New Business #17

COUNTY AGENDA REQUEST

Department:	Information Systems	Presenter(s):	Chief Information Officer Phil Frieder
Meeting Date:	Thursday, August 28, 2014	Type of Request:	New Business

Wording for the Agenda:

Consideration of staff's recommendation to enter into an agreement with Bartlett Fiber, Incorporated, in the amount of $138,056, for the installation of 7.2 miles of fiber optic cabling that would provide future data/voice connectivity to the E911 Operations Center, the Emergency Operations Center, Fire Station #7, and the South Fayette Water Treatment Plant.

Background/History/Details:

During the 2014 Board of Commissioners Retreat, discussion was held about installing fiber optic cabling that would connect various county locations and enhance county-wide network capabilities.

Bartlett Fiber is installing fiber optic cabling for Verizon Wireless, and Fayette County can benefit from this effort by entering into an agreement with Bartlett Fiber to lay 7.2 miles of fiber optic line from the intersection of County Line Road and McDonough Road to the intersection of Hampton Road and State Route 92. (See attached Site Map)

This creates a fiber network backbone along this corridor enhancing our network, data/voice capabilities by providing critical connectivity to the E911 Operations Center, the Emergency Operation Center, Fire Station #7, and the South Fayette Water Treatment Plant.

Bartlett Fiber's contract would be $138,056. The County will purchase and provide conduit, fiber,optic cable, mule tape, pull boxes, and canisters with an estimated cost to purchase these items being $43,523. This will bring the total project cost to $181,579.

What action are you seeking from the Board of Commissioners?

Consideration of staff's recommendation to enter into an agreement with Bartlett Fiber, in the amount of $138,056, for the installation of 7.2 miles of fiber optic cabling along several roads within Fayette County that would provide future data/voice connectivity to the E911 Operations Center, the Emergency Operations Center, Fire Station #7, and the South Fayette Water Treatment Plant.

If this item requires funding, please describe:

This request will be funded via the existing Information Technology STP Capital Program and available Capital Contingency.

Has this request been considered within the past two years?	No	If so, when?	
Is Audio-Visual Equipment Required for this Request?*	No	Backup Provided with Request?	Yes

**** All audio-visual material must be submitted to the County Clerk's Office no later than 48 hours prior to the meeting. It is also your department's responsibility to ensure all third-party audio-visual material is submitted at least 48 hours in advance.***

Approved by Finance	Yes	Reviewed by Legal	
Approved by Purchasing	Yes	County Clerk's Approval	Yes
Administrator's Approval			

Staff Notes:

New technology requires high band width that is not currently available with our current infrastructure capabilities. This effort will capitalize on utilizing technology as a strategic advantage and will save Fayette County and estimated cost of $411,462 due to the economics of scale.

Fayette County
"Where Quality Is a Lifestyle"
Purchasing Department
140 Stonewall Avenue West, Ste 101
Fayetteville, Georgia 30214
Phone: 770-305-5420
www.fayettecountyga.gov

August 20, 2014

Mr. Dana Burditt
Bartlett Fiber, Inc.
4200 Dawnwood Drive
Gastonia, N.C. 28056

Subject: Contract for Installation of Fiber Optic Cable

Dear Mr. Burditt

Fayette County wishes to contract with your company for installation of conduit, fiber optic cable, and pull boxes. Enclosed please find the proposed contract with two (2) signature pages. Please sign both copies in the signature page, and stamp them with your corporate seal, if applicable. Also, in compliance with Georgia's immigration compliance law, you will need to sign and notarize the enclosed *Contractor's Affidavit*.

Please return the completed documents, along with the Certificate of Insurance, to the Fayette County Purchasing Department as soon as possible.

If you need additional information, please contact me at 770-305-5393 or tburgess@fayettecountyga.gov.

Sincerely,

Ted L. Burgess
Director of Purchasing
Fayette County, Georgia

Scope of Work

The work of this contract will result in 7.2 miles of fiber optic cable enclosed in conduit, installed underground, spliced, terminated, and tested.

The County will purchase and provide conduit, fiber optic cable, mule tape, pull boxes, and canisters. The County will provide sufficient mule tape for one run to be pulled in the conduit footage. The Contractor will furnish all labor and perform all operations necessary to complete installation excluding the conduit, fiber optic cable, mule tape, pull boxes, and canisters. The Contractor will install all of the required material whether specifically addressed in these specifications or not.

The Contractor will perform all optical fiber cable testing and provide all documentation, as-builts and warranty, as described below.

The Contractor will install a total of 38,106 feet of 1 ½ inch conduit and 39,016 feet of 24-strand fiber optic cable as follows: beginning at the intersection of McDonough Road and County Line Road heading south, placing 11,616 feet of conduit to the intersection of County Line Road, South Jeff Davis Drive, and Inman Road. The Contractor will continue through this intersection south on Inman Road, placing 15,840 feet of conduit to the intersection of Inman Road and State Route 92. The Contractor will continue south/southeast from the intersection of Inman Road and State Route 92 on State Route 92, placing 10,560 feet of conduit to the intersection of State Route 92 South and Hampton Road South.

The Contractor will pull one run of mule tape in the conduit.

The Contractor will place a total of 100 pull boxes. Boxes will be placed at the following intersections:

- County Line Road and McDonough Road (This pull box shall be placed at a white arrow on pavement to avoid future conflict with McDonough Road widening project.)
- Inman Road / County Line Road / South Jeff Davis Drive
- State Route 92 and Inman Road
- State Route 92 South and Hampton Road North
- State Route 92 South and Hampton Road South

The Contractor will place the remaining pull boxes at one thousand (1,000) foot intervals throughout the project. An extra 25 feet of fiber optic cable will be provided at each pull box.

Contractor's labor charges and estimated quantities are as follows:

	Units	Charge Per Unit	Extended Price
Conduit labor	38,016	$2.50	$95,040.00
Fiber optic labor	39,016	1.00	39,016.00
Pull box installation	40	100.00	4,000.00
Total			$138,056.00

TESTING REQUIREMENTS

A. General

1. All cables and termination hardware shall be 100% tested for defects in installation and to verify cabling system performance under installed conditions according to the requirements of ANSIITIA.IEIA-568-B.l-3. All strands of each installed cable shall be verified prior to system acceptance. Any defect in the cabling system installation including but not limited to cable, connectors, feed through couplers, and enclosures shall be repaired or replaced in order to ensure 100% useable strands in all cables installed.

B. Fiber Testing

1. All fiber testing shall be performed on all fibers in the completed end-to-end system. There shall be no splices unless clearly defined in the design or Drawings. These tests also include continuity checking of each fiber.
2. Test set-up and performance shall be conducted in accordance with A ANSIITIA.IEIA-526-7 and/or ANSIITIAIEIA-568-B.3 Standards, and to the manufacturer's application guides.
3. Attenuation testing shall be performed with a stable launch condition using two-meter jumpers to attach the test equipment to the cable plant. The light source shall be left in place after calibration and the power meter moved to the far end to take measurements.
4. Singlemode
    a. Test the fiber cable bi-directionally with an OTDR and uni-directionally with a power meter light/ source. Fiber must be tested at both 1310mn and 1550nm. Maximum attenuation dB/Km @ 131Onm/1550mn shall be 0.5/0.5 for outside plant and l.O/l.O for inside plant. Maximum attenuation per connector pair shall be .75 dB.

C. Test Results

1. Test documentation shall be provided on disk/digitally as part of the as-built package. The disk shall be clearly marked on the outside front cover with the words "Project Test Documentation", the project name, and the date of completion (month and year). The results shall include a record of test frequencies, cable type, strand and cable I.D., measurement direction, reference setup, and crew member name(s). The test equipment name, manufacturer, model number, serial number, software version and last calibration date will also be provided at the end of the document. Unless the manufacturer specifies a more frequent calibration cycle, an annual calibration cycle is anticipated on all test equipment used for this installation. The test document shall detail the

test method used and the specific settings of the equipment during the test as well as the software version being used in the field test equipment.

2. The field test equipment shall meet the requirements of ANSIITIA/EIA-568-B.l-3.
3. Printouts generated for each cable by the wire fiber test instruments shall be submitted as a part of the documentation package. Alternately, the contractor may furnish this information in electronic form or CD. These CDs shall contain the electronic equivalent of the test results as defined by the Specification and be of format readable from Microsoft Word.
4. When repairs and re-tests are performed, the problem found and corrective action taken shall be noted, and both the failed and passed test data shall be documented.

DOCUMENTATION

A. As-Built record documentation for communications work shall include:

Cable routing and identification
Connection and programming schedules as appropriate
Equipment material list including quantities
Spare parts list with quantities if applicable
Details not on original Contract Documents
Test Results
Warranties

B The Contractor shall provide and maintain at the site a set of prints on which shall be accurately shown the actual installation of all work under this section, indicating any variation from contract drawings, including, changes in pathways, sizes, locations and dimensions. All changes shall be clearly and completely indicated as the work progresses.

C. Program prints shall be available for inspection by the Owner or any of his representatives and may be used to determine the progress of communications infrastructure work.

D. At the completion of the work, prepare a new set of as-built drawings, of the work as actually noted on the marked-up prints, including the dimensioned location of all pathways.

E. Furnish as-built drawings and documentation to the Project Manager.

OPERATIONS AND MANUAL

A. After competition of the work, the Contractor shall furnish and deliver Point-to-point diagrams, cabling diagrams, construction details and cable labeling details.

WARRANTY

1. All contractor furnished equipment is to be new and warranted free of faulty workmanship and damage.
2. The minimum warranty provisions specified shall not diminish the terms of individual equipment manufacturer's warranties.
3. Contractor shall provide a 1-year warranty for labor, workmanship and supplies not provided by owner.
4. Contractor shall provide a 1-year warranty for contractor supplied components used in the installed Pathway & Support Infrastructure. Defective and/or improperly installed contractor-supplied products shall be replaced and/or correctly installed at no cost to the Owner.

AGREEMENT

This Agreement, made this _____ day of _____, 20_____, by and between Fayette County, Georgia (hereinafter called "Owner") and Bartlett Fiber, Inc. (hereinafter called "Contractor").

WITHESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The Contractor will install conduit, fiber optic cable and pull boxes, mule tape, splicing, termination, and conduct testing as described in the agreement.

2. The Contractor will furnish all of the services as described in said agreement.

3. The Contractor agrees to perform all of the services described in the contract documents, and comply with the terms therein, for compensation of an amount not to exceed $138,056.

4. The term "Contract Document" means and includes the following:
    a. This Agreement
    b. Scope of work, including the attachment
    c. Contractor's (E-Verify) Affidavit
    d. Notice to proceed

5. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

6. Any dispute which may arise under this Agreement shall be resolved under the laws of the State of Georgia and venue shall be proper in Fayette County, Georgia.

IN WITNESS WHEREOF, the parties hereto have executed or caused to be executed by their duly authorized official, this Agreement on the date first above written.

OWNER:
Fayette County, Georgia

_____
STEVE RAPSON, County Administrator

ATTEST FOR OWNER:

_____

Name: _____
(Please Print)

Title: _____

CONTRACTOR:

_____(L.S.)

By: _____

Name: _____

Address: _____

_____

_____

_____

Employer Identification Number:

_____

GENERAL TERMS AND CONDITIONS

1. **Insurance**: The contractor shall, without expense to the county, carry the following insurance, to be in effect throughout the term of the contract, in at least the amounts and limits as follows:

    a. **General Liability Insurance**: $1,000,000 combined single limit per occurrence, including bodily and personal injury, destruction of property, and contractual liability.

    b. **Automobile Liability Insurance**: $1,000,000 combined single limit each occurrence, including bodily injury and property damage liability.

    c. **Worker's Compensation & Employer's Liability Insurance**: Workers Compensation as required by Georgia statute.

    The contractor shall provide Certificates of Insurance for all required coverage. The certificate shall list an additional insured as follows:

    Fayette County Board of Commissioners
    140 Stonewall Avenue West
    Fayetteville, GA 30214

2. **Unauthorized Performance:** The county will not compensate the contractor for work performed unless the work is authorized under the contract, as initially executed or as amended.

3. **Assignment of Contract:** Assignment of the contract will not be authorized.

4. **Indemnification**: The contractor shall defend and indemnify the county and all its officers, agents and employees against any suits, actions, or other claims brought on account of any injuries or damages to any person, persons, or property resulting from any negligent act or fault of the contractor, or of any agent, employee, subcontractor or supplier in the performance of the contract. The contractor shall pay any judgment with cost which may be obtained against the county growing out of such injury or damages.

5. **Patent Indemnity:** The contractor guarantees to save the county, its agents, officers, or employees harmless from liability of any nature or kind for use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, articles or appliances furnished or used in the performance of the contract, for which the contractor is not the patentee, assignee or licensee.

6. **Severability**: The invalidity of one or more of the phrases, sentences, clauses or sections contained in the contract shall not affect the validity of the remaining portion of the contract. If any provision of the contract is held to be unenforceable, then both parties shall be relieved of all obligations arising under such provision to the extent that the provision is unenforceable. In such case, the contract shall be deemed amended to the extent necessary to make it enforceable while preserving its intent.

7. **Delivery Failures:** If the contractor fails to deliver contracted goods or services within the time specified in the contract, or fails to replace rejected items in a timely manner, the county shall have authority to make open-market purchases of comparable goods or services. The county shall have the right to invoice the contractor for any excess expenses incurred, or deduct such amount from monies owed the contractor. Such purchases shall be deducted from contracted quantities.

8. **Substitution of Contracted Items:** The contractor shall be obligated to deliver products awarded in this contract in accordance with terms and conditions specified herein. If a contractor is unable to deliver the products under the contract, it shall be the contractor's responsibility to obtain prior approval of the ordering agency to deliver an acceptable substitute at the same price quoted in the contractor's original bid. In the event any contractor consistently needs to substitute or refuses to substitute products, the County reserves the right to terminate the contract or invoke the "Delivery Failures" clause stated herein.

9. **Inspection and Acceptance of Deliveries**: The county reserves the right to inspect all goods and products delivered. The county will decide whether to accept or reject items delivered. The inspection shall be conclusive except with respect to latent defects, fraud, or such gross mistakes as shall amount to fraud. Final inspection resulting in acceptance or rejection of the products will be made as soon as practicable, but failure to inspect shall not be construed as a waiver by the county to claim reimbursement or damages for such products which are later found to be in non-conformance with specifications. Should public necessity demand it, the county reserves the right to use or consume articles delivered which are substandard in quality, subject to an adjustment in price to be determined by the Purchasing Director.

10. **Termination for Cause**: The county may terminate the contract for cause by sending written notice to the contractor of the contractor's default in the performance of any term of this agreement. Termination shall be without prejudice to any of the county's rights or remedies by law.

11. **Termination for Convenience**: The county may terminate the contract for its convenience at any time with 7 days' written notice to the contractor. In the event of termination for convenience, the county will pay the contractor for services performed. The county will compensate partially completed performance based upon a signed statement of completion submitted by the contractor, which shall itemize each element of performance completed.

Contractor Affidavit under O.C.G.A. § 13-10-91(b)(1)

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of (name of public employer) has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

_____
Federal Work Authorization User Identification Number

_____
Date of Authorization

_____
Name of Contractor

_____
Name of Project

_____
Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, ____, 201__ in _____(city), _____(state).

_____
Signature of Authorized Officer or Agent

_____
Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE _____ DAY OF _____,201__.

_____
NOTARY PUBLIC

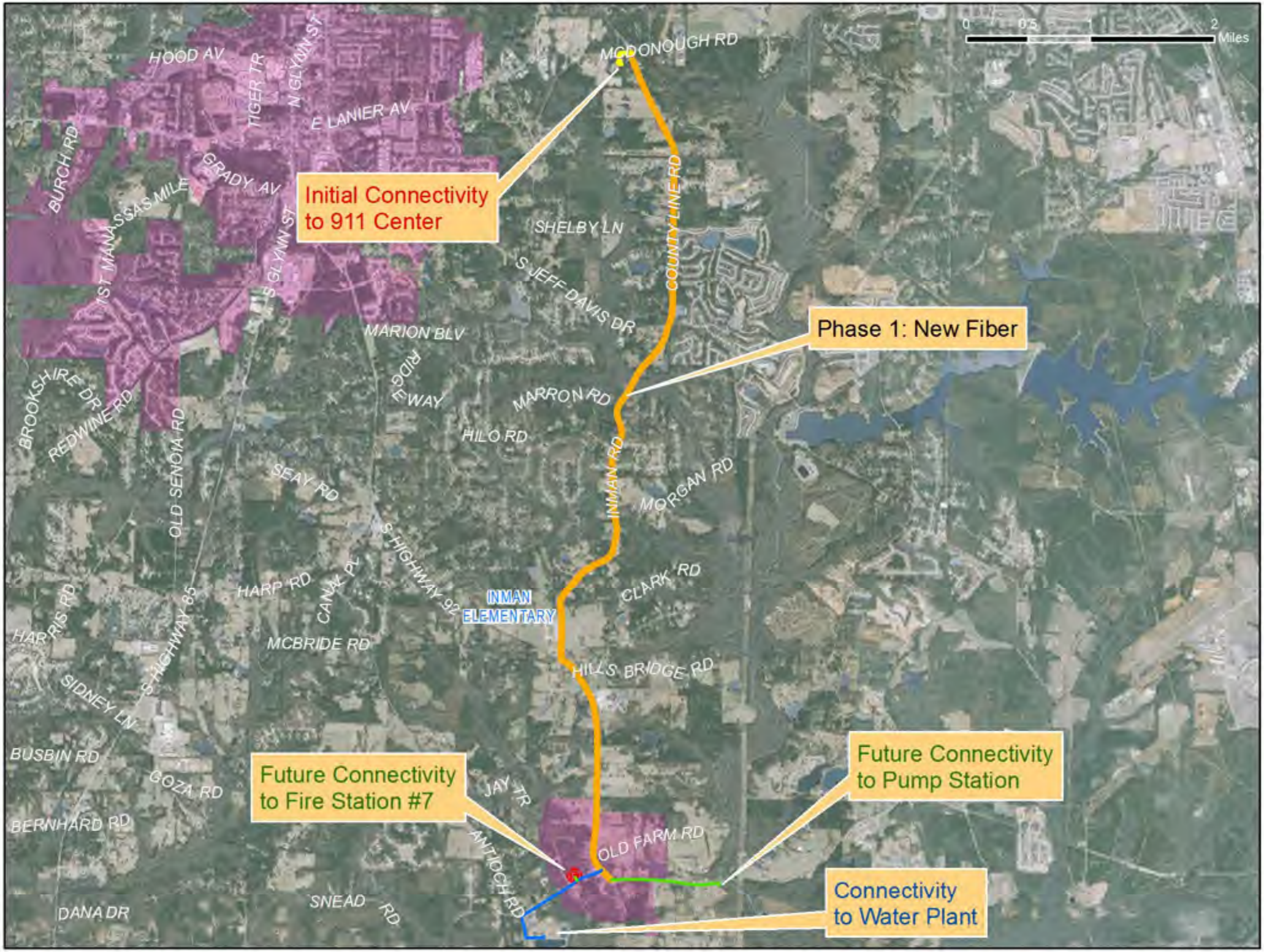
My Commission Expires:

_____

INFORMATION SYSTEMS- WATER SYSTEM

OVERALL MAP FOR THE PROPOSED PROJECT

(The Orange Line represents the proposed area for fiber optic cabling.)


0 0.5 1 2 Miles
MCDONOUGH RD
HOOD AV
TIGER TR
N GLYNN ST
E LANIER AV
BURCH RD
GRADY AV
WEST MANASSAS MILE
S GLYNN ST
Initial Connectivity to 911 Center
SHELBY LN
COUNTY LINE RD
S JEFF DAVIS DR
MARION BLV
Phase 1: New Fiber
RIDGE WAY
MARRON RD
BROOKSHIRE DR
REDWINE RD
OLD SENOIA RD
HILO RD
INMAN RD
SEAY RD
MORGAN RD
S HIGHWAY 92
CANAL PL
HARP RD
INMAN ELEMENTARY
CLARK RD
HARRIS RD
S HIGHWAY 85
MCBRIDE RD
HILLS BRIDGE RD
SIDNEY LN
BUSBIN RD
GOZA RD
Future Connectivity to Fire Station #7
JAY TR
Future Connectivity to Pump Station
BERNHARD RD
ANTIOCH RD
OLD FARM RD
SNEAD RD
DANA DR
Connectivity to Water Plant