

## SECTION 73

### SODDING

#### 73.1 DESCRIPTION

**A. General:** This work consists of preparing the ground surface and furnishing, transporting, and placing live sod.

**B. Related Work:**

Section 17	Salvaging, Stockpiling, and Placing Topsoil
Section 18	Erosion, Sediment, and Water Pollution Control
Section 71	Fertilizing
Section 76	Compost
Section 203	Submittals

#### 73.2 MATERIALS

The sod shall consist of a dense, well-rooted growth of Kentucky Blue Grass, fescue, or sod as approved by the Engineer. The sod shall be free from noxious weeds and substantially free from other objectionable grasses, weeds, or foreign materials detrimental to the development and future maintenance of the sod.

At the time the sod is cut, the grass shall have a length of approximately two (2) inches. If longer than three (3) inches, the grass shall be cut to approximately two inches in length, and the sod shall have been raked free of debris. Sod shall be delivered to the jobsite in live, moist condition without undue crumbling or breaking.

If the sod is in a dry condition so that it cannot be cut, rolled, loaded, and hauled to the jobsite, without crumbling or breaking, the Contractor shall apply water to the sod in sufficient quantities to provide a well-moistened condition of the sod to the depth to which it is to be cut. This watering shall be at no additional cost to the City.

Water used on sod shall be from municipal, domestic, or other sources known to be suitable for irrigation.

Fertilizer shall be provided as indicated in Section 71.

#### 73.3 CONSTRUCTION REQUIREMENTS

**A. Cutting and Salvaging Sod:** Shall be machine cut into rectangular sections. The sections shall be of uniform width of not less than ten (10) inches or more than twenty-four (24) inches. The sections may vary in length, up to nine (9) feet maximum. The sod shall be cut to a depth of three-fourths ( $\frac{3}{4}$ ) inch or more so the dense root system will be retained and exposed in the bottom side of sod, and the sod can be handled

without undue tearing or breaking. Sod shall be rolled with the top growth inside. Sod strips, which indicate crumbling, tearing, breaking, or loss of soil during the operations of cutting, transporting, or handling will not be acceptable. Sod shall be laid in its final position within 36 hours after being cut. During the period between cutting and laying, the sod shall be protected from damage.

- B. Preparing Surface for Sodding:** The surfaces to be sodded shall be constructed to the required cross-section and contour and shall be smooth, uniform, and free from stones, roots, or other undesirable foreign material. These surfaces shall be undercut to sufficient depth below adjacent areas so the top of newly-laid sod will be flush with any adjacent seeded or turfed areas and between one inch below to flush with top of sidewalks, curbs, or other structures. Some trenching-in of the areas to be sodded and some building up of the adjacent areas may be necessary. The adjacent areas shall smoothly blend with each other, without sharp breaks in the contours.

The prepared soil bed shall be inspected and approved prior to sodding. If the soil bed is dry and/or hot, the Engineer may require the Contractor to pre-water to a depth of one (1) inch prior to sodding. The earth planting bed shall be allowed to dry sufficiently after watering to permit sod placement without tracking.

Immediately prior to placing the sod, the soil shall be loosened and brought to a fine granular texture, to a depth of not less than one (1) inch. Clods, lumps, weeds, rocks larger than one (1) inch, or other unsatisfactory materials shall be removed.

- C. Laying Sod:** Sod shall be placed as soon as practicable following the winter season. When sod is available in the spring, the Engineer may issue written notice requiring the Contractor to begin placing sod within 10 working days of receipt of the notice. Failure to begin placement of the sod within the specified time shall result in issuance of a stop-work order. However, contract time will continue to be counted.

The sod on berm slopes shall be laid by hand in horizontal strips, beginning at the bottom of the slope and working upwards. In waterways, strips shall be laid parallel to the flow. Each section of sod shall be laid parallel to the flow. Each section of sod shall join the adjacent sections without overlapping but shall abut snugly against the section previously laid. End joints shall be staggered and open joints or gaps shall be filled with sod cut to the proper size and shape.

The top and bottom ends of sodded areas shall extend at least two (2) inches into the ground or ditch bottom. Other edges of sodded areas shall be turned into the ground two (2) inches and covered with a layer of topsoil which shall be compacted to conduct the surface water over the edge of the sod and blend the sodded areas into the adjacent finished grades.

Fertilizer shall be spread by hand operated broadcaster following sod installation as per Section 71.

- D. Anchoring:** On slopes steeper than 6:1, the sod shall be anchored with one (1) inch wide by six (6) inch long U-shaped staples made from No. 11 or heavier ungalvanized steel wire. A minimum of four (4) staples per sod strip in every other row shall be used.

In waterways, two (2) staples shall be placed in the upper end of each sod strip in the end facing flow.

Staples shall be driven flush with the top of the sod. Additional staples as required, to obtain adequate anchoring shall be placed as determined by the Engineer.

- E. Watering:** After sod has been laid, it shall be watered to provide a moist condition through the thickness of the sod and six (6) inches into the underlying soil bed.

For a period of three (3) weeks after sodding and initial watering, the Contractor shall apply adequate water to insure proper growth of the grass. The Engineer may waive watering requirements if adequate natural moisture has been present. At the end of the three (3) week watering period, the Engineer will inspect to determine if the sod is rooted into the underlying soil and is alive and growing. If sod has not satisfactorily rooted into the soil and is not alive and growing, the Engineer will determine if new sod and / or additional watering, at the Contractors expense, are required. Replaced sod shall be watered as required for the original.

After the Engineer acceptance of the newly sodded areas, the Contractor shall notify all affected property owners, with notification of watering requirements provided by the Owner, that they will be responsible for watering the newly sodded areas. The Contractor shall provide written verification that affected property owners have both been notified and accepted the condition of the newly sodded areas.

The growing season for sod is April through September.

- F. Rolling:** While not generally required, rolling may be specifically ordered for any areas where an especially smooth and level surface is desired.
- G. Seasonal Limitations:** Sod may be installed any time during the growing season. Dormant sodding shall be approved by the Engineer.

#### **73.4 METHOD OF MEASUREMENT**

Sodding will be measured to the nearest whole square yard. Necessary resodding of areas damaged from causes beyond the control of the Contractor will be measured and added to the original quantity used.

#### **73.5 BASIS OF PAYMENT**

Sodding will be paid for at the contract unit price per square yard. Payment will be full compensation for cutting, preparing the earth planting bed, for furnishing, hauling, placing, anchoring, rolling, tamping, and maintaining the sod, and for labor, equipment, tools, and incidentals, which may be necessary.

Payment for fertilizing sod will be included under a separate bid item. Water for sodding shall be considered incidental and shall be included in the unit price bid for sodding.

**END OF SECTION**