

(Revised December 1, 2022)

SECTION 01025 MEASUREMENT AND PAYMENT

1.03 MEASUREMENT AND PAYMENT

- A. Work Zone Staging and Traffic Control (Per Link)- Traffic control measures for work in low-traffic/residential areas shall be included in the unit price. Additional traffic control measures required for work in high-traffic/commercial areas will be paid for separately when authorized by the Program Manager, as follows.

Payment will be remitted for furnishing, installation, maintenance and removal of temporary traffic control per link of roadway based upon the current functional classification of the affected roadway as defined by the Federal Highway Administration per day. A roadway link is defined by two nodes or intersections. In the event a single work zone spans one or more intersections, the average link length will be used to determine the eligible quantity or work zones for payment. Each unit price bid shall include all but not be limited to furnishing, installation, maintenance and removing all traffic control devices, temporary signage, temporary pavement markings and shall include flagging and other means necessary for safe guidance and protection of vehicular and pedestrian traffic through the Work Zone per site based upon the functional classification and site conditions. When Police are required for traffic control the cost shall be included in the unit bid price. All traffic control measures and plans shall conform to the requirements of the Manual on Uniform Traffic Control Devices (MUTCD), Part 6 (Temporary Traffic Control), latest edition, as published by the US DOT / FHWA. The above referenced bid items are applicable to rehabilitation work within roadways with the following functional classifications:

1. (Bid Item 01015-01) FC17-Collector Street
2. (Bid Item 01015-02) FC16-Minor Arterial Street
3. (Bid Item 01015-03) FC14-Urban Principal Arterial Street

Functional Classification Maps for the Atlanta Metro Counties are available through Georgia's Department of Transportation (GADOT) website at:

<http://www.dot.ga.gov/DS/Data>

In the event that a functional classification assignment conflict exists between the drawings and the GADOT, the GADOT classification shall preside. The Contractor shall submit proposed traffic control plans to required regulatory agencies and they shall grant approval before the Work begins. Notification to begin Work shall require at least 48-hour notice to the appropriate agency and the Owner. Traffic control for roadways with "local" or "rural" functional classifications are considered incidental to the Work and the cost shall be included in the unit price for the Work performed. These type roadways shall meet MUTCD requirements. No separate payment will be made for traffic control roadways with functional classification other than those stated herein, unless otherwise authorized by the Owner for exceptional circumstances.

- B. GPS Locate and Data Collection /Manhole (Level 1 & Level 2)–. Measurement for payment will be per each for the specific Level of inspection made and will constitute full compensation to locate, take coordinates, and provide attribution information as defined by the Level of Inspection per the directions provided in Section 01056. This payment includes compensation for all digital deliverables outlined in Section 01056.
1. (Bid Item 01056-01) GPS Level 1: Applies to all manholes that are found as part of the assessment process and are not mapped or are wrongly mapped on the County’s system (survey grade GPS – 1 cm accuracy).
 2. (Bid Item 01056-02) GPS Level 2: Applies to all manholes not requiring a Level 1 assessment (mapping grade GPS – 3 m accuracy).
- C. Closed Circuit Television (CCTV) Inspection, Sewer, Internal Pipe Inspection ≤ 18 ” Diameter, Bid Items identified below. Measurement for payment will be per linear foot (LF) from center of manhole to center of manhole. Payment will constitute full compensation to perform a CCTV sewer pipe inspection on sanitary sewer mains per the Specifications. Defect coding, header data, and coding of service lateral locations are required. There will be no separate payment made for cleaning, data delivery, or data quality control. Payment shall only be made for the footage of sewer assessment between the manholes. Payment shall not be made until digital data files and reports are delivered and show complete and accurate information. Maintenance of traffic and associated traffic control measures required for the work shall be included in the unit price. Costs shall include, but are not limited to, labor, equipment, transportation, setup, tools, public notification, data management and all other related procedures and materials necessary to complete the inspections, in accordance with Section 01510. The Contractor must have off-road capability for the CCTV and an easement reel for the cleaning equipment.
1. (Bid Item 01510-01): CCTV for Pipe Inspection ≤ 8 ” Diameter Pipe.
 2. (Bid Item 01510-02): CCTV for Pipe Inspection >8 ” and ≤ 18 ” Diameter Pipe.
 3. (Bid Item 01510-03): CCTV for Pipe Inspection >18 ” and ≤ 24 ” Diameter Pipe.
 4. CCTV PRE-Inspection: Pre-CCTV will be performed under the same requirements as stipulated in Section 01510 with the exception of the requirements for cleaning. Visible defects will be recorded in accordance with PACP defect coding. Reverse assessments for incomplete inspections must be attempted if possible. It is noted that due to lack of cleaning, defects may or may not be visible for recording as per PACP. Contractor will record defects that are visible.
 - a. (Bid Item 01510-04): CCTV PRE-Inspection ≤ 8 ” Diameter Pipe.
 - b. (Bid Item 01510-05): CCTV PRE-Inspection >8 ” and ≤ 18 ” Diameter Pipe.
 5. CCTV Post-Inspection: Post-CCTV is the same activity as CCTV. Post-CCTV assignments are those assignments coupled with the known CERP pre-CCTV assignments. Payment will be made under CCTV pay items 01510-01-03)
- D. Remove Protruding Lateral, (Bid Item 02956-01). Measurement for payment will be per each (EA) for each protruding service lateral removed. Payment will constitute full compensation for cutting and/or grinding down protruding service laterals, including,

but not limited to, labor, equipment, transportation, tools, and all other related procedures and materials necessary to produce the results specified in Section 02956. Contractor will advise the field inspector prior to proceeding.

- E. (Bid Item 02530-01) Sewer, Internal Pipe Inspection, (Push Camera) Service Lateral, 4" to 8" Diameter. Measurement for payment will be per each (EA) for each service lateral inspected. Payment will constitute full compensation for inspection of service laterals, including, but not limited to, handheld (Push Camera) CCTV inspection. The Contractor shall perform service lateral television inspection on all service laterals exposed for open cut replacement, point repairs, HDD, or pipe bursting, and/or when directed by the Program Manager. This item does not include post-construction CCTV quality control inspection for service lateral rehabilitation or repair work. The cost for post CCTV quality control inspection for service lateral rehabilitation and repair work is to be included in the price of the respective service lateral rehabilitation or replacement bid item and will not be paid for separately. Payment shall only be made for each service lateral inspected, as directed by the Program Manager, commencing with zero footage at the portal of the pipeline associated with the mainline or at the cleanout.
- F. Sonar/TISCIT Survey, All Diameters $\geq 18"$, Measurement for payment will be per linear foot (LF) from center of manhole to center of manhole. Payment will constitute full compensation to perform a Sonar/TISCIT sewer pipe inspection on sewers. Defect coding, header data and coding of service lateral locations are required. There will be no separate payment made for data delivery or data quality control. Payment shall only be made for the footage of sewer associated with the manhole. Maintenance of traffic and associated traffic control measures required for the work shall be included in the unit price. Costs shall include, but not limited to, labor, equipment, transportation, setup, tools, public notification, data management and all other related procedures and materials necessary to complete the inspections, in accordance with Section 01510. The Contractor must have off-road capability for the CCTV/TISCIT and an easement reel for the cleaning equipment.
1. (Bid Item 01510-08): Sonar/TISCIT Survey $\geq 18"$ and $\leq 24"$ Diameter Pipe.
 2. (Bid Item 01510-09): Sonar/TISCIT Survey $> 24"$ and $\leq 36"$ Diameter Pipe.
 3. (Bid Item 01510-10): Sonar/TISCIT Survey $> 36"$ Diameter Pipe.
- G. Bypass Pumping: Measurement for payment will be per linear foot (LF) of the size and flow classification category for bypass pumping and temporary flow control. Payment will be full compensation for furnishing all labor, materials, equipment, setup, removal, cleanup, maintenance and operation, and incidentals necessary to produce the results specified in Section 01520.

Supplemental work associated with adding personnel, transportation, fuel etc., to operate the bypass system (after working hours or as directed) will be paid at an hourly rate to include time, materials, and all incidentals associated with the maintenance operation. Bypassing is intended to be operated and maintained by the crew on site performing other work. No payment will be considered for hourly bypass without permission of the County.

Bypass Pumping will be paid under Contract Items as follows:

1. (Bid Item 01520-01): Bypass Pumping ≤ 12 " Diameter Pipe with Flow $>25\%$ and $<50\%$.
2. (Bid Item 01520-02): Bypass Pumping ≤ 12 " Diameter Pipe with Flow $\geq 50\%$.
3. (Bid Item 01520-03): Bypass Pumping > 12 " and ≤ 36 " Diameter Pipe with Flow $>25\%$ and $<50\%$.
4. (Bid Item 01520-04): Bypass Pumping > 12 " and ≤ 36 " Diameter Pipe with Flow $\geq 50\%$.
5. (Bid Item 01520-05): Bypass Pumping Maintenance and Operation (All sizes).

Measurement for payment will be per hour for minimum staff and equipment costs associated with maintaining an active by-pass when the work crew is on extended absence from the job site (overnight, etc.).

Bypass pumping may, at times, have to remain in operation for an extended period of time in situations when the work is stopped and workers have left the site. The Contractor shall be responsible for maintaining, monitoring, managing, and implementing a successful pump bypass operation during such occurrences.

The County will reimburse the Contractor for hourly costs associated with providing manpower, materials, and equipment necessary to continually operate the bypass system at the price bid per hour. The Contractor will provide the Program Manager the minimum personnel requirements for operating the system for review and approval prior to manning the system for continued operation. The payment will be per LF for installation and maintenance and per hour for operation.

- H. Construction Exit/Entrance: Measurement for payment will be per each (EA) entrance/exit suitably installed and maintained per the *Manual for Erosion and Sediment Control of Georgia*, latest edition (designated as Co) with width reduced to 14'. Payment will constitute full compensation for all costs associated with access entrances/exits, including installation, maintenance, repair, removal, disposal, and restoration to original grade. Depending upon activity, Construction Exit/Entrance may not be required with the Construction Access Road.
1. (Bid Item 02110-01): Installation and Removal of Construction Exit/Entrance
 2. (Bid Item 02110-02): Installation only of Construction Exit/Entrance.
- I. 14' Wide Easement Access Road: Measurement for payment will be per linear foot (LF) of Access Road suitably installed and maintained per the *Manual of Erosion and Sediment Control of Georgia* latest edition (designated as Cr) modified by width and no "construction entrance". Payment shall constitute full compensation for all costs associated with installation, maintenance, repair, and removal of the Access Road. Access Road Construction shall be as approved by the Program Manager. The

Contractor is reminded that off-road equipment is required for cleaning and assessment under this contract.

1. (Bid Item 02110-03): Easement Access Road – 14’ Width, Installation and Removal
 2. (Bid Item 02110-04): Easement Access Road – 14’ Width, Installation only
- J. Easement Clearing, Light & Medium: Measurement for payment will be per square yard (SY) for the type of classification category of clearing as agreed to by the Program Manager. Light clearing can be achieved with hand equipment or bush hog; medium will use more of the same but larger equipment and add wood chipper(s). Payment will constitute full compensation for easement clearing, including, but not limited to labor, equipment, transportation, tools, and other related procedures and materials necessary to remove vegetation and other debris on or near the surface of the ground in the construction area to produce the results specified in Section 02110. Easements will be cleared of debris or obstructions impeding access to work areas. Maintenance of traffic and associated traffic control measures required for the work shall be included in the unit price. The Contractor and Program Manager will inspect the site and agree upon the level of clearing and the appropriate pay item prior to the work.
1. (Bid Item 02110-05) Easement Clearing, Light (Bush Hog)
 2. (Bid Item 02110-06) Easement Clearing, Medium (Bush Hog & Chipper)
- K. (Bid Item 02110-07) Easement Clearing, Heavy (Timbering Equipment): Measurement for payment will be per caliper inch for the type classification category of cleaning. The classification of per caliper inch will be measured at four (4) feet from the base of the tree. Heavy clearing may include similar equipment as with Light or Medium clearing but also need “timbering” equipment such as skidders or dozers. Payment will constitute full compensation for all associated costs including, but not limited to, labor, equipment, transportation, tools, and other related procedures and materials necessary to remove vegetation and other debris on or near the surface of the ground in the construction area to produce the results specified in Section 02110. Easements will be cleared of debris or obstructions impeding access to work areas. Maintenance of traffic and associated traffic control measures required for the work shall be included. The Contractor and Program Manager will inspect the site and agree upon the level of clearing and the appropriate pay item prior to the work. Where required, Erosion & Sediment Control BMP’s will be paid as a separate item.
- L. Erosion and Sedimentation Control (suitably installed and maintained per the *Manual for Erosion and Sediment Control of Georgia*, Latest Edition) and other ancillary items: Measurement for payment for the activity with which the Erosion Control Item(s) is associated shall constitute full compensation for all costs associated with Erosion and Sediment Control Best Management Practices, including installation, maintenance, repair, and removal. Quantities for payment shall be based upon actual quantity authorized by the County. Erosion and sedimentation control measures shall comply with the requirement of Sections 02110 and 02276 of these Specifications; the Georgia Erosion and Sedimentation Act of 1975, as amended; the *Manual for Erosion and Sediment Control of Georgia*, latest edition; and local soil

erosion and sedimentation control ordinances. Payment for various Erosion and Sedimentation Control devices installed and maintained will be as follows:

1. Riprap: Measurement for payment will be per square yard (SY) for riprap. Payment shall constitute full compensation for all costs associated with installation, maintenance, and repair of the Riprap. Payment will include filter fabric underlayment at a minimum 18" inch depth, or as directed by the Program Manager. When crossing a stream or ditch, the quantity eligible for payment shall be limited to 10 feet upstream and 10 feet downstream of top of disturbed area and from five feet from the top of bank, across a creek or ditch, banks and bottoms, to five feet beyond top of bank. Any other areas at creeks or ditches disturbed by the Contractor requiring riprap shall be riprapped at no cost to the County.
 - a. (Bid Item 02273-01): Riprap Type II (Installed)
 - b. (Bid Item 02273-02): Riprap Type III (Installed)
2. (Bid Item 02276-01) Tree Protection Fence: Measure for payment will be per linear foot (LF) for the tree protection fence suitably installed and maintained per the *Manual of Erosion and Sediment Control of Georgia*, latest edition. Payment shall constitute full compensation for all costs associated with tree protection fencing, including installation, maintenance, repair, and removal.
3. (Bid Item 02276-02) Check Dam (Hay Bales): Measurement for payment will be per each (EA) of check dam installed and maintained. Payment shall constitute full compensation for all costs associated with material, grading, installation suitably installed and maintained in accordance with *The Manual for Erosion and Sediment Control of Georgia*, Latest Edition, No separate payment will be made for maintenance, repair, and removal.
4. (Bid Item 02276-03) Inlet Sediment Trap: Measurement for payment will be per each (EA) for inlet sediment traps suitably installed and maintained in accordance with the *Manual for Erosion and Sediment Control of Georgia*, Latest Edition. Payment shall constitute full compensation for all costs associated with grading, installation, maintenance, repair, and removal. Contractor shall be responsible for installing the number of sedimentation traps to adequately capture silt, thus minimizing silt leaving disturbed sites.
5. Temporary Creek Crossing, Installed and maintained: Install, maintain and remove a temporary stream crossing utilizing culvert(s) for passage of construction vehicles across a watercourse. Measurement for payment will be made per linear foot (LF) complete temporary creek crossing suitably installed and maintained in accordance with the *Manual for Erosion and Sediment Control of Georgia*, Latest Division (designated as Sr-C) and removed. Payment shall constitute full compensation for all costs associated with grading, installation, maintenance, repair, and removal.
 - a. (Bid Item 02276-04): Temporary creek crossing $\geq 12"$ and $\leq 15"$ diameter
 - b. (Bid Item 02276-05): Temporary creek crossing $\geq 18"$ and $\leq 24"$ diameter

- c. (Bid Item 02276-06): Temporary creek crossing 36" diameter
- d. (Bid Item 02276-07): Temporary creek crossing 42" diameter
- 6. Tree/Shrubbery Replacement: Measurement for payment will be per each (EA) tree or bush removed and/or replaced for either native or ornamental species. Payment will be per the 3-gallon or 5-gallon bid item and will constitute full compensation for all associated costs for removing and replacement of the designated size of tree(s) and/or shrubbery on private property, including, but not limited to, labor, equipment, transportation, tools, and other related procedures and materials necessary. Payment will constitute full compensation for removing and replacing trees or shrubbery on private property. Replacement may include removal and replanting or replacing with new (as directed by the Owner/Program Manager) in accordance with Section 02276.
 - a. (Bid Item 02276-08): 3-gallon (installed complete)
 - b. (Bid Item 02276-09): 5-gallon (installed complete)
- 7. Chain Link Fence Removal & Replacement: Measurement for payment will be per linear foot (LF) of chain link fence removed and reset or replaced. Payment shall constitute full compensation for all costs associated with removing, resetting, and/or replacing fence, including materials, installation, maintenance, repair, and debris removal and other ancillary items. Payment will constitute full compensation for removing and replacing chain link fence, in kind, on public or private property in accordance with Section 02276.
 - a. (Bid Item 02276-10): Chain link fence (4 ft height)
 - b. (Bid Item 02276-11): Chain link fence (6 ft height)
 - c. (Bid Item 02276-12): Chain link fence (8 ft height)
- 8. Wood Fence Removal & Replacement: Measurement for payment will be per linear foot (LF) of wood fence removed, reset and/or replaced. Payment shall constitute full compensation for all costs associated with remove & replace fence, including materials, installation, maintenance, repair, and debris removal and other ancillary items. Payment will constitute full compensation for removing, resetting and/or replacing wood fence, in kind, on public or private property in accordance with Section 02276.
 - a. (Bid Item 02276-13): Wood fence (4ft height)
 - b. (Bid Item 02276-14): Wood fence (6ft height)
 - c. (Bid Item 02276-15): Wood fence (8ft height)
- 9. Pavement Sawcutting: Measurement for payment will be per linear foot (LF) of pavement sawcut. This work includes sawing joints in existing Portland cement and asphaltic concrete pavements such as roadway pavements, intersections, driveways, parking areas, and sidewalks when removing existing pavements as required for other work.
 - a. (Bid Item 02324-01): Pavement (1 - 8" thick) G-005
 - b. (Bid Item 02324-02): Pavement (additional thickness 1 - 4" beyond 8" thickness)
- 10. Unsuitable Soil Replacement (select backfill)- Measurement for payment will be per cubic yard (CY) compacted in place as defined below. All costs for hauling off the unsuitable material, hauling and placing imported fill

material shall be included in the unit price. Payment will be made on a basis of cubic yards (CY) compacted in place. When allowed by the Owner, in non-paved areas the compaction may be less than ninety-five percent (95%) however not less than ninety percent (90%) of the maximum dry density. In non-paved areas unsuitable soil for final backfill shall be replaced at the Owner's direction. This pay item includes from the top of the pipe bedding zone to final grade. Separate payment will be made for surface restoration. Payment for materials testing shall be made separately.

- a. (Bid Item 02324-03): Crusher Run (per CY)
- b. (Bid Item 02324-04): Imported Fill (per CY)
11. (Bid Item 02485-01) Sodding: Measurement for payment will be made per square yard (SY) of sod installed and accepted. Payment shall constitute full compensation for all costs associated with fine grading, fertilizing, and sodding, including ancillary work (including watering if necessary), on previously landscaped areas on public or private property in accordance with Section 02485. Disturbed areas shall be sodded only when directed to do so by the Program Manager.
12. (Bid Item 02486-01) Seeding: Measurement for payment will be made per square yard (SY) of seed and straw in place and accepted. Payment shall constitute full compensation for all costs associated with fine grading, fertilizing, and seeding, including ancillary work, previously landscaped areas on public or private property in accordance with Section 02486. Grass seeding shall match in kind the existing adjacent grass of previously landscaped areas. Soil preparation and/or topsoil shall be included.
13. Silt Fence: Measurement for payment will be made per linear foot (LF) for Type C silt fence single or double row as required, suitably installed and maintained in accordance with the *Manual of Erosion and Sediment Control of Georgia*, Latest Edition. Payment shall constitute full compensation for all costs associated with Silt Fence, including, but not limited to installation, maintenance, repair, and removal.
 - a. (Bid Item 02542-01): Silt Fence – Type C, Single row
 - b. (Bid Item 02542-02): Silt Fence – Type C, Double row
- M. Sewer, External Point Repairs, All Diameters, All Pipe Materials, All Depth Categories: Measurement for payment will be per each (EA) sewer main point repair twelve (12) linear feet (LF) in length minimum as measured from the centerline of each connection coupling along the longitudinal axis of the sewer main, rounded to the nearest foot and two (2) service reconnections. Payment will constitute full compensation for each external point repair, including, but not limited to, labor, materials, equipment, dewatering, pavement saw cutting, excavation, removing and disposing of unsuitable, unusable and excess excavated materials, shoring, disposing of all waste materials, transportation, safely maintaining trenches and excavations until repairs are completed, furnishing and installing new piping, furnishing and installing repair couplings, pipe bedding, backfill and compaction, post construction CCTV quality control inspection, including pipe bedding and backfilling per Section 02324. No separate payment shall be made for concrete or mechanical joint fittings. No separate payment shall be made for rebuilding pipe penetrations and existing manhole inverts considered incidental to the Work. The point repair depth shall be the measured depth at the point of repair for measurement and payment purposes regardless of the actual sewer main pipeline depth. Each point

repair shall include replacing the section of sewer main pipe twelve (12) linear feet (LF) in length, replacing up to two (2) service reconnections including furnishing and installing necessary service connection pipe, fittings, and flexible coupling for a complete reinstatement of the sewer collection piping assembly. Payment will not be remitted to repair any damage to surrounding areas caused by the Contractor in performance of the Work unless specifically authorized in writing by the County's Representative. Maintenance of traffic and associated traffic control measures required for the work shall be included in the unit price. The depth shall be the average depth of the actual repair as measured in the field. Excavated material not suitable for backfill will be replaced with Select Backfill (Bid Item 02324-03 and/or 02324-04) when authorized by the Program Manager. Road Pavement Patch, Select Backfill and other ancillary items shall be paid under other pay items in this contract. Unless approved by the Program Manager, a point repair with extensions will not exceed 30 LF.

1. (Bid Item 02535-01) External Point Repair, 6" to 18" PVC, ≤12' depth.
2. (Bid Item 02535-03) External Point Repair, 6" to 18" PVC, >12' - 20' depth.
3. (Bid Item 02535-05) External Point Repair, >18" to 24" DIP, ≤12' depth.
4. (Bid Item 02535-07) External Point Repair, >18" to 24" DIP, >12' - 20' depth.

N. Sewer External Point Repairs, Additional Linear Footage, All Dimensions, All Pipe Diameters, All Pipe Materials, All Depth Categories. Measurement for payment will be per linear foot (LF) of sewer pipe in excess of the twelve (12) linear feet (LF) included in the unit price above for an External Point Repair (EA). All length measurements shall be taken as field measurements along the longitudinal axis of the sewer. The depth category shall be the same average sewer main depth as measured for aforementioned point. Payment shall constitute full compensation for all costs for additional piping including, but not limited to, labor, equipment, dewatering, pavement removal and replacement, excavating, removing and disposing of excavated material if replaced with imported material per Section 02324, shoring, disposing all waste materials, transportation, safety, maintaining open pit until repairs are completed, installing new piping and backfilling per Section 02324. Maintenance of traffic and associated traffic control measures required for work shall be included in the price.

1. (Bid Item 02535-02) External Point Repair, 6" to 18" PVC, ≤ 12' depth, additional LF >12 LF Repair.
2. (Bid Item 02535-04) External Point Repair, 6" to 18" PVC, >12' - 20' depth, additional LF >12 LF Repair.
3. (Bid Item 02535-06) External Point Repair, >18" to 24" DIP, ≤ 12' depth, additional LF >12 LF Repair.
4. (Bid Item 02535-08) External Point Repair, >18" to 24" DIP, >12' - 20' depth, additional LF >12 LF Repair.

O. Sewer External Point Repairs, Substitution of Materials, All Dimensions, All Pipe Diameters, All Pipe Materials. Measurement for payment, in the form of an addition or deduction, will be per linear foot (LF) of sewer pipe where a material substitution has been utilized. All length measurements shall be taken as field measurements along the longitudinal axis of the sewer. Payment shall constitute full compensation

for all costs for additional piping including, but not limited to, labor, equipment, dewatering, pavement removal and replacement, excavating, removing and disposing of excavated material if replaced with imported material per Section 02324, shoring, disposing all waste materials, transportation, safety, maintaining open pit until repairs are completed, installing new piping and backfilling per Section 02324. Maintenance of traffic and associated traffic control measures required for work shall be included in the price.

1. (Bid Item 02535-09) External Point Repair, add/deduct cost for providing 6" DIP in lieu of PVC pipe.
2. (Bid Item 02535-10) External Point Repair, add/deduct cost for providing 8" DIP in lieu of PVC pipe.
3. (Bid Item 02535-11) External Point Repair, add/deduct cost for providing 10" DIP in lieu of PVC pipe.
4. (Bid Item 02535-12) External Point Repair, add/deduct cost for providing 12" DIP in lieu of PVC pipe.
5. (Bid Item 02535-13) External Point Repair, add/deduct cost for providing 15" DIP in lieu of PVC pipe.
6. (Bid Item 02535-14) External Point Repair, add/deduct cost for providing 18" DIP in lieu of PVC pipe.
7. (Bid Item 02535-15) External Point Repair, add/deduct cost for providing 20" DIP in lieu of PVC pipe.
8. (Bid Item 02535-16) External Point Repair, add/deduct cost for providing 24" DIP in lieu of PVC pipe.

- P. Service Lateral Reconnection 4"-6" Diameter, Various Depths, All Materials. Measurement for payment will be per each (EA). Before each exposed service lateral is reconnected it shall be inspected for defects with a CCTV push-camera manually inserted into the service lateral. When structural defects are observed during the inspection, the service lateral shall be replaced from the mainline to the right-of-way or easement boundary at the discretion of the Program Manager. Payment will constitute full compensation to reconnect services excavated and exposed in conjunction with open cut mainline replacement and external point repair work. Payment for each service reconnection will include a wye fitting or an electrofusion, saddle connection installed on the mainline, replacement of service lateral pipe to accommodate change in horizontal/vertical alignment, including replacement of service line fittings and connections, any additional excavation, removal, disposal, shoring, dewatering, bedding, pipe zone backfill and final backfilling. All associated costs for testing, post-installation cleaning, if required, and post-installation CCTV video require quality control documentation for the work. No separate or additional

payment will be made to install ductile iron piping or fittings for the service piping connections.

1. (Bid Item 02535-17) Service Lateral Reconnect, $\leq 12'$ depth, up to 12 LF
2. (Bid Item 02535-18) Service Lateral Reconnect, 12-20' depth, up to 16 LF
3. (Bid Item 02535-19) Service Lateral Reconnect/Replacement, additional LF (over 12'/16') Any Depth,

Q. Road Pavement Patch, Asphalt (DOT): Measurement for payment will be per square yard (SY) of pavement removed and replaced. Payment will constitute full compensation for removing and disposing of existing pavement and placing new pavement, including restoring existing pavement markings. The unit price shall include, but not be limited to, labor, equipment, materials, transportation, and tools required to perform the work in accordance with the latest DOT Standard 1401. Saw-cutting pavement will be paid separately. No additional payment will be made for removing and replacing adjacent pavement damaged while performing the sewer rehabilitation and replacement work.

1. (Bid Item 02700-01): Road Pavement Patch, with Concrete Cap (DOT Standard)

R. Road Pavement Patch, (Design Standards Detail G-005): Measurement for payment will be per square yard (SY) of pavement removed and replaced. Payment will constitute full compensation for removal and disposal of existing pavement and placement of new pavement to include concrete cap, restoration of existing pavement markings. The unit price shall include, but not be limited to, labor, equipment, materials, transportation, and tools required to perform the work in accordance with the latest DeKalb County DWM Design Standards Manual Standard Detail G-005, Typical Patch and Resurfacing Detail. No additional payment will be made for removing and replacing adjacent pavement damaged while performing the sewer rehabilitation and replacement work.

1. (Bid Item 02700-02): Road Pavement Patch, (County Standard)

S. Curb & Gutter, Granite & Concrete: Measurement for payment will be per linear foot (LF) of curb removed and replaced. Payment will constitute full compensation for sawcut, removing, disposing, and replacing existing curb and gutter as necessary to complete the sewer rehabilitation or replacement work. Replacing granite curbs and gutters shall be per Section 02700 and concrete curbs and gutters shall be per Section 02710.

1. (Bid Item 02710-03): Concrete curb and gutter (6"x24")
2. (Bid Item 02710-04): Concrete curb and gutter (8"x30")
3. (Bid Item 02710-05): Granite curb, reuse existing curb

T. Concrete Sidewalk: Measurement for payment will be per square yard (SY) of concrete sidewalk removed and replaced, 4" thick +/- . Payment will constitute full

compensation for sawcut, removing, disposing, and replacing a public or private sidewalk per Section 02710.

1. (Bid Item 02710-06): Concrete Sidewalk Replacement, 4"
- U. (Bid item 02710-04) Concrete Specialty Stamped Paver Sidewalk: Measurement for payment will be per square yard (SY) of concrete sidewalk removed and replaced, 4" thick +/- . Payment will constitute full compensation for sawcut, removing, disposing, and replacing, stamped to match surrounding sidewalk, a public or private sidewalk per Section 02710.
- V. Concrete Driveway Replacement, Residential: Measurement for payment will be per square yard (SY) of driveway removed and replaced (6" +/- thick). Payment will constitute full compensation for sawcut, removing, disposing, and replacing concrete driveways. Replaced driveways shall be installed per the Drawings and Section 02710.
1. (Bid Item 02710-01): Concrete Driveway Replacement, 6"
- W. Concrete Driveway Replacement, Commercial: Measurement for payment will be per square yard (SY) of driveway removed and replaced (8" +/- thick). Payment will constitute full compensation for sawcut, removing, disposing, and replacing concrete driveways. Replaced driveways shall be installed per the Drawings and Section 02710.
1. (Bid Item 02710-02): Concrete Driveway Replacement, 8"
- X. Asphalt Driveway Replacement: Residential & Commercial- Measurement for payment will be per square yard (SY) of driveway removed and replaced. Payment will constitute full compensation for removing, disposing, and replacing asphalt driveways. Replaced driveways shall be installed per the Drawings and Section 02700. Traffic control measures required for work in low-traffic or residential areas shall be included in the unit price.
1. (Bid Item 02700-05): Asphaltic Concrete Driveway Replacement, Residential & Commercial 6" thick
 2. (Bid Item 02700-06): Asphaltic Concrete Driveway Replacement, Residential & Commercial - Additional 2" lift
- Y. (Bid Item 02700-4) Specialty Brick Paver Replacement: Measurement for payment will be per square yard (SY) of brick paver removed and replaced. Reuse existing pavers to the greatest extent possible. Payment will constitute full compensation for removing and replacing a public or private sidewalk per Section 02700.
1. (Bid Item 02700-04): Specialty Brick Paver/Sidewalk Replacement
- Z. (Bid item 02607-01) Adjusting Manhole Height $\leq 12"$. Measurement for payment will be per each (EA) manhole for removing the frame & cover and building up the chimney section of the manhole no more than 12 inches (reuse existing casting frame and cover). Payment will constitute full compensation for all costs for uncovering and/or adjusting each manhole to grade or higher including, but not limited to, labor, equipment, transportation, tools, and all other related procedures and materials necessary to produce the results specified in Section 02607. Replacement MH frame & cover castings, when required, will be provided by the

County at no cost to the Contractor. There shall be no distinctions made for diameter of the manhole or its material composition. No separate payment shall be made for resetting existing manhole frames and covers. That work shall be considered an integral part of adjusting manholes. Manholes located in paved areas will require a concrete collar in accordance with DeKalb Standard Drawing S-006. No separate payment will be made for the concrete collar. Maintenance of traffic and associated traffic control measures required for the work shall be included in the unit price.

- AA. (Bid Item 02607-02) Adjusting Manhole Height > 12". Measurement for payment will be per vertical foot (VF) of manhole height adjustment exclusive of the manhole frame height. No separate payment will be made for 12" or less height adjustment Bid item 02607-1 above. Payment will constitute full compensation for all costs for uncovering and/or adjusting each manhole to grade or higher including, but not limited to, labor, equipment, transportation, tools, and all other related procedures and materials necessary to produce the results specified in Section 02607. Replacement MH frame & cover castings, when required, will be provided by the County at no cost to the Contractor. The Contractor will advise the Program Manager in writing prior to proceeding. There shall be no distinctions made for diameter of the manhole or its material composition. No separate payment shall be made for resetting existing manhole frames and covers. This work shall be considered an integral part of raising manholes. Manholes located in paved areas will require a concrete collar in accordance with DeKalb Standard Drawing S-006. No separate payment will be made for the concrete collar. Maintenance of traffic and associated traffic control measures required for the work shall be included in the unit price.
- BB. (Bid item 02607-03) Replace Manhole Frame and Cover (Standard, Waterproof): Measurement for payment will be per each (EA) for replacement of manhole frame and cover, completed and accepted. This work includes replacing manhole frames and covers that need to be replaced with the associated pavement or landscape repair made necessary by the work. Manholes located within paved areas will require a concrete collar in accordance with DeKalb Standard Drawing S-006. Payment will constitute full compensation for all costs associated with removing the existing manhole frame and cover, regardless of type, and replacing it with a new manhole frame and cover and other ancillary work. The costs include, but is not limited to, labor, equipment, transportation, tools, removal and replacement of asphalt as needed, and all other related procedures and materials necessary to produce the results specified in Section 02607. Replacement MH frame and cover will be provided by the County at no cost to the Contractor. Maintenance of traffic and associated traffic control measures required for the work shall be included in the unit price. Note, this item will not apply to Manhole Height Adjustments requiring the replacement of new frame and covers.
- CC. Locate & Expose Buried Manhole, Street & Non-Street. Measurement for payment will be per each (EA) buried manhole located and exposed. There shall be no distinctions made for the diameter or invert depth of the manhole exposed. There will be no distinctions made for manholes located beneath brick, cobbles, concrete, asphalt or other hard surfaces. Those manholes located outside of paved areas are non-street manholes. Payment shall be made at the bid price for each buried manhole acceptably located and exposed and will constitute full compensation for furnishing all labor, materials, tools, and equipment necessary to perform all work.

Manholes with minor ground litter and/or minor soil cover will not be considered buried if that manhole is in the approximate location provided by County records.

1. (Bid Item 02607-04) Locate and Expose buried manholes in street/paved area.
2. (Bid Item 02607-05) Locate and Expose buried manholes not in street.

DD. Cured-In-Place-Pipe (CIPP), All Diameters – Bid Item 02500 (1-14): Measurement for payment will be per linear foot (LF) of sewer acceptably lined based on the actual horizontal length of sewer lined based on actual horizontal length of sewer lined as field measured from center of manhole to center of manhole along the axis of the sewer. The length occupied by the manhole itself shall not be deducted. Payment for the diameter (or dimensions) of the sewer being lined and the wall thickness of the liner will constitute full compensation for the labor, equipment, and materials required to furnish and install the work complete. All costs for renewing gravity sewer pipe by CIPP liner will be included in the unit prices including, but not limited to, light cleaning of existing sewer pipe, type testing, wet-out, bypass pumping, pre-liner, insertion, Vericure type temperature monitoring system, curing, pre and post-installation CCTV inspection for condition confirmation and installation quality control, watertight sealing of connections at manholes, sealing of cut edges in pipe and/or manholes and all other related procedures and materials necessary to complete the pipe lining. Payment shall be withheld due to failure to submit all post-installation CCTV video and other required quality control documentation for the work. No payment shall be made for any portion of failed CIPP lining attempts and result in other methods used, such as open cut. If a section of existing host pipe must be repaired or replaced prior to installation, then the section will be paid for only by the appropriate conventional pipe work/point repair bid item. Correction of failed CIPP or CIPP deemed defective from mid-warranty internal condition inspection or test reports for structural values, thickness, etc., shall be repaired or replaced at no extra cost to the Owner. Payment for quality assurance sampling and testing of installed liner will be included in the unit price.

1. (Bid Item 02500-01) Cured-In-Place Pipe, 8" Diameter, minimum thickness
2. (Bid Item 02500-03) Cured-In-Place Pipe, 10" Diameter, minimum thickness
3. (Bid Item 02500-05) Cured-In-Place Pipe, 12" Diameter, minimum thickness
4. (Bid Item 02500-07) Cured-In-Place Pipe, 15" Diameter, minimum thickness
5. (Bid Item 02500-09) Cured-In-Place Pipe, 18" Diameter, minimum thickness
6. (Bid Item 02500-11) Cured-In-Place Pipe, 20" Diameter, minimum thickness
7. (Bid Item 02500-13) Cured-In-Place Pipe, 24" Diameter, minimum thickness
8. (Bid Item 02500-03) Cured-In-Place Pipe, 10" Diameter, minimum thickness

9. (Bid Item 02500-02) CIPP 8", Additional 1 mm thickness
 10. (Bid Item 02500-04) CIPP 10", Additional 1 mm thickness
 11. (Bid Item 02500-06) CIPP 12", Additional 1 mm thickness
 12. (Bid Item 02500-08) CIPP 15", Additional 1 mm thickness
 13. (Bid Item 02500-10) CIPP 18", Additional 1 mm thickness
 14. (Bid Item 02500-12) CIPP 20", Additional 1 mm thickness
 15. (Bid Item 02500-14) CIPP 24", Additional 1 mm thickness
- EE. Sewer, Internal Point Repair with CIPP, all Diameters, all wall thickness:-
Measurement for payment will be per each (EA) point repair at a minimum of eight (8) linear feet (LF) in length as measured from the centerline of each connection coupling along the longitudinal axis of the sewer main, rounded to the nearest foot. Payment for the liner will constitute full compensation for the labor, equipment, and materials required to furnish and install the work complete. All costs for repairing gravity sewer pipe by CIPP will be included in the unit prices. The unit prices shall include testing, wet-out, bypass pumping, pre-liner, insertion, curing, pre- and post-installation CCTV inspection for quality control, watertight sealing connections at manholes, sealing of cut edges in pipe and/or manholes and all other related procedures and materials necessary to complete the pipe lining. Payment shall be withheld due to failure to submit all post-installation CCTV video and other required quality control documentation for the work. No payment shall be made for any portion of failed CIPP lining attempts and result in other methods used, such as open cut. If a section of existing host pipe must be repaired or replace prior to installation, then the section will be paid for only by the appropriate conventional pipe work/point repair bid item.
1. (Bid Item 02520-01) Internal Pipe Point Repair with CIPP, 6"- 8" diameter, minimum thickness
 2. (Bid Item 02520-03) Internal Pipe Point Repair with CIPP, 10" diameter, minimum thickness
 3. (Bid Item 02520-05) Internal Pipe Point Repair with CIPP, 12" diameter, minimum thickness
 4. (Bid Item 02520-07) Internal Pipe Point Repair with CIPP, 15" diameter, minimum thickness
 5. (Bid Item 02520-09) Internal Pipe Point Repair with CIPP, 18" diameter, minimum thickness
 6. (Bid Item 02520-11) Internal Pipe Point Repair with CIPP, 20" - 24" diameter (Includes 24"), minimum thickness
- FF. Sewer Internal Point Repairs, Additional Linear Footage, All Dimensions, All Pipe Diameters. Measurement for payment will be per linear foot (LF) of sewer pipe in excess of the eight (8) linear feet (LF) included in the unit price above for an Internal Point Repair (EA). All length measurements shall be taken as field measurements along the longitudinal axis of the sewer. The unit prices shall include testing, wet-out, bypass pumping, pre-liner, insertion, curing, pre- and post-installation CCTV inspection for quality control, watertight sealing connections at manholes, sealing of

cut edges in pipe and/or manholes and all other related procedures and materials necessary to complete the pipe lining.

1. (Bid Item 02520-02) Internal Point Repair, additional footage, 6" - 8" diameter
2. (Bid Item 02520-04) Internal Point Repair, additional footage, 10" diameter
3. (Bid Item 02520-06) Internal Point Repair, additional footage, 12" diameter
4. (Bid Item 02520-08) Internal Point Repair, additional footage, 15" diameter
5. (Bid Item 02520-10) Internal Point Repair, additional footage, 18" diameter
6. (Bid Item 02520-12) Internal Point Repair, additional footage, 20" - 24" diameter (Includes 24")

GG. Internal Pipe Point Repair with Infrastructure Point Repair System – or Equal all Diameters, all wall thickness: Measurement for payment will be per each (EA) point repair at a minimum of eight (8) linear feet (LF) in length installed as measured from the centerline of each connection coupling along the longitudinal axis of the sewer main, rounded to the nearest foot. Payment for the liner will constitute full compensation for the labor, equipment, and materials required to furnish and install the work complete. All costs for repairing gravity sewer pipe by CIPP will be included in the unit prices. The unit prices shall include testing, wet-out, bypass pumping, pre-liner, insertion, curing, pre- and post-installation CCTV inspection for quality control, watertight sealing connections at manholes, sealing of cut edges in pipe and/or manholes and all other related procedures and materials necessary to complete the pipe lining. Payment shall be withheld due to failure to submit all post-installation CCTV video and other required quality control documentation for the work. No payment shall be made for any portion of failed lining attempts and result in other methods used, such as open cut. If a section of existing host pipe must be repaired or replace prior to installation, then the section will be paid for only by the appropriate conventional pipe work/point repair bid item. An additional CCTV inspection shall be allowed for in the Contractor's unit price and work schedule,

1. (Bid Item 02521-01) Internal Pipe Point Repair with Infrastructure Repair System, 6" - 8" Diameter
2. (Bid Item 02521-02) Internal Pipe Point Repair with Infrastructure Repair System, 10" Diameter
3. (Bid Item 02521-03) Internal Pipe Point Repair with Infrastructure Repair System, 12" Diameter
4. (Bid Item 02521-04) Internal Pipe Point Repair with Infrastructure Repair System, 15" Diameter
5. (Bid Item 02521-05) Internal Pipe Point Repair with Infrastructure Repair System, 18" Diameter

6. (Bid Item 02521-06) Internal Pipe Point Repair with Infrastructure Repair System, 20" – 24" Diameter
- HH. Sewer Internal Point Repairs with Infrastructure Repair System – or Equal, Additional Linear Footage, All Dimensions, All Pipe Diameters. Measurement for payment will be per linear foot (LF) of sewer pipe in excess of the eight (8) linear feet (LF) included in the unit price above for an Internal Point Repair (EA). All length measurements shall be taken as field measurements along the longitudinal axis of the sewer. The unit prices shall include testing, wet-out, bypass pumping, pre-liner, insertion, curing, pre- and post-installation CCTV inspection for quality control, watertight sealing connections at manholes, sealing of cut edges in pipe and/or manholes and all other related procedures and materials necessary to complete the pipe lining.
1. (Bid Item 02521-07) IPR, additional footage, 6" - 8" diameter
 2. (Bid Item 02521-08) IPR, additional footage, 10" diameter
 3. (Bid Item 02521-09) IPR, additional footage, 12" diameter
 4. (Bid Item 02521-10) IPR, additional footage, 15" diameter
 5. (Bid Item 02521-11) IPR, additional footage, 18" diameter
 6. (Bid Item 02521-12) IPR, additional footage, 20"-24" diameter
- II. Heavy Cleaning, Sanitary Sewer, <8" - 18": This item is associated with CCTV work. Measurement for payment will be per linear foot (LF), for the collection and removal of debris, measured along the centerline of the pipe, from centerline of structure to the end of survey or centerline of structure to centerline of structure, whichever is applicable. Heavy Cleaning must be approved by the Inspector in the field or through alternate methods whereby the Contractor provides information that will indicate that the cleaning was at a level necessitating heavy cleaning. Payment will constitute full compensation for authorized Heavy Cleaning completed and approved per Specification Section 02956. No payment will be made for any unauthorized Heavy Cleaning. There will be no separate payment made for documentation required to support the need for Heavy Cleaning. No separate payment will be made for mobilization/demobilization that might be required to perform the Heavy Cleaning and to continue CCTV inspection. Maintenance of traffic and associated traffic control measures required for the work shall be included in the unit price. Costs shall include, but not limited to, labor, equipment, transportation, setup, tools, and all other related procedures and materials necessary to complete the Heavy Cleaning in accordance with Specification Section 02956.
1. (Bid Item 02956-02) Heavy cleaning, ≤ 8" diameter.
 2. (Bid Item 02956-03) Heavy cleaning, >8" – 18" diameter.
 3. (Bid Item 02956-04) Heavy cleaning, >18" – 24" diameter.
- JJ. Cleaning & Verification, 18" - >36": This item is associated with Sonar/TISCIT work. Cleaning will be classified by pipe size and the Average Cross-Sectional Area

Blockage and will be determined by the actual measured (Pre-TISCIT) volume of deposits and other debris found in the pipe:

- a. $\leq 15\%$ Blockage: Where the volume of debris/deposits/in the pipe segment calculated over the length of the total line segment equates to that of a line segment holding 15% blockage for that length (MH to MH);
- b. 15% - 25% Blockage: Where the volume of debris/deposits/in the pipe segment calculated over the length of the total line segment equates to that of a line segment holding 15% blockage for that length but less than or equal to that calculated over the total length of the line segment holding 25% blockage for the length (MH to MH);
- c. $> 25\%$ Blockage: Where the volume of debris/deposits/in the pipe segment calculated over the length of the total line segment exceeds that of a line segment holding 25% blockage for the length of pipe (MH to MH);
- d. If the entire length of pipe cannot be assessed, the cleaning work order will be based on the level as calculated for the length of pipe assessed.

Cleaning will not be considered complete and accepted until a Post-TISCIT verification (PACP standard) is performed indicating that deposits/obstructions are not in excess of 5%. No separate payment will be made for Mobilization/demobilization that might be required to perform the Heavy Cleaning and to continue CCTV inspection. Maintenance of traffic and associated traffic control measures required for the work shall be included in the unit price. Costs shall include, but not limited to, labor, equipment, transportation, setup, tools, and all other related procedures and materials necessary to complete the Heavy Cleaning in accordance with Specification Section 02956.

1. (Bid Item 02956-05) Cleaning & Verification $< 15\%$ Average Cross Section Area Blockage, 18"-36" Diameter.
2. (Bid Item 02956-06) Cleaning & Verification $< 15\%$ - 25% Average Cross Section Area Blockage, 18"-36" Diameter.
3. (Bid Item 02956-07) Cleaning & Verification $> 25\%$ Average Cross Section Area Blockage, 18"-36" Diameter.
4. (Bid Item 02956-08) Cleaning & Verification $< 15\%$ Average Cross Section Area Blockage, $> 36\%$ Diameter.
5. (Bid Item 02956-09) Cleaning & Verification $< 15\%$ - 25% Average Cross Section Area Blockage, $> 36\%$ Diameter.
6. (Bid Item 02956-10) Cleaning & Verification $> 25\%$ Average Cross Section Area Blockage, $> 36\%$ Diameter.

KK. Manhole Debris Removal & Disposal: This pay item is utilized to clean those manholes found on inspection that contain debris that prevents Manhole Condition Assessment, CCTV, and SONAR/TISCIT inspections. Measurement will be by the estimated volume (CY) of debris removed from the manhole and disposed of.

1. (Bid Item 02956-11) Manhole Debris Removal & Disposal.

- LL. Manhole Frame Sealing, Measurement for payment will be per each (EA). Payment will constitute full compensation for all costs for installing a manufactured or applied internal or external flexible seal to frame joints including, but no limited to, labor, equipment, transportation, tools, and all other related procedures and materials.
- MM. Rebuild Invert and Bench, Measurement for payment will be per each (EA). Payment will constitute full compensation for all costs for rebuilding the invert and bench including, but not limited to, labor, equipment, transportation, tools, and all other related procedures and materials.
- NN. Sealing and Patching, 48" to and including 60" Diameter Manhole- Measurement for payment will be square yard (SY) of manhole wall actually sealed and/or patched. Payment will constitute full compensation for all manhole surface preparation and cleaning, patching, sealing active leaks, flow control/bypass pumping, clean up, inspection, quality assurance testing (manhole vacuum testing), and any other work or materials necessary to complete the work for up to thirty (30) vertical feet of depth. Sealing and patching work under this item is "stand-alone" and will be paid only for manholes not to be subsequently lined under another pay time. Payment will include all costs associated performing the work in accordance with Section 02900.
- OO. Cementitious Manhole Coating, 48" to and including 72" Diameter- Measurement will be per square yard (SY) of manhole wall coated. Payment will constitute full compensation for all labor, equipment, transportation, tools, removal of steps, surface preparation, removal of intruding connections, cleaning, patching, sealing, coating, flow control/bypass pumping, clean up, inspection, quality assurance testing (manhole vacuum testing), and any other work or materials necessary to complete the work for up to thirty (30) vertical feet of depth per Section 02900.
- PP. Epoxy Manhole Coating, 48' to and including 72" Diameter- Measurement will be per square yard (SY) of manhole wall coating. Payment will constitute full compensation for all labor, equipment, transportation, tools, removal of steps, surface preparation, removal of intruding connections, cleaning, patching, sealing, coating, flow control/bypass pumping, clean up, inspection, quality assurance testing (manhole vacuum testing), and any other work or materials necessary to complete the work for up to thirty (30) vertical feet of depth per Section 02900.
- QQ. Fiberglass Manhole Lining, 48" to and including 72" Diameter. Measurement will be per square yard (SY) of manhole wall lined. Payment will constitute full compensation for all labor, equipment, transportation, tools, surface preparation, cleaning, patching, grouting, sealing, lining, flow control/bypass pumping, clean up, inspection, quality assurance testing (manhole vacuum testing), and any other work or materials necessary to complete the work for up to thirty (30) vertical feet of depth per Section 02900.
- RR. Hydrant Meter/Water Consumption Charges: The Contractor will pay all fees associated with the acquisition, monthly charges, and water consumption associated with the Contract. The Contractor will report the water usage to the Project Manager monthly.
- SS. Sanitary Landfill: The Contractor will pay all disposal fees associated with the utilization of the County's Seminole Road Landfill. The Contractor will report the

monthly tare weight totals for Seminole Road Landfill to the Project Manager monthly.

- TT. Pipe Replacement: With the purpose of the contract being the urgent repair of infrastructure necessary to prevent future sanitary sewer overflows (SSO's), the Contractor may be requested to provide a proposal for pipe replacement in place or for construction of an offset alignment. These requests will be for small projects, no more than 1,000 linear feet in length. It is expected that these requests will be rare. To facilitate the request, the Program Manager will initiate a Work Change Directive (WCD) for each instance of this work to track the work and to obtain a cost proposal for the work. The construction work is expected to be a turn-key job with the Contractor providing coordination with others to obtain easements and providing as-built drawings sealed by an engineer or surveyor licensed with the State of Georgia. The work will include the following:
1. Cooperate with the Program Manager in the preliminary design of the pipe replacement or pipe realignment construction; provide input into the design as to the methods preferred by the Contractor (open cut replacement, pipe bursting, directional drilling, etc.).
 2. Obtain a right-to-enter from the property owner(s).
 3. Constructability Review: Provide site reconnaissance with the Program Manager staff to reduce risk to the Contractor and County; Review for practicable access (trees, hedges, fences), rock outcroppings and/or swampy ground, special features (walls, foundations), pipe cover of the proposed alignment, location of other utilities, creek crossings; Provide input for preferred construction methods, alternative options and costs based upon the final project design.
 4. Final Design: cause the proposed alignment to be staked in the field
 5. Update cost proposal:
 - a. Updated costs will include the following items not normally associated with construction:
 - GPS Level 1 (± 1 cm) coordinates for each manhole: per Each
 - GIS geodatabase or CAD equivalent file compatible with ESRI ArcMap that reflects the new alignment in the instance of an offset alignment
 - As-Built Drawings that will indicate the proposed easements sealed by an engineer or surveyor licensed with the State of Georgia

END OF SECTION