

1.0 General

1.1 Section Includes

- A. Application for Payment.
- B. Defect assessment.
- C. General Scope Descriptions.
- D. Unit prices.
- E. Unit Price Schedule.

1.2 Application For Payment

- A. Submit electronic Application for Payment via email as PDF electronic files on form(s) provided in Section 00 62 76 in accordance with requirements of the General Conditions.
 - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Content and Format: Use Unit Price Bid Schedule for listing items in Application for Payment.
 - 1. Execute by a person authorized to sign legal documents on behalf of Contractor. Engineer will return incomplete applications without action.
 - 2. Include amounts of Change Orders issued before last day of construction period covered by application.
- C. Submit updated construction schedule with each Application for Payment.
- D. Payment Period: Submit at intervals stipulated in the General Conditions.
- E. Submit executed originals with transmittal letter to Engineer by method ensuring receipt within 24 hours.
- F. Substantiating Data: When Engineer requires substantiating information, submit data justifying dollar amounts in question. Include the necessary documents with Application for Payment in accordance with requirements of the General Conditions.
- G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. Contractor's Construction Schedule (preliminary if not final).
 - 3. Products list.

4. Submittals Schedule (preliminary if not final).
 5. Certificates of insurance and insurance policies.
 - H. Application for Payment at Substantial Completion: After issuance of the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent (100%) completion for portion of the Work claimed as substantially complete less the amounts certified by the Engineer as remaining.
 1. Administrative actions and submittals that must precede or coincide with submittal of the Substantial Completion Application for Payment include the following:
 - a. Final Operation and Maintenance Manuals, as applicable.
 - b. Final test and field reports.
 - c. Draft Project Record Documents.
 - I. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following. Final Application will be prepared by the Engineer following completion of the final inspection per Section 01 77 00:
 1. Evidence of completion of Project closeout requirements.
 2. Final Project Record Documents.
 3. Insurance certificates for products and completed operations and proof that taxes, fees, and similar obligations were paid.
 4. Contractor's Affidavit: Submit on form provided by Engineer.
 5. Consent of Surety to Final Payment: Submit on form provided by Engineer.
- 1.3 Defect Assessment
- A. The Contractor shall replace the Work, or portions of the Work, not conforming to specified requirements, at no additional cost to the Owner.
 - B. If, in the opinion of the Engineer, it is not practical to remove and replace the Work, Engineer will direct appropriate remedy or adjust payment.
 - C. The defective Work may remain, but unit sum/price will be adjusted to new sum/price at discretion of Engineer and/or Owner.
 - D. Defective Work will be partially repaired according to instructions of Engineer and/or Owner and unit sum/price will be adjusted to new price at discretion of Owner.
 - E. Individual Specification Sections may modify these options or may identify specific formula or percentage sum/price reduction.
 - F. Authority of Owner to assess defects and identify payment adjustments is final.
 - G. Nonpayment for Rejected Products: Payment will not be made for rejected products for any of the following reasons:

1. Products wasted or disposed of in a manner that is not acceptable.
2. Products determined as unacceptable before or after placement.
3. Products not completely unloaded from transporting vehicle.
4. Products placed beyond lines and levels of the required Work.
5. Products remaining on hand after completion of the Work.
6. Loading, hauling, and disposing of rejected products.

1.4 General Scope Descriptions

A. Scope For Pipe.

- A. Payment and Work for pipe and appurtenances indicated under the various Unit Price Work Items shall include furnishing of all labor, tools, equipment, and materials required to acceptably construct the various units including layout, pipe and fittings, alignment changes, pipe bedding, laying and joining pipe, marking tape (installed in accordance with the Pipe Trench Detail), repairing leaks, thrust restraints (installed in accordance with the Restrained Joints Details and Notes), concrete thrust blocking (installed in accordance with the Thrust Blocking Details and Charts), and all other incidentals necessary to complete the work indicated in accordance with the requirements of the Contract Documents and to the satisfaction of the Owner.

B. Scope For Excavation and Backfill.

1. Payment and Work for excavation and backfill indicated under the various Unit Price Work Items shall include furnishing of all labor, tools, equipment and materials required to acceptably construct the various units, including locating existing underground utilities, test pits, layout, saw cutting, excavation and trenching at any depth, trolley track removal, removal of abandoned utility facilities, proper disposal of materials, dewatering, any required testing, backfilling (backfill material to comply with Restoration Schedule), compaction, and all other items necessary to complete the work indicated in accordance with the requirements of the Contract Documents and to the satisfaction of the Owner.

C. Scope For Surface Restoration.

1. Payment and Work for surface restoration indicated under the various Unit Price Work Items shall include furnishing of all labor, tools, equipment and materials required to complete surface restoration for all areas disturbed as a result of the work in accordance the requirements of the Contract Documents and to the satisfaction of the Owner.

1.5 Unit Prices

- A. Take measurements and compute quantities. Engineer will verify measurements and quantities.

- B. Unit Quantities: Quantities and measurements indicated on Bid Form are for Contract purposes only. Actual quantities furnished and installed, complete in place shall determine payment.
 - 1. When actual Work requires more or fewer quantities than those quantities indicated, provide required quantities at contracted unit sum/prices.
 - 2. When actual Work requires 25 percent (25%) or greater change in quantity than those quantities indicated, Owner or Contractor may claim a Contract Price adjustment.
- C. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals; erection, application, or installation of item of the Work; overhead and profit.
 - 1. Incidentals are items which may be found necessary to complete or perfect any portion of the work in a substantial manner and in compliance with the requirements stated or implied by Contract Documents, shall be furnished by the Contractor without additional compensation. This includes the cost of testing water, disposal costs and all testing costs including laboratory fees.
- D. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Engineer multiplied by unit price for Work incorporated in or made necessary by the Work.
- E. Measurement of Quantities:
 - 1. All work measured by Engineer will be according to the standards of weights and measures recognized by the U.S. Bureau of Standards.
 - 2. Weigh Scales: Inspected, tested, and certified by applicable State weights and measures department within the past year.
 - 3. Platform Scales: Of sufficient size and capacity to accommodate conveying vehicle.
 - 4. Metering Devices: Inspected, tested, and certified by applicable State department within the past year.
 - 5. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel, or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
 - 6. Measurement by Volume: Measured by cubic dimension using mean length, width, and height or thickness, not to exceed neat dimensions shown on Drawings.
 - a. Excavations: average end method based on horizontal measurements.
 - 7. Measurement by Area: Measured on surface by square dimension using mean length and width or radius, not to exceed neat dimensions shown on Drawings.
 - 8. Linear Measurement: Measured by linear dimension, at item centerline or mean chord.

9. Depth Measurement: taken as the depth of cut from invert of pipe, or base of structure, to original grade.
10. Stipulated Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

1.6 Unit Price Schedule:

- A. The General Descriptions listed above for common scopes of work are included, as applicable, in the following Unit Items Basis of Payment.
- B. Item No. 1: Mobilization and Project Management:
 1. Basis of Measurement: By lump sum.
 2. Basis of Payment:
 - a. Mobilization: Assembly and set up for the project, necessary general plant that includes Contractor's offices, signs, shops, plants, storage areas, sanitary and any other facilities, pre-construction site documentation.
 - b. Project Management: All administrative requirements associated with completion of the Work for the Project as described in the General Conditions, and Division 1 of the Project Manual. All administrative requirements of the project including overhead costs, bonding and insurance, and compliance with laws and regulations.
 3. Payment Requisites:
 - a. 10% of the amount bid on the initial application for payment.
 - b. 10% of the amount bid on each succeeding monthly application for payment.
 - c. Remainder of amount bid when Work performed equals 75% of the total Contract Price excluding the bid price for this item.
- C. Item No. 2: Erosion and Sedimentation Control:
 1. Basis of Measurement: By lump sum.
 2. Basis of Payment: Installation and maintenance of all temporary or long-term erosion and sedimentation controls used in the course of the construction project in accordance with the Erosion and Sediment Pollution Control Details, and any items required by permits from jurisdictions having authority.
 3. Payment Requisites: The lump sum bid price for this item shall be paid to the Contractor on a percentage of Work completed basis.
- D. Item Nos. 3 through 13: Traffic Maintenance and Protection:
 1. Basis of Measurement: By lump sum.
 2. Basis of Payment: Installation and maintenance of all temporary or long-term traffic control used in the course of the construction project, to assure safe and adequate flow of traffic per PennDOT Publication 213 including but not limited to:

Channelizing Devices, Barricades, Signing, Flaggers, Temporary Barrier, Temporary Traffic Impact Attenuators, Arrow Panels, Full-Matrix Changeable Message Sign Without Communications, Temporary Pavement Markings, Pavement Marking Removal, Permanent Pavement Markings, Temporary Modifications to Existing Permanent Traffic Signals, & Temporary Timing Adjustments to Existing Permanent Traffic Signal Controller, and any items required by jurisdictions having authority. This also includes all costs associated with No Parking requirements, per authorities having jurisdiction.

Stage 11 shall include all traffic maintenance and protection necessary for short-term construction activities, including but not limited to test pits, final paving restoration, etc.

3. Payment Requisites (Stages 1 – 10):
 - a. 50% payment shall be made upon complete setup and operation of each stage.
 - b. 50% payment shall be made upon complete removal of temporary modifications and return of the roadway to its existing condition, in accordance with PennDOT and City of Harrisburg requirements.
4. Payment Requisites (Stage 11):
 - a. 10% of the amount bid on the initial application for payment.
 - b. 10% of the amount bid on each succeeding monthly application for payment.
 - c. Remainder of amount bid when Work performed equals 75% of the total Contract Price excluding the bid price for this item.

E. Item No. 14: Bypass Pumping:

1. Basis of Measurement: By lump sum.
2. Basis of Payment: Installation and maintenance of all bypass pumping, piping and appurtenances used in the course of the construction period.
3. Payment Requisites: The lump sum bid price for this item shall be paid to the Contractor on a percentage of Work completed basis.

F. Item No. 15: Test Pit:

1. Basis of Measurement: Each.
2. Basis of Payment: Includes test pits, as shown on the Contract Drawings and directed by the Engineer, as required to fulfill the Project requirements. Payment shall only be made for test pits as directed by Engineer.
3. All test pits must be performed prior to the start of excavation for pipe and manhole installation and test pits must be performed prior to ordering precast concrete sewer structures.
4. The means and methods for completing test pits shall be up to the Contractor.
5. The Work of this item does not include surface restoration.

G. Item Nos. 16 through 22: Sewer Pipe Installation:

1. Basis of Measurement: By linear foot.
 - a. Measurement for lengths will be taken between the inside walls of the sewer structures or from the connection to existing pipe, as applicable, to include the total length of pipe installed in accordance with the Contract Documents.
 - b. No payment for this item shall be made until the sewer lines have been tested and passed in accordance with the requirements of the Contract Documents.
 - c. Payment shall be made only for completed runs.
2. Basis of Payment: Sewer Pipe Installation includes all those items listed under "Scope for Excavation and Backfill" and "Scope for Pipe," and shall include excavation (at any depth), backfill, removal of existing pipe where necessary, layout, pipe, laying and joining pipe, pipe bedding, compaction, testing, PVC fittings (11.25 and 22.5 degree) for storm sewer pipes where approved by Engineer, closed circuit television inspections, and all other materials and Work required for an installation in accordance with the Contract Documents.
3. Post-Installation Closed-Circuit Television Inspection, as described in 33 01 31, and as required to complete the cleaning and inspection of the sewer pipes.
4. The Work of this item does not include furnishing and installation of sewer lateral reconnections or surface restoration.

H. Item Nos. 23 through 28: Sewer Reconnections:

1. Basis of Measurement: Each.
2. Basis of Payment: Includes all those items listed under "Scope for Pipe" and "Scope for Excavation and Backfill", and shall include furnishing and placement of fittings, transition coupling, concrete, and other materials and work required to connect new sewer pipe to existing sewer pipe for a complete installation in accordance with the Contract Documents.
3. The Work of this item does not include surface restoration.

I. Item No. 29: 12" Reconnection to Existing Structure:

1. Basis of Measurement: Each.
2. Basis of Payment: Reconnections to Existing Structures includes all those items listed under "Scope for Pipe" and "Scope for Excavation and Backfill", and Section 33 31 00 core drilling hole in existing structure, and shall include all materials, labor, and equipment to reconnect new sewer pipes to existing sewer structures in accordance with the Contract Documents.

J. Item Nos. 30 & 31: Sewer Lateral Reconnections:

1. Basis of Measurement: Each.
2. Basis of Payment: Includes all those items listed under "Scope for Pipe" and "Scope for Excavation and Backfill", and shall include layout, pipe (maximum of 5 linear feet), inserta-tees or wyes/tees, fittings, laying and joining pipe, pipe bedding, excavation (at any depth), backfill (backfill material to comply with Restoration Schedule), transition coupling, concrete (where required), compaction, testing, and all other materials and work in accordance with the Contract Documents.
3. The Work of this item does not include surface restoration.

K. Item No. 32: Sewer Lateral Cleanout:

1. Basis of Measurement: Each.
2. Basis of Payment: Includes all those items listed under "Scope for Pipe" and "Scope for Excavation and Backfill", and shall include layout, pipe (to just past the curb), fittings, cap and riser, laying and joining pipe, pipe bedding, excavation (at any depth), backfill (backfill material to comply with Restoration Schedule), transition coupling, concrete (where required), compaction, testing, and all other materials and work required to install the sewer lateral cleanout to the sewer lateral in accordance with the Contract Documents.
3. The Work of this item does not include surface restoration.
4. It is noted that this Item No. is included as a bid item for use if necessary.

L. Item No. 33: Cut and Cap Existing 18" VCP:

1. Basis of Measurement: Each.
2. Basis of Payment: Includes various items to acceptably cut and cap existing sewer pipes in accordance with the Contract Documents, including, but not limited to, installation of caps, removal of sewer pipe, excavation and backfill, and all other labor, materials and equipment as required in accordance with the Contract Documents.
3. This Item Number shall only be used for payment where flowable fill is not being installed to abandon the existing sewer.
4. The Work of this item does not include surface restoration.

M. Item No. 34: Sewer Pipe Abandonment – Flowable Fill Type C:

5. Basis of Measurement: By cubic yard.
6. Basis of Payment: Includes various items to acceptably abandon existing sewer pipes in accordance with the Contract Documents, including, but not limited to, test/access/injection pits, internal closed-circuit television inspection of pipes to confirm inactivity, installation of caps, removal of sewer pipe, installation of

flowable fill, and all other labor, materials and equipment as required in accordance with the Contract Documents.

N. Item Nos. 35 through 52: Manhole Installation/Replacement:

1. Basis of Measurement: Each.
 - a. 25% payment shall not be made until manhole is tested and passed in accordance with the requirements of the Contract Documents.
2. Basis of Payment: Includes all those items listed under "Scope for Excavation and Backfill" and shall include various items to acceptably construct pre-cast, cast-in-place and doghouse style manholes in accordance with the Contract Documents, including, but not limited to, use of locating equipment, removal and disposal of existing manhole, lining of existing exposed brick (doghouse manholes), core drilling openings (as approved by Engineer), stone subbase, concrete base, flow channel, bench, manhole sections, cone sections, flat top sections (as approved by Engineer), flat top transition sections, grade rings, frames and covers, steps, joint sealing compound, installation of all components, and testing in accordance with the Contract Documents.

O. Item Nos. 53 & 54: Manhole Frame & Cover Replacement:

1. Basis of Measurement: Each.
2. Basis of Payment: Includes various items to acceptable install new manhole frame and covers, and grade rings in accordance with Section 33 05 61 of the Contract Documents.

P. Item Nos. 55 through 67: Water Main Replacement/Relocation:

1. Basis of Measurement: By lump sum.
2. Basis of Payment: Includes Work identified in the "Scope for Pipe" and "Scope for Excavation and Backfill" descriptions. Work also includes water pipe and valve removal (where necessary to facilitate manhole installations and/or replacements, and regardless of existing water main size and material), line stops, hydrostatic pressure testing and disinfection (including preparing, disinfecting, testing, and reporting), coordination with UGI for removal of abandoned gas facilities, and all other materials and work required to completely install the water main pipe and fittings in accordance with the Contract Documents.

Q. Item Nos. 68 & 69: Storm Sewer Inlet Replacement:

1. Basis of Measurement: Each.
 - a. Payment shall not be made until inlet is tested and passed accordance with the requirements of the Contract Documents.
2. Basis of Payment: Includes all those items listed under "Scope for Excavation and Backfill" and shall include various items to acceptably construct pre-cast inlets,

pre-cast tops in accordance with the Contract Documents, including, but not limited to, removal of existing inlet (where replaced a similar location), stone subbase, concrete base, flow channel, inlet wall riser sections, top unit, frame, grate, grade adjustment rings, steps, joint sealing compound, catch basin trap/hood, installation of all components, backfill (backfill material to comply with Restoration Schedule), core drilling (as approved by Engineer), protection of existing utilities, and testing in accordance with the Contract Documents.

3. Shall also include test pit to verify existing depths of utilities around storm sewer inlet and along the proposed sewer pipe alignment between the inlet and the downstream sewer/structure, as determined necessary by Contractor.

R. Item Nos. 70 and 71: Temporary Pavement Restoration:

1. Basis of Measurement: By square yard.
2. Basis of Payment: Includes work identified in the "Scope for Surface Restoration" description and Temporary Pavement Detail. Work for this item also includes maintaining temporary pavement, excavation and disposal of temporary pavement once permanent pavement is placed, temporary traffic line re-painting to replace damaged or removed line painting until permanent markings can be placed and all other requirements specified in Section 32 12 16.
3. Payment Requisites: Payment shall be made under this item only when temporary pavement must be placed as set forth in Section 32 12 16 or as directed by the Engineer and/or Owner.

S. Item Nos. 72 through 76: Pavement Restoration:

1. Basis of Measurement: By square yard.
2. Basis of Payment: Includes furnishing of all labor, tools, equipment and materials and all work required for restoration of asphalt surfaces disturbed as a result of the Work. Work under this item includes those items listed under "Scope for Excavation and Backfill" and "Scope for Surfacing" and all work related to the placement and compaction of permanent asphalt or concrete base, binder, and wearing pavement courses specified to the depths and grade indicated in the Contract Documents. Work also includes leveling courses, tack coating, pavement sealing, edge work, and pavement marking re-painting to replace all damaged or removed pavement markings, including but not limited to Stop Bars, Crosswalks, Thermoplastic Legends/Arrows, and Lane Lines. Any Stop Bars or Crosswalks disturbed by pavement activities shall be replaced for the entire width of the roadway.
3. Work shall also include the replacement and/or repair of traffic loop sensors that are disturbed or damaged by the Contractor during the completion of the Work.
4. Work must conform to PennDOT and City of Harrisburg Specifications and the requirements provided in the Contract Documents.

T. Item No. 77: 1.5" Milling:

1. 1.5" Milling includes all work under "Scope for Excavation and Backfill" and "Scope for Surface Restoration" and all work related to the milling and disposal of existing asphalt pavement materials to a depth of 1.5" as indicated in the Contract Documents.
2. Work must conform to City of Harrisburg Standard Specifications and the requirements provided in the Contract Documents. Placement of pavement materials shall be paid for under Item No. 73.
3. Quantities for this item shall be measured and paid for on a square yard basis for work completed in accordance with the Contract Documents. Measurements for area computations will be based on neat lines as shown in the Contract Documents and confirmed in the field by the Engineer. Quantities greater than those shown on the Contract Drawings will not be considered unless specifically directed by Engineer.

U. Item No. 78: 2" Milling:

4. 2" Milling includes all work under "Scope for Excavation and Backfill" and "Scope for Surface Restoration" and all work related to the milling and disposal of existing asphalt pavement materials to a depth of 2" as indicated in the Contract Documents.
5. Work must conform to PennDOT specifications and the requirements provided in the Contract Documents. Placement of pavement materials shall be paid for under Item No. 76.
6. Quantities for this item shall be measured and paid for on a square yard basis for work completed in accordance with the Contract Documents. Measurements for area computations will be based on neat lines as shown in the Contract Documents and confirmed in the field by the Engineer. Quantities greater than those shown on the Contract Drawings will not be considered unless specifically directed by Engineer.

V. Item No. 79: Granite Curb Restoration:

1. Basis of Measurement: Linear Foot.
 - a. Measurement for lengths will be taken from the joint at either end of the removed and reinstalled curb sections, horizontally along the centerline of the curbing installed.
 - b. Payment shall be made following final asphalt pavement restoration is completed adjacent to the granite curb.
2. Basis of Payment: Includes furnishing of all labor, tools, equipment and materials and all work required for removal, preservation, and reinstallation of granite curbing that is disturbed as a result of the Work.

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3. Work for this item includes replacement of granite curbing sections, tie-ins to inlets or existing curbing, and any other incidental items required for a complete installation and restoration. Work under this item includes those items listed under "Scope for Excavation and Backfill" and "Scope for Surfacing." Work shall conform to City of Harrisburg Standard Specifications and Details.
- W. Item No. 80: Concrete Curb Restoration:
1. Basis of Measurement: Linear Foot.
 - a. Measurement for lengths will be taken from the joint at either end of the replaced curb sections, horizontally along the centerline of the curbing installed.
 - b. Payment shall be made following final asphalt pavement restoration is completed adjacent to the granite curb.
 2. Basis of Payment: Includes furnishing of all labor, tools, equipment and materials and all work required for restoration of concrete curbing disturbed as a result of the Work.
 3. Work for this item includes replacement of concrete curbing sections, construction of curb radii, depressions, transitions, tie-ins to inlets or existing curbing, and any other incidental items required for a complete installation. Work under this item includes those items listed under "Scope for Excavation and Backfill" and "Scope for Surfacing." Work shall conform to PennDOT and City of Harrisburg Standard Specifications, and the details provided on the Contract Drawings.
- X. Item No. 81: Concrete Sidewalk Restoration:
4. Basis of Measurement: By square foot.
 5. Basis of Payment: Includes work identified in the Sidewalk Typical Section Detail and includes furnishing of all labor, tools, equipment, and materials and all work required for restoration of concrete sidewalk disturbed as a result of the Work. Work also includes excavation and removal of existing concrete curb; subbase, forms, reinforcing, concrete, accessories, placing, finishing, curing, and testing with any radii, depressions, transitions, tie-ins to structures; removal, protection, replacement, and installation of brick pavers, as applicable in accordance with the requirements of the Contract Documents.
- Y. Item No. 82: Existing Manhole Inspection:
1. Basis of Measurement: Each.
 - a. Payment shall be made following receipt of organized data that includes report of elevations and alignments, photos and all other data captured by Contractor.
 2. Basis of Payment: Includes all materials, labor, and equipment necessary to conduct confined space manned entry inspection to record elevations, alignment of connected sewer pipes, condition of manhole, elevations of connected sewer pipes, and all other information required before construction of pre-cast concrete structures.
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Z. Item No. 83: Clay Dike:

1. Basis of Measurement: Each.
2. Basis of Payment: Clay Dike shall include all labor, materials, and equipment required to furnish and install Clay Dikes as indicated by the Contract Documents.

AA. Item No. 84: Flowable Fill Type A or B:

1. Basis of Measurement: Cubic Yard.
2. Basis of Payment: Includes necessary materials, labor, and equipment to furnish and install flowable fill in accordance with the Contract Documents.

BB. Item No. 85: Unsuitable Bearing Material Replacement:

1. Basis of Measurement: By cubic yard. Measurement will be made as the product of $(L \times W \times D)/27$ where:

L is the length of excavation in feet.

W is the width of excavation based on average measured width in feet.

D is the average depth of excavation in feet.

as determined or verified by the Engineer.
2. Basis of Payment: Includes those items listed under "Scope of Excavation and Backfill" for the replacement of all material below the normal bottom of the excavation, which has been deemed unsuitable for bearing by the Engineer and such determination conveyed in writing. Work includes placement and compaction of replacement material meeting the requirements of Section 31 23 33 and disposal of unsuitable materials.

CC. Item No. 86: Additional Unclassified Excavation:

1. Basis of Measurement: By cubic yard. Measurement will be made as the product of $(L \times W \times D)/27$ where:

L is the length of excavation in feet.

W is the width of excavation based on average measured width in feet.

D is the average depth of excavation in feet.

as determined or verified by the Engineer.
2. Basis of Payment: Additional Unclassified Excavation includes those items listed under "Scope for Excavation and Backfill".
3. Payment Requisites: Additional Unclassified Excavation is for excavations made, when directed in writing by the Engineer and/or Owner, which are not included in other items for payment.

DD. Item No. 87: Additional Aggregate Backfill:

1. Basis of Measurement: By ton. Measurement will be made by verification of material supplier load delivery slips.
2. Basis of Payment: Additional Aggregate Backfill includes those items listed under "Scope for Excavation and Backfill" for additional aggregate backfill furnished, installed, and compacted, when directed in writing by the Engineer and/or Owner, which is not included in other items of payment.

EE. Item No. 88: Miscellaneous Concrete:

1. Basis of Measurement: By cubic yard. Measurement will be made by verification of material supplier load delivery slips.
2. Basis of Payment: Miscellaneous Concrete Installation includes all labor, materials, and equipment required to furnish and place concrete required due to unforeseen field conditions. Work under this item shall only be undertaken when directed in writing by the Engineer.

2.0 Products - Not Used.

3.0 Execution - Not Used.

END OF SECTION