

ITEM 110

ROADWAY EXCAVATION

110.1 Description. This Item shall govern the required excavation within the roadway limits, including roadside ditches, and either of the following:

- proper re-use of the suitable material for embankment within project limits, or
- removal and disposal of excess or unsuitable excavated materials.

This Item includes stripping, constructing, shaping, and grading of all earthwork along the entire length of the roadway including approaches to the same. Both structural and channel excavation are excluded from this Item.

The roadway excavation shall conform to the required lines, grades and typical cross-sections as shown on the construction drawings, and conform to the requirements of this Item.

All suitable excavation material available at the time of need shall be used for embankment before using borrow material. Stripped material is unsuitable for re-use as embankment within the project. Compaction of embankments shall be as outlined in the Item 132 "Embankment".

The roadway limits are defined as being from right-of-way line to right-of-way line, and from beginning station to ending station.

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, for constructing the required roadway sections or embankments, flattening slopes, etc., or as directed by the Engineer. Materials suitable for onsite use shall be defined by the Engineer. Unsuitable roadway excavation and roadway excavation in excess of that needed for construction shall be considered as waste and shall become the property of the Contractor to be disposed of legally outside the project limits.

No disposal site(s) shall be located within an environmentally sensitive area, "Water of the United States", wetland, 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(s) is defined in the plans, then the County 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 the top of subgrade elevation, shall be

replaced with suitable material from the roadway excavation, or from other suitable material sources (see "Special Roadway Excavation below").

During construction, Item 560 "Maintenance and Cleanup of the Project Site" shall be implemented for the duration of the Contract. The roadbed and ditches shall be maintained in a condition to insure proper drainage at all times. Ditches 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 at a location 5 feet before reaching the pipeline right-of-way, until a company representative is present to identify pipeline locations 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 remove material which will not properly support the roadway, and replace it with suitable backfill material. Measurement will be by cubic yard of material as computed by volumetric calculations based on actual measured dimensions of the over-excavated area.

When Special Excavation is required by the Engineer, the cubic yardage calculated will be added to the plan quantity.

Payment shall include hauling, placing, compacting and any other incidentals necessary for completing the work. The backfill used to replace the unsuitable excavation shall be either of the following:

- suitable onsite material
- imported material, when directed by the Engineer, in accordance with sections 130.2 & 130.3 of Item 130 "Borrow" and shall be paid for as provided under "Borrow" The material shall be placed in accordance with the Item 132 "Embankment".

110.4 Contesting Earthwork Plan Quantities. For all earthwork items (110, 120, 130) that are designated as “plan quantity” pay items, the following procedures shall apply for contesting the plan quantities:

If, after project award, the Contractor believes there is an error in the estimated quantities for earthwork items as shown on the bid sheet, the Contractor shall provide, at no expense to Harris County, sufficient documentation in the form of recoverable cross-sections and supporting computations. If the Contractor is required to re-survey a portion of the project for the purpose of contesting the quantity shown on the plan, the cross-sections must be taken at the same locations and orientation of those presented in the plan set, and using the same control points. The quantities shall be determined using the Harris County Earthwork Quantities Worksheet. The Engineer shall, at the County’s expense, designate a representative, either a Consultant’s or Harris County’s surveyor, to verify the re-survey process meets the above requirements. The Contractor’s documentation shall be provided prior to proceeding with any items of earthwork. No adjustments to the plan quantity will be allowed once any excavation, including stripping, has begun.

The Contractor shall submit all required documentation no more than 14 calendar days after the Contractor submits his written notification of protest. Requests to evaluate earthwork quantities will not be considered after that deadline.

If the documentation provided by the Contractor is deemed by Harris County to be sufficient, and is representative of actual field conditions, then the quantities derived therefrom shall be the basis of payment.

If the documentation provided by the Contractor is deemed by Harris County to be insufficient, additional supporting information may be required at no expense to Harris County. The Contractor shall submit the additional documentation no more than 14 calendar days after being notified of the County’s request.

Incentivized Project.

The time of early completion for receiving the incentive will not be extended on any incentivized project for any reason, including any time associated with a Contractor’s protest of earthwork quantities. If the Contractor chooses to protest earthwork quantities on an incentivized project, and is successful in gaining acceptance of the revised earthwork quantities, he may be granted extra days on the project in the same manner discussed below for “Non-Incentivized Project” as well as revision of the plan quantity, but that result shall not affect the early completion incentive time as per the “Supplement to Harris County General Condition (For Roads, Bridges, and Related Work)”.

Non-Incentivized Project.

If the Contractor's protest of earthwork quantities is accepted, the Contract Time may be adjusted for the contract time lost due to any of the following which falls after project start date:

- Contractor's time for submit the original documentation after the project start date up to a maximum of 14 calendar days.
- Additional calendar days may be granted for any part of Harris County's original review period that occurs subsequent to the project start date.
- Any additional days which were required for providing additional documentation pursuant to Harris County's request, up to a maximum of 14 calendar days.
- Any additional days which were required for Harris County to review additional documentation and render a decision.

If the Contractor's protest of earthwork quantities is rejected, neither the Contract Time nor the plan quantity shall be adjusted.

110.5 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 average end area method. This result represents a plan quantity amount that is paid for as such by the Roadway Excavation bid item.

With the exception of "Special Roadway Excavation" (as documented in Section 110.3) all work performed as required by this Item and measured as provided above, shall be paid for at the unit price bid for "Roadway Excavation", which price shall be full compensation for preparing and maintaining 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, placing, compacting and the furnishing of all labor, tools, equipment and incidentals necessary to complete the work.

Re-grading of existing roadside ditches outside the limits of roadway excavation shall be measured in its original condition along the centerline and the total length be computed, in linear feet and shall be full compensation for furnishing all labor, supervision, supplies, materials, permits, and equipment required to complete the work, including all items of excavation, disposal, haul, compaction, grading, and ditch dressing as specified, in the project documents.

There are line code(s), description(s), and unit(s) for this Item.

NOTE: This Item requires other Standard Specifications

Item 130 "Borrow"

Item 132 "Embankment"

Item 200 "Stripping"

Item 205 "Subgrade"

Item 560 "Maintenance and Cleanup of the Project Site"

END OF ITEM 110