

NORTH CAROLINA
CUMBERLAND COUNTY

**MUNICIPAL OPERATIONS - TRAFFIC CONTROL
DEVICES
TRAFFIC SIGNALS AGREEMENT
SCHEDULE C**

DATE: 5/4/2018

NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION

AND

WBS Elements:

6.1026SM & 6.2026SM

CITY OF FAYETTEVILLE

THIS AGREEMENT is made and entered into on the last date executed below, by and between the North Carolina Department of Transportation, an agency of the State of North Carolina, hereinafter referred to as the "Department" and the City of Fayetteville, hereinafter referred to as the "Municipality."

W I T N E S S E T H:

WHEREAS, the provisions of the North Carolina General Statutes (NCGS) §136-66.1 and §136-18 authorize the Municipality to contract with the Department for the installation, repair, operations, and maintenance of highway signs and markings, electric traffic signals and other traffic control devices on State Highway System streets within the Municipality; and,

WHEREAS, the Department and the Municipality have a mutual interest in the efficient and effective operation of traffic signals within the Municipality; and,

WHEREAS, the Department and the Municipality recognize that each party to this Agreement has an obligation and responsibility to provide for the safe, orderly, and efficient flow of traffic on their respective street systems; and,

WHEREAS, the Municipality finds that it is in the best public interest to operate traffic signals at certain intersections that are on the State's Highway System within or near the Municipality; and,

WHEREAS, the Department finds it desirable and advantageous to reimburse the Municipality for costs incurred when the Municipality operates traffic signals at certain intersections that are on the State Highway System within or near the Municipality;

NOW, THEREFORE, the Department and the Municipality do hereby agree as follows:

1. GENERAL PROVISIONS

COMPLIANCE WITH STATE/FEDERAL POLICY

The Municipality and/or its agent, including all contractors, subcontractors, or sub-recipients, shall comply with all applicable Federal and State policies and procedures, stated both in this Agreement and in the Department's guidelines and procedures.

FAILURE TO COMPLY - CONSEQUENCES

Failure on the part of the Municipality to comply with any of the provisions of this Agreement will be grounds for the Department to terminate participation in the costs of the Project and, if applicable, seek repayment of any reimbursed funds.

2. SCOPE OF THE PROJECT

The Municipality shall operate the traffic signals as defined in the Appendices and as indicated hereinafter:

- A. The operation of intersections on the State Highway System, both at the hardware and software levels, will be subject to the approval of the Department and will reflect the needs of traffic on both the State Highway System and the Municipal System.
- B. In the event the Department and the Municipality cannot agree on issues affecting the operation of these intersections, the decision of the Department will be final.
- C. The Municipality agrees to an annual audit of the performance of intersection equipment and systems. The audit is to be performed by the Department and the Municipality.
- D. The Municipality shall not install any traffic control devices, nor make any traffic signal phasing changes, on any State Highway System street without the prior approval of the Department, pursuant to NCGS §20-169.
- E. The Municipality shall operate the traffic signals in accordance with North Carolina General Statutes, the Department's current policies and guidelines as included in the Appendices, and all local codes and ordinances. If, in the opinion of the Department, the Municipality does not operate the traffic signals in accordance with the specified criteria, the Department shall have the right to cancel this Agreement.

F. The Department shall review and concur with any contract entered into by the Municipality for the operation of any traffic signal(s).

- Any contract entered into with another party to perform work associated with the requirements of this Agreement shall contain appropriate provisions regarding the utilization of Minority Business Enterprise/Women Business Enterprise (MBE/WBE), or as required and defined in NCGS 143-128.2 – 143-128.4 and the North Carolina Administrative Code. These provisions are incorporated into this Agreement by reference <https://connect.ncdot.gov/municipalities/Pages/Bid-Proposals-for-LGA.aspx>.
- The Municipality shall not advertise nor enter into a contract for services performed as part of this Agreement, unless the Department provides written approval of the advertisement or the contents of the contract.
- If the Municipality fails to comply with these requirements, the Department will withhold funding until these requirements are met.

3. TIME FRAME

This agreement shall be for the current state fiscal year, beginning July 1, 2018 and ending June 30, 2019. At the end of the fiscal year, the provision of services and quality of results may be reviewed by the Department and Municipality. The Agreement may be extended for additional fiscal years, contingent upon the increase of NCDOT maintenance funds by the General Assembly. Extensions may be made in one (1) year increments, incorporating any mutually agreed upon adjustments, with the end of the final fiscal year of service being June 30, 2023. On behalf of the Municipality, extensions may be authorized and executed by the Town/City Manager and/or Mayor without further resolution of the Town/City Council. The agreement may be terminated by either party upon a thirty (30) day written notice.

4. FUNDING

The eligible costs of this Project will be reimbursed from State funding.

5. REIMBURSEMENT

The Department shall reimburse the Municipality quarterly, based on an annual amount, for the operation of the traffic signals, as included below:

- A. Said reimbursement shall be limited to operational costs, which would include tasks associated with insuring the continuous, safe and efficient operation of traffic signals, traffic signal systems, and control facilities. Examples include, but are not limited to, operational performance reviews, emergency repairs to system components, periodic evaluation and adjustment to operational timing parameters, computer system and software upgrades, operational upgrades to maintain or improve safety or efficiency, etc.
- B. The Department will not reimburse operational costs for activities that do not have a direct and immediate effect on the continuous, safe and efficient operation of traffic signals, traffic signal systems, and control facilities including, but not limited to, painting of poles and signal cabinets, vegetation control adjacent to facilities, interior and exterior care of traffic control centers and parking areas, furniture for traffic control centers, etc.
- C. The Municipality agrees that it shall bear all costs for which it is unable to substantiate actual costs.
- D. Any costs incurred by the Municipality prior to written notification by the Department to proceed with the work may not be eligible for reimbursement.
- E. Equipment secured as a non-participating item by the Department (100% Municipality costs) will continue as non-participating items with respect to operations. The Department's Division Engineer will provide the necessary forms for documentation.

PROCESS

- F. The Municipality shall submit a quarterly itemized invoice to the Department for said costs no later than three (3) months after the scheduled quarterly invoicing date. This invoice will include the appropriate documentation and reflect the amount due for services performed by the Municipality during the quarter. The Department will reimburse the Municipality each quarter for work performed up to a total annual amount not to exceed \$250,000, unless additional reimbursements are approved by the Department. All final invoices must be submitted within one (1) year after the work is performed or said work will be considered non-billable and will not be paid for by the Department. The Department, at its option, may elect to increase the reimbursement rates shown in the Appendices of this Agreement up to three percent (3%) each year in consideration of inflation rates and cost increases, subject to the availability of funds and the performance of the Municipality.
- G. The Department shall reimburse the Municipality upon approval by the Department's Division Engineer and the Fiscal Management Section.

6. FORCE ACCOUNT

GENERAL

Work performed by the Municipality's own forces is considered Force Account work. Force account work that is not a part of the operational work included under this Agreement is only allowed when there is a finding of cost effectiveness for the work to be performed by some method other than contract awarded by competitive bidding process. Written approval from the Department's Division Engineer is required prior to the use of force account by the Municipality. Said invoices for force account work shall show a summary of labor, labor additives, equipment, materials and other qualifying costs in conformance with the standards for allowable costs set forth in Office of Management and Budget (OMB) Circular A-87 (www.whitehouse.gov/omb/circulars/index.html). Reimbursement shall be based on the Appendices as included herein.

EMERGENCY WORK

Under current Department policy, if force account work is necessary and performed by the Municipality during emergency occurrences or occurrences that endanger public safety, additional information shall be submitted, with each quarterly invoice, to document the emergency situation, actions taken during the occurrence and the resolution. Approval must be obtained from the Department's Division Engineer before reimbursement will be made.

7. RECORDS AND REPORTS

- A. In accordance with NCGS §159-34, the Municipality shall arrange for an annual independent financial and compliance audit of its fiscal operations. The Municipality shall furnish the Department with a copy of the annual independent audit report within thirty (30) days of completion of the report, but not later than nine (9) months after the Municipality's fiscal year ends.
- B. The Municipality shall keep and maintain all books, documents, papers, accounting records, other such cost records and supporting documentation and evidence as may be appropriate to substantiate costs incurred under this Agreement. Further, the Municipality shall make such materials available at its office at all reasonable times during the Agreement period, and for three (3) years from the date of the final payment made under this agreement, for inspection and audit by the Department's Division Engineer and Financial Management Division.

8. ADDITIONAL PROVISIONS

- A. This Agreement does not transfer legal control of, or responsibility, or legal liability for the State Highway System roads described herein to the Municipality, nor does it prohibit the Department from taking any action or undertaking any responsibilities with regard to such roads. This Agreement is solely for the benefit of the Municipality and the Department and not for the benefit of any other persons, including but not limited to, members of the public or users of the State Highway System roads, and no third party rights are created, or intended to be created, by this Agreement.
- B. The Municipality shall comply with Title VI of the Civil Rights Act of 1964, (Title 49 CFR, Subtitle A, Part 21). Title VI prohibits discrimination on the basis of race, color, national origin, disability, gender, and age in all programs or activities of any recipient of Federal assistance.
- C. It is the policy of the Department not to enter into any agreement with another party that has been debarred by any government agency (Federal or State). The Municipality certifies, by signature of this agreement, that neither it nor its agents or contractors are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any Federal or State Department or Agency.
- D. The Municipality shall certify to the Department compliance with all applicable Federal and State laws and regulations and ordinances and shall indemnify the Department against any fines, assessments or other penalties resulting from noncompliance by any entity performing work under contract with the Municipality.
- E. The Municipality is solely responsible for all agreements, contracts, and work orders entered into or issued by the Municipality for this work. The Department shall not be held liable by the Municipality for any expenses or obligations incurred for the work except those specifically eligible for the funds and obligations as approved by the Department under the terms of this Agreement. The Department shall not reimburse the Municipality any costs that exceed the total approved funding at any time.
- F. The Municipality will indemnify and hold harmless the Department, FHWA, and the State of North Carolina, their respective officers, directors, principals, employees, agents, successors, and assigns from and against any and all claims for damage and/or liability in connection with the work performed pursuant to this Agreement. The Department shall not be responsible for any damages or claims for damages, which may be initiated by third parties.

- G. The Department must approve any assignment or transfer of the responsibilities of the Municipality set forth in this Agreement to other parties or entities.
- H. By Executive Order 24, issued by Governor Perdue, and NCGS §133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e., Administration, Commerce, Environmental Quality, Health and Human Services, Information Technology, Military and Veterans Affairs, Natural and Cultural Resources, Public Safety, Revenue, Transportation, and the Office of the Governor).
- I. This Agreement contains the entire agreement between the parties and there are no understandings or agreements, verbal or otherwise, regarding this Agreement except as expressly set forth herein.
- J. The parties hereby acknowledge that the individual executing the Agreement on their behalf is authorized to execute this Agreement on their behalf and to bind the respective entities to the terms contained herein and that he has read this Agreement, conferred with his attorney, and fully understands its contents.

IN WITNESS WHEREOF, this Agreement has been executed the day and year heretofore set out, in triplicate, on the part of the Department and the Municipality by authority duly given.

ATTEST: _____ CITY OF FAYETTEVILLE
BY: _____ BY: _____
TITLE: _____ TITLE: _____
DATE: _____ DATE: _____

NCGS §133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization."

Approved by _____ of the local governing body of the City of Fayetteville,
as attested to by the signature of Clerk _____ of said governing body on
_____ (Date)

This Agreement has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

(SEAL)

BY: _____
(FINANCE OFFICER)

Remittance Address:

City of Fayetteville

DEPARTMENT OF TRANSPORTATION

BY: _____
(CHIEF ENGINEER)

DATE: _____

PRESENTED TO BOARD OF TRANSPORTATION ITEM O: _____

MUNICIPAL OPERATIONS AGREEMENT – SCHEDULE C

Traffic Signal Operations Program CITY OF FAYETTEVILLE

NOTE: The Department requires the Municipality to maintain a Level of Service “C”, or “good”, in order to provide reimbursement. If the operation falls below a Level of Service “C”, or “good”, then the Department may withhold reimbursement under this Agreement. The Department will not reimburse the Municipality for any associated additional costs if the Municipality elects to operate the signals at a higher level of service.

Key Components of a “Good” Level of Service:

1. Maximum Emergency Response Times
 - Trouble calls – 4 hours
 - Repair Knockdowns – 8 hours
 - Absence of a signal indication – Next working day
 - Repair/replace inoperative loops – 15 calendar days
2. Operational Performance Reviews
 - Perform the required minimum tasks at 6-month, 12-month and two-year intervals
 - Replace LED modules after 5 years of service
3. System Component Repairs
 - Repair equipment in a timely manner to support emergency and operational needs
 - Upgrade equipment firmware as appropriate to address items affecting operational efficiency and safety
 - Certify the proper operation of conflict monitors/malfunction management units on an annual basis

MUNICIPAL OPERATIONS AGREEMENT – SCHEDULE C

Operational Performance Review (OPR) Checklist – Traffic Signals
CITY OF FAYETTEVILLE

		Interval		
		6 MO	12 MO	2 YEARS
Cabinet	Lubricate hinges and lock	x		
	Replace Filters	x		
	Check Door Gasket	x		
	Check Anchor Bolts / Extension Bolts	x		
	Check for water seepage, dust accumulation; reseal base if needed	x		
	Check Grounding Resistance and Bonding Connections and Conductors	x		
	Check for current wiring schematics, Signal plans, and Maintenance Records	x		
	Check condition and operation of fan and thermostat	x		
	Check ground fault receptacle and insure no control equipment plugged into receptacle	x		
	Measure service voltage	x		
	Check interior lamps; replace as required	x		
	Check physical condition of meter / service disconnect	x		
	Clean and vacuum Cabinet	x		
	Visually check Line Filter and surge arrester	x		
	Inspect Foundation and exterior for damage, vandalism, and the presence and condition of signal inventory number	x		
	Test police panel switches		x	
	Place insect and/or rodent poison in cabinet if infestation is present	x		
Conflict Monitor	Verify conflict monitor certification date is within 12 months	x		
	Perform field check of operation. Remove load switch to create red fail and observe response of monitor. Ensure stop timing is implemented.		x	
Load Switches / Flashers	Check load switches and flashers for tight and secure fit into the socket	x		
	Check operation of all indicator lights	x		
Auxiliary Logic	Check for operation as per signal plans	x		

MUNICIPAL OPERATIONS AGREEMENT – SCHEDULE C

Operational Performance Review Checklist – Traffic Signals

		Interval		
		6 MO	12 MO	2 YEARS
Relays	Visually inspect condition of all relays and replace if necessary	x		
Terminal Connections	Check for discoloration and corrosion	x		
	Tighten all terminal connections	x		
	Check labels and replace as needed	x		
	Check programming of red monitor jumpers if present	x		
	Check condition of all loading resistors	x		
Controllers	Verify date and time, correct any discrepancies (if applicable)	x		
	Verify programming parameters	x		
	Verify proper software version	x		
	Verify operation per signal plan (phasing operation, timings, signal head display, pavement markings, etc.)	x		
	Check all harnesses and connections	x		
	Verify proper operation of any preemption circuits	x		
	Check operation of display and backlight	x		
	Check time clock settings	x		
	Check that Posted Speed Limit matches signal plan	x		
Detection Sensors	Inspect condition of all inductive loops and lead ins; Repair/replace as needed	x		
	Verify proper operation of detection sensors, meg; replace or repair as needed	x		
	Verify loop lead in cable is twisted in cabinet	x		
	Check loop lead-ins for correct labeling and phase assignments	x		
	Check alignment and proper operation of all out of street detection	x		
Detector Units	Check detector for proper operation and sensitivity	x		
	Verify stretch and delay programming and operation	x		

MUNCIPAL OPERATIONS AGREEMENT – SCHEDULE C

Operational Performance Review Checklist – Traffic Signals

		Interval		
		6 MO	12 MO	2 YEARS
Pedestrian Push Buttons	Check and actuate push buttons on all approaches of actuated crosswalks and visually verify pedestrian signal operation (Verify operation of all push buttons)	x		
	Check push button lamp (if applicable) for operation	x		
	Check push button alignment and accessibility	x		
	Check audio operation and direction	x		
	Check push button signs; clean or replace if necessary	x		
Pedestrian Heads	Re-lamp incandescent bulbs or replace LEDs if needed		x	
	Check condition, alignment and operation	x		
	Clean lenses and reflectors			x
Signal Heads and Blank Out Signs	Check for proper alignment, operation, and condition	x		
	Check condition of back plates (if used)	x		
	Check for proper height	x		
	Clean lenses, signs and LED modules; replace as needed			x
	Check for wear on the span wire and signal mounting hardware			x
Metal Poles and Mast Arms	Inspect for rust and spot paint as required		x	
	Inspect joints for rust and cracks at arm/upright location and at base plate		x	
	Visually inspect anchor bolts and mast arm bolts for condition and tightness		x	
	Check pole grounding and connections		x	
	Inspect for damage; document and report any damage found.		x	
	Check and secure pole caps and hand hole covers		x	
	Inspect all wiring and conduit in pole		x	
	Visually inspect condition of foundation		x	

MUNCIPAL OPERATIONS AGREEMENT – SCHEDULE C

Operational Performance Review Checklist – Traffic Signals

		Interval		
		6 MO	12 MO	2 YEARS
Wood Poles and Span Wire	Check pole for splitting	x		
	Check pole below grade for rot	x		
	Check clamps and all hardware	x		
	Check guy wire, anchors, and guards; repair if needed	x		
	Verify all spans are bonded to pole ground	x		
	Check pole grounding and connections	x		
Pull Boxes	Check the ground rod, clamp connection, and bonding of conduits if applicable		x	
	Check all cables in pull box for pinching by lid, including level of pull box		x	
	Check for abnormal amount of water; verify proper drainage		x	
	Check lid for abnormal condition and fit		x	
Systems Equipment	Ensure the controller operates in mode selected by master		x	
	Check any special equipment (transceivers, etc.) for proper operation		x	
	Disconnect controller from master and check for free or backup operation		x	
Conduit	Visually inspect all conduits; repair as needed		x	
Pavement Markings	Verify that pavement markings match intersection plans	x		
	Inspect condition of pavement markings	x		

MUNICIPAL OPERATIONS AGREEMENT – SCHEDULE C
Traffic Signals Reimbursement Schedule CITY OF FAYETTEVILLE

The Department will reimburse the Municipality for operation of traffic signals on the following schedule. Place a check beside the value for each function(s) the Municipality agrees to perform under any line item if all functions are not selected. Place a check beside the value under "Total" if the Municipality is to perform all functions for any line item.

If ALL functions will be selected, please check here: ☒

Item		Emergency Response	Operational Performance Reviews	System Component Repairs	Total
A.	Vehicular Signal Section (average of 10 head/int. or 30 section/int.)	<input type="checkbox"/> \$1.26	<input type="checkbox"/> \$10.22	<input type="checkbox"/>	<input type="checkbox"/> \$11.48
B.	Pedestrian Signal Head (Average of 4 heads/int.)	<input type="checkbox"/> \$3.15	<input type="checkbox"/> \$20.99	<input type="checkbox"/>	<input type="checkbox"/> \$24.14
C.	Fiber-Optic or LED Blank-out Sign	<input type="checkbox"/> \$12.60	<input type="checkbox"/> \$12.60	<input type="checkbox"/>	<input type="checkbox"/> \$25.20
D.	Pretimed Electronic Controller/Cabinet	<input type="checkbox"/> \$75.58	<input type="checkbox"/> \$138.56	<input type="checkbox"/> \$228.90	<input type="checkbox"/> \$443.04
E.	2-8 Assigned Phase Actuated Controller/Cabinet	<input type="checkbox"/> \$75.58	<input type="checkbox"/> \$503.84	<input type="checkbox"/> \$272.50	<input type="checkbox"/> \$851.92
F.	2-8 Assigned Phase Actuated Controller/Cabinet with Machine-vision Detection	<input type="checkbox"/> \$75.58	<input type="checkbox"/> \$503.84	<input type="checkbox"/> \$817.50	<input type="checkbox"/> \$1,396.92
G.	Flashing Beacon Controller/Cabinet	<input type="checkbox"/> \$12.60	<input type="checkbox"/> \$125.96	<input type="checkbox"/>	<input type="checkbox"/> \$138.56
H.	Travel Costs for Operational Performance Reviews at Signalized Intersection (no Flashers)	<input type="checkbox"/>	<input type="checkbox"/> \$62.98	<input type="checkbox"/>	<input type="checkbox"/> \$62.98

Item

Lump Sum Payment

CA.	Replace loop (includes labor, materials, and other cost for sawcutting and sealing) ¹	<input type="checkbox"/> \$7.58	per foot of sawcut
CB.	Furnish and install Lead-in Cable	<input type="checkbox"/> \$2.02	per foot installed
CC.	Furnish and install Conduit	<input type="checkbox"/> \$7.03	per foot installed
CD.	Furnish and install 3/8-inch messenger cable and incidental hardware	<input type="checkbox"/> \$3.19	per foot installed
CE.	Furnish and install 4 or 7-conductor signal cable	<input type="checkbox"/> \$3.07	per foot installed

APPENDIX II
Rev. 2/2016

<u>Item</u>	<u>Lump Sum Payment</u>
CF. Furnish and install Standard size Junction Box	<input type="checkbox"/> \$369.32
CG. Furnish and install cover for Standard size Junction Box	<input type="checkbox"/> \$59.95
CH. Furnish and install Oversized Junction Box	<input type="checkbox"/> \$515.00
CI. Furnish and install cover for Oversized Junction Box	<input type="checkbox"/> \$133.90
CJ. Furnish and install Riser	<input type="checkbox"/> \$544.87
CK. Furnish and install 40-foot Class 3 Wood Pole ²	<input type="checkbox"/> \$962.02
CL. Remove and dispose of Wood Pole.	<input type="checkbox"/> \$201.00
CM. Furnish and install Guy/Anchor Assembly	<input type="checkbox"/> \$353.29
CN. Furnish and install Grounding System	<input type="checkbox"/> \$245.25
CO. Furnish 12-inch 3-Section Vehicular Signal Head ²	<input type="checkbox"/> \$149.50
CP. Furnish 12-inch 4-Section Vehicular Signal Head ²	<input type="checkbox"/> \$199.50
CQ. Furnish 12-inch 5-Section Vehicular Signal Head ²	<input type="checkbox"/> \$339.50
CR. Furnish 8-inch 3-Section Vehicular Signal Head ²	<input type="checkbox"/> \$102.20
CS. Furnish Pedestrian Signal Head ²	<input type="checkbox"/> \$104.04
CT. Furnish LED indication – 12-inch RED ball ²	<input type="checkbox"/> \$18.50
CU. Furnish LED indication – 12-inch YELLOW ball ²	<input type="checkbox"/> \$19.00
CV. Furnish LED indication – 12-inch GREEN ball ²	<input type="checkbox"/> \$19.00
CW. Furnish LED indication – 12-inch RED Arrow ²	<input type="checkbox"/> \$21.00

APPENDIX II
Rev. 2/2016

<u>Item</u>		<u>Lump Sum Payment</u>
CX.	Furnish LED indication – 12-inch YELLOW Arrow ²	<input type="checkbox"/> \$22.50
CY.	Furnish LED indication – 12-inch GREEN Arrow ²	<input type="checkbox"/> \$22.00
CZ.	Furnish LED indication – 8-inch RED ball ²	<input type="checkbox"/> \$18.10
DA.	Furnish LED indication – 8-inch YELLOW ball ²	<input type="checkbox"/> \$18.10
DB.	Furnish LED indication – 8-inch GREEN ball ²	<input type="checkbox"/> \$18.10
DC.	Furnish LED Indication – 12-inch Hand	<input type="checkbox"/> \$46.25
DD.	Furnish LED indication – 12-inch Man	<input type="checkbox"/> \$85.00
DE.	Furnish LED indication – 12-inch Hand/Man Overlay	<input type="checkbox"/> \$70.00
DF.	Furnish LED indication – 16-inch Hand/Man Overlay with Countdown Module	<input type="checkbox"/> \$74.00
DG.	Furnish Pretimed/Actuated Controller ²	<input type="checkbox"/> \$1,215.00
DH.	Furnish Pole-Mounted Cabinet ²	<input type="checkbox"/> \$3,920.00
DI.	Furnish Base-Mounted Cabinet with auxiliary file ²	<input type="checkbox"/> \$4,597.00
DJ.	Furnish Base-Mounted Cabinet without auxiliary file ²	<input type="checkbox"/> \$4,375.00
DK.	Furnish LED Blank-Out Sign ²	<input type="checkbox"/> \$2,188.00
DL.	Furnish NEMA TS-2 Malfunction Management Unit ²	<input type="checkbox"/> \$649.80
DM.	Furnish Type 2010 or Type 2018 Conflict Monitor with Absence of Red Monitoring ²	<input type="checkbox"/> \$510.00
DN.	Furnish Type 2018 Conflict Monitor with Absence of Red Monitoring and Internet Protocol Communication ²	<input type="checkbox"/> \$645.00
DO.	Furnish Detection Camera/Sensor with Enclosure ²	<input type="checkbox"/> \$1,590.00

<u>Item</u>	<u>Lump Sum Payment</u>
DP. Furnish Single Channel NEMA TS-1 Loop Detector Unit ²	<input type="checkbox"/> \$90.00
DQ. Furnish Two-Channel NEMA TS-1 Loop Detector Unit ²	<input type="checkbox"/> \$160.00
DR. Furnish Two-Channel NEMA TS-2 Loop Detector Unit ²	<input type="checkbox"/> \$75.00
DS. Furnish Two-Channel TYPE 222 Loop Detector Unit ²	<input type="checkbox"/> \$45.75
DT. Furnish and replace Audible Pedestrian Signal ²	<input type="checkbox"/> \$436.00
DU. Perform Annual Inspection on Railroad-Interconnected Intersections	<input type="checkbox"/> \$197.30

¹ Replacement of defective loop with loop of identical or upgraded design requires no prior approval. Upgrading of functional rectangular loops to Quadrapole design requires prior approval from Division Traffic Engineer.

² Requires prior approval from Division Traffic Engineer for reimbursement of non-emergency replacements. If item is covered under warranty, Municipality will not be reimbursed without prior approval of Division Traffic Engineer.

Emergency Response: This function includes all labor and incidental items to bring the operation of the intersection into reasonable conformance with the existing plan of record. Reimbursements for items CA through DT will be given for items utilized in the completion of this work. Sufficient spare equipment must be purchased at the expense of the maintaining agency to insure all intersections are continuously operating according to the plan of record.

Operational Performance Reviews: This function includes the labor and materials as outlined in the attached Operational Performance Checklist. *Reimbursements for items CA through DT will be given for items utilized in the completion of this work only upon prior approval by the Division Traffic Engineer.* Where specialty equipment is not addressed specifically in the attached schedule, manufacturer's recommendations should be followed to insure continued optimum operation. Sufficient spare equipment must be purchased at the expense of the maintaining agency to allow the completion of this work.

System Component Repairs: This function includes labor, parts and materials to repair electronic traffic signal control components. This work typically involves in-house repair of electronic assemblies by troubleshooting and replacing specific integrated circuit chips, repairing damaged printed circuit traces, and making circuit modifications. This work includes making hardware, firmware and software upgrades to equipment to insure optimum operation. This work must be completed in a timely manner to support the emergency response and operational performance review functions.

APPENDIX II
Rev. 2/2016

MUNICIPAL OPERATIONS AGREEMENT – SCHEDULE C
TRAFFIC CONTROL DEVICES – LEVEL C

Items included on this schedule may be added or deleted to those checked above by a request in letter form signed by the Mayor, Clerk (or Manager). The letter should be sent in quadruplicate to the Division Engineer accompanied by four (4) copies of the SCHEDULE with all appropriate items checked. If the Division Engineer approves the new SCHEDULE he should sign, as approved, all four (4) copies of the Municipality's letter of request. The Division Engineer then forwards one copy of the letter and SCHEDULE to the DOT Controller and Local Programs Management Office, returns a copy of each to the Municipality, and retains a copy for his file. The new SCHEDULE will then become effective at the beginning of the next quarter for reimbursement.

The Department reserves the right of verification that all selected functions are being properly performed. If it is determined that any authorized function is not being performed, then the reimbursement will be reduced accordingly.

CITY OR TOWN

CLERK	DATE	MAYOR OR MANAGER	DATE
DEPARTMENT OF TRANSPORTATION			
		DIVISION ENGINEER	DATE

MUNICIPAL OPERATIONS AGREEMENT – SCHEDULE C

SIGNALS LIST CITY OF FAYETTEVILLE

SIGNAL LOCATION		STATE ID
Raeford Rd.	Fairfield St.	06-0001
Raeford Rd.	Robeson St.	06-0002
Eastern Blvd.	Russell St.	06-0016
Bragg Blvd.	Hay St.	06-0018
Eastern Blvd.	Person St.	06-0029
Robeson	Blount	06-0030
Bragg Blvd.	Elm St.	06-0032
Bragg Blvd.	Stamper Rd.	06-0033
Bragg Blvd.	W. Rowan St.	06-0037
Bragg Blvd.	Rowan St.	06-0038
Rowan St.	Ray Ave.	06-0039
Grove St.	Ramsey St.	06-0040
Eastern Blvd.	Grove St.	06-0041
Murchison Rd.	Langdon St.	06-0042
Ramsey St.	Hillsboro St.	06-0044
Robeson St.	Whitfield St.	06-0052
Raeford Rd.	McPherson Church Rd.	06-0054
US 401 By Pass	Yadkin Rd.	06-0055
US 401 By Pass	Murchison Rd.	06-0056
Robeson St.	Village Dr.	06-0060
Clinton Rd.	Cedar Creek Rd.	06-0072
NC 24	Cedar Creek Rd.	06-0076
US 401 By Pass	Rosehill Rd.	06-0079
US 401 By Pass	Ramsey St.	06-0081
US 401 By Pass	Cain Rd.	06-0084
US 401 By Pass	Cliffdale Rd.	06-0094
US 401 By Pass	Morganton Rd.	06-0095
US 401 By Pass	Raeford Rd.	06-0096
Bragg Blvd.	Shannon Dr.	06-0153
Raeford Rd.	Hope Mills Rd.	06-0155
Ramsey St.	Melstone Dr.	06-0211
Grove St.	Ann St.	06-0218
Bragg Blvd.	Pearl St.	06-0221
Ramsey St.	Cumberland St.	06-0223
Raeford Rd.	Purdue Dr.	06-0224
Hay St.	MLK Jr. Frwy W.	06-0231
Hay St.	MLK Jr. Frwy E.	06-0232
Murchison Rd.	Jasper St.	06-0234
Bragg Blvd.	Sycamore Dairy Rd.	06-0236
Ramsey St.	McArthur Rd.	06-0237
Bragg Blvd.	MLK Jr. Frwy E.	06-0244

Ramsey St.	MLK Jr. Frwy	06-0246
Ramsey St.	Langdon St.	06-0250
Bragg Blvd.	Johnson St	06-0265
Raeford Rd.	Bunce Rd.	06-0274
Bragg Blvd.	Santa Fe Dr.	06-0279
Grove St.	B St.	06-0314
US 401 By Pass	AAE W.	06-0318
Raeford Rd.	AAE W.	06-0320
US 401 By Pass	AAE E.	06-0321
Raeford Rd.	AAE E.	06-0323
US 401 By Pass	Cross Creek Mall	06-0325
Raeford Rd.	Roxie Ave.	06-0327
Raeford Rd.	Brighton Rd.	06-0328
Murchison Rd.	Shaw Mill Rd	06-0333
Raeford Rd.	Montclair Rd.	06-0334
Eastern Blvd.	Gillespie St.	06-0336
US 401 By Pass	Swain St.	06-0355
US 401 By Pass	Louise St.	06-0356
Raeford Rd.	Bingham Dr.	06-0358
Ramsey St.	Andrews Rd.	06-0360
Grove St.	Dunn Rd.	06-0371
Raeford Rd.	Ireland Dr.	06-0422
Bragg Blvd.	Cain Rd.	06-0425
Gillespie	Mountain	06-0427
Murchison Rd.	Filter Plant Dr.	06-0445
Ramsey St.	Stacy Weaver	06-0448
Murchison Rd.	Shaw Rd	06-0452
Ramsey St.	Law Rd.	06-0474
Raeford Rd.	Sandalwood Dr.	06-0491
Raeford Rd.	71st School Rd.	06-0516
US 401 By Pass	Campground Ln.	06-0521
NC 24	Plymouth St	06-0535
Robeson St.	MLK Jr. Frwy W.	06-0544
Robeson St.	MLK Jr. Frwy E.	06-0545
Bragg Blvd.	Ames St	06-0565
US 401 By Pass	Richwood Ct.	06-0576
Raeford Rd.	Time Warner	06-0592
Raeford Rd.	Strickland Bridge Rd.	06-0596
Ramsey St.	VA Hospital	06-0609
US 401 By Pass	Cross Creek Plaza	06-0705
Ramsey St.	Rosehill Rd.	06-0748
US 401 By Pass	Blanton Rd.	06-0751
Raeford Rd.	Chilton Dr.	06-0767
Ramsey St.	Northgate CC	06-0771
Ramsey St.	Methodist College	06-0785
Raeford Rd.	Old Raeford Rd.	06-0845
Eastern Blvd.	Old Wilmington Rd.	06-0910
US 401 By Pass	K-Mart	06-0915
Eastern Blvd.	MLK Jr. Frwy NB Ramp D	06-0916
Gillespie St.	MLK Jr. Frwy N.	06-0933

Gillespie St.	MLK Jr. Frwy S.	06-0934
Eastern Blvd.	MLK Jr. Frwy NB Ramp B	06-0936
US 401 By Pass	Chason Ridge Rd.	06-0979
Ramsey St.	Kinlaw & Ridgeway	06-1139
US 401 By Pass	Wal Mart	06-1161
US 401 By Pass	Red Tip	06-1169
Ramsey St.	MLK Jr Frwy S Ramp	06-1193
Ramsey St.	Treetop Dr	06-1200
Bragg Blvd.	Walter St.	06-1210
Ramsey St	US 295 Outer Loop	06-1223
Ramsey St.	Lowe's	06-1224
Robeson St.	Levy Dr.	06-1230
Murchison Rd.	Coley Dr.	06-1265
Ramsey St.	Meadowcroft Dr.	06-1280
Ramsey St.	Wal-Mart Entrance	06-1281
US 401 Bypass	Green Valley Rd	06-1286
Bragg Blvd	US 295 Loop B	06-1300
Bragg Blvd	US 295 Loop D	06-1301
Murchison Rd.	NC 295 Loop B	06-1302
Murchison Rd.	NC 295 Loop C	06-1303
NC 295 East	McArthur	06-1304
NC 295 West	McArthur	06-1305
Ramsey St.	Shawcroft Rd	06-1313
Ramsey St	Northwood Temple	06-1314
Murchison Rd.	Stadium Drive	06-1329
Bragg Blvd.	Coalition Blvd.	06-1341
Raeford Rd.	VA Hospital	06-1345
Ramsey	Summerchase	06-1369
Skibo	Freedom Town center	06-1370
Gillespie St.	Southern Ave.	06-0004
Gillespie St.	Blount St.	06-0006
Arsenal Ave.	Broadfoot Ave.	06-0007
Hay St.	Highland Ave.	06-0008
Russell St.	Robeson St.	06-0010
Russell St.	Winslow St.	06-0011
Russell St.	Gillespie St.	06-0014
Russell St.	Old Wilmington Rd.	06-0015
Morganton	Churchhill	06-0047
Owen Dr.	Gillespie St.	06-0051
Owen Dr.	Village Dr.	06-0058
Legion Rd.	W. Mountain Dr.	06-0074
Owen Dr.	Southern Ave.	06-0075
Owen Dr.	Cumberland Rd.	06-0212
Southern Ave.	Whitfield St.	06-0220
Cliffdale Rd.	McPherson Church Rd.	06-0225
Morganton Rd.	McPherson Church Rd.	06-0233
Person St.	N. Broad St.	06-0240
Yadkin Rd.	Santa Fe Dr.	06-0247
Robeson St.	Franklin St.	06-0264
Owen Dr.	Boone Trail	06-0270
Santa Fe Dr.	AAE NB Ramp	06-0278

Santa Fe Dr.	AAE SB Ramp	06-0281
Owen Dr.	Camden Rd.	06-0289
Morganton Rd.	Pinecrest Dr.	06-0290
Morganton Rd.	AAE E.	06-0319
Morganton Rd.	AAE W.	06-0322
Owen Dr.	AAE	06-0324
Morganton Rd.	Glensford Rd.	06-0346
Morganton Rd.	Skye Dr.	06-0350
Morganton Rd.	Cliffdale Rd.	06-0351
Village Dr.	Ireland Dr.	06-0353
Morganton Rd.	Sycamore Dairy Rd.	06-0361
Reilly Rd.	Cliffdale Rd.	06-0364
Morganton Rd.	Reilly Rd.	06-0369
Yadkin Rd.	Bonanza Rd.	06-0370
Morganton Rd.	Bonanza Dr.	06-0441
Russell St.	Coolspring St.	06-0443
Santa Fe Dr.	Bonanza Dr.	06-0453
Cumberland Rd.	Natal St.	06-0456
Owen Dr.	Melrose Rd.	06-0457
Reilly Rd.	Kimbridge Rd.	06-0482
Ireland Dr.	Coventry Ln.	06-0486
Yadkin Rd.	Fillyaw Rd.	06-0508
Morganton Rd.	Dobbins St.	06-0518
Cliffdale Rd.	Glensford Rd.	06-0527
Morganton Rd.	Cross Point	06-0530
Yadkin Rd.	Southwick Rd.	06-0540
Cliffdale Rd.	71st Sch Rd.	06-0541
Cliffdale Rd.	Bunce Rd.	06-0542
Reilly Rd.	Fillyaw Rd.	06-0543
Morganton Rd.	McFayden Rd.	06-0573
Cliffdale Rd.	Tradewinds	06-0626
Morganton Rd.	Ruritan Rd.	06-0688
Morganton Rd.	Hearthstone Dr.	06-0689
Cliffdale Rd.	Pritchett Dr.	06-0741
Cliffdale Rd.	Waters Edge Dr.	06-0742
Morganton Rd.	Loch Haven Dr.	06-0856
Bragg Blvd	Knox	06-0905
Bonanza Dr.	Glen Canyon Dr.	06-0922
Reilly Rd	Riegelwood St	06-0956
Glensford Dr.	Campground Rd.	06-1008
Glensford Dr.	Red Tip	06-1009
Yadkin Rd.	Wal Mart	06-1148
Cliffdale Rd.	AAE E.	06-1182
Cliffdale Rd.	AAE W.	06-1183
Camden Rd.	West Mountain Dr.	06-1195
Bonanza Dr.	BI-Low	06-1237
Yadkin Rd.	Lake Valley Dr.	06-1257
Lake Valley Dr	JKAM Entrance	06-1258
Glensford Dr.	Glensford Commons	06-1274
Santa Fe Dr.	Antietam Creek	06-1325

Santa Fe Dr.	Coalition	06-1326
Reilly	Glenallen	06-1337
Reilly	Jeffery	06-1338
Reilly	Northumberland	06-1339
Owen	Dallas	06-1351
Cliffdale	Freedom town center	06-1371
		<u>Total number of signals</u> 198

