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# **TURFGRASS SOD**

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1.01 OTHER CONTRACT DOCUMENTS

The General Conditions of the Contract, General Requirements and Supplemental Conditions attached hereto shall apply to and be a part of this Section.

1.02 DESCRIPTION OF WORK The Work described herein is for the supply and installation of Turfgrass Sod and associated works.

1.03 RELATED WORK

Section 02936 Topsoil

1.04 CLASSIFICATION OF THE WORK

Turf Grass Sod shall be classified as either Boulevard Sod or Playing Field Sod and unless specified otherwise in Section 01001 Supplemental Conditions or shown on the Drawings, Turf grass Sod shall be Boulevard Sod.

1.05 SUBMITTALS

Prior to delivery of the Turfgrass Sod the Contractor shall obtain approval from the Engineer of the source of the Turfgrass Sod and shall use no other source without written authorization from the Engineer. The Contractor shall, as described in Section 01340 Submittals, provide written certification from the grower stating the name and address of the turf grass seed supplier; the percentage by weight of each grass species in the blend; and the percentage by weight of each cultivar type sown into the Turfgrass Sod. Turfgrass Sod shall not be placed until the certification has been reviewed by the Engineer.

1.06 WARRANTY

The conditions as stated in Article XII of the General Conditions of the Contract will pertain to this Section. The Contractor shall at his sole cost and expense, maintain the Turfgrass Sod until it is accepted by the Engineer as stated in Part 3.04 of this Section. Once the Turfgrass Sod is accepted by the Engineer, the Contractor shall only be responsible for the replacement of any lawn found dead and/or in poor condition for a period of twelve (12) months from the date of the Certificate of Final Completion for the Work with the exception of Turfgrass sod damaged by accidental causes or negligent maintenance practices by the City which shall substantiated by written notice from the Contractor to the Engineer during the warranty period.

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### TURFGRASS SOD

# **PART 2 PRODUCTS**

2.01 TURFGRASS SOD

Turfgrass Sod shall be commercially produced on or harvested from mineral based soils, (peat based sod is not acceptable), containing a minimum of 75 percent non-organic soil by mass that has been sown and cultivated in nursery fields as a turf grass crop using certified Canada No.1 grass seed blends as shown below:

# **BOULEVARD SOD:**

**100 Percent** Kentucky bluegrass blend of 4 or 5 fine leafed turf grass cultivars, with a minimum of 60 percent, as determined by initial seeding proportions, of acceptable low maintenance and salt tolerant Kentucky bluegrass cultivars. The seed blend shall not comprise of any more than 25 percent of any single cultivar type

### PLAYING FIELD SOD:

**60 Percent** Kentucky bluegrass blend of 4 or 5 fine leafed turf grass cultivars, with a minimum of 60 percent, as determined by initial seeding proportions, of acceptable low maintenance Kentucky bluegrass cultivars. The seed blend shall not comprise of any more than 15 percent of any single cultivar type

**AND** 

**40 Percent** Creeping Red Fescue cultivars.

Any variation to the above seed blends shall be approved by the Engineer prior to the delivery of the Turfgrass Sod.

At the time of delivery, the Turfgrass Sod shall not contain more than 10 broadleaf weeds in a 50 square meter area and shall be free of noxious weeds, debris, stones, disease, turf damaging insects and any grass species, strains or cultivars other than those specified herein. The Turf Grass Sod shall be fine leafed, of uniform texture and of sufficient density that no surface soil is visible. The Turfgrass Sod shall be mowed to a height of 50 millimetres and cut in uniform strips of not less than 300 millimetres in width and to a uniform thickness of not less than 19 millimetres and not greater than 25millimetres

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# TURFGRASS SOD

	as necessary so that the majority of the dense root system is retained and exposed on the bottom side of the Turfgrass Sod. The thickness of the Turfgrass Sod shall be consistent throughout the entire load delivered to the Site.
2.02 WATER	Water shall be potable from a source approved by the Engineer.
2.03 FASTENERS	Fasteners shall be 17x17x200 millimetre wooden pegs or approved 200millimetre long U shaped steel staples.
2.04 HERBICIDE	Herbicides shall be standard commercial products registered for sale and use in Canada under the Pest Control Products Act and as approved by the Engineer.
2.05 INSECTICIDE	Insecticides shall be standard commercial products registered for sale and use in Canada under the Pest Control Products Act and as approved by the Engineer

# PART 3 EXECUTION

# 3.01 DELIVERY OF SOD

The Contractor shall schedule the delivery and installation of Turfgrass Sod to coincide with topsoil placement operations. The Turfgrass Sod shall be delivered to the Site, unloaded and stored on pallets within 24 hours of being harvested. During transportation the Turfgrass Sod shall be protected to prevent drying and ensure it arrives at the Site in a fresh and healthy condition.

During wet weather, the Turfgrass Sod shall be allowed to dry sufficiently to prevent tearing during handling. During dry weather, the Turfgrass Sod shall be protected from drying and shall be watered as necessary to ensure its vitality and to prevent any loss of soil during handling.

# 3.02 INSTALLATION OF SOD

Prior to commencing installation of the Turfgrass Sod, the Contractor shall obtain approval from Engineer that the finished grade and depth of topsoil are acceptable and installation of the Turfgrass Sod can start.

The final compacted and rolled topsoil/sod growing medium shall have a minimum depth of 150 millimetres (ranging from 131millimetres topsoil and 19 millimetres sod to 125 millimetres topsoil and 25millimetres sod).

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### **TURFGRASS SOD**

The Contractor shall install the Turfgrass Sod during the growing season and within 36 hours of being harvested. The Turfgrass Sod shall not be installed in a frozen state or when conditions are unfavourable to the successful installation of the Turfgrass Sod.

Prior to placing the Turfgrass Sod, the Contractor shall lightly scarify and moisten the topsoil. The Contractor shall remove any reinforcement netting that may be used to assist with the harvesting and/or placement of the sod prior to installation of the Turfgrass Sod.

The Contractor shall install the Turfgrass Sod in uniform rows perpendicular to the face of the slope of the ground with the joints in adjacent rows staggered and packed tightly to adjacent pieces with no overlapping joints. A full row of Turfgrass Sod, not less than 450 millimetres in width shall be placed along the perimeter of the sodded area, parallel to any planting, walking areas or curbs. All irregular, bare, thin, or dead areas shall be cut out square, using a sharp knife, and replaced with healthy Tuffgrass Sod.

On slopes greater than 3 horizontal to 1 vertical (18 degrees) the Contractor shall install the Turfgrass from the bottom of the slope upwards with every second row secured to the topsoil with approved fasteners, driven flush with the grass surface, at intervals of 1.0 metre on centre and 100 millimetres below the top edge of each sod piece. On slopes greater than 2 horizontal to 1 vertical (26 degrees) every row of Turfgrass Sod shall be secured as stated herein.

Within two hours following installation the Contractor shall lightly water the Turfgrass Sod. He shall then roll the Turfgrass Sod in two (2) directions at right angles to establish contact with the topsoil and create a uniform even surface with the adjoining grades, sidewalks and curbs. Heavy rolling to correct irregularities in the grade shall not be permitted. Edges and areas near existing fixtures that can not be rolled shall be thoroughly tamped by hand.

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### **TURFGRASS SOD**

After the turf grass has been watered and rolled, the Contractor shall fill all open joints in the Turfgrass Sod with a mixture of topsoil and grass seed. The grass seed shall be of the same approved blend used to sow the Turfgrass Sod and mixed in a ratio of 60 percent topsoil to 40 percent grass seed. The topsoil and grass seed mixture shall be placed into the openings by means of heavy raking and then rolled.

Following light rolling and joint filling, the Contractor shall water the Turfgrass Sod in sufficient quantities to thoroughly saturate both the turf grass and the underlying topsoil to a minimum depth of 150 millimetres.

All excess soil, debris, or deleterious materials on the pavement or sidewalk surfaces shall be removed and disposed of.

Repairs, rolling, joint filling, watering and cleanup shall be completed within 48 hours of the initial placement of the Turf Grass Sod.

3.03 MAINTENANCE OF SOD

The maintenance period will not commences until the Engineer has certified the installation of the Turfgrass Sod, as stated in Part 3.02 of this Section, is complete.

The Contractor shall maintain the Turfgrass Sod for a minimum continuous period of thirty (30) days or until such a time as the Work has been accepted by the Engineer as stated in Part 3.04 of this Section. Maintenance of the Turfgrass Sod shall include all watering, mowing, weed control, pest control, and cleaning of the turfgrass, including replacement of dead, damaged, deficient, slipped, washed out or vandalized turfgrass.

The Contractor shall water the Turfgrass Sod in sufficient quantities and at the required frequency to keep the topsoil beneath the sod continuously moist to a minimum depth of 100millimetres. And unless stated otherwise in Section 01001 Special Provisions, the Contractor shall make all necessary arrangements to obtain a supply of water and shall pay all costs associated with obtaining the water.

The Contractor shall provide adequate protection of turf grass areas from erosion, pedestrian and mechanical damage and shall only remove such protection after the turf grass area has been accepted by the Engineer.

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### **TURFGRASS SOD**

The Contractor shall first mow the Turfgrass Sod to 60 millimetres in height when the turf grass has initially grown to a height of 80 millimetres. Clippings shall be removed and disposed of if the grass appears smothered.

The Contractor shall apply herbicide when broad leaf weeds begin to develop. Herbicide shall be applied in accordance with the manufacturer's instructions and only when winds are less than 10 kilometres per hour and the air temperature is above 10 degrees Celsius

Areas sodded after September 15th which do not have an even stand of healthy live growth and/or adequate root development in that year, shall have the maintenance period commence on May 15th of the following year and continue as stated in this Section.

# 3.04 TERMINATION OF MAINTENANCE PERIOD

The Engineer will terminate the Turfgrass Sod maintenance period when all of the following criteria have been met by the Contractor.

- .1 The Turfgrass Sod supplied meets the blend and seed mixture requirements as specified herein; and
- .2 The Turfgrass Sod is green, even colored, and free of bare or dead sections, visible joints, undulations, and settlement, and
- .3 The Turfgrass Sod does not contain more than 10 broadleaf weeds in a 50 square metre area, and
- .4 The TurfGrass Sod roots are well anchored into the underlying moist topsoil and the Turfgrass Sod is established, healthy and vigorously growing; and
- .5 No surface soil is visible after the grass has been moved a minimum of two (2) times to a height of 60 millimetres, with the most recent moving occurring within two (2) working days prior to the date of inspection, and
- .6 The Site is clean and the Turfgrass area is free of any visual obstructions such as leaves.

If the Turfgrass Sod does not meet the above criteria, all deficiencies shall be corrected by the Contractor as required by the Engineer and further maintained by the Contractor as stated in Part 3.03 of this Section.

# **END OF SECTION**