



April 25, 2024

**Addendum No. 6
BL037-24
Hopkins Mill Subdivision Water Main Replacement**

The following addition/changes modify the Bid No. BL037-24 "Hopkins Mill Subdivision Water Main Replacement" Contract Documents, dated March 2024, as first advertised on March 20, 2024.

I. Questions:

Q1. Where mainline is in the grass area shall all landscaping in kind such as trees and bushes be replaced or just the sod?

A1. Replace landscaping as directed on the drawings. Sod will be typically replaced for all area on top of the water main trench. Trees and bushes will not be put back on top of the water main trench.

Q2. Would Gwinnett County consider adding a line item for Meter Replacement to allocate cost for (Water Notes) G-103 / Note #6?

A2. See updated M&P 32 to clarify meters will be provided by GCDWR. All water meter boxes and appurtenances will be included as part of the existing water meter relocation cost.

Q3. Please provide Detail S1 as referred to G-103 / Note #49?

A3. Please see attached Detail S1. CD-001 is revised to include detail S-1. A revised CD-001 is included in this addendum.

Q4. Clarification of Detail G5b

A4. The Detail G5b from Drawing No. CD-001 is deleted / removed and shall not be used.

Acknowledge receipt of this addendum on the firm information page of the request for proposal.
Sincerely,

Brittany Bryant, CPPB
Purchasing Associate III

SECTION 01 22 15.11

MEASUREMENT AND PAYMENT

BID WATER AND SEWER PROJECTS

PART 1 – GENERAL

SUMMARY

This section defines the bid items of Work listed on the Bid Form and defines how payment shall be determined. Payment shall be made for each item based on the description in this section.

Bid Prices included on the Bid Form shall be full compensation for all materials, labor, equipment, tools, construction equipment and machinery, heat, utilities, transportation, taxes, overhead, markup, incidentals, and services necessary for the execution and completion of the Work in the Contract Documents to be performed under this Contract. For the unit price Work described, actual used and installed quantities of each bid item shall be measured in the field or based on submitted delivery tickets and certified by the Engineer and/or GCDWR upon completion of construction in the manner set forth for each item in this and other sections of the Specifications. Payment for all items listed on the Bid Form will constitute full compensation for all Work shown and specified to be performed.

Pay items included in the Engineer Directed Items on the Bid Form are for any additional work that is determined to be required to complete the project but was not originally shown in the Bid Documents or is indicated “as directed by Owner”. For bidding purposes, use of Engineer Directed Items to pay for items of work that were shown in the Bid Documents is PROHIBITED, unless approved by GCDWR. Measurement and payment under Engineer Directed Items shall be in accordance with the limits established in writing by GCDWR upon directing such work.

The Contractor shall assist and fully cooperate with GCDWR to determine proper measurement and payment for each item providing complete and reasonable backup documentation as requested by GCDWR to substantiate payment due.

BID ITEMS

The following items comprise the Base Bid Total as listed on the Bid form.

1. SPECIFICATION SECTION NO. 01 78 39, UNIT PRICE FOR PROJECT RECORD DRAWINGS:

MEASUREMENT: The quantity to be paid under this item shall be all project record drawings of actual Work installed, complete as specified, submitted, and approved by GCDWR. On any Gwinnett County Department of Transportation project, Project Record Drawings shall be submitted 90 days after the DWR utility work is in service.

PAYMENT: The Unit Price Bid lump sum (LS) shall include all labor, materials, tools, and equipment necessary to prepare and submit project record drawings of actual Work installed, complete as specified, and approved by DWR. No additional payment will be made for multiple submittals.

2. SPECIFICATION SECTION NO 02 32 19, UNIT PRICE FOR EXPLORATORY EXCAVATIONS:

MEASUREMENT: The quantity to be paid under this item shall be the actual number (EA) of exploratory excavations as verified by GCDWR. This item is to only be used when directed by GCDWR and is not to be used by the Contractor as a method of payment for locating utilities or valves required for the completion of the Work.

PAYMENT: The Unit Price Bid for each (EA) exploratory excavation shall include all necessary labor, equipment, and materials required to perform exploratory excavations. The unit price shall further include full compensation for any traffic control needed for excavations including, but not limited to warning signs, message boards, barricades, lights, and flaggers. Any and all site restoration, haul-off, and clean-up work shall be included in the unit price. Topsoil removed from the immediate site and reused will not be considered for payment.

3. SPECIFICATION SECTION NO. 02 42 11, UNIT PRICE FOR SITE RESTORATION AND REMOVAL OF CONSTRUCTION MATERIAL:

MEASUREMENT: The quantity to be paid under this item shall be lump sum (LS) for cleanup and removal of all junk, rubbish, trash, and construction debris.

PAYMENT: The Unit Price Bid lump sum (LS) shall include all labor, tools, and equipment necessary to complete the Work as specified.

4. SPECIFICATION SECTION NO 03 30 00, UNIT PRICE FOR CAST-IN-PLACE CONCRETE – CLASS A:

MEASUREMENT: The quantity to be paid for under this item shall be the actual number of cubic yards (CY) of cast-in-place concrete placed as shown on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid for cast-in-place concrete shall include excavation, support, formwork, concrete testing, pouring, and finishing. Included shall be the cost of furnishing all materials, labor, equipment, tools, appliances, and other incidentals to complete the work.

5. SPECIFICATION SECTION NO 31 23 00, UNIT PRICE FOR ROCK REMOVAL

MEASUREMENT The quantity of Rock Removal paid for under this item shall be the number of cubic yards (CY) removed within the specified limits. There will be no additional payment for rock removal beyond the specified limits. Rock shall be defined as solid mineral material with a volume in excess of ½ CY that cannot be broken down and removed by the use of heavy construction equipment, such as a Caterpillar Model 215 track-type hydraulic excavator equipped with a short tip radius rock bucket, without drilling or blasting. Materials which can be loosened with a pick, hard pan, boulders less than ½ CY in volume, chert, clay, soft shale, soft and disintegrated rock, and any similar material shall not be considered as rock.

PAYMENT: The Unit Price Bid for cubic yard (CY) of Rock Removal shall include all necessary tools, equipment, labor, and materials to complete the Work. If rock is encountered, the Contractor shall delineate the rock for the proposed work and attain sufficient topographic data to establish the

limits of the rock to be excavated. Any other method of measurement must be approved by GCDWR. The quantity of Rock Removal paid for under this item shall be as follows:

- a) For trench pipe, maximum width will be measured as the lesser of the width of the pipe plus six (6) feet, or the width of the trench
- b) For standard manhole excavation, maximum excavation considered for payment will be the lesser of the actual excavated area or a 10'x10'; for all other manhole sizes the allowable length and width shall be the lesser of the diameter of the manhole plus six (6) feet, or the size of the excavated area.
- c) For bore pits, maximum excavation measurement for payment shall be the size of the pit plus two (2) feet on either side of where rock is found.

No additional payment shall be made for rock removal beyond these limits.

6. SPECIFICATION SECTION NO 31 25 00, UNIT PRICE FOR EROSION SEDIMENTATION AND POLLUTION CONTROLS:

MEASUREMENT: The quantity to be paid under this item shall be as indicated for each Best Management Practice (BMP) actually installed, as indicated on the Drawings, as directed by the Engineer, or as directed by GCDWR.

PAYMENT: The Unit Price Bid shall include all labor, materials, tools, and equipment necessary for furnishing, placing, maintaining, and removing each BMP, as applicable; all costs for inspection, monitoring, and reporting on the erosion sedimentation and pollution controls.

- a) Anionic Polyacrylamide – PAM (Pm): Payment shall be the actual number of gallons (GAL) of undiluted chemical utilized; or if PAM “logs” are utilized, payment shall be the actual number (EA) of PAM “logs” installed.
- b) Hay Bales (Sd1): Payment shall be for (EA) hay bale actually installed.
- c) Temporary Silt Fence Type ‘NS’ (Sd1): Payment shall be the actual number of linear feet (LF) installed. No payment will be made for silt fence required to be reinstalled for any reason.
- d) Temporary Silt Fence Type ‘S’ (Sd1): Payment shall be the actual number of linear feet (LF) installed. No payment will be made for silt fence required to be reinstalled for any reason.
- e) Inlet Sediment Trap (Sd2): Payment shall be for each (EA) number of inlet sediment traps actually installed.
- f) Slope Stabilization (Ss): Payment shall be for the square yards (SY) of matting or netting actually installed. No payment shall be made for maintenance of matting or netting.
- g) Stone Check Dam (Cd-S): Payment shall be for each (EA) stone check dam actually installed.
- h) Riprap (St): Payment shall be for square yards (SY) actually installed.
- i) Straw or Hay Mulch (Ds1): Payment shall be per ton (TN) actually installed at the coverage rates specified.
- j) Temporary Seeding (Ds2): Payment shall be per square yard (SY) of actually planted seed at the coverage rates specified. No payment shall be made for reseeding or maintenance.
- k) Construction Exit (Co): Payment shall be for (EA) construction exit installed and maintained throughout the duration of the project as shown on the plans or as approved by GCDWR.
- l) Construction Road (Cr): The Unit Price Bid shall be Square Yards (SY) for Construction Road Stabilization

7. SPECIFICATION SECTION NO. 32 12 16, UNIT PRICE FOR ASPHALTIC CONCRETE 9.5MM SUPERPAVE, TYPE II, GROUP 2 ONLY:

MEASUREMENT: The quantity to be paid for under this item shall be tons (TN) of Asphaltic Concrete 9.5mm Superpave, Type II, Group 2 Only placed to the limits shown on the Drawings or

as directed by GCDWR.

PAYMENT: The Unit Price Bid per ton (TN) shall include furnishing and placing materials including asphalt cement, hydrated lime when required, approved additives, tack coat; milling, removal, and haul off; removal of soils, aggregate and asphalt replaced, cleaning, repairing surfaces, and preparing surfaces; mixing, spreading, rolling; restriping roadway/pavement to match preconstruction striping; and labor, equipment, and materials required for placement. No additional payment will be made for the replacement of traffic loops and shall be included in the cost of the asphalt and coordinated with the local Department of Transportation. Payment shall not be made when asphalt is used by the Contractor due to over excavation or for the Contractor's convenience.

8. SPECIFICATION SECTION NO. 32 12 16, UNIT PRICE FOR ASPHALTIC CONCRETE 12.5 MM SUPERPAVE, GP2 ONLY:

MEASUREMENT: The quantity to be paid for under this item shall be tons (TN) of Asphaltic Concrete 12.5mm Superpave, GP2 Only placed to the limits shown on the Drawings or as directed by GCDWR.

PAYMENT: The Unit Price Bid per ton (TN) shall include furnishing and placing materials including asphalt cement, aggregate, hydrated lime when required, approved additives, tack coat; milling, removal, and haul off; removal of soils, aggregate and asphalt replaced, cleaning, repairing surfaces, and preparing surfaces; mixing, spreading, rolling; restriping roadway/pavement to match preconstruction striping; and labor, equipment and materials required for placement. No additional payment will be made for the replacement of traffic loops and shall be included in the cost of the asphalt and coordinated with the local Department of Transportation. Payment shall not be made when asphalt is used by the Contractor due to over excavation or for the Contractor's convenience.

9. SPECIFICATION SECTION NO. 32 12 16, UNIT PRICE FOR ASPHALTIC CONCRETE 19MM SUPERPAVE:

MEASUREMENT: The quantity to be paid for under this item shall be tons (TN) of Asphaltic Concrete 19mm Superpave placed to the limits shown on the Drawings or as directed by GCDWR.

PAYMENT: The Unit Price Bid per ton (TN) shall include furnishing and placing materials including asphalt cement, aggregate, hydrated lime when required, approved additives, tack coat; milling, removal, and haul off, removal of soil, aggregate and asphalt replaced, cleaning, repairing surfaces, and preparing surfaces; mixing, spreading, rolling; restriping roadway/pavement to match preconstruction striping; and labor, equipment, and materials required for placement. Payment shall not be made when asphalt is used by the Contractor due to over excavation or for the Contractor's convenience.

10. SPECIFICATION SECTION NO. 32 12 16, UNIT PRICE FOR ASPHALTIC CONCRETE 25MM SUPERPAVE:

MEASUREMENT: The quantity to be paid for under this item shall be tons (TN) of Asphaltic Concrete 25mm Superpave placed to the limits shown on the Drawings or as directed by GCDWR.

PAYMENT: The Unit Price Bid per ton (TN) shall include furnishing and placing materials including asphalt cement, aggregate, hydrated lime when required, approved additives, tack coat;

milling, removal, and haul off, removal of soils, aggregate and asphalt replaced, cleaning, repairing surfaces, and preparing surfaces; mixing, spreading, rolling; and labor, equipment, and materials required for placement. Payment shall not be made when asphalt is used by the Contractor due to over excavation or for the Contractor's convenience.

11. SPECIFICATION SECTION NO. 32 12 16, UNIT PRICE FOR GRADED AGGREGATE BASE (GAB):

MEASUREMENT: The quantity to be paid for under this item shall be tons (TN) of Graded Aggregate Base (GAB) bedding or backfill placed and compacted as shown on the Drawings, as directed by GCDWR due to pavement failure, temporary road surface, or as directed by GCDWR.

PAYMENT: The Unit Price Bid per ton (TN) of GAB shall include all shaping and compacting of the existing roadbed, spreading, mixing, and watering; milling, removal and haul off and off-site disposal of soils, aggregate, and GAB; and labor, equipment, and materials required for placement and compaction of GAB to the limits specified and shown on the Drawings. No additional payment shall be made for GAB placed outside the limits specified unless otherwise as directed by GCDWR.

12. SPECIFICATION SECTION NO. 32 12 16, UNIT PRICE FOR GEOTEXTILE FABRIC:

MEASUREMENT: The quantity to be paid for under this item shall be square yards (SY) of geotextile fabric, as measured before placement in the trench, or after placement for at-grade protection from soil embedment, installed per the manufacturer's recommendations as shown on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid per square yard (SY) of geotextile fabric shall include all labor, equipment, and materials required for placement of geotextile fabric as shown on the Drawings or as directed by GCDWR.

13. SPECIFICATION SECTION NO. 32 12 16, UNIT PRICE FOR GEOGRID:

MEASUREMENT: The quantity to be paid for under this item shall be square yards (SY) of geogrid, as measured before placement in the trench, or after placement for at-grade protection from soil embedment, installed per the manufacturer's recommendations as shown on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid per square yard (SY) of geogrid shall include all labor, equipment, and materials required for placement of geogrid as shown on the Drawings or as directed by GCDWR.

14. SPECIFICATION SECTION NO. 32 16 13, UNIT PRICE FOR CURB/COMBINATION CURB & GUTTER:

MEASUREMENT: The quantity to be paid under these items shall be the actual number of linear foot (LF) length of curb and/or combination curb and gutter installed as specified, indicated on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Prices Bid per linear foot (LF) length for curbs/curbs and gutter shall include

the furnishing of all materials, labor, tools, and equipment necessary to complete the Work as specified, as indicated on the Drawings, or as directed by GCDWR.

15. SPECIFICATION SECTION NO. 32 16 13, UNIT PRICE FOR SIDEWALK INSTALLATION:

MEASUREMENT: The quantity to be paid under this item shall be the actual number of square yards (SY) of sidewalk installed in accordance with the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid per square yard (SY) of sidewalks shall include the furnishing of all materials, labor, tools, and equipment necessary to complete the Work as specified, as indicated on the Drawings, or as directed by GCDWR. No additional payment will be made for the wheelchair ramps. All materials, labor, tools, and equipment necessary for the ramps will be included in this pay item.

16. SPECIFICATION SECTION NO 32 23 00, UNIT PRICE FOR ADDITIONAL PIPE BEDDING:

MEASUREMENT: The quantity to be paid under this item shall be the actual number of cubic yards (CY) of additional bedding material placed as specified, or as directed by GCDWR and not shown in the Contract Documents.

PAYMENT: The Unit Price Bid per cubic yard (CY) of additional bedding material include any additional permit fees, maintenance charges and inspection fees required by all road departments and the furnishing of all labor, materials, tools, traffic control and equipment necessary to complete the Work as specified, as indicated on the Drawings, or as directed by GCDWR. Included shall be the cost of additional excavation beyond trench depth to provide firm foundation and any cost of furnishing necessary work beyond the limits of measurement as defined under these specifications. Payment will not be made when bedding material is used by the Contractor due to over excavation or for the Contractor's convenience.

17. SPECIFICATION SECTION NO. 32 92 00, UNIT PRICE FOR PERMANENT SEEDING:

MEASUREMENT: The quantity to be paid under this item shall be the actual number of square yards (SY) of planted seed, complete; to include ground preparation, lime, fertilizer, seed, and mulch as specified, as indicated on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid per square yard (SY) shall include all labor, materials, tools, and equipment necessary to complete the Work as specified.

18. SPECIFICATION SECTION NO. 32 92 00, UNIT PRICE FOR SODDING:

MEASUREMENT: The quantity to be paid under this item shall be the actual number of square yards (SY) of sod installed, complete; to include ground preparation, lime, fertilizer, and sod as specified, as indicated on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid per square yard (SY) shall include all labor, materials, tools, and equipment necessary to complete the Work as specified.

19. SPECIFICATION SECTION NO. 32 92 00, UNIT PRICE FOR TOPSOIL:

MEASUREMENT: The quantity paid under this item shall be the number of cubic yards (CY) of topsoil placed.

PAYMENT: The Unit Price Bid per cubic yard (CY) of topsoil placed shall include all labor, equipment, and materials required for topsoil including delivering, placing, grading, and preparing topsoil.

20. SPECIFICATION SECTION NO 32 93 43, UNIT PRICE FOR TREE REPLACEMENT:

MEASUREMENT: The quantity to be paid under this item shall be each actual number (EA) of trees planted by type as shown on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid for each tree (EA) planted shall include all necessary tools, equipment, labor, and materials to complete the Work.

21. SPECIFICATION SECTION NO. 32 93 43, UNIT PRICE FOR TREE SAVE BARRIER FENCE:

MEASUREMENT: The quantity to be paid under this item shall be the actual number of linear feet (LF) of tree save barrier fence installed as shown on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid per linear feet (LF) of tree save barrier fence installed shall include all labor, materials, tools and equipment necessary for furnishing, placing, maintaining, and removing. No payment shall be made for tree save barrier fence required to be reinstalled for any reason.

22. SPECIFICATION SECTION NO 33 01 30.71, UNIT PRICE FOR MANHOLE INVERT REHABILITATION:

MEASUREMENT: The quantity to be paid under this item shall be the actual number (EA) of manhole inverts rebuilt.

PAYMENT: The Unit Price Bid for each (EA) manhole invert rehabilitation shall include all necessary tools, equipment, labor, and materials to complete the Work.

23. SPECIFICATION SECTION NO 33 01 30.74, UNIT PRICE FOR BYPASS PUMPING:

MEASUREMENT: The quantity to be paid under this item shall be a lump sum (LS) for all bypass pump requirements needed to complete the work.

PAYMENT: The Unit Price Bid lump sum (LS) shall include all labor, materials, tools, equipment and monitoring personnel required to complete the Work as specified including but not limited to multiple pump setups and discharge pipe.

24. SPECIFICATION SECTION NO 33 05 16.13, UNIT PRICE FOR PRECAST CONCRETE OR COMPOSITE UTILITY STRUCTURES:

MEASUREMENT:

- a. Standard diameter (48") manholes to be paid under this item shall be the total number of vertical feet of manhole base, riser(s), and cone or slab top placed, as measured between the inside invert of the downstream sewer pipe to the top of the ring and cover. All measurements shall be to the nearest one-tenth (0.1) foot.
- b. Large diameter (60", 72", 84" and 96") manholes to be paid under this item shall be the actual number installed of each size base – including the reducer slab. The vertical feet of 48" manhole riser(s) and cone or slab top placed, as measured between the top of the reducer slab to the top of the ring and cover, shall be paid under the Standard diameter (48") manholes.
- c. Frames and covers to be paid under this item for "traffic" and "bolt down" type frames and covers shall be the actual number of manhole frames and covers installed, including all necessary tools, labor and equipment required to complete the Work.
- d. Outside drops to be paid under this item shall be the actual number of outside drops installed. Payment for the manhole shall be paid under the items for manholes described above in items a or b.
- e. Cores to be paid under this item shall be the actual number of manhole cores made, complete with a flexible manhole boot installed, including all necessary tools, labor and equipment required to complete the Work in accordance with these specifications.
- f. Adjustment of frame and cover to be paid under this item shall be the actual number of frames and covers adjusted.

PAYMENT:

- a. The Unit Price Bid per each (EA) of Standard Diameter (48") manhole shall be the total number of manholes installed, including all necessary tools, labor and equipment required to complete the Work.
- b. The Unit Price Bid per each (EA) of Large Diameter (60", 72", 84", and 96") manhole shall be the total number of manholes installed, including all necessary tools, labor and equipment required to complete the Work.
- c. The Unit Price Bid per vertical footage (VF) of Additional Manhole vertical footage shall be the vertical feet of manhole depth over 10-feet as shown on the Drawings. All measurements shall be to the nearest one-tenth (0.1) foot.
- d. The Unit Price Bid for each (EA) frame and cover for "traffic" and "bolt down" type shall be the actual number of manhole frame and cover installed, including all necessary tools, labor and equipment required to complete the Work.
- e. The Unit Price Bid for each (EA) outside drop shall be the actual number of outside drops installed. Payment for the manhole shall be paid under the items for manholes described above in items a or b.
- f. The Unit Price Bid for each (EA) core shall be the actual number of manhole cores made, complete, with a flexible manhole boot installed; including all necessary tools, labor and equipment required to complete the Work in accordance with these specifications. Cores required to correct factory mistakes will not be allowed for payment.
- g. The Unit Price Bid for each (EA) adjustment of frame and cover shall be the actual number of frame and cover adjusted.

25. SPECIFICATION SECTION NO. 33 05 16.13, UNIT PRICE FOR PRECAST CONCRETE VAULTS:

MEASUREMENT: The quantity to be paid under this item shall be the actual number (EA) of precast concrete vaults installed as shown on the Drawings or as directed by GCDWR.

PAYMENT: The Unit Price Bid per each (EA) precast concrete vault shall include all necessary tools, equipment, labor and materials to complete the Work.

26. SPECIFICATION SECTION NO. 33 05 16.13, UNIT PRICE FOR ADJUSTING/MODIFYING VAULT TOPS:

MEASUREMENT: The quantity to be paid under this item shall be the actual number (EA) of vault tops adjusted, modified, or replaced as specified, as indicated on the Drawings, or as directed by GCDWR. All salvaged manhole frame and covers are to be returned to GCDWR.

PAYMENT: The Unit Price bid shall be paid per each (EA) valve top adjustment, modification, or replacement and shall include all necessary tools, equipment, labor and materials to complete the Work.

27. SPECIFICATION SECTION NO. 33 05 23.16, UNIT PRICE FOR UTILITY PIPE JACKING:

MEASUREMENT: The quantity to be paid under this item shall be the actual number of linear feet (LF) placed under the respective items: jacked steel casing, as specified, as indicated on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Prices Bid per linear foot (LF) of jacked steel casing shall be in full compensation for all excavation, , dewatering, sheeting, shoring, jacking/auguring operations, receiving pits, concrete, grout, sand and screenings, brick masonry, steel casing pipe, welding, backfill and all other materials, labor tools, and equipment necessary for the proper completion of the Work as specified, as indicated on the Drawings, or as directed by GCDWR. The unit price for each shall further include full compensation for furnishing barricades, warning signs, message boards, and lights. The carrier pipe shall be paid separately under the item titled for the specific pipe material type.

28. SPECIFICATION SECTION NO. 33 05 23.16, UNIT PRICE FOR UTILITY PIPE STEEL CASING OPEN CUT:

MEASUREMENT: The quantity to be paid under this item shall be the actual linear feet (LF) of open cut steel casing by size, furnished and installed.

PAYMENT: The Unit Price Bid per linear foot (LF) shall include steel casing pipe, welding, brick masonry, sand and screenings, clearing and grubbing, excavation, rock excavation, borrow, backfilling, dewatering, sheeting, shoring, bedding, thrust restraints, concrete poly wrap; the furnishing of all other labor, materials, tools, and equipment necessary for the proper completion of the Work as specified, as indicated on the Drawings, or as directed by GCDWR. The carrier pipe shall be paid separately under the item titled for the specific pipe material type.

29. SPECIFICATION SECTION NO 33 11 13.05, UNIT PRICE FOR DUCTILE IRON PIPE
(WATER):

MEASUREMENT: The quantity to be paid under this item shall be the actual linear feet (LF) of pipe by size, furnished and installed.

PAYMENT: The Unit Price Bid per linear foot (LF) shall include pipe and fittings, clearing and grubbing, excavation, rock excavation, borrow, backfilling, dewatering, sheeting, shoring, bedding, thrust restraints, concrete, poly wrap, pipe coating, free boring; making all required connections to either active or inactive lines including wet cut-ins; testing and sterilization; the furnishing of all other labor, materials, tools, and equipment necessary for the proper completion of the Work as specified, as indicated on the Drawings, or as directed by GCDWR.

30. SPECIFICATION SECTION NO 33 12 16, UNIT PRICE FOR WATER UTILITY
DISTRIBUTION VALVES:

MEASUREMENT: The quantity to be paid under this item shall be the actual number (EA), size, and type of valves installed or relocated as shown on the Drawings or as directed by GCDWR.

PAYMENT: The Unit Prices Bid per each (EA) valve under this item shall be full compensation for the furnishings, test, installing and painting of all valves, furnishing and installing valve markers, valve boxes with concrete collars, including pilot valves, sleeves, anchors, gauges, gearing, wrenches, lubricant, brackets, valve operating nut extensions, valve keys, the cutting and plugging of existing mains as required, and other accessories and appurtenances, and the furnishing of all detailed drawings, manuals, labor, materials, tools and equipment necessary to complete the Work as specified as indicated on the Drawings, or as directed by GCDWR. All necessary earth excavation required for the installation of valves shall be included in this Unit Price Bid item. The valves specifically included under other items of the contract will be in the payments made under those items.

31. SPECIFICATION SECTION NO 33 12 16, UNIT PRICE FOR WATER TAPPING SLEEVES &
VALVES:

MEASUREMENT: The quantity to be paid under this item shall be the actual number (EA) and size of tapping sleeve and valves (TS&V) installed as shown on the Drawings or as directed by GCDWR.

PAYMENT: The unit Price Bid for each (EA) TS&Vs under this item shall be full compensation for the furnishing, testing, and installing all tapping sleeves and valves as specified including excavation, valve, valve boxes with concrete collars, valve operating nut extensions, making the tap, concrete support block, furnishing and installing valve markers, and other accessories and appurtenances, and the furnishing of all detailed drawings, manuals, labor, materials, tools, and equipment necessary to complete the Work as specified as indicated on the Drawings, or as directed by GCDWR. All necessary earth excavation required for the installation of valves shall be included in this Unit Price Bid item.

32. SPECIFICATION SECTION NO 33 12 13, UNIT PRICE FOR RELOCATE EXISTING WATER SERVICE METER:

MEASUREMENT: The quantity to be paid under this item shall be the number (EA) of water meters relocated as shown on the Drawings.

PAYMENT: The Unit Price Bid for each (EA) water service meter relocated shall include excavation, backfill, relocation of the meter, new meter box, yokes, settings, and all appurtenances, extension of house service piping which is to be performed by a licensed plumber, connections, coordination with GCDWR and property owner/tenant for service interruption, disinfection, testing, and all necessary tools, equipment, labor, and materials to relocate the service meter and restore the disturbed area as closely as possible to its original state including groundcover, replanting of landscape shrubs using nursery stock as available from local suppliers. GCDWR shall provide new meters to the Contractor where required.

33. SPECIFICATION SECTION NO 33 12 13, UNIT PRICE FOR - WATER SERVICE SHORT SIDE:

MEASUREMENT: The quantity to be paid under this item shall be the number (EA) of short side water meter connections including new service line installation from water main to meter and connection to meter, as shown on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid for each (EA) water service short side shall include all excavation, backfill, meter box and all appurtenances, connections, coordination with GCDWR and property owner/tenant for service interruption, disinfection, testing, and all necessary tools, equipment, labor, and materials to connect meter and restore the disturbed area as closely as possible to its original state including ground cover, replanting of landscape shrubs using nursery stock as available from local suppliers.

34. SPECIFICATION SECTION NO 33 12 13, UNIT PRICE FOR – WATER SERVICE LONG SIDE:

MEASUREMENT: The quantity to be paid under this item shall be the number (EA) of long side water meter connections including new service line installation from water main to meter and connection to meter, as shown on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid for each (EA) water service long side shall include all excavation, backfill, meter box and all appurtenances, connections, coordination with GCDWR and property owner/tenant for service interruption, disinfection, testing, and all necessary tools, equipment, labor, and materials to connect meter and restore the disturbed area as closely as possible to its original state including ground cover, roadway repair, replanting of landscape shrubs using nursery stock as available from local suppliers.

35. SPECIFICATION SECTION NO 33 12 16.12, UNIT PRICE FOR AIR AND VACUUM VALVES (NEW INSTALLATION):

MEASUREMENT: The quantity to be paid under this item shall be the actual number (EA), size, and type of valves installed as shown on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid per each (EA) air and vacuum valve under this item shall include

the furnishing of all materials for properly constructing the installation complete; including: manhole base or vault, riser and slab top, frames and covers or hatch, concrete, excavation, bedding foundation cushion, air and vacuum valve, isolation valve, galvanized steel piping, brass blow-off valve, double strap service saddle, rubber hose with quick disconnect, and the furnishing of all labor, tools, and equipment necessary to complete the Work as specified, as indicated on the Drawings, or as directed by GCDWR.

36. SPECIFICATION SECTION NO 33 12 19, UNIT PRICE FOR FIRE HYDRANT ASSEMBLY:

MEASUREMENT: The quantity to be paid per each (EA) fire hydrant assembly shall be the actual number of fire hydrant assemblies installed as shown on the Drawings or as directed by GCDWR.

PAYMENT: The Unit Price Bid for each (EA) fire hydrant assembly shall include excavation, connecting to water main, furnishing and installing hydrants, pipe, fittings and valve from the water main to the hydrant; placing hydrants to correct horizontal alignment and vertical elevation, backfill, testing, and shop and field painting of the fire hydrants; complete with all accessories, appurtenances, restraint, gravel, concrete, and hydrant wrenches; and the furnishing of all labor, materials, tools, and equipment necessary to complete the Work as specified, as indicated on the Drawings, or as directed by GCDWR.

37. SPECIFICATION SECTION NO 33 12 19.81, UNIT PRICE TO RELOCATE OR RECONNECT FIRE HYDRANTS:

MEASUREMENT: The quantity to be paid under this item shall be based on the actual number (EA) of existing hydrants relocated or reconnected as shown on the Drawings or as directed by GCDWR.

PAYMENT: The Unit Price Bid for relocated or reconnecting each (EA) fire hydrant shall include excavation, disconnecting from, plugging and blocking, or connecting openings in existing mains, cleaning and reworking hydrants and valves removed from the existing water system, and relocating, setting, connecting all hydrants and gate valves to the new mains, complete with all connecting pipe fittings, accessories, appurtenances, restraint, gravel, concrete, and hydrant wrenches, and furnishing all labor, superintendents, equipment, materials, and tools necessary to complete the Work as specified, indicated on the Drawings, or as directed by GCDWR.

38. SPECIFICATION SECTION NO 33 12 19.81, UNIT PRICE TO ADJUST EXISTING FIRE HYDRANTS:

MEASUREMENT: The quantity to be paid under this item shall be the actual number (EA) of adjusted fire hydrants as specified, as indicated on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid per each (EA) fire hydrant shall include excavation, backfill, adjusting gate valve, complete with all accessories, appurtenances, restraint, gravel, concrete, and hydrant wrenches, and furnishing all labor, equipment, materials, tools, and equipment necessary to complete the Work specified.

39. SPECIFICATION SECTION NO 33 12 19.81, UNIT PRICE FOR SALVAGE EXISTING FIRE HYDRANT:

MEASUREMENT: The quantities to be paid under this item shall be the actual number (EA) of existing fire hydrant(s) removed, transported, and delivered to a location specified by GCDWR.

PAYMENT: The Unit Price Bid for each (EA) salvaging fire hydrant(s) shall include the furnishing of all materials, labor and equipment for excavation, bedding, disconnecting from, plugging and blocking, or connecting openings in existing mains, backfilling, landscape repairs, transporting and delivery of the complete fire hydrant(s) to a location specified by GCDWR. Removal of hydrant valves shall not be measured for payment under any other Bid Item.

40. SPECIFICATION SECTION NO 33 31 00, UNIT PRICE FOR SANITARY UTILITY SEWORAGE PIPING (GRAVITY PVC)

MEASUREMENT: The quantity to be paid under this item shall be the actual linear feet (LF) of pipe by size, furnished and installed.

PAYMENT: The Unit Price Bid per linear foot (LF) shall include pipe and fittings, clearing and grubbing, excavation, borrow, backfilling, dewatering, sheeting, shoring, bedding, thrust restraints, concrete, making all required connections to either active or inactive lines; testing; the furnishing of all other labor, materials, tools, and equipment necessary for the proper completion of the Work as specified, as indicated on the Drawings, or as directed by GCDWR.

41. SPECIFICATION SECTION 33 31 00, UNIT PRICE FOR SANITARY SEWER SERVICE CONNECTIONS:

MEASUREMENT: The quantity to be paid under this item shall be the actual number (EA) of service connections installed from the centerline of the main to the edge of the right-of-way; centerline of manhole to the end of the stub; connection to an existing stub, or as indicated on the Drawings.

PAYMENT: The Unit Price Bid for each (EA) service connection under this item shall include excavating, Tee or Wye fitting, pipe, plugs, mastic fillers, pipe bedding, making all required connections to active or inactive sewer lines, and other appurtenances for making connections to sewers, backfilling, electronic markers, testing and inspections, and the furnishing of all labor, materials, tools, and equipment necessary to complete the Work as specified, as indicated on the Drawings, or as directed by GCDWR.

42. SPECIFICATION SECTION NO 33 31 00, UNIT PRICE FOR SANITARY UTILITY SEWORAGE PIPING (GRAVITY DIP):

MEASUREMENT: The quantity to be paid under this item shall be the actual linear feet (LF) of pipe by size, furnished and installed.

PAYMENT: The Unit Price Bid per linear foot (LF) shall include pipe and fittings, clearing and grubbing, excavation, borrow, backfilling, television inspection of the existing sewer lines, cleaning of the existing sewer lines, manhole repair for any damaged manholes in the course of the work,

dewatering, sheeting, shoring, bedding, thrust restraints, concrete, poly wrap, pipe coating, making all required connections to either active or inactive lines; testing; the furnishing of all other labor, materials, tools and equipment necessary for the proper completion of the Work as specified, as indicated on the Drawings, or as directed by GCDWR.

43. SPECIFICATION SECTION NO 33 31 00, UNIT PRICE FOR SANITARY UTILITY SEWERAGE PIPING (FORCE MAINS DIP):

MEASUREMENT: The quantity to be paid under this item shall be the actual linear feet (LF) of pipe by size, furnished and installed.

PAYMENT: The Unit Price Bid per linear foot (LF) shall include pipe and fittings, clearing and grubbing, excavation, rock excavation, borrow, backfilling, dewatering, sheeting, shoring, bedding, thrust restraints, concrete, poly wrap, pipe coating, free boring, and painting of non-potable pipe lines; making all required connections to either active or inactive lines including wet cut-ins; testing; the furnishing of all other labor, materials, tools, and equipment necessary for the proper completion of the Work as specified, as indicated on the Drawings, or as directed by GCDWR.

44. SPECIFICATION SECTION NO 34 41 16.10, UNIT PRICE FOR TRAFFIC CONTROL DEVICES:

MEASUREMENT: The quantity to be paid under this item shall be lump sum (LS) for the construction, maintenance, and removal of temporary traffic control devices required for maintenance of traffic during construction.

PAYMENT: The unit Price Bid lump sum (LS) shall include the furnishing of all materials, tools, equipment, and labor necessary to complete the Work as specified, as indicated on the Drawings, or as directed by GCDWR.

45. SPECIFICATION SECTION NO 34 41 16.10, UNIT PRICE FOR TRAFFIC CONTROL – POLICE OFFICERS:

MEASUREMENT: The quantity to be paid under this item shall be the actual number of hours (HR) worked by Police Officer(s), typically used for directing traffic and providing additional visibility for the construction project.

PAYMENT: The Unit Price bid per hour (HR) shall include the use of Police Officer(s) to be paid at the county agreed rate for the actual number of hours worked by Police Officer(s), necessary to complete the Work as specified, as indicated on the Drawings, or as directed by GCDWR. The hourly cost shall be a fully loaded cost.

46. SPECIFICATION SECTION No 34 41 16.10, UNIT PRICE FOR TRAFFIC CONTROL – VARIABLE MESSAGE SIGNS:

MEASUREMENT: The quantity to be paid under this item shall be the number of days (DAY) for each electronic, portable, Variable Message Sign(s) (also known as Changeable Message Signs) in operation as specified, as indicated on the Drawings, or as directed by GCDWR.

PAYMENT: The Unit Price Bid for each day (DAY) for the variable message sign shall include delivery, operation, changing of message as needed or requested by GCDWR within 24 hours, and all necessary tools, equipment, labor, and materials to install, maintain, and remove the sign.

47. SPECIFICATION SECTION NO. 34 71 00, UNIT PRICE FOR DRIVEWAY CUT RESTORATION:

MEASUREMENT: The quantity to be paid under this item shall be the actual number of square yards (SY) of driveway pavement restored within the construction of trench crossing said driveways. The width of pavement measured for payment shall be the lesser of the nearest joint or edge of right of way or easement; except in the instance where entire sections or slabs have been removed under the direction of GCDWR.

PAYMENT: The Unit Price Bid per square yard (SY) of driveway pavement restored shall include the furnishing of all materials, labor, tools, and equipment necessary to complete the Work as specified, as indicated on the Drawings, or as directed by GCDWR.

48. UNIT PRICE FOR TEMPORARY STREAM/CREEK CROSSING:

MEASUREMENT: The quantity to be paid under this item shall be Lump Sum (LS) for the installation, maintenance, and removal of the temporary stream/creek crossings for the project.

PAYMENT: The Unit Price Bid shall be Lump Sum (LS) for the Temporary Stream/Creek Crossings and shall include all necessary tools, equipment, labor and materials to complete the work including clearing, excavation and backfilling, stream diversion and by-pass pumping, installation of temporary storm drainage piping, aggregate, rip rap, geotextile fabric, maintenance of crossings, and demolition and restoration of crossing as indicated on the Drawings, or as directed by GCDWR.

49. UNIT PRICE FOR CUT/PLUG AND ABANDON EXISTING SEWER LINE:

MEASUREMENT: The quantity to be paid under this item shall be the actual number (EA) of existing sewers to be cut and plugged as shown on the Drawings or as directed by GCDWR.

PAYMENT: The Unit Price Bid for each (EA) shall include all necessary tools, labor, equipment, and materials to cut/plug existing sewer lines including excavation, dewatering, backfill, cutting the existing line, and installation of the permanent plug as indicated on the Drawings, or as directed by GCDWR.

50. UNIT PRICE FOR ABANDONMENT OF EXISTING MANHOLES IN PLACE:

MEASUREMENT: The quantity to be paid under this item shall be the actual number (EA) of manholes to be abandoned as shown on the Drawings or as directed by GCDWR.

PAYMENT; The Unit Price Bid for each (EA) existing manhole to be abandoned shall include removal and off-site disposal of the existing manhole top and riser section(s), removal and disposal of any water or solids within the existing manhole, breaking bottom of manhole, placement of #57 stone, placement of compacted earth fill and topsoil above manhole, , and all other necessary tools, equipment, labor and materials to complete the Work as specified, as indicated on the Drawings, or

as directed by GCDWR.

51. UNIT PRICE FOR WETLANDS, STREAM BANKS AND STREAM BUFFER RESTORATION:

MEASUREMENT: The quantity to be paid under Wetlands, Stream Banks and Stream Buffer Restoration shall be Lump Sum (LS) for the installation and maintenance of all Wetlands, Stream Banks and Stream Buffer Restoration.

PAYMENT: The Unit Prices Bid shall be Lump Sum (LS) for the Wetlands, Stream Banks and Stream Buffer Restoration and shall include all necessary tools, equipment, labor and materials to complete the Work, including excavation, temporary preservation of wetland soils, placement of on-site wetlands substrate, installation of anti-seep collars, geotextile fabric, live stakes plantings, bare root trees and shrubs plantings, pre and post construction photographic and topographic survey documentation, and all other work as indicated on the Drawings, or as directed by GCDWR.

SECTION 00311

BID FORM

Bidder submits the following Unit Price Work Bid Prices for the Hopkins Mill Water Line Replacement, identified as part of this Bid. Work included within each Bid Item is described in the Specification Section listed for that Bid Item. Payment for each Bid Item is described in specification sections 01 22 15.11 – Measurement and Payment and A-01 22 15 – Supplemental Measurement and Payment listed for that Bid Item.

PART 1 - BASE BID ITEMS

Bid Item No.	Specification Section	Description	M & P *	Estimated Quantity	Unit Price	Extended Price
1	33 11 13.05	8" Diameter, Ductile Iron Pipe, Pressure Class 350	29	8,745 LF		
2	<i>Water Utility Distribution Valve</i>					
2a	33 12 16	Gate Valve 8" Diameter	30	18 EA		
2b	33 12 16	Existing Water Line Tie-ins, 16" x 8" Tapping Sleeve and Valve	31	3 EA		
3	33 12 19	Water Utility Distribution Fire Hydrant Assembly	36	29 EA		
4	33 12 13	Water Service Connections – Relocate Existing Meters	32	15 EA		
5	33 12 19.81	Salvage, Existing Fire Hydrant	39	16 EA		
6	<i>Water Service Connections</i>					
6a	33 12 13	3/4" Long Side Water Service, installed by Dry Bore	34	115 EA		
6b	33 12 13	3/4" Short Side Water Service	33	98 EA		
7	<i>Erosion and Sediment Controls</i>					
7a	31 25 00	Temp. Silt Fence Non-Sensitive (Sd1-S)	6c	6,400 LF		
7b	31 25 00	Temp. Seeding (Ds3)	6j	2,978 SY		

*M&P #: Measurement & Payment Item #

BID FORM

00311-1

60683286

Bid Item No.	Specification Section	Description	M & P *	Estimated Quantity	Unit Price	Extended Price
7c	31 25 00	Inlet Protection (Sd2-P)	6e	27 EA		
8	02 42 11	Site Restoration and Cleanup	3	1 LS		
9	32 12 16	Graded Aggerate Base	11	1,000 TN		
10	32 12 16	9.5 mm Superpave, Type II	7	1,821 TN		
11	32 12 16	19 mm Superpave Binder	9	931 TN		
12	34 71 00	Driveway Cut Restoration	47	420 SY		
13	32 16 13	Curb/Combination Curb & Gutter Restoration	14	370 LF		
14	33 92 00	Sodding	18	3,276 SY		
15	34 41 16.10	Traffic Control - Devices	44	1 LS		
16	34 41 16.10	Traffic Control – Police Officer	45	100 HR	\$65.00	
17	01 78 39	Record Drawings	1	1 LS		

*M&P #: Measurement & Payment Item #

PART 2 - OWNER DIRECTED WORK ITEMS TOTAL

Bid Item No.	Specification Section	Description	M & P *	Estimated Quantity	Unit Price	Extended Price
1	03 30 00	Miscellaneous Concrete	SUP #4	100 CY		
2	32 93.43	Replace Trees - Ornamental and Shrubbery	20	10 EA		
3	02 32 19	Exploratory Excavation	2	12 EA		
4	31 23 00	16" Insertion Valve	SUP #3	3 EA		
5	34 41 16.10	Variable Message Board	46	60 DAYS		

*M&P #: Measurement & Payment Item #

Bid Item No.	Specification Section	Description	M & P *	Estimated Quantity	Unit Price	Extended Price
6	33 11 13.05	Ductile Iron Pipe Fittings	SUP #1	4,000 LB		
7	31 23 00	#57 Stone Sub-base	16	500 TN		
8	02 42 11	Debris Removal	SUP #2	100 TN		

*M&P #: Measurement & Payment Item #

PART 1 – BASE BID ITEMS TOTAL

\$ _____

\$ _____

PART 1- BASE BID ITEMS TOTAL (Bid Items 1 – 17): _____

(Use Words)

PART 2 – OWNER DIRECTED WORK ITEMS TOTAL

\$ _____

PART 2- OWNER DIRECTED WORK ITEMS TOTAL (Bid Items 1 - 15): _____

(Use Words)

OVERALL BID TOTAL (PART 1 + PART 2)

\$ _____

\$ _____

OVERALL BID TOTAL (PART 1 + PART 2): _____

(Use Words)