

**Construction Specification for
Sodding**

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TS 5.00.01 SCOPE

This specification covers the requirements for the supplying, placing, and maintaining sod within the contract limits.

TS 5.00.02 REFERENCES

This specification refers to the following standards, specifications or publications:

City of Toronto Specifications

TS 5.10 Construction Specification for Growing Medium

Canadian Nursery Landscape Association

CNLA Canadian Standards for Nursery Stock

TS 5.00.03 DEFINITIONS – Not Used

TS 5.00.04 DESIGN AND SUBMISSION REQUIREMENTS

TS 5.00.04.01 Delivery and Storage

Schedule deliveries in order to keep storage at job site to a minimum without causing delay.

Deliver and store sod on pallets on site within 24 hours of being lifted.

During wet weather allow sod to dry sufficiently to prevent tearing during lifting and handling.

During dry weather protect sod from drying and water sod as necessary to ensure its vitality and prevent dropping of soil in handling. Dry sod shall be rejected.

Broken, dry, discoloured pieces shall be rejected by the Contract Administrator.

TS 5.00.05 MATERIALS

TS 5.00.05.01 Nursery Sod

The quality and the source of nursery sod supplied shall be according to the specifications for number one grade turf grass nursery sod as set out in the latest edition of *Canadian Standards for Nursery Stock*. It shall be Number One Kentucky Bluegrass or Kentucky Bluegrass/Fine Fescue cultivars or as specified in the Contract Documents.

The source of sod shall be approved by the Contract Administrator before it is used in the Contract. No other source shall be used without the approval of the Contract Administrator.

TS 5.00.05.02 Sod Stakes

Sod stakes shall be wooden pegs 17 x 17 x 300 mm or approved 200 mm long steel staples.

TS 5.00.05.03 Fertilizer

Fertilizer shall be a complete synthetic slow release fertilizer with maximum 35 per cent water soluble nitrogen. Apply fertilizer at rates based on soil analysis recommendations.

TS 5.00.05.04 Water

Potable water shall be used, unless the Contractor provides testing results that demonstrate the water to be used is free of contaminants or impurities that would adversely affect the germination and growth of vegetation

TS 5.00.05.05 Mesh

Mesh shall be jute or synthetic plastic.

TS 5.00.05.06 Herbicide

Type, rate, and method of application subject to approval by the Contract Administrator, and shall be according to Toronto Municipal Code Chapter 612 Pesticides, Use of.

TS 5.00.05.07 Topsoil

Topsoil shall be 100 mm in depth and be Type 1 – Standard Mix according to TS 5.10.

TS 5.00.06 EQUIPMENT – Not Used

TS 5.00.07 CONSTRUCTION

TS 5.00.07.01 Workmanship

Keep site well drained. Clean up immediately any soil and debris spilled onto pavements and dispose of deleterious materials.

TS 5.00.07.02 Preparation of Topsoil Substrate

Verify that grades are correct. If discrepancies occur, notify the Contract Administrator and do not commence work until instructed by Contract Administrator

Remove debris, roots, branches, stones in excess of 50 mm diameter and other deleterious materials. Remove soil contaminated with calcium chloride, toxic materials and petroleum products. Remove debris which protrudes more than 75 mm above surface. Dispose of removed material off site.

Cross cultivate those areas where equipment used for hauling and spreading has compacted soil.

Where new sod is to be installed in existing sodded areas not disturbed by construction, rototill the area, apply a topdressing of topsoil, and install sod as specified.

TS 5.00.07.03 Laying of Sod

Prior to sodding, obtain approval from Contract Administrator that finished grade and depth of topsoil are satisfactory.

Lay sod within 36 hours of being lifted.

Sodding during excessively wet conditions, at freezing temperatures or over frozen soil is not acceptable.

Lay sod in rows, perpendicular to slope, and with joints staggered. Butt sections closely without overlapping or leaving gaps between sections. Cut out irregular or thin sections with sharp implements.

Provide close contact between sod and soil by light rolling. Use of heavy roller to correct irregularities in grade is not permitted.

Water sod immediately after laying to obtain moisture penetration into top 75 mm of topsoil/growing medium.

Provide adequate protection of sodded areas against erosion and mechanical damage. Remove protection after lawn areas have been accepted.

TS 5.00.07.04 Layering of Pegged Sod

Place mesh on top of topsoil on slopes steeper than 3H:1V. Secure mesh in place with wooden pegs or staples at maximum intervals of 600 mm. Cover with topsoil/growing medium.

Lay sod sections perpendicular to slopes greater than 4H:1V and secure with wooden pegs. Place pegs 3 per m, 100 mm below top edge of sod roll to prevent shifting of sod. Drive pegs flush with top of sod soil.

TS 5.00.07.05 Maintenance of Sod

Water the sodded areas in sufficient quantities and at frequency required to maintain soil under sod continuously moist to depth of 75 to 100 mm.

Cut grass when height is above 65 mm and maintain to a 60 mm – 100mm height. Remove clippings longer than 20 mm in length.

Maintain sodded areas weed free.

Fertilize sodded areas one month after sodding with fertilizer at rate per soil analysis recommendations. Postpone fertilizing until following spring if application falls within four week period to expected end of growth season.

Overseed with perennial rye and fescue grass blends (excluding creeping fescue) in the fall.

TS 5.00.07.06 Maintenance Period

The Contractor shall maintain the sod for 60 Days following completion of the sod placement. During this period, the Contractor shall ensure that all placed sod is kept healthy, actively growing and green in leaf colour. At the end of the 60-day period, the Contractor Administrator will inspect the placed sod for defects. Any defective sod shall be replaced at no extra cost to the City.

Maintenance of the placed sod should be suspended during the winter dormant period (November 1 to April 30) and the 60-day maintenance period shall resume in the following spring after the winter dormant period.

The completed sod is subject to a general warranty period as specified in the Contract Documents, notwithstanding the 60-day maintenance period mentioned in this specification.

TS 5.00.08 QUALITY ASSURANCE

TS 5.00.08.01 Performance Measure

Sixty days after installation, the sod shall be green and show evidence of rooting into the underlying soil. Any areas of sod which fail to meet these requirements shall be rejected and the Contractor shall replace the rejected sod at no extra cost to the City.

Sodded areas will be considered meeting the performance measure provided that:

- 1) Sodded areas are properly established, healthy, actively growing, and green in leaf colour.
- 2) Sod is free of bare and dead spots and without weeds.
- 3) No surface soil is visible when grass has been cut to height of 40 mm.
- 4) Sodded areas have been cut minimum 2 times.
- 5) All placed sod shall be in the same location as originally placed and shall not have moved, eroded, slipped or slough. Lawns sodded after September 30 shall be accepted in the following spring one month after start of the growing season provided acceptance conditions are fulfilled.

TS 5.00.08.02 Failure to Meet Performance Measure

If the completed work does not meet the performance measures, the Contractor shall re-apply the specified materials according to this specification. All replaced sod shall be subject to a further maintenance period of 60 consecutive days.

If the Contractor cannot apply or re-apply the sod due to site condition of for any reason, the Contractor shall maintain the site and control erosion until conditions permit application of the sod.

TS 5.00.09 MEASUREMENT FOR PAYMENT

TS 5.00.09.01 Nursery Sod – Unstaked

Measurement of nursery sod shall be by area in square metres (m²).

TS 5.00.09.02 Nursery Sod – Staked

Measurement of nursery sod and stakes shall be by area in square metres (m²).

TS 5.00.09.03 Nursery Sod – Staked with Mesh

Measurement of nursery sod, stakes and mesh shall be by area in square metres (m²).

TS 5.00.10 BASIS OF PAYMENT

- TS 5.00.10.01 Nursery Sod – Unstaked – Item**
Nursery Sod – Staked – Item
Nursery Sod – Staked with Mesh – Item

Payment at the Contract Price for the above tender items shall be full compensation for all labour, Equipment and Material to do the work. Payment shall include the supplying and placing of topsoil, sod, watering, weeding, fertilizing and maintenance until Final Acceptance, as well as, sod replacement and water for sod when no separate item for payment exists for such work.