SECTION 02430

SODDING

PART 1 - GENERAL

1.01 DESCRIPTION

A. Provide all labor, materials, necessary equipment and services to complete the
   turfgrass Sodding work, as indicated on the drawings, as specified herein or both,
   except as for items specifically indicated as "NIC ITEMS".

1.02 RELATED SECTIONS

A. Section 02200 – Earthwork
B. Section 02210 – Finish Grading
C. Section 02400 – Landscaping
D. Section 02410 – Shrub and Tree Relocation
E. Section 02420 – Soil Preparation and Soil Mixes
F. Section 02450 – Tree and Plant Protection
G. Other Sections as applicable.

1.03 QUALITY ASSURANCE

A. Standards: Federal Specifications (FS) 0-F-241c (1), Fertilizers, Mixed, Commercial.
B. Requirements or Regulatory Agencies: Conform to the requirements of the State
   Department of Agriculture.

1.04 SUBMITTALS

A. Growers Certifications:
   1. Turfgrass Sod species and location of field from which turfgrass sod is cut.
   2. Compliance with state and federal quarantine restrictions. Manufacturer’s
      certification of fertilizer and herbicide composition.
   3. All Contractors’ licenses and or certifications for the uses and or application
      of herbicides, pesticides and fertilizers per the State, County and governing
      municipality.

1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver turfgrass sod on pallets.
B. Protect root system from exposure to wind or sun.
C. Protect turfgrass sod against dehydration, contamination, and heating during
   transportation and delivery. Such protection shall encompass the entire period
   during which the turfgrass sod is in transit, being handled, or in temporary storage.
   Evidence of inadequate protection against drying out shall be cause for rejection.
D. Do not deliver more turfgrass sod than can be installed within 24 hours.
E. Keep stored turfgrass sod moist and under shade, or covered with moistened burlap.

F. Do not break, tear, stretch, or drop turfgrass sod. The Landscape Architect may reject sod that has been damaged by poor handling.

G. Unless otherwise authorized by Landscape Architect, the Contractor shall notify the Landscape Architect at least 48 hours in advance of anticipated delivery date of the turfgrass sod. A legible copy of the invoice showing species and variety of the turfgrass sod included for each shipment shall be submitted to the Landscape Architect for approval.

1.06 JOB CONDITIONS

A. Begin installation of turfgrass sod after preceding related work is accepted.

B. Environmental Requirements:
   1. Install turfgrass sod during months acceptable to the Landscape Architect.
   2. Do not install turfgrass sod on saturated soil.

C. Protection: Erect signs and barriers against vehicular traffic on areas prepared for sod.

1.07 GUARANTEE

A. Guarantee turfgrass sod for period of twelve months after date of Final Approval.

B. Replacement turfgrass sod under this guarantee shall be guaranteed for twelve months from the date of installation.

C. Repair damage to other plants during turfgrass sod replacement at no cost to the Owner.

PART 2 - PRODUCTS

2.01 TURFGRASS SOD

A. Turfgrass Sod Species: Refer to species indicated on approved landscape plans.
   1. Turfgrass Producers International Grade: Premium Grade Turfgrass Sod.

B. All turfgrass sod shall conform to the following requirements:
   1. Furnish in pads that are not stretched, broken, or torn.
      a. Turfgrass Sod pads shall be 18x24 inches in size (plus or minus 5%) with a 1-1/2 inch thickness (excluding top growth and thatch). Broken and torn or uneven ends will not be accepted.
   2. Uniformly mowed height when harvested:
      a. Turfgrass Sod - 2 inches in height.
   3. Thatch: Maximum 1/2 inch uncompressed.
   4. Inspected and found free of diseases, nematodes, pests, and pest larvae, by entomologist of State of Florida Department of Agriculture.
   5. Weeds:
a. Free of horse grass, nut grass or other objectionable weeds or weed seeds.

6. Uniform in green color, leaf texture, and density.

2.02 WATER
A. Free of substances harmful to plant growth, objectionable odor or staining agents.

2.03 FERTILIZER
A. FS 0-F-241c(1), Grade A or B.
B. The Chemical designation for slow release granular fertilizer with minor trace elements in addition to 12% Nitrogen, 8% Phosphorous, and 8% Potassium (Lesco or approved equal) shall have at least 50% of the nitrogen from a non-water-soluble organic source for all plantings except on lake banks.
C. Apply and distribute by methods and rates as recommended by manufacturer.
D. All State, County, and Municipal governmental regulations must be met including any licensing or certification requirements for uses and/or applications.

2.04 HERBICIDES
A. As recommended by the State of Florida Department of Agriculture.
B. Post-emergent Herbicide: Roundup as manufactured by Monsanto Corp. or approved equal.
C. Pre-emergent Herbicide: Ron Star or approved equal.
D. When next to an aquatic water body, an approved aquatic herbicide or approved equal must be utilized that will meet the State, County or Municipal requirements.
E. All State, County and municipal governmental regulations must be met including any licensing or certification requirements for uses or applications.

PART 3 - EXECUTION

3.01 INSPECTION
A. Verify that excavation for turfgrass sod is 4 inches below finish grade and approved Planting/Top Soil Mix to depth of 2 or more inches for turfgrass sod (2 inches) to meet finish grade.
B. Water dry soil to depth of 6 inches 48 hours before turfgrass sodding.

3.02 INSTALLATION
A. All areas to be turfgrass sodded shall receive finish grading per Section 02210.
B. Transplant turfgrass sod within 48 hours after harvesting.
C. Turfgrass Sod coverage must provide 100% coverage at Final Approval.
D. Begin turfgrass sodding at bottom of slopes. When installing turfgrass sod adjacent to a water body, install turfgrass sod to the waterline.
E. Lay first row of turfgrass sod in straight line with long dimension of pads parallel to slope contours.
F. Butt side and end joints. Ensure that joints are tight, thereby eliminating the need to patch and/or top-dress to eliminate gaps.

G. Stagger end joints in adjacent rows.

H. Do not stretch or overlap rows.

I. Water turfgrass sod immediately after transplanting.

J. Top dressing for turfgrass sodded areas may be clean sand (sterilized), mined from fresh water sources. Sand mined from salt water is unacceptable. Sand shall be free from construction debris, weeds, turfgrass sod, biodegradable materials, noxious pests and diseases and other deleterious materials.

3.03 LAWN ESTABLISHMENT

A. Maintenance of sodded areas shall begin immediately after so installation and shall continue until final approval. Maintenance shall consist of protecting, watering, weeding, cutting, fertilizing, repairing eroded area and re-sodding dead and or damaged turfgrass sod.

B. Watering:
   1. Keep turfgrass sod moist during first week after planting.
   2. After first week, supplement rainfall to produce a total of 2 inches per day until final acceptance.
   3. It is the contractors’ responsibility to water all plant material.

C. Mowing:
   1. Maintain turfgrass sod between 2 inches and 2-1/2 inches in height. When turfgrass sod reaches 3 inches in height, mow to 2 inches in height.
   2. Do not cut off more than 40% of grass leaf in single mowing.
   3. Remove all turfgrass sod clippings throughout.

D. Re-turfgrass sod areas which in the opinion of the Landscape Architect is required to establish a uniform stand of turfgrass sod.

E. Weed Eradication:
   1. Apply specified or approved equal post-emergent herbicide per manufacture’s rate and method of application to all areas to receive sod.
   2. Apply specified or approved equal pre-emergent herbicide before sodding and between second and third mowing, per manufacturer’s rate and method of applications.
   3. Verify that the herbicide and applicant technique will not damage sod prior to application, and replace all damaged sod and any other landscaping due to herbicide at no cost to the owner.

F. Fertilizer: Apply fertilizer uniformly at manufacturer’s recommended rate 30 days after turfgrass sodding and at three-month intervals thereafter. Water in to avoid “burning” or damaging turfgrass sod.

G. Establishment period shall extend until final acceptance by the Owner according to the conditions of the Contract.
3.04 CLEANING

A. Immediately clean spills from paved and finished surface areas.
B. Remove debris and excess materials from project site.
C. Dispose of protective barricades and warning signs at termination of lawn establishments.

END OF SECTION