PART 1 - GENERAL

1.1 RELATED SECTIONS:

Refer to Section 02200 for requirements regarding earthwork and the University Utility Locate process.

Refer to Section 02500 for requirements regarding pavement and surfacing.

Refer to Section 02810 regarding irrigation requirements.

1.2 SCOPE OF SECTION:

This section contains the requirements relating to lawns, trees, shrubs, and ground cover; including subsoil scarification, soil preparation and finish grading involving topsoil and landscape accessories.

1.3 GENERAL:

A. Any construction project which disturbs existing landscaping (sidewalks, benches, fountains, retaining walls, streetlights, accent lighting, trees, shrubs, ground cover, grass, flowers, etc.) shall include appropriate new landscaping. This landscaping effort shall include an analysis of the impacts the proposed development shall have upon adjacent land uses and provide any required buffering. Buffering shall be required whenever there is a potential incompatibility between adjacent land uses due to noise, incompatible visual elements such as loading docks or solid waste storage, or conflicts in circulation. Under these conditions, landscaping strategies may include the use of dense plant material, walls, berms or other improvements designed to provide a physical separation.

B. Landscape design must be completed by a licensed Landscape Architect

1.4 PROTECTION DURING CONSTRUCTION:

A. Trees within the general construction area, as shown on drawing or marked in the field by the University, shall be protected in accordance with the latest standard accepted by the International Society of Arboriculture and/or the University’s Grounds Department.

B. Any vegetation, including trees and shrubs, severely damaged or destroyed shall be replaced by the Contractor with like species or another species approved by the Grounds Department through Project Manager or his/her designee. The Contractor shall be held liable for the difference in value between the replacement tree and the original tree. (See Section 1.8 Replacement of Trees.)
SECTION 02900-LANDSCAPING

C. Items A and B above shall be a standard contract clause in all University construction contracts.

1.5 **SUBSOIL SCARIFICATION:**

A. Scarify or cultivate subsoils in order to break-up, crush or otherwise make subsoils capable of drainage. Scarification should be done to the following depths:

1. Seeding or Sodded and Groundcover Areas 12 inches.
2. Shrubbed Areas 24 inches.
3. Tree Areas: 42 inches deep.
4. Building perimeter: 42 inches deep by 20 feet wide.

Work must be approved by Grounds Department prior to placing topsoil. Prohibit travel over scarified areas except for placing topsoil and installation of plant material.

1.6 **TOPSOIL**

A. Topsoil to have a soil analysis conducted and amended as necessary. Do not place topsoil until soil scarification and has been approved by the Grounds Department through the Project Manager. Place topsoil during dry weather. Depth of Topsoil should be placed as follows after rolling:

1. Seeded or sodded areas: 6 inches
2. Planted areas: 12 inches

1.7 **LAWNS AND GRASSES:**

A. Normal procedure shall be to use sodding for new grassed areas. Seeding shall only be considered in large areas with low public visibility, and shall be approved by the Grounds Department through the Project Manager. Make special provision for control of soil erosion.

Sod shall be sand grown; mud-grown sod is not acceptable.

B. **GRASS TYPES:**

Grass types shall be Compadre Zoysia or Tifton 419 Bermuda. Grass type shall be approved by the Grounds Department through the Project Manager. All new grass areas shall be irrigated.

C. **RESOddsing/Reseeding:**
Any area of vegetation that is damaged during construction shall be restored to its original state within 72 hours of the completion of the associated construction work. Grassed areas shall be resodded. Special care shall be taken before and after the restoration to ensure the area is not subject to erosion. Reseeding shall only be allowed in special cases with individual case approved by the Grounds Department through the Project Manager.

1.8 TREES, PLANTS, AND GROUND COVERS:

A. SELECTION:

Plant material shall be obtained from a source in plant hardiness Zone 8. Zones are defined on U.S. Department of Agriculture Plant Hardiness Zone Map. Selection of plant materials shall be subject to the approval of the Grounds Department through the Project Manager.

B. REPLACEMENT OF TREES:

Trees that are removed or damaged as a result of construction activities shall be relocated or replaced.

1. DESIGN CONSIDERATION: Whenever possible, existing trees that cannot be incorporated into proposed plans should be relocated. Relocated trees shall be planted in accordance with the International Society of Arboriculture Best Management Practices, Tree Planting. New locations shall be approved by the Grounds Department through the Project Manager or his/her designee.

2. DESIGN CONSIDERATION: When trees are unable to be relocated, the University requires the Project to replace trees at a minimum of a two for one basis (at least two new trees for each tree removed). This ratio can change at the discretion of the Grounds Department depending on the quality and size of the trees being removed. Each replacement tree shall be a minimum of 4-inch caliper for deciduous trees and 12 feet for Evergreen Trees. A list of acceptable replacement trees is maintained by the Grounds Department through the Project Manager. Replacement trees shall be selected from this list with the advice and concurrence of the Grounds Department through the Project Manager or his/her designee. A variety of replacement trees should be selected to enhance the beauty of the Campus and mitigate tree loss through disease.

3. If an existing tree not designated on the construction plan to be removed is damaged during construction, the contractor is responsible for reimbursing the University for the Value of that tree. The Value will be determined by a North Carolina Certified Arborist at the discretion of the
University. Part of the reimbursement will be allocated to the replacement of the tree as addressed in section 2.

C. TREE PRESERVATION:

The University has a policy concerning the preservation of trees on campus. To ensure that this policy is followed, the Architect/Engineer is responsible for incorporating measures into the landscape design of all projects.

Appropriate tree protection measures based on ISA best management practices. Tree protection shall be approved by the Grounds Department through the Project Manager.

In cases requiring resolution or assistance, the Grounds Department or Project Manager can be consulted.

D. MULCH:

Double shredded hardwood mulch minimum thickness 3” to a maximum thickness 4”.

END OF SECTION