

CITY OF MIDDLETOWN  
PURCHASING DEPARTMENT

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ADDENDUM #6 TO BID #2014-017

**BID #2014-017- Francis T. Patnaude Inter-Municipal Pumping Station  
Mattabassett Regionalization Project – CT-DEEP CWF-487C**

Date Issued: **January 26, 2015**

**ALL BIDDERS ARE HEREBY ADVISED OF THE FOLLOWING INFORMATION AND/OR MODIFICATIONS TO THE CONTRACT BID DOCUMENTS:**

- **REVISED DRAWINGS**
- **REVISED SPECIFICATIONS**
- **REVISED RESPONSE TO QUESTION**

**INVITATION TO BID**

The date set for the receipt of proposals will remain the same.

**\*\*\*Tuesday, February 10, 2015 at 11:00 AM EST\*\*\***

**PLEASE VERIFY THAT YOU HAVE RECEIVED THIS NOTIFICATION IN THE SPACE BELOW AND FAX OR EMAIL THIS PAGE BACK TO THE PURCHASING DEPARTMENT.**

**FAX: 860-638-1995 EMAIL: [purchase@middletownct.gov](mailto:purchase@middletownct.gov)**

**BIDDER ACKNOWLEDGES RECEIPT OF ADDENDUM #6: \_\_\_\_\_**

**COMPANY NAME**

All bidders are hereby advised of the following amendments to the contract bid documents which are hereby made an integral part of the specifications for the subject project, prepared by the City of Middletown to the same extent as all other documents. All work shall conform to the standards and provisions of same. Bids submitted shall be deemed to include contract document information as shown in Addendum No. 1, and ALL addendums issued. General bidders shall notify sub-bidders that may be affected by this addendum as applicable. **Bidders shall be required to acknowledge receipt of this addendum in the space provided on the Bid Proposal Form.**

**Failure to acknowledge receipt of this addendum by the bidder may result in the rejection of their bid.** Bidders are directed to review changes to all portions of the work as changes to one portion may affect the work of another.

**Total Addendum: 26 pages**

**\*\*\*BIDDER NOTE:** If you have already submitted a bid you shall be required to acknowledge receipt of this addendum under separate cover in a sealed envelope clearly marked with the bid number and description. This acknowledgment must be received by the time and date specified to be accepted by the City.

\_\_\_\_\_  
Donna L. Imme, CPPB  
Supervisor of Purchases

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**BID #2014-017- Francis T. Patnaude Inter-Municipal Pumping Station  
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**ITEM #1 – REVISED DRAWINGS**

1. A revised Drawing A-5.3 (Flat Roof to Wall Connection) was not released as part of Addendum #4 as stated by #28 on p. 4. The revisions are as described by #30 on the same page.
2. Revised Drawing PI-0.3 (Control System Architecture) released as part of Addendum #4 did not include a revised note as stated by #43 on p. 5. Revise Note 3 on Drawing PI-0.3 to read as follows:  
  
“3. The pump sizes and pump monitoring systems vary based on manufacturer.”

**ITEM #2 – REVISED SPECIFICATIONS**

1. Delete Specification Section 700 “Measurement and Payment” in its entirety and replace with the revised Section 700 attached to this Addendum #6. Revised for consistency with the revised Bid Proposal issued by Addendum #4.
2. Add the following paragraph 2.06 to Specification Section 11060 “Interior Process Piping and Appurtenances”:  
  
2.06 STAINLESS STEEL PIPE AND FITTINGS
  - A. Pipe: Type 304L stainless steel seamless pipe per ASTM A312 and A999, Schedule 40 wall thickness and threaded ends per ASME B1.20.1.
  - B. Fittings: Standard pattern 150 lb. Type 304L stainless steel threaded fittings per ASME B1.20.1 and ASTM A351.
3. Add the following paragraph 2.09 to Specification Section 11070 “Interior Valves and Appurtenances”:  
  
2.09 BALL VALVES
  - A. Full port or conventional port, two-piece bronze body per ASTM B584 rated for 600 psi non-shock cold working pressure with threaded ends and stainless steel trim. NIBCO, Apollo valve by Conbraco Industries, or equal.

**ITEM #3 – REVISED RESPONSE TO QUESTION**

The response to the question whether the open channel walls and floors are scheduled to receive epoxy coating (Addendum #4, p. 22) is hereby rescinded. See revised response below:

**Q:** Drawing A-6.3 - Do the open channel walls and floors have an epoxy coating?

**A:** **The concrete walls and floors of the screen channels, vortex grit chamber, and wet wells will not receive epoxy coating.**

## SECTION 700

**MEASUREMENT AND PAYMENT****GENERAL**

- (a) The following subsections describe the measurement of and payment of the work to be done under the items listed in the BID PROPOSAL.
- (b) Each unit price or lump sum price stated in the BID PROPOSAL shall constitute full compensation as herein specified for each item of work completed in accordance with the plans and specifications.
- (c) The price for Bid Item #1 shall include compensation for excavation, disposal, backfilling and compaction for surplus excavated *non-controlled materials* (as directed by the Engineer) and installation of all necessary trench supports as required by OSHA (see 6.21 of the Special Conditions).
- (d) The price for Bid Item #1 shall include all excavation in earth. When rock is excavated, the price therefore shall be in addition to the cost of excavating earth, and no deduction shall be made in the amount of earth excavation.
- (e) If changes are made in the design based on the plans and specifications as issued, and should such changes increase or decrease the amount of work to be done, the contract will be adjusted in accordance with the applicable unit price bid items.
- (f) Where work is shown on the drawings or required by the specifications and a bid item is not provided, the cost of that work shall be included in the unit prices bid for other items of work as agreed to by the Engineer and Owner.
- (g) The Engineer has the right to adjust pipe depths shown on the Contract Drawings within the designated pay limits without additional cost to the Owner.
- (h) The prices for those items which involve excavation shall include compensation for maintaining a dry and "dust-free" environment.

**ITEM 1: PUMP STATION, GRAVITY SEWER AND FORCE MAIN IMPROVEMENTS**

- A. This Item, being paid for on a lump sum basis, will not be measured for payment.
- B. Payment for this Item will be at the contract lump sum price for "Pump Station, 42 inch, 36 inch, 12 inch Gravity Sewer and Force Main Improvements" as listed in the Bid Proposal. This price shall be full compensation for all labor, equipment, tools, supplies and materials, consisting of: clearing and grubbing; temporary sheeting, shoring and stay-bracing; earth excavation; disposal of surplus earth material, construction of structural foundation mat and walls; backfilling; compaction; erection of Pump Station Building, Civil, Architectural, Structural, Mechanical, Electrical, Process, Plumbing, and related

- equipment; flow metering vault; site improvements; final grading; paving; turf establishment; construction of 30 inch Force Main; construction of 36 inch East Main Street replacement sewer; construction of 12 inch Maple Street Sewer replacement sewer; construction of 42 inch River road Sewer, maintenance and protection of traffic, and all other work incidental and necessary to complete this Work.
- C. Bid Item No. 1 shall be performed in accordance with the following contract documents:
1. Division 1, Information for Bidders, General Conditions, Special Conditions, General Specifications, Pollution Control and Environmental Protection; 102; 104 – 673; 00800; 01010; 01020 - 01500; 01563 - 01810; 02113; 02230; 02300; 02340 - 02378; 02512 – 02821; and Divisions 3 – 16, except for specification sections; 086250; 105113 – 107500 and 113000.
- D. Tubular daylighting device, metal lockers, metal storage shelving, flag pole, appliances and building plaque shall be paid for under the applicable lump sum item in the Base Bid.
- E. Timber and Steel Sheeting left in place shall be paid for under the applicable unit price items in the Base Bid.
- F. Selective demolition and protection of existing “critical” pipes and structures shall be paid for under the applicable lump sum item in the Base Bid.
- G. Maintain Flows (Bypassing) to existing Wastewater Treatment Plant shall be paid for under the applicable lump sum items in the Base Bid.
- H. Removal and disposal of former buried treatment tank piles and substructures shall be paid for under the applicable unit price item in the Base Bid.
- I. Removal and disposal of building piles and substructures to a minimum depth of three (3) feet below final grade shall be paid for under the applicable unit price item in the Base Bid.
- J. Micro-piles supporting pump station building, valve vault, surge tank, 42 inch sanitary sewer pipe utility bridge crossing, 36 inch sanitary sewer open cut and cover section on pump station site and 42 inch sanitary sewer open cut and cover section on pump station site, shall be paid for under the applicable unit price bid items in the Base Bid.
- K. Asbestos abatement, removal and disposal; universal waste reclamation, removal and disposal; lead paint awareness for workers; and, preparation of containment areas shall be paid for under the applicable unit priced items in the Base Bid.
- L. Earth excavation and screened gravel below normal grade shall be paid for under the applicable unit price bid item in the Base Bid.
- M. Rock excavation and disposal shall be paid for under the applicable unit price bid item in the Base Bid

- N. Removal of obstructions (Bore and Jack) shall be paid for under the applicable unit price item in the Base Bid.
- O. Supporting interfering and parallel obstructions shall be paid for under the applicable unit price items in the Base Bid.
- P. Railroad inspector, Trafficmen (City Police), Trafficmen (State Police), Trafficmen (Uniformed Flagmen) shall be paid for under the applicable allowance items in the Base Bid.
- Q. Construct Temporary Waste Stockpile Area shall be paid for under the applicable lump sum item in the Base Bid.
- R. Removal and Disposal of Underground Storage Tanks shall be paid for under the applicable lump sum item in the Base Bid.
- S. Excavation and disposal of controlled materials and management of reusable controlled materials shall be paid for under the applicable unit price items in the Base Bid.
- T. Handling contaminated groundwater shall be paid for under the applicable lump sum item in the Base Bid.
- U. Overcoming obstacles during drilling micro-piles shall be paid for under the applicable unit price item in the Base Bid.
- V. Micro-piles rock socket pump station and valve vault depth greater than 10 feet as called out on the structural drawings shall be paid for under the applicable unit price item in the Base Bid.
- W. Micro-piles rock socket surge tank depth greater than 5.5 feet as called out on the structural drawings shall be paid for under the applicable unit price item in the Base Bid.
- X. Micro-piles rock socket 42 inch pipe bridge crossing depth greater than 4 feet as called out on the structural drawings shall be paid for under the applicable unit price item in the Base Bid.
- Y. Micro-piles additional verification testing shall be paid for under the applicable unit price item in the Base Bid.

**ITEM 2: FURNISH AND INSTALL TUBULAR DAYLIGHTING DEVICE, METAL LOCKERS, METAL STORAGE SHELVING, FLAG POLE, APPLIANCES AND BUILDING PLAQUE (CWF FUNDING INELIGIBLE COST)**

- A. This Item of Work shall be measured as Lump Sum consisting of furnishing and installing tubular daylighting device, metal lockers, metal storage shelving, flag pole, appliances, and building plaque, as shown on architectural drawings, referenced elevations, sections and details and Specification Sections 086250; 101416; 105113 – 107500 and 113000.

- B. This item shall be measured and paid for in accordance with the following specification sections:
- 1) Division 1, Information for Bidders, General Conditions, Special Conditions, General Specifications, Pollution Control, architectural drawings and details and Specification Sections 086250; 101416, 105113 – 107500 and 113000.

**ITEM 3: SHEETING LEFT IN PLACE – TIMBER**

- A. The work required by this section of the Specifications shall be measured by the square foot for payment.
- B. Where timber sheeting is directed by the Engineer in writing to be wholly or partially left in place, payment will be made only for the portion so ordered to be left in place. The surface area of permanent timber sheeting so ordered to be left in place and to be measured for payment, will be the product of the horizontal length of timber sheeting along each side of the excavation times the applicable height of timber sheeting below the specified cutoff level within the limits as ordered by the Engineer.
- C. No allowance will be made for quantity of timber wasted in cutting of sheeting below surface of ground, nor for timber wasted in cutting and fitting sheeting.
- D. Furnishing and installing permanent timber sheeting shall be paid for at the contract unit price per square foot "Sheeting Left in Place - Timber", as listed in the bid, which price and payment shall include the furnishing of all materials including timber, tools, labor, equipment and all other items incidental to complete the work. No timber or sheeting will be paid for which the Engineer has not ordered in writing to be left in place.
- E. No separate payment will be made for bracing but shall be included in Bid Item #1.
- F. No separate payment will be made for temporary timber sheeting and bracing but shall be included in Bid Item #1.
- G. Shall be performed in accordance with specification section 02377.

**ITEM 4: SHEETING LEFT IN PLACE – STEEL**

- A. The work required by this section of the Specifications shall be measured by the square foot for payment
- B. Where steel sheeting is directed or ordered in writing by the Owner to be wholly or partially left in place, measurement will be made only for the portion so ordered or directed to be left in place. The surface area of permanent steel sheeting so ordered to be left in place and to be measured for payment will be the product of the appropriate horizontal lengths of continuous steel sheeting along each side of the excavation times the applicable height of steel sheeting, below the specified and/or ordered cutoff levels, within the limits ordered by the Engineer.

- C. No allowance will be made for quantity of steel wasted in cutting of sheeting below surface of ground, nor for steel wasted in cutting and fitting sheeting.
- D. Furnishing and installing permanent steel sheeting shall be paid for at the contract unit price per square foot "Sheeting Left in Place - Steel", as listed in the bid, which price and payment shall include the furnishing of all materials, tools, labor, equipment and all other costs incidental and necessary to satisfactorily complete the items as indicated, specified or directed. No steel or sheeting will be paid for which the Engineer has not ordered in writing to be left in place.
- E. No separate payment will be made for bracing but shall be included in Bid Item #1.
- F. No separate payment will be made for temporary steel sheeting and bracing but shall be included in Bid Item #1.
- G. Shall be performed in accordance with specification section 02378.

**ITEM 5: SELECTIVE DEMOLITION**

- A. This Item, being paid for on a lump sum basis, will not be measured for payment.
- B. Payment for this Item will be at the contract lump sum price for "Selective Demolition" as listed in the Bid Proposal. This price shall include full compensation for all labor, equipment, tools, supplies and materials and work incidental and necessary to complete the Work consisting of the following:
  - 1. Protect and maintain existing "CRITICAL" sanitary sewer pipes, manholes and sanitary structures during construction.
  - 2. Install shoring, sheeting, bracing and protection to protect the existing pump station sanitary chamber.
  - 3. Selective demolition of existing building mechanical, electrical and plumbing (MEP) contents and superstructures at 34 East Main Street including Sewage Pump Building, Incinerator Building, and Fire Training Tower. Asbestos abatement, universal waste reclamation and lead training shall be paid for under applicable base bid unit price items.
  - 4. Remove and dispose all remaining equipment, non-asbestos containing materials and non- universal waste reclamation materials from within these buildings before building demolition.
  - 5. Remove and dispose existing asphalt paving and underlying concrete within the construction limits of disturbance.
  - 6. Remove and stockpile site entrance concrete sidewalk and curbing for reuse.

7. Remove and dispose trees, fencing, and miscellaneous debris within the construction limits of disturbance. Signs, sign posts, sign post foundations, utility poles, wires, hydrants and traffic control devices shall be removed and disposed unless otherwise noted on the drawings. Existing fences and their foundations shall be cleared and removed from the project site and disposed.
  8. Remove and dispose existing site utilities, including catch basins, sanitary manholes, water, electrical and sewer piping, within the construction limits of disturbance, unless otherwise shown on the contract drawings.
  9. Remove, haul and dispose of all site and building related solid waste debris off - site. No reuse of site or building materials will be permitted on site. Crushed building foundation and other structural materials shall not be considered suitable for reuse as granular fill, sub-base or pervious structural backfill. No crushing will be permitted on-site.
  10. Off-site crushing of concrete, brick and asphaltic materials generated from the demolition of building substructures and superstructures and paved areas shall conform to Section M.02 of the “State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction Supplemented Form 816”, dated July 2008.
- C. Shall be performed in accordance with the following specification sections:
1. Division 1, Information for Bidders, General Conditions, Special Conditions, General Specifications, Pollution Control and Environmental Protection; Sections 01505 and 02060 and Drawing C-1.2.

**ITEM 6: MAINTAIN FLOWS (BYPASSING) TO EXISTING WASTEWATER TREATMENT PLANT IN THE 10 INCH MAPLE STREET SEWER AND THE 36 INCH EAST MAIN STREET SEWER**

- A. This Item, being paid for on a lump sum basis, will not be measured for payment.
- B. Payment for this Item will be at the contract lump sum price for “Maintain Flows (Bypassing) to Existing Wastewater Treatment Plant, in the 10 inch Maple Street Sewer and the 36 inch East Main Street Sewer” as listed in the Bid Proposal. This price shall include full compensation for all labor, equipment, tools, supplies and materials and work incidental and necessary to complete the Work consisting of the following:
  1. Maintain flows and furnish and maintain temporary sewage bypass pumping
  2. Maintain flows through the 10 inch sewer on Maple Street.
  3. Maintain flows through the 36 inch sewer on East Main Street. Maintain all temporary plugs and pipes prior to permanently plugging and abandoning these sewers.

- C. Shall be performed in accordance with the following specification sections and drawings:
  - 1. Division 1, Information for Bidders, General Conditions, Special Conditions, General Specifications, Pollution Control and Environmental Protection; Sections 02062- Temporary By-Pass Pumping and Drawings C-2.2, C-2.3, and C-1.5.

**ITEM 7: MAINTAIN FLOWS (BYPASSING) TO EXISTING WASTEWATER TREATMENT PLANT IN THE 42 INCH SEWER ON RIVER ROAD**

- A. This Item, being paid for on a lump sum basis, will not be measured for payment.
- B. Payment for this Item will be at the contract lump sum price for “Maintain Flows to existing Wastewater Treatment Plant in the 42 inch sewer on River Road” as listed in the Bid Proposal. This price shall include full compensation for all labor, equipment, tools, supplies and materials and work incidental and necessary to complete the Work consisting of the following:
  - 1. Maintain flows and furnish and maintain temporary sewage bypass pumping.
  - 2. Maintain flows through the 42 inch sewer on River Road entering the existing Water Pollution Control Plant. These flows shall be maintained at all times during construction. Maintain all temporary plugs and pipes prior to permanently plugging and abandoning these sewers.
- C. Shall be performed in accordance with the following specification sections and drawings:
  - 2. Division 1, Information for Bidders, General Conditions, Special Conditions, General Specifications, Pollution Control and Environmental Protection; Sections 02062 - Temporary By-Pass Pumping and Drawings C-2.4 and C-1.5.

**ITEM 8: REMOVE AND DISPOSE PILES INCLUDING SUBSTRUCTURES SUPPORTING EXISTING BURIED TANKS (FORMER SLUDGE DIGESTION AND CLARIFICATION TREATMENT TANKS)**

- A. This Item of Work shall be measured as “PER EACH” pile jacked, removed and disposed.
- B. Where buried former treatment tank substructures are located within the construction limits of disturbance and which interfere with proposed new work, remove and dispose piles and substructure including caps, foundation mats and walls.
- C. Piles underlying former buried treatment tanks shall be excavated and exposed and locations shall be surveyed by Contractor prior to removal. Contractor shall assume all piles underlying former treatment tanks shall be removed and disposed to make way for new work. Work shall include jacking pile removal and disposal of piles and reinforced concrete underlying former buried treatment tanks.
- D. Work shall be performed in accordance with the following specification sections and

drawings:

1. Division 1, Information for Bidders, General Conditions, Special Conditions, General Specifications, Pollution Control and Environmental Protection; Specification Sections 02060 – Selective Demolition, Contract Drawings C-1.2; C-7.2 and Civil Details. City drawings posted on the City web site are to be used for informational purposes.

**ITEM 9: REMOVE AND DISPOSE PILES INCLUDING SUBSTRUCTURES SUPPORTING INCINERATOR BUILDING, PUMP STATION BUILDING, SANITARY CHAMBER AND FIRE TRAINING TOWER TO A MINIMUM DEPTH OF THREE (3) FEET BELOW FINAL PROPOSED GRADE**

- A. This Item of Work shall be measured as “PER EACH” pile cut and capped to a depth of three feet below final proposed grade.
- B. Where existing building substructures are within the limits of disturbance but do **not** interfere with proposed new work, remove and cut and cap piles, pile caps, foundation mats and walls, to a minimum depth of three (3) feet below proposed finished grade.
- C. Pilings under buildings shall be undisturbed and left in place if they do not interfere with the work or with the final grading.
- D. All site areas shall be backfilled to final grade with compacted granular material, or on-site excavated materials if approved, in accordance with Section 102, or as shown on the applicable Structural drawings.
- E. City drawings posted on the City web site are to be used for informational purposes.
- F. Sanitary chamber is a “critical” structure which shall be protected and maintained during construction. Payment for protection and maintenance of “critical” sanitary structures, chambers manholes and pipe shall be included in Bid Item: Selective Demolition.

**ITEM 10: MICRO-PILES PUMP STATION BUILDING AND VALVE VAULT**

- A. The quantity to be measured for payment under this Item shall be the actual number of linear feet of drilled shaft installed, complete and in place as specified, as measured from steel plate to **specified** bottom of rock socket.
- B. Payment for work under this Item will be at the contract linear foot price at the locations and to the limits as shown on the plans, and shall include full compensation for furnishing of all plant, labor, tools, equipment, materials and incidentals; mobilization /demobilization; and performing all operations in connection with the work shown on the Structural Drawings and Specification Section 02300-Micro-Piles..

**ITEM 11: MICRO-PILES SURGE TANK**

- A. The quantity to be measured for payment under this Item shall be the actual number of linear feet of drilled shaft installed, complete and in place as specified, as measured from steel plate to **specified** bottom of rock socket.
- B. Payment for work under this Item will be at the contract linear foot price at the locations and to the limits as shown on the plans, and shall include full compensation for furnishing of all plant, labor, tools, equipment, materials and incidentals; mobilization/demobilization; and performing all operations in connection with the work shown on the Structural Drawings and Specification Section 02300-Micro-Piles. .

**ITEM 12: MICRO-PILES – 42 INCH SANITARY SEWER PIPE BRIDGE CROSSING**

- A. The quantity to be measured for payment under this Item shall be the actual number of linear feet of drilled shaft installed, complete and in place as specified, as measured from steel plate to **specified** bottom of rock socket.
- B. Payment for work under this Item will be at the contract linear foot price at the locations and to the limits as shown on the plans, and shall include full compensation for furnishing of all plant, labor, tools, equipment, materials and incidentals; mobilization/demobilization; and performing all operations in connection with the work shown on the Structural Drawings and Specification Section 02300-Micro-Piles. .
- C. This item will be deleted from the Base Bid Contract if DEDUCT Alternate No. 2 is accepted by the Owner. The Contractor shall include the cost of this item when figuring the total cost of Deduct Alternate No. 2.

**ITEM 13: MICRO-PILES – 36 INCH SANITARY SEWER OPEN CUT SECTION ON PUMP STATION SITE BETWEEN MANHOLES 106 AND 107 INCLUDING MANHOLES 106 AND 107**

- A. The quantity to be measured for payment under this Item shall be the actual number of linear feet of drilled shaft installed, complete and in place as specified, as measured from steel plate to bottom of casing. These piles do not require a rock socket.
- B. Payment for work under this Item will be at the contract linear foot price at the locations and to the limits as shown on the plans, and shall include full compensation for furnishing of all plant, labor, tools, equipment, materials and incidentals; mobilization / demobilization; and performing all operations in connection with the work shown on the Structural Drawings and Specification Section 02300-Micro-Piles. .

**ITEM 14: MICRO-PILES –42 INCH SANITARY SEWER OPEN CUT SECTION ON PUMP STATION SITE BETWEEN MANHOLES 104 AND 106 INCLUDING MANHOLES 104**

- A. The quantity to be measured for payment under this Item shall be the actual number of

linear feet of drilled shaft installed complete and in place as specified and measured from steel plate to bottom of rock socket.

- B. Payment for work under this Item will be at the contract linear foot price at the locations and to the limits as shown on the plans, and shall include full compensation for furnishing of all plant, labor, tools, equipment, materials and incidentals; mobilization/demobilization; and performing all operations in connection with the work shown on the Structural Drawings and Specification Section 02300-Micro-Piles.
- C. This item will be deleted from the Base Bid Contract if DEDUCT Alternate No. 2 is accepted by the Owner. The Contractor shall include the cost of this item when figuring the total cost of Deduct Alternate No. 2.

**ITEM 15: BOILER INSULATION, REMOVAL AND DISPOSAL**

- A. This work will be measured by the actual number of square feet of boiler insulation removal and disposal.
- B. This work will be paid for at the contract unit price per square foot of boiler insulation, removal and disposal, which price shall include all materials, labor, tools, and equipment incidental and necessary.

**ITEM 16: WALL WOOD PANEL AND ASSOCIATED GLUE, REMOVAL AND DISPOSAL**

- A. This work will be measured by the actual number of square feet of wood panel.
- B. This work will be paid for at the contract unit price per square foot of wall wood panel and associated glue, removal and disposal, which price shall include all materials, labor, tools, and equipment incidental and necessary.

**ITEM 17: INTERIOR WINDOW FRAME CAULK, REMOVAL AND DISPOSAL**

- A. This work will be measured by the actual number of linear feet of interior window frame caulk.
- B. This work will be paid for at the contract unit price per linear foot of interior window frame caulk, removal and disposal, which price shall include all materials, labor, tools, and equipment incidental and necessary.

**ITEM 18: INTERIOR WINDOW GLAZING COMPOUND, REMOVAL AND DISPOSAL**

- A. This work will be measured by the actual number of linear feet of interior window frame caulk.
- B. This work will be paid for at the contract unit price per linear foot of interior window frame caulk, removal and disposal, which price shall include all materials, labor, tools,

and equipment incidental and necessary.

**ITEM 19: EXTERIOR WINDOW GLAZING COMPOUND, REMOVAL AND DISPOSAL**

- A. This work will be measured by the actual number of linear feet of exterior window glazing compound, removal and disposal which price shall include all materials, labor, tools and equipment incidental and necessary to complete.
- B. This work will be paid for at the contract unit price per square foot of Exterior Window Glazing Compound complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary for each type of installation.

**ITEM 20: BUILD UP ROOF (ALL LAYERS), REMOVAL AND DISPOSAL**

- A. This work will be measured by the actual number of square feet of build -p roof all layers, removal and disposal, which price shall include all materials, labor, tools and equipment incidental and necessary to complete.
- B. This work will be paid for at the contract unit price per square foot of Exterior Window Glazing Compound complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary for each type of installation.

**ITEM 21: ROOF VENT FLASHING, REMOVAL AND DISPOSAL**

- A. This work will be measured by the actual number of square feet of roof vent flashing, removal and disposal, which price shall include all materials, labor, tools and equipment incidental and necessary to complete.
- B. This work will be paid for at the contract unit price per square foot of Roof Vent Flashing complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary for each type of installation.

**ITEM 22: ROOF SEALANT FLASHING (INCLUDING ASSOCIATED CONTAMINATED MATERIALS), REMOVAL AND DISPOSAL**

- A. This work will be measured by the actual number of square feet of roof sealant flashing (including associated contaminated materials), removal and disposal, which price shall include all materials, labor, tools and equipment incidental and necessary to complete.
- B. This work will be paid for at the contract unit price per square foot of Roof Sealant Flashing including associated contaminated materials complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary for each type of installation.

**ITEM 23: ROOF SILVER PAINT (INCLUDING ASSOCIATED CONTAMINATED MATERIALS), REMOVAL AND DISPOSAL**

- A. This work will be measured by the actual number of square feet of roof silver paint (including associated contaminated materials), removal and disposal, which price shall include all materials, labor, tools and equipment incidental and necessary to complete.
- B. This work will be paid for at the contract unit price per square foot of Roof Silver Paint including associated contaminated materials complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary for each type of installation.

**ITEM 24: PIPE INSULATION (INCLUDING MUDDED FITTINGS/ELBOWS, IF EXISTS BEHIND WALLS AND CEILING AND DETERMINED TO BE ACM), REMOVAL AND DISPOSAL**

- A. This work will be measured by the actual number of linear feet of pipe insulation (including mudded fittings/elbows, if exist behind walls and ceiling and determined to be ACM), removal and disposal, which price shall include all materials, labor, tools and equipment incidental and necessary to complete.
- B. This work will be paid for at the contract unit price per linear foot of Pipe Insulation Including Mudded Fittings/Elbows including associated contaminated materials complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary for each type of installation.

**ITEM 25: GLOVE BAG FOR PIPE INSULATION/MUDD FITTING (<3 LF/3 SF) (IF FOUND DURING DEMOLITION BEHIND CEILING/WALLS AND DETERMINED TO BE ACM), REMOVAL AND DISPOSAL**

- A. This work will be measured by the actual number of glove bags for pipe insulation / mudd fitting (< 3 LF/3 SF) (If found during demolition behind ceiling/walls and determined to be ACM), removal and disposal, which price shall include all materials, labor, tools and equipment incidental and necessary to complete.
- B. This work will be paid for at the contract unit price per glove bag for pipe insulation/ mudd fitting (<3 LF/3 SF) including associated contaminated materials complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary for each type of installation.

**ITEM 26: PREPARATION OF A SMALL CONTAINMENT (FOR ABATING ACM >3 LF/SF BUT <10 LF /25 SF) WITH DECONTAMINATION UNIT (INCLUDING REMOBILIZATION IF NECESSARY)**

- A. This work will be measured by the actual number of containment areas for abating ACM >3 LF/SF but <10 SF/25 LF) with decontamination unit (including remobilization if necessary), which price shall include all materials, labor, tools and equipment incidental

and necessary to complete.

- B. This work will be paid for at the contract unit price per containment area for abating ACM (>3 LF/SF but < 10 SF/25 LF ) including associated contaminated materials complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary for each type of installation.

**ITEM 27: PREPARATION OF A MEDIUM CONTAINMENT (FOR ABATING ACM >10 SF/25 LF BUT < 500 LF/1500 SF) WITH DECONTAMINATION UNIT (INCLUDING REMOBILIZATION IF NECESSARY)**

- A. This work will be measured by the actual number of containment areas for abating ACM >10 SF/25 LF but < 500 LF/1500 SF) with decontamination unit (including remobilization if necessary), which price shall include all materials, labor, tools and equipment incidental and necessary to complete.
- B. This work will be paid for at the contract unit price per containment area for abating ACM (>10 LF/SF but < 500 LF/1500 SF ) including associated contaminated materials complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary for each type of installation.

**ITEM 28: EARTH EXCAVATION AND SCREENED GRAVEL BELOW NORMAL GRADE**

- A. If, in the opinion of the Engineer, the material at or below normal grade is unsuitable for foundation material beneath piping and or structures, it shall be removed to such depths and widths within the payment lines as ordered by the Engineer. Normal grade is defined as the bottom of the normal trench along the proposed pipe grade and the bottom of the normal excavation for the base of structures as shown on the Structural or Civil Contract Drawings.
- B. All such excavations shall be backfilled with Screened Gravel
- C. The quantity of earth excavation and backfill below normal grade to be paid for shall be equal to the number of cubic yards of unsuitable material excavated, measured to the extent of work completed as ordered by the Engineer.
- D. The unit price shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary and for excavation and disposal of excavated material below normal grade as ordered or directed by the Engineer, and for furnishing, placing and compacting screened gravel in such excavations.
- E. All work associated with the requirements of this Item, and required and related to the installation of the proposed utility lines and excavation limits of the proposed pumping station substructure will be measured and paid for under this Item.

**ITEM 29: ROCK EXCAVATION, DISPOSAL AND BACKFILL**

- A. This Item is intended to cover rock excavation anywhere within the normal limits of excavation called for on the Structural and Civil Contract Drawings and in the Specifications and rock excavation below normal grade.
- B. Where rock is encountered, it shall be uncovered but not excavated until measurements have been made by the Engineer, unless in the opinion of the Engineer, satisfactory measurements can be made in some other manner acceptable to the Owner.
- C. The quantity of rock to be paid for under this Item shall be the number of cubic yards of rock, measured in place prior to excavation, within the limits of normal excavation as defined on the Civil or Structural plans, unless rock excavation beyond such limits has been pre-authorized in writing by the Engineer, in which case measurement shall be made to the Engineer's authorized limits.
- D. Excavated rock of acceptable dimension and acceptable quality may be used as rip rap in locations where rip rap protection is indicated on the Civil drawings. Excavated rock not so used and not so disposed of in a manner as approved by the Engineer shall not be measured or included for payment.
- E. The bidder should include in his bid, under all items involving excavation, the cost of doing the entire excavation as earth; the price for this Item is intended to cover the difference between the cost of rock excavation and the cost of earth excavation. The unit price shall include all labor, materials and equipment necessary for rock excavation; disposal as ordered or directed by the Engineer; furnishing, placing and compacting all additional material needed for backfill; and any pre-blast survey so necessitated upon excavation to disclose exact rock locations above normal grade.
- F. All work associated with the requirements of this Item will be measured and paid for under this Item.

**ITEM 30: REMOVAL OF OBSTRUCTIONS (BORE AND JACK)**

- A. Includes boulders of 1 cubic foot and larger in volume and/or rock which requires drilling, chipping, wedging and/or splitting with power tools for removal
- B. The quantity of rock removal to be paid for shall be equal to the pipe casing outside diameter plus six (6) inches.
- D. The unit price shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary and for removal of boulders and rock
- E. All work associated with the requirements of this Item, and required and related to the jacking installation of the proposed 42 inch sewer will be measured and paid for under this Item.

- F. This item will be deleted from the Base Bid Contract if DEDUCT Alternate No. 2 is accepted by the Owner. The Contractor shall include the cost of this item when figuring the total cost of Deduct Alternate No. 2.

**ITEM 31: SUPPORTING INTERFERING OBSTRUCTIONS**

- A. "Supporting Interfering Obstructions" will be measured for payment by the actual number of linear feet of interfering obstructions within the trench pay limit that are supported, said linear footage measured along the centerline of the obstruction. Un-supported utilities or obstructions, any supported utility services, pipes or conduits less than 4 inches in diameter or direct buried wires will not be measured for payment.
- B. The unit price for "Supporting Interfering Obstructions" shall include full compensation for all supporting materials required to properly support the obstruction, installation, maintaining the supports, and all labor, equipment and tools necessary to complete this Item. It shall not include any costs for excavation.
- C. The Owner may elect to replace the obstruction instead of supporting it. Should the Owner elect replacement, the Contractor shall be compensated for replacement at the unit prices of the appropriate Items shown in the Contract. If no bid unit prices are available in the Contract, a cost for the replacement work shall be negotiated in accordance with the General Conditions of the Contract.

**ITEM 32: SUPPORTING PARALLEL OBSTRUCTIONS**

- A. "Supporting Parallel Obstructions" will be measured for payment by the actual number of linear footages of parallel obstructions within the trench pay ;limit that are supported, said linear footage measured along the centerline of the obstruction. Un-supported utilities or obstructions, any supported utility services, pipes or conduits less than 4 inches in diameter or direct buried wires will not be measured for payment.
- B. The unit price for "Supporting Parallel Obstructions" shall include full compensation for all supporting materials required to properly support the obstruction, installation, maintaining the supports, and all labor, equipment and tools necessary to complete this Item. It shall not include any costs for excavation.
- C. The Owner may elect to replace the obstruction instead of supporting it. Should the Owner elect replacement, the Contractor shall be compensated for replacement at the unit prices of the appropriate Items shown in the Contract. If no bid unit prices are available in the Contract, a cost for the replacement work shall be negotiated in accordance with the General Conditions of the Contract.

**ITEM 33: RAILROAD INSPECTOR (ALLOWANCE)**

- A. Work under this Item will be paid for under the contract stated allowance for this Item, and in accordance with "Section 01020 - Allowances" of these Specifications. The allowance amount may be increased or decreased depending upon the actual expenses

- incurred and approved by the Owner.
- B. The method of measurement shall be by review of invoices submitted by the Providence and Worcester Railroad Company to the Contractor documenting the actual number of man-hours spent by railroad inspection personnel including flagmen. The use of vehicles and associated equipment will not be measured for payment but shall be considered as included in the man-hour invoices submitted.
  - C. The method of payment shall be made to cover the actual invoices received by the Contractor for the services of Railroad inspection and flag personnel required, which price shall include all equipment, vehicles, labor, overtime pay, and insurance necessary to perform the work. No markup beyond that allowed under Section 01020 will be considered under this contract.
  - D. The unit price established for this work Item shall include all compensation, insurance, benefits and any other cost, or liability, incidental to the furnishing of Railroad Inspector or flagmen.

**ITEM 34: TRAFFICMEN (CITY POLICE) (ALLOWANCE)**

- A. Work under this Item will be paid for under the contract stated allowance for this Item, and in accordance with "Section 01020 - Allowances" of these Specifications. The allowance amount may be increased or decreased depending upon the actual expenses incurred and approved by the Owner.
- B. The method of measurement shall be by review of invoices submitted by the municipal Police Department to the Contractor documenting the actual number of man-hours spent by uniformed police officers or private-duty uniformed individuals directing and maintaining flow of traffic in construction areas. The use of Police Department Vehicles, if requested by the Contractor, will be measured for payment by the number of hours the vehicle is used.
- C. The method of payment shall be made to cover the actual payroll invoices received by the Contractor for the services of uniformed police officers or private duty uniformed individuals required for the maintaining and control of traffic, which price shall include all equipment, City vehicles, labor, overtime pay, and insurance necessary to perform the work. No markup beyond that allowed under Section 01020 will be considered under this contract
- D. Work under this Item will be paid for under the contract stated allowance for this Item, and in accordance with "Section 01020 - Allowances" of these Specifications. The allowance amount may be increased or decreased depending upon the actual expenses incurred and approved by the Owner.
- E. The minimum hours for payment for any one policeman, in any one day, shall be four (4) hours, unless otherwise specified. No uniformed officer shall work more than twelve (12) hours in any one day. Overtime wages are considered included in the unit price established

for this Item.

- F. The unit price established for this work Item shall include all compensation, insurance, benefits and any other cost, or liability, incidental to the furnishing of Trafficmen (Municipal Police) and Police Department Vehicles.

**ITEM 35: TRAFFICMEN (STATE POLICE) (ALLOWANCE)**

- A. Work under this Item will be paid for under the contract stated allowance for this Item, and in accordance with "Section 01020 - Allowances" of these Specifications. The allowance amount may be increased or decreased depending upon the actual expenses incurred and approved by the Owner.
- B. The method of measurement shall be by review of invoices submitted by the State Police Department to the Contractor documenting the actual number of man-hours spent by State police officers directing and maintaining flow of traffic in construction areas. The use of State Police Department Vehicles and associated equipment will not be measured for payment but shall be considered as included in the man-hour invoices submitted.
- C. Payment shall be made to cover the actual payroll invoices received by the Contractor for the services of State police officers required for the maintaining and control of traffic, which price shall include all equipment, State vehicles, labor, overtime pay, and insurance necessary to perform the work. No markup beyond that allowed under Section 01020 will be considered under this contract.
- D. The unit price established for this work Item shall include all compensation, insurance, benefits and any other cost, or liability, incidental to the furnishing of Trafficmen (State Police).

**ITEM 36: TRAFFICMEN (UNIFORMED FLAGMEN) (ALLOWANCE)**

- A. Work under this Item will be paid for under the contract stated allowance for this Item, and in accordance with "Section 01020 - Allowances" of these Specifications. The allowance amount may be increased or decreased depending upon the actual expenses incurred and approved by the Owner.
- B. The method of measurement shall be by review of invoices submitted by the Contractor documenting the actual number of man-hours spent by Trafficmen (Uniformed Flagmen) directing and maintaining flow of traffic in construction areas.
- C. Payment shall be made to cover the actual payroll costs incurred by the Contractor for the services of Trafficmen (Uniformed Flagmen) required for the maintaining and control of traffic, which price shall include all equipment, labor, overtime pay, approved overhead, and insurance necessary to perform the work. No markup beyond that allowed under Section 01020 will be considered under this contract.

- D. The unit price established for this work Item shall include all compensation, insurance, benefits and any other cost, or liability, incidental to the furnishing of Trafficmen (Uniformed Flagmen).

**ITEM 37: CONSTRUCT TEMPORARY WASTE STOCKPILE AREA**

- A. This work shall be paid for at the Contract Lump Sum price, which shall include all materials, tools, labor, equipment, permits, and work needed to construct, decontaminate, and manage the WSA, site as selected by Owner, including all clearing, grubbing, grading, clean-up and site restoration as applicable to comply with these Contract Documents.
- B. All materials, labor and equipment associated with compliance with the General Permit for Contaminated Soil and/or Sediment Management (Staging and Transfer) will not be measured separately, but will be considered incidental to this item.

**ITEM 38: NON-SPECIAL INSPECTION RELATED TESTING LABORATORY SERVICES (ALLOWANCE)**

- A. Work under this Item will be paid for under the contract stated allowance for this Item, and in accordance with "Section 01020 - Allowances" of these Specifications. The allowance amount may be increased or decreased depending upon the actual expenses incurred and approved by the Owner.
- B. This Item is for payment to the Contractor for testing as directed by or ordered by the Engineer in accordance with the provisions of Special Conditions Section 6.24.
- C. Payment will be made based on actual testing laboratory invoice cost plus 5% mark up for tests demonstrating Work completed in compliance with the Contract Documents.
- D. This Item does not include testing of Controlled Materials which is incidental to Section 02215-Disposal of Controlled Materials.
- E. This Item does not include testing required under "SPECIAL INSPECTIONS" as further stipulated on Structural Drawings. Special inspections testing costs shall be paid by the Owner.

**ITEM 39: REMOVAL AND DISPOSAL OF UNDERGROUND STORAGE TANKS**

- A. This item will be paid for at the contract lump sum price for "Removal and Disposal of Underground Storage Tanks" complete. Materials associated with the excavation, removal and disposal of the USTs, such as permits, equipment, tank disposal costs, etc. will not be measured for payment, but will be considered incidental to this item.
- B. Excavation and Disposal of controlled materials and handling of contaminated groundwater associated with "Removal and Disposal of Underground Storage Tanks" shall be separately measured for payment and will be paid for under other applicable unit price or lump sum bid items.

- C. This Contract price lump sum shall include all related necessary work and material associated with the excavation, removal and disposal of the UST, including, but not limited to removal and disposal of residual liquid product from the USTs, state and local permits, equipment, material recycling and disposal, air monitoring, backfilling, temporary fencing, barricades, and lighting, shoring, bracing, pumping, bailing, or for material or equipment necessary for the satisfactory completion of the work.

**ITEM 40: DISPOSAL OF CONTROLLED MATERIALS**

- A. The work of “DISPOSAL OF CONTROLLED MATERIALS” will be measured for payment as the actual net weight in “Tons” of material delivered to the disposal facility. Such determinations shall be made by measuring each hauling vehicle load on the certified permanent scales at the disposal facility. Total weight will be the summation of weight bills issued by the facility or facilities specific to this Project.
- B. Materials generated by excavation beyond the Controlled Material Limit of Disturbance and the Low Level Material Limit of Disturbance, as shown on Drawings ENV-1.2 and ENV – 1.3 issued with Addendum #3, will not be measured for payment but shall be included under Bid Item #1.
- C. The Contractor shall bear responsibility for all costs associated with the appropriate handling, management and disposal of this material.
- D. Equipment decontamination, the collection of residuals, and the collection and disposal of liquids generated during equipment decontamination activities will not be separately measured for payment.
- E. The disposal of excavated materials, originally anticipated to be controlled materials, but determined by characterization sampling not to contain concentrations of regulated chemicals (non-polluted or “clean” materials) will not be separately measured for payment under this item but will be considered as surplus excavated materials and shall be handled in accordance with the Management of Reusable Controlled Material specification.
- F. This work shall be paid for at the Contract unit price, which shall include the loading and transportation of controlled materials from the Waste Stockpile Area (WSA) to the disposal facility; the fees paid to the facility for treatment/recycling/disposal; the preparation of all related paperwork; and all equipment, materials, tools, and labor incidental to this work. This unit price will be applicable to each of the Contractor-selected disposal facilities and will not change for the duration of the Project.

**ITEM 41: CONTROLLED MATERIALS EXCAVATION**

- A. The work of Controlled Materials Excavation will be measured for payment by the number of cubic yards of material excavated within the payment limits specified in the contract documents (i.e., the “Areas of Environmental Concern”) and taken to the WSA, and stockpiled within the storage bins for sampling by the Engineer or temporarily stockpiled on site for later reuse if authorized by the Engineer. Material kept in proximity to the site

- of the excavation for approved re-use as it is generated, or live load soil for removal from the site, will not be measured for payment.
- B. Excess excavations beyond the Controlled Material Limit of Disturbance and the Low Level Material Limit of Disturbance, as shown on Drawings ENV-1.2 and ENV – 1.3 issued with Addendum #3, will not be measured for payment but shall be included under Bid Item #1.
  - C. The Contractor assumes all costs associated with the appropriate handling, management and disposal of this material.
  - D. Equipment decontamination, the collection of residuals, and the collection and disposal of liquids generated during equipment decontamination activities will not be measured separately for payment.
  - E. “Controlled Materials Excavation” shall be paid for at the Contract unit price per cubic yard, which shall include all transportation from the excavation site to the WSA, and stockpiling controlled materials at the WSA; and all tools, equipment, material and labor incidental to this work. Disposal of the Controlled Material will be paid for under “Disposal of Controlled Materials.”
  - F. Construction and management of the WSA shall not be separately measured for payment but shall be paid for under “Temporary Waste Stockpile Area.”
  - G. This price shall also include equipment decontamination; the collection of residuals generated during decontamination and placement of such material in the WSA; and the collection and disposal of liquids generated during equipment decontamination activities.
  - H. All materials, labor and equipment associated with compliance with the General Permit for Contaminated Soil and/or Sediment Management (Staging and Transfer) will not be measured separately, but will be considered incidental to the “Controlled Materials Excavation”.
  - I. Handling and disposal of contaminated groundwater will be paid for under “Handling Contaminated Groundwater.”

**ITEM 42: MANAGEMENT OF REUSABLE CONTROLLED MATERIAL**

- A. Management of Reusable Controlled Material shall be measured for payment by the number of cubic yards of material loaded and transported from the WSA and placed at re-fill areas located within the Construction Limits of Disturbance in accordance with the Contract.
- B. Management of Reusable Controlled Material shall be paid for at the Contract unit price per cubic yard, which shall include all materials, equipment, tools and labor necessary to load and transport reusable controlled materials from the WSA to re-fill areas located within the Construction Limits of Disturbance and to place and compact the reusable

- material. This price shall include any decontamination of soil handling equipment, and the treatment/recycling/disposal of wastes generated in conjunction with such decontamination.
- C. No separate payment shall be made for consolidating previously tested individual stockpiles that have been deemed reusable, but shall be considered incidental to the work.
  - D. The disposal of any reusable controlled material that fails to meet material testing requirements for the intended use in accordance with the Contract requirements, as well as any excess reusable material, shall be paid under “Disposal of Controlled Materials.”

**ITEM 43: HANDLING CONTAMINATED GROUNDWATER**

- A. Within fourteen (14) calendar days after addressing the Engineer’s comments on the proposed system(s) for Handling Contaminated Groundwater, the Contractor shall submit to the Engineer for approval a cost breakdown of its lump sum bid price. The submission must include substantiation showing that the cost breakdown submitted is reasonable based on the Contractor's lump sum bid. The cost breakdown shall be in accordance with the following payment schedule:
  - 1. The cost to prepare the design for proposed system(s) for Handling Contaminated Groundwater, including preparation and submittal of all state and local permit registration applications, in accordance with these specifications. Design costs shall not exceed 10% of the total cost of the item.
  - 2. The procurement and installation cost for the proposed system(s) for Handling Contaminated Groundwater in accordance with these specifications. Procurement and installation costs shall not exceed 20% of the total cost of the item.
  - 3. Equipment decontamination and demobilization and restoration of site. Decontamination and demobilization costs shall not exceed 10% of the total cost of the item.
  - 4. The remaining costs for operation, monitoring, permit compliance, sampling and analysis, disposal costs and maintenance of the proposed system(s), including cleaning of the temporary portable sedimentation settling frac tanks, of settled solids, transporting of solids to the WSA, and disposal of the contaminated dewatering wastewater to a permitted treatment facility in accordance with these specifications shall be divided evenly throughout the duration of the project work involving contaminated groundwater at the discretion of the Engineer.
- B. All materials, labor and equipment associated with obtaining permits and compliance with the DEEP General Permit for Discharge of Groundwater Remediation Wastewater to a Sanitary Sewer or Discharge of Groundwater Remediation Wastewater Directly to Surface Water will not be measured separately, but will be considered incidental to this item.
- C. Increased costs directly related to the Contractor’s operation (i.e. treatment or increased

- charges due to changes in pH or additional contaminants, treatment and disposal of excess water related to process or waste water, etc.) will not be paid under this item but will be considered a part of the Contractor's cost for the item under which the work is being performed.
- D. This work will be paid for at the Contract lump sum price for "Handling Contaminated Groundwater" which price shall include: all work and materials involved with handling contaminated groundwater from within GW AOEC and shall include conveying contaminated groundwater from the dewatering point to the temporary containment tanks and treatment facility; treatment; conveying discharge of contaminated wastewater to an on-site sanitary sewer, disposal or recycling of used treatment media (i.e. bag filters and spent carbon); permit applications; disposal and permit fees; electrical costs; sampling and documentation costs; laboratory costs; design and monitoring; mobilization, operation, and maintenance of the system; site work; all required equipment decontamination; transportation of solids to the WSA; and equipment demobilization. POTW fees will be waived.
- E. Erosion and Sedimentation controls associated with work under this Item will be paid under the appropriate lump sum bid item of the Contract.

**ITEM 44: OVERCOMING OBSTACLES DURING DRILLING MICROPILES**

- A. This work will be measured by the actual number of hours expended on the drill rig utilized in overcoming obstructions which were encountered but not expected and/or notified at the time of bid.
- B. This work will be paid for at the contract unit price per hour of overcoming obstacles during drilling micro-piles, complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary for each type of micro-pile installation at each specified location.

**ITEM 45: MICRO-PILES ROCK SOCKET – PUMP STATION BUILDING AND VALVE VAULT – DEPTH GREATER THAN 10 FEET**

- A. This work will be measured by the actual number of linear feet of rock socket in excess of the depths called for on the Structural Drawings to adjust the basis of design in order to develop the specified tension requirements. The basis of design depths of rock sockets will be paid under other applicable unit price bid items.
- B. This work will be paid for at the contract unit price per added linear foot of rock socket complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary.

**ITEM 46: MICRO-PILES ROCK SOCKET – SURGE TANK – DEPTH GREATER THAN 5.5 FEET**

- A. This work will be measured by the actual number of linear feet of rock socket in excess of

the depths called for on the Structural Drawings to adjust the basis of design in order to develop the specified tension requirements. The basis of design depths of rock sockets will be paid under other applicable unit price bid items.

- B. This work will be paid for at the contract unit price per added linear foot of rock socket complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary.

**ITEM 47: MICRO-PILES ROCK SOCKET – 42 INCH SEWER PIPE BRIDGE CROSSING – DEPTH GREATER THAN 4 FEET**

- A. This work will be measured by the actual number of linear feet of rock socket in excess of the depths called for on the Structural Drawings to adjust the basis of design in order to develop the specified tension requirements. The basis of design depths of rock sockets will be paid under other applicable unit price bid items.
- B. This work will be paid for at the contract unit price per added linear foot of rock socket complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary.

**ITEM 48: MICRO-PILES – ADDITIONAL VERIFICATION TESTING**

- A. This work will be measured by the actual number of additional verification tests as ordered by the Engineer.
- B. This work will be paid for at the contract unit price per verification test complete in place, which price shall include all materials, labor, tools, and equipment incidental and necessary for each type of installation.

**ITEM 49: EXTENDED WARRANTY (MAINTENANCE BOND)**

- A. This item, being paid for on a lump sum basis, will not be measured for payment.
- B. Payment for this Item will be at the contract lump sum price as listed in the bid for “Extended Warranty (Maintenance Bond).” The cost shall be for the second year of coverage of the Contractor’s guarantee in accordance with the Contract Documents.

**ITEM 50: CITY OF MIDDLETOWN PERMITS**

- A. The method of measurement shall be review of documentation from the surety or bond and insurance companies submitted by the Contractor.
- B. Comply with Section 01020 “Allowances” of these Specifications.
- C. Payment shall be made to cover the actual cost of the bond and insurance requirements of the Excavation Permit to be filed with the City of Middletown Department of Public Works and for other permit authorizations as required by the Owner for the Work of this

Project. The Owner waives the Excavation Permit fee. No markup will be allowed.

- D. This Item will be paid for under the contract stated allowance for this Item, and in accordance with Section 01020 "Allowances" of these Specifications. The allowance amount may be increased or decreased depending upon the actual expenses incurred and approved by the Owner.

END OF SECTION