

Chapter 8. LANDSCAPING

8.1 Purpose and Intent

This chapter is intended to establish minimum standards for the preservation and enhancement of tree canopy, as well as the design of landscapes so as to improve the City aesthetically, economically and environmentally.

This chapter improves the appearance of the City's environment through the provision of trees and landscaping in order to better control soil erosion; reduce the hazards of flooding; stabilize the ground water tables; absorb carbon dioxide; supply oxygen; provide shade for cooling; screen noise and incompatible uses, dust, glare; and preserve, protect and enhance the natural environment.

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8.2 Applicability

A. Applies:

1. Applicable provisions of this chapter shall apply to expansion of existing development and new development requiring Master Plan or Preliminary Plat consideration.

B. Does Not Apply:

1. Development of an existing platted lot of record with that of a single-family, duplex, triplex, or quadruplex House building type is entirely exempt from the provisions of this chapter.
2. Exception plat and Minor Subdivisions are entirely exempt from the provisions of this chapter.
3. Valid and permitted forestry or harvesting activities are entirely exempt from the provisions of this chapter.
4. Existing development (sites developed prior to the effective date of the Land Development Ordinance) is entirely exempt from the provisions of this chapter, except that:
 - a. All applicable provisions of this chapter shall apply when an existing parking lot is expanded or improved to add 12 or more spaces.
 - b. All applicable provisions of this chapter shall apply when an existing principal structure gross floor area is expanded by 25% or more. Landscaping material installation and applicable provisions are required only for the expanded portion of development.

8.3 General Provisions

- A. **Existing Vegetation, Fences, Walls, and Berms:** The use of existing trees or shrubs to satisfy the landscaping requirements of this chapter is strongly encouraged. Significant existing vegetation within landscaped areas shall be preserved and credited towards required landscaping. Existing berms, walls, or fences within the landscaped area, but not including chain link fencing, may be used to fulfill the standards for the type of landscaping required, provided that these elements are in a condition of good repair.
- B. **Protection of Vegetation during Design:** Through the protection of trees and existing vegetation, the City encourages new or expanded development to be creative in design and placement of buildings, structures, parking and other impervious surfaces as to preserve natural features and to complement the existing topography when practical.
- C. **Installation of New Vegetation and Other Features:** New plant material should complement existing vegetation. If existing significant vegetation and other site features do not fully meet the standards for the type of landscaping required, then additional vegetation and/or site features (including fences) shall be planted or installed within the required landscaping area.
- D. **Grading in Required Landscape Areas:** If grading within a perimeter buffer is proposed, slopes of 3:1 or less are encouraged to ensure the proper transition of grades to the adjacent property.
- E. **Easements & Right-of-Ways:** Nothing shall be planted or installed within an underground or overhead utility easement or a drainage easement without the consent of the Administrator and the easement holder at the time of development plan approval.
- F. **Involuntary Tree Removal & Replacement (damage, destruction, or death):** Trees planted or protected/preserved on private property to meet the provisions of this chapter that are involuntarily felled due to damage, destruction, or death shall be replaced with a tree(s) of a size equal, or equivalent point value, to the assigned credit of the original tree.
- G. **Voluntary Tree Removal & Replacement:** Trees planted or protected/preserved on private property to meet the provisions of this chapter shall not be replaced or permanently removed without obtaining a Tree Removal & Replacement Permit, which shall confirm compliance with one of the following provisions or remedies:
 - 1. **Replacement:** A replacement tree shall meet, or exceed, the current minimum size or height requirement of the same tree type (shade or ornamental).
 - 2. **Permanent Removal:** When a tree must be removed and replacement is not practical, a payment may be made to the City of Salisbury in-lieu of the required tree being replaced based on the current minimum size or height requirement of the same tree type (shade or ornamental). The value of the payment shall be determined on an annual basis by the Community Planning Services department of the City of Salisbury and approved as part of the annual budget ordinance.

- H. **Building Setbacks:** Building placement within allowable setbacks may supersede Perimeter Buffer width requirements; however, there shall be no net loss of required Perimeter Buffer material or points.

8.4 Landscape Plan

- A. **Applicability:** Pursuant to the Applicability section above (Sec. 8.2), a Landscape Plan shall be required for a proposed development prior to any land disturbance. (This does not include predevelopment site grading, which is permitted by the provisions of Sections 4.5 and 15.5.) The Landscape Plan shall contain the information detailed in Section 16.10, Landscape Plan Requirements.
- B. **Overall Tree Canopy:** Proposed development requiring a Landscape Plan shall provide a minimum of 30% overall tree canopy. The tree canopy percentage of coverage is defined as one (1) tree per 500 square feet of gross surface area. Percentage of required tree canopy shall be calculated using gross acreage. In addition to tree preservation, compliance with this provision may be achieved using required perimeter buffers, street yards, and parking lot landscaping. For Major Subdivisions, tree canopy requirements can only be met on lots designated as common property, such as Home Owner's Association (HOA) or Property Owner's Association (POA) property.
- C. **Revisions to Approved Landscape Plans:** Due to lack of plant availability, approved landscape plans may require minor revisions. Minor revisions to Landscape Plans may be approved by the Administrator if:
 - 1. There is no reduction in the quantity of plant material.
 - 2. There is no significant change in size or location of plant materials.
 - 3. The new plants are of the same general category (i.e., shade trees, ornamental trees, shrubs, groundcover) and have the same general design characteristics (mature height, crown spread) as the materials being replaced.

8.5 Tree Protection & Preservation

A. Applicability and General Provisions

1. **Clearing (aka Clear Cutting):** Clearing, defined as the removal or destruction of 25% or more of the applicable development site trees having a DBH of 4 inches or greater, shall be prohibited unless the clearing is a part of, and identified on, an approved Preliminary Plat, Schematic Plan, or Master Plan. Up to 10% of the existing, applicable tree canopy identified on the aforementioned plan type may be cleared and not subject to the Tree Replacement provisions of Section 8.6, below. Clearing beyond that threshold shall be subject to the Tree Replacement provisions for sites experiencing inactivity. Clearing might not include grubbing or stumping the development site; however, any amount of clearing shall include complete removal of all fallen and residual debris from the development site.

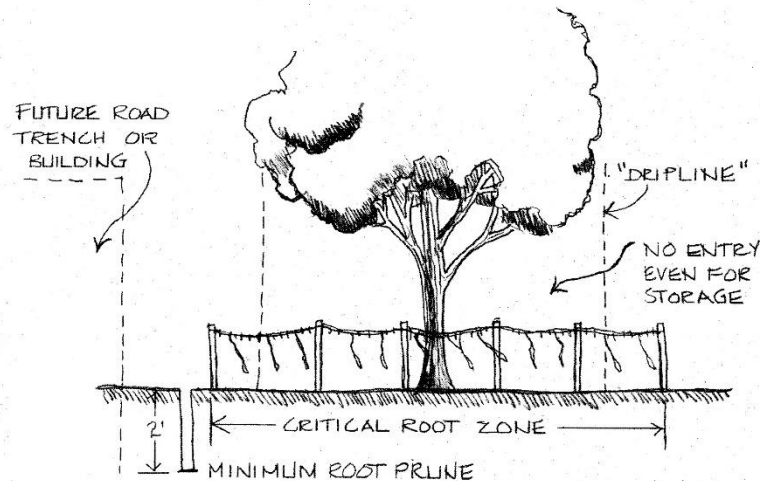
B. Landscape Credits for Tree Preservation

1. Credits for tree preservation are available when trees that are proposed for preservation are clearly identified on the Landscape Plan.
2. Minimum size requirement to qualify for tree preservation is 4 inches (DBH).
3. Landscape credits for existing trees within Perimeter Buffers will be given at the rate of 12 points per 4 inches in diameter at breast height (DBH) of existing plant preserved. (See Section 8.7 for details on points for landscaping.)

C. Protection of Existing Vegetation During Construction

1. A tree protection plan, showing there will be no disturbance in the Critical Root Zone (CRZ), shall be submitted prior to grading. Trenching, placing backfill, driving, or parking equipment in the CRZ, and the dumping of materials detrimental to plant health in close proximity of the trees to be preserved is prohibited.
2. Protective barricades shall be placed around all trees designated to be saved, prior to the start of development activities or grading.
 - a. Barricades may consist of 2"x 4" posts with 1"x 4" rails, orange safety fence, or a similar treatment and shall remain in place until development activities are complete.
 - b. The barricaded area shall remain free of all building materials, stockpiled soil or other construction debris.
 - c. Construction traffic, storage of vehicles and materials, and grading shall not take place within the protective areas of the existing trees.
 - d. Barricades shall be erected at a recommended minimum distance from the base of protected trees according to the following standards:

- (1) **For trees 10” or less in caliper:** Place at a minimum distance of 10’ from the base of each protected tree, or outside the drip line, whichever is greater.
 - (2) **For trees greater than 10” in caliper:** Place at a minimum distance equal to 10’ from the base of a protected tree plus an additional 1’ for each additional 1” in caliper greater than 10” in caliper, or outside the drip line, whichever is greater.
3. Construction access to a site should occur where an existing or proposed entrance/exit is located.
 4. Land disturbance within a tree drip line is discouraged except for driveway access points, sidewalks, curb and gutter.
 5. Where grading within a tree drip line cannot be avoided, cut and fill shall be limited to ¼ to ½ of the area within the drip line, and tree roots shall be pruned with clean cuts at the edge of the disturbed area. (No fill shall be placed within the drip line of a tree without venting to allow air and water to reach the roots.)
 6. Storage of construction materials and any other construction activities that contribute to the compaction should be limited to areas of the site within the limits of construction.



Pre-construction tree protection techniques and concepts.

8.6 Tree Replacement

Although cleared, some development sites will experience delays or complete construction inactivity. In those instances, and following proper consultation and documentation, the following replacement/replanting provisions shall apply depending on the level of construction activity. Substantial progress is defined in Chapter 9, Environmental Protection, Phase II Stormwater Ordinance:

A. Replanting Cleared Land (No Substantial Progress):

Within 180 days following expiration of an approved plan's vesting period, replanting efforts shall be accomplished using one or more of the following methods:

1. Shade trees listed on the approved Large Trees appendix of the Landscape Ordinance & Design Guidelines, planted at a minimum of 6 feet to 8 feet tall, 1.5" DBH, and at a rate of at least 36 shade trees per acre.
2. Trees planted in compliance with the NC Cooperative Extension guide for reforestation, with tree seedlings planted at a minimum rate of one (1) tree per each 10-foot by 10-foot (10'x10') area.
3. As authorized under this section, a payment may be made to the City of Salisbury in-lieu of replanting. The value of the payment shall be determined on an annual basis by the Community Planning Services department of the City of Salisbury and approved as part of the annual budget ordinance. The applicant is informed of the amount to be paid upon statement of choice to utilize payment in-lieu in whole or part as a method to comply with these replanting provisions. Any payment shall be delivered to Development Services within the 180-day replanting period following closure of the vesting period.

- B. Replanting Cleared Land (Substantial Progress):** Following determination of substantial progress and one (1) year of uninterrupted construction inactivity, the city shall consult with the developer, owner of record, or their assigns, to determine project viability and a continuation schedule, if found viable. If project viability is unknown and undetermined, a letter to that fact shall be provided by the developer, owner of record, or their assigns, and replanting shall consist of planting all required Street Yard trees per the approved Landscape Plan. If the clearing and substantial progress are related only to a predevelopment site grading permit, replanting of Street Yard trees shall be in accordance with the Street Yard provisions of this Ordinance. Infrastructure shall include roads, driveways, sidewalks, utilities, and stormwater devices.

8.7 Perimeter Buffer

The landscaping regulations established in this section are intended to minimize potential conflicts between abutting developments, to eliminate or minimize potential nuisances such as dirt, litter, noise, glare of lights, signs, and unsightly buildings or parking areas, and to ensure adequate landscaping in new development. New single family and/or duplex development that is part of a larger common plan is exempt from the provisions of this section.

A. Required Perimeter Buffer

Perimeter Buffers shall be required for any development or expansion of existing development. The perimeter buffer may be a Fixed or Flexible Buffer as described below.

1. Fixed Buffers

The purpose of Fixed Buffers is to ensure that a natural area of appropriate size and density of plantings is located between certain zoning districts. (See white boxes in table below)

- a. Fixed Buffers require a specific width, type of plant material, and quantity of plant material.
- b. In a mixed-use development, the interior boundaries of abutting outparcels are not required to meet the Fixed Buffer requirements.

2. Flexible Buffers

The intent of the Flexible Buffers is to provide for landscaping of new development or redevelopment, but to allow for creativity and flexibility in the placement of the landscaping throughout development sites rather than simply at the perimeter. (See gray boxes in table below)

Developers shall provide throughout the site the square footage of landscape area and number of landscape required points that would be equivalent to a Type-A buffer along the side and rear portions of the parcel (see 8.6.B, Buffer types). Required planting in street yards and of street trees shall not count toward the required minimum landscaping.

		Adjacent District							
		OSP RR	GR	HR UR MHD	RMX CI	HS NMX TND CMX	DMX	HB LI	HI
District of Proposed Development	OSP RR	A ₁	A ₁	A ₁	A ₁	A ₁	A ₁	A ₁	A ₁
	GR	C	A ₁	A ₁	A ₁	A ₁	A ₁	A ₁	A ₁
	HR UR MHD	C	B	A ₁	A ₁	A ₁	A ₁	A ₁	A ₁
	RMX CI	D ₂	C	B	A ₁	A ₁	A ₁	A ₁	A ₁
	HS TND NMX CMX	E ₂	D ₃	C	B	A ₁	A ₁	A ₁	A ₁
	DMX	C ₄	B ₄	A _{1,4}	A _{1,4}	A _{1,4}	A _{1,4}	A _{1,4}	A _{1,4}
	HB LI	F ₂	F ₂	C	B	B	A	A	A ₁
	HI	F ₂	F ₂	D ₂	C	C	B	B	A ₁

Buffer	Fixed or Flexible Buffer Required	Buffer	Fixed Buffer Required
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NOTES:

1. Flexible Buffer as specified in 8.6.A.2.
2. Complete visual separation required through the use of densely planted vegetation that would provide complete visual separation within three (3) years of planting or a six-foot fence (constructed of masonry or pressure treated lumber). In either case, the requirements of the table above shall be met for the corresponding buffer. Visual separation is not required where connectivity (for motor vehicles and/ or non-motorized modes) between land uses is planned or provided.
3. Buffer required for the non-residential and/ or multi-family portion of mixed use developments only.
4. In the DMX district, a maximum of 15% of the total lot area shall be required to meet the Buffer provisions.

B. Buffer Types

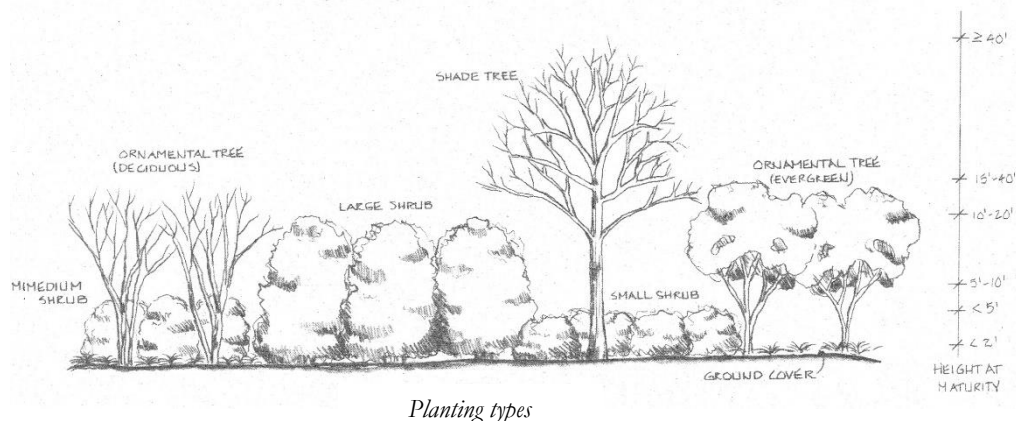
Each Buffer has a specified width, type of plant material and quantity of plant material which is required. The width and density of the Buffer increases as the difference in zoning classifications increases.

Buffer Type	Minimum Width	Trees *		Shrubs	Required points per linear foot
		Shade	Orn.		
A	8 ^{**}	n/a	1/100'	Optional	0.4
B	10'	1/100' (b)	N/A	Optional	0.6
C	15'	1/75'	1/100'	Optional	0.7
D	20'	1/50'	1/100'	Optional	0.8
E	25'	1/50'	1/75'	Optional	0.9
F	30'	1/50'	1/50'	Optional	1.0

* rounded to the nearest whole number; if 1/2, then round upward

** The buffer requirement for the Type A Buffer shall be a minimum average width of 8 feet, but at no time shall the width be less than four (4) feet.

Points for Buffers	
Planting Type	Points
Shade Tree	12
Ornamental Tree	6
Large Shrub	3
Medium Shrub	2
Small Shrub	1



1. In Type B Buffers, Ornamental Trees may be substituted for Shade Trees at the rate of two (2) Ornamental Trees for each required Shade Tree.
2. **Conflict with Utility Lines:** In the case of a conflict with utility lines, one (1) Ornamental Tree may be substituted for each required Shade Tree if approved by the Administrator or his designee and corresponding utility service(s).
3. **Landscape Credits:** Landscape credits for existing trees within Buffers will be given at the rate of 12 points per 4 inches in diameter at breast height (DBH) of existing plant material preserved.

8.8 Street Yard

A Street Yard consists of a planting area parallel to a public right-of-way but on private property, typically between the sidewalk and new development, designed to provide continuity of vegetation along the right-of-way and to soften the impact of development by providing a pleasing view from the road.

- A. **Applicability:** Street Yards shall be provided in all districts where a front setback greater than 10 feet is provided; however, Street Yard provisions are always exempt from development in the OSP, RR, DMX, GR, UR, HR, TND, and MHD districts.
- B. **Minimum Width:** Street Yards shall be a minimum of eight (8) feet wide.
- C. **Required Trees:** Street Yards shall contain one Shade Tree per 35 linear feet (or fraction thereof) except in areas of conflict with existing overhead utility lines, where Ornamental Trees shall be planted at one per 25 linear feet (or fraction thereof).
- D. **Tree Spacing:** Trees shall be distributed along the street frontage, but they are not required to be at equal intervals. This will allow for flexibility in design while discouraging long intervals without trees.
- E. No more than 20% of the Street Yard may be used for walkways or signs.
- F. Parking, merchandise display and off-street loading are prohibited in the Street Yard.
- G. All trees in Street Yards shall be planted no closer than four (4) feet from any public right-of way.

8.9 Street Trees

Street trees shall be planted in the street right-of-way as specified in the table below. Spacing of trees should allow for a clear view of buildings and land uses.

Transect Zone	T-1	T-2	T-3	T-4	T-5	T-6	Assigned Districts
Zoning Districts	OSP	RR	GR MHD	UR HR RMX	NMX CMX TND	DMX	HB, HS, CI LI, HI
Street Tree Requirement	No	No	Yes	Yes, in UR & HR	Yes, in TND	No	No
Street Tree Location (required or voluntary)	n/a	n/a	Planting strip	Dependent on Street Section	Dependent on Street Section	Tree well	Dependent on Street Section

- A. **Applicability:** Street trees shall apply to newly constructed and reconstructed streets.
- B. Planting strips shall have a minimum width of seven (7) feet.
- C. Shade trees shall be installed at an average distance of 50 feet on-center. Only where overhead utilities exist prior to development can ornamental trees be substituted and planted at the same distance.
- D. Street trees shall be placed at least eight (8) feet from light poles and ten feet from electrical transformers in order to allow these utilities to be safely serviced.
- E. Along state maintained streets, such plantings shall comply with NCDOT standards.

8.10 Landscape Standards for Parking Lots

A. Applicability:

1. All properties with new parking lots of 12 or more spaces or expanded lots (to add 12 or more spaces) shall be required to obtain a zoning permit and to comply with this section and the requirements for Perimeter Buffers (Section 8.7) and Street Yards (Section 8.8).
2. Existing parking lots (paved or unpaved) that are expanded or improved to add 12 or more spaces shall comply with the landscaping requirements of this section within the expanded or improved portion only.

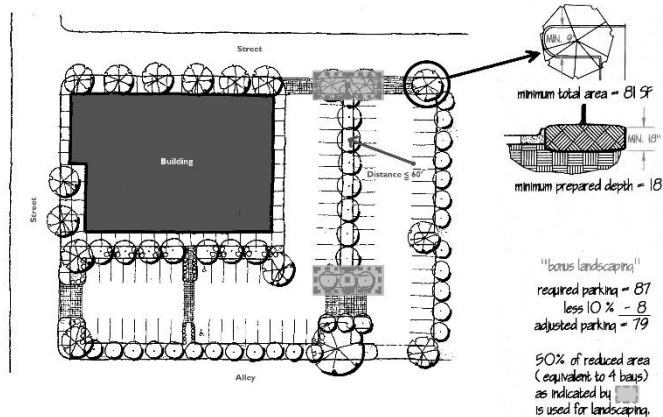
B. Perimeter Buffers:

1. If a perimeter buffer is not otherwise required or provided around new or expanded parking lots, a Type-A buffer shall be provided along the perimeter portion of parking lots that abut an adjacent property. These points may contribute towards the overall yard requirement.
2. Parking lot connections up to 24-foot wide between adjacent properties shall be exempt from the Perimeter Buffer requirements.

C. **Street Frontages:** Parking areas located along a street frontage shall have the portion of the lot that fronts the street screened up to a height of 3 feet using shrubs, brick walls (using brick that matches the adjacent building), wrought iron-type fencing, or any combination thereof. There shall be no openings in the screening greater than 2 feet except openings for pedestrian passage, which should be at least 5 feet in width. If landscaping is used, the minimum planting area width shall not be less than 4 feet. Where a street yard is provided, per Section 8.7, no additional landscape width beyond the width of the street yard shall be required. However, screening requirements shall be met within the street yard area.

D. Interior Parking Lot Landscaping:

1. In parking lots with 12 or more spaces, trees shall be planted at a rate of one Shade Tree for every 12 spaces or fraction thereof. Ornamental Trees may be provided at a rate of 2:1 in lieu of a Shade Tree where there is a conflict with overhead utility lines.



2. Required trees shall be located within or adjacent to parking lots as tree islands, medians, at the end of parking bays, traffic delineators, or between rows or parking spaces in a

manner such that no parking space is located more than 60 feet from a parking lot tree.

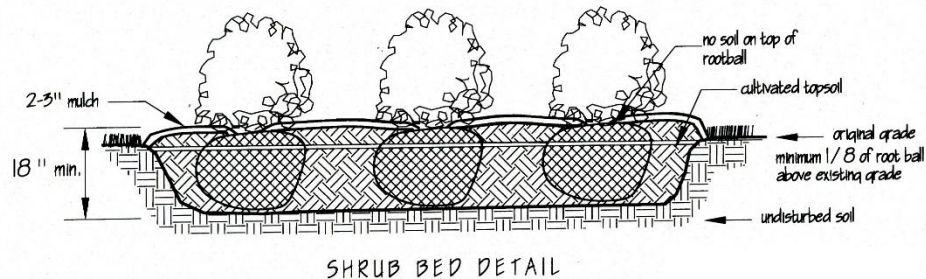
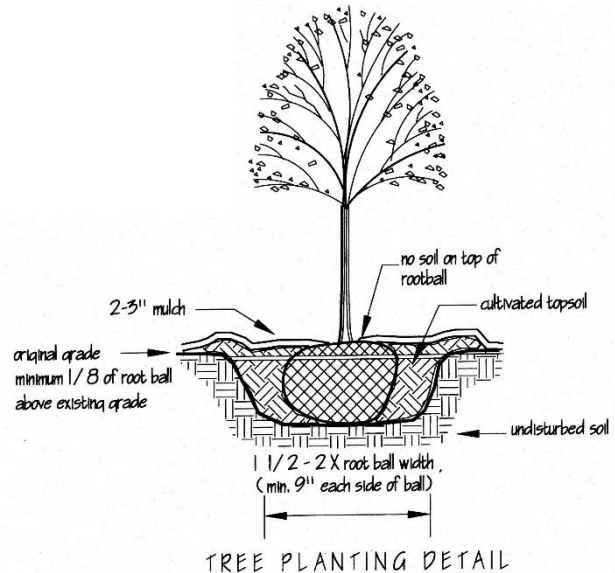
3. Trees located within the Perimeter Buffers or Street Yards cannot be credited toward the parking lot requirements.
4. Planting Areas within the parking lots shall provide a minimum of 81 square feet with a minimum inside dimension of nine (9) feet and a minimum prepared depth of 18 inches (see image on preceding page).
5. Any parking lot containing 20 or more parking spaces may reduce the number of required parking spaces by as much as 10% if 50% of the reduced area is used for parking lot landscaping, with no landscaped area less than the minimum required parking lot planting area (see example in image above). This bonus landscaping shall apply to non-residential uses in RMX, NMX, CMX, DMX, HB, LI, HI, HS, and CI districts only.

8.11 Landscape Standards and Specifications

- A. The developer shall furnish and install all plant materials listed on the plan schedule.
- B. Plant materials shall conform to the requirements described in the latest edition of American Standard for Nursery Stock, which is published by the American Association of Nurserymen.
- C. Plant materials shall be from an approved species list or approved by the Administrator or his designee.
- D. Shade Trees shall be minimum 2-inch caliper or larger at the time of planting. Ornamental Trees shall be a minimum of 6' in height at the time of planting (i.e., six feet from top of root ball to top of tree).
- E. No tree may be planted in the Sight Triangle (see Section 4.7.I, Intersections) without the prior approval of the Administrator.
- F. Do not use staking materials unless it is absolutely necessary. If staking is necessary, then the developer/property owner shall remove the staking materials after one growing season.
- G. The Administrator or his designee may be consulted to determine the proper time to move and install plant material so that stress to the plant is minimized. A temporary Certificate of Occupancy may be issued when extremes in weather or soil conditions are not favorable to landscaping.

H. The developer shall ensure that all plant pits, vine pits, hedge trenches, and shrub beds are excavated as follows:

1. All pits shall be generally circular in outline, with vertical sides. The tree pit shall be deep enough to allow one-eighth of the ball to be above existing grade. Soil within the Planting Areas shall be free of rock, debris, inorganic compositions and chemical residues detrimental to plant life. Soil shall be compatible with the composition of the existing sub-soil and sufficiently blended to ensure adequate exchange of air and water between the Planting Area and the adjacent soil strata. Plants shall rest on well-compacted surface. The tree pit shall be a minimum of nine inches larger on every side than the ball of the tree.
2. If areas are designated as shrub beds or hedge trenches, they shall be cultivated to at least 18 inches in depth. Areas designated for Ground Covers and Vines shall be cultivated to at least 12 inches in depth.



- I. Each tree, shrub, or vine shall be pruned in an appropriate manner, in accordance with accepted standard practice.
- J. All trenches and shrub beds shall be edged and cultivated to the lines shown on the drawings. The areas around isolated plants shall be edged and cultivated to the full diameter of the pit.
- K. Existing trees shall be preserved whenever possible (see Section 9.3).
- L. All Planting Areas shall be mulched with a two-to-three inch layer of bark, pine needles, or other similar material to cover the complete Planting Area.

8.12 Alternate Methods of Compliance

Alternate landscaping plans, plant materials, or planting methods may be used where unreasonable or impractical situations would result from application of landscaping requirements, or where necessary to protect existing vegetation. Such situations may result from streams, natural rock formations, topography, or other physical conditions; or from lot configuration, utility easements, unified development design, or unusual site conditions.

A. Approval of Alternate Plan

The applicable approval authority may approve an alternate plan which proposes different plant materials or methods provided that the quality, effectiveness, durability, and performance are equivalent to that required by this Ordinance.

B. Appeal

Decisions of the applicable approval authority regarding alternate methods of compliance may be appealed to the Zoning Board of Appeals.

C. Non-Compliance

In the event of a taking of right-of-way that puts a property in non-compliance, the property shall come back into compliance as it was previous to the taking. If coming into compliance presents a hardship for the property owner, then the property owner may present an alternate method of compliance.

8.13 Plant Substitution

Due to seasonal planting problems and a lack of plant availability, approved landscape plans may require minor revisions. Minor revisions to planting plans may be approved by the Administrator or designee if:

- A.** There is no reduction in the quantity of plant material.
- B.** There is no significant change in size or location of plant materials.
- C.** The new plants are of the same general category (i.e., Shade Tree, Ornamental Tree, Evergreen, or Shrub) and have the same general design characteristics (mature height, crown spread) as the materials being replaced.