

CITY OF SAN ANGELO**ITEM 160****FURNISHING AND PLACING TOPSOIL****160.1 DESCRIPTION.**

This Item shall govern for the furnishing and placing of approved topsoil to the depths and area shown on the Plans or as directed by the City.

160.2 MATERIALS.

(1) **Topsoil.** The topsoil shall be fertile soil, be easily cultivated, be free from objectionable material, have a relatively high erosion resistance and be readily able to support the growth of planting, seeding or sodding.

(2) **Water.** Water shall be free of industrial wastes and other objectionable material. Water source to be approved by the City.

160.3 SOURCES.

The topsoil may be obtained from the right-of-way at sites of proposed excavation or embankment when shown on the Plans or designated by the City.

The approximate quantity of acceptable topsoil to be salvaged from the project will be shown on the Plans. The topsoil may also be obtained from approved sources, which are outside of the right-of-way and have been secured by the Contractor.

160.4 CONSTRUCTION METHODS.

Any trash, wood, brush, stumps or other objectionable materials encountered at the source shall be removed and disposed of as approved by the City prior to beginning of work required by this Item. The source and stockpile areas shall be kept drained, insofar as practicable, during the period of topsoil removal. The source and stockpile areas shall be left in a neat and presentable condition upon completion of the removal of all material required.

The placement of the topsoil shall be undertaken as soon as the grading operations have been completed or at such time as specified by the City. The topsoil shall be spread so as to form a cover of uniform thickness (loose) as shown on the Plans. After the topsoil has been placed and shaped, it shall be sprinkled and/or rolled if directed by the City. Rolling shall be performed with a light corrugated drum roller of the type approved by the City.

(1) **Right-of-Way Sources.** The existing topsoil shall be moved from within the limits of construction as shown on the Plans and stockpiled in a windrow along the right-of-way line, or at designated locations. It also may be spread over an area that is ready for topsoil application in accordance with the Plans or as directed by the City.

(2) Contractor-Obtained Sources. The Contractor shall notify the City sufficiently in advance of the opening of any material source to permit inspection of the site and to prepare for any necessary measurement. Only material, which meets the approval of the City, shall be utilized.

160.5 MEASUREMENT.

This Item will be measured by one of the following methods as shown on the Plans.

When Class 1 measurement is specified, topsoil will be measured by the 100-foot station as measured along the baseline of each roadbed.

When Class 2 measurement is specified, topsoil will be measured by the square yard complete in place.

When Class 3 measurement is specified, topsoil will be measured by the cubic yard in vehicles at the point of delivery.

When Class 4 measurement is specified, topsoil will be measured in the stockpile and the volume computed in cubic yards by the method of average end areas.

When Class 5 measurement is specified, topsoil will be measured in its original position at the source and the volume computed in cubic yards by the method of average end areas.

160.6 PAYMENT.

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Furnishing and placing Topsoil" of the class and depth specified. This price shall be full compensation for securing any necessary source(s) and any royalty involved; for furnishing all materials, for all excavation, loading, hauling, stockpiling and placing; and for furnishing all labor, tools, equipment and incidentals necessary to complete the work.

"Rolling" and "Sprinkling" will not be paid for directly, but will be considered subsidiary to this Item, unless otherwise shown on the Plans.

Payment will not be made for any material, which is used for purposes other than, that which is required by this Item.

Excavation required by this Item in cut sections will be measured and paid for in accordance with the provisions of the various excavation items involved, with the provision that excavation will be measured and paid for once only, regardless of the manipulations involved.

Excavation which will be paid for directly, in accordance with the various excavation Items involved, will include the original in-place volume of topsoil salvaged from cut sections, as well as the additional volume of excavation made necessary for placing the topsoil, in cut areas. Excavation, for topsoil, in areas upon which embankment will be placed will neither be measured nor paid for directly; its cost will be included in the unit price bid for this Item. The foregoing provisions are depicted in Figure 1.

Figure 1
Roadway Cross Sections Showing Payment for
Excavation and Embankment

