SECTION 329200 – TURF & GRASSES

1.1 SUMMARY

A. Landscaping includes the layout, soil preparation, excavation for and planting of landscape materials, including lawns, weed control barriers, erosion control, and landscape edgings.

B. Topsoil preparation includes soil amendments and fertilizers.

C. The Consultant shall develop specifications and maintenance work standards so that such material and work can be measured in the field against said standard.

D. The Consultant shall prepare the construction documents such that installation of lawns and the maintenance thereof are packaged together. The University reserves the right to install topsoil and lawn and perform all necessary maintenance with its own forces or under a separate contract from the general construction.

1.2 SUBMITTALS

A. Reviewed and approved submittals from the Consultant and the Project Manager must be in place prior to delivery of material to the site.

B. Vendor’s certification of grass seed and grass seed bag tag. A sufficient quantity of tags must be submitted to substantiate that the proper quantity of seed was applied, i.e. the correct pounds per square foot.

C. Analysis of existing surface soil.

D. Source of topsoil and analysis.
   1. Analysis must include pH, mechanical analysis, organic material, nitrogen-phosphorus-potassium (N-P-K) balance, and noxious weed(s) content.

E. Planting schedule.

1.3 SUBSTITUTIONS

A. Substitutions, including plant material, must be approved in writing by the Project Manager at least ten (10) business days prior to delivery of materials to the site.

1.4 WARRANTY

A. Living Planting Materials: The installation contractor is relieved of all warranty requirements on completed and accepted installations.

1.5 MAINTENANCE

A. The University will assume all maintenance responsibilities once materials are planted and mulched.

B. Lawns: The University will assume all mowing and maintenance once lawn is installed.
1.6 MATERIALS

A. Plant Materials
1. General:
   • Plant material shall be true to botanical name.
   • No substitutions shall be made without authorization of the Project Manager.
2. Ground Covers, Grasses, and Perennials:
   • Stock: Ground covers, minimum 4” pot
   • Stock: Grasses and Perennials, minimum 1 gallon
3. Lawns: Seeded sown or sodded.
   a. Turfgrass Seed Mix, as on file at Crosman’s Seeds: 50% of two (2) varieties of endophyte enhanced perennial ryegrass, 30% of creeping red fescue, and 20% of two (2) varieties of Midnight Blue Kentucky Bluegrass.
   b. Athletic Field Seed Mix, as on file at Lakeside Sod Company: 80% of three (3) varieties of Midnight Blue Kentucky Bluegrass and 20% of two (2) varieties of endophyte enhanced perennial ryegrass.
   c. Seed shall be of current crop year with a germination rate of no less than 85%, must be certified, and have a purity of no less than 95%. Certified seed tags shall be submitted to the Project Manager and available for inspection on site. Other vendors may be used, contact Manager of Horticulture and Grounds for current seed blend specifications.
   d. Total weed seed shall not exceed .05% of mixture.
   e. Acceptable stand of grass to be free of noxious biannual weeds and annual grasses.
   f. Preparation for planting lawns
      I. Loosen subgrade of lawn areas to minimum of 4”. Remove stones over 1-1/2” in any dimension and sticks, roots, rubbish or other extraneous matter. Limit preparation to area which will be planted promptly after preparation.
      II. Spread topsoil to a minimum depth to meet lines, grades, and elevations shown after light rolling and natural settlement.
      III. Place approximately ½ of total amount of topsoil required. Work into top of loosened subgrade to create transition layer and then place remainder of planting soil. If amendments are specified, mix thoroughly into upper 4” of topsoil.
   g. Time of seeding:
      I. Seed immediately after preparation of seedbed at rate indicated per seed blend. Mechanical seed installation followed by hydromulch application. Seeding shall be done between April 1 and June 1, or between August 15 and October 1. When delays in operations carry the work beyond the seasons specified, or when conditions of high winds, drought, excessive moisture or ice are such that satisfactory results are not likely to be obtained at any stage of the work, the work will stop and it shall be resumed only when the desired results are likely to be obtained, or when approved corrective measures and procedures are adopted.
      II. Seed indicated areas within the contract limits and areas adjoining contract limits disturbed as a result of construction operations.
   h. Sod to be accepted in writing by the Manager of Horticulture and Grounds prior to installation.
      I. Lay sod within 24 hours from time of stripping. Do not plant dormant sod or if ground is frozen.
      II. Lay sod to form a solid mass of tightly fitted joints. Butt ends and sides of sod strips; do not overlap. Stagger strips to offset joints in adjacent courses. Work from boards to avoid damage to subgrade or sod. Tamp or roll lightly to ensure contact with subgrade. Work sifted soil into minor cracks between pieces of sod, remove excess to avoid smothering of adjacent grass.
      III. Anchor sod on slopes with wood pegs to prevent slippage.
      IV. Water sod thoroughly with fine spray immediately after planting.

B. Topsoil: Reuse surface soil stockpiled on-site or import topsoil. Imported topsoil and stockpiled soil shall meet the following and be verified via soil test:
1. Fertile, friable, natural loam, surface soil, free of subsoil, clay, lumps, crushed stone, weeds, and other litter.
2. pH between 6.5 and 7.2
3. Minimum 5% organic material.
4. Soil must be tested and results approved by the Manager of Horticulture and Grounds prior to delivery.
5. Recommendations on type and quantity of additives required to establish satisfactory pH factor, supply of nutrients, and organic content.
6. Unapproved soil must be removed.
7. Lawn areas require 6” of approved topsoil; planting beds as outlined on plans require 18” of approved topsoil.

C. Soil Amendments
1. Plant Beds
   - 2 to 4 yards of peat per 1,000 sq ft
   - Pre-emergent herbicide applied per label
2. Others as required to meet specifications
   - Lime, aluminum sulfate, sand, perlite, peat humus, sawdust or ground-bark humus, manure, and herbicides.

D. Fertilizers: Bonemeal, superphosphate, commercial fertilizer, and slow-release fertilizer applied per package label and standard professional practice. Commercial Fertilizer shall be of neutral character, with some elements derived from organic sources. Soil test to indicate if phosphorus is required.
1. All applications shall be in accordance with labeled instructions, applicable local, state and federal laws and ANSI A300 (Part 2)-1998.
2. At least 50% of nitrogen to be in organic form.
3. Plant Beds –
   - A 5-0-5 nitrogen-phosphorus-potassium (N-P-K) slow release granular fertilizer at 2-3 lb. per 100 sq. ft. to be incorporated with peat moss at planting.
4. Turf
   - 1 lb. actual nitrogen in 10-0-4 slow release granular fertilizer as seedbed is prepared per 1,000 sq. ft.

E. Weed Control Barriers: Nonwoven fabric; installed prior to installation of mulch.

F. Erosion Control Materials: Blankets and fiber mesh.

G. Landscape Edgings: To be used only when stone mulch abuts lawn
1. ¾” X 4” deep steel edging secured with minimum 15” stakes. Finish shall be two (2) coats of black rust inhibiting paint.

1.7 INSTALLATION

A. The Contractor Project Manager shall stake out and review plant material locations for approval by the Project Manager and Manager of Horticulture and Grounds prior to planting operations.

B. The Contractor shall be responsible to maintain the health of all plant material stored on site including but not limited to watering and mulching prior to installation.

C. Plant Density:
   1. Ground Covers: Shall be placed on centers such that the area shall be covered, free of voids and gaps, immediately.

D. Recondition existing lawn areas damaged by Contractor operations, including relief of compacted areas with aerating and proper seedbed preparation prior to reseeding. Maintenance requirements shall match those of new plantings.

E. Control dust and mud to keep the traveled way free from materials spilled from hauling equipment, including control in areas outside the contract limits.
F. Maintain the traveled way such that snow, ice, and drainage control may be maintained by others. Within the contract limits, the Contractor shall maintain the traveled way including snow, ice, and drainage control.

G. Remove and dispose of surplus soil and waste material off Owner's property.

1.8 INSPECTION AND ACCEPTANCE

A. The Consultant, Project Manager, and/or Manager of Horticulture and Grounds must inspect plant materials for general health, shipping damage, compliance with the standards stated herein and contract specifications and may reject plant materials at the place of growth, place of resale, or at the site, before planting.

B. The Consultant, Project Manager, and/or Manager of Horticulture and Grounds must inspect planting pits for size, preparation, and backfill mixture, before planting.

C. When landscape work is completed, the Project Manager and Manager of Horticulture and Grounds will make an inspection to determine acceptability.

D. The installation contractor shall provide a minimum 24-hour notice in advance of planting, bed preparation, and/or backfilling to the Project Manager to assure that inspection by University personnel is properly coordinated.

E. When landscape work does not comply with requirements, replace rejected work as specified and maintain until re-inspected and accepted by the Project Manager and Manager of Horticulture and Grounds. Replacement of rejected work will be at no additional cost to the Owner.

END OF SECTION 329200