

1.0 GENERAL

1.1 Scope

- .1 This guideline addresses the materials, methodology and services necessary for complete installation of sodded lawns, which includes the control of noxious and pernicious weeds within seeded lawns and meadows.
- .2 Due to the current prevalence of damages associated with Chaffer Beetle, the scope of sod installation should be limited if not suspended where practical in favour of seeding with resistant seed mixtures, or designing with alternate groundcover or planting. See Section 32 92 00, Turf and Grasses, 2.6.3.2.

1.2 Related Work

- .1 Related Work in Other Sections:
 - .1 Section 32 80 00 Irrigation
 - .2 Section 32 91 00 Planting Preparation
 - .3 Section 32 93 00 Plants
 - .4 Section 32 92 00 Turf and Grasses

1.3 Pertinent Standards and Legislation

- .1 Conform to the requirements of the latest editions of the following standards and legislation:
 - .1 Canadian Landscape Standard – Current Edition
 - .2 British Columbia Standard for Turfgrass Sod
 - .3 British Columbia Weed Control Act
 - .4 Canada Seed and Fertilizer Act
 - .5 Canada Pest Control Products Act

1.4 Submittals

- .1 Provide UBCO Facilities Manager of Landscape and Building Services with guaranteed analysis of the grass mixture and purity of sod. Submit specification data of sod prior to installation. Submit soil analysis of sod growing medium with sod specification data.

1.5 Inspections and Approvals

- .1 All sod installations are subject to inspection and may be rejected for failure until Total Performance. Replace rejected materials and remove from site at no expense to UBCO.
- .2 Notify UBCO Facilities Manager of Landscape and Building Services at the completion of work for an inspection for Substantial Performance.
- .3 Final inspection of sodded lawns will be made at the end of the specified warranty period. For release from the Contract, all sodded lawns must be alive and in a healthy, satisfactory growing condition at the time of inspection.

2.0 MATERIALS AND DESIGN REQUIREMENTS

2.1 Product Handling

- .1 During shipping, storage and installation, protect sod against drying, to the requirements of the B.C. Standard for Turfgrass Sod.

2.2 Protection

- .1 Protect all sodded areas against trespassing and from damage at all times until Acceptance. If any sodded areas are damaged, they shall be repaired as required by the Contractor.

2.3 Warranty

- .1 All workmanship and materials covered under Work of this Section shall be warrantied for a period of one (1) full year from the date of Substantial Performance.

2.4 Materials

- .1 Fertilizer shall be as recommended for season of application (as per industry standards).
- .2 Dolomite Lime: Shall be finely and uniformly ground containing not less than 90% calcium carbonate.
- .3 Sod:
 - .1 Suitability: All turfgrass sod shall be suited to the locality, site conditions and intended function of each project or area.
 - .2 Sod shall be nursery grown turfgrass sod, true to type, conforming to the B.C. Standard for Turfgrass Sod. "Non-Netted" Sod only will be accepted.
 - .3 The quality grade of sod (based on B.C. Standard for Turfgrass Sod) shall be No. 1 Premium Grade grown on a screened alluvial sand base, cultivated on a sterilized soil base to ensure a weed free product. The maximum fines (silt and clay) in the alluvial sand base to be no more than 1% by weight.

Sod to be:

 - .1 'Supreme' (30% Kentucky Blue, 30% Fescue, 40% Perennial Rye) as grown by Anderson Sod Farm, 10821 Farms Road, Mission, B.C., 604-826-2383
 - .2 Or approved equal. Equivalency to be reviewed and approved by the UBCO Facilities Manager of Landscape and Building Services.
- .4 Submit sieve analysis for turf farm sand if requested by UBCO Facilities Manager of Landscape and Building Services.
- .5 The grass mixture in sod shall be suited to the location and intended use and shall be as described in the B.C. Standard for Turfgrass Sod unless otherwise specified.
- .4 Weed Control: the use of toxic pesticides for cosmetic purposes is voluntarily suspended on UBC Campus. Manual weed control is the preferred method and may be the only permitted methodology. Remove and replace significantly affected sod. Consult with Project Landscape

Architect and UBCO Facilities Manager of Landscape and Building Services for approval of any alternative organic weed control substances or methodologies.

2.5 Fertilizer

- .1 Apply fertilizer at manufacturers' recommended rates. Ensure equal distribution. Mix into top 50 mm. (2") of growing medium by disking, raking or harrowing. Application of fertilizer shall be within 48 hours of laying sod.

2.6 Liming

- .1 Add lime as required to ensure pH 6.0 to 6.5. Mix into full depth of growing medium. Coordinate with soils analysis.

2.7 Subgrade Preparation and Finishing

- .1 Obtain approval of UBCO Facilities Manager of Landscape and Building Services of subgrade and growing medium prior to laying any sod. Ensure that growing medium is placed to required depths and tolerances as specified and detailed in the Contract Documents and spread evenly over the approved subgrade. Ensure the growing medium is firm against footprints, loose in texture and free of all stones, roots branches etc. as required under Section 32 92 00 Turf and Grasses.
- .2 Ensure finish grade surfaces are tamped with roller before laying sod, and finish grades are congruent with project drawings as specified.
- .3 Grades:
 - .1 Sodded lawns must be graded for safe operation of maintenance equipment and must not exceed 3:1 maximum slope, 5:1 preferred (please refer to Section 31 22 00 Grading).
 - .2 Areas to be sodded shall be at grades as shown at the time of sodding, less an allowance for the thickness of the sod.
 - .3 Restore all areas to be sodded which are misshapen or eroded to original specified condition, grade and slope as directed just prior to sodding. Minor adjustment and refinement of finish grade to be made as directed by the Consultant.
 - .4 Crown or slope for surface drainage and eliminate all low spots or depressions.
- .4 If the surface of the growing medium is dry, lightly moisten the growing medium immediately prior to laying sod.

2.8 Sod Laying

- .1 Use full rolls where possible. No bits or sod remnants are allowed.
- .2 Only lay sod within acceptable weather conditions during March through mid-October. Do not lay sod during periods of high summer temperatures, or drought when no consistent, supplementary irrigation is available to retain sod and underlying medium in moist condition. Do not lay sod during periods of heavy rainfall and when excessive puddling is apparent on site.

- .3 Lay sod in rows with ends staggered. Butt all sections closely. Do not overlap or allow gaps wider than 2mm between sections. Top of sod to be flush with adjacent walking surfaces.
- .4 Protect new sod from heavy foot traffic during laying. Place planks or plywood if necessary to prevent damage. Lay within 24 hours after delivery to prevent deterioration. Any sod laid after the 24 hour period will be rejected.
- .5 Lay sections on slopes at right angles to the direction of the slope. Stake sod into place with wood stakes driven flush with the surface in any locations having slopes steeper than 3:1 (NOTE: Sloped lawns over 3:1 are only permitted where pre-approved by UBCO Facilities Manager of Landscape and Building Services. Interval spacing on stakes shall not exceed 500mm. Prior to pedestrian traffic being allowed onto the sod, and only after the sod is well rooted into the growing medium, pegs or stakes shall be removed or driven to an elevation 50mm below the finished surface.
- .6 Cut sod where necessary only with sharp tools.
- .7 Water thoroughly to penetrate the full depth of the growing medium as specified.
- .8 When sod has dried sufficiently, roll with 113kg. (250lb.) roller to obtain smooth uniform surface and ensure a good bond between soil and sod.
- .9 Erosion control netting shall be installed in sodded areas where required, erosion control mesh or netting shall be placed and secured with stakes or staples set firmly into the ground to a minimum depth of 150mm. Spacing of stakes or staples shall be adequate to ensure complete anchorage of the sod to the ground.

2.9 Maintenance

- .1 Refer to Section 32 01 90 Operation and Maintenance of Planting for complete maintenance guidelines.
- .2 The maintenance period begins at the time lawns and meadows are planted and continues for 55 days from the date of Substantial Performance.
- .3 Maintenance shall consist of all measures necessary to keep grass healthy, in a vigorous growing condition and well rooted into the underlying soil. Maintenance shall include, but shall not be limited to the following:
 - .1 Mowing shall be carried out at regular intervals as required to maintain grass at a standard maximum height of 60mm (2-1/2"). Not more than 1/3 of the blade shall be cut at any one mowing. Edges of sodded areas shall be neatly trimmed. Heavy clippings shall be removed immediately after mowing and trimming.
 - .2 Edging / Trimming: All lawn perimeters and around walkways, curbs, walls, bed edging, utilities and other fixtures shall be edged and trimmed at each mowing or at intervals sufficient to maintain a crisp and neat appearance. Absolutely do not use line trimmers around trees and shrubs. Sprinkler heads shall be trimmed to clear as often as necessary to keep them operating properly. The hard surface areas adjacent to the lawns shall be swept and cleaned after each operation.
 - .3 Fertilizing: Post-establishment fertilizer shall follow initial mowing and shall be carried out when grass is dry. Unless otherwise specified, use fertilizer that will provide at least 0.45kg/92.9 sq. m. (1 lb/1000 sq. ft.) of lawn area.

- .4 Watering shall be carried out when required and with sufficient quantities to prevent grass and underlying growing medium from drying out.
- .5 Rolling shall be carried out when required to remove any minor depressions or irregularities.
- .6 Weed control shall be carried out when the density of weeds reaches 10 broadleaf weeds or 50 annual weedy grasses per 37 sq. M. (400 square feet).
- .7 Weed control shall reduce the density of weeds to zero.
- .8 Any sodded areas showing deterioration or bare spots shall be repaired immediately. All areas showing shrinkage due to lack of watering shall be top dressed and seeded with a seed mix matching the original seed mix.
- .9 All sodded areas shall be adequately protected with warning signs and fencing as directed by Consultant. Fencing shall be maintained in good condition to provide a continuous barrier until Substantial Performance. Except as otherwise required by the work of the contract, the fencing shall be removed from the site only upon Acceptance.
- .10 Clean-up: Clean-up shall include removal of clippings from all walks, curbs and other paving.

*****END OF SECTION*****