the purpose of this section, the area containing the canopy and critical root zones of trees composing the existing tree canopy to be retained shall be known as the "Tree Protection Zone". The critical root zone and tree protection zone will be measured as a radial distance from the tree trunk and will be equivalent to the greater area of: the drip line; a maximum of six feet from the trunk; or a distance or 1.5 feet for every inch of trunk DBH. (See Figure 9.21.1)

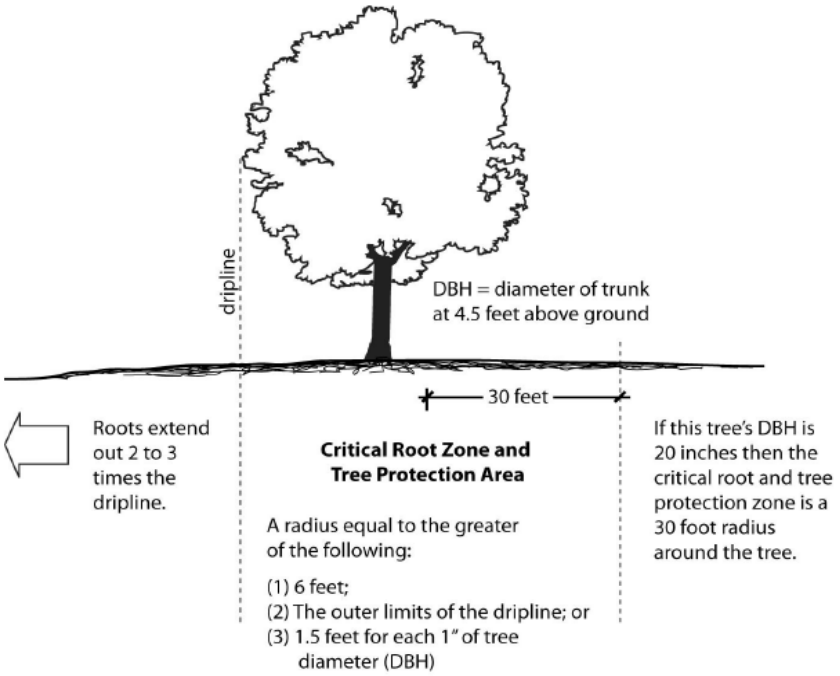


Figure 9.21.1: Critical Root / Tree Protection Zone

2. Prior to the approval of a development plan, site plan, or subdivision plan, all Tree Protection Zones shall be identified for protection in a form acceptable to the Administrator, and shall be areas where the existing canopy will be maintained.

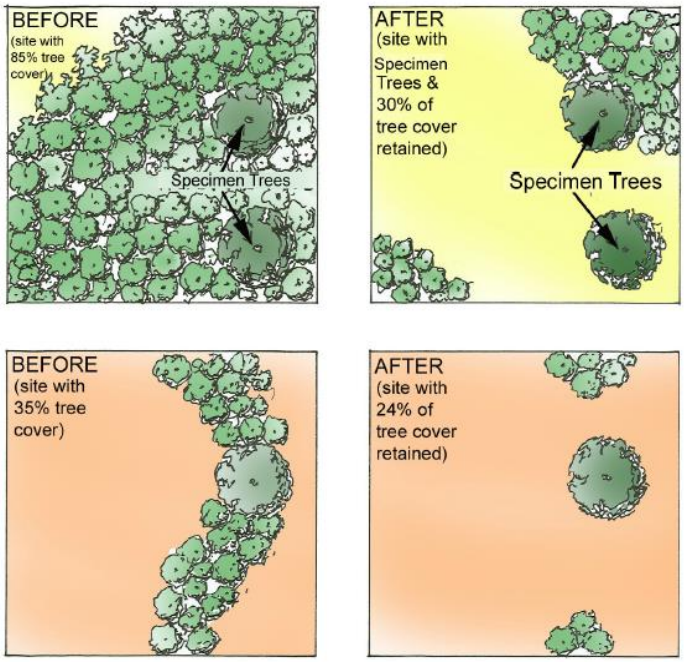


Figure 9.21.2 Tree Protection Zone: This diagram depicts the TPZ on two hypothetical development sites.

9. Tree Protection During Construction

Existing trees must be protected during construction. Trees must be protected from direct or indirect root damage and trunk and crown disturbance. The following standards shall apply.

- Tree protection zones and tree save areas shall remain open and unpaved.
- Construction site activities such as parking, material storage, dirt stockpiling, concrete washout and other similar activities shall be prohibited within the tree protection zone.
- Changes that significantly raise or lower the grade of soil in tree save areas and tree protection zone are prohibited.
- If an underground utility must cross the drip line area, the contractor must tunnel or auger underneath major roots of the tree without cutting them. Permission may be granted for auguring of 1/3 distance of the drip line to the trunk of the tree only if there is no other feasible way. Depth of auguring shall be a minimum of 2 feet. Figure 9.21.3 highlights both appropriate and inappropriate practices for auguring near saved trees.

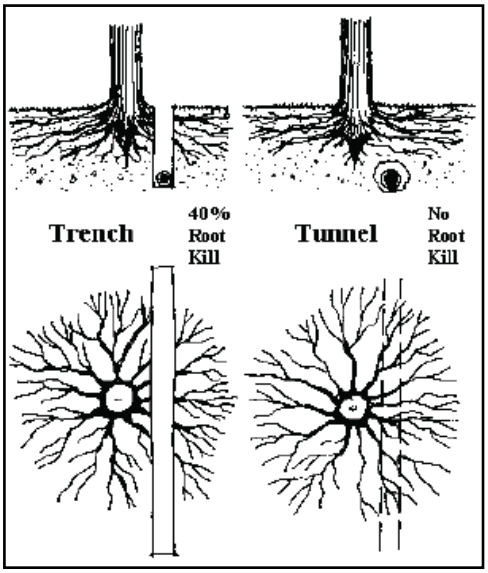


Figure 9.21.3 Proper Boring and Auguring Techniques (tunnel must be at least 2 ft below grade)

A. Tree Protection Fencing

During development, the owner or developer shall be responsible for the erection of any and all barriers necessary to protect any existing or installed trees from damage both during and after construction. The tree protection fencing shall be clearly shown on the site plan or subdivision plan, and shall be maintained until the final site inspection prior to the Certificate of Occupancy is scheduled.

1. Where Required: Heritage trees and trees retained in a Tree Protection Zone shall be fenced with a sturdy and visible fence before grading, clearing, or other development activity begins. Fencing should be erected outside the critical root zone. The owner or developer shall contact the Administrator or his designated representative for inspection of fencing prior to any development or land clearing activity.
2. Type of Fencing: All fencing required by this section shall be a minimum of four (4) feet high and consist of visibility mesh fabric fencing material with posts eight (8) feet or less on center.

   See Figures 9.21.4 and 9.21.5 for fencing illustrations.

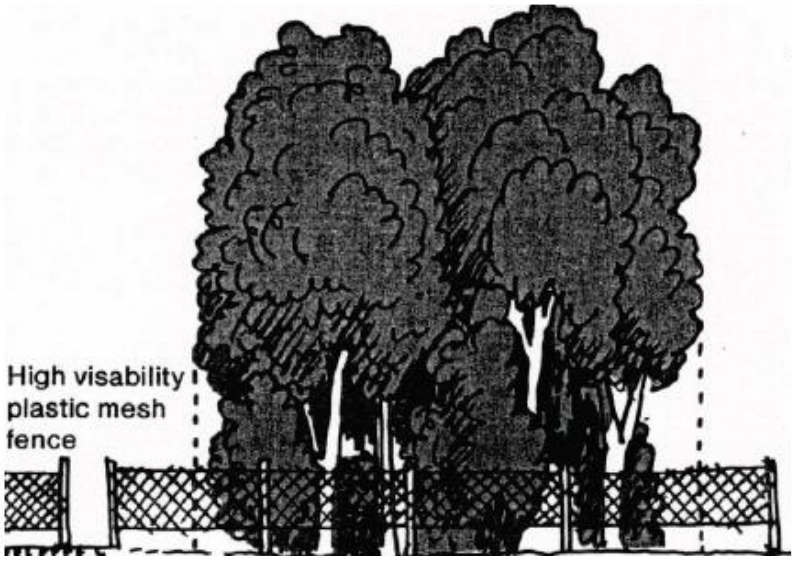


Figure 9.21.4: Fencing should be placed to prevent trucks and equipment from damaging tree roots.

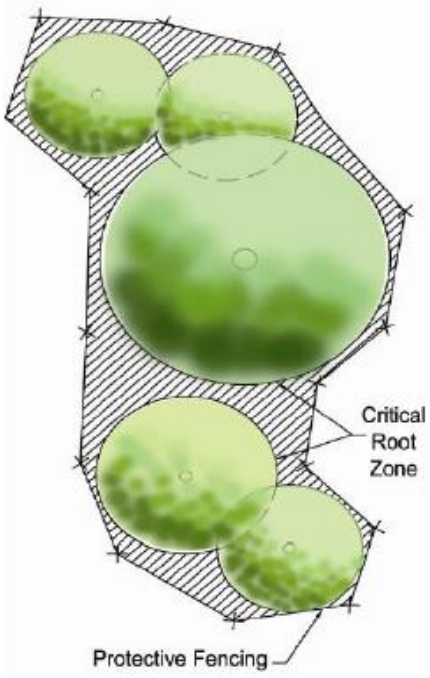


Figure 9.21.5: Protective fencing should be placed at the outer limits of the tree protection zone / critical root zone.

B. Signage

Signs shall be installed on the tree protection fence visible on all sides of the fenced-in area. The sign shall contain the following language "TREE PROTECTION ZONE: KEEP OUT". The sign shall be posted in both English and Spanish.

C. Inspection

All tree protection measures shall be inspected and approved by the Administrator or his designee prior to the start of any land disturbing activities. Failure to have tree protection measures in place prior to the commencement of construction is a violation of this Ordinance. Sites may be inspected periodically by planning department staff and authorized representatives of the Town to ensure compliance.

D. Additional Tree Protection

Additional tree protection measures and notes may be required by the Town where applicable.

10. Tree Planting Mitigation

A. Where removal of existing trees is approved within tree protection zones, new trees shall be installed in the general vicinity of the trees removed, in accordance with the following schedule:

Tree Removed	Replacement Tree to be Planted
4 to 7 inch DBH.	(3) 2" caliper trees
8 to 12 inch DBH.	(6) 2"caliper trees
13 to 18 inch DBH.	(9) 2"caliper trees
19 to 24 inch DBH.	(12) 2" caliper trees
25 inch or larger DBH.	(15) 2"caliper trees

Any replacement trees shall be similar in species to those that were removed except as may be permitted by the Zoning Administrator in consultation with a certified arborist or registered forester where, in his opinion, the replacement species will serve in an equal or better capacity than the original species.

B. In some situations, it may not be suitable to mitigate on site. The following options are available if on-site mitigation is not possible:

1. Tree Bank

   a. The number of replacement trees shall be the same as described in Section 9.21.10. Replacement costs (material plus labor) shall be at the applicant's expense.
   b. Allowable sites for receiving off-site replacement plantings as defined by the Waxhaw Tree Management and Maintenance Plan.
   c. Town owned properties.
   d. All trees to be replaced off-site shall meet the replacement standards of this section.
   e. In the event there are no appropriate planting spaces available, the tree replacement fee must be paid.

2. Tree Replacement Fee. A fee in lieu of tree replacement may be allowed, subject to approval by the Administrator after careful consideration of all other options. A tree replacement fee shall be required for each replacement tree required but not planted on the application site. The fee shall be based on the cost of the replacement tree. The applicant is responsible for providing price quotes from at least three (3) tree suppliers within this region.

   a. The fee shall be paid to the Town prior to the issuance of a Tree Removal Permit.
   b. A separate account shall be established by the Town for fees collected. Tree Replacement fee receipts shall be earmarked specifically for this account. Funds withdrawn from this account

shall be used for planting of new trees in Town owned parks, open spaces or rights-of way or maintenance of public trees according to Waxhaw's Urban Forestry Management Plan. The request must be made, in writing, to the Zoning Administrator. The Zoning Administrator must determine, in conjunction with a North Carolina registered forester, registered landscape architect, ISA certified arborist, or certified tree and landscape appraiser, if the site is not suitable for on-site mitigation.

C. Where removal of existing trees occurs within tree protection zones without a permit, new replacement trees shall be installed at a ratio double the schedule listed above, in addition to other penalties assessed and / or mitigation requirements assessed by the Town of Waxhaw.

D. Proposed mitigation tree planting shall be shown on a site plan, indicating the proposed location, size, and species of mitigation trees. Canopy trees shall be spaced no closer than twenty-five (25) feet from other canopy trees, and understory trees shall be placed no closer than fifteen (15) feet from other understory trees.

E. Mitigation trees shall be installed prior to approval of final record plats wherever feasible. The Administrator may deny approval of occupancy permits when required mitigation planting has not been completed.

F. All new plant material shall be of good quality, installed in a manner to meet the standards set forth in the American Standard for Nursery Stock by the American Association of Nurserymen.

G. New Tree Planting for Single-Family Subdivisions: The following tree planting will be required for new single-family subdivisions approved for construction after the adoption of this Ordinance:

1. Street Trees: Street trees shall be planted along all new public streets. Tree planting shall follow the following criteria:

   a. New trees are required wherever existing trees are not saved within 30 feet of the back of curb.
   b. New trees shall be spaced between 40 feet and 65 feet on center.
   c. New medium and large maturing trees shall be located within twenty five (25) feet of the back of curb, and shall be located outside of public street right-of-ways, and no closer than four (4) feet from sidewalks.

d. New small maturing trees shall be located inside rights-of-way. When available, small maturing trees shall be located inside planting strips.

e. New trees shall be canopy species, except where overhead utility lines exist within twenty five (25) feet of the street right-of-way, small maturing species shall be used.

f. New trees shall be 2-inch minimum caliper at planting.

g. New trees shall be selected from the approved Waxhaw tree species list (Section 9.21.15), provided that additional species may be used subject to specific approval of the Administrator.

h. Street trees may be installed prior to, during, or after construction on any lot, but in any case, street trees shall be installed prior to issuance of occupancy permits for each lot.

2. Individual Lots: Each single-family lot shall have a minimum cumulative tree DBH. required within the lot as shown below. Notwithstanding, street trees as herein required, shall not count as meeting these requirements. These minimum standards may be met with existing trees, with new trees, or any combination of existing and new trees. The cumulative tree DBH. shall be in accordance with the following schedule:

a. Lots on traditionally cleared land (80% or greater of the subdivision area has been cleared of trees for a period of five (5)

Lot Size	Cumulative DBH. required per lot	Minimum # of trees required per lot
6,000 s.f. or less	6"	2
6,001 to 15,000 s.f.	8"	3
15,001 to ,20,000 s.f.	10"	4
20,001 or Greater	12"	4

b. Lots on partially wooded land (between 20% and 40% of the total land area has been wooded for a period of five (5) years or greater) or wooded land (greater than 40% of the total land area has been wooded for a period of five (5) years or greater):

Lot Size	Cumulative DBH. required per lot	Minimum # of trees required per lot
6,000 s.f. or less	8"	2
6,001 to 15,000 s.f.	10"	3
15,001 to 20,000 s.f.	16"	4
20,001 or Greater	20"	4

c. New tree planting for each single-family lot shall be done on a lot-by-lot basis, prior to the issuance of an occupancy permit for each lot.

G. Tree Maintenance and Replacement:

1. Replacement: When existing and proposed trees used to comply with this Ordinance die or are removed for any reason, they must be replaced during the next suitable planting season in a manner, quantity, and size approved by the Administrator.
2. Notification: If the owner is notified of missing or dead trees and fails to replace them or contact the Administrator within 10 working days, the site is considered to be in violation of this Ordinance.
3. Protection: Existing and proposed trees used to comply with this Ordinance shall not be sheared, topped, or disfigured by improper pruning. Trees shall be allowed to grow to their natural height and form.

11. Tree Planting Techniques

Installation and construction practices shall be utilized which preserve existing topsoil or amend the soil to reduce compaction (See Figure 9.21.6 for an illustration of proper planting techniques)

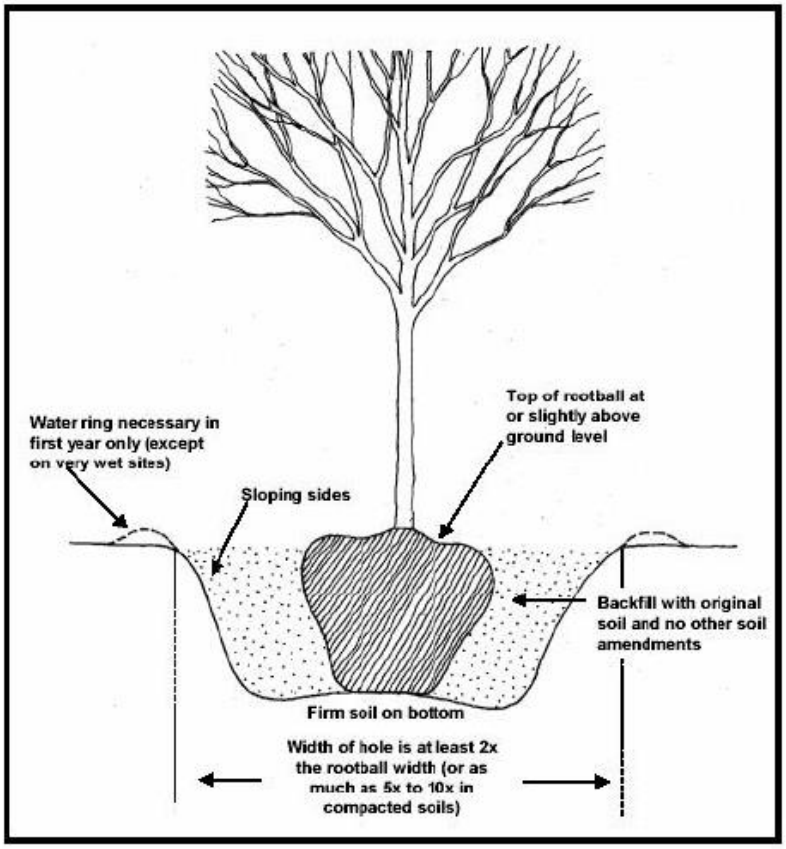


Figure 9.21.6: Proper Tree Planting Technique.

A. All trees shall be properly guyed or staked (where required due to grade changes, steep slopes, creek embankments, or man-made hazards), fertilized and mulched (3-4" layer). See illustration below and the ANSI standards for fertilization and mulching. Figure 9.21.7 shows proper mulching techniques.

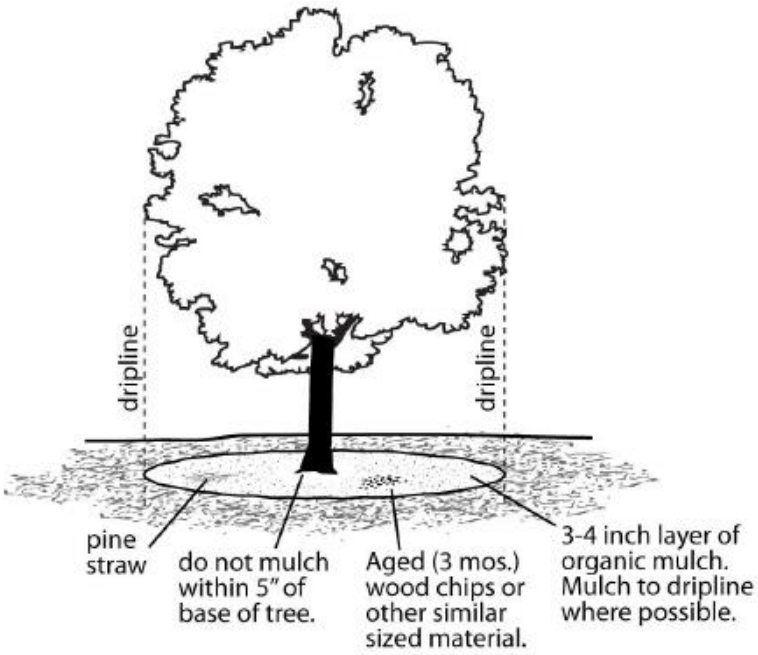


Figure 9.21.7: Proper Tree Mulching Technique.

12. Fees

A tree removal permit application shall be accompanied by a fee to be determined by the Town Board and set in the Fee Schedule except when the applicant is the Town of Waxhaw.

13. Exceptions

Where there are exceptional conditions that prevent full compliance with Section 9.21 *Tree Preservation*, the applicant may request an exception. A request for any exception shall be submitted in writing by the applicant for consideration by the Administrator. The written request shall fully state all substantiating facts and evidence pertinent to the exception request, and include supporting maps or plans. The Administrator, in conjunction with a North Carolina registered urban forester, registered landscape architect, or ISA certified arborist will review the exception request.

A. <u>Exception Criteria</u>

An exception shall not be granted unless the following criteria are satisfied:

1. The exception is necessary because:

   a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; and

b. Strict compliance with the provisions of this code may jeopardize reasonable use of property

B. Proposed vegetation removal, replacement, and any mitigation measures proposed shall be consistent with the purpose and intent Section 9.21.

C. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity.

14. Violations

Any person who violates any of the provisions of this ordinance, or rules of orders adopted or issued pursuant of this ordinance shall be subject to any one or all of the combination of penalties authorized by this section or those contained in Section 17.5 of the Unified Development Ordinance. If a party continues to fail to comply with a particular provision, the party shall continue to remain subject to the penalties prescribed by this section for the period of the continued violation of the particular provision. Penalties assessed under this Section are in addition to, and not in lieu of, compliance requirements of the Town's Unified Development Ordinance.

A. Destruction or removal of trees greater than 8 inches DBH without approval of the *Town of Waxhaw* will incur a civil penalty equal to the amount of the value of trees listed in *The Guide for Plant Appraisal 9th Edition* published by The Council of Trees and Landscape Appraisers as determined by a NC registered urban forester or ISA certified arborist. The amount of the civil penalty shall include any cost incurred by the Town in appraising the value of the trees removed or destroyed in violation of this ordinance.

B. For the purposes of this Section, a separate offence shall be deemed to have occurred for each tree 8 inches in DBH or greater that have been destroyed or removed without the approval of the *Town of Waxhaw*.

C. If the Zoning Administrator or designee has determined that a violation of this Ordinance has occurred, no certificate of compliance shall be issued until compliance has been achieved.

15. Waxhaw Tree Species List

Any tree should be chosen based on individual site characteristics such as space, sunlight, soil moisture, urban stresses, etc. This list provides trees that perform well in this region under most circumstances. Please reference the 'comments' column for pertinent information on the tree species listed. The Town encourages the practice of "right tree, right place" to reduce future problems and improve tree survival for many years. The Administrator in conjunction with an approved tree professional may approve additional tree species on a case-by-case basis.

Large Maturing Trees *Height of 50 ft. or more*				
Common Name	**Botanical Name**	**Height x Width**	**Comments**	**Growth Rate**
Deciduous Trees				
Ash, Green	*Fraxinus pennsylvanica*	50-60 x 25	many cultivars, potential insect problem(ash borer)	fast
Ash, White	*Fraxinus americana*	50-80 x 40	many cultivars, emerald ash borer	moderate
Baldcypress	*Taxodium distichum*	70 x 25	Unique, stately tree, tolerates wet areas, may produce 'knees in wet soils	moderate
Beech, American	*Fagus grandifolia*	70 x 50	Needs space and good soils, stately tree, holds some leaves through winter for screening	Slow to moderate
Birch, River	*Betula nigra*	40-60 x 35	Chose drought resistant variety, prone to insect problems, avoid mass plantings	Moderate to fast
Dawn Redwood	*Metasequoia glyptostroboides*	70 x 30	Underused tree, upright form, good screening	fast
Elm, Lacebark	*Ulmus parvifolia*	50 x 40	Upright and spreading, good disease resistance, interesting bark, cultivars	Moderate to fast
Ginkgo	*Ginkgo biloba*	50-80 x 30	Tough tree, odd looking, better for specimen tree Plant only the male species	slow
Hornbeam, European	*Carpinus betulus*	50 x 35	Fine tree for urban uses, numerous cultivars for size and shape	Moderate to slow
Hackberry, Common	*Celtis occidentalis*	60 x 50	Large root system, underused tree	Moderate to fast
Hackberry, Sugar	*Celtis laevigata*	70 x 60	Large root system, more disease resistant	Moderate to fast
Hickory, Bitternut	*Carya cordiformis*	60 x 40	Large nut, difficult to transplant, great tree	Fast to moderate
Hickory, Pignut	*Carya glabra*	60 x 35	Large nut, difficult to transplant, great tree	moderate
Hickory, Shagbark	*Carya ovata*	60 x 40	Large nut, difficult to transplant, great tree	Slow to moderate
Hickory, Mockernut	*Carya tomentosa*	60 x 40	Large nut, difficult to transplant, great tree	moderate
Kentucky Coffeetree	*Gymnocladus dioicus*	60 x40	Interesting spring color, tough, underused tree, may present litter problem	moderate
Magnolia, Cucumbertree	*Magnolia acuminata*	60 x 40	Needs space, beautiful park or natural area tree, great blooms, many cultivars for size	Moderate to fast
Maple, Sugar	*Acer saccharum*	60 x 30	Prefers partial shade, choose cultivar "Legacy" or 'Summer Proof' for heat, find disease resistant cultivars	Slow to moderate
Maple, Red	*Acer rubrum*	40-60 x 40+	Many cultivars for shape, resistance and fall color	Moderate to fast
Oak, White	*Quercus alba*	50-80 x 50-70	Monarch tree, needs space, great form, some litter in fall	Moderate to slow

Oak, Swamp White	*Quercus bicolor*	50 x 40	Tough tree, white underside to leaf is interesting, tolerates wet and dry soils, likes acid soils	moderate
Oak, Shumard	*Quercus shumardii*	40-60 x 40+	Pyramidal-spreading at maturity, tough, good fall color	Moderate
Oak, Southern Red	*Quercus falcata*	60-70 x 50	Large shade tree, Good structure, some litter in fall	moderate
Oak, Nuttall	*Quercus nuttallii*	50 x 50	Very adaptable, colorful most of the year, some litter in fall	moderate
Oak, Scarlet	*Quercus coccinea*	70 x 50	Tough and adaptable, good fall color	Slow to moderate
Oak, Willow	*Quercus phellos*	50-80 x 50	Needs space, beloved urban tree	Moderate
Oak, Overcup	*Quercus lyrata*	40-60 x 40	More confined, oval, superb tree	Moderate
Oak, Pin	*Quercus palustris*	60 x 40	Compact crown, great fall color, avoid high pH	Moderate to fast
Oak, English	*Quercus robur*	60 x 50	Numerous cultivars for shape and size	moderate
Oak, Post	*Quercus stellata*	45 x 40	Smaller crown, tough tree, unusual form, not widely available	slow
Oak, Black	*Quercus velutina*	60 x 40-50	Tough, good form	slow
Oak, Live	*Quercus virginiana*	40 x 50+	shorter, needs wide spaces, stately tree	Moderate to slow
Poplar	*Liriodendron tulipifera*	70+ x 40	Needs space and good soil, weaker wood, at least 40' from structures or parking	fast
Sycamore, Planetree	*Platanus occidentalis*	80 x 50	No urban sites, needs space, litter issues, may not tolerate dry sites with poor soil	fast
Tupelo, Blackgum	*Nyssa sylvatica*	50 x 30	Great fall color, tough, underused	moderate
Zelkova, Japanese	*Zelkova serrata*	50+ x 40	Tough urban tree, upright habit, culitvars	Moderate to fast
Evergreen Trees				
Cryptomeria, Japanese	*Cryptomeria japonica*	50 x 20	Possible replacement to Leyland cypress, shows some disease problems, avoid mass plantings	fast
Cypress, Leyland	*XCupressocyparis leylandii*	40-60 x 20+	**Overused**, prone to **disease** and pests, **Use cultivars** for variety of color and shape, not long lived in most cases **Choose carefully, no mass plantings**	fast

Cedar, Atlas	*Cedrus atlantica*	50 x 30	Pyramidal in youth, spreading later, beautiful tree, cultivars	Moderate to slow
Cedar, Deodar	*Cedrus deodara*	40-60 x 40	Graceful tree, needs space, numerous cultivars for color and size	Slow to moderate
Hemlock, Carolina	*Tsuga caroliniana*	45 x 20	Needs improved soils, not very drought tolerant	Slow
Incensecedar, Califorina	*Calocedrus decurrens*	40-50 x 10	Tolerant of heat, great screen or specimen tree	Slow to moderate
Magnolia, Southern	*Magnolia grandiflora*	60 x 40	Needs space, great screen, numerous cultivars for size and bloom	Slow to moderate
Pine, Loblolly	*Pinus taeda*	70 x 40	Strong pine, choose location wisely, may break during ice	fast
Pine, Shortleaf	*Pinus echinata*	60 x 30	More beauty that Loblolly, some disease issues, choose wisely	Fast to moderate
Norway Spruce	*Picea abies*	50 x 25	Choose location wisely, heat is a factor, may not tolerate full sun with no irrigation, needs root space	Moderate to fast
Sawara Falsecypress	*Chamaecyparis pisifera*	50 x 20	Upright, loose, cultivars	moderate
Hinoki Falsecypress	*Chamaecyparis obtusa*	50 x 20	Beautiful tree, red bark, cultivars for size	Moderate

Medium Maturing Trees

Height 30ft. – 50ft.

Common Name	Botanical Name	Height x Width	Comments	Growth Rate
Deciduous Trees				
Carolina Silverbell	*Halesia tetraptera*	30 x 25	Beautiful flower, wonderful small tree, low branching, tolerates shade	Moderate
Cherry, Japanese	*Prunus serrulata*	40 x 40	Many varieties, sizes and colors, prone to disease, use sparingly	Moderate
Cherry, Yoshino	*Prunus yedoensis*	35 x 40	Beloved tree, performs well in heat, prone to disease, use wisely	Fast
Dogwood, Flowering	*Cornus florida*	35 x 25	Not stress tolerant, not suited for full sun, needs good soils, many cultivars for color and disease resistance	Slow

Dogwood, Kousa	*Cornus kousa*	30 x 30	Better suited to urban stresses and heat, numerous cultivars	Slow
Lacebark Elm	*Ulmus parvifolia*	40 x 30	Tough urban tree, tolerates stress, some cultivars	Fast
Turkish Filbert	*Corylus colurna*	40 x 20	Excellent urban tree, formal habit, heat tolerant	Moderate
Hornbeam, European	*Carpinus betulus*	50 x 35	Fine tree for urban uses, numerous cultivars for smaller size and shape	Moderate to slow
Hornbeam, American	*Carpinus caroliniana*	20-30 x 30	Tough tree, looks like Beech, muscular trunk	Slow
Hophornbeam, American	*Ostrya virginiana*	35 x 20	Beautiful bark, interesting structure, tough	Slow
Red Horsechestnut	*Aesculus x carnea*	50 x 40	Interesting tree, good flowers, some litter with nut, tough, excellent border tree	Moderate
Honeylocust, Thornless	*Gleditsia triacanthos*	30-50 x 30+	Some problems with disease and insects, many cultivars for size and shape, likes good soils	Fast
Maple, Red	*Acer rubrum v.??*	40 x variable	Choose cultivars for size, shape, resistance and fall color	Moderate to fast
Maple, Hedge	*Acer campestre*	25-35 x 25	Good fall color, more compact size	Slow
Maple, "Sunset"	*A. truncatum x platanoides*	25-35 x 25	Several cultivars, stress tolerant	Moderate
Maple, Trident	*Acer buergerianum*	35 x 30	Tough, small tree, good for urban sites, fall color	Slow to moderate
Oak, English	*Quercus robur*	Variable, 25 - 50	Numerous cultivars for shape and size	Moderate
Oak, Post	*Quercus stellata*	45 x 40	Smaller crown, tough tree, unusual form, not widely available	Slow
Redbud, Eastern	*Cercis canadensis*	30 x 30	Great flower show, numerous varieties and cultivars for size, flower and color	Moderate to fast
Sourwood	*Oxydendrum arboreum*	30+ x 20	Colorful all seasons, minor insect pests	Slow
Evergreen Trees				
Arborvitae, Giant	*Thuja plicata*	50 x 20	Great conifer for screen/hedge, bagworms, numerous cultivars for size or color	Moderate
Arborvitae, Eastern	*Thuja occidentalis*	40 x 15	More disease and insect problems than *T. plicata,* many culitvars	Moderate to fast
Cedar, Easter Red	*Juniperus virginiana*	40 x 20	Tough, compact, columnar*, substitute for Leyland Cypress*, many cultivars	Moderate to slow
Cypress, Arizona	*Cupressus arizonica*	40 x 20	Great tree, tough, replacement for Leyland Cypress, cultivars	Moderate
Cryptomeria, Japanese	*Cryptomeria japonica*	50 x 20	Possible replacement to Leyland cypress, shows some disease problems, avoid mass plantings, cultivars for size	Fast

Carolina Hemlock	*Tsuga caroliniana*	50 x 20	Needs moist, well drained soil; tolerates urban pressures, cultivars	Slow to moderate
Magnolia v.?	*Magnolia grandiflora v.?*	Variable 30+ x 30	Choose cultivar for various sizes	Moderate to slow
Magnolia, Sweetbay	*Magnolia virginiana*	20-50 x 20	Beautiful semi-evergreen magnolia, tolerates wet soils, cultivars	Moderate to fast
Atlantic Whitecedar	*Chamaecyparis thyoides*	40 x 20	Beautiful tree, may be hard to find, numerous cultivars for color and size	Moderate to fast
American Holly	*Ilex opaca*	45 x 20+	Choose cultivars for superior performance	Moderate
Fosteri Holly	*Ilex attenuata*	30+ x 15	Many cultivars for size	Moderate
Southern Redcedar	*Juniperus silicola*	30+ x 15	Like Eastern Redcedar, smaller, tougher	Slow

Small Maturing Trees

Height 10ft. – 30ft.

Common Name	Botanical Name	Height x Width	Comments	Growth Rate
Deciduous Trees				
Cherry, Apricot	*Prunus spp. v.??*	variable	Incredible variety in flower color, size and shape; short lived due to disease and insect problems, use wisely & sparingly	Slow to moderate
Chinese Pistache	*Pistacia chinensis*	30 x 30	Very tough, fall color, tolerates pruning	Moderate
Crabapple, Flowering	*Malus spp.*	20 x 20	Short lived, incredible flowering, choose disease and insect resistant cultivars, use sparingly	Moderate
Common Crapemyrtle	*Lagerstoemia indica*	variable	Overplanted, overpruned, tough, beautiful, use sparingly, endless cultivars for size and flower color	Moderate to fast
Dogwood, Corneliancherry	*Cornus mas*	20 x 20	Beautiful tree, tougher than *C. florida* , many cultivars for color and flower size	Moderate
Fringetree	*Chionanthus virginicus*	15-20 x 20	Beautiful small tree, shrubby look, *C. retusus* is also noteworthy	Slow
Maple, Hedge	*Acer campestre*	25-35 x 25	Good fall color, more compact size	Slow
Maple, "Sunset"	*A. truncatum x platanoides*	25-35 x 25	Several cultivars, stress & heat tolerant	Moderate
Serviceberry	*Amelanchier arborea*	15-25 x 15	Not stress tolerant, great flower show, requires little pruning, some disease problems, many cultivars for flower and habit	Slow
Redbud, Eastern	*Cercis canadensis*	20-30 x 20	Showy flower, some disease problems, tough tree, many cultivars for color	Moderate
Carolina Silverbell	*Halesia tetraptera*	30 x 25	Beautiful flower, wonderful small tree, low branching, tolerates shade	Moderate

Hornbeam, American	*Carpinus caroliniana*	20-30 x 30	Tough tree, looks like Beech, muscular trunk	Slow
Witchhazel	*Hamamelis virginiana*	20 x 20	Tough, great in borders or near buildings, interesting form, *H. japonica* and x *intermedia* easier to locate	Moderate
Evergreen Trees				
Carolina Cherrylaurel	*Prunus caroliniana*	30 x 20	Tough, beautiful, needs space, some cultivars	Fast
Loquat	*Eriobotrya japonica*	15-25 x 25	Tough, tropical looking, fruit edible & may cause litter	Moderate
Holly	*Ilex spp.*	variable	*I. cornuta, glabra, opaca, verticillata, decidua, cassine, vomitoria,* endless hybrids and cultivars, explore native hollies	Moderate to fast
Juniper, Chinese	*Juniperus chinensis x*	variable	Many cultivars for shape, size, color	Moderate to slow
Mountain Laurel	*Kalmia latifolia*	variable	Not very stress tolerant, beautiful border plant, requires improved soil, cultivars for size and flower color, underused	Slow
Magnolia	*Magnolia spp.*	30 x 20	Many cultivars for smaller size such as "Little Gem", "Wada's Memory", "Hasse"	Moderate
Magnolia, Star	*Magnolia stellata*	20 x 15	Use species or numerous cultivars	Moderate
Waxmyrtle, Southern	*Myrica cerifera*	25 x 20	Tolerates heat and stress, some cultivars	

16. Invasive Species List

The following is a list of exotic invasive species as provided by the North Carolina Native Plant Society. The intent of the list is to eliminate the use of invasive exotic plants in landscaping and restoration projects. Any species listed in this section is prohibited for use in landscaping and mitigation plans within the Town of Waxhaw.

The NC Native Plant Society ranks exotic plants based on their demonstrated invasive characteristics. The Town of Waxhaw adopts the Rank 1 – Severe Threat and Rank 2 – Significant Threat lists to reference the plants and species that should be avoided.

Rank 1 - Severe Threat

Exotic plant species that have invasive characteristics and spread readily into native plant communities, displacing native vegetation.

Scientific name	Common name
*Ailanthus altissima (Mill.) Swingle**	Tree of Heaven*

Albizia julibrissin Durz.*	Mimosa*
Alliaria petiolata (Bieb.) Cavara & Grande	Garlic-mustard
Alternanthera philoxeroides (Mart.) Griseb.	Alligatorweed
Celastrus orbiculatus Thunb.	Asian bittersweet
*Elaeagnus angustifolia L.**	Russian olive*
*Elaeagnus umbellata Thunb.**	Autumn olive*
Hedera helix L.	English ivy
Hydrilla verticillata (L.f.) Royle	Hydrilla
Lespedeza bicolor	Bicolor lespedeza
Lespedeza cuneata (Dum.-Cours.) G. Don	Sericea lespedeza
Ligustrum sinense Lour.	Chinese privet
Lonicera fragrantissima Lindl. & Paxton	Fragrant honeysuckle
Lonicera japonica Thunb.	Japanese honeysuckle
Microstegium vimineum (Trin.) A. Camus	Japanese stilt-grass
Murdannia keisak (Hassk.) Hand.-Mazz.	Asian spiderwort
Myriophyllum aquaticum (Vell.) Verdc.	Parrotfeather

*Paulownia tomentosa (Thunb.) Sieb.&Zucc. ex Steud.**	Princess tree*
Phragmites australis (Cav.) Trin. ssp. australis	Common reed
Polygonum cuspidatum Seib. & Zucc.	Japanese knotweed
Pueraria montana (Lour.) Merr.	Kudzu
Rosa multiflora Thunb.	Multiflora rose
Salvinia molesta Mitchell	Aquarium water-moss
Vitex rotundifolia L.f.	Beach vitex
Wisteria sinensis (Sims) DC	Chinese wisteria

Rank 2 - Significant Threat

Exotic plant species that display some invasive characteristics, but do not appear to present as great a threat native communities in NC as the species listed in Rank 1.

Scientific name	Common name
Ampelopsis brevipedunculata (Maxim.) Trautv.	Porcelain-berry
Arthraxon hispidus (Thunb.) Makino	Hairy jointgrass
Bambusa spp.	Exotic bamboo
Berberis thunbergii DC	Japanese barberry
Broussonetia papyrifera (L.) L'Her. ex Vent.	Paper mulberry

Cayratia japonica (Thunb. ex Murray) Gagnep.	Bushkiller
Centaurea biebersteinii DC	Spotted knapweed
Clematis terniflora DC (=C. dioscoreifolia)	Leatherleaf clematis
Conium maculatum L.	Poison hemlock
Coronilla varia L.	Crown vetch
Dioscorea oppositifolia L.	Air-potato
Eichhornia crassipes (Mart.) Solms	Water-hyacinth
*Euonymus alata (Thunb.) Sieb.**	Burning bush*
Euonymus fortunei (Turcz.) Hand. - Mazz	Winter creeper
Glechoma hederacea L.	Gill-over-the-ground, ground ivy
Humulus japonicus	Japanese Hops
Lamium purpureum L.	Henbit
Lespedeza bicolor Turcz.	Bicolor lespedeza, shrubby bushclover
Ligustrum japonicum Thunb.	Japanese privet
Ligustrum vulgare L.	Common privet
Lonicera maackii (Rupr.) Maxim.	Amur bush honeysuckle

Lonicera morrowii A. Gray	Morrow's bush honeysuckle
Lonicera standishii Jaques	Standish's Honeysuckle
Lonicera ×bella [morrowii × tatarica]	Hybrid Bush Honeysuckle
Ludwigia uruguayensis (Camb.) Hara	Creeping waterprimrose
Lygodium japonicum (Thunb. ex Murr.) Sw.	Japanese climbing fern
Lythrum salicaria L.	Purple loosestrife
*Mahonia beali (Fortune) Carriere**	Leatherleaf Mahonia*
Miscanthus sinensis Andersson	Chinese silver grass
*Morus alba L.**	White mulberry*
Myriophyllum spicatum Komarov	Eurasian watermilfoil
*Nandina domestica Thunb.**	Nandina*
Persicaria longiseta (de Bruijn) Moldenke (=Polygonum caespitosum Blume)	Oriental ladies-thumb
Persicaria maculata (Rafinesque) S.F. Gray (=Polygonum persicaria L.)	Lady's thumb
Phyllostachys spp.	Exotic bamboo
Poncirus trifoliata (L.) Raf.	Hardy-Orange
*Pseudosasa japonica (Sieb. & Zucc. ex Steud.) Makino ex Nakai**	Arrow bamboo*

Pyrus calleryana Decne.	Bradford pear
Rhodotypos scandens (Thunb.)	Makino jetbead
Rubus phoenicolasius Maxim.	Wineberry
Solanum viarum Dunal	Tropical soda apple
Sorghum halepense (L.) Pers.	Johnson grass
Spiraea japonica L.f.	Japanese spiraea
Stellaria media (L.) Vill.	Common chickweed
Veronica hederifolia L.	Ivyleaf speedwell
Vinca major L.	Bigleaf periwinkle
Vinca minor L.	Common periwinkle
Wisteria floribunda (Willd.) DC	Japanese wisteria
Xanthium strumarium L.	Common cocklebur
Youngia japonica (L.) DC.	Oriental false hawksbeard

**Already present in our region.*

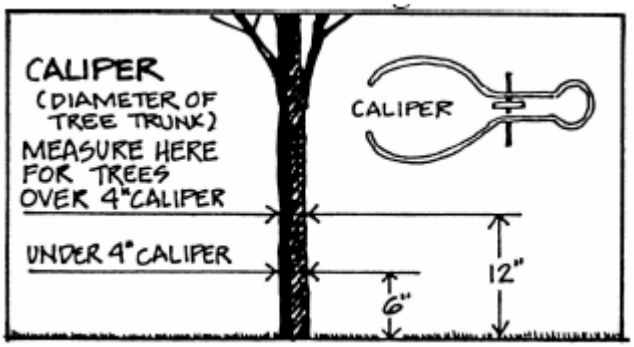
17. Definitions

As used within this ordinance, the following terms shall have the meanings set forth in this section:

ANSI - American National Standards Institute (ANSI) is a private, non-profit organization (501-C3) that administers and coordinates the U.S. voluntary standardization and conformity assessment system.

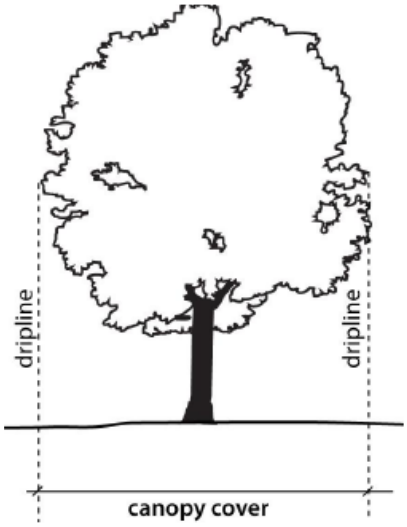
Auguring – A practice used to reduce the damage to and loss of individual trees where underground construction involves a tree's critical root zone (CRZ).

Caliper – Diameter measurement of a tree trunk taken at six (6) inches above ground level for trees up to and including trees four (4) inches in caliper. For larger trees, measurement of caliper shall be taken at twelve (12) inches above ground level.



Canopy – The uppermost spreading branchy layer of a tree

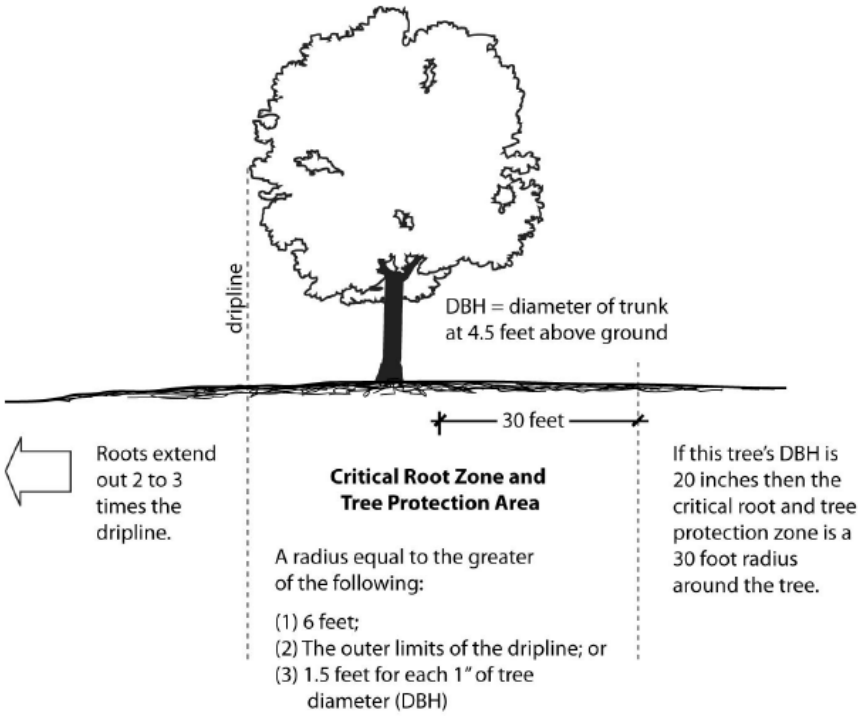
Canopy Cover – The area that falls within a tree's drip line.



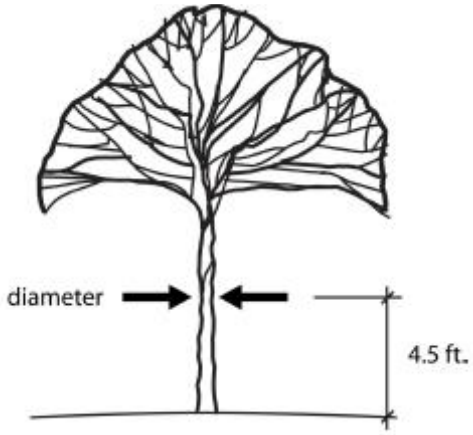
Clear Cutting – The felling and removal of all trees from an area. This practice is typically an indiscriminant removal of trees except in the case of silviculture harvesting where removal is followed up with a forest replanting or regeneration effort to keep the land forested.

Cluster of Trees – A group of trees gathered together in their natural state.

Critical Root Zone (CRZ) or Tree Protection Zone (TPZ) – The radial distance from the tree trunk equivalent to the greater area of: the drip line; a maximum of six feet from the trunk; or a distance or 1.5 feet for every inch of trunk DBH.



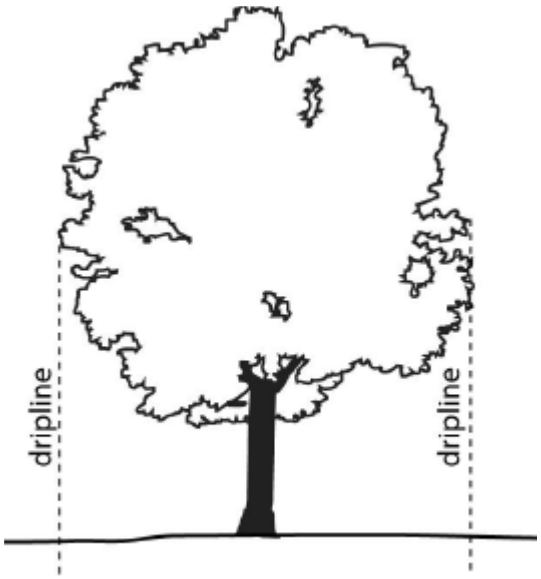
DBH (Diameter at Breast Height) – The trunk diameter of a tree measured at a point four and one-half (4 ½) feet above the ground.



Deciduous – Plants or trees that lose their leaves annually.

Development – The act, process or state of erecting buildings or structures, or making improvements.

Drip Line – An imaginary vertical line extending from the outermost portion of the tree canopy to the ground.



Evergreen – Plants or trees that retain their levels throughout the year.

Exotic/Invasive Species – An alien species that becomes established in natural or semi-natural ecosystems or habitats and threatens native plants and when such species spread they threaten biological diversity. Invasive species include, but are not limited to, English Ivy – Hedera helix, Chinese Wisteria – Wisteria sinensis, Japanese Wisteria – Wisteria floribunda, Japanese Honeysuckle – Lonicera japonica, Kudzu – Pueraria montana.

Grading or Land Disturbing – Any use of land by any person that results in a change of the natural cover or topography and that may cause or contribute to the sedimentation or soil compaction.

Heritage Tree – Existing trees thirty-six (36) inches DBH or larger.

ISA – The International Society of Arboriculture is a worldwide professional organization dedicated to fostering a greater appreciation for trees and to promoting research, technology, and the professional practice of arboriculture.

Land Clearing – The large scale indiscriminant removal of trees, shrubs, and undergrowth with the intention of preparing real property for non-agricultural development.

Large Maturing Tree – A tree whose height is greater than sixty (60) feet at maturity and meets the specification of "American Standards for Nursery Stock" published by the American Association of Nurserymen. See also *Canopy Tree*.

Medium Maturing Tree – A tree whose height is thirty (30) to sixty (60) feet at maturity and meets the specification of "American Standards for Nursery Stock" published by the American Association of Nurserymen.

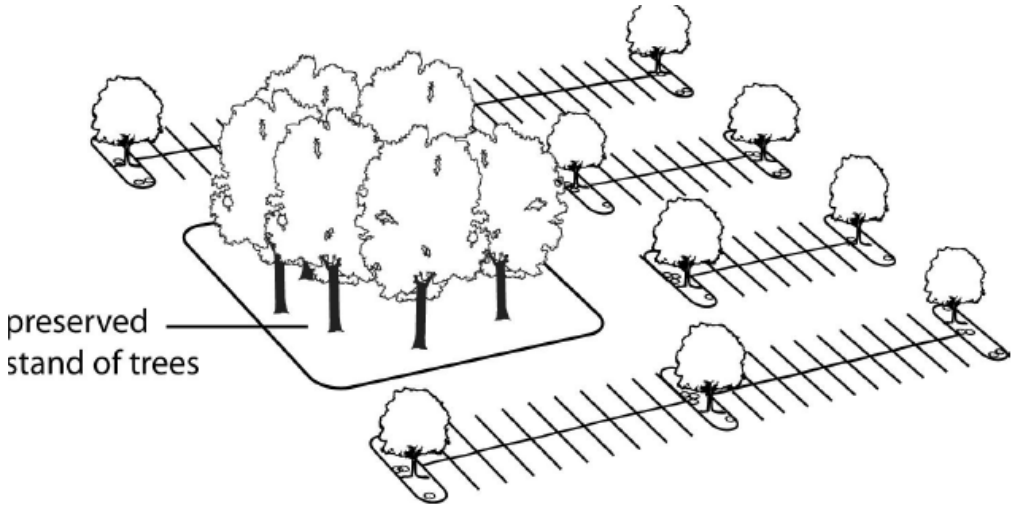
Native Species – Refers to a tree species whose geographic range during pre-colonial times included the Piedmont of North Carolina.

Protective Fencing – A physical and visual barrier installed around the critical root zone of a tree to prevent damage to the tree and its root system. At a minimum this would include four (4) foot tall orange safety fencing.

Pruning - The cutting off or removal of dead or living parts of a tree or shrub. See ANSI standards for recommended pruning practices.

Small Maturing Tree – A tree whose height is less than thirty (30) feet at maturity and meets the specifications of "American Standards for Nursery Stock" published by the American Association of Nurserymen.

Stand – A group of trees of sufficiently uniform and/or complimentary species composition, age, and condition that they may be considered homogenous unit for management purposes.

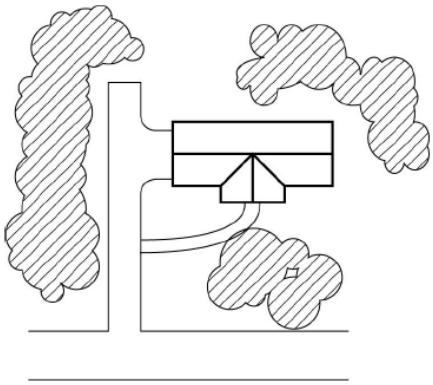


Street Tree – A tree planted within or adjacent to a public right-of-way as required by the town.

Tree Bank - A site such as a school or public park, where the owner/developer shall donate and plant the required trees when it is not feasible to plant the required trees within their site's project area

Tree Protection Zone – The area that contains the canopy and critical root zones of trees composing the existing canopy.

Tree Save Area – One or more areas of a site which includes existing trees and their tree protection zone. The purpose of a tree save area is to encourage the preservation of healthy clusters of trees or heritage trees.



Tree Survey – The tree survey shall be prepared by a licensed surveyor, arborist, landscape architect, registered forester, or engineer registered in the state of North Carolina. The survey shall provide the location, species, and size of all existing trees eight (8) inches or larger in diameter at breast height (DBH), and any understory tree (e.g. Dogwood, Redbud, Ironwood, American Holly, etc.) with a caliper measurement of four (4) inches or more as stipulated in section 9.21.7.

9.22 UNION COUNTY PUBLIC SCHOOL ZONING REGULATION

1. Purpose

Union County Public Schools (UCPS) is currently subject to 13 different sets of local land use regulations (12 different municipalities and Union County). Regulations vary from jurisdiction to jurisdiction, making it difficult to build new schools, renovate existing schools or locate mobile units in a consistent, timely and cost effective manner.

As a part of the Union County Board of Education's adopted "Building Program Cost Saving Principles", UCPS is endeavoring to establish a standard zoning classification and standardized requirements for school construction regardless of the schools locale in Union County. Such standardization will result in (i) equitable school facilities throughout the county; (ii) more efficient permitting of school facilities and (iii) cost savings for the benefit of the taxpayers of Union County.

2. Applicability

A. UCPS staff will involve local municipal staff early in the site selection process. The local municipal staff will make recommendations regarding target sites or areas within their respective jurisdictions that are suitable for school uses. Pursuant to state statute, final decisions regarding the selection of school sites are made by the Union County Board of Education.

B. Allow all new schools, additions, or renovation uses by right with supplemental standards. This will eliminate the costly and time-consuming discretionary conditional use permit zoning process and site-by-site negotiations. All local government entities benefit by having expectations regarding school design and construction identified in advance.

C. Jurisdictions may consider an optional conditional use permit review process if unique conditions exist as determined by the zoning/planning administrator. The administrator shall consider if the proposed project poses a negative impact on the public health , safety and historical character of the Town of Waxhaw.

3. Standards

Supplemental standards shall include:

A. <u>Exterior of buildings.</u>

1. Exterior building materials shall be limited to masonry brick (brick or Shall be reviewed and approved by the Zoning Administrator.
2. UCPS staff will work with municipality staff to follow any requirements of municipality "special overlay districts" as it relates to the exterior design of the facility.
3. Exterior of buildings will be articulated to enhance the area of the site.

B. Mobile classrooms (MCR)

1. MCR's shall be located in rear yard if possible. If rear yard cannot accommodate the MCR's then they can be placed in the side yard. MCR's can be placed in the front yard only if the MCR's cannot be accommodated in the rear or side yards.
2. MCR underpinning and crawl spaces shall be screened.
3. Landscaping/planting shall be provided between the MCR and any adjacent roads from which the MCR's are visible.
4. MCR's shall be removed promptly by UCPS when no longer required at a school site. No MCR shall be vacant for more than 60 days during the schools calendar year without written approval from the Zoning Administrator. A detailed written request must be submitted to the Zoning Administrator outlining the unique circumstances that require a waiver or extension of the requirement.

C. Sidewalks

1. Sidewalks shall be installed unless they present a public health and safety hazard. If shown as a hazard, then a waiver from town staff must be approved and the ordinance pertains to Union County Schools only. Sidewalks on the school property that connect to an existing sidewalk infrastructure will be provided by UCPS. Except as provided above, the municipalities shall be responsible paying for and constructing sidewalks.
2. UCPS will dedicate appropriate easement or road right of way needed for sidewalks if requested by municipality.
3. UCPS will grade areas for sidewalks if requested by municipality.
4. UCPS will cooperate with municipality to apply for grants for sidewalks.

D. Exterior Illumination

1. Driveway and parking area lighting shall be no more than 10 foot candles. Spill over to adjacent properties shall not exceed 1 foot candle. Lighting fixtures shall be shielding type.
2. Lighting fixtures located on the building exterior shall not emit more than 5 foot candles and shall be shielding type.
3. Lighting for athletic fields shall follow the current standards as set forth by the North Carolina High School Athletic Association Lighting Standard. A lighting control package shall be included and lights shall be shut-off no later than one hour after the end of the event.

E. Signs

1. Materials for sign base and structure shall match the primary building materials.
2. Sign face shall not exceed 40 square feet and does not include the sign support structure. The bottom of the sign face shall be no less than 24" above nor more than 72" above the ground surface. The sign support structure can include columns and walls on either side of and below the sign face and shall not be more than 16" taller that the sign face.
3. One sign shall be permitted per school. Alternatively, if multiple schools use the same driveway access, then the allowable square footage may be increased by 10 square feet for each additional school.
4. One wall sign per school shall be permitted and only for the name of the school and shall be reviewed by the administrator.
5. External illumination is allowed.
6. Temporary banners shall be allowed on the exterior walls of schools with the following conditions:

    a. No more than three (3) banners shall be allowed at any time.
    b. No banner shall exceed thirty-two (32) square feet and shall not be illuminated.
    c. Each banner shall be displayed no earlier than ten (10) days prior to the first day of school and shall be removed no later than ten (10) days after the last day of school.

F. Parking

1. At elementary and middle schools provide 1 space per staff member plus 1.6 spaces per classroom or 1 space for each 3 seats used for assembly purposes whichever is greater.
2. At high schools provide 5 spaces per instructional classroom or 1 space for each 3 seats used for assembly purposes whichever is greater.
3. No more than 20% of the required spaces can be compact spaces.
4. Minimum size of spaces shall be 9' wide by 19' long for regular, 7.5' wide by 15' long for compact, and accessible spaces shall meet current accessibility codes.

G. Student Drop Off Stacking

1. On-site vehicle stacking for student drop-off shall be based on NCDOT requirements using the NCDOT required calculator.

H. Landscaping and Screening/buffering

1. Trees and shrubs shall be as indicated within the municipality species list.
2. Parking Area: 1 large or 2 small trees shall be provided for each 12 parking spaces. Each parking space shall be located within 65' of a tree. Rows of parking spaces shall be terminated with a landscaped island and shall be the same size as a parking space.
3. Parking areas shall be screened from adjacent public roads with shrubs based on the municipality's species list.
4. Storm Detention Basins shall be screened with fencing and/or shrubs as determined by the administrator and shall be dependant upon the size, location, and use of the basin.
5. Land berms will not be permitted between school facilities and roads.
6. Land berms can be used in conjunction with required screening/buffering to adjacent uses as determined by the local regulations.
7. Screening/buffering from adjacent uses will be opaque and shall consist of:

    a. Small trees planted at a rate of 3 per 100' and 6' high evergreen shrubs planted at a rate of 25 per 100', or
    b. Large trees planted at a rate of 2.5 per 100' and a 6' high solid wood fence, or
    c. Tall evergreen trees with branches touching the ground planted in a stagger.

8. If the adjoining property is of similar or compatible use the Administrator may reduce or eliminate the screening/buffer.
9. Screening/buffering requirements may be waived when screening/buffering is already provided. There may be cases where the unusual topography or elevation of a site, or the size of the parcel involved, or the presence of screening on adjacent property would make the strict adherence to the regulation serve no useful purpose. In those cases, the Administrator is empowered to waive the requirements for screening so long as the spirit and intent of this section and the general provisions of this section pertaining to screening are adhered to. This section does not negate the necessity for establishing screening for uses adjacent to vacant property.
10. UCPS will endeavor to adhere to all Tree Preservation ordinances of the municipalities and shall preserve natural buffers between the school facility and adjacent properties as much as practical.

11. UCPS will endeavor to retain as much existing trees and vegetation on school sites as practical and will re-introduce common local species into the project as possible.

I. In the event any provisions of the supplemental regulations conflict with any other provisions of this ordinance, then the provisions of these supplemental regulations shall control. Other ordinance provisions not in conflict with these supplemental regulations remain in effect.