

SECTION 02228

EXTRA UNIT PRICE WORK FOR EXCAVATION AND BACKFILL

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Measurement and payment applicable to extra Work items required for utility installations which are identified in the Proposal Form, and which have been authorized in advance by the Owner's Representative and made necessary by unusual or unforeseen circumstances encountered during utility excavation.

1.02 UNIT PRICES

- A. Special excavation: Measurement for special excavation is on a cubic yard basis, measured in place, without deduction for space occupied by portions of pipes, ducts, or other structures left in place across trenches excavated under this item.
 - 1. Cost for item shall include:
 - a. Dewatering and surface water control.
 - b. Protection of pipes, ducts, or other structures encountered including bracing, shoring, and sheeting necessary for support.
 - c. Replacement of pipes, ducts, or structures damaged by special excavation operations, except where payment for replacement is authorized by Owners Representative due to deteriorated condition of pipes, ducts, or structure.
 - d. Temporary disconnecting, plugging, and reconnecting of low volume water pipes, to allow machine excavation or augering, when approved by Owner's Representative. Pipe for replacement shall be new and conform to specification requirements for type of existing pipe removed.
 - e. Resodding required for surface restoration within designated limits of special excavation.
 - f. Disposal of excess excavated material not suitable for bedding or backfill, or not required for the Project.
 - 2. Include cost for following items in payment for applicable Division 2 Sections:

- a. Trench safety system including sheeting and shoring.
 - b. Utility piping installed in trenches excavated under this item.
 - c. Removal and replacement of associated streets, driveways, and sidewalks.
- B. Extra hand or machine excavation: Measurement for extra hand excavation is on a cubic yard basis, measured in place.
1. Cost for item shall include:
 - a. Dewatering and surface water control.
 - b. Disposal of excess excavated material not suitable for bedding or backfill, or not required for the Project.
 2. Include cost for placement of extra hand excavation in payment for Extra Work Bid Item for Extra Placement of Material.
 3. Include cost for following items in payment for applicable Division 2 Sections:
 - a. Trench safety system including sheeting and shoring.
 - b. Removal and replacement of associated streets, driveways, and sidewalks.
- C. Extra placement of material:
1. Measurement for extra placement of material is on a cubic yard basis, measured in place. At the discretion of Owner's Representative, measurement of cubic yards may be calculated from the volume of Extra Hand Excavation or Extra Machine Excavation for which placement is made, minus the volume of any Extra Placement of Special Backfill authorized in conjunction with the Work.
 2. Cost for this item shall include resodding required for surface restoration within designated limits of Extra Hand Excavation or Extra Machine Excavation.
- D. Extra placement of special excavation:
1. Measurement for extra placement of special material is on a cubic yard basis, measured in place.

- 2. Cost for this item shall include geotextile material and concrete trench dams required to complete the placement of special material conforming to the Specifications.
- E. No payment will be made for delays in completion of Work resulting from extra unit price Work.
- F. Refer to Section 01025 - Measurement and Payment for unit price procedures.

1.03 DEFINITIONS

- A. Special excavation: Excavation necessitated by obstruction of pipes, ducts, or other structures, not shown on Drawings, which interfere with installation of utility piping by normal methods of excavation or augering. Contractor shall be responsible for locating such underground obstructions, sufficiently in advance of trench excavation or augering, to preclude damage to the obstructions.
- B. Extra hand excavation: Excavation by manual labor at locations designated by the Owner Representative, which is not included in, or is incidental to, bid items contained in the Schedule of Unit Prices.
- C. Extra machine excavation: Excavation by machine at locations designated by the Owner Representative, which is not included in, or is incidental to, bid items contained in the Schedule of Unit Prices.
- D. Extra replacement of material: Handling, backfill, and compaction of excavated material authorized under Extra Work Bid Items for Extra Hand Excavation or Extra Machine Excavation. Placement and compaction shall conform to requirements specified in appropriate Division 2 Sections.
- E. Extra placement of special backfill: Hauling, placing, and consolidating of special materials in conjunction with Extra Work Bid Item Extra Replacement of Material at locations designated by the Owner's Representative. Materials placed under this item shall conform to requirements for Bank Run Sand, Cement Stabilized Sand, Concrete Sand, Pea Gravel, Gem Sand, or Crushed Stone specified in Division 2 Sections.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION