MEMORANDUM – ADDENDUM NO. 4

To: Parties Interested In RFB2019-17
From: Misty Landers
Date: January 18, 2019
Re: RFB2019-17  –  Carl-Bethlehem Rd. 24-inch Water Transmission Main Relocation

As a result of the Pre-Bid Conference held 01/17/2019, please make note of the following:

Proposal Form: Added pay item 19 for Clearing and Grubbing, if not completed by the GaDOT Contractor. Added Mandatory Alternate Bid “A” to include Pay Item 4A – 36” Jack and Bore in lieu of Pay Item No. 4 – 36” Steel Casing – Open Cut Installation. Both changes were incorporated to address unknowns in the road contractors scheduling.

Section 1025 – Measurement and Payment: Included Measurement and Payment definitions for items 19 and 4A above.
SECTION III
PROPOSAL

To: Mike Renshaw, County Manager
Barrow County Board of Commissioners
30 North Broad Street
Winder, Georgia, 30680

PROJECT TITLE: Carl-Bethlehem Road 24-Inch Water Transmission main Relocation

Bidder's person to contact for additional information on this Bid Form:

Name:
Address:
Telephone:
Licensed, Class:
Contractor No.

1. BIDDER'S DECLARATION AND UNDERSTANDING

1.1 The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the OWNER, and that the Bid is made without any connection or collusion with any person submitting another Bid on this Project.

1.2 The Bidder further declares that he has carefully examined the Bidding and Contract Documents for the construction of the project, that he has personally inspected the site, that he has satisfied himself as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the said quantities with the detailed requirements of the Bidding and Contract Documents, and that this Bid Form is made according to the provisions and under the terms of the Bidding Documents, which Documents are hereby made a part of this Bid Form.
1.3 The Bidder further acknowledges that he has satisfied himself as to the nature and location of the work, the general and local conditions, particularly those bearing access to the site; rights-of-way and temporary construction limits; disposal, handling and storage of materials; availability of labor, water, electric power, and roads; and uncertainties of weather, creek stages, or similar physical conditions at the site; the conformation and conditions of the ground; the character of equipment and facilities needed preliminary to and during the prosecution of the work and all other matters which can in any way affect the work or the cost thereof covered by the Bidding and Contract Documents.

1.4 The Bidder further acknowledges that he has satisfied himself/herself as to the character, quality, and quantity of surface and subsurface materials to be encountered from his inspection of the site and from reviewing any available records or exploratory work furnished by the OWNER or included in these Documents. Failure by the CONTRACTOR to acquaint himself with the physical conditions of the site and all available information will not relieve him from responsibility for properly estimating the difficulty or cost of successfully performing the work.

1.5 The Bidder warrants that as a result of his examination and investigation of all the aforesaid data that he can perform the work in a good and workmanlike manner and to the satisfaction of the OWNER. The OWNER assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of the Agreement, unless (1) such representations are expressly stated in the Agreement Form, and (2) the Agreement Form expressly provides that the responsibility therefore is assumed by the OWNER.

1.6 Bidder shall include the following additional documents and information with this Bid Form:

   1.6.1 Bid Security

   1.6.2 Bidder’s Certification of License Number on the outside of envelope containing this Bid Form.

2. CONTRACT EXECUTION AND BONDS

2.1 The Contractor grants to the OWNER the exclusive right and option to accept its bid, upon the terms and conditions provided for in the Bidding Documents. The Contractor shall be obligated to hold its bid open for sixty (60) days from the date of the submittal of its bid. The OWNER may exercise its right to accept the bid at any time during this sixty (60) day period.
2.2 All bidders are required to execute the Construction Agreement included in this bid package to indicate the bidder’s willingness to comply with all terms of the Agreement and to submit the executed Agreement with the bid. Upon award of the Project to the winning bidder, the County will execute the Agreement. There will be no re-negotiation of terms of the Agreement. Please be advised that the bidder’s execution of the Agreement prior to the award of the Project does not constitute the acceptance of an offer by the County or otherwise bind the County in any way until such time as the County executes the Agreement.

The Bidder will, within 5 days from receiving Notice of Award, deliver to the OWNER the Performance Bond, Payment Bond, and Certificate(s) of Insurance, required herein, and will, to the extent of his bid, furnish all machinery, tools, apparatus, and other means of construction and do the work and furnish all the materials necessary to complete all work as specified or indicated in the Bidding and Contract Documents.

3. CERTIFICATES OF INSURANCE

3.1 The Successful Bidder agrees to furnish the OWNER, within 5 days from receiving Notice of Award, both the Certificate of Insurance required herein and the insurance company's own Certificate of Insurance.

3.2 The Successful Bidder further agrees that the total bid amount stated herein includes specific consideration for the insurance coverages, including contractual liability, specified in the Bidding and Contract Documents.

4. START OF CONSTRUCTION AND CONTRACT COMPLETION TIME

4.1 The Successful Bidder further agrees to promptly mobilize and begin work within 15 days from the Contract start date specified in the OWNER’S Notice to Proceed, and to be substantially complete, as defined in the General Conditions, within 60 days from the Contract start date specified in the OWNER’S Notice to Proceed. All work tasks of the total project shall be complete in all respects within 60 days from the date specified in the OWNER’S Notice to Proceed.

5. ADDENDA

5.1 The Bidder hereby acknowledges that he has received Addenda No’s __, __, __, __, __, (Bidder shall insert No. of each Addendum received) and agrees that all addenda issued are hereby made part of the Bidding and Contract Documents, and the Bidder further agrees that his Bid Form includes all impacts resulting from said addenda.

6. SALES AND USE TAXES

6.1 The Bidder agrees that all sales and use taxes, if applicable, are included in the stated bid prices for the work.

7. BASIS OF AWARD

7.1 Award of Contract will be made in accordance with Paragraph 16 (Award of Contract) of the INSTRUCTIONS TO BIDDERS.

8. TOTAL BID AMOUNT
8.1 The Bidder further proposes to accept as full payment for the work proposed herein the amounts computed under the provisions of the Bidding and Contract Documents and based on the following unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved for each. The Bidder agrees that the unit prices represent a true measure of all labor and materials required to perform the work, including all allowances for overhead, profit, bond cost and any and all other costs associated with the work for each type and unit of work called for in these Bidding and Contract Documents. The unit price amounts shall be shown in both words and figures. In case of a discrepancy, the amounts shown in words shall govern.

8.2 UNIT PRICE

<table>
<thead>
<tr>
<th>Bid Item No.</th>
<th>Bid Item</th>
<th>Qty</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Geotechnical Allowance</td>
<td>1</td>
<td>N/A</td>
<td>$5,000.00</td>
<td>Five Thousand and 00/100 Dollars</td>
</tr>
<tr>
<td>2</td>
<td>Mobilization</td>
<td>1</td>
<td>LS</td>
<td>$_____<strong><strong>/LS</strong></strong>________________</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Rock Removal</td>
<td>160</td>
<td>CY</td>
<td>$<em><strong><strong><strong><strong>/CY</strong></strong></strong></strong></em>____________</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>36” Steel Casing – Open Cut Installation</td>
<td>200</td>
<td>LF</td>
<td>$<em><strong><strong><strong><strong>/LF</strong></strong></strong></strong></em>____________</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Asphalt Drive Repair</td>
<td>10</td>
<td>LF</td>
<td>$<em><strong><strong><strong><strong>/LF</strong></strong></strong></strong></em>____________</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Asphalt Pavement Repair</td>
<td>30</td>
<td>LF</td>
<td>$<em><strong><strong><strong><strong>/LF</strong></strong></strong></strong></em>____________</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>24” Ductile Iron Pipe</td>
<td>1,180</td>
<td>LF</td>
<td>$<em><strong><strong><strong><strong>/LF</strong></strong></strong></strong></em>____________</td>
<td></td>
</tr>
<tr>
<td>Bid Item No.</td>
<td>Bid Item</td>
<td>Qty</td>
<td>Unit</td>
<td>Unit Price</td>
<td>Extended Total Amount</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------</td>
<td>-----</td>
<td>------</td>
<td>------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>8</td>
<td>24” Restrained Joint Ductile Iron Pipe</td>
<td>200</td>
<td>LF</td>
<td>$__________<strong>/LF$</strong>____________________</td>
<td>Dollars</td>
</tr>
<tr>
<td>9</td>
<td>24” Butterfly Valve</td>
<td>2</td>
<td>EA</td>
<td>$__________<strong>/EA$</strong>____________________</td>
<td>Dollars</td>
</tr>
<tr>
<td>10</td>
<td>Air Release and Vacuum Valve</td>
<td>2</td>
<td>EA</td>
<td>$__________<strong>/EA$</strong>____________________</td>
<td>Dollars</td>
</tr>
<tr>
<td>11</td>
<td>Remove and Salvage Existing Air Release Valves</td>
<td>2</td>
<td>EA</td>
<td>$__________<strong>/EA$</strong>____________________</td>
<td>Dollars</td>
</tr>
<tr>
<td>12</td>
<td>Connect to Existing 24” Water Main</td>
<td>2</td>
<td>EA</td>
<td>$__________<strong>/EA$</strong>____________________</td>
<td>Dollars</td>
</tr>
<tr>
<td>13</td>
<td>Cut, Plug, and Abandon Existing 24” Water Main</td>
<td>2</td>
<td>EA</td>
<td>$__________<strong>/EA$</strong>____________________</td>
<td>Dollars</td>
</tr>
<tr>
<td>14</td>
<td>Hay Bales</td>
<td>40</td>
<td>EA</td>
<td>$__________<strong>/EA$</strong>____________________</td>
<td>Dollars</td>
</tr>
<tr>
<td>15</td>
<td>Temporary Silt Fence Type “C”</td>
<td>780</td>
<td>LF</td>
<td>$<strong><strong><strong><strong><strong><strong>/LF$</strong></strong></strong></strong></strong></strong>_________</td>
<td>Dollars</td>
</tr>
<tr>
<td>16</td>
<td>Dry Straw or Hay Mulch</td>
<td>2</td>
<td>TON</td>
<td>$__________<strong>/TON$</strong>_________________</td>
<td>Dollars</td>
</tr>
<tr>
<td>Bid Item No.</td>
<td>Bid Item</td>
<td>Qty</td>
<td>Unit</td>
<td>Unit Price</td>
<td>Extended Total Amount</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------</td>
<td>-------</td>
<td>------</td>
<td>------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>17</td>
<td>Seeding and Mulch</td>
<td>1,160</td>
<td>LF</td>
<td>$________<strong><strong>/LF</strong></strong>______________________</td>
<td>________________________Dollars</td>
</tr>
<tr>
<td>18</td>
<td>Crusher Run Backfill (If Authorized by Owner)</td>
<td>225</td>
<td>TON</td>
<td>$________<strong><strong>/TON</strong></strong>______________________</td>
<td>________________________Dollars</td>
</tr>
<tr>
<td>19</td>
<td>Clearing and Grubbing if Not Performed by GADOT Contractor</td>
<td>620</td>
<td>LF</td>
<td>$________<strong><strong>/LF</strong></strong>______________________</td>
<td>________________________Dollars</td>
</tr>
</tbody>
</table>

NOTE: All labor, material and equipment required to complete the work as shown on the plans but not specifically itemized in the above bid items but shown or called out on the plans shall be included in the price.

BASE BID: TOTAL OF EXTENDED AMOUNT FOR UNIT PRICES LISTED ABOVE:

______________________________________________________________________________ Dollars

and __________________________ cents $________________________________________________

(Amount written in words has precedence)

MANDATORY ALTERNATE BID “A”

Alternate Bid “A”: Will include 36” Jack & Bore with steel casing in lieu of Item 4: 36” Steel Casing – Open Cut Installation.

<table>
<thead>
<tr>
<th>Bid Item No.</th>
<th>Bid Item</th>
<th>Qty</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>4A</td>
<td>36” Steel Casing – Jack &amp; Bore Installation</td>
<td>200</td>
<td>LF</td>
<td>$________<strong><strong>/LF</strong></strong>______________________</td>
<td>________________________Dollars</td>
</tr>
</tbody>
</table>
8.3 Bidder acknowledges that the unit prices have been computed in accordance with the General Conditions. Bidder further acknowledges that quantities are not guaranteed and final payment will be based on actual quantities determined as provided in Bidding and Contract Documents.

8.4 Total Bid Summary:

8.4.1 TOTAL BASE BID AMOUNT: $______________________________
   (including bond premium)

8.4.2 ALTERNATE BID “A”: $______________________________

9. EXPERIENCE OF BIDDER

9.1 The Bidder submits the following list of at least five clients for whom projects involving similar construction have been performed within the past 10 years.

1) Name of Client (Owner and Contact)_________________________________________________________
   Email Address ____________________________ Telephone Number _____________________________
   Street__________________________________________
   City______________ State__________ Zip______________
   Project Name____________________________________
   Date Completed__________________________ Total Contract Amount____________________________

2) Name of Client (Owner and Contact)________________________________________________________
   Email Address ____________________________ Telephone Number _____________________________
   Street__________________________________________
   City______________ State__________ Zip______________
   Project Name____________________________________
   Date Completed__________________________ Total Contract Amount____________________________

3) Name of Client (Owner and Contact)________________________________________________________
   Email Address ____________________________ Telephone Number _____________________________
   Street__________________________________________
   City______________ State__________ Zip______________
   Project Name____________________________________
4) Name of Client (Owner and Contact) ____________________________________________________________
   Email Address _____________________________ Telephone Number ____________________________
   Street_________________________________________________________________________________________
   City___________________________ State______________ Zip__________________________
   Project Name__________________________________________________________
   Date Completed______________________ Total Contract Amount_____________________

5) Name of Client (Owner and Contact) ____________________________________________________________
   Email Address _____________________________ Telephone Number ____________________________
   Street_________________________________________________________________________________________
   City___________________________ State______________ Zip__________________________
   Project Name__________________________________________________________
   Date Completed______________________ Total Contract Amount_____________________

10. PERFORMANCE OF WORK BY CONTRACTOR

   10.1 The Bidder shall perform at least 50 percent of the work with his own forces.

11. SUBCONTRACTORS

   11.1 The Bidder further proposes that the following subcontracting firms or businesses will be
   awarded subcontracts for the following portions of the work in the event that the Bidder is
   awarded the Contract:

   Name__________________________________________________________
   Type of Work____________________________________________________
   Street_________________________________________________________________________________________
   City___________________________ State______________ Zip__________________________

   Name__________________________________________________________
   Type of Work____________________________________________________
12. **SURETY**

12.1 If the Bidder is awarded a construction Contract, the Surety who provides the Performance Bond and Payment Bond will be:

__________________________________________ whose address is

Street____________________________________

City__________________________ State______________ Zip___________

13. **BIDDER**

13.1 The name of the Bidder submitting this Bid Form is

__________________________________________ doing business at

Street____________________________________

City__________________________ State______________ Zip___________

which is the address to which all communications concerned with this Bid Form and with the Agreement Form shall be sent.

13.2 The names of the principal officers of the corporation submitting this Bid Form, or of the partnership, or of all persons interested in this Bid Form as principals are as follows:

__________________________________________

__________________________________________

__________________________________________
If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set his (its) hand this _____ day of ______ 20____.

________________________________________
Signature of Bidder

________________________________________
Title
If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this _____ day of _______________ 20___.

(SEAL)

Name of Corporation

________________________________________

By

________________________________________

Title

________________________________________

Attest

Secretary

________________________________________

End of Section
THIS PAGE WAS INTENTIONALLY NOT USED
ADDITIONAL SPECIFICATION SECTION 01025
MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SCOPE OF WORK

This Section describes the methods by which measurement will be made of the quantities for which payment will be made for the project.

1.02 MEASUREMENT OF WORK

A. WORK shall be measured by the ENGINEER or his representative, with assistance from the CONTRACTOR prior to preparation of a payment request by the CONTRACTOR.

B. Unit quantities that are measured in place shall be measured monthly. The CONTRACTOR shall give the ENGINEER a minimum of two days notice for making all required measurements.

C. Materials that must be measured as delivered shall be measured at the time of delivery by the ENGINEER or his representative; the CONTRACTOR shall provide sufficient advance notice so that such measurements can be made.

D. WORK completed shall be measured for completion against the schedule of values provided by the CONTRACTOR in accordance with the General Conditions. Related work necessary for a complete and operational job, such as relocation of mail boxes removal of trees, relocation of utilities, field engineering, clearing and grubbing, traffic control, etc., not specifically identified as a pay item shall be included in the unit price bid. No additional payments will be made for such activities.

1.03 PROGRESS PAYMENTS

Progress payments shall be as follows:

A. All items of WORK not specifically listed in the Bid Schedule shall be considered incidental to the construction, and the cost of all such work and material shall be included in the prices bid for various items listed.

B. All items listed for measurement and payment shall include all machinery, plant, materials and labor, etc., to successfully and satisfactorily complete WORK specified.

C. Payment: The CONTRACTOR will receive payment only for the items listed in the Bid Schedule of this contract, and no separate payments will be made for the work under any section of the CONTRACT DOCUMENTS except as provided for in the Bid Form. Where measurements are required to be made by the ENGINEER for the payment of a pay item, the failure of the CONTRACTOR to give adequate notification or failure of the CONTRACTOR to give the ENGINEER assistance for the measurement shall result in the forfeiture of payment for the work or item which was not measured.
D. WORK to be paid for as a "Lump Sum" shall be measured for completion against the "Schedule of Values" provided by the CONTRACTOR. The "Schedule of Values" shall be submitted at the preconstruction conference and shall include quantities and prices of items aggregating the total "Lump Sum" and will subdivide the work into component parts in sufficient detail to serve as the basis for progress payments during construction.

PART 2 PRODUCTS

2.01 STORED MATERIALS

Partial payment shall be made for approved materials stored at the project site, provided invoices for said materials are furnished in accordance with payment request submittal.

PART 3 EXECUTION

3.01 GEOTECHNICAL ALLOWANCE

The basis of payment for this item shall be a cash allowance. The soils technician shall be chosen by the OWNER. The technician shall make periodic site visits, scheduled by the ENGINEER, to verify compaction is in conformance with the specifications and drawings. All incidental overhead/processing/handling costs incurred by the CONTRACTOR for the geotechnical testing cost allowance shall be included in the unit prices bid per linear foot of various sizes and types of pipe laid as provided in the Proposal. If additional compaction tests are required as a result of poor compaction of trenches, the additional cost for said tests shall be the responsibility of the CONTRACTOR.

3.02 MOBILIZATION

A. The basis of payment for this item shall be lump sum.

B. Work performed under this item shall include the movement of personnel, equipment, supplies and incidentals to and from the project site as needed to complete work on the various contract items and for premiums on bonds and insurance for the project. Material for bid items shall not be included in Mobilization.

3.03 ROCK REMOVAL

A. Quantities for rock removal shall be expressed in cubic yards, as defined below, in accordance with the plans and specifications.

B. If rock is encountered, the CONTRACTOR is to expose the rock to the required limits of excavation. The OWNER or ENGINEER shall then attain sufficient topographic data to establish the limits of the rock to be excavated. No backfill shall be placed until rock measurements are made. If backfill is placed or rock is excavated before measurements are made, no compensation will be allowed for such rock excavation.

C. For water mains, the quantity of rock to be paid for shall be calculated from the upper surface data obtained to one foot below the pipe invert multiplied by five feet trench width.
No additional payment shall be made for manhole excavation or benching. The price for this work shall be included in the unit price bid for rock excavation.

D. The quantity of rock to be paid for the wet well and/or valve vault shall be calculated from the upper surface data obtained to one foot below the well base and/or valve vault multiplied by the area of the wet well (outside diameter). No additional payment will be made for benching.

E. The quantity of rock to be paid for the rock encountered as part of the general grading shall extend the upper surface data obtained to one foot below the proposed grade multiplied by the horizontal area of rock disturbed within the grading limits.

3.04 BORE AND JACK CASINGS

A. Measurement of all casing pipe shall be actual number of linear feet made from bulkhead to bulkhead along the centerline of actual casing placed under the respective items, uncased boring, jacked steel casing, or steel casing/open cut, as indicated on the Drawings.

B. Payment for each size and installation method of casing installed shall be in full compensation for all excavation, rock excavation, dewatering, sheeting, shoring, receiving pits, concrete, grout, steel casing pipe, end seals, spacers, welding, backfill and all other materials, labor, tools, and equipment necessary for proper completion of the Work as specified or indicated on the Drawings.

C. Unit price bid shall include cost of any warning signs and/or flagmen that may be required. CONTRACTOR is to determine need for such, prior to submitting bid price.

D. No payment shall be made for incomplete or unacceptable borings, for realignment, or for increased length for the convenience of the CONTRACTOR.

3.05 REMOVING AND REPLACING PAVEMENT

A. The quantities for various types of drive repair for which payment will be made shall be for linear feet of driveway replaced with the same type and thickness of pavement existing prior to construction, measured along the centerline of the trench for pipe placed in or across existing driveways. Concrete and asphalt drives repaired with gravel shall be counted as gravel drive repair.

B. The quantities for asphalt pavement repair for which payment will be made shall be for linear feet measured along the centerline of the trench for pipe placed in or across existing roadways.

C. Payment for driveway and roadway replaced shall be made for the quantities determined in the manner specified above at the applicable contract price. This amount, so paid, shall be compensation in full for cutting and removal of existing pavements, furnishing all labor, materials, tools, equipment, services and other work in connection with or incidental to the construction.
3.06 DUCTILE IRON PIPE WATER MAINS

A. The quantities of the various sizes and types of water mains will be measured along the centerline of the pipe from center of fitting to center of fitting or to the end of the pipeline. No deduction will be made for fittings or valves.

B. The price bid shall include, but not be limited to, the pipe materials, all fittings, gaskets, bolts, glands, concrete blocking, concrete thrust collars; testing and disinfection including temporary connections and blow-offs; all labor, equipment, clearing and removal and disposal of clearing debris, stripping, storing, and replacement of top soil in lawn and garden areas, excavation, dewatering of trenches, removal and replacement of signs and mailboxes in the path of construction activities, replacement of mailbox approaches, fences, curb and gutter, etc., protection of existing utilities (both overhead and underground), storm pipes, culverts, drainage ditches, all benching, sheeting and bracing, crushed stone bedding, tamping and compaction and backfilling, roadway shoulder repairs, traffic maintenance and protection, dressing and final grading, grassing, cleanup, as-built drawings, and all other work incidental to place the water mains as indicated on the Drawings.

C. Unit price bid shall include cost for coordination with Georgia Department of Transportation representatives and roadway contractor before and during construction, and shall include survey work to accurately place the water main and appurtenances horizontally and vertically. CONTRACTOR is to determine need for such, prior to submitting bid price.

3.07 WATER MAIN VALVES

A. The quantities of the various sizes and types of valves will be the actual number installed by the CONTRACTOR and approved by the ENGINEER.

B. The price bid shall include, but not be limited to, the valve, all labor, necessary equipment, fittings, rodding, blocking, concrete pad, debris cap, valve box or manhole. Valves shall be paid for at the unit price bid. Payment will not be made for valves used for temporary connections or blow-offs.

3.08 AIR RELEASE VALVES

A. The quantities to be paid under this item shall be the actual number of air release valves installed by the CONTRACTOR and approved by the ENGINEER.

B. The price bid shall include, but not be limited to, the air valve and surge check valve, gate valve, factory welded-on tee, manhole base and riser sections, top slabs, frames and covers, concrete, excavation, bedding, foundation cushion, and all labor, tools, and equipment necessary to complete the Work as specified and indicated on the Drawings.
3.09 SALVAGE EXISTING AIR RELEASE VALVE

A. The quantities to be paid under this item shall be the actual number of existing air release valve(s) removed and delivered to a location in Barrow County specified by the Owner.

B. The price bid shall include all materials, labor, tools and equipment for excavation, disconnecting, plugging or blocking openings in existing main, removal and disposal of manhole sections and top slab, backfilling and compacting including stone, and transporting and delivery of the complete air release valve assembly.

3.10 CONNECTION TO EXISTING WATERLINE (WET CUT-IN)

The price bid for the connection to the various sizes of existing waterline shall be for the actual number of connections performed and shall include clearing, excavation, connection to existing line with new line, coordinating shutdown with OWNER, **compliance with required time constraints including work after normal working hours (e.g. nights, weekends) if necessary**, fittings, labor, equipment, backfilling, testing, grassing, cleanup, and all other work incidental to the connection.

3.11 CUT, PLUG, AND ABANDON EXISTING WATERLINES

The basis of payment for this item shall be lump sum to include all labor, equipment, and materials necessary to properly abandon the various sizes of existing waterlines throughout the project limits, including locating existing waterlines, removal of water from lines, **filling abandoned water line with flowable fill per GDOT Standards Specifications**, properly plugging and sealing all abandoned items, and verification that all existing service connections are changed from the existing lines to the new lines.

3.12 EROSION AND SEDIMENTATION CONTROLS AND SEEDING

A. Measurement for the following items shall be as indicated. Best Management Practices (BMPs) shall conform to the approved Drawings for Erosion and Sedimentation Control or as directed by the design engineer or GCDWR.

   a. Hay Bales: Payment for hay bales shall be based on the number of hay bales installed.

   b. Temporary Silt Fence Type ‘C’: Payment for temporary silt fence shall be based on the number of lineal feet installed. No payment will be made for silt fence required to be reinstalled for any reason.

   c. Dry Straw or Hay Mulch: Payment for straw or hay mulch shall be based on the number of tons of straw or hay mulch installed. No additional payment shall be made for maintenance of mulch.

   d. Seeding and Mulch: Payment for temporary and permanent seeding shall be based on the number of linear feet of temporary and permanent seeding installed over the entire disturbed area width, as measured along the centerline of pipe, at the
coverage rates specified. Seeding shall include seed, mulch, fertilizer, and asphaltic emulsion. No additional payment will be made for reseeding or maintenance.

B. The unit price for each item shall include all labor, equipment, and materials necessary for furnishing, placing, maintenance, and removal of each item as applicable. In addition, unit price shall include all costs for inspection, monitoring, and reporting on the erosion and sedimentation controls. There will be no separate payment for the installation or maintenance of construction exits.

3.13 CRUSHER RUN BACKFILL (IF AUTHORIZED BY OWNER)

A. The quantity of crusher run backfill shall be the actual number of tons placed, as directed by Barrow County.

B. The unit price bid shall include the furnishing of all materials, labor, tools, traffic control and appliances necessary to complete the Work as herein specified, shown or ordered. Included shall be the costs of additional excavation beyond trench width to provide firm foundation and any costs of furnishing necessary work beyond the limits of measurement as defined under these specifications. Payment will not be made when crusher run backfill is used by the Contractor for the Contractor’s convenience or when used by the Contractor to simplify compaction.

3.14 CLEARING & GRUBBING

A. The quantity of wooded area cleared shall be measured by the actual number of linear feet.

B. The unit bid shall include all labor, equipment, and materials necessary to clear wooded area within the project limits. Clearing and grubbing includes, but is not limited to removal of trees, stumps, roots, brush, structures, and all other materials found on or near the surface of the ground in the project area. Precautionary measures shall be taken so as not to damage existing features.

END OF SECTION