## \*\*\*New Ordinance\*\*\*

## Section 22-59. Landscape Regulations

Adoption of this ordinance shall simultaneously revoke

Section 22-164(b).

Section 22-183(b).

Section 22-345.6 and reclassify it as Reserved.

Section 22-345.7 and reclassify it as Reserved.

Section 22-345.10 and reclassify it as Reserved

## Section 22-59 Landscape Regulations

#### a) Established:

The minimum standards for this provision include the installation and maintenance of landscape plantings which are necessary to preserve and enhance the aesthetic beauty of the City, and to ensure the health, safety, and general welfare of its residents. More specifically, the intent of these regulations is to provide for adequate buffering between incompatible land uses; protect, preserve and enhance the aesthetic appeal and scenic beauty of the City; reduce noise and air pollution; reduce storm water run-off; filter and reduce glare from artificial light sources; and provide shaded areas along streets and in parking lots.

This section is established in support of the findings that:

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

#### b) Definitions:

- (1) Buffer-yard, A landscaped area parallel to recorded side or rear property lines, and public street right-of-ways in order to provide spatial separation and /or screening between adjacent land uses.
- (2) Canopy Trees, Any locally adapted tree variety expected to reach a height in excess of thirty (30) feet at maturity.
- (3) Fencing, A wall or fence provided for aesthetic purposes or for the purpose of protecting adjacent uses from potential noise, glare, trash, odor, visual disorder or other detrimental effects.
- (4) Landscape Plan, The design and specifications for the placement of all natural and manmade features (such as plantings, fencing, earth berms, buildings, parking, drives, walkways, etc.) within a specified exterior space; including the retention of existing viable features, as well as the introduction of new or replacement features for the purpose of enhancing

- the property and its appearance, minimizing the potential for negative impacts upon public senses, and protecting the community environment.
- (5) Planting, The introduction or retention of hedges, plantings, natural vegetative covers or berms for the purpose of beautifying and enhancing property, controlling soil erosion and air temperature, reducing glare or noise and screening adjoining uses.
- (6) Screening, The introduction or retention of hedges, plantings, natural vegetative covers, berms or walls for the purpose of protecting adjacent uses from potential noise, glare, trash, odor, visual disorder or other detrimental effects.
- (7) Shrub, A locally adapted permanent evergreen or deciduous species expected to reach four (4) feet in height within three (3) years of planting.
- (8) Understory tree, A locally adapted tree variety not expected to reach a height in excess of thirty (30) feet or less than ten (10) at maturity.

## **Affected Property**

- a) New Developments: All new developments, buildings, structures, and parking areas shall comply with the minimum landscape requirements set forth herein provided however, developments that provide four (4) or less parking spaces shall be exempt from the landscape requirements for parking areas.
- b) Renovation to Existing Development: Any "change of use" as defined by the North Carolina Building Code or if total renovations to an existing development within a five (5) year period enlarge the total footprint twenty-five (25) percent or more, then the parking area for such development shall be required to comply with the minimum requirements set forth herein to the fullest extent technically feasible as determined by the permit-issuing authority.

#### **Development Exempt from Approval:**

The following activities or uses shall be exempt from Buffer requirements in this section:

- (1) **Public Projects-** The construction of any public street or utility service line, whether publicly or privately owned.
- (2) **Maintenance** Maintenance of any structure is exempt from site plan review.

- (3) **Agricultural** The use or intended use of land, with or without accessory structures, for purposes of agriculture, raising of crops or animals, forestry and the like.
- (4) **Single Family Residences** Single family residences, including manufactured homes, on a single lot of record are exempt from buffer requirements, but shall comply with all other requirements regarding single family residences and manufactured homes.
- (5) **Home Occupations-** Home occupations as defined in this Chapter, unless expressly provided otherwise.
- (6) **Accessory Structures Integral to Permitted Development** Any accessory structure or use, whether temporary or permanent, integral to an approved development permitted in accordance with the provisions of this title. Such accessory structure or use shall comply with the design and performance provisions of this Chapter.
- (7) **Temporary Uses, Nonmaterial-** Those activities of short duration that do not materially affect the area's natural environment, parking requirements, transportation patterns, public health or economic values shall be reviewed for approval by the Zoning Administrator.
- (8) **Proposed (land) Use** The intended or anticipated use of the property once the Certificate of Occupancy is issued.
- (9) **Existing (land) Use** The legal or permitted use of the land according to the City of Dunn Zoning Ordinance.

## Responsibility of requirements:

One hundred (100) percent of the applicable buffer requirements shall be the responsibility of the developing land use.

- a. Where there are competing or conflicting land uses and or differences in the intensity of the land uses, buffer-yards and screening shall be required according to the following: The designated buffer-yards are intended to be an aggregate dimension between the competing uses.
- b. If a proposed use is to develop next to an undeveloped or "vacant" property, the proposed use will be required to designate one-half of the required buffer-yard based on the previous or the potential use of the adjacent property. The existing zoning or the proposed use as shown in the Land Use Plan will determine the potential use of the adjacent property.
- c. If a proposed use is to develop next to an existing land use that was not previously required to create a buffer-yard, the proposed use will be required to create the entire buffer-yard.

d. Perpendicular encroachments by driveways, pedestrianways, and utilities across or through the buffer are permitted, but should be minimized so as to maintain the sprit and intent of the Ordinance.

#### 22-59.3

## **Landscape Material Specifications**

- a) All plant materials shall be healthy, living plants. The use of artificial plants to satisfy requirements set forth herein shall be prohibited.
- b) All plant materials used to satisfy requirements set forth herein shall be suitable for the climatic characteristics of Dunn. The recommended plant list in Section 22-59.16 lists species of plants that are suitable for the climate of Dunn.
- c) Equal spacing of plant material installed to satisfy requirements set forth herein shall not be required. Plant materials may be grouped and clustered in order to present a more natural appearance; provided however, material installed to comply with buffer requirements set forth herein shall be placed in a manner to form a continuous buffer.
- d) Existing trees, regardless of classification may be counted toward requirements for shade trees or ornamental trees as set forth herein provided such trees are a minimum of three (3) inches in caliper, in good health, and located in the approximate area as required herein.
- e) Ornamental trees may be substituted on a 1:1 ratio for shade trees where tree installation is required in close proximity to overhead utility services.
- f) Shade trees shall be defined as any deciduous or leaf bearing tree that reaches a mature height in excess of forty (40) feet. Shade trees shall be a minimum of two (2) inches in caliper or eight (8) feet in height at the time of installation.
- g) Evergreen trees shall be defined as any tree that maintains foliage on a year round basis. Evergreen trees shall be a minimum of one and one half (1.5) inches in caliper or six (6) feet in height at the time of installation.
- h) Ornamental trees or understory trees shall be defined as any deciduous or evergreen tree that has a particular ornamental characteristic and tends to

have a mature height less than that of a shade tree. The ornamental characteristic of such trees may include a distinctive shape, color, flower, or limb configuration. Ornamental trees shall be a minimum of one and one half (1.5) inches in caliper or six (6) feet in height at the time of installation.

- i) Shrubs shall be a minimum of three (3) gallons in size at the time of installation. Where these regulations specifically require the installation of 'tall, evergreen shrubs', such shrubs shall be a minimum of three (3) gallons in size and three (3) feet in height at the time of installation; shall reach a minimum mature height of six (6) feet; and shall be a species of shrub that does not loose all its leaves at one time.
- j) Groundcover shall consist of grass, turf, sod, ivy, bedding plants, or low, spreading vines. Pebbles, wood chips, bark, mulch, straw and similar materials shall be used to delineate planting beds, but in no instance shall such materials be used for the purpose of sidewalks, parking areas, or driveways. Areas dedicated for lawns shall be cleared of debris, graded level, and covered with sod, turf, or grass seed.

#### 22-59.4

#### Landscape Plan Preparation

All landscape plans shall be drawn to scale and prepared in a professional manner. The Code Enforcement Officer shall reserve the right to refuse acceptance of landscape plans that have not been prepared in a professional manner. All landscape plans shall comply with the requirements set forth herein. Landscaping shall not be haphazardly placed in order to fill left over space, but rather to accomplish the intent of these regulations as required herein.

#### 22-59.5

## Landscape Plan Submittal Requirements

- a) Two (2) copies of the proposed landscape plan shall accompany all applications for building permits. In situations where a site meets the minimum requirements set forth herein or a proposed development is not subject to requirements set forth herein, the Code Enforcement Officer may waive the requirement for the submittal of a landscape plan.
- b) The landscape plan shall illustrate the following information:
  - (1) Location and labels for all proposed plant materials;
  - (2) Location and labels of existing vegetation to be saved or remain undisturbed;

- (3) Methods and details for the protection of existing vegetation;
- (4) Location and specifications for proposed fences, walls, or berms;
- (5) Plant list or schedule with the botanical and or common name, quantity, spacing, and size of all proposed materials at the time of installation;
- (6) Location of all existing and proposed structures, paved areas, landscape islands, and sidewalks;
- c) If an irrigation system is proposed that is equipped with automatic timers and is connected to the City of Dunn public water system, then such system shall be equipped with automatic rain and soil moister sensors that are activated to prevent the operation of those irrigation systems while rain is falling and / or when soil moisture is adequate. Any irrigation system connected to the City of Dunn public water system shall require the installation of a double backflow protection device.

## 22-59.6 Reserved

**Required Screening Types:** In situations where a development is adjacent to multiple uses then the most restrictive buffer requirement for a property line shall be required along each side and rear property line abutting the property, otherwise the development shall follow the requirements listed below. Residential uses are identified as uses number one, two and three in the Land Use Relationship table Sec 22-59.8.

## Buffer-yards shall be required to meet the following minimum screening requirements:

	Туре А	Туре В			
Adjacent Land Uses	Residential vs. Non- Residential	Residential vs. Residential and Non-Residential vs. Non- Residential			
Minimum # of trees	3/ 1000 square feet	2/ 1000 square feet			
Minimum # of shrubs	12/ 1000 square feet (3 gal. min. at planting; 6' min at maturity)	8/ 1000 square feet (3 gal. min. at planting; 4' min at maturity)			
Minimum % of Evergreen	75%	50%			

## Type C.

A five (5) feet Landscaping Buffer; typically the areas abutting a right of way and other perimeters not required to have either a Type A or Type B buffer-yard, typically on the front and corners side property lines or adjacent to similar uses (indicated by a "0" in the Land Use Relationship table Sec. 22-59.8). This type of buffer shall consist of, lawn, low-growing evergreen shrubs or broadleaf evergreens, or other ground cover.

**Land Use Relationships:** The following land use relationships shall be used to determine required screening and buffering as provided in Section 22-59.7. Buffer-yards shall range in width from ten (10) to forty (40) feet. The following table illustrates the required buffer-yard widths, in feet:

	Land Use on Adjacent Property								
Proposed Use	#1	#2	#3	#4	#5	#6	#7	#8	#9
#1	0	0	20	10	20	30	20	20	30
#2	0	0	20	10	20	30	20	20	30
#3	20	20	0	0	20	20	20	20	20
#4	10	10	0	0	0	0	0	0	10
#5	20	20	20	0	0	0	10	0	20
#6	30	30	20	0	0	0	10	0	20
#7	20	20	20	0	10	10	0	0	20
#8	20	20	20	0	0	0	0	0	10
#9	30	30	20	10	20	20	20	10	0

- #1 Single Family Dwelling District, R-20 and R-10
- #2 Single Family Dwelling District, R-7
- #3 Multifamily Dwelling District, R-M
- #4 Central Commercial District, C-1
- #5 Shopping Center District, C-2
- #6 Highway Commercial District, C-3
- #7 Neighborhood Business District, C-4 and Office and Institutional District, C-O
- #8 Transitional Commercial Warehouse District, Tr-Cw
- #9 Restricted Industrial District, I-10 and Industrial District, I-100

#### 22-59.8.1

#### **Exceptions to the Land Use Relationships:**

a) All residential developments shall maintain a minimum Type A buffer of forty (40) feet Parallel to the Railroad Right -of -Way.

- b) All developments adjacent to a Public Park with active recreation shall require a minimum Type A buffer of twenty (20) feet.
- c) A public greenway trail may exist in any required buffer, if a public greenway trail is dedicated in a required buffer there shall be a reduction of the required planting equal to one-half of the standard requirement.

## Modifications of the requirements

- a. Alteration of Screening and Buffer-yard Requirements:
  - (1) In the event that the unusual topography or elevation of a development site or the location or size of the parcel to be developed would make strict adherence to the requirements of this Section serve no meaningful purpose or would make it physically impractical to install and maintain the required screening and buffering, the Zoning director may alter the requirements provided the spirit and intent is maintained. Such an alteration may occur only at the request of the developer, who shall submit a plan to the Zoning director showing existing site features that would screen the proposed use and any additional screen materials the developer may propose to have installed. The Zoning director shall have no authority to alter the screening and buffering requirements unless the developer demonstrates that existing site features and any additional screening materials will screen the proposed use as effectively as the required screening.
  - (2) The vacancy or non-use of an adjoining *parcel* shall not constitute grounds for providing relief to the screening and buffering requirements contained in this section. Neither shall the desire of an owner to make more intensive use nor greater economic use of the property be grounds for reducing the screening/buffer requirements.
  - (3) The retention of existing vegetation shall be maximized to the extent practical, wherever such vegetation contributes to required buffering and screening or to the preservation of significant trees.
- b. If the required Buffer-Yard area makes up over twenty (20%) percent of an existing parcel, no greater than one acre in size, the use of a solid wall or fence may reduce the yard requirement by one half (1/2).

A fence or solid wall shall be of material compatible with the principle building in composition and color. The fence or wall shall also conform to Section 22-58 of this Ordinance

Minimum height: Six (6) feet

A minimum of one (1) understory tree or four (4) shrubs per twenty (20) feet of linear fence or wall shall be planted.

c. If required landscaping of a Buffer-Yard makes up over twenty (20%) percent of a lot greater than one acre in size, the use of an earth berm may reduce the yard requirement by one fourth (1/4).

Berms must be placed and planted within the developing property.

- Minimum height, three (3) feet
- Minimum crown width, two (2) feet
- Minimum slope, 2:1

In no way shall the Berm be allowed to impact or detain natural storm-water flows.

#### 22-59.10

## **Supplementary Screening**

- a. **Utility & Mechanical Screening:** All non-residential and multifamily developments' mechanical and utility equipment which is greater than five (5) tons in nominal capacity, and is located on, beside, or adjacent to any building or developments shall be fully screened from the view of streets and adjacent property. The screen shall exceed the height of the equipment, shall not interfere with the operation of the equipment, and shall use one or a combination of the following screening techniques:
  - (1) Building materials and design which are compatible with those used for the exterior of the principal building or
  - (2) Evergreen plantings

In situations where mechanical and utility equipment is (are) located on the roof of a structure, all devices will be fully screened from the view of streets or adjacent property using technique 1 (one).

b. **Trash Containment Areas Screening:** All trash containment devices, including compactors and dumpsters, shall be located and designed so as not to be visible from the view of adjacent streets and properties. If the device is not visible from off the site, then it need not be screened. The type of screening used shall be equal to the standards in Section 22-59.10.a.

## 22-59.11 Street Frontage Landscaping Requirements

Parking areas located adjacent to public rights-of-way shall provide a landscape strip between the parking area and its point of intersection with the right-of-way.

This section shall not apply to the Central Commercial District. Parking areas in the Central Commercial District shall have wheel stops or curbing installed so as to not allow the front of a vehicle to protrude into the public right of way.

- a) If the parking area does not exceed 10,000 square feet in area, then such landscape strip shall be a minimum of five (5) feet in width and shall contain a minimum of eight (8) shrubs per forty (40) linear feet of street frontage (See Figure 1). Such required shrubs shall be a species with a minimum mature height of three (3) feet.
- b) If the parking area exceeds 10,000 and does not exceed 100,000 square feet in area, then such landscape strip shall be a minimum of eight (8) feet in width and shall contain a minimum of one (1) shade tree and eight (8) shrubs per forty (40) linear feet of street frontage (See Figure 1). Such required shrubs shall be a species with a minimum mature height of three (3) feet.

Street Frontage Landscape Strip

- c) If the parking area exceeds 100,000 square feet in area, then such landscape strip shall comply with one (1) or a combination of the following options:
  - (1) Such landscape strip shall be a minimum of twenty (20) feet in width and shall contain a berm with a minimum height of two and one half (2.5) feet above the finished elevation of the parking area. Such berm shall have a maximum slope of one foot of rise to three feet run (1:3) and a minimum crown width of three (3) feet. In addition to the required berm, one (1) shade tree and eight (8) shrubs per forty (40) linear feet of street frontage shall be required (See Figure 2).

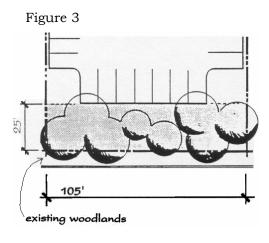
elevation 270.0

elevation 270.5

earth berm

street frontage

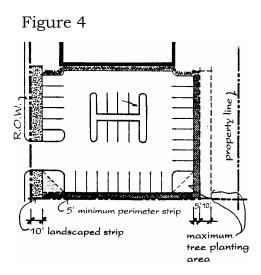
(2) Such landscape strip shall be a minimum of twenty-five (25) feet in width and consist of undisturbed woodland or forest (See Figure 3).



## Peripheral Landscaping Requirements

A landscape border a minimum of five (5) feet in width shall encompass the periphery of parking areas not located adjacent to public rights-of-way. Such landscape border shall be required between any parking area and any property line, yard, required yard, or buildings. Such landscape border may be interrupted for ingress and egress to buildings and adjoining lots. The landscape border shall contain a minimum of one (1) shade tree or one (1) ornamental tree, and eight (8) shrubs per forty (40) linear feet of perimeter (See Figure 4).

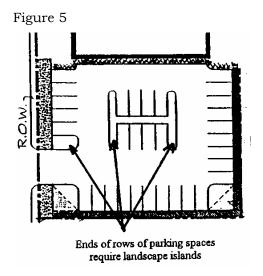
This section shall not apply to the Central Commercial District. Parking areas in the Central Commercial District shall have wheel stops or curbing installed so as to not allow the front of a vehicle to protrude into adjacent property.



# 22-59.13 Landscape Requirements for the Interior of Parking Areas

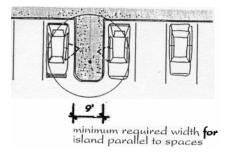
- a) The interior of parking areas shall contain tree landscape islands and peninsulas located in such a manner as to divide and break up large expanses of paving; guide and delineate an orderly traffic flow pattern; promote pedestrian and vehicular safety; and preserve existing trees and vegetation.
- b) A maximum of twelve (12) consecutive parking spaces in a row shall be permitted without a tree landscape island or peninsula.

c) Each end of each row of parking spaces shall require a tree landscape island (See Figure 5).



d) The minimum width for a tree landscape island or peninsula that is parallel to a parking space shall be nine (9) feet, and the minimum length for the same shall be eighteen (18) feet. Each tree landscape island or peninsula shall contain a minimum of one (1) shade tree and the balance of the area shall contain a permeable ground cover (See Figure 6).

Figure 6



e) No more than four (4) double rows of parking spaces shall exist without a landscape island extending the entire length of one double row of parking. Such tree landscape island shall be a minimum of nine (9) feet in width and shall contain one (1) shade tree per forty (40) linear feet of length and the balance of the area shall contain a permeable ground cover (See Figure 7).

One double row of parking spaces

Nine (9) foot wide landscape island separates rows of parking spaces

f) The permit-issuing authority may require the channelization of ingress and egress points to parking areas in order to facilitate and ensure the safe and efficient movement of vehicular traffic into, from, and through such parking area. Channelization may be accomplished by limiting parking spaces along primary ingress and egress points, and or the use of tree landscape islands, raised concrete islands, or other structures that will guide and delineate traffic flow.

## Landscape Material Installation and Maintenance

- (A) All landscaping material shall be installed in accordance with accepted planting procedures prior to the issuance of a Certificate of Occupancy or a financial guarantee posted in accordance with Section 22-59.11.
- (B) The owner, occupant, tenant, or agent shall be jointly and severally responsible for the maintenance of all landscaping. Landscaping shall be maintained in a good condition so as to present a healthy, neat, and orderly appearance. Proper maintenance shall include watering, weeding, mowing, mulching, fertilizing, and pruning. Any dead or damaged landscaping material shall be promptly replaced with materials of an approved size and type.
- (C) Trees planted and retained to fulfill the requirements of this ordinance shall be permitted to attain their normal, mature size. Trees shall be pruned only as necessary to promote healthy growth and prevent hazardous conditions.

## 22-59.15 Financial Guarantees

The City of Dunn recognizes that vegetation used in landscaping or screening should be planted at certain times of the year to ensure the best chance of survival. In order to ensure compliance with requirements set forth herein, and to reduce the potential expense of replacing landscaping or screening materials which were installed in an untimely or improper fashion, in lieu of requiring the completion and installation of any and all landscape improvements prior to the issuance of a certificate of zoning compliance, the Code Enforcement Officer may enter into a written agreement with the developer whereby the developer shall agree to complete all required landscape improvements. Once said agreement is signed by both parties and the security required herein is provided, the certificate of zoning compliance may be issued if all other requirements of these regulations are met. To secure this agreement, the developer shall provide as approved by the Code Enforcement Officer either one or a combination of the following guarantees equal to 1.25 times the entire cost of the improvements secured. Any expense associated with cost verification by the Code Enforcement Officer shall be paid entirely by the developer.

(A) Surety Performance Bond: The developer shall obtain a performance bond from a surety bonding company authorized to do business in the state of North Carolina. The bond shall be payable to the City of Dunn.

The duration of the bond shall be until such time as the City approves the improvements.

- (B) Cash or Equivalent Security: The developer shall deposit cash, an irrevocable letter of credit or other instrument readily convertible into cash at face value, either with the City or in escrow with a financial institution designated as an official depository of the City. The use of any instrument other than cash shall be subject to the approval of the Code Enforcement Officer. If cash or other instrument is deposited in escrow with a financial institution as provided herein, then the developer shall file with the City an agreement between the financial institution and himself guaranteeing the following:
  - (1) That said escrow amount will be held in trust until released by the City and may not be used or pledged by the developer in any other transaction during the term of the escrow; and
  - (2) That in case of a failure on the part of the developer to complete said improvements, the financial institution shall upon notification of the City to the financial institution of an estimate of the amount needed to complete the improvements, immediately pay the City the funds estimated to complete the improvements, up to the full balance of the escrow account, or deliver to the City any other instruments fully endorsed or otherwise made payable in full to the City.
- (C) Default: Upon default, meaning failure on the part of the developer to complete the required improvements in the time allowed by this Ordinance or as spelled out in the performance bond or escrow agreement, then the surety, or financial institution holding the escrow account shall if requested by the City, pay all or any portion of the bond or escrow fund to the City up to the amount needed to complete the improvements based on an estimate by the City. Upon payment, the City, in its discretion, may expend such portion of said funds, as it deems necessary to complete all or any portion of the required improvements. The City shall return to the developer any funds not spent in completing the improvements.
- (D) Release of Guarantee Security: The Code Enforcement Officer may release part of any security posted as the improvements are completed and approved by the City. Such funds may be released within ten (10) days after the corresponding improvements have been so approved.

#### Recommended Plant List

The following list contains some plant species that are native to the Dunn area or are known to be suitable for the climate of the Dunn area. Applicants seeking landscape approval shall not be required to select materials from the following list, but shall be required to select plant species that are known to be suitable for the climate of the Dunn area.

(A)	Shade	Trees
-----	-------	-------

- American beech
- Bald Cypress
- Black gum
- Elm
- Hickory
- Japanese zelkova
- Laurel oak

- Live oak
- Pecan
- Pin oak
- Poplar
- Red maple
- Red oak
- River birch

- Southern magnolia
- Southern sugar maple
- Sycamore
- Water Oak
- White Oak
- Willow Oak

## (B) Ornamental Trees

- American holly
- Carolina silver bell
- Crabapple
- Crape myrtle
- Eastern redbud
- Flowering apricot
- Flowering dogwood
- Japanese Maple
- Red Cedar
- Saucer magnolia
- Southern magnolia
- Star magnolia
- Wax myrtle
- Yaupon holly

## (C) Evergreen Trees (for buffers)

- Carolina cherry laurel
- Canadian hemlock
- Eastern red cedar
- Douglas fir
- Leyland cypress
- White cedar

## (D) Shrubs and Hedges

- Abelia
- Azalea
- Barberry
- Boxwood
- Camelia

- Dwarf yaupon holly
- Gardenia
- Hydrangea
- Indian Hawthorn
- Juniper

- Nandina
- Rosemary
- Wax myrtle
- Redtips
- Privet

## (E) Groundcover

- Carolina jasmine
- Centipede grass
- Common periwinkle
- Confederate jasmine
- Creeping fig
- Creeping gardenia
- Creeping juniper
- Daylily
- English Ivy
- Fescue grass
- Honeysuckle
- Lantana
- Liriope
- Vebena
- Winter Creeper
- Zoysia grass