

## ITEM 110

### ROADWAY EXCAVATION

110.1 Description. Roadway excavation shall consist of the required excavation within the limits of roadway including roadway ditches (excluding excavation designated as channel excavation, structural excavation, etc.), the removal and proper utilization or disposal of all excavated materials; and the constructing, shaping and finishing of all earthwork on the entire length of roadway and the approaches to same, in conformity with the required lines, grades and typical cross section and in accordance with the specification requirements herein outlined. All suitable excavation material shall be used for embankment, prior to using borrow material. Compaction of embankments shall be as outlined in the Item 132, "Embankment". The roadway is defined as being from right-of-way line to right-of-way line, within the limits of the project.

110.2 Construction Methods. All roadway excavation and corresponding embankment construction shall be performed as specified herein and in accordance with the Item 132, "Embankment" and the completed roadway shall conform to the established alignment, grades and cross sections.

All suitable excavated materials shall be utilized, insofar as practicable, in constructing the required roadway sections or in uniformly widening embankment, flattening slopes, etc., or as directed by the Engineer. Suitable materials will be defined by the Engineer. Unsuitable roadway excavation and roadway excavation in excess of that needed for construction shall be known as waste and shall become the property of the Contractor to be disposed of by the Contractor outside the limits of the right of way. The Contractor shall provide the disposal locations and the total quantity of all excavated and/or disposed of material.

The disposal site shall not be an environmentally sensitive area, waters of the United States, wetlands, or floodway. It is the responsibility of the contractor to contact the proper authorities to determine land use classification and to obtain any necessary permits. If the disposal site is defined in the plans, then the City of Deer Park shall be responsible for ensuring that the appropriate Department of the Army permit has been obtained for the activity, as necessary. Unsuitable material encountered below subgrade elevation, shall be replaced with material from the roadway excavation, or with other suitable material.

During construction, the roadbed and ditches shall be maintained in a condition to insure proper drainage at all times. Ditches and channels shall be so constructed and maintained as to avoid damage to the roadway section.

All roadway excavation utilized as embankment shall be placed in accordance with Item 132, "Embankment".

In those cases where the Contractor has over-excavated beyond the lines and grades shown on the drawings, or designated by the Engineer, it shall be the Contractor's responsibility to replace the material and recompact it at his own expense. The material shall be replaced in accordance with the Item 132, "Embankment".

At the location of pipeline crossings, the Contractor shall suspend machine excavation to within 5 feet of any pipeline right of way, until a company representative is present to identify pipe location and to further direct excavation operations. The notification to the pipeline company of the Contractor's operations and the request for their representative's attendance shall be the responsibility of the Contractor. The Contractor shall not be reimbursed directly for any work or expenditure as a result of intersecting any pipeline operation. Any contingent costs therefore shall be anticipated in the preparation of the bid and included as distributed items of cost in the price for roadway excavation.

110.3 Special Roadway Excavation. When geotechnical conditions dictate, the Engineer may direct the Contractor to excavate material, which will not properly support the roadway, and replace it with other material. In those cases the additional excavation shall be paid as provided for under "Extra Work Items". The material used to replace the excavated material shall be in accordance with Item 130, "Borrow" and shall be paid for as provided under "Borrow" i.e. measured in place by the method of average end areas. The material shall be replaced in accordance with the Item 132, "Embankment".

110.4 Measurement and Payment. The quantity of excavation to be paid for shall be the number of cubic yards of material computed by theoretical cross-sections, obtained from the drawings and natural ground lines, including stripping, using the method of average end areas. Field cross-sections will not be performed after construction has begun.

After bidding, if the Contractor contests the estimated quantities for stripping and/or excavation, as shown on the bid sheet, he shall provide at no expense to the City of Deer Park, sufficient documentation in the form of recoverable cross-sections and supporting computations. This Item 110 documentation shall be provided prior to proceeding with any stripping and/or excavation work. No adjustments to the excavation quantities will be allowed once stripping and/or excavation work has begun.

If the documentation provided by the contractor, is deemed by the City of Deer Park to be insufficient, additional supporting information may be required, at no expense to the City of Deer Park.

If the documentation, provided by the contractor, is deemed by the City of Deer Park to be correct and is representative of actual field conditions, then he derived quantities shall be the basis of payment for excavation.

The Contractor must submit all required documentation within fourteen (14) calendar days of the project start date, or within fourteen (14) days of horizontal and vertical control information being provided, whichever occurs last. Requests to evaluate the stripping and/or excavation quantities will not be considered after this time.

All work performed as required by this Item and measured as provided above, will be paid for at the unit price bid for "Roadway Excavation", which price shall be full compensation for preparing roadside ditches, trimming of slopes, hauling and storage of excavated material for other uses, disposal of unsuitable or surplus materials (wastage), preparation and completion of subgrade, shoulders, roadway, any necessary hauling and the furnishing of all labor, tools, equipment and incidentals necessary to complete the work.

Excavation in the roadside ditches where indicated and described on the drawings or bid items, shall be measured and paid for in linear feet.

END OF ITEM 110