Union County, NC

Union County Government Center
500 North Main Street
Monroe, North Carolina

Meeting Agenda

Monday, November 15, 2021
3:00 PM

Board Room, First Floor

Board of Commissioners

Chairman Richard Helms
Vice Chairman Dennis Rape
Commissioner Jerry Simpson
Commissioner Stony Rushing
Commissioner David Williams

Opening of Meeting

Invocation - Commissioner Jerry Simpson

Pledge of Allegiance - Union Academy Girls' Varsity Volleyball Team

Informal Comments

Public Hearing(s)

Staff Recognition

21-391 Employee Recognition

Attachments: BoCC Agenda 11152021 Service Awards Retirements

Consent Agenda

21-377 Emergency Services Complex Network Switches Purchase

Attachments: Trace 3 Quote QTE562021

21-369 Resolution Authorizing Conveyance of Surplus Property

Attachments: Resolution for Conveyance of Surplus Property

21-375 Amendment - Fire Alarm System for Detention Center

Attachments: Johnson Controls UCSO Service Agreement Renewal

21-394 Resolution to Convey Law Enforcement Canine “Kobe”

Attachments: Agreement
Resolution

21-414 Warehouse Lease

Attachments: Lease

21-383 Sale of Surplus Yard Waste

Attachments: 2022 022 Sealed Bid
Gardenscape Submission 10192021

21-402 Lease Agreement Amendment with Raymond G. Smith for Office Space at 604 Lancaster Avenue

Attachments: BOCC Item 7333 RG Smith Amendment to Extend Lease b Months

21-404 Purchase of Voting, Precinct and Ballot Storage Systems from Patterson Pope for the Board of Elections Addition and Renovation Project

Attachments: BOCC Item BOE Patterson Pope Storage Equipment

21-415 Structured Cabling for Sheriff's Office Expansion and Renovations, Emergency Services Complex and Southwest Library Projects

Attachments: Resolution for Providing Notice of Construction UC Structur Cabling
IFB 2022-023 REBID - UC Structured Cabling - Recommendation to Award Letter
IFB 2022-023 REBID - UC Structured Cabling - Certified Bi Tab
Bid Sheet - Connectivity
Construction Contract A101 with Connectivity

21-384 Asphalt Restoration Services

Attachments: Contract 5589 Seagraves RFQ
6318 JA Segraves Public Works Water Wastewater
7350 JA Seagraves Amendment

21-385 Potable Water Service Parts

Attachments: FINAL IFB 2022 003 Potable Water Service Parts
7349 Ferguson Agreement

21-388 Replacement Excavator

Attachments: PO Excavator Request Package

21-389 Replacement Articulating Wheel Loader

Attachments: PO Loader Request Package

21-390 Crooked Creek WRF Clarifier Repairs

Attachments: Request to Solicit FY22 RR Clarifier Corrective Maintenanc
Kemp Construction Inc
PO Clarifier Repairs

21-398 Project SW110 - STEG Gravity Sewer Improvements (Gray Water System) Stallings - Bid Award

Attachments: 20211029 RecommendationofAward and BidTab
20211115 NoticeOfConstructionResolution
20211115 LocationMaps

21-395 415 WIC Breastfeeding Peer Counseling Program - Budget Amendment #9

Attachments: Budget Amendment 9

21-397 Amendment to the Union County Pay and Classification Plan

21-381 Surplus Vehicle Sale

Attachments: Attachment A
Surplus Vehicles Resolution

21-328 Fixed Price Term Agreements Policy

Attachments: Fixed Price Agreements Policy

21-392 Minutes for Approval

Items Removed From Consent (if any)

Agenda items identified by Commissioners to be removed from the Consent Agenda for clarity, comment, public awareness, and/or to be voted on separately.

Information Only

21-331 Wastewater Treatment Capacity - Monthly Update

21-378 Tax Collector's Departmental Report for September 2021

Attachments: September 2021 Percentage for Regular Tax Report
Tax Department Monthly Report Memorandum

21-380 Union EMS Quarterly Report September 2021

Attachments: Union EMS Quarterly Report September 2021

Business

21-185 Advanced Metering Infrastructure (AMI) Program

Attachments: UCPW Advanced Metering Feasibility Study Updated 1011
Sole Source Justification Memo
Final Union County AMI Contract
2022 CPO292 Advanced Metering Infrastructure
CPO 292

21-382 RZ-2021-005 Sherin Rezoning

Attachments: RZ 2021-005 Sherin Vicinity Map
RZ 2021-005 Sherin Parcel Map zoom
RZ-2021-005 Sherin Staff Report 11-3-21
Motions and Consistency Statements - RZ-2021-005 (Sheri

21-386 Union County 2050 Strategy Implementation Committee Recruitment

Attachments: UC 2050 implementation process
Union County 2050 Implementation Committee Recruitmen October 2021

21-417 ARPA Funding Allocation

21-420 Options for Board of Commissioners Regular Meeting Schedule

21-468 Sharp Business Systems - Printer Contract

Attachments: County of Union Addendum Sharp
County of Union Lessees General and Incumbency Certifica A551
County of Union Omnibus Add 11538 SLG Lease
County of Union PreAudit Cert Add NC A536
Request for Certificate of Insurance
SLG Lease AgreementCounty of Union
Union County MA
Union County Schedule A

21-443 Purchase of Real Property

Attachments: Real Property Purchase Contract- 5301 Friendly Baptist Ch Road

County Manager's Comments

Commissioners' Comments

Closed Session

Adjournment

Union County, NC

Staff Report

Union County Government Center
500 North Main Street
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www.unioncountync.gov

File #: 21-391 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Employee Recognition

INFORMATION CONTACT:

Jennifer Davis, Human Resources, Assistant Director, HR, 704-283-3803

ACTION REQUESTED:

Acknowledge employee service award recipients and retirees for the month of November.

BACKGROUND:

The employee recognition program acknowledges employees for full-time continuous service at the following intervals: 5 years, 10 years, 15 years, 20 years, 25 years and 30 years of service. We would like to recognize the following employees for full-time continuous service with Union County Local Government.

FINANCIAL IMPACT:

n/a

SERVICE AWARD RECIPIENTS		
Employee Name	**Division**	**Union County Service**
KATHRYN WOODLEY	HUMAN RESOURCES	5 YEARS
BJORN HANSEN	PLANNING	5 YEARS
LORIE MAY	PUBLIC WORKS	5 YEARS
ALLISON BOYLES	SOCIAL SERVICES	5 YEARS
ROBYN MOBLEY	SOCIAL SERVICES	5 YEARS
RUBEN VASQUEZ	SOCIAL SERVICES	5 YEARS
DANA CHASTAIN	TAX ADMINISTRATION	5 YEARS
Employee Name	**Division**	**Union County Service**
CAROLINE CARTER	LIBRARY	20 YEARS
Employee Name	**Division**	**Union County Service**
JERRY MACEMORE	TAX ADMINISTRATION	25 YEARS
NOVEMBER RETIREMENTS		
Employee Name	**Division**	**Union County Service**
LISA LOVE	HEALTH	13 YEARS
SHILO GARNER	SHERIFF'S OFFICE	14 YEARS
DEAN GLENN	FACILITIES MANAGEMENT	18 YEARS
JERRY GUFFEY	SOLID WASTE	21 YEARS

Union County, NC

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File #: 21-377 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Emergency Services Complex Network Switches Purchase

INFORMATION CONTACT:

Christopher Liersaph, Information Technology, Assistant Director, Information Technology, & 704-292-2520

ACTION REQUESTED:

Authorize the purchase of specified network switches for use in the Emergency Services Complex.

BACKGROUND:

The Emergency Service Complex will require the purchase of network switching equipment for connectivity.

FINANCIAL IMPACT:

This purchase will use funds from the General Fund to total $84,898.56.

TRACE3

Quote: QTE562021
Date: 8/23/2021
Exp Date: 9/10/2021

Trace3 | 5565 Corporate Exchange CT SE | 877.575.8877 | www.trace3.com

Company Union County Emergency Services
500 N Main St
Monroe, NC 28112
Vann Dale

Proposed by Andrew Smith

Qty	Part	Emergency Services CX6410M Stack	Unit List Price	204X Price	204X Ext. Price	Unit Price	Ext. Price
1	R0X27A	Aruba 6410 Switch	$ 23,499.00	$ 15,509.34	$ 15,509.34	$ 11,749.50	$ 11,749.50
1	HR7T4E	HPE 1Y FC 4H Exch Aruba 6410 Switch SVC [for R0X27A]	$ 4,020.00	$ 2,974.80	$ 2,974.80	$ 2,974.80	$ 2,974.80
4	R0X35A	Aruba 6400 1800W Power Supply with C16 Inlet Adapter	$ 2,499.00	$ 1,649.34	$ 6,597.36	$ 1,249.50	$ 4,998.00
4	R0X35A	INCLUDED: NEMA 6-20 220V NA Power Cord	$ -	$ -	$ -	$ -	$ -
1	R0X31A	Aruba 6400 Management Module	$ 8,999.00	$ 5,939.34	$ 5,939.34	$ 4,499.50	$ 4,499.50
3	R0X39B	Aruba 6400 48p 1GbE CL4 PoE 4SFP56 Module	$ 9,999.00	$ 6,599.34	$ 19,798.02	$ 4,999.50	$ 14,998.50
3	JL563A	Aruba 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver	$ 1,575.00	$ 1,039.50	$ 3,118.50	$ 787.50	$ 2,362.50
5	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	$ 1,040.00	$ 686.40	$ 3,432.00	$ 353.60	$ 1,768.00
4	R0X38B	Aruba 6400 48p 1GbE CL4 PoE Module	$ 8,999.00	$ 5,939.34	$ 23,757.36	$ 4,499.50	$ 17,998.00
			$ 60,630.00	**$ 40,337.40**	**$ 81,126.72**		**$ 61,348.80**

Qty	Part	911 CX6300M Stack (96 POE Ports)	Unit List Price	204X Price	204X Ext. Price	Unit Price	Ext. Price
3	JL661A	Aruba 6300M 48G CL4 PoE 4SFP56 Switch	$ 11,699.00	$ 7,721.34	$ 23,164.02	$ 5,849.50	$ 17,548.50
3	HL6K7E	HPE 1Y FC 4H Exch Aruba6300M 48P PoE SVC [for JL661A]	$ 1,083.00	$ 801.42	$ 2,404.26	$ 801.42	$ 2,404.26
6	JL087A	Aruba X372 54VDC 1050W Power Supply	$ 1,199.00	$ 791.34	$ 4,748.04	$ 599.50	$ 3,597.00
6	JL087A	INCLUDED: Power Cord - U.S. localization	$ -	$ -	$ -	$ -	$ -
			$ 13,981.00	**$ 9,314.10**	**$ 30,316.32**		**$ 23,549.76**
**		Meets/exceeds requirements - Statewide IT Contract Number: 204x - IT Infrastructure Solutions Bid/Solicitation Number: ITS-400277 Contract Award Type: CONVENIENCE Current Effective Dates: July 1, 2018 - June 30, 2023					
						Subtotal:	

Andrew Smith

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File #: 21-369 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Resolution Authorizing Conveyance of Surplus Property

INFORMATION CONTACT:

Sgt. Jonathan Davis, Procurement, Union County Sheriff's Office

ACTION REQUESTED:

Adopt Resolution authorizing County Manager to donate surplus 2017 Ford F-150 Animal Service vehicle to South Piedmont Community College.

BACKGROUND:

In accordance with G.S. 160A-274, the County is authorized to convey to any other governmental unit any interest in real or personal property. The Sheriff's Office has determined that a certain 2017 Ford F-150, further identified as County Number 36-17, is surplus, and the Sheriff's Office now desires that the County convey this vehicle to South Piedmont Community College.

FINANCIAL IMPACT:

None.

RESOLUTION AUTHORIZING CONVEYANCE OF A CERTAIN UNION COUNTY SURPLUS VEHICLE TO SOUTH PIEDMONT COMMUNITY COLLEGE

THAT WHEREAS, Union County is the owner of one 2017 Ford F-150, with North Carolina Vehicle Identification Number 1FTFX1EG2HFA60842, as further identified by County Number 36-17 (the "Vehicle"); and

WHEREAS, Union County desires to declare surplus and convey the Vehicle to South Piedmont Community College, a "governmental unit" as defined by North Carolina General Statutes § 160A-274; and

WHEREAS, pursuant to North Carolina General Statutes § 160A-274, Union County is authorized to convey to any other governmental unit any interest in real or personal property;

NOW, THEREFORE, BE IT RESOLVED by the Union County Board of Commissioners as follows:

1. The Vehicle is hereby declared surplus.

2. The County Manager or his designee is authorized to dispose of the Vehicle to South Piedmont Community College in accordance with G.S. § 160A-274, and to execute such documents of conveyance as may be necessary to transfer ownership of the Vehicle. There shall be no monetary consideration given for conveyance of the Vehicle to South Piedmont Community College.

This the ____ day of _____, 2021.

ATTEST:

_____ _____

Lynn G. West, Clerk to the Board Richard B. Helms, Sr., Chairman

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File #: 21-375 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Amendment - Fire Alarm System for Detention Center

INFORMATION CONTACT:

Dorothy Thomas, Union County Sheriff's Office, Operations Manager, (704) 283-3578

ACTION REQUESTED:

Authorize the County Manager to negotiate and execute an amendment substantially consistent with this agenda item.

BACKGROUND:

Union County Sheriff's Office (UCSO) has contracted with Johnson Controls to provide coverage of the fire alarm system for the Union County Detention Center. Because the County has various agreements with Johnson Controls with an overall financial impact greater than $50,000, the requested Amendment to the contract will exceed the County Manager signatory authority limit of $50,000. Therefore, the UCSO is requesting authorization from the Board of Commissioners to continue providing these contracted services for coverage of the fire alarm system at the Union County Detention Center.

FINANCIAL IMPACT:

Cost of the contract is $9,973.95 annually for the next three years for a total contract cost of $29,921.85. Funding for the amendment is available in the UCSO FY2022 budget appropriation and future expenditures are subject to budget appropriation by the Board of Commissioners.

Johnson Controls Fire Protection LP
9826 Southern Pine Blvd.
Charlotte, NC 28217
704-608-2277
shasta.jenkins@jci.com

Service Agreement Renewal

Single or Multi - Site Renewal:	Single	**Salesperson:**	**Ship To Address:** Same as bill to address
Contract Number:	**19315964**	Shasta Jenkins	**Bill To Address:** Monroe, NC 28112

Johnson Controls Fire Protection LP ("Company"), for and in consideration of the prices herein named, proposes to furnish the work, and/or materials hereinafter described, subject to the terms and conditions of this Agreement.

Contract Dates: 8/1/2021 – 7/31/2023

Scope of Service: See Contract Details on Page 2 & 3

Total Annual Amount: $ -

Renewal Requirements: Customer Requires New Service Agreement

Billing Frequency: Annual

Customer Acceptance

In accepting this Agreement, Customer agrees to the terms and conditions contained herein including those on the following page(s) of this Agreement and any attachments or riders attached hereto that contain additional terms and conditions. It is understood that these terms and conditions shall prevail over any variation in terms and conditions on any purchase order or other document that the Customer may issue. Any changes in the system requested by the Customer after the execution of this Agreement shall be paid for by the Customer and such changes shall be authorized in writing. **ATTENTION IS DIRECTED TO THE LIMITATION OF LIABILITY, WARRANTY, INDEMNITY AND OTHER CONDITIONS CONTAINED IN THIS AGREEMENT. This offer shall be void if not accepted in writing within thirty (30) days from the date first set forth above.**

Union County Sheriff Office		**JOHNSON CONTROLS FIRE PROTECTION LP**	
By:	X	By:	X
Name:		Name:	
Date:		Date:	
Title:		Title:	
Email:		Email:	
PO #:		License #:	

Contract Details:

Line Item	Location name	Product	Level of Service	Service Frequency	Inspection Months	Annual Amount
		Fire Alarm	Expert	Annual	JUN	$ 9,973.95
					Total Annual Renewal Amount :	$ 9,973.95

Johnson Controls

*We recently upgraded our Service Plan offerings to provide additional benefits to our customers. Below is a summary of the upgrades made to the Service Plan offerings.

Previous Plan (Fire Alarm)	Previous Plan Includes	Upgraded Plan	Upgraded Plan Includes
Silver	· Test & Inspection · PDF Inspection Reporting · No Labor Discount	**Essential**	· Test & Inspection · Xaap Electronic Inspection reporting · 10% Labor & Parts Discount

			· Customer Portal
Gold Labor	· Test & Inspection · Labor Coverage · No Parts Discounts · No Labor Discount for services not covered · PDF Inspection Reporting	**Enhanced**	· Test & Inspection · Labor Coverage & Panel Parts Coverage · 15% Labor Discount for services not covered under contract (i.e. Acts of Nature, Faulty Wiring, Moves/Adds/Changes, User Abuse & Vandalism) · Xaap Electronic Inspection Reporting · Battery Replacement Option (batteries are replaced every 3 years per manufactuer's specification. Excludes additional replacements.) · Remote Service Support · Smoke Detector Cleaning · Sensitivity Testing (non - addressable panels) · Customer Portal
Platinum	· Test and Inspection · System Labor Coverage · System Parts Coverage · Peripheral Part Replacement Coverage · EIR/PDF Inspection Reporting · No Discounts for services not covered under contract	**Expert**	· Test & Inspection · System Labor Coverage · System Parts Coverage · Peripheral Part Replacement Coverage · Xaap Electronic Inspection Reporting · 20% Discount for services not covered under contract · Battery Replacement Coverage (batteries are replaced every 3 years per manufactuer's specification. Excludes additional replacements.) · Remote Service Support · Smoke Detector Cleaning · Customer Portal

TERMS AND CONDITIONS

1. Term. The Initial Term of this Agreement shall commence on the date of this Agreement and continue for the period indicated in this Agreement. At the conclusion of the Initial Term, this Agreement shall automatically extend for successive terms equal to the Initial Term (subject to Section 3) unless either party gives written notice to the other party at least thirty (30) days prior to the end of the then-current term (each a ("Renewal Term").

2. Payment. Amounts are due upon receipt of the invoice and shall be paid by Customer within 30 days. Invoicing disputes must be identified in writing within 21 days of the invoice date. Payments of any disputed amounts are due and payable upon resolution. All other amounts remain due within 30 days. Payment is a condition precedent to Company's obligation to perform Services under the Agreement. Work performed on a time and material basis shall be at the then-prevailing Company rate for material, labor, and related items, in effect at the time supplied under this Agreement. Failure to make payment when due will give Company, without prejudice to any other right or remedy, the right to (a) stop performing any Services, terminate or suspend any unpaid software licenses, and/or terminate this Agreement; and (b) charge Customer interest on the amounts unpaid at a rate equal to the lesser of 1.5% per month or the maximum rate permitted under applicable law, until payment is made in full. Customer agrees to pay all of Company's reasonable collection costs, including legal fees and expenses.

3. Pricing. The pricing set forth in this Agreement is based on the number of devices and services to be performed as set forth in this Agreement. If the actual number of devices installed or services to be performed is greater than that set forth in this Agreement, the price will be increased accordingly. Company may increase prices upon notice to Customer to reflect increases in material and labor costs. Customer agrees to pay all taxes, permits, and other charges, including but not limited to state and local sales and excise taxes, installation or alarm permits, false alarm assessments, or any charges imposed by any government body, however designated, levied or based on the service charges pursuant to this Agreement. Prices in any quotation or proposal from Company are subject to change upon notice sent to Customer at any time before the quotation or proposal has been accepted. Prices for products covered may be adjusted by Company, upon notice to Customer at any time prior to shipment, to reflect any increase in Company's cost of raw materials (e.g., steel, aluminum) incurred by Company after issuance of Company's applicable proposal or quotation. Company will provide Customer with notice of any pricing adjustments applicable to any Renewal Term no later than 45 days prior to the commencement of that Renewal Tern. Unless Customer terminates the Agreement at least thirty (30) days prior to the start of such Renewal Term, the adjusted price shall be the price for the Renewal Term.

4. Code Compliance. Company does not undertake an obligation to inspect for compliance with laws or regulations unless specifically stated in this Agreement. Customer acknowledges that the Authority Having Jurisdiction (e.g. Fire Marshal) may establish additional requirements for compliance with local codes. Any additional services or equipment required will be provided at an additional cost to Customer.

5. Limitation of Liability; Limitations of Remedy. Customer understands that Company offers several levels of protection services and that the level described has been chosen by Customer after considering and balancing various levels of protection afforded and their related costs. **It is understood and agreed by Customer that Company is not an insurer and that insurance coverage shall be obtained by Customer and that amounts payable to Company hereunder are based upon the value of the services and the scope of liability set forth in this Agreement and are unrelated to the value of Customer's property and the property of others located on the premises. Customer agrees to look exclusively to Customer's insurer to recover for injuries or damage in the event of any loss or injury. Customer releases and waives all right of recovery against Company arising by way of subrogation. Company makes no guaranty or warranty, including any implied warranty of merchantability or fitness for a particular purpose that equipment or services supplied by Company will detect or avert occurrences or the consequences therefrom that the equipment or service was designed to detect or avert. It is impractical and extremely difficult to fix the actual damages, if any, which may proximately result from failure on the part of Company to perform any of its obligations under this Agreement. Accordingly, Customer agrees that Company shall be exempt from liability for any loss, damage or injury arising directly or indirectly from occurrences, or the consequences therefrom, which the equipment or service was designed to detect or avert. Should Company be found liable for any loss, damage or injury arising from a failure of the equipment or service in any respect, Company's liability for Services performed on-site at Customer's premises shall be limited to an aggregate amount equal to the Agreement price (as increased by the price for any additional work) or, where the time and material payment term is selected, Customer's time and material payments to Company. Where this Agreement covers multiple sites, liability shall be limited to the amount of the payments allocable to the site where the incident occurred. Company's liability with respect to Monitoring Services is set forth in Section 17 of this Agreement. Such sum shall be complete and exclusive. IN NO EVENT SHALL COMPANY BE LIABLE, FOR ANY DAMAGE, LOSS, INJURY, OR ANY OTHER CLAIM ARISING FROM ANY SERVICING, ALTERATIONS, MODIFICATIONS, CHANGES, OR MOVEMENTS OF THE COVERED SYSTEM(S), AS HEREINAFTER DEFINED, OR ANY OF ITS COMPONENT PARTS BY CUSTOMER OR ANY THIRD PARTY. To the maximum extent permitted by law, in no event shall Company and its affiliates and their respective personnel, suppliers and vendors be liable to Customer or any third party under any cause of action or theory of liability, even if advised of the possibility of such damages, for any (a) special, incidental, consequential, punitive or indirect damages of any kind; (b) loss of profits, revenues, data, customer opportunities, business, anticipated savings or goodwill; (c) business interruption; or (d) data loss or other losses arising from viruses, ransomware, cyber-attacks or failures or interruptions to network systems. The limitations of liability set forth in this Agreement shall inure to the benefit of all parents, subsidiaries and affiliates of Company, whether direct or indirect, Company's employees, agents, officers and directors.**

6. Reciprocal Waiver of Claims (SAFETY Act). Certain of Company's systems and services have received Certification and/or Designation as Qualified Anti-Terrorism Technologies ("QATT") under the Support Anti-terrorism by Fostering Effective Technologies Act of 2002, 6 U.S.C. §§ 441-444 (the "SAFETY Act"). As required under 6 C.F.R. 25.5 (e), to the maximum extent permitted by law, Company and Customer hereby agree to waive their right to make any claims against the other for any losses, including business interruption losses, sustained by either party or their respective employees, resulting from an activity resulting from an "Act of Terrorism" as defined in 6 C.F.R. 25.2, when QATT have been deployed in defense against, response to, or recovery from such Act of Terrorism.

7. Indemnity. Customer agrees to indemnify, hold harmless and defend Company against any and all losses, damages, costs, including expert fees and costs, and expenses including reasonable defense costs, arising from any and all third party claims for personal injury, death, property damage or economic loss, arising in any way from any act or omission of Customer or Company relating in any way to this Agreement, including but not limited to the Services under this Agreement, whether such claims are based upon contract, warranty, tort (including but not limited to active or passive negligence), strict liability or otherwise. Company reserves the right to select counsel to represent it in any such action. Customer's responsibility with respect to indemnification and defense of Company with respect to Monitoring Services is set forth in Section 17 of this Agreement.

8. General Provisions. Customer has selected the service level desired after considering and balancing various levels of protection afforded and their related costs. All work to be performed by Company will be performed during normal working hours of normal working days (8:00 a.m. - 5:00 p.m., Monday through Friday, excluding Company holidays), as defined by Company, unless additional times are specifically described in this Agreement. All work performed unscheduled unless otherwise specified in this Agreement. Appointments scheduled for four-hour window. Additional charges may apply for special scheduling requests (e.g. working around equipment shutdowns, after hours work). Company will perform the services described in the Service Solution ("Services") for one or more system(s) or equipment as described in the Service Solution or the listed attachments ("Covered System(s)"). UNLESS OTHERWISE SPECIFIED IN THIS AGREEMENT, ANY INSPECTION (AND, IF SPECIFIED, TESTING) PROVIDED UNDER THIS AGREEMENT DOES NOT INCLUDE ANY MAINTENANCE, REPAIRS, ALTERATIONS, REPLACEMENT OF PARTS, OR ANY FIELD ADJUSTMENTS WHATSOEVER, NOR DOES IT INCLUDE THE CORRECTION OF ANY DEFICIENCIES IDENTIFIED BY COMPANY TO CUSTOMER. COMPANY SHALL NOT BE RESPONSIBLE FOR EQUIPMENT FAILURE OCCURRING WHILE COMPANY IS IN THE PROCESS OF FOLLOWING ITS INSPECTION TECHNIQUES, WHERE THE FAILURE ALSO RESULTS FROM THE AGE OR OBSOLESCENCE OF THE ITEM OR DUE TO NORMAL WEAR AND TEAR. THIS AGREEMENT DOES NOT COVER SYSTEMS, EQUIPMENT, COMPONENTS OR PARTS THAT ARE BELOW GRADE, BEHIND WALLS OR OTHER OBSTRUCTIONS OR EXTERIOR TO THE BUILDING, ELECTRICAL WIRING, AND PIPING.

9. Customer Responsibilities. Customer shall regularly test the System(s) in accordance with applicable law and manufacturers' and Company's recommendations. Customer shall promptly notify Company of any malfunction in the Covered System(s) which comes to Customer's attention. This Agreement assumes any existing system(s) are in operational and maintainable condition as of the Agreement date. If, upon inspection, Company determines that repairs are recommended, repair charges will be submitted for approval by Customer's on-site representative prior to work. Should such repair work be declined, Company shall be relieved from any and all liability arising therefrom.

Customer further agrees to:

- provide Company clear access to Covered System(s) to be serviced including, if applicable, lift trucks or other equipment needed to reach inaccessible equipment;
- supply suitable electrical service, heat, heat tracing adequate water supply, and required system schematics and/or drawings;
- notify all required persons, including but not limited to authorities having jurisdiction, employees, and monitoring services, of scheduled testing and/or repair of systems;
- provide a safe work environment;
- in the event of an emergency or Covered System(s) failure, take reasonable precautions to protect against personal injury, death, and/or property damage and continue such measures until the Covered System(s) are operational; and
- comply with all laws, codes, and regulations pertaining to the equipment and/or Services provided under this Agreement.

Customer represents and warrants that it has the right to authorize the Services to be performed as set forth in this Agreement. Customer is solely responsible for the establishment, operation, maintenance, access, security and other aspects of its computer network ("Network") and shall supply Company secure Network access for providing its services. Products networked, connected to the internet, or otherwise connected to computers or other devices must be appropriately protected by Customer and/or end user against unauthorized access. Customer is responsible to take appropriate measures, including performing back-ups, to protect information, including without limit data, software, or files (collectively "Data") prior to receiving the service or products.

10. Repair Services. Where Customer expressly includes repair, replacement, and emergency response services in the Service Solution section of this Agreement, such Services apply only to the components or equipment of the Covered System(s). Customer agrees to promptly request repair services in the event the System becomes inoperable or otherwise requires repair. The Agreement price does not include repairs to the Covered System(s) recommended by Company as a result of an inspection, for which Company will submit independent pricing to Customer and as to which Company will not proceed until Customer authorizes such work and approves the pricing. Repair or replacement of non-maintainable parts of the Covered System(s) including, but not limited to, unit cabinets, insulating material, electrical wiring, structural supports, and all other non-moving parts, is not included under this Agreement.

11. System Equipment. The purchase of equipment or peripheral devices, (including but not limited to smoke detectors, passive infrared detectors, card readers, sprinkler system components, extinguishers and hoses) from Company shall be subject to the terms and conditions of this Agreement. If, in Company's sole judgment, any peripheral device or other system equipment, which is attached to the Covered System(s), whether provided by Company, Customer or a third party, interferes with the proper operation of the Covered System(s), Customer shall remove or replace such device or equipment promptly upon notice from Company. Failure of Customer to remove or replace the device shall constitute a material breach of this Agreement. If Customer adds any third party device or equipment to the Covered System(s), Company shall not be responsible for any damage to or failure of the Covered System(s) caused in whole or in part by such device or equipment.

12. Reports. Where inspection and/or test services are selected, such inspection and/or test shall be completed on Company's then current report form, which shall be given to Customer, and, where applicable, Company may submit a copy thereof to the local authority having jurisdiction. The report and recommendations by Company are only advisory in nature and are

intended to assist Customer in reducing the risk of loss to property by indicating obvious defects or impairments noted to the system and equipment inspected and/or tested. They are not intended to imply that no other defects or hazards exist or that all aspects of the Covered System(s), equipment, and components are under control at the time of inspection. Final responsibility for the condition and operation of the Covered System(s) and equipment and components lies with Customer.

13. Availability and Cost of Steel, Plastics & Other Commodities. Company shall not be responsible for failure to provide services, deliver products, or otherwise perform work required by this Agreement due to lack of available steel products or products made from plastics or other commodities. In the event Company is unable, after reasonable commercial efforts, to acquire and provide steel products, or products made from plastics or other commodities, if required to perform work required by this Agreement, Customer hereby agrees that Company may terminate the Agreement, or the relevant portion of the Agreement, at no additional cost and without penalty. Customer agrees to pay Company in full for all work performed up to the time of any such termination.

14. Confined Space. If access to confined space by Company is required for the performance of Services, Services shall be scheduled and performed in accordance with Company's then-current hourly rate.

15. Hazardous Materials. Customer represents that, except to the extent that Company has been given written notice of the following hazards prior to the execution of this Agreement, to the best of Customer's knowledge there is no:

- "permit confined space," as defined by OSHA;
- risk of infectious disease;
- need for air monitoring, respiratory protection, or other medical risk; or
- asbestos, asbestos-containing material, formaldehyde or other potentially toxic or otherwise hazardous material contained in or on the surface of the floors, walls, ceilings, insulation or other structural components of the area of any building where work is required to be performed under this Agreement.

All of the above are hereinafter referred to as "Hazardous Conditions." Company shall have the right to rely on the representations listed above. If Hazardous Conditions are encountered by Company during the course of Company's work, the discovery of such materials shall constitute an event beyond Company's control, and Company shall have no obligation to further perform in the area where the Hazardous Conditions exist until the area has been made safe by Customer as certified in writing by an independent testing agency, and Customer shall pay disruption expenses and re-mobilization expenses as determined by Company. This Agreement does not provide for the cost of capture, containment or disposal of any hazardous waste materials, or hazardous materials, encountered in any of the Covered System(s) and/or during performance of the Services. Said materials shall at all times remain the responsibility and property of Customer. Company shall not be responsible for the testing, removal or disposal of such hazardous materials

16. Remote Service. If Customer selects Remote Service, Customer understands and agrees that, while Remote Service provides for communication regarding Customer's fire alarm system to Company via the Internet, Remote Service does not constitute monitoring of the system, and Customer understands that Remote Service does not provide for Company to contact the fire department or other authorities in the event of a fire alarm. Customer understands that if it wishes to receive monitoring of its fire alarm system and notification of the fire department or other authorities in the event of a fire alarm, it must select monitoring services as a separate Service under this Agreement**.** CUSTOMER FURTHER UNDERSTANDS AND AGREES THAT THE TERMS OF SECTION 17.F OF THIS AGREEMENT APPLY TO REMOTE SERVICE.

17. Monitoring Services. If Customer has selected Monitoring Services, the following shall apply to such Services:

A. Alarm Monitoring Service. Customer agrees and acknowledges that Company's sole and only obligation under this Agreement shall be to provide alarm monitoring, notification, and/or Runner Services as set forth in this Agreement and to endeavor to notify the party(ies) identified by Customer on the Contact/Call List ("Contacts") and/or Local Emergency Dispatch Numbers for responding authorities. Upon receipt of an alarm signal, Company may, at our sole discretion, attempt to notify the Contacts to verify the signal is not false. If we fail to notify the Contacts or question the response we receive, we will attempt to notify the responding authority. In the event Company receives a supervisory signal or trouble signal, Company shall endeavor to promptly notify one of the Contacts. Company shall not be responsible for a Contact's or responding authority's refusal to acknowledge/respond to Company's notifications of receipt of an alarm signal, nor shall Company be required to make additional notifications because of such refusal. The Contacts are authorized to act on Customer's behalf and, if so designated on the Contact/Call List, are authorized to cancel an alarm prior to the notification of authorities. Customer understands that local laws, ordinances or policies may restrict Company's ability to provide the alarm monitoring and notification services described in this Agreement and/or necessitate modified or additional services and related charges to Customer. Customer understands that Company may employ a number of industry-recognized measures to help reduce occurrences of false alarm signal activations. These measures may include, but are not limited to, implementation of industry-recognized default settings; implementation of "partial clear time bypass" procedures at our alarm monitoring center and other similar measures at our sole discretion from time to time. THESE MEASURES CAN RESULT IN NO ALARM SIGNAL BEING SENT FROM AN ALARM ZONE IN CUSTOMER'S PREMISES AFTER THE INITIAL ALARM ACTIVATION UNTIL THE ALARM SYSTEM IS MANUALLY RESET. Upon receiving notification from Company that a fire or gas detection (e.g. carbon monoxide) signal has been received, the responding authority may forcibly enter the premises. Cellular radio unit test supervision, if provided under this Agreement, provides only the status of the cellular radio unit's current signaling ability at the time of the test communication based on certain programmed intervals and does not serve to detect the potential loss of radio service at the time of an actual emergency event. Company shall not be responsible to provide monitoring services under this Agreement unless and until the communication link between Customer's premises and Company's Monitoring Center has been tested. **SUCH SERVICES ARE PROVIDED WITHOUT WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE**.

B Limitation of Liability; **Limitations of Remedy**. Customer understands that Company offers several levels of Monitoring Services and that the level described has been chosen by Customer after considering and balancing various levels of protection afforded and their related costs**. It is understood and agreed by Customer that Company is not an insurer and that insurance coverage shall be obtained by Customer and that amounts payable to Company hereunder are based upon the value of the Monitoring Services and the scope of liability set forth in this Agreement and are unrelated to the value of Customer's property and the property of others located on the premises. Customer agrees to look exclusively to Customer's insurer to recover for injuries or damage in the event of any loss or injury and that Customer releases and waives all right of recovery against Company arising by way of subrogation. Company makes no guaranty or warranty, including any implied warranty of merchantability or fitness for a particular purpose that equipment or Services supplied by Company will detect or avert occurrences or the consequences therefrom that the equipment or Service was designed to detect or avert. It is impractical and extremely difficult to fix the actual damages, if any, which may proximately result from failure on the part of Company to perform any of its monitoring obligations under this Agreement. Accordingly, Customer agrees that Company shall be exempt from liability for any loss, damage or injury arising directly or indirectly from occurrences, or the consequences therefrom, which the equipment or Service was designed to detect or avert. Should Company be found liable for any loss, damage or injury arising from a failure of the equipment or Service in any respect, Company's liability with respect to Monitoring Services shall be the lesser of the annual fee for Monitoring Services allocable to the site where the incident occurred or two thousand five hundred ($2,500) dollars. Such sum shall be complete and exclusive. IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY DAMAGE, LOSS, INJURY, OR ANY OTHER CLAIM ARISING FROM ANY SERVICING, ALTERATIONS, MODIFICATIONS, CHANGES, OR MOVEMENTS OF THE COVERED SYSTEM(S), AS HEREINAFTER DEFINED, OR ANY OF ITS COMPONENT PARTS BY CUSTOMER OR ANY THIRD PARTY. COMPANY SHALL NOT BE LIABLE FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO DAMAGES ARISING FROM THE USE, LOSS OF THE USE, PERFORMANCE, OR FAILURE OF THE COVERED SYSTEM(S) TO PERFORM. The limitations of liability set forth in this Agreement shall inure to the benefit of all parents, subsidiaries and affiliates of Company, whether direct or indirect, Company's employees, agents, officers and directors.**

C. Indemnity, Insurance. Customer agrees to indemnify, hold harmless and defend Company against any and all losses, damages, costs, including expert fees and costs, and expenses including reasonable defense costs, arising from any and all third-party claims for personal injury, death, property damage or economic loss, arising in any way from any act or omission of Customer or Company relating in any way to the Monitoring Services provided under this Agreement, whether such claims are based upon contract, warranty, tort (including but not limited to active or passive negligence), strict liability or otherwise. Company reserves the right to select counsel to represent it in any such action. Customer shall name Company, its officers, employees, agents, subcontractors, suppliers, and representatives as additional insureds on Customer's general liability and auto liability policies.

D. No modification. Modification to Sections 17 B or C may only be made by a written amendment to this Agreement signed by both parties specifically referencing Section 17 B and/or C, and no such amendment shall be effective unless approved by the manager of Company's Central Monitoring Center.

E. Customer's Duties. In addition to Customer's duty to indemnify, defend, and hold Company harmless pursuant to this Section 17:

i. Customer agrees to furnish the names and telephone numbers of all persons authorized to enter or remain on Customer's premises and/or that should be notified in the event of an alarm (the Contact/Call List) and Local Emergency Dispatch Numbers and provide all changes, revision and modifications to the above to Company in writing in a timely manner. Customer must ensure that all such persons are authorized and able to respond to such notification.

ii. Customer shall carefully and properly test and set the system immediately prior to the securing of the premises and carefully test the system in a manner prescribed by Company during the term of this Agreement. Customer agrees that it is responsible for any losses or damages due to malfunction, miscommunication or failure of Customer's system to accurately handle, process or communicate date data. If any defect in operation of the System develops, or in the event of a power failure, interruption of telephone service, or other interruption at Customer's premises of signal or data transmission through any media, Customer shall notify Company immediately. If space/interior protection (i.e. ultrasonic, microwave, infrared, etc.) is part of the System, Customer shall walk test the system in the manner recommended by Company.

iii. When any device or protection is used, including, but not limited to, space protection, which may be affected by turbulence of air, occupied airspace change or other disturbance, forced air heaters, air conditioners, horns, bells, animals and any other sources of air turbulence or movement which may interfere with the effectiveness of the System during closed periods while the alarm system is on, Customer shall notify Company

iv. Customer shall promptly reset the System after any activation.

v. Customer shall notify Company regarding any remodeling or other changes to the protected premises that may affect operation of the system.

vi. Customer shall cooperate with Company in the installation, operation and/or maintenance of the system and agrees to follow all instructions and procedures which may be prescribed for the operation of the system, the rendering of services and the provision of security for the premises.

vii. Customer shall pay all charges made by any telephone or communications provider company or other utility for installation, leasing, and service charges of telephone lines connecting Customer's premises to Company. Customer acknowledges that alarm signals from Customer's premises to Company are transmitted over Customer's telephone or other transmission service and that in the event the telephone or other transmission service is out of order, disconnected, placed on "vacation," or otherwise interrupted, signals from Customer's alarm system will not be received by Company, during any such interruption in telephone or other transmission service and the interruption will not be known to Company. Customer agrees that in the event the equipment or system continuously transmits signals reasonably determined by Company to be false and/or excessive in number, Customer shall be subject to the additional costs and fees incurred by Company in the receiving and/or responding to the excessive signals and/or Company may at its sole discretion terminate this Agreement with respect to Monitoring services upon notice to Customer.

F. Communication Facilities.

i. Authorization. Customer authorizes Company, on Customer's behalf, to request services, orders or equipment from a telephone company, wireless carrier or other company providing communication facilities, signal transmission services or facilities under this Agreement

(referred to as "Communication Company"). Should any third-party service, equipment or facility be required to perform the Monitoring Services set forth in this Agreement, and should the same be terminated or become otherwise unavailable or impracticable to provide, Company may terminate Monitoring Services upon notice to Customer.

ii. Digital Communicator. Customer understands that a digital communicator (DACT), if installed under this Agreement, uses traditional telephone lines for sending signals which eliminate the need for a dedicated telephone line and the costs associated with such dedicated lines.

iii. Derived Local Channel. The Communication Company's services provided to Customer in connection with the Services may include Derived Local Channel service. Such service may be provided under the Communication Company's service marks or service names. These services include providing lines, signal paths, scanning and transmission. Customer agrees that the Communication Company's liability is limited to the same extent Company's liability is limited pursuant to this Section 17.

iv. CUSTOMER UNDERSTANDS THAT COMPANY WILL NOT RECEIVE ALARM SIGNALS WHEN THE TELEPHONE LINE OR OTHER TRANSMISSION MODE IS NOT OPERATING OR HAS BEEN CUT, INTERFERED WITH OR IS OTHERWISE DAMAGED OR IF THE ALARM SYSTEM IS UNABLE TO ACQUIRE, TRANSMIT OR MAINTAIN AN ALARM SIGNAL OVER CUSTOMER'S TELEPHONE SERVICE FOR ANY REASON INCLUDING NETWORK OUTAGE OR OTHER NETWORK PROBLEMS SUCH AS CONGESTION OR DOWNTIME, ROUTING PROBLEMS, OR INSTABILITY OF SIGNAL QUALITY. CUSTOMER UNDERSTANDS THAT OTHER POTENTIAL CAUSES OF SUCH A FAILURE OVER CERTAIN TELEPHONE SERVICES (INCLUDING BUT NOT LIMITED TO SOME TYPES OF DSL, ADSL, VOIP, DIGITAL PHONE, INTERNET PROTOCOL BASED PHONE OR OTHER INTERNET INTERFACE-TYPE SERVICE OR RADIO SERVICE, INCLUDING CELLULAR OR PRIVATE RADIO, ETC. ("NON-TRADITIONAL TELEPHONE SERVICE")) INCLUDE BUT ARE NOT LIMITED TO: (1) LOSS OF NORMAL ELECTRIC POWER TO CUSTOMER'S PREMISES (THE BATTERY BACK-UP FOR THE ALARM PANEL DOES NOT POWER TELEPHONE SERVICE); AND (2) ELECTRONICS FAILURES SUCH AS A MODEM MALFUNCTION. CUSTOMER UNDERSTANDS THAT COMPANY WILL ONLY REVIEW THE INITIAL COMPATIBILITY OF CUSTOMER'S ALARM SYSTEM WITH NON-TRADITIONAL TELEPHONE SERVICE AT THE TIME OF INITIAL CONNECTION TO COMPANY'S MONITORING CENTER AND THAT CHANGES IN CUSTOMER'S TELEPHONE SERVICE'S DATA FORMAT AFTER THE INITIAL REVIEW OF COMPATIBILITY COULD MAKE CUSTOMER'S TELEPHONE SERVICE UNABLE TO TRANSMIT ALARM SIGNALS TO COMPANY'S MONITORING CENTERS. IF COMPANY DETERMINES IN ITS SOLE DISCRETION THAT IT IS COMPATIBLE, COMPANY WILL PERMIT CUSTOMER TO USE NON-TRADITIONAL TELEPHONE SERVICE AS THE SOLE METHOD OF TRANSMITTING ALARM SIGNALS, ALTHOUGH CUSTOMER UNDERSTANDS THAT COMPANY RECOMMENDS THE USE OF AN ADDITIONAL BACK-UP METHOD OF COMMUNICATION TO CONNECT CUSTOMER'S ALARM SYSTEM TO THE MONITORING CENTER REGARDLESS OF THE TYPE OF TELEPHONE SERVICE USED. CUSTOMER ALSO UNDERSTANDS THAT IF COMPANY DETERMINES IN ITS SOLE DISCRETION THAT CUSTOMER'S NON-TRADITIONAL TELEPHONE SERVICE IS OR LATER BECOMES NON-COMPATIBLE, OR IF CUSTOMER CHANGES TO ANOTHER NON-TRADITIONAL TELEPHONE SERVICE THAT IS NOT COMPATIBLE, THEN COMPANY REQUIRES THAT CUSTOMER USE AN ALTERNATE METHOD OF COMMUNICATION ACCEPTABLE TO COMPANY AS THE PRIMARY METHOD TO CONNECT CUSTOMER'S ALARM SYSTEM TO THE MONITORING CENTER. CUSTOMER UNDERSTANDS THAT TRANSMISSION OF FIRE ALARM SIGNALS BY MEANS OTHER THAN A TRADITIONAL TELEPHONE LINE MAY NOT BE IN COMPLIANCE WITH FIRE ALARM STANDARDS OR SOME LOCAL FIRE CODES, AND THAT IT IS CUSTOMER'S OBLIGATION TO COMPLY WITH SUCH STANDARDS AND CODES. CUSTOMER ALSO UNDERSTANDS THAT IF THE ALARM SYSTEM HAS A LINE CUT FEATURE, IT MAY NOT BE ABLE TO DETECT IF A NON-TRADITIONAL TELEPHONE SERVICE LINE IS CUT OR INTERRUPTED, AND THAT COMPANY MAY NOT BE ABLE TO PROVIDE CERTAIN AUXILIARY MONITORING SERVICES THROUGH A NON-TRADITIONAL TELEPHONE LINE OR SERVICE. CUSTOMER FURTHER UNDERSTANDS THAT THE ALARM PANEL MAY BE UNABLE TO SEIZE THE PHONE LINE TO TRANSMIT AN ALARM SIGNAL IF ANOTHER CONNECTION IS OFF THE HOOK DUE TO IMPROPER CONNECTION OR OTHERWISE.

G. Verification; Runner Service. Some jurisdictions may require alarm verification by telephone or on-site verification ("Runner Service") before dispatching emergency services. In the event that a requirement of alarm verification becomes effective after the date of this Agreement, such services may be available at an additional charge. Company shall not be held liable for any delay or failure of dispatch of emergency services arising from such verification. Where Runner Service is indicated, such services may be provided by a third party. COMPANY WILL NOT ARREST OR DETAIN ANY PERSON.

H. Personal Emergency Response Service. If Customer has selected Personal Emergency Response Services, Customer agrees that the very nature of Personal Emergency Response Services, irrespective of any delays, involves uncertainty, risk and possible serious injury, disability or death, for which Company should not under any circumstances be held responsible or liable; that the equipment furnished for Personal Emergency Response Services is not foolproof and may experience signal transmission failures or delays for any number of reasons, whether or not our fault or under Company's control; that the actual time required for medical emergency providers to arrive at the premises and/or to transport any person requiring medical attention is unpredictable and that many contributing factors, including but not limited to such things as telephone network operation, distance, weather, road and traffic conditions, alarm equipment function and human factors, both with responding authorities and with Company, may affect response

18. Limited Warranty. COMPANY WARRANTS THAT ITS WORKMANSHIP AND MATERIAL, EXCLUDING MONITORING SERVICES, FURNISHED UNDER THIS AGREEMENT WILL BE FREE FROM DEFECTS FOR A PERIOD OF NINETY (90) DAYS FROM THE DATE OF FURNISHING. Where Company provides product or equipment of others, Company will warrant the product or equipment only to the extent warranted by such third party. EXCEPT AS EXPRESSLY SET FORTH HEREIN, COMPANY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES PERFORMED OR THE PRODUCTS, SYSTEMS OR EQUIPMENT, IF ANY, SUPPORTED HEREUNDER.

Company makes no and specifically disclaims all representations or warranties that the services, products, software or third party product or software will be secure from cyber threats, hacking or other similar malicious activity.

19. Software and Digital Services. Use, implementation, and deployment of the software and hosted software products ("Software") offered under these terms shall be subject to, and governed by, Company's standard terms for such Software and Software related professional services in effect from time to time at https://www.johnsoncontrols.com/techterms (collectively, the "Software Terms"). Applicable Software Terms are incorporated herein by this reference. Other than the right to use the Software as set forth in the Software Terms, Company and its licensors reserve all right, title, and interest (including all intellectual property rights) in and to the Software and improvements to the Software. The Software that is licensed hereunder is licensed subject to the Software Terms and not sold. If there is a conflict between the other terms herein and the Software Terms, the Software Terms shall take precedence and govern with respect to rights and responsibilities relating to the Software, its implementation and deployment and any improvements thereto.

20. Taxes, Fees, Fines, Licenses, and Permits. Customer agrees to pay all sales tax, use tax, property tax, utility tax and other taxes required in connection with the equipment and Services listed, including telephone company line charges, if any. Customer shall comply with all laws and regulations relating to the equipment and its use and shall promptly pay when due all sales, use, property, excise and other taxes and all permit, license and registration fees now or hereafter imposed by any government body or agency upon the equipment or its use. Company may, without notice, obtain any required permit, license or registration for Customer at Customer's expense and charge a fee for this service. If Customer fails to maintain any required licenses or permits, Company shall not be responsible for performing the services and may terminate the services without notice to Customer.

21. Outside Charges. Customer understands and accepts that Company specifically disclaims any responsibility for charges associated with the notification or dispatching of anyone, including but not limited to fire department, police department, paramedics, doctors, or any other emergency personnel, and if there are any charges incurred as a result of said notification or dispatch, said charges shall be the responsibility of Customer.

22. Insurance. Customer shall name Company, its officers, employees, agents, subcontractors, suppliers, and representatives as additional insureds on Customer's general liability and auto liability policies.

23. Waiver of Subrogation. Customer does hereby for itself and all other parties claiming under it release and discharge Company from and against all hazards covered by Customer's insurance, it being expressly agreed and understood that no insurance company or insurer will have any right of subrogation against Company.

24. Force Majeure, **Exclusions**. Company shall not be liable, nor in breach or default of its obligations under this Agreement, for delays, interruption, failure to render services, or any other failure by Company to perform an obligation under this Agreement, where such delay, interruption or failure is caused, in whole or in part, directly or indirectly, by a Force Majeure Event. A "Force Majeure Event" is a condition or event that is beyond the reasonable control of Company, whether foreseeable or unforeseeable, including, without limitation, acts of God, severe weather (including but not limited to hurricanes, tornados, severe snowstorms or severe rainstorms), wildfires, floods, earthquakes, seismic disturbances, or other natural disasters, acts or omissions of any governmental authority (including change of any applicable law or regulation), epidemics, pandemics, disease, viruses, quarantines, or other public health risks and/or responses thereto, condemnation, strikes, lock-outs, labor disputes, an increase of 5% or more in tariffs or other excise taxes for materials to be used on the project, fires, explosions or other casualties, thefts, vandalism, civil disturbances, insurrection, mob violence, riots, war or other armed conflict (or the serious threat of same), acts of terrorism, electrical power outages, interruptions or degradations in telecommunications, computer, network, or electronic communications systems, data breach, cyber-attacks, ransomware, unavailability or shortage of parts, materials, supplies, or transportation, or any other cause or casualty beyond the reasonable control of Company. If Company's performance of the work is delayed, impacted, or prevented by a Force Majeure Event or its continued effects, Company shall be excused from performance under the Agreement. Without limiting the generality of the foregoing, if Company is delayed in achieving one or more of the scheduled milestones set forth in the Agreement due to a Force Majeure Event, Company will be entitled to extend the relevant completion date by the amount of time that Company was delayed as a result of the Force Majeure Event, plus such additional time as may be reasonably necessary to overcome the effect of the delay. To the extent that the Force Majeure Event directly or indirectly increases Company's cost to perform the services, Customer is obligated to reimburse Company for such increased costs, including, without limitation, costs incurred by Company for additional labor, inventory storage, expedited shipping fees, trailer and equipment rental fees, subcontractor fees or other costs and expenses incurred by Company in connection with the Force Majeure Event.

25. Delays. Company shall have no responsibility or liability to Customer or any other person for delays in the installation or repair of the System or the performance of our Services regardless of the reason, or for any resulting consequences.

26. Termination. Company may terminate this Agreement immediately at its sole discretion upon the occurrence of any Event of Default as hereinafter defined. Company may also terminate this Agreement at its sole discretion upon notice to Customer if Company's performance of its obligations under this Agreement becomes impracticable due to obsolescence of equipment at Customer's premises or unavailability of parts.

27. No Option to Solicit. Customer shall not, directly or indirectly, on its own behalf or on behalf of any other person, business, corporation or entity, solicit or employ any Company employee, or induce any Company employee to leave his or her employment with Company, for a period of two years after the termination of this Agreement.

28. Default. An Event of Default shall include (a) any full or partial termination of this Agreement by Customer before the expiration of the then-current Term, (b) failure of Customer to pay any amount when due and payable, (c) abuse of the System or the Equipment, (d) failure by Customer to observe, keep or perform any term of this Agreement; (e) dissolution, termination, discontinuance, insolvency or business failure of Customer. Upon the occurrence of an Event of Default, Company may pursue one or more of the following remedies, (i) discontinue furnishing Services, (ii) by written notice to Customer declare the balance of unpaid amounts due and to become due under this Agreement to be immediately due and payable, (iii) receive immediate possession of any equipment for which Customer has not paid, (iv) proceed at law or equity to enforce performance by Customer or recover damages for breach of this

Agreement, and (v) recover all costs and expenses, including without limitation reasonable attorneys' fees, in connection with enforcing or attempting to enforce this Agreement.

29. One-Year Limitation on Actions; Choice of Law. No claim or cause of action, whether known or unknown, shall be brought against Company more than one year after the claim first arose. Except as provided for herein, Company's claims must also be brought within one year. Claims for unpaid contract amounts are not subject to the one-year limitation. The laws of Massachusetts shall govern the validity, enforceability, and interpretation of this Agreement.

30. Assignment. Customer may not assign this Agreement without Company's prior written consent. Company may assign this Agreement without obtaining Customer's consent.

31. Entire Agreement. The parties intend this Agreement, together with any attachments or Riders (collectively the "Agreement) to be the final, complete and exclusive expression of their Agreement and the terms and conditions thereof. This Agreement supersedes all prior representations, understandings or agreements between the parties, written or oral, and shall constitute the sole terms and conditions relating to the Services. No waiver, change, or modification of any terms or conditions of this Agreement shall be binding on Company unless made in writing and signed by an Authorized Representative of Company.

32. Headings. The headings in this Agreement are for convenience only.

33. Severability. If any provision of this Agreement is held by any court or other competent authority to be void or unenforceable in whole or in part, this Agreement will continue to be valid as to the other provisions and the remainder of the affected provision.

34. Electronic Media. Customer agrees that Company may scan, image or otherwise convert this Agreement into an electronic format of any nature. Customer agrees that a copy of this Agreement produced from such electronic format is legally equivalent to the original for any and all purposes, including litigation. Customer agrees that Company's receipt by fax of the Agreement signed by Customer legally binds Customer and such fax copy is legally equivalent to the original for any and all purposes, including litigation.

35. Legal Fees. Company shall be entitled to recover from Customer all reasonable legal fees incurred in connection with Company enforcing the terms and conditions of this Agreement.

36. License Information (Security System Customers): AL Alabama Electronic Security Board of Licensure 7956 Vaughn Road, PMB 392, Montgomery, Alabama 36116 (334) 264-9388: AR Regulated by: Arkansas Board of Private Investigators and Private Security Agencies, #1 State Police Plaza Drive, Little Rock 72209 (501)618-8600: CA Alarm company operators are licensed and regulated by the Bureau of Security and Investigative Services, Department of Consumer Affairs, Sacramento, CA, 95814. Upon completion of the installation of the alarm system, the alarm company shall thoroughly instruct the purchaser in the proper use of the alarm system. Failure by the licensee, without legal excuse, to substantially commence work within 20 days from the approximate date specified in the agreement when the work will begin is a violation of the Alarm Company Act: NY Licensed by the N.Y.S. Department of the State: TX Texas Commission on Private Security, 5805 N. Lamar Blvd., Austin, TX 78752-4422, 512-424-7710. License numbers available at www.johnsoncontrols.com or contact your local Johnson Controls office.

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-394 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Resolution to Convey Law Enforcement Canine “Kobe”

INFORMATION CONTACT:

Dorothy Thomas, Operations Manager, Union County Sheriff’s Office, 704-283-3578

ACTION REQUESTED:

Adopt a Resolution Authorizing Conveyance of a Certain Canine Retired from the Service of the Union County Sheriff’s Office to a Certain Retired Union County Sheriff’s Deputy in accordance with N.C.G.S. 160A-267.

BACKGROUND:

Union County Sheriff’s Office has retired “Kobe”, a 7-year-old Black Labrador Retriever single-purpose canine. “Kobe” served 6-7 years as a single purpose, explosive detection canine. He served as a member of UCSO Operations and has served not only Union County, but the surrounding region with his partner/handler Sgt. Shilo Garner. “Kobe” is highly trained and not an average pet. The Sheriff’s Office is compelled to ensure he is responsibly placed in a home that understands his training, therefore, the best person to place “Kobe” with would be his handler Sgt. Shilo Garner.

FINANCIAL IMPACT:

Revenue of $1.00

STATE OF NORTH CAROLINA

AGREEMENT

COUNTY OF UNION

THIS AGREEMENT is made and entered into as of _____, by and between UNION COUNTY, a political subdivision of the State of North Carolina, whose address is 500 N. Main St., Monroe, NC 28112 ("Union"), and SHILO GARNER, whose address is _____ ("Officer").

W I T N E S S E T H

WHEREAS, the Union County Sheriff's Office currently owns a dog named Kobe used for sniffing for the presence of explosives (the "dog"); and

WHEREAS, the Sheriff's Office now plans to retire the dog from service, and Union therefore considers the dog to be surplus property; and

WHEREAS, the Officer is employed with the Union County Sheriff's Office and Sergeant Shilo Garner has worked as the dog's handler, and now wishes to purchase the dog from Union County.

WHEREAS, Union is authorized to sell the dog by private sale pursuant to North Carolina General Statues §§ 160A-266 and 160A-267.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties hereto do each contract and agree with the other as follows:

1. Union agrees to sell the dog to Officer for a cost of One Dollar ($1.00). Officer agrees that upon sale of the dog to Officer, Union shall have no further responsibility related to the dog's care, activities, or actions.

2. Officer agrees to protect, defend, indemnify and hold harmless Union County, its respective agents, officers and employees free and harmless from and against all losses, professional fees, damages, costs, and other expenses or liabilities of every kind and character arising out of relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of acts of the dog following its sale to Officer that are due, in whole or in part, to the negligence of the Officer.

3. Officer waives, releases and discharges Union County, its respective agents, officers and employees of and from any and all claims, damages, demands, costs, liability and causes of action whatsoever that may arise as a result of any acts of the dog following its sale to Officer, including but not limited to, any claims, causes of action, liability, damages, demands and costs related to loss of or injury to any of the Officer's persons or property. This waiver and release shall inure to the benefit of Union County, and shall bind the Officer along with his heirs, legal representatives, assigns and successors in interest.

IN WITNESS WHEREOF, the parties hereto, acting under authority of their respective governing bodies, have caused this Agreement to be duly executed, this the day and year first above written.

ATTEST:

BY: _____
Lynn West, Clerk to the Board

UNION COUNTY

BY: _____
William M. Watson, County Manager

WITNESS:

__Shilo Garner_____

BY: _____

BY: _____

Approved As to Legal Form _____

OFFICE OF THE COMMISSIONERS AND MANAGER

500 N. Main St., Room 921 • Monroe, NC 28112 • Phone (704)283-3810 • Fax (704)282-0121

A RESOLUTION AUTHORIZING CONVEYANCE OF A CERTAIN CANINE RETIRED FROM THE SERVICE OF THE UNION COUNTY SHERIFF'S OFFICE TO A CERTAIN RETIRED UNION COUNTY SHERIFF'S DEPUTY

THAT WHEREAS, Union County's Sheriff's Office is the owner of a canine, known as "Kobe," used for sniffing for the presence of explosives (the "dog"); and

WHEREAS, the Sheriff's Office now plans to retire the dog from service; and

WHEREAS, Union County desires to convey the dog by private sale to retired Union County Sheriff's Deputy Shilo Garner pursuant to North Carolina General Statutes §§ 160A-266 and 160A-267;

NOW, THEREFORE, BE IT RESOLVED by the Union County Board of Commissioners as follows:

1. The County Manager is authorized to dispose of the dog to Shilo Garner in accordance with G.S. § 160A-267, and to execute such documents of conveyance as may be necessary to transfer ownership of the dog. Consideration for disposition of the dog shall be monetary and shall include the promise by Shilo Garner that he shall indemnify and waive, release, and discharge Union County from claims or damages in connection with or arising out of the acts of the dog following its sale to Shilo Garner.

2. A notice summarizing the contents of this Resolution shall be published once after its adoption, and no sale shall be consummated hereunder until ten days after publication.

This the 15th day of November, 2021.

ATTEST:

_____ _____

Lynn G. West, Clerk to the Board Richard B. Helms, Sr., Chairman

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-414 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Warehouse Lease

INFORMATION CONTACT:

Patrick Niland, County Management, Assistant County Manager, 704-283-3630

ACTION REQUESTED:

Authorize County Manager to approve Contract for Warehouse Lease

BACKGROUND:

On date of signature, Union County will enter into a lease, with Liquid Management LLC. This lease will run for a term of five (5) years. This amendment requires Board of Commissioners' authorization since the total cost for the agreement will exceed the County Manager's approval authority.

FINANCIAL IMPACT:

Liquid Management LLC, lease: Year one (1):$2,400 per month for a total of $28,800.00 with a 2% escalation for subsequent years.

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COMMERCIAL LEASE AGREEMENT
(Multi-Tenant Facility)

(Note: This form is not intended to be used as a Sublease and SHOULD NOT be used in Sublease circumstances)

THIS COMMERCIAL LEASE AGREEMENT, including any and all addenda attached hereto ("Lease"), is by and between **Liquid Management, LLC**,
a(n) **Limited Liability Corporation** ("Landlord"),
(individual *or* State of formation and type of entity)
whose address is **231 Post Office Drive, Suite B8 , Indian Trail , NC 28079**, and
Union County,
a(n) ~~**Limited Liability Company**~~ * ("Tenant"). * political subdivision of the State of North Carolina
(individual *or* State of formation and type of entity)
whose address is 500 N. Main Street, Suite 918, Monroe, NC 28112 Int _____

☐ If this box is checked, the obligations of Tenant under this Lease are secured by the guaranty of _____ (name(s) of guarantor(s)) attached hereto and incorporated herein by reference.

(Note: Any guaranty should be prepared by an attorney at law.)

For and in consideration of the mutual promises set forth herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

PREMISES/PROPERTY

(Note: In this paragraph, Premises is the actual space being leased and Property is the broader site/location of the Premises.)

1. (a) Landlord leases unto Tenant, and Tenant hereby leases and takes upon the terms and conditions which hereinafter appear, those certain premises depicted on **Exhibit A** attached hereto and incorporated herein by reference (hereinafter called the "Premises"), which is a part of a building or buildings located at the Property (defined below).

The address of the Premises is:

(Address): [redacted]

(b) The Premises is located at the following described property ("Property"): Int _____

(Address): _____

Plat Reference: Lot(s) _____, Block or Section _____, as shown on Plat Book or Slide _____ at Page(s) _____, **Union** County, consisting of _____ acres.

☐ If this box is checked, Property shall mean that property described on **Exhibit B** attached hereto and incorporated herewith by reference.

(For information purposes: (i) the tax parcel number of the Property is: **07069046**; and, (ii) some or all of the Property is described in Deed Book **7385**, Page No. **0091**, **Union** County.)

All facilities furnished at the Property and designated for the general use, in common, of occupants of the Property and their invitees, agents or employees, including Tenant hereunder, including but not limited to parking areas, streets, driveways, sidewalks, canopies, roadways, loading platforms, shelters, ramps, landscaped areas, exterior water faucets, irrigation systems, exterior lighting fixtures, signs and other facilities whether of a similar or dissimilar nature ("Common Areas") shall at all times be subject to the exclusive

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control and management of Landlord, and Landlord shall have the right from time to time to change the area, level, location and arrangement of the Common Areas and to restrict parking by tenants and their employees to employee parking areas, to make Rules and Regulations (as herein defined) and do such things from time to time as in Landlord's reasonable discretion may be necessary regarding the Common Areas.

Tenant shall also have a non-exclusive right, in common with other tenants at the Property, to the use of the Common Areas at the Property, subject to the terms hereof.

☐ **Occupancy Limitation**: If this box is checked, notwithstanding any greater occupancy of the Premises which may be permitted by any law, statute, ordinance, regulation, rule (including rules enacted pursuant to any private use restrictions), as the same may be amended from time to time, Tenant shall not allow occupancy of the Premises to exceed _____ persons per _____ square feet in the Premises at any one time.

TERM

2. The term of this Lease shall commence on **July 1**, **2021** ("Lease Commencement Date"), and shall end at 11:59 p.m. (based upon the time at the locale of the Premises) on **June 30, 2026**, _____, unless sooner terminated as herein provided. The first Lease Year Anniversary shall be the date twelve (12) calendar months after the first day of the first full month immediately following the Lease Commencement Date and successive Lease Year Anniversaries shall be the date twelve (12) calendar months from the previous Lease Year Anniversary.

☒ If this box is checked, Tenant shall have the option of renewing this Lease, upon written notice given to Landlord at least **60** days prior to the end of the then expiring term of this Lease, for **1** additional term(s) of **5** years each.

☐ If this box is checked, Tenant shall have the option of renewing this Lease, upon written notice given to Landlord at least _____ days prior to the end of the then expiring term of this Lease, for additional term(s) as specified on **Exhibit C.**

☐ **Option to Lease**- If this box is checked, Tenant, upon the payment of the sum of $ _____ (which sum is not rental or security deposit hereunder, but is consideration for this Option to Lease and is non-refundable under any circumstances) shall have a period of _____ days prior to the Lease Commencement Date ("Option Period") in which to inspect the Premises and make inquiry regarding such sign regulations, zoning regulations, utility availability, private restrictions or permits or other regulatory requirements as Tenant may deem appropriate to satisfy itself as to the use of the Premises for Tenant's intended purposes. Tenant shall conduct all such on-site inspections, examinations, inquiries and other review of the Premises in a good and workmanlike manner, shall repair any damage to the Premises caused by Tenant's entry and on-site inspections and shall conduct same in a manner that does not unreasonably interfere with Landlord's or any tenant's use and enjoyment of the Property. In that respect, Tenant shall make reasonable efforts to undertake on-site inspections outside of the hours any tenant's business is open to the public and shall give prior notice to the tenant at the Premises of any entry onto the Premises for the purpose of conducting inspections. Upon Landlord's request, Tenant shall provide to Landlord evidence of general liability insurance. Tenant shall also have a right to review and inspect all contracts or other agreements affecting or related directly to the Premises and shall be entitled to review such books and records of Landlord that relate directly to the operation and maintenance of the Premises, provided, however, that Tenant shall not disclose any information regarding the Property (or any tenant therein) unless required by law and the same shall be regarded as confidential, to any person, except to its attorneys, accountants, lenders and other professional advisors, in which case Tenant shall obtain their agreement to maintain such confidentiality. Tenant assumes all responsibility for the acts of itself, its agents or representatives in exercising its rights under this Option to Lease and agrees to indemnify and hold Seller harmless from any damages resulting therefrom. This indemnification obligation of Tenant shall survive the termination of this Option to Lease or this Lease. Tenant shall, at Tenant's expense, promptly repair any damage to the Premises or Property caused by Tenant's entry and on-site inspections. **IF TENANT CHOOSES NOT TO LEASE THE PREMISES, FOR ANY REASON OR NO REASON, AND PROVIDES WRITTEN NOTICE TO LANDLORD THEREOF PRIOR TO THE EXPIRATION OF THE OPTION PERIOD, THEN THIS LEASE SHALL TERMINATE AND NEITHER PARTY SHALL HAVE ANY FURTHER OBLIGATIONS HEREUNDER AND LANDLORD SHALL RETURN TO TENANT ANY RENTAL OR SECURITY DEPOSIT PAID TO LANDLORD HEREUNDER.** Tenant shall be deemed to have exercised its Option to Lease and to be bound under the terms of this Lease if (i) Tenant shall occupy the Premises prior to the expiration of the Option Period, whereupon the date of occupancy shall be deemed the Lease Commencement Date, or (ii) Tenant shall not provide written notice to Landlord of its termination of this Lease prior to the expiration of the Option Period.

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RENTAL

3. Beginning on July 1, 2021 ("Rent Commencement Date"), Tenant agrees to pay Landlord (or its Agent as directed by Landlord), without notice, demand, deduction or set off, an annual rental of $ 28,800.00, payable in equal monthly installments of $ 2,400.00, in advance on the first day of each calendar month during the term hereof. Upon execution of this Lease, Tenant shall pay to Landlord the first monthly installment of rent due hereunder. Rental for any period during the term hereof which is less than one month shall be the pro-rated portion of the monthly installment of rental due, based upon a 30 day month.

[X] If this box is checked, the annual rental payable hereunder (and accordingly the monthly installments) shall be adjusted every 1 Lease Year Anniversary by 2.000 % over the amount then payable hereunder. In the event renewal of this Lease is provided for in paragraph 2 hereof and effectively exercised by Tenant, the rental adjustments provided herein shall apply to the term of the Lease so renewed, or

[ ] If this box is checked, the annual rental payable hereunder (and accordingly the monthly installments) shall be adjusted every _____ Lease Year Anniversary by the greater of: (i) _____ percent (_____ %) over the amount then payable hereunder, or, (ii) the percentage increase (but not any decrease) in the numerical index of the "Consumer Price Index for All Urban Consumers" (1982-84 = 100) published by the Bureau of Labor Statistics of the United States Department of Labor ("CPI") for the immediately preceding twelve (12) month period over the amount then payable hereunder.

[ ] If this box is checked, the annual rental payable hereunder (and accordingly the monthly installments) shall be adjusted every _____ Lease Year Anniversary by $ _____ over the amount then payable hereunder. In the event renewal of this Lease is provided for in paragraph 2 hereof and effectively exercised by Tenant, the rental adjustments provided herein shall apply to the term of the Lease so renewed.

[ ] If this box is checked, the annual rental payable hereunder (and accordingly the monthly installments) shall be adjusted as provided on **Exhibit C.**

[X] If this box is checked, Tenant shall pay all rental to Landlord's Agent at the following address:

Liquid Management, LLC
231 Post Office Drive, Suite B8
Indian Trail, NC 28079

LATE CHARGES

4. If Landlord fails to receive full rental payment within 5 days after it becomes due, Tenant shall pay Landlord, as additional rental, a late charge equal to Five Point Zero percent 5.000 (%) of the overdue amount or $ 100.00 whichever is greater, plus any actual bank fees incurred for dishonored payments. The parties agree that such a late charge represents a fair and reasonable estimate of the cost Landlord will incur by reason of such late payment.

SECURITY DEPOSIT

5. Upon the execution of this Lease, Tenant shall deposit with Landlord the sum of $ 2400.00 as a security deposit which shall be held by Landlord as security for the full and faithful performance by Tenant of each and every term, covenant and condition of this Lease. The security deposit does not represent payment of and Tenant shall not presume application of same as payment of the last monthly installment of rental due under this Lease. Landlord shall have no obligation to segregate or otherwise account for the security deposit except as provided in this paragraph 5. If any of the rental or other charges or sums payable by Tenant shall be over-due and unpaid or should payments be made by Landlord on behalf of Tenant, or should Tenant fail to perform any of the terms of this Lease, then Landlord may, at its option, appropriate and apply the security deposit, or so much thereof as may be necessary, to compensate toward the payment of the rents, charges or other sums due from Tenant, or towards any loss, damage or expense sustained by Landlord resulting from such default on the part of the Tenant; and in such event Tenant upon demand shall restore the security deposit to the amount set forth above in this paragraph 5. In the event Tenant furnishes Landlord with proof that all utility bills and other bills of Tenant related to the Premises have been paid through the date of Lease termination, and performs all of Tenant's other obligations under this Lease, the security deposit shall be returned to Tenant within sixty (60) days after the date of the expiration or sooner termination of the term of this Lease and the surrender of the Premises by Tenant in compliance with the provisions of this Lease.

[ ] If this box is checked, Agent shall hold the security deposit in trust and shall be entitled to the interest, if any, thereon.

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UTILITY BILLS/SERVICE CONTRACTS

6. Landlord and Tenant agree that utility bills and service contracts ("Service Obligations") for the Premises shall be paid by the party indicated below as to each Service Obligation. Where a Service Obligation is allocated to Tenant, Tenant shall not be responsible for such service as to any Common Area and such responsibility shall be limited to the Premises (Tenant space). In each instance, the party undertaking responsibility for payment of a Service Obligation covenants that they will pay the applicable bills prior to delinquency. The responsibility to pay for a Service Obligation shall include all metering, hook-up fees or other miscellaneous charges associated with establishing, installing and maintaining such utility or contract in said party's name. Within thirty (30) days of the Lease Commencement Date, Tenant shall provide Landlord with a copy of any requested Tenant Service Obligation information.

Service Obligation	Landlord	Tenant	Not Applicable
Sewer/Septic	X		
Water	X		
Electric	X		
Gas	X		
Telephone	X		
HVAC (maintenance/service contract)	X		
Elevator (including phone line)			X
Security System	X		
Fiber Optic	X		
Janitor/Cleaning		X	
Trash/Dumpster	X		
Landscaping/Maintenance	X		
Sprinkler System (including phone line)			X
Pest Control	X		

Landlord shall not be liable for injury to Tenant's business or loss of income therefrom or for damage that may be sustained by the person, merchandise or personal property of Tenant, its employees, agents, invitees or contractors or any other person in or about the Premises, caused by or resulting from fire, steam, electricity, gas, water or rain, which may leak or flow from or into any part of the Premises, or from the breakage, leakage, obstruction or other defects of any utility installations, air conditioning system or other components of the Premises or the Property, except to the extent that such damage or loss is caused by Landlord's ~~gross~~ negligence or willful misconduct. Landlord represents and warrants that the heating, ventilation and air conditioning system(s) and utility installations existing as of the Lease Commencement Date shall be in good order and repair. Subject to the provisions of this paragraph 6, Landlord shall not be liable in damages or otherwise for any discontinuance, failure or interruption of service to the Premises of utilities or the heating, ventilation and air conditioning system(s) and Tenant shall have no right to terminate this Lease or withhold rental because of the same. * and any other provision of this Agreement, Int _____

RULES AND REGULATIONS

7. ☐ If this box is checked, the rules and regulations attached hereto ("Rules and Regulations") are made a part of this Lease. Tenant agrees to comply with all Rules and Regulations of Landlord in connection with the Premises and the Property which are in effect at the time of the execution of the Lease or which may be from time to time promulgated by Landlord in its reasonable discretion, provided notice of such new Rules and Regulations is given to Tenant in writing and the same are not in conflict with the terms and conditions of this Lease. Landlord shall use commercially reasonable efforts to enforce such Rules and Regulations at the Property, provided, however, in no event shall Landlord be obligated to make any material expenditures in connection with the enforcement of such Rules and Regulations. Landlord shall not be liable for any damages arising from any use, act or failure to act of any other tenant or occupant (including such tenant's or occupant's invitees, agents or employees), if any, of the Property. Int _____

PERMITTED USES

8. The permitted use of the Premises shall be: **Union County** (including any Union County related agency) ("Permitted Use"). The Premises shall be used and wholly occupied by Tenant solely for the purposes of conducting the Permitted Int _____

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Use, and the Premises shall not be used for any other purposes unless Tenant obtains Landlord's prior written approval of any change in use. Landlord makes no representation or warranty regarding the suitability of the Premises for or the legality (under zoning or other applicable ordinances) of the Permitted Use for the Premises, provided however, that Landlord does represent that it has no contractual obligations with other parties which will materially interfere with or prohibit the Permitted Use of Tenant at the Premises. At Tenant's sole expense, Tenant shall procure, maintain and make available for Landlord's inspection from time to time any governmental license(s) or permit(s) required for the proper and lawful conduct of Tenant's business in the Premises. Tenant shall not cause or permit any waste to occur in the Premises and shall not overload the floor, or any mechanical, electrical, plumbing or utility systems serving the Premises. Tenant shall keep the Premises, and every part thereof, in a clean and wholesome condition, free from any objectionable noises, loud music, objectionable odors or nuisances.

TAXES, INSURANCE AND COMMON AREA AND PROPERTY OPERATING EXPENSES

(Note: The following box should only be checked if there are no boxes checked below in paragraph 9.)

☒ Tenant shall have no responsibility to reimburse Landlord for taxes, insurance or Common Areas and Property Operating Expenses.

9. Landlord shall pay all taxes (including but not limited to, ad valorem taxes, special assessments and any other governmental charges) on the Property, shall procure and pay for such commercial general liability, broad form fire and extended and special perils insurance with respect to the Property as Landlord in its reasonable discretion may deem appropriate and shall maintain and operate the Common Areas and the Property. Tenant shall reimburse Landlord for its proportionate share of all taxes, insurance and Common Areas and Property Operating Expenses as provided herein within fifteen (15) days after receipt of notice from Landlord as to the amount due. Tenant shall be solely responsible for insuring Tenant's personal and business property and for paying any taxes or governmental assessments levied thereon. Tenant shall reimburse Landlord for its proportionate share of taxes, insurance and Common Areas and Property Operating Expenses during the term of this Lease, and any extension or renewal thereof. **If boxes are checked below, the manner of reimbursement shall be as indicated:**

Taxes

☐ Its proportionate share of the amount by which all taxes (including but not limited to, ad valorem taxes, special assessments and any other governmental charges) on the Property for each tax year exceed all taxes on the Property for the tax year _____; or

☐ Its proportionate share of all taxes (including but not limited to, ad valorem taxes, special assessments and any other governmental charges) on the Property for each tax year.

If the final Lease Year of the term fails to coincide with the tax year, then any excess for the tax year during which the term ends shall be reduced by the pro rata part of such tax year beyond the Lease term. If such taxes for the year in which the Lease terminates are not ascertainable before payment of the last month's rental, then the amount of such taxes assessed against the Property for the previous tax year shall be used as a basis for determining the pro rata share, if any, to be paid by Tenant for that portion of the last Lease Year.

☐ If this box is checked, Tenant shall reimburse Landlord for its proportionate share of taxes by paying to Landlord, beginning on the Rent Commencement Date and on the first day of each calendar month during the term hereof, an amount equal to one-twelfth (1/12) of its proportionate share of the then current tax payments for the Property. Upon receipt of bills, statements or other evidence of taxes due, Landlord shall pay or cause to be paid the taxes. If at any time the reimbursement payments by Tenant hereunder do not equal its proportionate share of the amount of taxes paid by Landlord, Tenant shall upon demand pay to Landlord an amount equal to the deficiency or Landlord shall refund to Tenant any overpayment (as applicable) as documented by Landlord. Landlord shall have no obligation to segregate or otherwise account for the tax reimbursements paid hereunder except as provided in this paragraph 9.

Insurance

☐ Its proportionate share of the excess cost of commercial general liability, broad form fire and extended and special perils insurance with respect to the Property over the cost of the first year of the Lease term for each subsequent year during the term of this Lease; or

☐ Its proportionate share of the cost of all commercial general liability, broad form fire and extended and special perils insurance with respect to the Property.

☐ If this box is checked, Tenant shall reimburse Landlord for its proportionate share of insurance by paying to Landlord, beginning on the Rent Commencement Date and on the first day of each calendar month during the term hereof, an

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amount equal to one-twelfth (1/12) of its proportionate share of the then current insurance premiums for the Property. Upon receipt of bills, statements or other evidence of insurance premiums due, Landlord shall pay or cause to be paid the insurance premiums. If at any time the reimbursement payments by Tenant hereunder do not equal its proportionate share of the amount of insurance premiums paid by Landlord, Tenant shall upon demand pay to Landlord an amount equal to the deficiency or Landlord shall refund to Tenant any overpayment (as applicable) as documented by Landlord. Landlord shall have no obligation to segregate or otherwise account for the insurance premium reimbursements paid hereunder except as provided in this paragraph 9.

Provided however, notwithstanding any provision of the foregoing, that in the event Tenant's use of the Premises results in an increase in the rate of insurance on the Property, Tenant shall pay to Landlord, upon demand and as additional rental, the amount of any such increase.

Common Areas and Property Operating Expenses

☐ Its proportionate share of all Common Areas and Property Operating Expenses.

For the purpose of this Lease, Common Areas and Property Operating Expenses shall include: (a) the cost of water and sewer services for any exterior landscaping irrigation systems; (b) the cost of utilities to service the Property (not separately metered to tenants and regardless of their allocation to Landlord under paragraph 6 hereof) including but not limited to, electric service for any parking lot lighting, marquee signs, ground signs, pylon signs, time clocks, irrigation systems, common electric outlets used in connection with maintenance of the Property, and such other electric costs, including the replacement of light bulbs in Common Areas light fixtures as necessary to properly maintain and operate the Common Areas; (c) the cost of the removal of any trash, including the rental cost of dumpster units and fees for refuse removal; (d) the cost of exterior window washing of vacant spaces, cleaning of any building exterior, awnings, sidewalks, driveways and parking areas; (e) the cost of any grounds maintenance, including but not limited to charges for maintaining plant materials, fertilizer, pesticides, grass mowing, pruning of plants, planting of annual flowers, removal of debris and trash from Common Areas, cleaning supplies, and such other expenses necessary to maintain the Property; (f) the cost of service contracts with independent contractors to maintain on a regular basis the plumbing systems outside the rentable areas of each tenant, and to provide for pest control and exterminating services for the Common Areas; (g) the cost of maintaining the parking areas and driveways, including the re-striping of parking spaces, patching of deteriorated pavement, replacement of parking signs or directional signs; (h) the cost of Landlord's personnel when such personnel are engaged directly in the maintenance of the Common Areas of the Property, including the cost of employer taxes and a proration of employee benefits; (i) the cost of snow and ice removal from parking areas, driveways, walkways and service areas; (j) the cost of telephone, telegraph, stationery, advertising, and mail or shipping costs related directly to the maintenance or operation of the Property; (k) the cost of all repairs and maintenance for the structure, Property and systems related thereto; and (l) such other costs and expenses as are typically incurred in the maintenance and operation of a property of this type, inclusive of a management fee paid by Landlord to a property manager or property management company or organization for the management of the Property and any owner association dues or assessments. Within one hundred eighty (180) days following the end of each calendar year, Landlord shall cause a statement to be prepared of the actual cost of Common Areas and Property Operating Expenses for such calendar year and shall provide Tenant a copy of same. Tenant's proportionate share of Common Areas and Property Operating Expenses is presently estimated to be the sum of $_____ annually or $ _____ per month.

☐ If this box is checked, Tenant shall reimburse Landlord for its proportionate share of Common Areas and Property Operating Expenses by paying to Landlord, beginning on the Rent Commencement Date and on the first day of each calendar month during the term hereof, the amount set forth above as the presently estimated per month proportionate share of Common Areas and Property Operating Expenses for the Premises. Landlord shall pay or cause to be paid the Common Areas and Property Operating Expenses. Within one hundred eighty (180) days following the end of each calendar year, Landlord shall: (i) cause a statement to be prepared of the actual cost of Common Areas and Property Operating Expenses for such calendar year and shall notify Tenant of any overpayment or underpayment of Tenant's proportionate share of these items during such prior calendar year; and, (ii) establish an estimate of the cost of Common Areas and Property Operating Expenses for the then current calendar year. To the extent Tenant has overpaid Tenant's proportionate share of these items for the preceding calendar year, such overage shall be credited to Tenant's proportionate share of these items for the current calendar year. To the extent Tenant has underpaid Tenant's proportionate share of these items for the preceding calendar year, Tenant shall, on the first day of the calendar month following receipt of the statement from Landlord setting forth the amount of such underpayment, pay to Landlord the full amount of such underpayment for the preceding calendar year. In addition, beginning on the first day of the calendar month following the date upon which Landlord shall have delivered to Tenant the statement for the estimated Common Areas and Property Operating Expenses for the then current calendar year, Tenant shall pay to Landlord the product of one-twelfth (1/12) of Tenant's proportionate share of the estimated Common Areas and Property Operating Expenses for the then current calendar year multiplied by the number of calendar months in the calendar year which shall have begun as of said first day, minus the aggregate amount of the monthly payments for Tenant's proportionate share of

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expenses theretofore paid by Tenant during such calendar year. The remainder of Tenant's proportionate share of such expenses for the then current calendar year shall be paid by Tenant to Landlord on the first day of each succeeding month in equal consecutive monthly installments of one-twelfth (1/12) of the total amount of Tenant's proportionate share of Common Areas and Property Operating Expenses as shown on the estimate thereof provided by Landlord. Landlord shall have no obligation to segregate or otherwise account for the insurance premium reimbursements paid hereunder except as provided in this paragraph 9.

For purposes of this paragraph 9, "Tenant's proportionate share" shall mean **(check one):**

☒ 24.000 % of the expenses above designated; or

☐ $ _____ payable monthly, in satisfaction of all reimbursements under this paragraph 9; Landlord ☐ shall ☐ shall not be obligated to provide to Tenant a statement of the actual cost of Common Areas and Property Operating Expenses for each calendar year.

INSURANCE; WAIVER; INDEMNITY

10. (a) During the term of this Lease, Tenant shall maintain commercial general liability insurance coverage (occurrence coverage) with broad form contractual liability coverage and with coverage limits of not less than 1,000,000.00 combined single limit, per occurrence, specifically including liquor liability insurance covering consumption of alcoholic beverages by customers of Tenant should Tenant choose to sell alcoholic beverages. Such policy shall insure Tenant's performance of the indemnity provisions of this Lease, but the amount of such insurance shall not limit Tenant's liability nor relieve Tenant of any obligation hereunder. All policies of insurance provided for herein shall name as "additional insureds" Landlord,* ~~Landlord's Agent, all mortgagees of Landlord and such other individuals or entities as Landlord may from time to time designate upon written notice to Tenant~~. Tenant shall provide to Landlord, at least thirty (30) days prior to expiration, certificates of insurance to evidence any renewal or additional insurance procured by Tenant. Tenant shall provide evidence of all insurance required under this Lease to Landlord prior to the Lease Commencement Date. * Dennis W. Moser, and the Moser Group, Inc. Int _____

(b) Landlord (for itself and its insurer) waives any rights, including rights of subrogation, and Tenant (for itself and its insurer) waives any rights, including rights of subrogation, each may have against the other for compensation of any loss or damage occasioned to Landlord or Tenant arising from any risk generally covered by the "all risks" insurance required to be carried by Landlord and Tenant. The foregoing waivers of subrogation shall be operative only so long as available in the State of North Carolina. The foregoing waivers shall be effective whether or not the parties maintain the insurance required to be carried pursuant to this Lease.

(c) Except as otherwise provided in paragraph 10(b), ** Tenant indemnifies Landlord for damages proximately caused by the negligence or wrongful conduct of Tenant and Tenant's employees, agents, invitees or contractors. Except as otherwise provided in paragraph 10(b), Landlord indemnifies Tenant for damages proximately caused by the negligence or wrongful conduct of Landlord and Landlord's employees, agents, invitees or contractors. The indemnity provisions in this paragraph 10** cover personal injury and property damage and shall bind the employees, agents, invitees or contractors of Landlord and Tenant (as the case may be). The indemnity obligations in this paragraph 10** shall survive the expiration or earlier termination of this Lease. Int _____

** , to the extent permitted by applicable law,

REPAIRS BY LANDLORD

11. Landlord agrees to keep in good repair the roof, foundation, structural supports, exterior walls (exclusive of all glass and exclusive of all exterior doors) of the Premises and the Common Areas of the Property (including all facilities located in the Common Areas and serving the Premises and any portion of the Property other than the Premises, and capital replacements thereof) provided that Landlord shall not be responsible for repairs or capital replacements rendered necessary by the negligence or intentional wrongful acts of Tenant, its employees, agents, invitees or contractors. Tenant shall promptly report in writing to Landlord any defective condition known to it which Landlord is required to repair and failure to report such conditions shall make Tenant responsible to Landlord for any liability incurred by Landlord by reason of such conditions.

(Note: Should Landlord and Tenant need to further detail the allocation of responsibility hereunder, the Special Stipulations box at the end of the Lease should be checked and such allocation should be specified on an Exhibit C.)

REPAIRS BY TENANT

12. (a) Tenant accepts the Premises in their present condition and as suited for the Permitted Use and Tenant's intended purposes. Tenant, throughout the initial term of this Lease, and any extension or renewal thereof, at its expense, shall maintain in good order and repair the Premises (except those repairs expressly required to be made by Landlord hereunder), specifically including but not limited to all light bulb and ballast replacements, plumbing fixtures and systems repairs within the Premises and water heater repairs. Tenant further agrees that it shall not use the Common Areas for storage or for the disposal of refuse or any other material. Tenant shall use only licensed contractors for repairs where such license is required. ~~Landlord shall have the right to approve the contractor as to any repairs in excess of $ 2,000.00~~ _____.

Int _____

Tenant Initials _____ _____ Landlord Initials _____ _____

☐ If this box is checked, Tenant, at its expense, shall maintain the heating, ventilation and air conditioning system(s) serving the Premises ("HVAC Systems") in good order and repair, including but not limited to replacement of parts, compressors, air handling units and heating units. Tenant shall be required to maintain a preventive maintenance contract for the HVAC Systems on terms and with a provider reasonably acceptable to Landlord, which contract shall call for at least semi-annual maintenance, inspection and repair of such HVAC Systems ("HVAC Contract"). Tenant shall provide a copy of the HVAC Contract to Landlord annually. Provided that: (i) Tenant has kept the HVAC Contract in force, and, (ii) Tenant shall have obtained Landlord's prior written approval of the contractor and the repair or replacement expenses for the HVAC Systems, then, for any calendar year, Tenant shall be responsible for the cost of repairing or replacing the HVAC Systems (or any major component thereof) up to $ _____ per HVAC System with a maximum repair or replacement cost of $ _____ for all HVAC Systems ("HVAC Cap") in such year. Tenant shall provide Landlord copies of all records related to the servicing, maintenance, repair, and replacement of the HVAC Systems upon the occurrence of any service, maintenance, repair, or replacement of the HVAC Systems. Landlord shall be responsible for paying the repair cost or replacement cost of such HVAC System in excess of the HVAC Cap.

☒ If this box is checked, Landlord, at its expense, shall maintain the heating, ventilation and air conditioning system(s) serving the Premises ("HVAC Systems") in good order and repair, including but not limited to replacement of parts, compressors, air handling units and heating units. Provided that, Tenant shall reimburse Landlord for the cost of repairing or replacing the HVAC Systems (or any major component thereof) an amount up to $ 1,500.00 per HVAC System with a maximum replacement cost of $ 5,000.00 for all HVAC Systems ("HVAC Cap") in such year. Landlord shall be responsible for paying the repair cost or replacement cost of such HVAC System in excess of the HVAC Cap. Tenant shall reimburse Landlord for the amount of the HVAC Cap payable hereunder upon the written request of Landlord.

(b) Tenant, Tenant's employees, agents, invitees or contractors shall take no action which may void any manufacturers or installers warranty with relation to the Premises or the Property. Tenant shall * indemnify and hold Landlord harmless from any liability, claim, demand or cause of action arising on account of Tenant's breach of the provisions of this paragraph 12.

* , to the extent permitted by applicable law, Int _____

ALTERATIONS

13. Tenant shall not make any alterations, additions, or improvements to the Premises without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed. Landlord, in connection with Landlord's consent to same, may designate any such alterations, additions, or improvements to the Premises as subject to removal upon the expiration or earlier termination of this Lease, in which case, upon Landlord's written notice to Tenant to remove same at the expiration or earlier termination of this Lease, Tenant shall do so and restore the Premises to the condition that existed prior to such alterations, additions, or improvements being made. Tenant shall promptly remove any alterations, additions, or improvements constructed in violation of this paragraph 13 upon Landlord's written request. All approved alterations, additions, and improvements will be accomplished in a good and workmanlike manner, in conformity with all applicable laws and regulations, ~~and by a contractor approved by Landlord~~, free of any liens or encumbrances. Tenant has no authority to allow, will not permit, ~~and will indemnify Landlord and hold it harmless from~~, any contractors', laborers', mechanics', or materialmen's liens, or any other similar liens filed against the Premises in connection with any alterations, additions, or improvements to the Premises.

Int _____

SURRENDERING THE PREMISES

14. Tenant shall schedule its move date with Landlord, in writing, in advance of the expiration or earlier termination of this Lease. Tenant agrees to return the Premises to Landlord at the expiration or earlier termination of this Lease, broom clean and in as good condition and repair as on the Lease Commencement Date, natural wear and tear, damage by storm, fire, lightning, earthquake or other casualty alone excepted. By written notice to Tenant, Landlord may require Tenant to remove any alterations, additions or improvements at the expiration or earlier termination of this Lease (whether or not made with Landlord's consent and whether or not designated via paragraph 13 as subject to removal) and to restore the Premises to its prior condition as of the Lease Commencement Date, all at Tenant's expense. All alterations, additions and improvements which Landlord has not required Tenant to remove shall become Landlord's property and shall be surrendered to Landlord upon the termination of this Lease, except that Tenant may remove any of Tenant's personal property or trade fixtures which can be removed without material damage to the Premises. Tenant shall repair, at Tenant's expense, any damage to the Premises caused by the removal of any such personal property or trade fixtures. **(Note: Should Landlord and Tenant need to further enumerate their intent/understanding as to the status of items or property as fixtures, trade fixtures, or personal property hereunder, the Special Stipulations box at the end of the Lease should be checked and such enumeration should be specified by listing same by category on an Exhibit C.)**

DESTRUCTION OF OR DAMAGE TO PREMISES

15. (a) If the Premises are totally destroyed by storm, fire, lightning, earthquake or other casualty, Landlord shall have the right to terminate this Lease on written notice to Tenant within thirty (30) days after such destruction and this Lease shall terminate as of the date of such destruction and rental shall be accounted for as between Landlord and Tenant as of that date.

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(b) If the Premises are damaged but not wholly destroyed by any such casualties or if the Landlord does not elect to terminate the Lease under paragraph 15(a) above, Landlord shall commence (or shall cause to be commenced) reconstruction of the Premises within one hundred twenty (120) days after such occurrence and prosecute the same diligently to completion, not to exceed two hundred seventy (270) days from the date upon which Landlord receives applicable permits and insurance proceeds. In the event Landlord shall fail to substantially complete reconstruction of the Premises within said two hundred seventy (270) day period, Tenant's sole remedy shall be to terminate this Lease.

(c) In the event of any casualty at the Premises during the last one (1) year of the Lease Term, Landlord and Tenant each shall have the option to terminate this Lease on written notice to the other of exercise thereof within sixty (60) days after such occurrence.

(d) In the event of reconstruction of the Premises, Tenant shall continue the operation of its business in the Premises during any such period to the extent reasonably practicable from the standpoint of prudent business management, and the obligation of Tenant to pay annual rental and any other sums due under this Lease shall remain in full force and effect during the period of reconstruction. The annual rental and other sums due under this Lease shall be abated proportionately with the degree to which Tenant's use of the Premises is impaired, commencing from the date of destruction and continuing during the period of such reconstruction. Tenant shall not be entitled to any compensation or damages from Landlord for loss of use of the whole or any part of the Premises, Tenant's personal property, or any inconvenience or annoyance occasioned by such damage, reconstruction or replacement.

(e) In the event of the termination of this Lease under any of the provisions of this paragraph 15, both Landlord and Tenant shall be released from any liability or obligation under this Lease arising after the date of termination, except as otherwise provided for in this Lease.

GOVERNMENTAL ORDERS

16. Landlord, at its own expense, shall comply with: (a) any law, statute, ordinance, regulation, rule, requirement, order, court decision or procedural requirement of any governmental or quasi-governmental authority relative to the Common Areas and/or facilities serving the Common Areas (or any facilities serving the Premises and the Common Areas), (b) the rules and regulations of any applicable governmental insurance authority or any similar body, relative to the Common Area and/or facilities serving the Common Areas (or any facilities serving the Premises and the Common Areas). Tenant, at its own expense, agrees to comply with: (a) any law, statute, ordinance, regulation, rule, requirement, order, court decision or procedural requirement of any governmental or quasi-governmental authority having jurisdiction over the Premises, (b) the rules and regulations of any applicable governmental insurance authority or any similar body, relative to the Premises and Tenant's activities therein; (c) provisions of or rules enacted pursuant to any private use restrictions, as the same may be amended from time to time and (d) the Americans with Disabilities Act (42 U.S.C.S. §12101, et seq.) and the regulations and accessibility guidelines enacted pursuant thereto, as the same may be amended from time to time. Landlord and Tenant agree, however, that if in order to comply with such requirements the cost to Tenant shall exceed a sum equal to one (1) year's rent, then Tenant may terminate this Lease by giving written notice of termination to Landlord in accordance with the terms of this Lease, which termination shall become effective sixty (60) days after receipt of such notice and which notice shall eliminate the necessity of compliance with such requirements, unless, within thirty (30) days of receiving such notice, Landlord agrees in writing to be responsible for such compliance, at its own expense, and commences compliance activity, in which case Tenant's notice given hereunder shall not terminate this Lease.

CONDEMNATION

17. (a) If the entire Premises shall be appropriated or taken under the power of eminent domain by any governmental or quasi-governmental authority or under threat of and in lieu of condemnation (hereinafter, "taken" or "taking"), this Lease shall terminate as of the date of such taking, and Landlord and Tenant shall have no further liability or obligation arising under this Lease after such date, except as otherwise provided for in this Lease.

(b) If more than twenty-five percent (25%) of the floor area of the Premises is taken, or if by reason of any taking of the Property or the Premises, regardless of the amount so taken, the remainder of the Premises is not one undivided space or is rendered unusable for the Permitted Use, either Landlord or Tenant shall have the right to terminate this Lease as of the date the portion of the Premises of taking of the portion of the Premises or Property so taken, upon giving notice of such election within thirty (30) days after receipt by Tenant from Landlord of written notice that said portion of the Premises or the Property have been or will be so taken. In the event of such termination, both Landlord and Tenant shall be released from any liability or obligation under this Lease arising after the date of termination, except as otherwise provided for in this Lease.

(c) Landlord and Tenant, immediately after learning of any taking, shall give notice thereof to each other.

(d) If this Lease is not terminated on account of a taking as provided herein above, then Tenant shall continue to occupy that portion of the Premises not taken and the parties shall proceed as follows: (i) at Landlord's cost and expense and as soon as reasonably possible, Landlord shall restore (or shall cause to be restored) the Premises and/or Property remaining to a complete unit of like quality and character as existed prior to such appropriation or taking, and (ii) the annual rent provided for in paragraph 3 and other sums due under the Lease shall be reduced on an equitable basis, taking into account the relative values of the portion taken as compared to the portion remaining. Tenant waives any statutory rights of termination that may arise because of any partial taking of the Premises and/or the Property.

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(e) Landlord shall be entitled to the entire condemnation award for any taking of the Premises and/or the Property or any part thereof. Tenant's right to receive any amounts separately awarded to Tenant directly from the condemning authority for the taking of its merchandise, personal property, relocation expenses and/or interests in other than the real property taken shall not be affected in any manner by the provisions of this paragraph 17, provided Tenant's award does not reduce or affect Landlord's award and provided further, Tenant shall have no claim for the loss of its leasehold estate.

ASSIGNMENT AND SUBLETTING

18. Tenant shall not assign this Lease or any interest hereunder or sublet the Premises or any part thereof, or permit the use of the Premises by any party other than the Tenant, without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed. Tenant shall pay to Landlord, concurrently with any request for consent to assignment or sublet, a non-refundable fee of $ 50.00 as payment to Landlord for its review and processing of the request. ~~In addition, Tenant shall pay to Landlord any legal fees and expenses incurred by Landlord in connection with the proposed assignment or sublet, to the extent such amounts exceed $ 500.00~~ . Consent to any assignment or sublease shall not impair this provision and all later assignments or subleases shall be made likewise only on the prior written consent of Landlord. No sublease or assignment by Tenant shall relieve Tenant of any liability hereunder.

Int _____

EVENTS OF DEFAULT

19. The happening of any one or more of the following events (hereinafter any one of which may be referred to as an "Event of Default") during the term of this Lease, or any renewal or extension thereof, shall constitute a breach of this Lease on the part of the Tenant: (a) Tenant fails to pay when due the rental or any other monetary obligation as provided for herein; (b) Tenant abandons or vacates the Premises; (c) Tenant fails to comply with or abide by and perform any non-monetary obligation imposed upon Tenant under this Lease within thirty (30) days after written notice of such breach; (d) Tenant is adjudicated bankrupt; (e) A permanent receiver is appointed for Tenant's property and such receiver is not removed within sixty (60) days after written notice from Landlord to Tenant to obtain such removal; (f) Tenant, either voluntarily or involuntarily, takes advantage of any debt or relief proceedings under any present or future law, whereby the rent or any part thereof is, or is proposed to be, reduced or payment thereof deferred and such proceeding is not dismissed within sixty (60) days of the filing thereof; (g) Tenant makes an assignment for benefit of creditors; or (h) Tenant's effects are levied upon or attached under process against Tenant, which is not satisfied or dissolved within thirty (30) days after written notice from Landlord to Tenant to obtain satisfaction thereof.

REMEDIES UPON DEFAULT

20. Upon the occurrence of Event of Default, Landlord may pursue any one or more of the following remedies separately or concurrently, without prejudice to any other remedy herein provided or provided by law: (a) Landlord may terminate this Lease by giving written notice to Tenant and upon such termination shall be entitled to recover from Tenant damages as may be permitted under applicable law; or (b) Landlord may terminate this Lease by giving written notice to Tenant and, upon such termination, shall be entitled to recover from the Tenant damages in an amount equal to all rental which is due and all rental which would otherwise have become due throughout the remaining term of this Lease, or any renewal or extension thereof (as if this Lease had not been terminated); or (c) Landlord, as Tenant's agent, without terminating this Lease, may enter upon and rent the Premises, in whole or in part, at the best price obtainable by reasonable effort, without advertisement and by private negotiations and for any term Landlord deems proper, with Tenant being liable to Landlord for the deficiency, if any, between Tenant's rent hereunder and the price obtained by Landlord on reletting, provided however, that Landlord shall not be considered to be under any duty by reason of this provision to take any action to mitigate damages by reason of Tenant's default and expressly shall have no duty to mitigate Tenant's damages. No termination of this Lease prior to the normal ending thereof, by lapse of time or otherwise, shall affect Landlord's right to collect rent for the period prior to termination thereof. Tenant acknowledges and understands that Landlord's acceptance of partial rental will not waive Tenant's breach of this Lease or limit Landlord's rights against Tenant hereunder or Landlord's right to evict Tenant through a summary ejectment proceeding, whether filed before or after Landlord's acceptance of any such partial rental.

EXTERIOR SIGNS

21. Tenant shall place no signs upon the outside walls, doors or roof of the Premises or anywhere on the Property, except with the express written consent of the Landlord in Landlord's sole discretion. Any consent given by Landlord shall expressly not be a representation of or warranty of any legal entitlement to signage at the Premises or on the Property. Any and all signs placed on the Premises or the Property by Tenant shall be maintained in compliance with governmental rules and regulations governing such signs and Tenant shall be responsible to Landlord for any damage caused by installation, use or maintenance of said signs, and all damage incident to removal thereof.

LANDLORD'S ENTRY OF PREMISES

22. Landlord may advertise the Premises "For Rent" 60 days before the termination of this Lease. Landlord may enter the Premises upon prior notice at reasonable hours to exhibit same to prospective purchasers or tenants, to make repairs required of Landlord under the terms hereof, for reasonable business purposes and otherwise as may be agreed by Landlord and Tenant. Landlord may enter the Premises at any time without prior notice, in the event of an emergency or to make emergency repairs to the Premises. Upon request of Landlord, Tenant shall provide Landlord with a functioning key to the Premises and shall replace such key if the locks to the Premises are changed.

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QUIET ENJOYMENT

23. So long as Tenant observes and performs the covenants and agreements contained herein, it shall at all times during the Lease term peacefully and quietly have and enjoy possession of the Premises, subject to the terms hereof.

HOLDING OVER

24. If Tenant remains in possession of the Premises after expiration of the term hereof, Tenant shall be a tenant at sufferance and there shall be no renewal of this Lease by operation of law. In such event, commencing on the date following the date of expiration of the term, the monthly rental payable under Paragraph 3 above shall for each month, or fraction thereof during which Tenant so remains in possession of the Premises, be **twice** the monthly rental otherwise payable under Paragraph 3 above.

ENVIRONMENTAL LAWS

25. (a) Tenant covenants that with respect to any Hazardous Materials (as defined below) it will comply with any and all federal, state or local laws, ordinances, rules, decrees, orders, regulations or court decisions relating to hazardous substances, hazardous materials, hazardous waste, toxic substances, environmental conditions on, under or about the Premises or the Property or soil and ground water conditions, including, but not limited to, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, the Resource Conservation and Recovery Act, the Hazardous Materials Transportation Act, any other legal requirement concerning hazardous or toxic substances, and any amendments to the foregoing (collectively, all such matters being "Hazardous Materials Requirements"). Tenant shall remove from the Premises, all Hazardous Materials that were placed on the Premises by Tenant or Tenant's employees, agents, invitees or contractors, either after their use by Tenant or upon the expiration or earlier termination of this Lease, in compliance with all Hazardous Materials Requirements.

(b) Tenant shall be responsible for obtaining all necessary permits in connection with its use, storage and disposal of Hazardous Materials, and shall develop and maintain, and where necessary file with the appropriate authorities, all reports, receipts, manifest, filings, lists and invoices covering those Hazardous Materials and Tenant shall provide Landlord with copies of all such items upon request. Tenant shall provide within five (5) days after receipt thereof, copies of all notices, orders, claims or other correspondence from any federal, state or local government or agency alleging any violation of any Hazardous Materials Requirements by Tenant, or related in any manner to Hazardous Materials. In addition, Tenant shall provide Landlord with copies of all responses to such correspondence at the time of the response. * , to the extent permitted by applicable law,

(c) Tenant hereby* indemnifies and holds harmless Landlord, its successors and assigns from and against any and all losses, liabilities, damages, injuries, penalties, fines, costs, expenses and claims of any and every kind whatsoever (including attorney's fees and costs) paid, incurred or suffered by, or asserted against Landlord as a result of any claim, demand or judicial or administrative action by any person or entity (including governmental or private entities) for, with respect to, or as a direct or indirect result of, the presence on or under or the escape, seepage, leakage, spillage, discharge, emission or release from the Premises or the Property of any Hazardous Materials caused by Tenant or Tenant's employees, agents, invitees or contractors. This indemnity* shall also apply to any release of Hazardous Materials caused by a fire or other casualty to the Premises if such Hazardous Materials were stored on the Premises or the Property by Tenant, its agents, employees, invitees or successors in interest. Int _____

(d) For purposes of this Lease, "Hazardous Materials" means any chemical, compound, material, substance or other matter that: (i) is defined as a hazardous substance, hazardous material or waste, or toxic substance pursuant to any Hazardous Materials Requirements, (ii) is regulated, controlled or governed by any Hazardous Materials Requirements, (iii) is petroleum or a petroleum product, or (iv) is asbestos, formaldehyde, a radioactive material, drug, bacteria, virus, or other injurious or potentially injurious material (by itself or in combination with other materials).

(e) The warranties and indemnities contained in this paragraph 25 shall survive the termination of this Lease.

SUBORDINATION; ATTORNMENT; ESTOPPEL

26. (a) This Lease and all of Tenant's rights hereunder are and shall be subject and subordinate to all currently existing and future mortgages affecting the Premises. Within ten (10) days after the receipt of a written request from Landlord or any Landlord mortgagee, Tenant shall confirm such subordination by executing and delivering Landlord and Landlord's mortgagee a recordable subordination agreement and such other documents as may be reasonably requested, in form and content satisfactory to Landlord and Landlord's mortgagee. Provided, however, as a condition to Tenant's obligation to execute and deliver any such subordination agreement, the applicable mortgagee must agree that mortgagee shall not unilaterally, materially alter this Lease and this Lease shall not be divested by foreclosure or other default proceedings thereunder so long as Tenant shall not be in default under the terms of this Lease beyond any applicable cure period set forth herein. Tenant acknowledges that any Landlord mortgagee has the right to subordinate at any time its interest in this Lease and the leasehold estate to that of Tenant, without Tenant's consent.

(b) If Landlord sells, transfers, or conveys its interest in the Premises or this Lease, or if the same is foreclosed judicially or nonjudicially, or otherwise acquired, by a Landlord mortgagee, upon the request of Landlord or Landlord's successor, Tenant shall attorn to said successor, provided said successor accepts the Premises subject to this Lease. Tenant shall, upon the request of Landlord

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or Landlord's successor, execute an attornment agreement confirming the same, in form and substance acceptable to Landlord or Landlord's successor and Landlord shall thereupon be released and discharged from all its covenants and obligations under this Lease, except those obligations that have accrued prior to such sale, transfer or conveyance; and Tenant agrees to look solely to the successor in interest of Landlord for the performance of those covenants accruing after such sale, transfer or conveyance. Such agreement shall provide, among other things, that said successor shall not be bound by (a) any prepayment of more than one (1) month's rental (except the Security Deposit) or (b) any material amendment of this Lease made after the later of the Lease Commencement Date or the date that such successor's lien or interest first arose, unless said successor shall have consented to such amendment.

(c) Within ten (10) days after request from Landlord, Tenant shall execute and deliver to Landlord an estoppel certificate (to be prepared by Landlord and delivered to Tenant) with appropriate facts then in existence concerning the status of this Lease and Tenant's occupancy, and with any exceptions thereto noted in writing by Tenant. Tenant's failure to execute and deliver the Estoppel Certificate within said ten (10) day period shall be deemed to make conclusive and binding upon Tenant in favor of Landlord and any potential mortgagee or transferee the statements contained in such estoppel certificate without exception.

ABANDONMENT

27. Tenant shall not abandon the Premises at any time during the Lease term. If Tenant shall abandon the Premises or be dispossessed by process of law, any personal property belonging to Tenant and left on the Premises, at the option of Landlord, shall be deemed abandoned, and available to Landlord to use or sell to offset any rent due or any expenses incurred by removing same and restoring the Premises.

NOTICES

28. All notices required or permitted under this Lease shall be in writing and shall be personally delivered or sent by U.S. certified mail, return receipt requested, postage prepaid. Notices to Tenant shall be delivered or sent to the address shown at the beginning of this Lease, ~~except that upon Tenant taking possession of the Premises, then the Premises shall be Tenant's address for such purposes.~~ Notices to Landlord shall be delivered or sent to the address shown at the beginning of this Lease and notices to Agent, if any, shall be delivered or sent to the address set forth in Paragraph 3 hereof. All notices shall be effective upon delivery. Any party may change its notice address upon written notice to the other parties, given as provided herein. Int _____

BROKERS Tenant

29. Except as expressly provided herein, ~~Tenant and~~ Landlord agreesto indemnify and hold ~~each other~~ harmless from any and all claims of brokers, consultants or real estate agents by, through or under the indemnifying party for fees or commissions arising out of the lease of the Property to Tenant. Tenant and Landlord represent and warrant to each other that: (i) except as to the brokers designated below ("Brokers"), they have not employed nor engaged any brokers, consultants or real estate agents to be involved in this transaction and (ii) that the compensation of the Brokers is established by and shall be governed by separate agreements entered into as amongst the Brokers, the Tenant and/or the Landlord. Int _____

The Moser Group Inc. ("Listing Agency"),
Mackenzie Moser ("Listing Agent" - License # 285594)
Acting as: ☐ Landlord's Agent; ☒ Dual Agent
and _____ ("Leasing Agency"),
_____ ("Leasing Agent" - License # _____)
Acting as: ☐ Tenant's Agent; ☐ Landlord's (Sub)Agent; ☐ Dual Agent

GENERAL TERMS

30. (a) "Landlord" as used in this Lease shall include the undersigned, its heirs, representatives, assigns and successors in title to the Premises. "Agent" as used in this Lease shall mean the party designated as same in Paragraph 3, its heirs, representatives, assigns and successors. "Tenant" shall include the undersigned and its heirs, representatives, assigns and successors, and if this Lease shall be validly assigned or sublet, shall include also Tenant's assignees or sublessees as to the Premises covered by such assignment or sublease. "Landlord", "Tenant", and "Agent" include male and female, singular and plural, corporation, partnership or individual, as may fit the particular parties.

(b) No failure of Landlord to exercise any power given Landlord hereunder or to insist upon strict compliance by Tenant of its obligations hereunder and no custom or practice of the parties at variance with the terms hereof shall constitute a waiver of Landlord's right to demand exact compliance with the terms hereof. All rights, powers and privileges conferred hereunder upon parties hereto shall be cumulative and not restrictive of those given by law.

(c) **Time is of the essence in this Lease.**

(d) This Lease may be executed in one or more counterparts, which taken together, shall constitute one and the same original document. Copies of original signature pages of this Lease may be exchanged via facsimile or e-mail, and any such copies shall constitute

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originals. This Lease constitutes the sole and entire agreement among the parties hereto and no modification of this Lease shall be binding unless in writing and signed by all parties hereto. The invalidity of one or more provisions of this Lease shall not affect the validity of any other provisions hereof and this Lease shall be construed and enforced as if such invalid provisions were not included.

(e) Each signatory to this Lease represents and warrants that he or she has full authority to sign this Lease and such instruments as may be necessary to effectuate any transaction contemplated by this Lease on behalf of the party for whom he or she signs and that his or her signature binds such party. The parties acknowledge and agree that: (i) the initials lines at the bottom of each page of this Lease are merely evidence of their having reviewed the terms of each page, and (ii) the complete execution of such initials lines shall not be a condition of the effectiveness of this Lease.

(f) Upon request by either Landlord or Tenant, the parties hereto shall execute a short form lease (memorandum of lease) in recordable form, setting forth such provisions hereof (other than the amount of annual rental and other sums due) as either party may wish to incorporate. The cost of recording such memorandum of lease shall be borne by the party requesting execution of same.

(g) If legal proceedings are instituted to enforce any provision of this Lease, the prevailing party in the proceeding shall be entitled to recover from the non-prevailing party reasonable attorneys fees and court costs incurred in connection with the proceeding.

SPECIAL STIPULATIONS

[X] If this box is checked, additional terms of this Lease are set forth on **Exhibit C** attached hereto and incorporated herein by reference. **(Note: Under North Carolina law, real estate agents are not permitted to draft lease provisions.)**

THIS DOCUMENT IS A LEGAL DOCUMENT. EXECUTION OF THIS DOCUMENT HAS LEGAL CONSEQUENCES THAT COULD BE ENFORCEABLE IN A COURT OF LAW. THE NORTH CAROLINA ASSOCIATION OF REALTORS® MAKES NO REPRESENTATIONS CONCERNING THE LEGAL SUFFICIENCY, LEGAL EFFECT OR TAX CONSEQUENCES OF THIS DOCUMENT OR THE TRANSACTION TO WHICH IT RELATES AND RECOMMENDS THAT YOU CONSULT YOUR ATTORNEY.

IN WITNESS WHEREOF, the parties hereto have hereunto caused this Lease to be duly executed.

LANDLORD:

Individual

_____

Date: _____

_____

Date: _____

Business Entity

Liquid Management, LLC
(Name of Firm)

By: _____
Dennis W. Moser

Title: Manager

Date: 06/21/2021

TENANT:

Individual

_____

Date: _____

_____

Date: _____

Business Entity

Union County
(Name of Firm)

By: _____
William M. Watson

Title: County Manager

Date: _____

This instrument has been preaudited in the manner required by The Local Government Budget and Fiscal Control Act

_____
Deputy Finance Officer

Approved as to Legal Form: BTI

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WORKING WITH REAL ESTATE AGENTS (LEASE TRANSACTIONS)

*NOTE: This form is designed for use by agents working with landlords and/or tenants. It is similar, but not identical, to the "Working with Real Estate Agents" brochure published by the NC Real Estate Commission (available in letter-length format as NCAR Standard Form #520), which **must** be used by agents working with sellers and/or buyers.*

When leasing real estate, you may find it helpful to have a real estate agent assist you. Real estate agents can provide many useful services and work with you in different ways. In some real estate transactions, the agents work for the landlord. In others, the landlord and tenant may each have agents. And sometimes the same agents work for both the landlord and the tenant. It is important for you to know whether an agent is working for you as **your** agent or simply working **with** you while acting as an agent of the other party.

This brochure addresses the various types of working relationships that may be available to you. It should help you decide which relationship you want to have with a real estate agent. It will also give you useful information about the various services real estate agents can provide landlords and tenants, and it will help explain how real estate agents are paid.

LANDLORDS

Landlord's Agent

If you are leasing real estate as a landlord, you may want to "list" your property for lease with a real estate firm. If so, you will sign a "listing agreement" authorizing the firm and its agents to represent you in your dealings with tenants as your *landlord's agent.* You may also be asked to allow agents from other firms to help find a tenant for your property.

Be sure to read and understand the listing agreement before you sign it. Your agent must give you a copy of the listing agreement after you sign it.

Duties to Landlord: The listing firm and its agents must • promote your best interests • be loyal to you • follow your lawful instructions • provide you with all material facts that could influence your decisions • use reasonable skill, care and diligence, and • account for all monies they handle for you. Once you have signed the listing agreement, the firm and its agents may not give any confidential information about you to prospective tenants or their agents without your permission so long as they represent you. But **until you sign the listing agreement, you should avoid telling the listing agent anything you would *not* want a tenant to know.**

Services and Compensation: To help you lease your property, the listing firm and its agents will offer to perform a number of services for you. These may include • helping you price your property • advertising and marketing your property • giving you all required property disclosure forms for you to complete • negotiating for you the best possible price and terms • reviewing all written offers with you and • otherwise promoting your interests.

For representing you and helping you lease your property, you will pay the listing firm a commission or fee. The listing agreement must state the amount or method for determining the commission or fee and whether you will allow the firm to share its commission with agents representing the tenant.

Dual Agent

You may even permit the listing firm and its agents to represent you **and** a tenant at the same time. This "dual agency relationship" is most likely to happen if an agent with your listing firm is working as a *tenant's agent* with someone who wants to lease your property. If this occurs and you have not already agreed to a dual agency relationship in your listing agreement, your listing agent will ask you to amend your listing agreement to permit the agent to act as agent for both you and the tenant.

It may be difficult for a *dual agent* to advance the interests of both the tenant and landlord. Nevertheless, a *dual agent* must treat tenants and landlords fairly and equally. Although the *dual agent* owes them the same duties, tenants and landlords can prohibit *dual agents* from divulging **certain** confidential information about them to the other party.

Some firms also offer a form of dual agency called "designated agency" where one agent in the firm represents the landlord and another agent represents the tenant. This option (when available) may allow each "designated agent" to more fully represent each party.

If you choose the "dual agency" option, remember that since a dual agent's loyalty is divided between parties with competing interests, it is especially important that you have a clear understanding of • what your relationship is with the *dual agent* and • what the agent will be doing for you in the transaction.

TENANTS

When leasing real estate as a tenant, you may have several choices as to how you want a real estate firm and its agents to work with you. For example, you may want them to represent only you (as a **tenant's agent**). You may be willing for them to represent both you and the landlord at the same time (as a **dual agent**). Or you may agree to let them represent only the landlord (**landlord's agent** or **subagent**). Some agents will offer you a choice of these services. Others may not.

Tenant's Agent

Duties to Tenant: If the real estate firm and its agents represent you, they must • promote your best interests • be loyal to you • follow your lawful instructions • provide you with all material facts that could influence your decisions • use reasonable skill, care

STANDARD FORM 521
Revised 7/2014
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North Carolina Association of REALTORS®, Inc.
REALTOR®
THE MOSER GROUP, 231 POST OFFICE DR STE B8 INDIAN TRAIL NC 28079 Phone: 704.882.1700 Fax: 704.882.2220 Jim Circle Lease
Raenne Little Produced with zipForm® by zipLogix 18070 Fifteen Mile Road, Fraser, Michigan 48026 www.zipLogix.com

and diligence, and • account for all monies they handle for you. Once you have agreed (either orally or in writing) for the firm and its agents to be your *tenant's agent,* they may not give any confidential information about you to landlords or their agents without your permission so long as they represent you. But **until you make this agreement with your tenant's agent, you should avoid telling the agent anything you would not want a landlord to know.**

Unwritten Agreements: To make sure that you and the real estate firm have a clear understanding of what your relationship will be and what the firm will do for you, you may want to have a written agreement. However, some firms may be willing to represent you and assist you for a time as a *tenant's agent* without a written agreement. But if you decide to make an offer to lease a particular property, the agent must obtain a written agency agreement before writing the offer. If you do not sign it, the agent can no longer represent and assist you and is no longer required to keep information about you confidential.

Be sure to read and understand the agency agreement before you sign it. Once you sign it, the agent must give you a copy of it.

Services and Compensation: A *tenant's agent* will perform a number of services for you. These may include helping you • find a suitable property • learn more about the property • prepare and submit a written offer to the landlord and • otherwise promote your best interests. A *tenant's agent* can be compensated in different ways. For example, you can pay the agent out of your own pocket. Or the agent may seek compensation from the landlord or listing agent first, but require you to pay if the listing agent refuses. Whatever the case, be sure your compensation arrangement with your *tenant's agent* is spelled out in a tenant agency agreement before you make an offer to purchase property and that you carefully read and understand the compensation provision.

Dual Agent

You may permit an agent or firm to represent you **and** the landlord at the same time. This "dual agency relationship" is most likely to happen if you become interested in a property listed with your *tenant's agent* or the agent's firm. If this occurs and you have not already agreed to a dual agency relationship in your tenant agency agreement, your *tenant's agent* will ask you to amend the tenant agency agreement or sign a separate agreement or document permitting him or her to act as agent for both you and the landlord. It may be difficult for a *dual agent* to advance the interests of both the tenant and landlord. Nevertheless, a *dual agent* must treat tenants and landlords fairly and equally. Although the *dual agent* owes them the same duties, tenants and landlords can prohibit *dual agents* from divulging **certain** confidential information about them to the other party.

Some firms also offer a form of dual agency called "designated agency" where one agent in the firm represents the landlord and another agent represents the tenant. This option (when available) may allow each "designated agent" to more fully represent each party.

If you choose the "dual agency" option, remember that since a *dual agent's* loyalty is divided between parties with competing interests, it is especially important that you have a clear understanding of • what your relationship is with the *dual agent* and • what the agent will be doing for you in the transaction. This can best be accomplished by putting the agreement in writing at the earliest possible time.

Landlord's Agent Working With a Tenant

If the real estate agent or firm that you contact does not offer *tenant agency* or you do not want them to act as your *tenant's agent,* you can still work with the firm and its agents. However, they will be acting as the *landlord's agent* (or "subagent"). The agent can still help you find and lease property and provide many of the same services as a *tenant's agent.* The agent must be fair with you and provide you with any "material facts" (such as a leaky roof) about properties.

But remember, the agent represents the landlord - not you - and therefore must try to obtain for the landlord the best possible price and terms for the landlord's property. Furthermore, a *landlord's agent* is required to give the landlord any information about you (even personal, financial or confidential information) that would help the landlord in the lease of his or her property. Agents must tell you *in writing* if they are *landlords' agents* before you say anything that can help the landlord. But **until you are sure that an agent is not a *landlord's agent,* you should avoid saying anything you do *not* want a landlord to know.**

Landlords' agents are compensated by the landlords.

June 21, 2021
Date

The Moser Group Inc.
Firm Name

Mackenzie Moser
Agent Name and License Number **285594**

Disclosure of Landlord Subagency

☐ *When showing you property and assisting you in leasing a property, the above agent and firm will represent the LANDLORD. For more information, see "Landlord's Agent Working with a Tenant" in the brochure.*

Agent's Initials Acknowledging Disclosure: _____

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Exhibit C

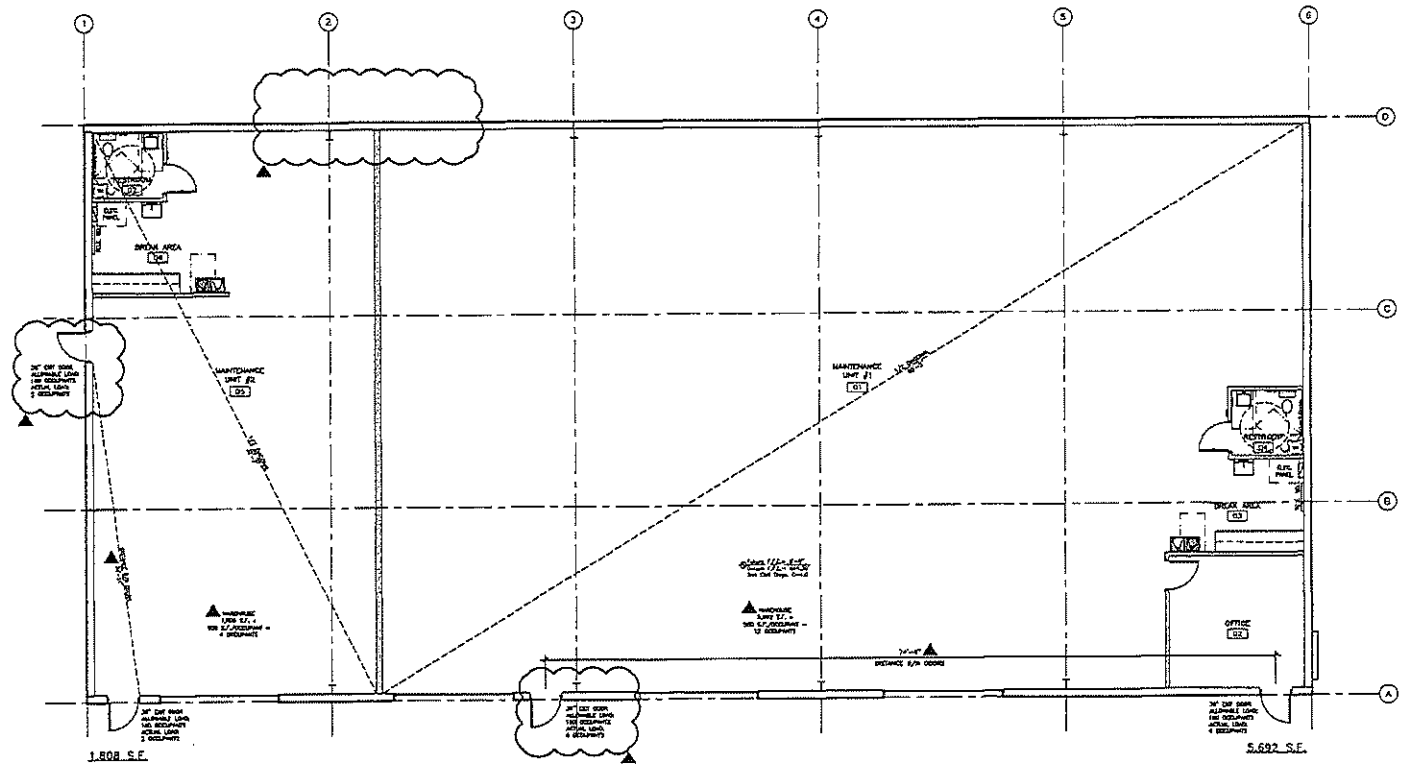
Exhibit A



TYPICAL SIGNAGE

LIFE SAFETY PLAN NOTES

1. PROVIDE FIRE EXTINGUISHERS PER 2018 NCBC SECTION 906 & NFPA 10 (MOUNT @ 48" TO CENTER) S.C.F.D. TO DETERMINE LOCATION WITH FIRE MARSHAL UPON FINAL INSPECTION.
2. PROVIDE EXIT SIGNAGE PER 2018 NCBC SECTIONS 1013.6, 1013.7, 1013.8 & 1013.9 WITH 6" HIGH LETTERS PER NCBC 403.5. REMOVAL MUST BE IN COMPLIANCE WITH CODE.
3. ALL LIFE SAFETY SYSTEMS (IF APPLICABLE) SPRINKLER, FIRE ALARM, EXITS LIGHTING, & EXIT SIGNS SHALL BE MAINTAINED DURING CONSTRUCTION.



01 FLOOR PLAN: Life Safety

3/16" = 1'-0"

(ISO full bleed A1 only)

URBAN ARCHITECTURAL GROUP

Seal:

JIM CIRCLE MAINTENANCE BUILDING

Maintenance Shell Building

[redacted]

Date:	February 10, 2020
Project Number:	2019-65
Issued For:	
Construction Only:	02.10.20
Permit Comments:	04.30.20

LIFE SAFETY PLAN

A0.1

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WORKING WITH REAL ESTATE AGENTS (LEASE TRANSACTIONS)

This is not a contract

By signing, I acknowledge that the agent named below furnished a copy of this brochure and reviewed it with me.

THE NORTH CAROLINA ASSOCIATION OF REALTORS®, INC. MAKES NO REPRESENTATION AS TO THE LEGAL VALIDITY OR ADEQUACY OF ANY PROVISION OF THIS FORM IN ANY SPECIFIC TRANSACTION.

Liquid Management, LLC	**Union County**
Tenant or Landlord Name (Print or Type)	*Tenant or Landlord Name (Print or Type)*
Tenant or Landlord Signature	*Tenant or Landlord Signature*
6.21.21	
Date	*Date*

The Moser Group Inc.
Firm Name

Mackenzie Moser
Agent Name and License Number **285594**

Disclosure of Landlord Subagency

☐ *When showing you property and assisting you in leasing a property, the above agent and firm will represent the LANDLORD. For more information, see "Landlord's Agent Working with a Tenant" in the brochure.*

Tenant's Initials Acknowledging Disclosure: _____

Agents must retain this acknowledgment for their files.

STANDARD FORM 521
Revised 7/2014
© 7/2020

Produced with zipForm® by zipLogix 18070 Fifteen Mile Road, Fraser, Michigan 48026 www.zipLogix.com

Jim Circle Lease

Exhibit C

1. PUBLIC RECORD. Landlord acknowledges that Tenant is subject to Chapter 132 of the North Carolina General Statutes, the Public Records Act (the "Act"), and that this Lease, as well as any of exhibits or attachments hereto, shall be a public record as defined in such Act, and as such, will be open to public disclosure and copying.

2. INDEMNIFICATION. Landlord agrees to protect, defend, indemnify and hold Tenant, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of this Lease and/or the performance hereof that are due, in whole or in part, to the negligence of Landlord, its officers, employees, subcontractors or agents. Landlord further agrees to investigate, handle, respond to, provide defense for, and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto. Tenant agrees, to the extent permitted by applicable law, to protect, defend, indemnify and hold Landlord, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of this Lease and/or the performance hereof that are due, in whole or in part, to the negligence of Tenant, its officers, employees, subcontractors or agents. Tenant further agrees, to the extent permitted by applicable law, to investigate, handle, respond to, provide defense for, and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto.

3. NON-APPROPRIATIONS. All payments shall be conditioned upon appropriations by the Union County Board of Commissioners of sufficient funds for each request for services.

4. E-VERIFY. E-Verify is the federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to federal law. Landlord shall ensure that Landlord and any subcontractor performing work under this Lease: (i) uses E-Verify if required to do so by North Carolina law; and (ii) otherwise complies with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. A breach of this provision by Landlord will be considered a breach of this Lease.

Union County Government
Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-383 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Sale of Surplus Yard Waste

INFORMATION CONTACT:

Ron Gilkerson, Solid Waste, Director, 704-283-3576

ACTION REQUESTED:

(i) Authorize the sale of the Property, in accordance with the Board's "Resolution for the Disposition of Personal Property by Sealed Bid in Accordance with G.S. 160A-268," dated October 4, 2021, to the highest responsive, responsible bidder, Brian Arnold (Greenscape Inc.), in the amount of $1.00 per cubic yard; and

(ii) Authorize the County Manager to execute any documentation necessary to effectuate such sale.

BACKGROUND:

At the October 4, 2021 Board meeting, the Board adopted a Resolution for the Disposition of Personal Property by Sealed Bid in Accordance with G.S. 160A-268 and authorized the Procurement Division Director to execute the documents necessary to dispose of surplus yard waste on behalf of Union County. Per the Resolution, the Procurement Director advertised and solicited sealed bids for the purchase of processed yard waste material located at the Union County Solid Waste Landfill located at 2135 Austin Chaney Road, Wingate, NC 28174. Gardenscape, Inc. from Wadesboro, NC, was the successful responsive, responsible bidder at $1.00 per cubic yard.

FINANCIAL IMPACT:

The material to be sold is estimated at 23,300 cubic yards. Based on the bid amount provided by Gardenscape, Inc. at $1.00 per cubic yard, the Solid Waste Enterprise Fund should generate an estimated $23,300.00 in addition to saving significant staff time associated with on site management of the material.

Sealed Bid Auction # 2022-022
Processed Yard Waste Surplus

Due Date: October 19, 2021
Time: 2:00 pm EST
Location: Union County Government Center
Procurement Department
500 N. Main Street, Suite #709
Monroe, NC 28112

Procurement Contact:

Name: Corey Brooks
Title: Procurement Specialist
E-mail: corey.brooks@unioncountync.gov
Telephone: 704.283.3683

1 Sealed Bid Form

1.1 PROJECT SCOPE

1.1.1 GROUND YARD WASTE SURPLUS

Union County, NC, is soliciting sealed bids for the purchase of processed yard waste material at the County's Type I Composting Facility. The processed surplus yard waste material is located at the Union County's Solid Waste's Landfill, 2135 Austin Chaney Rd, Wingate, NC 28174.

Union County Solid Waste estimates that there will be in excess of approximately 5500 tons (14,300 cubic yards) of processed yard waste material stockpiled after the subcontractor grinding event. The freshly ground yard waste material will be placed in windrows and monitored until it meets all NCDEQ permit requirements prior to purchase.

The Property may be viewed, by appointment, Monday – Friday 9 a.m. - 4 p.m. Corey Brooks, Procurement Specialist at 704-283-3683 or by email at corey.brooks@unioncountync.gov to schedule an appointment.

1.1.2 ATTACHMENT “A” – PHOTOS

Photos of typical yard waste material.









1.2 BID TERMS & REQUIREMENTS

- Bids are to be received by Union County, by **2:00 p.m. October 19, 2021** at which time they shall be opened and read aloud in a public meeting. Bids delivered after the announced time will be disqualified.
- In the event that the County receives written bids that result in a tie, the bidders will be notified and given an opportunity to bid again. Only the highest bidders who made the same offer will be allowed to participate in the re-bid opportunity.
- Mail **or** hand-deliver bids to:

  Union County Government Building
  Administrative Services, Procurement Division
  500 North Main Street, Suite #709
  Monroe, NC 28112
  Attention: Corey Brooks, Procurement Specialist

- Bids are to be sealed inside an envelope marked "Processed Yard Waste Sealed Bid." Please use the attached "Appendix A- Bid Form." Failure to submit a bid in this manner will result in immediate disqualification of the bid.
- The Bidder shall accept the Yard Waste Surplus in **AS-IS, WHERE-IS**.
- Bidders shall not attach any conditions to their bids for purchase of the Property. This specifically includes, without limitation, any attempt to selectively bid individual items which are part of the Property, as the bid must be for all of the Property.
- The County will be responsible for loading all subcontractor provided trucks and the Bidder shall be responsible for all expenses related to the hauling and transportation of the Property.
- Per Cubic Yard Price:
  - Union County operator will load vendor supplied truck. Each load will be tallied by the number of buckets (at a known quantity) by Union County staff if cubic yardage pricing is utilized.
- The Board shall determine whether to accept the highest, responsible bid or reject all bids. No bids may be withdrawn within sixty (60) days from the date of bid opening. Electronic (email) or facsimile submissions will not be accepted. The Bidder awarded the Property will have sixty (60) to ninety (90) days from the date of award to remove all of the Property from the County's landfill site. The County will be responsible for loading all trucks provided by the Bidder and the Bidder shall be responsible for all expenses related to the hauling, transportation, and ultimate disposition of the Property. The Property will be weighed or measured by the County at the

time of loading and/or removal of the Property by the winning Bidder. The winning Bidder will then be invoiced based upon the total quantity of the Property removed (based upon Bidder's unit price bid). Such invoice must be paid within thirty (30) days of the date of invoice.

- Union County reserves the right to reject any or all bids if it is determined to be in the best interest of the County.

2 APPENDIX A - BID FORM

Return bid form and Bid Deposit in a sealed envelope, marked "Yard Waste Sealed Bid", to the Procurement Department, 500 N. Main ST., Suite 709, Monroe, NC 28112, by the Bid Due Date and Time.

Bid submitted by:

Name _____

Address _____

Phone # _____

Email _____

MY BID AMOUNT (PRICE PER CUBIC/YARD) IS $ _____

THE PROPERTY IS SOLD AS IS. THE COUNTY MAKES NO EXPRESSED OR IMPLIED WARRANTY OF ANY KIND WHATSOEVER WITH RESPECT TO THE PROPERTY. THE COUNTY DISCLAIMS ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO: THE MERCHANTABILITY OF THE PROPERTY OR ITS FITNESS FOR ANY PARTICULAR PURPOSE, THE DESIGN OR CONDITION OF THE PROPERTY, THE QUALITY OR CAPACITY OF THE PROPERTY, THE WORKMANSHIP IN THE PROPERTY, COMPLIANCE OF THE PROPERTY WITH THE REQUIREMENTS OF ANY LAW, RULE, SPECIFICATION OR CONTRACT PERTAINING TO THE PROPERTY, PATENT INFRINGEMENT, AND LATENT DEFECTS.

By my signature below, I acknowledge that I have read and agree to all aforementioned Bid Terms & Requirements. By my signature below, I also acknowledge that I have the authority to submit this Bid.

Signed _____ Date _____

2 APPENDIX A - BID FORM

Return bid form and Bid Deposit in a sealed envelope, marked "Yard Waste Sealed Bid", to the Procurement Department, 500 N. Main ST., Suite 709, Monroe, NC 28112, by the Bid Due Date and Time.

Bid submitted by:

Name Brian Arnold (Gardenscape)

Address 740 Morven Freight Ln Rd
Waxhaw NC 28170

Phone # 614-679-2017

Email barnold@gardenscapeinc.com

MY BID AMOUNT (PRICE PER CUBIC/YARD) IS $ 1.00 / ~~cy~~ Cy

THE PROPERTY IS SOLD AS IS. THE COUNTY MAKES NO EXPRESSED OR IMPLIED WARRANTY OF ANY KIND WHATSOEVER WITH RESPECT TO THE PROPERTY. THE COUNTY DISCLAIMS ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO: THE MERCHANTABILITY OF THE PROPERTY OR ITS FITNESS FOR ANY PARTICULAR PURPOSE, THE DESIGN OR CONDITION OF THE PROPERTY, THE QUALITY OR CAPACITY OF THE PROPERTY, THE WORKMANSHIP IN THE PROPERTY, COMPLIANCE OF THE PROPERTY WITH THE REQUIREMENTS OF ANY LAW, RULE, SPECIFICATION OR CONTRACT PERTAINING TO THE PROPERTY, PATENT INFRINGEMENT, AND LATENT DEFECTS.

By my signature below, I acknowledge that I have read and agree to all aforementioned Bid Terms & Requirements. By my signature below, I also acknowledge that I have the authority to submit this Bid.

Signed Brian Arnold Date 10/18/21

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-402 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Lease Agreement Amendment with Raymond G. Smith for Office Space at 604 Lancaster Avenue

INFORMATION CONTACT:

Christopher J. Boyd, Facilities Management, Division Director 704-283-3868

ACTION REQUESTED:

To authorize the County Manager to negotiate and execute an agreement substantially consistent with this agenda item.

BACKGROUND:

Union County has leased office space at 604 Lancaster Avenue for the past three (3) years and six (6) months to support the Department of Juvenile Justice. The current lease extension is set to expire on December 1, 2021 and the Facilities Management Department recommends extending this lease for another eighteen (18) months. The total amount of leased space and other terms will remain the same except the lease rate. The monthly lease rate will increase by approximately three (3) percent to $6,753.05 per month beginning on June 1, 2022. The extension will terminate on May 31, 2023, unless otherwise amended by mutual written consent of both parties.

FINANCIAL IMPACT:

The total cost of the lease extension is $120,374.76 payable in eighteen (18) monthly installment payments. There are sufficient funds in the Rental of Real Property account to cover this expense.

STATE OF NORTH CAROLINA

AMENDMENT #3

COUNTY OF UNION

This Amendment, made and entered into as of the _____, by and between UNION COUNTY, a political subdivision of the State of North Carolina, hereinafter referred to as "Tenant," and RAYMOND G. SMITH, hereinafter referred to as "Landlord," shall modify as indicated that Commercial Lease Agreement between the parties dated June 1, 2018, as modified by amendments dated July 19, 2018 and July 8, 2021, hereinafter referred to as the "Lease."

W I T N E S S E T H:

WHEREAS, the parties entered into a Lease for certain Premises located on Cedar Street in Monroe, NC, which Premises would be utilized for Juvenile Justice offices; and

WHEREAS, the term of the Lease is set to expire on December 1, 2021. The parties now desire to extend the terms of the Lease for an additional eighteen (18) months;

NOW, THEREFORE, in consideration of the parties' continuing obligations under the Lease and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto do each contract and agree with the other as follows:

1. Lease Term. Effective upon the execution of this Amendment, the term of the Lease shall be extended eighteen (18) months from December 1, 2021 to May 31, 2023.

2. Rental Payments. Beginning December 1, 2021, Tenant shall pay Landlord six (6) equal monthly installment payments of $6,556.36. Beginning June 1, 2022, Tenant shall pay Landlord twelve (12) equal monthly installment payments of $6,753.05. Landlord and Tenant agree that all of Tenant's rights in, and obligation to pay rent for, the leased Premises pursuant to the Lease shall terminate as of 11:59 p.m. on May 31, 2023, unless otherwise amended by mutual written consent of the parties.

3. Except as herein amended, the terms and provisions of the Lease shall remain in full force and effect.

[Remainder of page intentionally left blank. Signatures follow on the next page.]

IN WITNESS WHEREOF, the parties hereto, acting under authority of their respective governing bodies, have caused this Amendment to be duly executed, this the day and year first above written.

WITNESS:	UNION COUNTY
By: _____ Lynn West, Clerk to the Board	By: _____ William M. Watson, County Manager
WITNESS:	RAYMOND G. SMITH
By: _____	By: _____(SEAL)

Approved as to Legal Form CJB

This Instrument Has Been Preaudited In The
Manner Required By The Local Government
Budget And Fiscal Control Act

_____
Deputy Finance Officer

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-404 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Purchase of Voting, Precinct and Ballot Storage Systems from Patterson Pope for the Board of Elections Addition and Renovation Project

INFORMATION CONTACT:

Christopher J. Boyd, Facilities Management, Division Director 704-283-3868

ACTION REQUESTED:

To authorize the County Manager to negotiate and execute an agreement substantially consistent with this agenda item.

BACKGROUND:

As part of the Board of Elections Addition and Renovation project, Facilities Management coordinated with the Board of Elections staff and the design team for the selection of storage systems to be used for voting equipment, precinct and ballot storage.

NC State Contract 420A will be used for the majority of the purchase. The total cost of the purchase is $106,865.97 and includes $13,711.29 in material costs listed as off-contract.

FINANCIAL IMPACT:

The total cost of the purchase is $106,865.97. There are sufficient funds in Capital Account 40080107 - Board of Elections Renovations to cover this expense.

UNION COUNTY
north carolina

Memorandum

To: Cheryl Wright, Director of Procurement and Contract Management

From: Christopher Boyd

Date: October 15, 2021

Re: Justification for Procurement Exception – Solicitation of Three Verbal Quotes

---

Pursuant to Union County Procurement Policy, Purchase of Goods, Section II, C, which states, in part, "…If in the judgement of the Division Director…the solicitation of three verbal quotations is…not in the interest of Union County, then the Division Director may purchase the item after…recording the justification for securing fewer than three (quotations)." The justification for this purchase is as follows:

Facilities needs to purchase Voting and Precinct storage equipment. The purchase of the shelving system and installation can be provided by Patterson Pope under NC State Contract 420A. However, $13,711.29 of the total material cost is listed as off-contract. Facilities Staff has checked the market and determined that this price is practical.

Therefore, it is my recommendation that Union County move forward with purchasing off-contract Voting and Precinct storage equipment from Paterson Pope in the amount of $13,711.29. I believe this purchase to be reasonable and in the best interest of Union County.

REQ.#_____

UNIONCOUNTY
north carolina

Purchase Requisition Request Form

Division of Facilities Management
500 N. Main St., Suite 500
Monroe, NC 28112
(704) 296-4248

Friday, October 15, 2021

Location: Board of Elections

Budget Code: 40080107 - 5580

Cost: $106,865.97

☐ **Funds Available __**

Vendor/Contractor: Patterson Pope

Brief Description:

Room 134 - Spacesaver shelving designed for misc voting equipment storage.
Room123 - Spacesaver shelving designed for misc precinct storage.Includes cabinets with locking doors on casters.
Room 124 - Spacesaver shelving designed for misc ballot storage.
Room 128 - Spacesaver shelving designed for archive ballot storage.
All freight, local delivery and Installation is included. Field measuring prior to ordering to confirm all rooms.

Requestor: Linda Whitaker

Director: _____ **Date**: _____

End User Quote

End User
Project Name: UNION COUNTY BOARD OF ELECTIONS
Contact Name:
Contact Phone:

Distributor Info
Name: Spacesaver Corporation
Salesperson: GARRETT,MICHAEL
Project #: 324616
Contract Pricing: Yes
Quickship Pricing: No
Contract Name: North Carolina, State of
Contract Number: 420A Furniture
List Price: North Carolina, State of (2019)
ETO Leadtime: Not Applicable
MLT Leadtime: 14
ESD: 01/07/2022

Lead times (ESD) are approximate and subject to change, based on order volume and the exact product mix on your order. Please use them as a guide for planning purposes only.

Date Printed: 09/27/2021
Filename: P:\Projects\Charlotte\Garrett, Michael\Union County\324616 Board of Elections\324616 1D.om

BALLOT STORAGE, 128

Qty	UM	Part Number	Color	Description	Unit Weight	Total Weight	Unit List Price	Total List Price
Charge								
1		MATSURCHARGE		Material Surcharge	0.00	0.00	$264.65	$264.65
Total Charge Weight 0.00							Total Charge List Price	$264.65
							Discount of 0.0 %	$0.00
							Total Charge Net	$264.65
4-Post and Case Shelving								
6	EA	CP		CLOTHESPIN	0.02	0.12	$2.95	$17.70
77	EA	SF-3015-P	TBD	Plain Shelf, 4Post, Single-Face, 30W x 15D x 0.75H	4.88	375.76	$21.00	$1,617.00
35	EA	SF-4215-P	TBD	Plain Shelf, 4Post, Single-Face, 42W x 15D x 0.75H	6.11	213.85	$28.50	$997.50
154	EA	SS-3014-F	TBD	SHELF SUPPORT,30 X 14	1.50	231.00	$5.45	$839.30
70	EA	SS-4211-F	TBD	SHELF SUPPORT,42 X 11	2.78	194.60	$10.75	$752.50
14	EA	US-1588-CA	TBD	Upright, 4Post, Closed Angle, 15D x 88.25H	20.00	280.00	$86.50	$1,211.00
9	EA	US-1588-CT	TBD	Upright, 4Post, Closed Tee, 15D x 88.25H	24.00	216.00	$97.00	$873.00
11	EA	UWA	TBD	UPRIGHT WALL ANCHOR	0.38	4.18	$14.00	$154.00
Total 4-Post and Case Shelving Weight 1,515.51							Total 4-Post and Case Shelving List Price	$6,462.00
							Discount of 54.3 %	$3,508.87
							Total 4-Post and Case Shelving Net	$2,953.13
4-Post and Case Shelving- off contract								
11	EA	FB-3004	TBD	FRONT BASE, 30W X 4H	1.75	19.25	$9.25	$101.75
5	EA	FB-4204	TBD	FRONT BASE, 42W X 4H	2.50	12.50	$10.50	$52.50
Total 4-Post and Case Shelving- off contract Weight 31.75							Total 4-Post and Case Shelving- off contract List Price	$154.25
							Discount of 54.3 %	$83.76
							Total 4-Post and Case Shelving- off contract Net	$70.49
Total Weight 1,547.26							Total List Price	$6,880.90
							Total Discount of 52.2 %	$3,592.62
							Total Net Dollars	$3,288.28

End User Quote

End User
Project Name: UNION COUNTY BOARD OF ELECTIONS
Contact Name:
Contact Phone:

Distributor Info

Name:	Spacesaver Corporation
Salesperson:	GARRETT,MICHAEL
Project #:	324616
Contract Pricing:	Yes
Quickship Pricing:	No
Contract Name:	North Carolina, State of
Contract Number:	420A Furniture
List Price:	North Carolina, State of (2019)
ETO Leadtime:	Not Applicable
MLT Leadtime:	14
ESD:	01/07/2022

Lead times (ESD) are approximate and subject to change, based on order volume and the exact product mix on your order. Please use them as a guide for planning purposes only.

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Qty	UM	Part Number	Color	Description	Unit Weight	Total Weight	Unit List Price	Total List Price
OFFICE, 170								
Charge								
1		MATSURCHARGE		Material Surcharge	0.00	0.00	$34.67	$34.67
Total Charge Weight 0.00							Total Charge List Price	$34.67
							Discount of 0.0 %	$0.00
							Total Charge Net	$34.67
4-Post and Case Shelving								
1	EA	BH-30	TBD	Back Holder, 4Post/Case, 30W	0.50	0.50	$7.95	$7.95
1	EA	BP-3076	TBD	Back Panel, 4Post/Case, 30W x 76.25H	16.00	16.00	$134.00	$134.00
8	EA	SF-3030-P	TBD	Plain Shelf, 4Post, Double-Face, 30W x 30D x 0.75H	8.50	68.00	$39.00	$312.00
14	EA	SR-30-F	TBD	SHELF REINFORCEMENT,30	1.17	16.38	$5.55	$77.70
16	EA	SS-3014-F	TBD	SHELF SUPPORT,30 X 14	1.50	24.00	$5.45	$87.20
2	EA	US-3076-CA	TBD	Upright, 4Post, Closed Angle, 30D x 76.25H	26.25	52.50	$106.00	$212.00
2	EA	UWA	TBD	UPRIGHT WALL ANCHOR	0.38	0.76	$14.00	$28.00
Total 4-Post and Case Shelving Weight 178.14							Total 4-Post and Case Shelving List Price	$858.85
							Discount of 54.3 %	$466.36
							Total 4-Post and Case Shelving Net	$392.49
4-Post and Case Shelving- off contract								
1	EA	FB-3002	TBD	FRONT BASE, 30W X 2H	1.25	1.25	$8.00	$8.00
Total 4-Post and Case Shelving- off contract Weight 1.25							Total 4-Post and Case Shelving- off contract List Price	$8.00
							Discount of 54.3 %	$4.34
							Total 4-Post and Case Shelving- off contract Net	$3.66
Total Weight 179.39							Total List Price	$901.52
							Total Discount of 52.2 %	$470.70
							Total Net Dollars	$430.82

End User Quote

End User
Project Name: UNION COUNTY BOARD OF ELECTIONS
Contact Name:
Contact Phone:

Distributor Info
Name: Spacesaver Corporation
Salesperson: GARRETT,MICHAEL
Project #: 324616
Contract Pricing: Yes
Quickship Pricing: No
Contract Name: North Carolina, State of
Contract Number: 420A Furniture
List Price: North Carolina, State of (2019)
ETO Leadtime: Not Applicable
MLT Leadtime: 14
ESD: 01/07/2022

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PRECINCT STORAGE, 123

Qty	UM	Part Number	Color	Description	Unit Weight	Total Weight	Unit List Price	Total List Price
Wide Span Shelving								
10	EA	WSBFBS48	TBD	BEAM SUPPORT, WIDE SPAN, FRONT TO BACK, 48L	3.22	32.20	$10.25	$102.50
10	EA	WSBS84	TBD	BEAM, WIDE SPAN, STANDARD, 84L	11.65	116.50	$44.00	$440.00
5	EA	WSDSS1248	TBD	DECKING, WIDE SPAN, FLANGED STEEL SHELF, 18 GA, 12W X 48D	12.73	63.65	$32.50	$162.50
10	EA	WSDSS3648	TBD	DECKING, WIDE SPAN, FLANGED STEEL SHELF, 18 GA, 36W X 48D	34.44	344.40	$52.00	$520.00
2	EA	WSWU2480885	TBD	UPRIGHT, WIDE SPAN, WELDED, 2 INCH POST, 48D X 94.5H	39.20	78.40	$171.00	$342.00
Total Wide Span Shelving Weight 635.15							Total Wide Span Shelving List Price	$1,567.00
							Discount of 46.1 %	$722.39
							Total Wide Span Shelving Net	$844.61
Wide Span Shelving- off contract								
4	EA	WSUAF	TBD	UPRIGHT ANCHOR FOOT, WIDE SPAN	0.84	3.36	$35.50	$142.00
Total Wide Span Shelving- off contract Weight 3.36							Total Wide Span Shelving- off contract List Price	$142.00
							Discount of 46.1 %	$65.46
							Total Wide Span Shelving- off contract Net	$76.54
Charge								
1		MATSURCHARGE		Material Surcharge	0.00	0.00	$1,188.93	$1,188.93
Total Charge Weight 0.00							Total Charge List Price	$1,188.93
							Discount of 0.0 %	$0.00
							Total Charge Net	$1,188.93
4-Post and Case Shelving								
32	EA	BD-1816.5	TBD	Bin Divider, 4Post/Case, 18D x 16.5H	2.00	64.00	$15.50	$496.00
8	EA	BD-1818	TBD	Bin Divider, 4Post/Case, 18D x 18H	4.25	34.00	$25.50	$204.00
3	EA	BH-42	TBD	Back Holder, 4Post/Case, 42W	0.75	2.25	$8.50	$25.50
1	EA	BP-3688	TBD	Back Panel, 4Post/Case, 36W x 88.25H	22.25	22.25	$150.00	$150.00
3	EA	BP-4288	TBD	Back Panel, 4Post/Case, 42W x 88.25H	26.00	78.00	$162.00	$486.00
14	EA	CP		CLOTHESPIN	0.02	0.28	$2.95	$41.30
7	EA	SF-3024-P	TBD	Plain Shelf, 4Post, Double-Face, 30W x 24D x 0.75H	7.00	49.00	$31.00	$217.00
14	EA	SF-3624-P	TBD	Plain Shelf, 4Post, Double-Face, 36W x 24D x 0.75H	8.25	115.50	$33.25	$465.50
21	EA	SF-4215-P	TBD	Plain Shelf, 4Post, Single-Face, 42W x 15D x 0.75H	6.11	128.31	$28.50	$598.50
210	EA	SF-4224-P	TBD	Plain Shelf, 4Post, Double-Face, 42W x 24D x 0.75H	9.75	2,047.50	$42.50	$8,925.00

End User Quote

End User
Project Name: UNION COUNTY BOARD OF ELECTIONS
Contact Name:
Contact Phone:

Distributor Info
Name: Spacesaver Corporation
Salesperson: GARRETT,MICHAEL
Project #: 324616
Contract Pricing: Yes
Quickship Pricing: No
Contract Name: North Carolina, State of
Contract Number: 420A Furniture
List Price: North Carolina, State of (2019)
ETO Leadtime: Not Applicable
MLT Leadtime: 14
ESD: 01/07/2022

Lead times (ESD) are approximate and subject to change, based on order volume and the exact product mix on your order. Please use them as a guide for planning purposes only.

Date Printed: 09/27/2021
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Qty	UM	Part Number	Color	Description	Unit Weight	Total Weight	Unit List Price	Total List Price
14	EA	SF-4818-P	TBD	Plain Shelf, 4Post, Single-Face, 48W x 18D x 0.75H	8.25	115.50	$37.25	$521.50
24	EA	SF-4818-S	TBD	Slotted Shelf, 4Post, Single-Face, 48W x 18D x 0.75H	8.25	198.00	$37.25	$894.00
32	EA	SR-18-F	TBD	SHELF REINFORCEMENT,18	0.75	24.00	$3.85	$123.20
378	EA	SR-24-F	TBD	SHELF REINFORCEMENT,24	0.96	362.88	$4.50	$1,701.00
14	EA	SS-3014-F	TBD	SHELF SUPPORT,30 X 14	1.50	21.00	$5.45	$76.30
28	EA	SS-3614-F	TBD	SHELF SUPPORT,36 X 14	1.75	49.00	$6.10	$170.80
462	EA	SS-4211-F	TBD	SHELF SUPPORT,42 X 11	2.78	1,284.36	$10.75	$4,966.50
76	EA	SS-4811-F	TBD	SHELF SUPPORT,48 X 11	3.14	238.64	$12.75	$969.00
2	EA	US-1588-CA	TBD	Upright, 4Post, Closed Angle, 15D x 88.25H	20.00	40.00	$86.50	$173.00
2	EA	US-1588-CT	TBD	Upright, 4Post, Closed Tee, 15D x 88.25H	24.00	48.00	$97.00	$194.00
6	EA	US-1888-CA	TBD	Upright, 4Post, Closed Angle, 18D x 88.25H	22.00	132.00	$91.50	$549.00
3	EA	US-1888-CT	TBD	Upright, 4Post, Closed Tee, 18D x 88.25H	26.00	78.00	$102.00	$306.00
24	EA	US-2488-CA	TBD	Upright, 4Post, Closed Angle, 24D x 88.25H	26.25	630.00	$102.00	$2,448.00
21	EA	US-2488-CT	TBD	Upright, 4Post, Closed Tee, 24D x 88.25H	30.00	630.00	$118.00	$2,478.00
28	EA	UWA	TBD	UPRIGHT WALL ANCHOR	0.38	10.64	$14.00	$392.00

Total 4-Post and Case Shelving Weight 6,403.11

Total 4-Post and Case Shelving List Price $27,571.10
Discount of 54.3 % $14,971.11
Total 4-Post and Case Shelving Net $12,599.99

4-Post and Case Shelving- off contract

1	EA	FB-3004	TBD	FRONT BASE, 30W X 4H	1.75	1.75	$9.25	$9.25
2	EA	FB-3604	TBD	FRONT BASE, 36W X 4H	2.00	4.00	$9.25	$18.50
33	EA	FB-4204	TBD	FRONT BASE, 42W X 4H	2.50	82.50	$10.50	$346.50
6	EA	FB-4804	TBD	FRONT BASE, 48W X 4H	3.00	18.00	$11.50	$69.00

Total 4-Post and Case Shelving- off contract Weight 106.25

Total 4-Post and Case Shelving- off contract List Price $443.25
Discount of 54.3 % $240.68
Total 4-Post and Case Shelving- off contract Net $202.57

Total Weight 7,147.87

Total List Price $30,912.28
Total Discount of 51.8 % $15,999.64
Total Net Dollars $14,912.64

End User Quote

End User
Project Name: UNION COUNTY BOARD OF ELECTIONS
Contact Name:
Contact Phone:

Distributor Info

Name:	**Spacesaver Corporation**
Salesperson:	**GARRETT,MICHAEL**
Project #:	**324616**
Contract Pricing:	**Yes**
Quickship Pricing:	**No**
Contract Name:	**North Carolina, State of**
Contract Number:	**420A Furniture**
List Price:	**North Carolina, State of (2019)**
ETO Leadtime:	**Not Applicable**
MLT Leadtime:	**14**
ESD:	**01/07/2022**

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VOTING EQ, 134

Qty	UM	Part Number	Color	Description	Unit Weight	Total Weight	Unit List Price	Total List Price
Buyout- off contract								
7	-	L 4		-	0.00	0.00		
Total Buyout- off contract Weight 0.00							Total Buyout- off contract List Price	$0.00
							Discount of 0.0 %	$0.00
							Total Buyout- off contract Net	$0.00
Cantilever Shelving								
10	EA	CBSF-36	TBD	Shelf Filler, Cantilever, Base, 3H, 36W	2.00	20.00	$19.25	$192.50
10	EA	CBSPB-3613	TBD	Base Shelf, Cantilever, Plain, w/End Brackets, 36W x 13D	13.25	132.50	$82.00	$820.00
10	EA	CCTSB-3613	TBD	Canopy Top, Cantilever, Single-Face, w/Brackets, 13D, 36W	10.50	105.00	$112.00	$1,120.00
9	EA	CSBGC13L28	TBD	CANTILEVER SGL BASE GUSSET COUNTERTOP, LEFT	5.75	51.75	$42.00	$378.00
1	EA	CSBGS13L70	TBD	CANTILEVER SINGL BASE GUSSET, SEISMIC,LEFT, FRMWRX	10.75	10.75	$103.00	$103.00
1	EA	CSBGS13R70	TBD	CANTILEVER SINGL BASE GUSSET, SEISMIC, RIGHT, FRMWRX	10.75	10.75	$103.00	$103.00
20	EA	CST3613	TBD	CANT.SHELF TRAY,BIN STORAGE	11.50	230.00	$82.00	$1,640.00
10	EA	CWAB	TBD	CANTILEVER - WALL ANCHOR BRACKET	0.41	4.10	$3.65	$36.50
10	EA	CWF-8436	TBD	WELDED FRAME,CANT 84 X 36	26.50	265.00	$150.00	$1,500.00
Total Cantilever Shelving Weight 829.85							Total Cantilever Shelving List Price	$5,893.00
							Discount of 47.2 %	$2,781.50
							Total Cantilever Shelving Net	$3,111.50
Wide Span Shelving								
162	EA	WSBFBS24	TBD	BEAM SUPPORT, WIDE SPAN, FRONT TO BACK, 24L	1.61	260.82	$6.50	$1,053.00
162	EA	WSBS84	TBD	BEAM, WIDE SPAN, STANDARD, 84L	11.65	1,887.30	$44.00	$7,128.00
81	EA	WSDSS1224	TBD	DECKING, WIDE SPAN, FLANGED STEEL SHELF, 18 GA, 12W X 24D	6.82	552.42	$27.00	$2,187.00
162	EA	WSDSS3624	TBD	DECKING, WIDE SPAN, FLANGED STEEL SHELF, 18 GA, 36W X 24D	18.62	3,016.44	$36.00	$5,832.00
16	EA	WSUTP		UPRIGHT TIE PLATE, BACK TO BACK, WITHOUT ADJUSTABLE BEAMS	0.52	8.32	$10.50	$168.00
12	EA	WSWU2241350	TBD	UPRIGHT, WIDE SPAN, WELDED, 2 INCH POST, 24D X 142.5H	46.20	554.40	$238.00	$2,856.00
4	EA	WSWU2241440	TBD	UPRIGHT, WIDE SPAN, WELDED, 2 INCH POST, 24D X 144H	46.60	186.40	$216.00	$864.00

End User Quote

End User
Project Name: UNION COUNTY BOARD OF ELECTIONS
Contact Name:
Contact Phone:

Distributor Info
Name: Spacesaver Corporation
Salesperson: GARRETT,MICHAEL
Project #: 324616
Contract Pricing: Yes
Quickship Pricing: No
Contract Name: North Carolina, State of
Contract Number: 420A Furniture
List Price: North Carolina, State of (2019)
ETO Leadtime: Not Applicable
MLT Leadtime: 14
ESD: 01/07/2022

Lead times (ESD) are approximate and subject to change, based on order volume and the exact product mix on your order. Please use them as a guide for planning purposes only.

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Qty	UM	Part Number	Color	Description	Unit Weight	Total Weight	Unit List Price	Total List Price
Total Wide Span Shelving Weight 6,466.10						Total Wide Span Shelving List Price		$20,088.00
						Discount of 46.1 %		$9,260.57
						Total Wide Span Shelving Net		$10,827.43
Wide Span Shelving- off contract								
32	EA	WSUAF	TBD	UPRIGHT ANCHOR FOOT, WIDE SPAN	0.84	26.88	$35.50	$1,136.00
Total Wide Span Shelving- off contract Weight 26.88						Total Wide Span Shelving- off contract List Price		$1,136.00
						Discount of 46.1 %		$523.70
						Total Wide Span Shelving- off contract Net		$612.30
Healthcare Work Surfaces- off contract								
10	EA	CSWS36RE	TBD	CANT.SOLID WORK SURFACE,RECT.	34.00	340.00	$449.00	$4,490.00
10	EA	CWSB13	TBD	CANTILEVER WORK SURFACE SUPPORT BRACKET	5.00	50.00	$91.00	$910.00
Total Healthcare Work Surfaces- off contract Weight 390.00						Total Healthcare Work Surfaces- off contract List Price		$5,400.00
						Discount of 46.1 %		$2,489.40
						Total Healthcare Work Surfaces- off contract Net		$2,910.60
Charge								
1		MATSURCHARGE		Material Surcharge	0.00	0.00	$3,806.25	$3,806.25
Total Charge Weight 0.00						Total Charge List Price		$3,806.25
						Discount of 0.0 %		$0.00
						Total Charge Net		$3,806.25
4-Post and Case Shelving								
35	EA	CP		CLOTHESPIN	0.02	0.70	$2.95	$103.25
482	EA	SF-4224-P	TBD	Plain Shelf, 4Post, Double-Face, 42W x 24D x 0.75H	9.75	4,699.50	$42.50	$20,485.00
844	EA	SR-24-F	TBD	SHELF REINFORCEMENT,24	0.96	810.24	$4.50	$3,798.00
964	EA	SS-4211-F	TBD	SHELF SUPPORT,42 X 11	2.78	2,679.92	$10.75	$10,363.00
Total 4-Post and Case Shelving Weight 8,190.36						Total 4-Post and Case Shelving List Price		$34,749.25
						Discount of 54.3 %		$18,868.84
						Total 4-Post and Case Shelving Net		$15,880.41
4-Post and Case Shelving- off contract								
60	EA	FB-4204	TBD	FRONT BASE, 42W X 4H	2.50	150.00	$10.50	$630.00
20	EA	US-24124.25-CA	TBD	UPRIGHT, 4POST, CLOSED ANGLE, 24D X 133.25H	39.00	780.00	$358.00	$7,160.00
50	EA	US-24124.25-CT	TBD	UPRIGHT, 4POST, CLOSED TEE, 24D X 133.25H	39.00	1,950.00	$402.00	$20,100.00

End User Quote

End User
Project Name: UNION COUNTY BOARD OF ELECTIONS
Contact Name:
Contact Phone:

Distributor Info

Name:	**Spacesaver Corporation**
Salesperson:	**GARRETT,MICHAEL**
Project #:	**324616**
Contract Pricing:	**Yes**
Quickship Pricing:	**No**
Contract Name:	**North Carolina, State of**
Contract Number:	**420A Furniture**
List Price:	**North Carolina, State of (2019)**
ETO Leadtime:	**Not Applicable**
MLT Leadtime:	**14**
ESD:	**01/07/2022**

Lead times (ESD) are approximate and subject to change, based on order volume and the exact product mix on your order. Please use them as a guide for planning purposes only.

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Qty	UM	Part Number	Color	Description	Unit Weight	Total Weight	Unit List Price	Total List Price

Total 4-Post and Case Shelving- off contract Weight 2,880.00

Total 4-Post and Case Shelving- off contract List Price	$27,890.00
Discount of 54.3 %	$15,144.27
Total 4-Post and Case Shelving- off contract Net	$12,745.73

Total Weight 18,783.19

Total List Price	$98,962.50
Total Discount of 49.6 %	$49,068.27
Total Net Dollars	$49,894.23

Non SSC Items

Installation	$0.00
Freight	$0.00

Grand Total Weight 27,657.71

Grand Total List Price	$137,657.21
Grand Total Discount of 50.220 %	$69,131.24
Grand Total Net Price	$68,525.97

patterson·pope
SPACE MADE SIMPLE.

Proposal

Quote #: Q-42533-1
Drawing Ver: 324616 1D NC State Contract
Date: 9/27/2021
Expires On: 12/31/2021

Patterson Pope
Remit To:
10321 S. Medallion Dr.
Cincinnati, OH 45241
Phone: (704) 523-4400
Fax: (704) 523-4499

Install To
Union County Board of Elections
316 East Windsor Street
Monroe, NC 28112

Bill To
,

SALESPERSON	EMAIL	DELIVERY METHOD	PAYMENT METHOD
Michael Garrett	mgarrett@pattersonpope.com		Net 10

Room 134 - Spacesaver shelving designed for misc voting equipment storage.
Room123 - Spacesaver shelving designed for misc precinct storage.Includes cabinets with locking doors on casters.
Room 124 - Spacesaver shelving designed for misc ballot storage.
Room 128 - Spacesaver shelving designed for archive ballot storage.
All freight, local delivery and Installation is included. Field measuring prior to ordering to confirm all rooms.

Group Name	Description	Net Total
Spacesaver Material NC State Contract	Please see plans for details and NC State contract pdf for discount structure per room.	$68,525.97
Installation & Services	Installation, local delivery during normal business hours.	$38,340.00

Sub Total:	$106,865.97
Estimated Total Tax:	7,213.45
Grand Total:	**$114,079.42**

Pricing per NC State Contract 420A.PO issued to Patterson Pope in c/o Spacesaver Corp.
Important Proposal Notes
Applicable sales tax and final shipping charges will be added to the invoice if not indicated above.

Patterson Pope requires a purchase order (or signed quote) for each individual accepted quote.

Please provide sign off on final drawing(s). Indicate color choices on your PO.

Patterson Pope offers custom manufactured solutions to fit your unique space. For this reason no product can be ordered until a representative from Patterson Pope is able to field verify all dimensions.

Signature below indicates acceptance of this proposal and of the attached terms and conditions.

Signature: _____ **Effective Date:** _____/_____/_____

Name (Print): _____ **Title:** _____

Please sign and email to Michael Garrett at mgarrett@pattersonpope.com.

THANK YOU FOR YOUR BUSINESS!

Patterson Pope Terms and Conditions The following terms and conditions shall apply to any Deliverables (defined herein) provided by Patterson Pope, Inc. ("Company") to Client.

1. **Acceptance and Agreement:** The provisions on the pricing page, the purchase order and these Terms and Conditions (collectively, the "Agreement") constitute the entire agreement between Company and Client and supersede all other communications between the parties, whether written or oral, regarding the products and services described in this Agreement ("Deliverables"). The terms of this Agreement are expressly limited to those provided herein, and no purported modification, addition, or waiver of the provisions hereof shall be binding on Company for any purposes unless contained in writing, signed by an authorized representative of Company. The provisions hereof shall be deemed to have been accepted by Client's acceptance of all or any part of the Deliverables. All orders or any changes to such orders shall be subject to acceptance by Company. Change orders requested after receipt of Client purchase order may also incur additional charges. If, for any reason, Client cancels the order, any cancellation, restocking and handling charges will be invoiced. Future purchase orders (or similar engagement documents) and associated pricing pages may reference these Terms and Conditions, and by such reference, these Terms and Conditions shall be incorporated therein.

2. **Payment and Pricing:** Pricing quoted on the pricing page supersedes all previously quoted prices and is good for 60 days from the date of this Agreement. The pricing page may or may not include applicable sales or other taxes required by law; such taxes will be billed to Client and are Client's sole responsibility. This system has been custom designed and will be specially manufactured for your unique requirements. A non-refundable down payment of 40% is due upon order, 30% is due at the time of shipment and 30% is due at the time of completion. Client shall have no authority to assert any offsets or discounts against any payment due, except as expressly agreed to by Company in the pricing page or other signed writing. Client represents and warrants to Company that it is solvent at the time this Agreement is made. Client hereby grants a security interest in the product Deliverables to secure payment to Company and consents to Company filing a financing statement to perfect such security.

3. **Space Requirements:** This system has been specially designed to meet Client's specific requirements; as such, most of the equipment is manufactured on a "per job" basis. Client shall allow Company's representative(s) reasonable access to Client's facilities to confirm whether the space where the Deliverables will be installed matches Client's representations. In the event that the space cannot be field verified before the Deliverables must be ordered and the actual space does not match what had been previously represented, Client is responsible for any delays and additional costs incurred to reconfigure the Deliverables to fit actual space (i.e. extra material, labor, and freight). Notwithstanding any field verification by Company, it is Client's responsibility to be certain the space is suitable for the installation of this equipment (i.e. adequate fire protection and floor load capacity).

4. **Acceptance:** Client shall accept the Deliverables which conform to the requirements of specifications under this Agreement. All claims for errors, shortages, or damage ("Non-conformance") must be made in writing to the respective Account Representative within ten (10) days of Client's receipt of any Deliverables, and Company shall have a reasonable period of time, based on the severity and complexity of the Non-conformance, to correct the Non-conformance. If Client uses the Deliverables before acceptance or fails to promptly notify Company of any Non-conformance then the Deliverables shall be considered accepted by the Client.

5. **Freight and Shipping:** Freight and shipping terms are detailed on the pricing page. In the event that Client or one of its agents refuses delivery for whatever reason on or after the estimated delivery date, Client will be responsible for the payments in accordance to Section 2 and the pricing page in addition to any supplemental storage charges incurred by Company as a result of the delay *unless* the delay is caused by Company, one of its manufacturers, freight carriers, subcontractors, and/or any other agent acting on Company's behalf.

6. **Limited Warranty:** Company warrants its installation services under the Agreement shall be performed with reasonable care in a diligent and competent manner. Company's sole obligation under this warranty shall be to correct any Non-conformance, provided that Client gives Company written notice within ten (10) days after installation is completed. Company does not warrant and is not responsible for any product Deliverables or third party services. Client agrees to look to the third party manufacturer or vendor (and not Company) with respect to all claims regarding such third party products or services as its sole and exclusive remedy. *This section is Company's only warranty concerning the product and service Deliverables, and is made expressly in lieu of, and to disclaim, all other warranties and representations, express or implied, including any implied warranties of merchantability, non-infringement, or fitness for a particular purpose, or otherwise.*

7. **Limitation of Remedy and Liability:** *The maximum liability of Company and Company's principals, directors, officers, agents, employees, personnel, affiliates and their partners shall be the fees Company actually receives under the Agreement for the portion of work giving rise to the liability. In no event shall any of the above be liable to Client or any third party for any indirect, special, incidental, consequential, exemplary or punitive damages of any kind whatsoever in connection with the agreement, including but not limited to lost profits, loss of business opportunity, lost savings, and loss of business information.* Client will bear the risk of loss or damage to, or theft of, any Deliverables once delivery has been made to the Client. Any action against Company must be brought within twelve (12) months after the cause of action arises. Neither party shall be liable for any delays or failures in performance due to circumstances beyond its reasonable control, including but not limited to, strikes, riot, war, fire, flood, storm, explosion, accident, or other acts of God. This contract shall be construed in accordance with the laws of the State of North Carolina (without regard to its choice of law provisions). Claims arising out of or requiring the interpretation of this Agreement shall be brought and litigated exclusively in courts located

within Mecklenburg County, North Carolina, or if a federal court, the court whose district includes Mecklenburg County, North Carolina. This Agreement may not be assigned without prior written consent; provided, however, Company may assign this Agreement in whole or in part, without the Client's consent, in connection with a merger, acquisition, corporate reorganization, or sale of substantially all of the Company's assets, and Client agrees that Company shall be released from any further obligations under this Agreement upon such assignment.

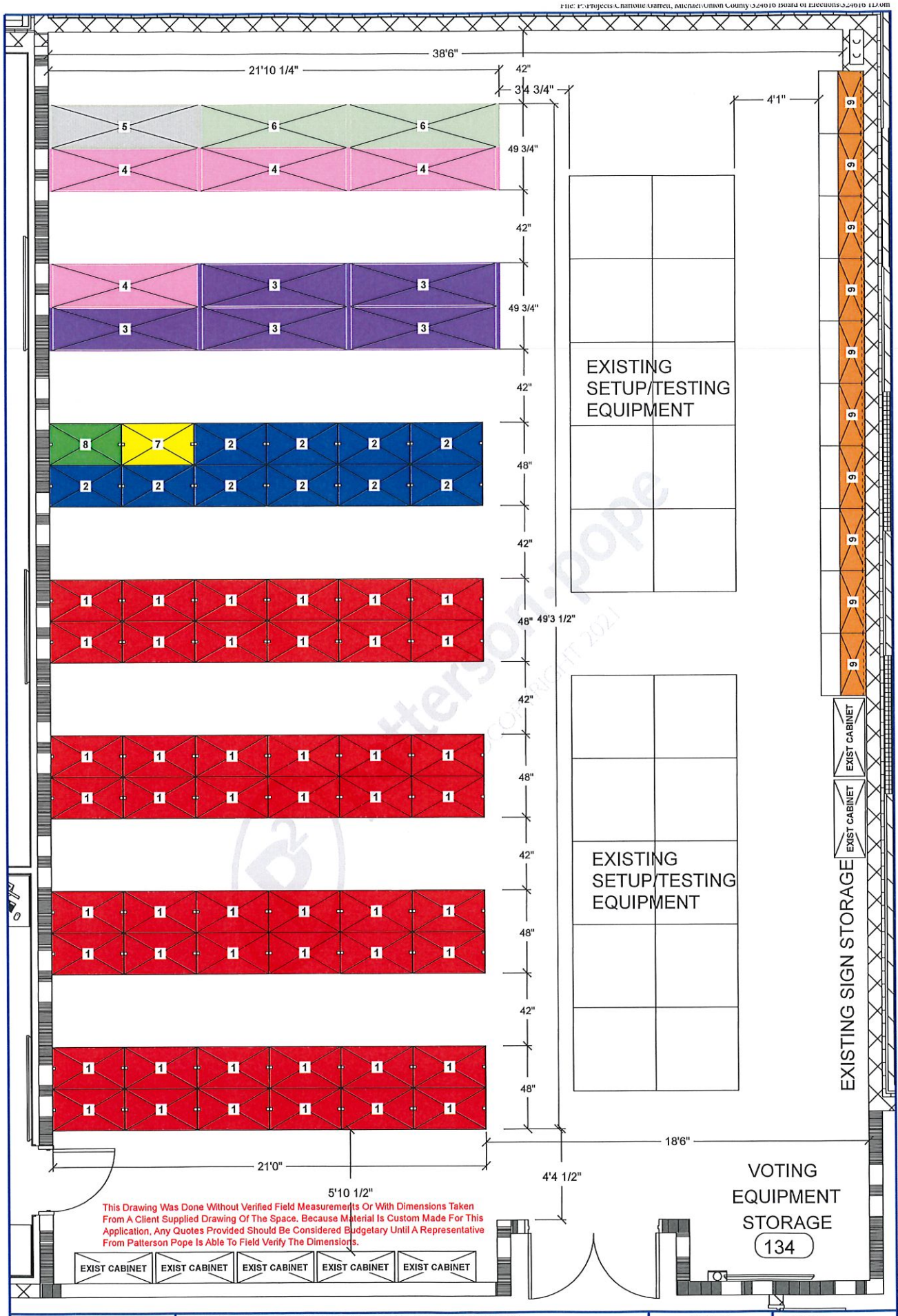
Patterson Pope, Inc. Date

CLIENT Date

(This Agreement may be signed in counterparts and by facsimile or electronic signature by an authorized representative.)

Purchase Order #_____

File: P:\Projects\Charlotte Garrett, Michael\Union County\324616 Board of Elections\324616 1D.dm

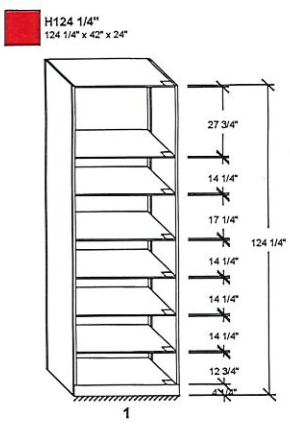


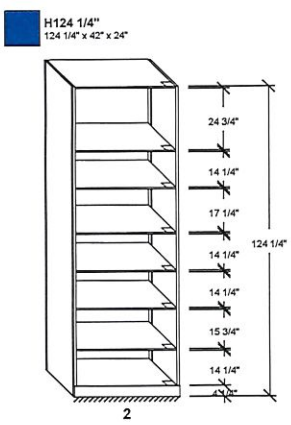
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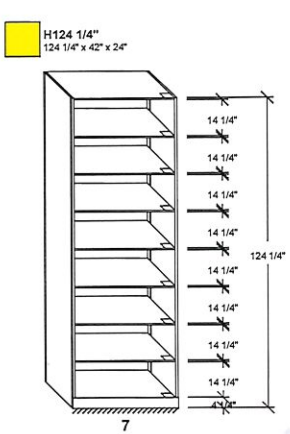
Project Name: UNION COUNTY BOARD OF ELECTIONS			Project #: 324616	APPROVAL This drawing Approved By:
Salesperson: GARRETT,MICHAEL	Scale 1/4" = 1'	Rev level: 1D	Drawn by: R Estridge	
			Date Printed: 09/23/2021	Dated

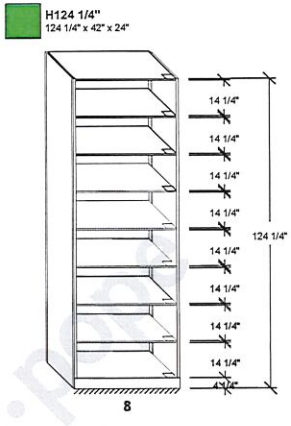
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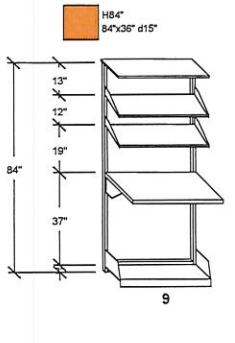
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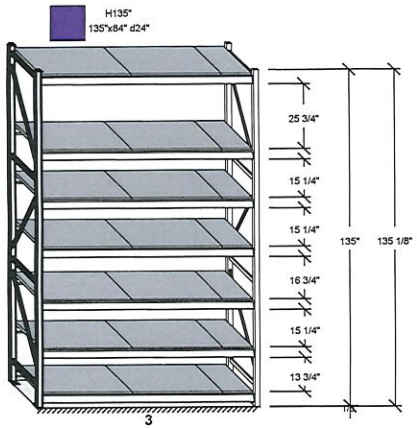


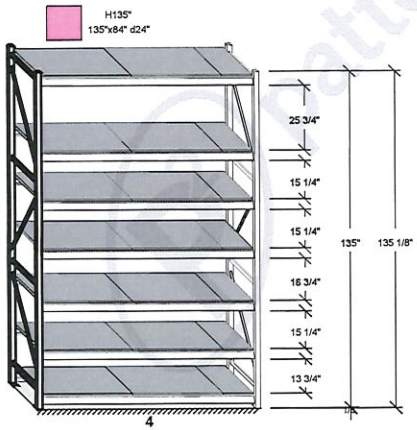


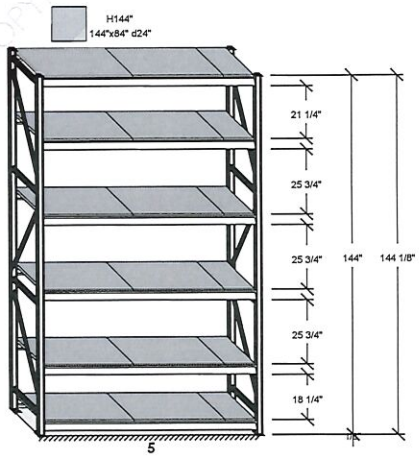


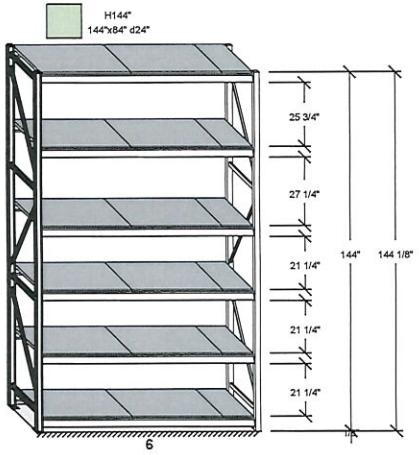












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Project Name: UNION COUNTY BOARD OF ELECTIONS

Salesperson: GARRETT,MICHAEL

Scale: 1/4" = 1'

Rev level: 1D

Project #: 324616

Drawn by: R Estridge

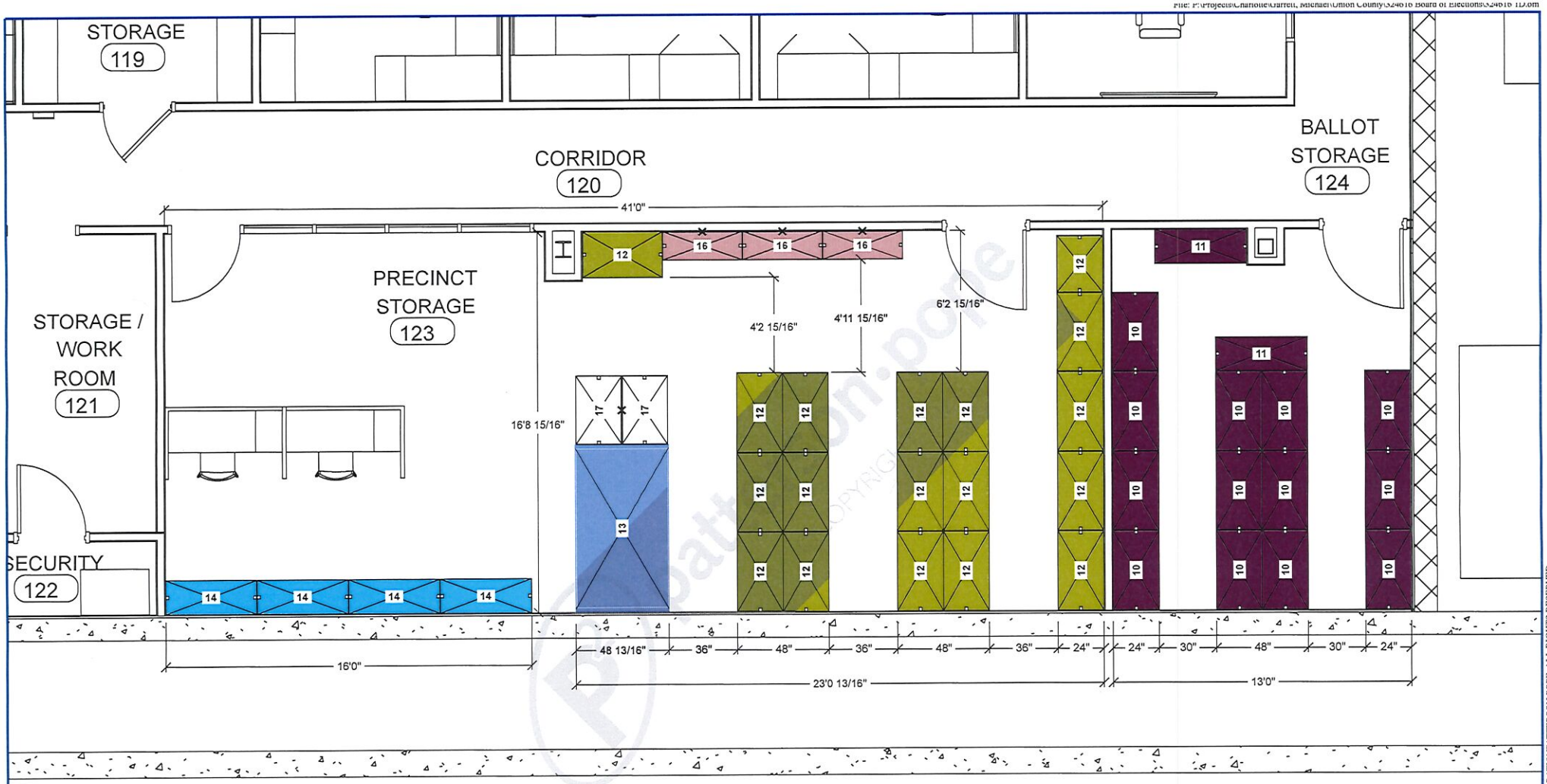
Date Printed: 09/23/2021

APPROVAL
This drawing Approved By:

Dated

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This Drawing Was Done Without Verified Field Measurements Or With Dimensions Taken From A Client Supplied Drawing Of The Space. Because Material Is Custom Made For This Application, Any Quotes Provided Should Be Considered Budgetary Until A Representative From Patterson Pope Is Able To Field Verify The Dimensions.

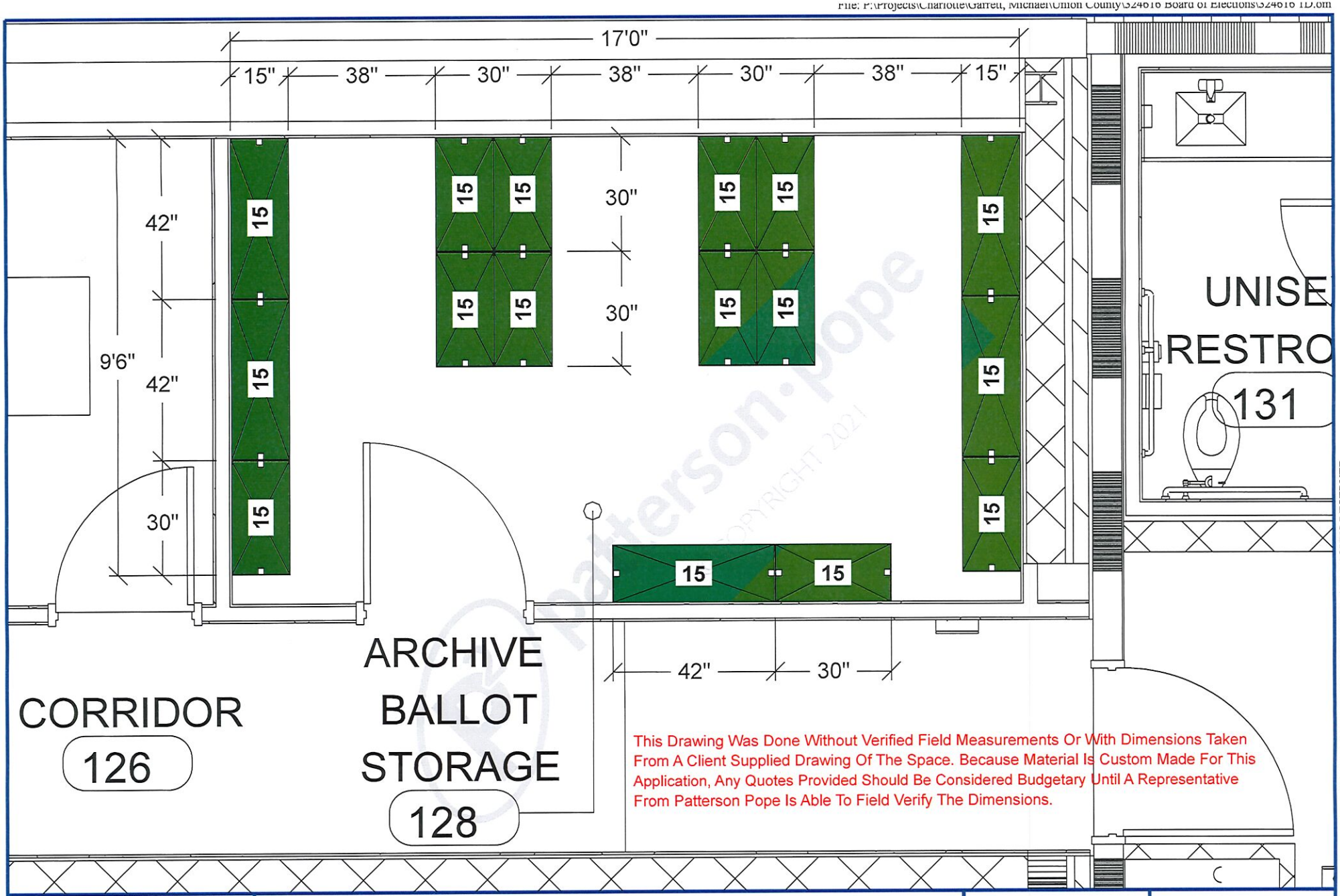
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Project Name: UNION COUNTY BOARD OF ELECTIONS			Project #: 324616	APPROVAL This drawing Approved By:
Salesperson: GARRETT,MICHAEL	Scale 1/4" = 1'	Rev level: 1D	Drawn by: R Estridge	
			Date Printed: 09/23/2021	Dated

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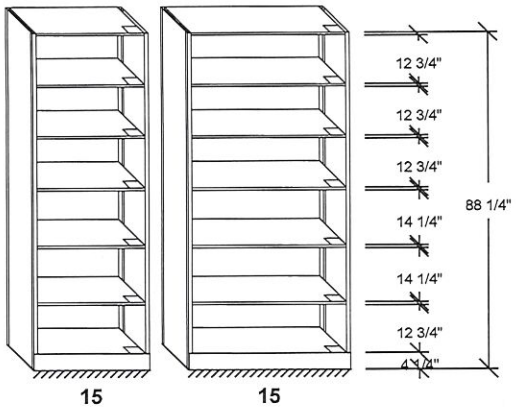
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Salesperson: GARRETT,MICHAEL	Scale 3/8" = 1'	Rev level: 1D	Drawn by: R Estridge
			Date Printed: 09/23/2021
			Dated

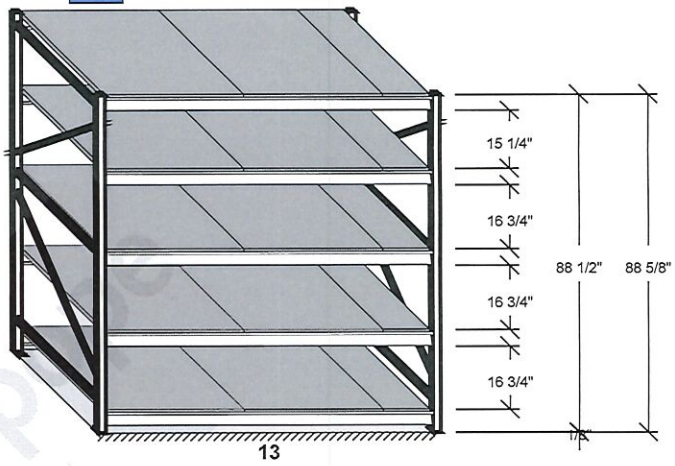
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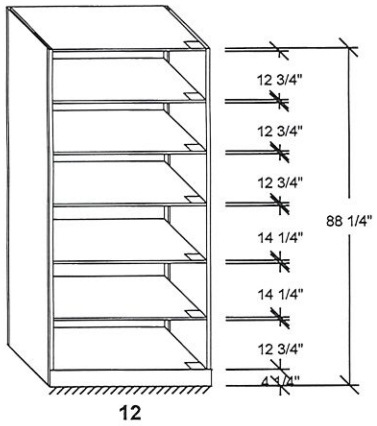
BALLOT STORAGE ROOM SHELVING
30" / 42"W X 15"D



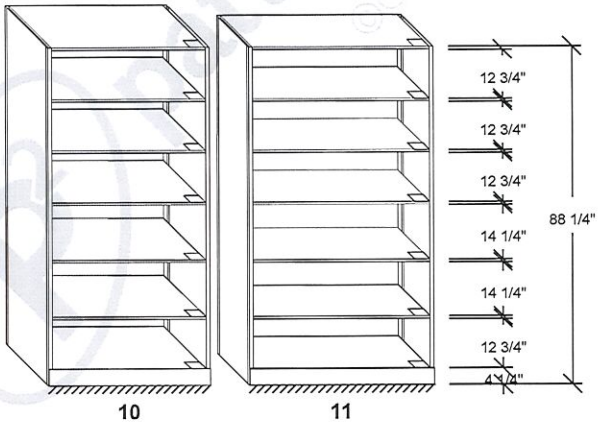
H88 1/2"
88 1/2"x84" d48"



PRECINCT STORAGE
88 1/4" x 42" x 24"

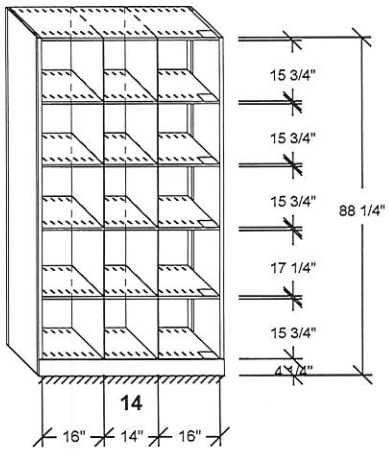


BALLOT STORAGE
88 1/4" x 42" x 24"
48"w x 18"d



(60) CUBBIES

CUBBIES
88 1/4" x 48" x 18"



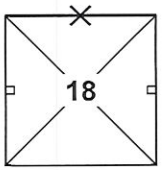
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Project Name: UNION COUNTY BOARD OF ELECTIONS		Project #: 324616	APPROVAL This drawing Approved By:
Salesperson: GARRETT,MICHAEL	Scale 1/4" = 1'	Rev level: 1D	Drawn by: R Estridge
			Date Printed: 09/23/2021
			Dated

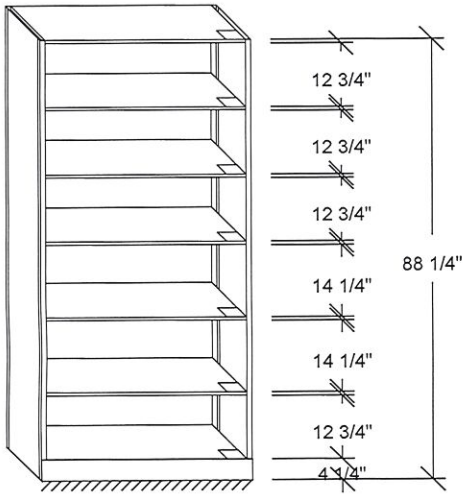
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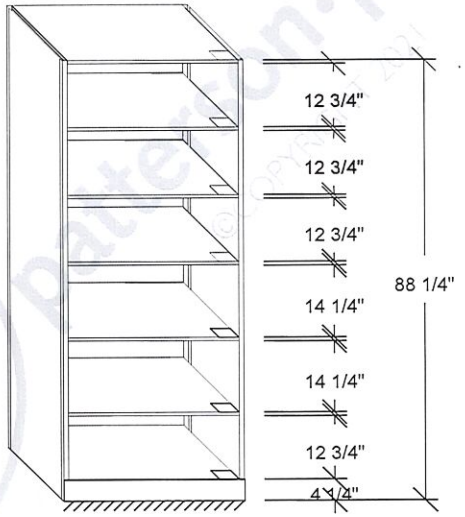


PRECINCT STORAGE SHELVING
42"W X 15"D



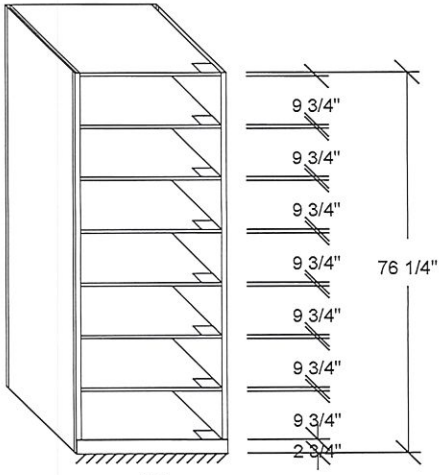
16

PRECINCT STORAGE SHELVING
36"W X 24"D BACK-TO-BACK



17

OFFICE 170 SHELVING
(1) SECTION 30"W X 30"D



18

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Project Name: UNION COUNTY BOARD OF ELECTIONS

Salesperson: GARRETT,MICHAEL

Scale: 1/2" = 1'

Rev level: 1D

Project #: 324616

Drawn by: R Estridge

Date Printed: 09/23/2021

APPROVAL
This drawing Approved By: _____

Dated _____

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Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-415 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Structured Cabling for Sheriff's Office Expansion and Renovations, Emergency Services Complex and Southwest Library Projects

INFORMATION CONTACT:

Christopher J. Boyd, Facilities Management, Division Director 704-283-3868

ACTION REQUESTED:

Accept the low bidder, authorize award of the construction contract to Connectivity, LLC in the amount of $805,310.23, authorize the County Manager to negotiate and execute an agreement consistent with this agenda item, and Adopt Resolution Providing Notice of Structured Cabling Project.

BACKGROUND:

Union County has three (3) capital facility projects underway that will require significant structured cabling as part of the scope of each project. On September 9, 2021, the Procurement Department issued an Invitation for Bids as IFB 2022-023. On September 17, 2021, only one (1) bid was received which required the project to be rebid. The Procurement Department issued an Invitation for Bids as IFB 2022-023 REBID on September 24, 2021. On October 4, 2021, two (2) bids, only one (1) of which was deemed responsive, were received and publicly opened. All bids were tabulated, reviewed and certified by the designer per the attached report. Based on the designer's review and recommendation, staff recommends that the project be awarded to the lowest, responsive bidder, Connectivity, LLC, in the amount of $805,310.23.

FINANCIAL IMPACT:

The total cost of the contract is $805,310.23. There are sufficient funds to cover this expense in Capital Accounts 40080109 - Emergency Services Complex, 40080080 - Sheriff's Office Renovations and 40080096 - Southwest Union Library.

RESOLUTION OF THE UNION COUNTY BOARD OF COMMISSIONERS PROVIDING NOTICE OF UNION COUNTY STRUCTURED CABLING PROJECT CONSTRUCTION

WHEREAS, pursuant to G.S § 153A-457, a county shall notify property owners and adjacent property owners prior to commencement of any construction project by the county; and

WHEREAS, G.S. § 153A-457 provides that notice of a county construction project is deemed sufficient if notice of the construction project is given in any open meeting of the county prior to the commencement of the construction project; and

WHEREAS, the Union County Board of Commissioners desires to give notice of construction of the UNION COUNTY STRUCUTRED CABLING prior to commencement of project construction as required by G.S. § 153A-457.

NOW, THEREFORE, BE IT RESOLVED BY THE Union County Board of Commissioners that:

1. Union County may commence construction of UNION COUNTY STRUCTURED CABLING on property located at 3344 Presson Road, Monroe, NC, 28112 (Sheriff's Office Expansion and Renovation), 2258 Concord Avenue, Monroe, NC, 28112 (Emergency Services Complex), and 1515 Cuthbertson Road, Waxhaw, NC (Southwest Union Library) after the award of the construction contract for the project.

2. This resolution and notice is adopted in accordance with the construction notice requirements of G.S. § 153A-457.

Adopted this the 15th day of November, 2021.

Attest:

_____
Lynn West, Clerk to the Board

_____
Richard B. Helms, Sr., Chairman
Union County Board of Commissioners

Certified Bid Tabulation
Union County Structured Cabling Project 2022-023

Union County Government
General Services – Facilities Management
500 North Main Street, Suite 509
Monroe, NC 28112

Attn: Gordon Vincent, Project Manager

RE: **Union County Structured Cabling Project 2022-023**

Dear Gordon:

Two bids were received, one deemed non-responsive as a bid bond was not submitted as required.

For the above referenced project, the apparent low bid received was:

$805,310.23 – Connectivity LLC

See attached bid tabulation summary sheet and bid forms.

Sincerely,

Thomas M. Capodicasa, RCDD

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
THOMAS M CAPODICASA
BICSI ID# 247718
EXPIRES 12-31-22
RCDD

1927 South Tryon Street - Suite 300 - Charlotte, N.C. 28203
Phone #: (704) 338-1292 Fax #: (704) 338-9974

BID TABULATION FORM - General Contract (SINGLE PRIME BID)

Union County Structured Cabling - 2022-023

7-Oct-21

Certified by: Thomas Cuyler

Bidder Name	Bid Form	Bid Security	Non-Collusion Affidavit	Equal Opp. Affidavit	HUB Minority	Base Bid	Contingency	Total Bid		
Connectivity LLC Lic. # SP.FA/LV.31547 **45 Odell School Road, Suite H** **Concord, NC 28027** **704-789-1030**	Y	Y	Y	Y	Y	$ 805,310.23	$0.00	$ 805,310.23		
UTD Technology Corporation N/A **11190 Downs Road** **Pineville, NC 28134**	Y	N	Y	Y	Y	$ 906,090.00	$0.00	$ 906,090.00	* Deemed non-responsive as a bid bond was not submitted as required.	

Structured Cabling and Network Infrastructure

Union County
Structured Cabling
&
Network Infrastructure

Combined Project Overview
Bid Number 2022-023 REBID

Emergency Services Center
Sheriff's Office
Southwest Regional Library

Respectfully Submitted:
Kelly Bright
Connectivity LLC
45 Odell School Road
Suite H
Concord, NC 28027
704-789-1030

1.1 Bid Form Checklist

A. Submit this form as a cover sheet to your Bid.

B. Attach the noted documents to your Bid.

C. Checklist:

- ☒ 00 43 13 Bid Form
  - ☒ Unit Prices Complete
  - ☒ Contractor's License Number Completed
- ☒ 00 43 13.13 Bid Security
  - ☐ AIA A310-2010
  - ☐ Cash
  - ☒ Cashier's or Certified Check
- ☒ 00 45 19 Non-Collusion Affidavit
- ☒ 00 45 36 Equal Opportunity Employment Affidavit
- ☒ 00 45 39 HUB Minority Forms
  - ☐ Affidavit A
  - ☒ Affidavit B
  - ☐ Affidavit C
  - ☐ Affidavit D

END OF DOCUMENT 00 43 13.16

BID INFORMATION

Name of Bidder: Connectivity, LLC

Date: 9/15/2021

Project Name: Union County Structured Cabling

Owner: Union County

Owner Project Number:

Designer: Optima Engineering

Designer Project Number: 21-0064

CERTIFICATIONS OF BASE BID

The undersigned Bidder, hereby declares that he has carefully investigated the scope of work and having thoroughly familiarized himself with the Contract Documents relative hereto, and has read all special provisions furnished prior to the opening of the bids; that he has satisfied himself relative to the work to be performed. The bidder further declares that he and his sub-contractors have fully complied with NCGS 64, Article 2 in regards to E-Verification as required by N.C. General Statute 143-129(j).

The bidder proposes and agrees if this proposal is accepted, to contract with Union County Government, in the form of contract specified, to provide all necessary labor, equipment, materials, machinery, tools, apparatus, transportation, services, fees, permits, etc., to complete the construction Union County Structured Cabling, all in accordance with the aforementioned Contract Documents to the full and entire satisfaction of Union County Government, with definite understanding that no money will be allowed for extra work except as set forth in the General Conditions and the Contract Documents for the lump sum of:

TOTAL BASE BID PRICE:

Eight Hundred Five Thousand Three Hundred Ten and 23/100 Dollars ($ **805,310.23**).

The above amount may be modified by the included Unit Prices and Alternates at the Owner's sole discretion.

SUB-CONTRACTOR LIST:

The following shall execute subcontracts with the Bidder for the portion of the work indicated:

Specialty Work Sub-Contractor (Name & License No.):
Connectivity - Low Voltage License License No. SP.FA/LV.31547

Specialty Work Sub-Contractor (Name & License No.):
_____ License No. _____

UNIT PRICES: (Prices shall include installation)

Cable Tray – Ladder per linear foot **Forty six and 72/100** Dollars ($ 46.72)
18" Ladder Rack Installed per 1'

Cable Tray – Solid per linear foot **Seventy Three and 62/100** Dollars ($ 73.62)
18" Solid Bottom Installed per 1'

Fiber Optic per linear foot **Eight and 05/100** Dollars ($ 8.05)
12 Strand OM4 Installed/Unterminated

Data Cable per drop **Two Hundred Forty Five and 00/100** Dollars ($ 245.00)
Single Cat6A Data Drop

bidding in conjunction with this bid. The person signing this bid form represents that he/she has full authority and representative capacity to execute this Bid Form in the capacity indicated below.

The undersigned agrees that in the case of failure on his part to execute the said contract and the bond within ten (10) consecutive calendar days after written notice being given of the award of contract, the certified check, cash or bid bond accompanying this bid shall be paid into the funs of the Owner's account set aside for the Project, as liquidated damages for such failure; otherwise, the certified check, cash or bid bond accompanying the Proposal shall be returned to the undersigned.

The undersigned bidder agrees that they are expected to act as Project Expediter and coordinate work of all other contractors.

The firm signing this bid and registered under that name is legally qualified to perform all work included in the scope of the contract as determined by the State of North Carolina, in granting the registration.

PROPOSAL SIGNATURE:

Respectfully submitted this 15th day of September , 2021 .

Connectivity, LLC
(Name of firm or corporation making bid)

By: Kelly Bright
Signature and Typed Name

Title: President

Address of Bidder: 45 Odell School Road Suite H
Concord, NC 28027

Bidders N.C. Contractor License No. SP.FA/LV.31547

Type of License: Low Voltage License

Limitations: None

Attest:

By: Darren Custer

Title: Project Manager

END OF DOCUMENT 00 41 13

NON-COLLUSION AFFIDAVIT

STATE OF NORTH CAROLINA
COUNTY OF UNION

I Kelly Bright, being first duly sworn, deposes and says that:

1. He/She is the President of Connectivity, LLC, the Bidder that has submitted the attached Bid;

2. He/She is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

3. Such Bid is genuine and is not a collusive or sham bid;

4. Neither the said Bidder nor any of its officers, partners, owners agents, representatives, employees or parties of interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other bidder, firm or person to submit a collusive or sham bid in connection with the contract for which the attached Bid has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm or person to fix the price or prices in the attached bid or of any other bidder, or to fix any overhead, profit or cost element of the bid price of any other bidder or to secure through collusion, conspiracy, connivance or unlawful agreement any advantage against the Owner or any person interested in the proposed contract; and

5. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

Kelly Bright
TITLE President

Subscribed and sworn before me, this 13 day of September, 2021

Notary Public Michelle R Kreuz

My Commission Expires 2-26-25 END OF DOCUMENT 00 45 19

MICHELLE R KREUZ
NOTARY PUBLIC
Cabarrus County
North Carolina
My Commission Expires Feb. 26, 2025

STATE OF NORTH CAROLINA

AFFIDAVIT

UNION COUNTY

NOW COMES Affiant, first being sworn, deposes and says as follows:

1. I, being duly authorized by and on behalf of Connectivity, LLC ("Contractor"), have bid on an agreement with Union County, North Carolina ("Union") Union County Structured Cabling - ESC, SO, SWRL ;

2. As part of my duties and responsibilities pursuant to said agreement, I attest that I am aware of and in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):

X After hiring an employee to work in North Carolina, I verify the work authorization of said employee through E-Verify and retain the record of the verification of work authorization while the employee is employed and for one year thereafter; or

___ I employ fewer than twenty-five (25) employees in the State of North Carolina.

3. As part of my duties and responsibilities pursuant to said agreement, I attest that to the best of my knowledge any subcontractors employed as a part of this agreement are in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):

N/A After hiring an employee to work in North Carolina, the subcontractor verifies the work authorization of said employee through E-Verify and retains the record of the verification of work authorization while the employee is employed and for one year thereafter; or

N/A The subcontractor employs fewer than twenty-five (25) employees in the State of North Carolina. Specify subcontractor: N/A

This the 15th day of September, 2021.

Kelly Bright
Affiant

Kelly Bright
Printed Name

Sworn to and subscribed before me, this the 15 day of September, 2021.

MICHELLE R KREUZ
NOTARY PUBLIC
Cabarrus County
North Carolina
My Commission Expires Feb. 26, 2025

[OFFICIAL SEAL]

Michelle R Kreuz
, Notary Public

My Commission Expires: 2-26-25

Attach to Bid Attach to Bid Attach to Bid Attach to Bid Attach to Bid Attach to Bid Attach to Bid Attach to Bid

Identification of HUB Certified/ Minority Business Participation

I, Kelly Bright, President of Connectivity, LLC,
(Name of Bidder)

do hereby certify that on this project, we will use the following HUB Certified/ minority business as construction subcontractors, vendors, suppliers or providers of professional services.

Firm Name, Address and Phone #	Work Type	*Minority Category	**HUB Certified (Y/N)
Connectivity - 45 Odell School Road, Ste H Concord, NC 28027 (704)789-1030	Structured Cabling and Network Infrastructure	F	Y

Attach to Bid Attach to Bid Attach to Bid Attach to Bid Attach to Bid Attach to Bid Attach to Bid Attach to Bid

State of North Carolina --AFFIDAVIT B-- Intent to Perform Contract with Own Workforce.

County of Union

Affidavit of Connectivity, LLC
(Name of Bidder)

I hereby certify that it is our intent to perform 100% of the work required for the

Union County Structured Cabling - ESC, SO, SWRL contract.
(Name of Project)

In making this certification, the Bidder states that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform all elements of the work on this project with his/her own current work forces; and

The Bidder agrees to provide any additional information or documentation requested by the owner in support of the above statement. The Bidder agrees to make a Good Faith Effort to utilize minority suppliers where possible.

The undersigned hereby certifies that he or she has read this certification and is authorized to bind the Bidder to the commitments herein contained.

Date: 8/15/21 Name of Authorized Officer: Kelly Bright

Signature: Kelly Bright

Title: President

SEAL

MICHELLE R KREUZ
NOTARY PUBLIC
Cabarrus County
North Carolina
My Commission Expires Feb. 26, 2025

State of NC, County of Cabarrus

Subscribed and sworn to before me this 15 day of Sept. 2021

Notary Public Michelle R Kreuz

My commission expires 2-26-25

Structured Cabling and Network Infrastructure



Grand Total With Breakdown

Material Total:	**$472,723.98**
Labor Total:	**$281,665.00**
Sub-Total:	**$754,388.98**
Tax (Union County 6.75%):	**$ 50,921.25**
Grand Total:	**$805,310.23**

Structured Cabling and Network Infrastructure



Attached Company License and Certification

1. Connectivity Low Voltage License
2. Leviton Certification
3. 2019 HUB Certification
4. SBE 2025 Recertification
5. Copy of 5% Bid Security Check

LICENSE NUMBER

SP.FA/LV.31547

EXPIRATION DATE

10/11/2021

STATE OF NORTH CAROLINA
BOARD OF EXAMINERS OF ELECTRICAL CONTRACTORS

THIS IS TO CERTIFY THAT:

Connectivity LLC

Larry Alan Bright

is duly registered and entitled to practice Electrical Contracting in the

Special Restricted Fire Alarm/Low Voltage Classification License

Limitation: Limited to electrical work directly related to a fire alarm, burglar alarm or low voltage system installation as prescribed in 21, NCAC 18B .0804

Witness our hands and the seal of the Board

Connectivity LLC
45 Odell School Road
Suite H
Concord, NC 28027

Gerald Harrell
Chairman

Secretary - Treasurer

LEVITON®
Authorized Network Installer

Leviton Authorized Network Installer Certification

Connectivity, LLC - Concord, NC

Has met Leviton's Certification Program selection criteria and has successfully completed the program certification requirements. Therefore, Connectivity, LLC is hereby certified as a Leviton Authorized Network Installer. Installations performed by Connectivity, LLC that are compliant with TIA/EIA and/or ISO requirements are eligible to receive Leviton Network Solutions Extended Product and Performance System Limited Warranties.

Connectivity, LLC has agreed to conform to all Leviton specified, TIA/EIA and/or ISO compliant installation practices in force at the time of installation. In addition, Connectivity, LLC agrees to install Leviton approved products and category compliant cabling in compliance with program policies and related industry standards.

TIA/568 Series and ISO standards compliant links and channels are covered under Leviton Network Solutions Extended Product and Performance Warranties when installed by Authorized Network Installers. Leviton approved cable manufacturers must be used to obtain system warranties.

Connectivity, LLC agrees to adhere to the Terms & Conditions of Leviton Network Solutions certified contractor program, and the Terms & Conditions of the programs Extended Product and Performance System Limited Warranties for the duration of their participation in the program. In no event shall Leviton be liable for special, indirect, incidental, consequential or punitive damages (regardless of the form of action, whether in contract or in tort, including negligence, gross negligence and strict liability), including, without limitation, lost profits, lost revenue, loss of data, technology, rights or services, interruption of business, costs of procurement of substitute products or other economic damage arising from the failure of a system installed by a Leviton certified contractor.

0001468
Certification Number

3/22/2007
Certified Installer Since

Asef Baddar
Asef Baddar, RCDD, DCD
Contractor Programs Manager

12/31/2022
Expiration Date

North Carolina
Department of Administration
Office for Historically Underutilized Businesses

Machelle Sanders
Secretary

Tammie Hall
Director

February 12, 2019

Kelly Bright
Connectivity Network Cabling (Woman Owned)
45 Odell School Rd. Suite H
Concord, NC 28027

Dear Kelly Bright:

The Office for Historically Underutilized Businesses (HUB Office) is pleased to inform you that your company is now certified as a Historically Underutilized Business. Your firm is listed in the Statewide Uniform Certification (SWUC) Program database. This certification will remain in effect for four (4) years from the date of this letter.

You must notify the HUB Office in writing within 30 days of any changes affecting your compliance with SWUC Program eligibility requirements, including changes in ownership, day-to-day management and operational control. Failure to notify the HUB Office of these changes or reapply for certification in a timely manner may cause your HUB Certification to be revoked. In addition, please be advised your status may be changed if there is a 3rd party challenge granted against your firm. The link to the HUB Office 3rd party challenge form can be located at http://www.doa.nc.gov/hub/documents/ThirdpartyEligibilityChallengerev080811.pdf. All information submitted to the Office for Historically Underutilized Business is subject to audit and review.

The HUB Office collaborates with local Minority/Women/Small Business (M/W/SBE)Offices who offer assistance to certified HUB firms with identifying contract opportunities with state and local government. Many of these offices also offer assistance with business development. Please visit our website at http://www.doa.nc.gov/hub/programs.aspx?pid=swuc to locate the local office near you. Another great resource is the Small Business and Technology Development Center at www.sbtdc.org for free personalized business assistance and counseling.

It is important to note that although your status as a certified HUB firm greatly improves your access to state and local government contracts, this certification does not guarantee contract awards. Your ability to research opportunities and bid competitively will be important to your success in this program. We are committed to assisting you through the process with the completion of the Preliminary Business Development and Supportive Services Assessment Survey, located on the HUB Office website under the Certification Tab. The information will provide an overview of your company which will assist us in appropriately aligning contract opportunities that you are ready, willing and able to persue.

Thank you for your interest and participation in the SWUC Program as a Historically Underutilized Business firm with the State of North Carolina.

Sincerely,

Tammie Hall

Tammie Hall
Director

CHARLOTTE

CITY OF CHARLOTTE
GENERAL SERVICES
Charlotte Business INClusion

August 9, 2021

Kelly Bright
Connectivity LLC
45 Odell School Rd. Suite H
Concord, NC 28027

Letter of SBE Recertification

Vendor #: 150499
Valid Until: 08/05/2025

Kelly Bright:

Congratulations! Your firm is now re-certified as a Small Business Enterprise (SBE) with the City of Charlotte. The Charlotte Business INClusion (CBI) Program seeks to enhance competition and participation of small, minority and women owned firms in city contracting and to promote economic growth and development in the City of Charlotte.

Connectivity LLC., will be included in the next update of the City's Vendor List. To ensure that your contact information is always current, please notify the Charlotte Business INClusion program immediately if any changes occur, such as an address, telephone number, type of service, ownership, and control of your company.

We want to ensure your company has access to current and future City contracting opportunities; therefore, we have included web links to the City of Charlotte Contracting Opportunity and EarlyBird page. The first consists of current contract opportunities while Early Bird connects vendors with future opportunities:

- City of Charlotte Contracting Opportunities
- EarlyBird

This certification is not a guarantee of doing business with the city therefore you must continue to market your business. The city also reserves the right to re-evaluate your certification eligibility from time to time or when our office determines that such re-evaluation is warranted.

Should you have any questions about this process or need additional assistance, please contact our office at (704) 336-4137 or via email questions to the following address: charlottebusinessinclusion@charlottenc.gov.

Thank you for your interest and participation in the Charlotte Business INClusion program.

Sincerely,

Nyema M. H. Mathis
Nyema M. H. Mathis
Certification Specialist
704-336-4138
cc: file

Notice to Purchaser - In the event that this check is lost, misplaced or stolen, a sworn statement and 90-day waiting period will be required prior to replacement. This check should be negotiated within 90 days.

Cashier's Check - Customer Copy

No. 1309620666

Void After 90 Days

30-1/1140
NTX

Date 08/23/21 03:06:30 PM

CODDLE CREEK VILLAGE
0006 2350800 0129

Pay BANK OF AMERICA FOUR ONE ZERO ZERO ZERO CTSCTS

$41,000.00

Forty One Thousand and 00/100 Dollars

To The Order Of UNION COUNTY

MEMO: BID#2021-090

Remitter (Purchased By): CONNECTIVITY LLC

Bank of America, N.A.
SAN ANTONIO, TX

Not-Negotiable
Customer Copy
Retain for your Records

001641000710

00-53-3364B 06-2019

BANK OF AMERICA

Cashier's Check

No. 1309620666

Notice to Purchaser - In the event that this check is lost, misplaced or stolen, a sworn statement and 90-day waiting period will be required prior to replacement. This check should be negotiated within 90 days.

Void After 90 Days

30-1/1140
NTX

Date 08/23/21 03:06:30 PM

CODDLE CREEK VILLAGE
0006 2350800 0129

Pay BANK OF AMERICA FOUR ONE ZERO ZERO ZERO CTSCTS

$41,000.00

Forty One Thousand and 00/100 Dollars

To The Order Of UNION COUNTY

MEMO: BID#2021-090

Remitter (Purchased By): CONNECTIVITY LLC

Bank of America, N.A.
SAN ANTONIO, TX

00-53-3364B 06-2019

AUTHORIZED SIGNATURE

⑈1309620666⑈ ⑆114000019⑆ 001641000710⑈

THE ORIGINAL DOCUMENT HAS A WHITE REFLECTIVE WATERMARK ON THE BACK. HOLD AT AN ANGLE TO VIEW WHEN CHECKING THE ENDORSEMENTS.

AIA® Document A101® – 2017

Standard Form of Agreement Between Owner and Contractor *where the basis of payment is a Stipulated Sum*

AGREEMENT made as of the day of in the year
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

Union County, North Carolina
500 N. Main Street
Monroe, NC 28112

and the Contractor:
(Name, legal status, address and other information)

Connectivity, LLC.
45 Odell School Road
Suite H
Concord, NC 28027

for the following Project:
(Name, location and detailed description)

Union County Structured Cabling
Sheriff's Office
Emergency Services Complex
Southwest Regional Library

The Architect:
(Name, legal status, address and other information)

Optima Engineering
1927 S. Tryon Street
Suite 300
Charlotte, NC 28203

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

The parties should complete A101®–2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201®–2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

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User Notes: (1382117991)

TABLE OF ARTICLES

1 THE CONTRACT DOCUMENTS

2 THE WORK OF THIS CONTRACT

3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

4 CONTRACT SUM

5 PAYMENTS

6 DISPUTE RESOLUTION

7 TERMINATION OR SUSPENSION

8 MISCELLANEOUS PROVISIONS

9 ENUMERATION OF CONTRACT DOCUMENTS

EXHIBIT A INSURANCE AND BONDS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in Article 9 of this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents or reasonably inferable by the Contractor as necessary to produce the results intended by the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others. Except as expressly provided for in the Contract Documents to the contrary, the Contractor at its sole cost, risk, and expense shall construct, equip, provide, purchase, pay for, and furnish all of the Work in accordance with the Contract Documents and governmental codes and regulations as they apply to performance of the Work.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:
(Check one of the following boxes.)

[ ] The date of this Agreement.

[**X**] A date set forth in a notice to proceed issued by the Owner.

[ ] Established as follows:
(Insert a date or a means to determine the date of commencement of the Work.)

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

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User Notes: (1382117991)

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work:
(Check one of the following boxes and complete the necessary information.)

[X] Not later than ( ) calendar days from the date of commencement of the Work.

[ ] By the following date:

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date
Sheriff's Office	In coordination with the building Contractor the date shall be March 18, 2022.
Emergency Services Complex	In coordination with the building Contractor the date shall be May 1, 2022.
Southwest Regional Library	In coordination with the building Contractor the date shall be December 2, 2022.

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be Eight Hundred Five Thousand Three Hundred Ten Dollars and Twenty Three Cents ($ 805,310.23), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

Item	Price

§ 4.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement.
(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance

§ 4.3 Allowances, if any, included in the Contract Sum:
(Identify each allowance.)

Item	Price

§ 4.4 Unit prices, if any:
(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit ($0.00)
Cable Tray – 18" Ladder	per linear foot	$46.72
Cable Tray – 18" Solid Bottom	per linear foot	$73.62
Fiber Optic Cable – 12 Strand OM4	per linear foot	$8.05
Data Cable – Single CAT 6A	per linear foot	$245.00

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User Notes: (1382117991)

Unit prices are considered complete and include (i) all materials, equipment, labor, delivery, installation, overhead, and profit; and (ii) any other costs or expenses in connection with, or incidental to, the performance of that portion of the Work to which such unit prices apply.

§ 4.5 Liquidated damages, if any:
(Insert terms and conditions for liquidated damages, if any.)

§ 4.5.1 The Contractor acknowledges and recognizes that the Owner is entitled to full and beneficial occupancy and use of the completed Work following expiration of the Contract Time and that the Owner has relied on the Contractor's duty to achieve Substantial Completion of the Work within the Contract Time. The Contractor further acknowledges and agrees that if the Contractor fails to cause the Substantial Completion of any portion of the Work within the Contract Time, the Owner will sustain extensive damages and serious loss as a result of such failure. The exact amount of such damages will be extremely difficult to ascertain. Therefore, the Owner and the Contractor agree as set forth in this Section 4.5.

§ 4.5.2 If the Contractor fails to achieve Substantial Completion of the Work within the Contract Time, the Owner shall be entitled to retain or recover from the Contractor, as liquidated damages and not as a penalty, the amount of One Thousand Five Hundred Dollars_____ Dollars ($1,500.00_) per day, commencing upon the first day following expiration of the Contract Time and continuing until the date that the Contractor achieves Substantial Completion of the entire Work. Such liquidated damages are hereby agreed to be a reasonable pre-estimate of damages the Owner will incur as a result of delayed completion of the Work.

§ 4.5.3 The Owner may deduct liquidated damages described in Subsection 4.5.2 from any unpaid amounts then or thereafter due the Contractor under the Contract Documents, as provided herein and otherwise in the Contract Documents. Any liquidated damages not so deducted from any unpaid amount due the Contractor shall be payable by the Contractor to the Owner together with interest from the date of the demand at the highest interest rate allowed by applicable law.

§ 4.5.4 Notwithstanding anything to the contrary in the Contract Documents, if the Owner is unable to recover any portion of liquidated damages in accordance with the terms and conditions of Section 4.5 because any portion of Section 4.5 is found to be unenforceable or invalid as a penalty or otherwise, then the Owner shall be entitled to recover from the Contractor all of the Owner's actual damages in connection with any failure by the Contractor to achieve Substantial Completion of the Work within the Contract Time, including, without limitation, consequential damages.

§ 4.6 Other:
(Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.)

Notwithstanding anything herein to the contrary, the amount expended under this Contract shall not exceed the Contract Sum set forth in Section 4.1 without the execution of a Modification.

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the 5th day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the 15th day of the following month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than forty-five (45) days after the Architect receives the Application for Payment.

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User Notes: (1382117991)

(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 In accordance with AIA Document A201™–2017, General Conditions of the Contract for Construction, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.6.1 The amount of each progress payment shall first include:

.1 That portion of the Contract Sum properly allocable to completed Work;

.2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and

.3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.6.2 The amount of each progress payment shall then be reduced by:

.1 The aggregate of any amounts previously paid by the Owner;

.2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201–2017;

.3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;

.4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017; and

.5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold retainage as set forth in Section 5.1.7:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

The Owner shall make progress payments on account of the Contract Price on the basis of the Contractor's Applications for Payment as recommended by the Architect monthly. Until the Work is fifty percent (50%) completed, retainage will be five percent (5%) of any progress payment due to the Contractor. The Work shall be deemed fifty percent (50%) complete when the Contractor's gross project invoices, excluding the value of materials stored off-site, equal or exceed fifty percent (50%) of the value of the Contract, except the value of materials stored on-site shall not exceed twenty percent (20%) of the Contractor's gross project invoices for the purpose of determining whether the Work is fifty percent (50%) complete.

(Paragraphs deleted)

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

When the Work is fifty percent (50%) complete, and if the Contractor continues to perform satisfactorily and any nonconforming Work identified and noticed prior to that time by the Architect or the Owner has been corrected by the Contractor and accepted by the Architect and the Owner, no further retainage shall be retained from progress

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payments due to the Contractor. However, following fifty percent (50%) completion of the Work, the Owner may withhold additional retainage from a subsequent progress payment, not to exceed five percent (5%) in order to allow the Owner to retain two and one-half percent (2.5%) total retainage through the completion of the Work. Subsequent to reducing retainage, the full retainage of payments authorized (up to five percent (5%) of each subsequent progress payment application) may be reinstated if the Owner determines the Contractor's performance is unsatisfactory.

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:
(Insert any other conditions for release of retainage upon Substantial Completion.)

The Owner may retain sufficient funds to secure completion of the Work or correction of any of the Work. If the Owner retain such funds, the amount retained shall not exceed two and one-half (2 ½) times the estimated value of the Work remaining to be completed or corrected.

§ 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201–2017.

§ 5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.1.10 Consent of the Surety shall be obtained before any retainage is paid by the Owner. Consent of the Surety, signed by an agent, must be accompanied by a certified copy of such agent's authority to act for the Surety.

§ 5.2 Final Payment

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

.1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment; and

.2 a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 45 days after the issuance of the Architect's final Certificate for Payment, or as follows:

§ 5.3 Interest

Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.
(Insert rate of interest agreed upon, if any.)

12 % per annum, or the maximum rate allowed by applicable law, if less, for such time as interest may accrue and no more.

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker.
(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

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§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows:
(Check the appropriate box.)

[X] Litigation in a court of competent jurisdiction

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2017.

§ 7.1.1 If the Contract is terminated for the Owner's convenience in accordance with Article 14 of AIA Document A201–2017, then the Owner shall pay the Contractor a termination fee as follows:
(Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner's convenience.)

N/A (No termination fee)

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 The Owner's representative:
(Name, address, email address, and other information)

Chris Boyd
Facilities Director
1407 Airport Road
Monroe, NC 28110

§ 8.3 The Contractor's representative:
(Name, address, email address, and other information)

§ 8.4 Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.

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§ 8.5 Insurance and Bonds

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A101™–2017 Exhibit A, and elsewhere in the Contract Documents.

(Paragraphs deleted)

§ 8.7 Other provisions:

The Contractor represents and warrants the following to the Owner (in addition to any other representations and warranties contained in the Contract Documents), as an inducement to the Owner to execute this Contract, which representations and warranties shall survive the execution and delivery of this Contract, any termination of this Contract, and the final completion of the Work:

(i) that it and its Subcontractors are financially solvent, able to pay all debts as they mature, and possessed of sufficient working capital to complete the Work and perform all obligations hereunder;

(ii) that it is able to furnish the plant, tools, materials, supplies, equipment, and labor required to complete the Work and perform its obligations hereunder;

(iii) that it is authorized to do business in the State of North Carolina and properly licensed by all necessary governmental and public and quasi-public authorities having jurisdiction over it and over the Work and the Project, including, without limitation, a valid North Carolina general contractor's license;

(iv) that its execution of this Contract and its performance thereof is within its duly authorized powers;

(v) that its duly authorized representatives has visited the site of the Project, familiarized himself with the local and special conditions under which the Work is to be performed, and correlated its observations with the requirements of the Contract Documents; and

(vi) that it possesses a high level of experience and expertise in the business administration, construction, construction management, and superintendent of projects of the size, complexity, and nature of this Project, and it will perform the Work with the care, skill, and diligence of such a contractor.

The foregoing warranties are in addition to, and not in lieu of, any and all other liability imposed upon the Contractor by law with respect to the Contractor's duties, obligations, and performance hereunder. The Contractor acknowledges that the Owner is relying upon the Contractor's skill and experience in connection with the Work called for hereunder.

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

.1 AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor

.2 AIA Document A101™–2017, Exhibit A, Insurance and Bonds

.3 AIA Document A201™–2017, General Conditions of the Contract for Construction

(Paragraph deleted)

.5 Drawings: The drawings are separately bound and are therefore not attached to this agreement.

Number	Title	Date
TE001	Technology Legend and Notes	9.9.2021
TE100	Telecom Site Plan - ESC	9.9.2021
TE101	Overall First Floor Plan - ESC	9.9.2021
TE1-02	Overall First Floor Cable Tray Plan - ESC	9.9.2021
TE103	Enlarged Telecom Plans - ESC	9.9.2021
TE104	Telecom Riser Diagram - ESC	9.9.2021
TE200	Telecom Site Plan - SO	9.9.2021
TE201	Overall First Floor Telecom Plan - SO	9.9.2021
TE202	Overall Second Floor Telecom Plan - SO	9.9.2021
TE203	Enlarged Telecom Plans - SO	9.9.2021
TE204	Telecom Riser Diagram – SO	9.9.2021

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TE301	Overall First Floor Plan - SWRL	9.9.2021
TE400	Telecom Details	9.9.2021
TE401	Telecom Details	9.9.2021

.6 Specifications: The specifications are separately bound and are therefore not attached to this agreement.

Section	Title	Date	Pages
00 01 01	Project Title Page	6.14.2021	1
00 01 10	Table of Contents	6.14.2021	1
00 11 13	Advertisement for Bids	6.14.2021	2
00 21 00	Instructions to Bidders	6.14.2021	2
00 22 00	Supplementary Instructions to Bidders	6.14.2021	12
00 25 00	Pre Bid Meetings	6.14.2021	6
00 41 13	Bid Form – Stipulated Sum	6.14.2021	3
00 43 13	Bid Security Form	6.14.2021	1
00 43 13.16	Bid Form Checklist	6.14.2021	1
00 43 28	Tax Rebate Form	6.14.2021	3
00 43 39.13	Guidelines for Recruitment and Selection of Minority Business	6.14.2021	12
00 45 19	Non-Collusion Affidavit	6.14.2021	1
00 45 36	Equal Opportunity Employment Affidavit	6.14.2021	1
00 45 39	MBE Provisions Affidavit	6.14.2021	7
00 52 00	Agreement Forms	6.14.2021	1
00 61 00	Bond Forms	6.14.2021	1
00 62 00	Certificate of Insurance	6.14.2021	1
00 72 00	General Conditions of the Contract for Construction	6.14.2021	1
00 73 00	Supplementary General Conditions	6.14.2021	20
01 10 00	Summary	6.14.2021	3
01 26 00	Contract Modifications Procedures	6.14.2021	2
01 29 00	Payment Procedures	6.14.2021	3
01 31 00	Project Management and Coordination	6.14.2021	5
01 32 00	Construction Progress Documentation	6.14.2021	3
01 33 00	Submittal Procedures	6.14.2021	8
01 40 00	Quality Requirements	6.14.2021	6
01 41 00	Special Inspections	6.14.2021	21
01 42 00	References	6.14.2021	3
01 50 00	Temporary Facilities and Controls	6.14.2021	5
01 60 00	Product Requirements	6.14.2021	6
01 73 00	Execution	6.14.2021	5
01 73 29	Cutting and Patching	6.14.2021	3
01 74 19	Construction Waste Management and Disposal	6.14.2021	5
01 77 00	Closeout Procedures	6.14.2021	4
01 78 23	Operation and Maintenance Data	6.14.2021	5
01 78 39	Project Record Documents	6.14.2021	3
01 79 00	Demonstration and Training	6.14.2021	2
27 00 00	Basic Telecommunications Requirements	6.14.2021	8
27 05 26	Grounding and Bonding for Communications Systems	6.14.2021	7
27 05 36	Cable Trays for Communications Systems	6.14.2021	5
27 05 53	Identification for Communications Systems	6.14.2021	5
27 11 16	Communications Racks, Frames, and Enclosures	6.14.2021	6

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27 13 13	Communications Copper Backbone Cabling	6.14.2021	8
27 13 23	Communications Optical Fiber Backbone Cabling	6.14.2021	7
27 13 33	CATV Coaxial Backbone Cabling	6.14.2021	7
27 15 13	Communications Copper Horizontal Cabling	6.14.2021	7
27 15 33	CATV Coaxial Horizontal Cabling	6.14.2021	7

(Paragraphs deleted)

.7 Addenda, if any:

Number	Date	Pages
Addendum 1	September 13, 2021	2
Addendum 2	September 24	8

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

.8 Other Exhibits:
(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

[ ] AIA Document E204™–2017, Sustainable Projects Exhibit, dated as indicated below:
(Insert the date of the E204-2017 incorporated into this Agreement.)

[ ] The Sustainability Plan:

Title	Date	Pages

[ ] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages

.9 Other documents, if any, listed below:
(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201™–2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

Performance Bond
Payment Bond
Notice to Proceed
Minority Participation Forms (Guidelines for Recruitment and Selection of Minority Businesses for Participation in Union County Construction Contracts, pages 1-13; Identification of HUB Certified/Minority Business Participation Form; Affidavits A-D, if required by the terms thereof; and Appendix E, MBE Documentation for Contract Payments

This Agreement entered into as of the day and year first written above.

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OWNER *(Signature)*	**CONTRACTOR** *(Signature)*
William M. Watson, County Manager	Kelly Bright, Owner
(Printed name and title)	*(Printed name and title)*

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PAGE 1

Union County, North Carolina
500 N. Main Street
Monroe, NC 28112

...

Connectivity, LLC.
45 Odell School Road
Suite H
Concord, NC 28027

...

Union County Structured Cabling
Sheriff's Office
Emergency Services Complex
Southwest Regional Library

...

Optima Engineering
1927 S. Tryon Street
Suite 300
Charlotte, NC 28203

PAGE 2

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in Article 9 of this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

...

The Contractor shall fully execute the Work described in the Contract Documents or reasonably inferable by the Contractor as necessary to produce the results intended by the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others. Except as expressly provided for in the Contract Documents to the contrary, the Contractor at its sole cost, risk, and expense shall construct, equip, provide, purchase, pay for, and furnish all of the Work in accordance with the Contract Documents and governmental codes and regulations as they apply to performance of the Work.

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...

[X] A date set forth in a notice to proceed issued by the Owner.

PAGE 3

[X] Not later than ( ) calendar days from the date of commencement of the Work.

...

Sheriff's Office	In coordination with the building Contractor the date shall be March 18, 2022.
Emergency Services Complex	In coordination with the building Contractor the date shall be May 1, 2022.
Southwest Regional Library	In coordination with the building Contractor the date shall be December 2, 2022.

...

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be Eight Hundred Five Thousand Three Hundred Ten Dollars and Twenty Three Cents ($ 805,310.23), subject to additions and deductions as provided in the Contract Documents.

...

Cable Tray – 18" Ladder	per linear foot	$46.72
Cable Tray – 18" Solid Bottom	per linear foot	$73.62
Fiber Optic Cable – 12 Strand OM4	per linear foot	$8.05
Data Cable – Single CAT 6A	per linear foot	$245.00

Unit prices are considered complete and include (i) all materials, equipment, labor, delivery, installation, overhead, and profit; and (ii) any other costs or expenses in connection with, or incidental to, the performance of that portion of the Work to which such unit prices apply.

PAGE 4

§ 4.5.1 The Contractor acknowledges and recognizes that the Owner is entitled to full and beneficial occupancy and use of the completed Work following expiration of the Contract Time and that the Owner has relied on the Contractor's duty to achieve Substantial Completion of the Work within the Contract Time. The Contractor further acknowledges and agrees that if the Contractor fails to cause the Substantial Completion of any portion of the Work within the Contract Time, the Owner will sustain extensive damages and serious loss as a result of such failure. The exact amount of such damages will be extremely difficult to ascertain. Therefore, the Owner and the Contractor agree as set forth in this Section 4.5.

§ 4.5.2 If the Contractor fails to achieve Substantial Completion of the Work within the Contract Time, the Owner shall be entitled to retain or recover from the Contractor, as liquidated damages and not as a penalty, the amount of One Thousand Five Hundred Dollars_____ Dollars ($1,500.00_) per day, commencing upon the first day following expiration of the Contract Time and continuing until the date that the Contractor achieves Substantial Completion of the entire Work. Such liquidated damages are hereby agreed to be a reasonable pre-estimate of damages the Owner will incur as a result of delayed completion of the Work.

§ 4.5.3 The Owner may deduct liquidated damages described in Subsection 4.5.2 from any unpaid amounts then or thereafter due the Contractor under the Contract Documents, as provided herein and otherwise in the Contract Documents. Any liquidated damages not so deducted from any unpaid amount due the Contractor shall be payable by the Contractor to the Owner together with interest from the date of the demand at the highest interest rate allowed by applicable law.

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§ 4.5.4 Notwithstanding anything to the contrary in the Contract Documents, if the Owner is unable to recover any portion of liquidated damages in accordance with the terms and conditions of Section 4.5 because any portion of Section 4.5 is found to be unenforceable or invalid as a penalty or otherwise, then the Owner shall be entitled to recover from the Contractor all of the Owner's actual damages in connection with any failure by the Contractor to achieve Substantial Completion of the Work within the Contract Time, including, without limitation, consequential damages.

...

Notwithstanding anything herein to the contrary, the amount expended under this Contract shall not exceed the Contract Sum set forth in Section 4.1 without the execution of a Modification.

...

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the 5th day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the 15th day of the following month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than forty-five (45) days after the Architect receives the Application for Payment.

PAGE 5

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold ~~the following amount, as retainage, from the payment otherwise due:~~retainage as set forth in Section 5.1.7:

...

The Owner shall make progress payments on account of the Contract Price on the basis of the Contractor's Applications for Payment as recommended by the Architect monthly. Until the Work is fifty percent (50%) completed, retainage will be five percent (5%) of any progress payment due to the Contractor. The Work shall be deemed fifty percent (50%) complete when the Contractor's gross project invoices, excluding the value of materials stored off-site, equal or exceed fifty percent (50%) of the value of the Contract, except the value of materials stored on-site shall not exceed twenty percent (20%) of the Contractor's gross project invoices for the purpose of determining whether the Work is fifty percent (50%) complete.

~~**§ 5.1.7.1.1** The following items are not subject to retainage:~~
~~*(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)*~~

...

When the Work is fifty percent (50%) complete, and if the Contractor continues to perform satisfactorily and any nonconforming Work identified and noticed prior to that time by the Architect or the Owner has been corrected by the Contractor and accepted by the Architect and the Owner, no further retainage shall be retained from progress payments due to the Contractor. However, following fifty percent (50%) completion of the Work, the Owner may withhold additional retainage from a subsequent progress payment, not to exceed five percent (5%) in order to allow the Owner to retain two and one-half percent (2.5%) total retainage through the completion of the Work. Subsequent to reducing retainage, the full retainage of payments authorized (up to five percent (5%) of each subsequent progress payment application) may be reinstated if the Owner determines the Contractor's performance is unsatisfactory.

PAGE 6

The Owner may retain sufficient funds to secure completion of the Work or correction of any of the Work. If the Owner retain such funds, the amount retained shall not exceed two and one-half (2 ½) times the estimated value of the Work remaining to be completed or corrected.

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...

§ 5.1.10 Consent of the Surety shall be obtained before any retainage is paid by the Owner. Consent of the Surety, signed by an agent, must be accompanied by a certified copy of such agent's authority to act for the Surety.

...

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than ~~30~~ 45 days after the issuance of the Architect's final Certificate for Payment, or as follows:

...

12 % per annum, or the maximum rate allowed by applicable law, if less, for such time as interest may accrue and no more.

PAGE 7

~~[–] Arbitration pursuant to Section 15.4 of AIA Document A201–2017~~

[X] Litigation in a court of competent jurisdiction

~~[–] Other *(Specify)*~~

...

N/A (No termination fee)

...

Chris Boyd
Facilities Director
1407 Airport Road
Monroe, NC 28110

PAGE 8

~~§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A201–2017, may be given in accordance with AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:~~

~~*(If other than in accordance with AIA Document E203–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)*~~

The Contractor represents and warrants the following to the Owner (in addition to any other representations and warranties contained in the Contract Documents), as an inducement to the Owner to execute this Contract, which representations and warranties shall survive the execution and delivery of this Contract, any termination of this Contract, and the final completion of the Work:

(i) that it and its Subcontractors are financially solvent, able to pay all debts as they mature, and possessed of sufficient working capital to complete the Work and perform all obligations hereunder;

(ii) that it is able to furnish the plant, tools, materials, supplies, equipment, and labor required to complete the Work and perform its obligations hereunder;

(iii) that it is authorized to do business in the State of North Carolina and properly licensed by all necessary governmental and public and quasi-public authorities having jurisdiction over it and over the Work and the Project, including, without limitation, a valid North Carolina general contractor's license;

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(iv) that its execution of this Contract and its performance thereof is within its duly authorized powers;
(v) that its duly authorized representatives has visited the site of the Project, familiarized himself with the local and special conditions under which the Work is to be performed, and correlated its observations with the requirements of the Contract Documents; and
(vi) that it possesses a high level of experience and expertise in the business administration, construction, construction management, and superintendent of projects of the size, complexity, and nature of this Project, and it will perform the Work with the care, skill, and diligence of such a contractor.

The foregoing warranties are in addition to, and not in lieu of, any and all other liability imposed upon the Contractor by law with respect to the Contractor's duties, obligations, and performance hereunder. The Contractor acknowledges that the Owner is relying upon the Contractor's skill and experience in connection with the Work called for hereunder.

...

~~.4 AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:~~
~~(Insert the date of the E203-2013 incorporated into this Agreement.)~~

.5 Drawings: The drawings are separately bound and are therefore not attached to this agreement.

Number	Title	Date
TE001	Technology Legend and Notes	9.9.2021
TE100	Telecom Site Plan - ESC	9.9.2021
TE101	Overall First Floor Plan - ESC	9.9.2021
TE1-02	Overall First Floor Cable Tray Plan - ESC	9.9.2021
TE103	Enlarged Telecom Plans - ESC	9.9.2021
TE104	Telecom Riser Diagram - ESC	9.9.2021
TE200	Telecom Site Plan - SO	9.9.2021
TE201	Overall First Floor Telecom Plan - SO	9.9.2021
TE202	Overall Second Floor Telecom Plan - SO	9.9.2021
TE203	Enlarged Telecom Plans - SO	9.9.2021
TE204	Telecom Riser Diagram – SO	9.9.2021
TE301	Overall First Floor Plan - SWRL	9.9.2021
TE400	Telecom Details	9.9.2021
TE401	Telecom Details	9.9.2021

.6 Specifications: The specifications are separately bound and are therefore not attached to this agreement.

~~.5 Drawings~~

~~Number Title Date~~

Section	Title	Date	Pages
00 01 01	Project Title Page	6.14.2021	1
00 01 10	Table of Contents	6.14.2021	1
00 11 13	Advertisement for Bids	6.14.2021	2
00 21 00	Instructions to Bidders	6.14.2021	2
00 22 00	Supplementary Instructions to Bidders	6.14.2021	12
00 25 00	Pre Bid Meetings	6.14.2021	6
00 41 13	Bid Form – Stipulated Sum	6.14.2021	3
00 43 13	Bid Security Form	6.14.2021	1
00 43 13.16	Bid Form Checklist	6.14.2021	1
00 43 28	Tax Rebate Form	6.14.2021	3
00 43 39.13	Guidelines for Recruitment and Selection of Minority Business	6.14.2021	12
00 45 19	Non-Collusion Affidavit	6.14.2021	1

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00 45 36	Equal Opportunity Employment Affidavit	6.14.2021	1
00 45 39	MBE Provisions Affidavit	6.14.2021	7
00 52 00	Agreement Forms	6.14.2021	1
00 61 00	Bond Forms	6.14.2021	1
00 62 00	Certificate of Insurance	6.14.2021	1
00 72 00	General Conditions of the Contract for Construction	6.14.2021	1
00 73 00	Supplementary General Conditions	6.14.2021	20
01 10 00	Summary	6.14.2021	3
01 26 00	Contract Modifications Procedures	6.14.2021	2
01 29 00	Payment Procedures	6.14.2021	3
01 31 00	Project Management and Coordination	6.14.2021	5
01 32 00	Construction Progress Documentation	6.14.2021	3
01 33 00	Submittal Procedures	6.14.2021	8
01 40 00	Quality Requirements	6.14.2021	6
01 41 00	Special Inspections	6.14.2021	21
01 42 00	References	6.14.2021	3
01 50 00	Temporary Facilities and Controls	6.14.2021	5
01 60 00	Product Requirements	6.14.2021	6
01 73 00	Execution	6.14.2021	5
01 73 29	Cutting and Patching	6.14.2021	3
01 74 19	Construction Waste Management and Disposal	6.14.2021	5
01 77 00	Closeout Procedures	6.14.2021	4
01 78 23	Operation and Maintenance Data	6.14.2021	5
01 78 39	Project Record Documents	6.14.2021	3
01 79 00	Demonstration and Training	6.14.2021	2
27 00 00	Basic Telecommunications Requirements	6.14.2021	8
27 05 26	Grounding and Bonding for Communications Systems	6.14.2021	7
27 05 36	Cable Trays for Communications Systems	6.14.2021	5
27 05 53	Identification for Communications Systems	6.14.2021	5
27 11 16	Communications Racks, Frames, and Enclosures	6.14.2021	6
27 13 13	Communications Copper Backbone Cabling	6.14.2021	8
27 13 23	Communications Optical Fiber Backbone Cabling	6.14.2021	7
27 13 33	CATV Coaxial Backbone Cabling	6.14.2021	7
27 15 13	Communications Copper Horizontal Cabling	6.14.2021	7
27 15 33	CATV Coaxial Horizontal Cabling	6.14.2021	7

~~.6 Specifications~~

~~Section~~	~~Title~~	~~Date~~	~~Pages~~

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Addendum 1	September 13, 2021	2
Addendum 2	September 24	8

...

Performance Bond
Payment Bond
Notice to Proceed
Minority Participation Forms (Guidelines for Recruitment and Selection of Minority Businesses for

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Participation in Union County Construction Contracts, pages 1-13; Identification of HUB Certified/Minority Business Participation Form; Affidavits A-D, if required by the terms thereof; and Appendix E, MBE Documentation for Contract Payments

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William M. Watson, County Manager

Kelly Bright, Owner

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Certification of Document's Authenticity

AIA® Document D401™ – 2003

I, , hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with its associated Additions and Deletions Report and this certification at 11:25:48 ET on 11/04/2021 under Order No. 1289669003 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A101™ – 2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, as published by the AIA in its software, other than those additions and deletions shown in the associated Additions and Deletions Report.

_____

(Signed)

_____

(Title)

_____

(Dated)

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AIA® Document A101® – 2017 Exhibit A

Insurance and Bonds

This Insurance and Bonds Exhibit is part of the Agreement, between the Owner and the Contractor, dated the day of in the year
(In words, indicate day, month and year.)

for the following **PROJECT**:
(Name and location or address)

Standard Template Project
Union County

THE OWNER:
(Name, legal status and address)

Union County, North Carolina
500 N. Main Street
Suite 510
Monroe, NC 28110

THE CONTRACTOR:
(Name, legal status and address)

Connectivity, LLC.
45 Odell School Road
Suite H
Concord, NC 28027

TABLE OF ARTICLES

A.1 GENERAL

A.2 OWNER'S INSURANCE

A.3 CONTRACTOR'S INSURANCE AND BONDS

A.4 SPECIAL TERMS AND CONDITIONS

ARTICLE A.1 GENERAL

The Owner and Contractor shall purchase and maintain insurance, and provide bonds, as set forth in this Exhibit and otherwise required in the Contract Documents. As used in this Exhibit, the term General Conditions refers to AIA Document A201™–2017, General Conditions of the Contract for Construction.

ARTICLE A.2 OWNER'S INSURANCE

(Paragraphs Deleted)

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Document A201®–2017, General Conditions of the Contract for Construction. Article 11 of A201®–2017 contains additional insurance provisions.

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§ A.2.2 Liability Insurance

The Owner shall be responsible for purchasing and maintaining the Owner's usual general liability insurance.

(Paragraphs Deleted)

(Table Deleted)

(Paragraphs Deleted)

(Table Deleted)

(Paragraphs Deleted)

(Paragraphs Deleted)

(Table Deleted)

ARTICLE A.3 CONTRACTOR'S INSURANCE AND BONDS

§ A.3.1 General

§ A.3.1.1 Certificates of Insurance. The Contractor shall provide certificates of insurance acceptable to the Owner evidencing compliance with the requirements in this Article A.3 at the following times: (1) prior to commencement of the Work; (2) upon renewal or replacement of each required policy of insurance; and (3) upon the Owner's request. An additional certificate evidencing continuation of commercial liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment and thereafter upon renewal or replacement of such coverage until the expiration of the periods required by Section A.3.2.1 and Section A.3.3.1. The certificates will show the Owner as an additional insured on the Contractor's insurance policy or policies as required by this Article A.3. In no event shall any failure of the Owner to receive certified copies or certificates of policies required under Article A.3 or to demand receipt of such certified copies or certificates prior to the Contractor's commencing the Work be construed as a waiver by the Owner or the Architect of the Contractor's obligations to obtain insurance pursuant to this Article A.3. The obligation to procure and maintain any insurance required by this Article A.3 is a separate responsibility of the Contractor and independent of the duty to furnish a certified copy or certificate of such insurance policies. When any required insurance, due to the attainment of a normal expiration date or renewal date, shall expire, the Contractor shall supply the Owner with certificates of insurance and amendatory riders or endorsements that clearly evidence the continuation of all coverage in the same manner, limits of protection, and scope of coverage as was provided by the previous policy. In the event any renewal or replacement policy, for whatever reason obtained or required, is written by a carrier other than that with whom the coverage was previously placed, or the subsequent policy differs in any way from the previous policy, the Contractor shall also furnish the Owner with a certified copy of the renewal or replacement policy unless the Owner provides the Contractor with prior written consent to submit only a certificate of insurance for any such policy.

§ A.3.1.2 Deductibles and Self-Insured Retentions. The Contractor shall disclose to the Owner any deductible or self-insured retentions applicable to any insurance required to be provided by the Contractor.

§ A.3.1.3 Additional Insured Obligations. To the fullest extent permitted by law, the Contractor shall cause the commercial general liability coverage to include (1) the Owner, its officers, agents, and employees; the Architect;

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and the Architect's consultants as additional insureds on the Commercial General Liability Policy for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner as an additional insured for claims made under the Contractor's completed operations coverage. . The additional insured coverage shall be primary and non-contributory to any of the Owner's general liability insurance policies and shall apply to both ongoing and completed operations. , The additional insured coverage with respect to the Owner, its officers, agents, and employees, shall be no less than that provided by Insurance Services Office, Inc. (ISO) forms CG 20 10 07 04, CG 20 37 07 04, and, with respect to the Architect and the Architect's consultants, CG 20 32 07 04.

§ A.3.2 Contractor's Required Insurance Coverage

§ A.3.2.1 The Contractor shall, for the protection and benefit of the indemnitees and the Contractor and as part of the Contractor's efforts to satisfy the obligations set forth in Paragraph A.3.2, procure, purchase, and maintain in full force and effect the following types and limits of insurance issued by insurers authorized to do business in North Carolina and rated A-VII or better by A.M. Best or carriers otherwise acceptable to the Owner, and in form and substance reasonably satisfactory to the Owner, which afford the coverages set forth below in Paragraph A.3.2. Information concerning reduction of coverage shall be furnished by the Contractor promptly and within any time limits required by the Contract Documents. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, unless a different duration is stated below:

(If the Contractor is required to maintain insurance for a duration other than the expiration of the period for correction of Work, state the duration.)

Commercial General Liability insurance, specifically relating to coverage for bodily injury or property damage arising out of completed operations (as set forth in A.3.2.2.1.4) shall be maintained for not less than three (3) years following final payment. The Contractor shall continue to provide evidence of such coverage to the Owner on an annual basis during the aforementioned period, Additional Insured status, as required by A.3.1.3 for Products and Completed Operations shall extend for a period of not less than three (3) years after final payment.

§ A.3.2.2 Commercial General Liability

§ A.3.2.2.1 Commercial General Liability insurance for the Project written on an occurrence form CG 00 01 04 13 or its equivalent with policy limits of not less than One Million Dollars ($ 1,000,000) per occurrence (per location/per project), Two Million Dollars ($ 2,000,000) general aggregate, Two Million Dollars ($ 2,000,000) aggregate for products-completed operations hazard, One Million Dollars ($1,000,000) personal and advertising injury limit, and Five Thousand Dollars ($5,000) medical expense limit providing coverage for claims including

- **.1** damages because of bodily injury, sickness or disease, including occupational sickness or disease, and death of any person;
- **.2** personal injury and advertising injury and liability assumed under an insured contract (including the tort liability of another assumed in a business contract);
- **.3** damages because of physical damage to or destruction of tangible property, including the loss of use of such property;
- **.4** bodily injury or property damage arising out of completed operations;
- **.5** the Contractor's indemnity obligations under Section 3.18 of the General Conditions;
- .6 premises-operations;
- .7 independent contractors, including, without limitation, Subcontractors and Sub-subcontractors.

§ A.3.2.2.2 The Contractor's Commercial General Liability policy under this Section A.3.2.2 shall not contain an exclusion, restriction, or limitation of coverage for the following:

- **.1** Claims by one insured against another insured, if the exclusion or restriction is based solely on the fact that the claimant is an insured, and there would otherwise be coverage for the claim.
- **.2** Claims for property damage to the Contractor's Work .
- **.3** Claims for bodily injury other than to employees of the insured.
- **.4** Claims for indemnity under Section 3.18 of the General Conditions arising out of injury to employees of the insured.
- **.5** Claims or loss excluded under a prior work endorsement or other similar exclusionary language.
- **.6** Claims or loss due to physical damage under a prior injury endorsement or similar exclusionary language.

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.7 Claims related to residential, multi-family, or other habitational projects, if the Work is to be performed on such a project.
.8 Claims related to roofing, if the Work involves roofing.
.9 Claims related to exterior insulation finish systems (EIFS), synthetic stucco or similar exterior coatings or surfaces, if the Work involves such coatings or surfaces.
.10 Claims related to earth subsidence or movement, where the Work involves such hazards.
.11 Claims related to explosion, collapse and underground property damage
12 Claims related to fellow employees.

§ A.3.2.3 Business Automobile Liability covering liability arising out of any auto, including owned, hired, and non-owned autos., with policy combined single limits of not less than One Million Dollars ($ 1,000,000) per occurrence, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those autos along with any other statutorily required automobile coverage. Such coverage shall be written on ISO form CA 001, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in ISO form CA 00 01 10 13.

§ A.3.2.4 Business Umbrella coverage at a policy limit of not less than Five Million Dollars ($5,000,000) per occurrence. The Contractor's retention shall not exceed Ten Thousand Dollars ($10,000).

§ A.3.2.5 Workers' Compensation at statutory limits.

§ A.3.2.6 Employers' Liability with policy limits not less than One Million Dollars ($ 1,000,000) each accident,One Million Dollars ($ 1,000,000) disease each employee, and One Million Dollars ($ 1,000,000) disease policy limit.

§ A.3.2.7 Jones Act, and the Longshore & Harbor Workers' Compensation Act, as required, if the Work involves hazards arising from work on or near navigable waterways, including vessels and docks

§ A.3.2.8 The insurance required by Subparagraph A.3.2. shall be written on an occurrence basis. It shall also be written on a per location/per project basis. The insurance required by Subparagraph A.3.2 shall also provide coverage of liability of Contractor's engaged professional consultants (i.e. independent testing laboratories, engineers, surveyors, etc.) for errors and omissions, or a separate policy shall be provided.

§ A.3.2.9 The Contractor shall also cause each Subcontractor to (i) procure insurance reasonably satisfactory to the Owner and (ii) name the Owner and Architect as additional insureds under the Subcontractor's commercial general liability policy. The additional insured endorsement included on the Subcontractor's comprehensive general liability policy shall state that coverage is afforded the additional insureds with respect to claims arising out of operations performed by or on behalf of the Contractor. If the additional insureds have other insurance that is applicable to the loss, such other insurance shall be on an excess or contingent basis. The amount of the insurer's liability under this insurance policy shall not be reduced by the existence of such other insurance nor shall it reduce or limit Contractor's contractual obligation to indemnify, save harmless, and defend the Owner for claims made or suits brought which result from or are in connection with the performance of this Agreement.

§ A.3.3 Contractor's Other Insurance Coverage
§ A.3.3.1 Insurance selected and described in this Section A.3.3 shall be purchased maintained in force by Contractor, from an insurance company or insurance companies lawfully authorized to issue insurance in North Carolina and rated A-VII or better by A.M. Best,. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, unless a different duration is stated below:
(If the Contractor is required to maintain any of the types of insurance selected below for a duration other than the expiration of the period for correction of Work, state the duration.)

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The insurance required by Paragraph 3.3 shall be maintained in effect, unless otherwise provided for in the Contract Documents, until the earliest of the following: (i) the date on which all persons and organizations who are insureds under the policy agree that it shall be terminated, (ii) the date on which final payment has been made; or (iii) the date on which the insurable interests in the property of all insureds other than the Owner have ceased.

§ A.3.3.2 The Contractor shall purchase and maintain the following types and limits of insurance in accordance with Section A.3.3.1.
(Select the types of insurance the Contractor is required to purchase and maintain by placing an X in the box(es) next to the description(s) of selected insurance. Where policy limits are provided, include the policy limit in the appropriate fill point.)

[ ] **§ A.3.3.2.1** Builder's Risk insurance on the entire Work. Such insurance shall be written on a completed value form and in an amount equal to the initial Contract Sum, subject to any subsequent modification of the Contract Sum. The insurance shall apply on a replacement cost basis. Builders Risk insurance shall, at a minimum, cover the perils insured under the ISO special causes of loss form (CP 10 30) and shall be endorsed as needed to provide full coverage for loss or damage from collapse, including collapse resulting from design error. Builders Risk insurance shall include coverage for flood. Builders Risk insurance shall cover the entire Work at the site identified in this Agreement and when applicable include reasonable compensation for Architect's services and expenses made necessary by an insured loss. Insured property shall include portions of the Work located away from the site but intended for use at the site, and shall also cover portions of the Work in transit. The policy shall cover the cost of removing debris, including demolition as may be legally necessary by the operation of applicable law.

[ ] **§ A.3.3.2.2 Boiler and Machinery Insurance.**, Boiler and machinery insurance shall be purchased covering insured objects during installation and until final acceptance by the Owner. This insurance shall name as insureds the Owner, the Contractor, and all Subcontractors and Sub-subcontractors in the Work. In lieu of this separate policy, the Contractor may have the boiler and machinery exclusion removed from the Builders Risk policy.

] §
§ A.3.3.3
If the Owner is damaged by the failure of the Contractor to maintain the insurance required by Paragraph A.3.3, then the Contractor shall bear all reasonable costs properly attributable to that failure. The Owner and the Contractor waive all rights against each other and each of
their subcontractors, sub-subcontractors, officers, officials, agents, and employees for recovery of damages caused by fire and other perils to the extent covered by Builders Risk insurance purchased pursuant to Paragraph A.3.3, or any other property insurance applicable to the Work. If such insurance does not allow the insured to waive rights of recovery against others prior to loss, the Contractor shall cause them to be endorsed with a waiver of subrogation as required in the Contract Documents.

§ A.3.3.4 Partial occupancy or use of the Work shall not commence until the insurance company or companies providing Builders Risk insurance have consented to such partial occupancy or use. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies, and agree to take no action, other than upon mutual written consent, with respect to occupancy or use of the Work that could lead to cancelation, lapse, or reduction of insurance.

§ A.3.4 Performance Bond and Payment Bond

(Paragraph Deleted)

(Table Deleted)

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A Performance Bond and a Labor and Material Payment Bond
are required.
The Contractor shall obtain a Performance Bond and a Payment Bond acceptable to the Owner from a surety company authorized to do business in North Carolina that has a financial standing rating from A.M. Best Company equal to or better than A and must be included on the approved list of sureties issued by the United States Department of Treasury and satisfactory to the Owner, each bond for the full amount of the Contract Sum and any subsequent increases. The Contractor shall provide surety bond wherein the surety waives notice of any and all modifications, omissions, additions, changes and advance payments or deferred payments in or about the Contract, and agrees that the obligations undertaken by the
Bond shall not be impaired in any manner by reason of any such modifications, omissions, additions, changes, and advance payments or deferred payments. The surety bond must set forth no requirement that suit be initiated prior to the time stipulated in applicable North Carolina statutes of limitation. The bond shall guarantee the Contractor's faithful performance of
(Table Deleted)

the Contract and the payment of all obligations arising thereunder. The Contractor shall pay all charges in connection with these bonds. One executed copy of the bonds shall be attached to each copy of the Contract before they are returned to the Architect for the Owner's signature. The Contractor shall require the attorney in fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of his power of attorney indicating the monetary limit of such power. Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds.

ARTICLE A.4 SPECIAL TERMS AND CONDITIONS

Special terms and conditions that modify this Insurance and Bonds Exhibit, if any, are as follows:

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AIA® Document A101® – 2017 Exhibit A

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PAGE 1

Standard Template Project
Union County

...

Union County, North Carolina
500 N. Main Street
Suite 510
Monroe, NC 28110

...

Connectivity, LLC.
45 Odell School Road
Suite H
Concord, NC 28027

...

The Owner and Contractor shall purchase and maintain insurance, and provide bonds, as set forth in this ~~Exhibit.~~ Exhibit and otherwise required in the Contract Documents. As used in this Exhibit, the term General Conditions refers to AIA Document A201™–2017, General Conditions of the Contract for Construction.

...

~~**§ A.2.1 General**~~

...

~~Prior to commencement of the Work, the Owner shall secure the insurance, and provide evidence of the coverage, required under this Article A.2 and, upon the Contractor's request, provide a copy of the property insurance policy or policies required by Section A.2.3. The copy of the policy or policies provided shall contain all applicable conditions, definitions, exclusions, and endorsements.~~

PAGE 2

~~**§ A.2.3 Required Property Insurance**~~

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...

§ A.2.3.1 Unless this obligation is placed on the Contractor pursuant to Section A.3.3.2.1, the Owner shall purchase and maintain, from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located, property insurance written on a builder's risk "all-risks" completed value or equivalent policy form and sufficient to cover the total value of the entire Project on a replacement cost basis. The Owner's property insurance coverage shall be no less than the amount of the initial Contract Sum, plus the value of subsequent Modifications and labor performed and materials or equipment supplied by others. The property insurance shall be maintained until Substantial Completion and thereafter as provided in Section A.2.3.1.3, unless otherwise provided in the Contract Documents or otherwise agreed in writing by the parties to this Agreement. This insurance shall include the interests of the Owner, Contractor, Subcontractors, and Sub-subcontractors in the Project as insureds. This insurance shall include the interests of mortgagees as loss payees.

...

§ A.2.3.1.1 Causes of Loss. The insurance required by this Section A.2.3.1 shall provide coverage for direct physical loss or damage, and shall not exclude the risks of fire, explosion, theft, vandalism, malicious mischief, collapse, earthquake, flood, or windstorm. The insurance shall also provide coverage for ensuing loss or resulting damage from error, omission, or deficiency in construction methods, design, specifications, workmanship, or materials. Sub-limits, if any, are as follows:

...

(Indicate below the cause of loss and any applicable sub-limit.)

...

Causes of Loss	**Sub-Limit**

...

§ A.2.3.1.2 Specific Required Coverages. The insurance required by this Section A.2.3.1 shall provide coverage for loss or damage to falsework and other temporary structures, and to building systems from testing and startup. The insurance shall also cover debris removal, including demolition occasioned by enforcement of any applicable legal requirements, and reasonable compensation for the Architect's and Contractor's services and expenses required as a result of such insured loss, including claim preparation expenses. Sub-limits, if any, are as follows:

...

(Indicate below type of coverage and any applicable sub-limit for specific required coverages.)

...

Coverage	**Sub-Limit**

...

§ A.2.3.1.3 Unless the parties agree otherwise, upon Substantial Completion, the Owner shall continue the insurance required by Section A.2.3.1 or, if necessary, replace the insurance policy required under Section A.2.3.1 with property insurance written for the total value of the Project that shall remain in effect until expiration of the period for correction of the Work set forth in Section 12.2.2 of the General Conditions.

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...

§ A.2.3.1.4 Deductibles and Self-Insured Retentions. If the insurance required by this Section A.2.3 is subject to deductibles or self-insured retentions, the Owner shall be responsible for all loss not covered because of such deductibles or retentions.

...

§ A.2.3.2 Occupancy or Use Prior to Substantial Completion. The Owner's occupancy or use of any completed or partially completed portion of the Work prior to Substantial Completion shall not commence until the insurance company or companies providing the insurance under Section A.2.3.1 have consented in writing to the continuance of coverage. The Owner and the Contractor shall take no action with respect to partial occupancy or use that would cause cancellation, lapse, or reduction of insurance, unless they agree otherwise in writing.

...

§ A.2.3.3 Insurance for Existing Structures

...

If the Work involves remodeling an existing structure or constructing an addition to an existing structure, the Owner shall purchase and maintain, until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, "all-risks" property insurance, on a replacement cost basis, protecting the existing structure against direct physical loss or damage from the causes of loss identified in Section A.2.3.1, notwithstanding the undertaking of the Work. The Owner shall be responsible for all co-insurance penalties.

...

§ A.2.4 Optional Extended Property Insurance.

...

The Owner shall purchase and maintain the insurance selected and described below.

...

(Select the types of insurance the Owner is required to purchase and maintain by placing an X in the box(es) next to the description(s) of selected insurance. For each type of insurance selected, indicate applicable limits of coverage or other conditions in the fill point below the selected item.)

...

[-] § **A.2.4.1 Loss of Use, Business Interruption, and Delay in Completion Insurance**, to reimburse the Owner for loss of use of the Owner's property, or the inability to conduct normal operations due to a covered cause of loss.

...

[-] § **A.2.4.2 Ordinance or Law Insurance**, for the reasonable and necessary costs to satisfy the minimum requirements of the enforcement of any law or ordinance regulating the demolition, construction, repair, replacement or use of the Project.

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...

[-] § A.2.4.3 Expediting Cost Insurance, for the reasonable and necessary costs for the temporary repair of damage to insured property, and to expedite the permanent repair or replacement of the damaged property.

...

[-] § A.2.4.4 Extra Expense Insurance, to provide reimbursement of the reasonable and necessary excess costs incurred during the period of restoration or repair of the damaged property that are over and above the total costs that would normally have been incurred during the same period of time had no loss or damage occurred.

...

[-] § A.2.4.5 Civil Authority Insurance, for losses or costs arising from an order of a civil authority prohibiting access to the Project, provided such order is the direct result of physical damage covered under the required property insurance.

...

[-] § A.2.4.6 Ingress/Egress Insurance, for loss due to the necessary interruption of the insured's business due to physical prevention of ingress to, or egress from, the Project as a direct result of physical damage.

...

[-] § A.2.4.7 Soft Costs Insurance, to reimburse the Owner for costs due to the delay of completion of the Work, arising out of physical loss or damage covered by the required property insurance: including construction loan fees; leasing and marketing expenses; additional fees, including those of architects, engineers, consultants, attorneys and accountants, needed for the completion of the construction, repairs, or reconstruction; and carrying costs such as property taxes, building permits, additional interest on loans, realty taxes, and insurance premiums over and above normal expenses.

...

§ A.2.5 Other Optional Insurance.

...

The Owner shall purchase and maintain the insurance selected below.

...

(Select the types of insurance the Owner is required to purchase and maintain by placing an X in the box(es) next to

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~~*the description(s) of selected insurance.)*~~

...

~~[ ] § A.2.5.1 Cyber Security Insurance for loss to the Owner due to data security and privacy breach, including costs of investigating a potential or actual breach of confidential or private information.~~

...

~~*(Indicate applicable limits of coverage or other conditions in the fill point below.)*~~

...

~~[ ] § A.2.5.2 Other Insurance~~

...

~~*(List below any other insurance coverage to be provided by the Owner and any applicable limits.)*~~

...

~~Coverage~~ ~~Limits~~

...

§ A.3.1.1 Certificates of Insurance. The Contractor shall provide certificates of insurance acceptable to the Owner evidencing compliance with the requirements in this Article A.3 at the following times: (1) prior to commencement of the Work; (2) upon renewal or replacement of each required policy of insurance; and (3) upon the Owner's ~~written~~ request. An additional certificate evidencing continuation of commercial liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment and thereafter upon renewal or replacement of such coverage until the expiration of the periods required by Section A.3.2.1 and Section A.3.3.1. The certificates will show the Owner as an additional insured on the Contractor's ~~Commercial General Liability and excess or umbrella liability policy or policies.~~insurance policy or policies as required by this Article A.3. In no event shall any failure of the Owner to receive certified copies or certificates of policies required under Article A.3 or to demand receipt of such certified copies or certificates prior to the Contractor's commencing the Work be construed as a waiver by the Owner or the Architect of the Contractor's obligations to obtain insurance pursuant to this Article A.3. The obligation to procure and maintain any insurance required by this Article A.3 is a separate responsibility of the Contractor and independent of the duty to furnish a certified copy or certificate of such insurance policies. When any required insurance, due to the attainment of a normal expiration date or renewal date, shall expire, the Contractor shall supply the Owner with certificates of insurance and amendatory riders or endorsements that clearly evidence the continuation of all coverage in the same manner, limits of protection, and scope of coverage as was provided by the previous policy. In the event any renewal or replacement policy, for whatever reason obtained or required, is written by a carrier other than that with whom the coverage was previously placed, or the subsequent policy differs in any way from the previous policy, the Contractor shall also furnish the Owner with a certified copy of the renewal or replacement policy unless the Owner provides the Contractor with prior written consent to submit only a certificate of insurance for any such policy.

PAGE 3

§ A.3.1.3 Additional Insured Obligations. To the fullest extent permitted by law, the Contractor shall cause the commercial general liability coverage to include (1) the Owner, ~~the Architect,~~ its officers, agents, and employees; the Architect; and the Architect's consultants as additional insureds on the Commercial General

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Liability Policy for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner as an additional insured for claims ~~caused in whole or in part by the Contractor's negligent acts or omissions for which loss occurs during completed operations.~~ made under the Contractor's completed operations coverage. . The additional insured coverage shall be primary and non-contributory to any of the Owner's general liability insurance policies and shall apply to both ongoing and completed operations. ~~To the extent commercially available, the additional insured coverage~~ , The additional insured coverage with respect to the Owner, its officers, agents, and employees, shall be no less than that provided by Insurance Services Office, Inc. (ISO) forms CG 20 10 07 04, CG 20 37 07 04, and, with respect to the Architect and the Architect's consultants, CG 20 32 07 04.

...

§ A.3.2.1 The Contractor ~~shall purchase and maintain~~ shall, for the protection and benefit of the indemnitees and the Contractor and as part of the Contractor's efforts to satisfy the obligations set forth in Paragraph A.3.2, procure, purchase, and maintain in full force and effect the following types and limits of insurance ~~from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.~~ issued by insurers authorized to do business in North Carolina and rated A-VII or better by A.M. Best or carriers otherwise acceptable to the Owner, and in form and substance reasonably satisfactory to the Owner, which afford the coverages set forth below in Paragraph A.3.2. Information concerning reduction of coverage shall be furnished by the Contractor promptly and within any time limits required by the Contract Documents. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, unless a different duration is stated below:

...

Commercial General Liability insurance, specifically relating to coverage for bodily injury or property damage arising out of completed operations (as set forth in A.3.2.2.1.4) shall be maintained for not less than three (3) years following final payment. The Contractor shall continue to provide evidence of such coverage to the Owner on an annual basis during the aforementioned period, Additional Insured status, as required by A.3.1.3 for Products and Completed Operations shall extend for a period of not less than three (3) years after final payment.

...

§ A.3.2.2.1 Commercial General Liability insurance for the Project written on an occurrence form CG 00 01 04 13 or its equivalent with policy limits of not less than ~~($) each occurrence, ($) general aggregate, and ($~~ One Million Dollars ($ 1,000,000) per occurrence (per location/per project), Two Million Dollars ($ 2,000,000) general aggregate, Two Million Dollars ($ 2,000,000) aggregate for products-completed operations hazard, One Million Dollars ($1,000,000) personal and advertising injury limit, and Five Thousand Dollars ($5,000) medical expense limit providing coverage for claims including

...

.2 personal injury and advertising ~~injury;~~injury and liability assumed under an insured contract (including the tort liability of another assumed in a business contract);

...

.4 bodily injury or property damage arising out of completed operations;~~and~~

...

.5 the Contractor's indemnity obligations under Section 3.18 of the General ~~Conditions.~~Conditions;

...

.6 premises-operations;

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...

.7 independent contractors, including, without limitation, Subcontractors and Sub-subcontractors.

...

§ A.3.2.2.2 The Contractor's Commercial General Liability policy under this Section A.3.2.2 shall not contain an ~~exclusion or restriction~~ exclusion, restriction, or limitation of coverage for the following:

...

.2 Claims for property damage to the Contractor's Work ~~arising out of the products-completed operations hazard where the damaged Work or the Work out of which the damage arises was performed by a Subcontractor.~~.

PAGE 4

.11 Claims related to explosion, collapse and underground ~~hazards, where the Work involves such hazards.~~property damage

...

12 Claims related to fellow employees.

...

§ A.3.2.3 ~~Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Contractor, with policy~~ Business Automobile Liability covering liability arising out of any auto, including owned, hired, and non-owned autos., with policy combined single limits of not less than ~~($) per accident,~~ One Million Dollars ($ 1,000,000) per occurrence, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those ~~motor vehicles~~ autos along with any other statutorily required automobile coverage. Such coverage shall be written on ISO form CA 001, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in ISO form CA 00 01 10 13.

...

§ A.3.2.4 ~~The Contractor may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided such primary and excess or umbrella insurance policies result in the same or greater coverage as the coverages required under Section A.3.2.2 and A.3.2.3, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require the exhaustion of the underlying limits only through the actual payment by the underlying insurers.~~Business Umbrella coverage at a policy limit of not less than Five Million Dollars ($5,000,000) per occurrence. The Contractor's retention shall not exceed Ten Thousand Dollars ($10,000).

...

§ A.3.2.6 Employers' Liability with policy limits not less than One Million Dollars ($ 1,000,000) each accident,One Million Dollars ($ 1,000,000) disease each employee, and One Million Dollars ($ 1,000,000) disease policy limit.

...

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§ A.3.2.8 ~~If the Contractor is **required** to furnish professional services as part of the Work, the Contractor **shall** procure Professional Liability **insurance** covering performance **of** the **professional** services, with **policy** limits of not less than ($) per claim and ($) in the aggregate.~~**The insurance required by Subparagraph A.3.2. shall be written on an occurrence basis. It shall also be written on a per location/per project basis. The insurance required by Subparagraph A.3.2 shall also provide coverage of liability of Contractor's engaged professional consultants (i.e. independent testing laboratories, engineers, surveyors, etc.) for errors and omissions, or a separate policy shall be provided.**

...

§ A.3.2.9 ~~If **the** Work involves **the** transport, dissemination, use, **or** release **of** pollutants, **the** Contractor **shall** procure Pollution Liability insurance, with policy limits **of** not less than ($) per claim and ($) in **the**aggregate.~~**The Contractor shall also cause each Subcontractor to (i) procure insurance reasonably satisfactory to the Owner and (ii) name the Owner and Architect as additional insureds under the Subcontractor's commercial general liability policy. The additional insured endorsement included on the Subcontractor's comprehensive general liability policy shall state that coverage is afforded the additional insureds with respect to claims arising out of operations performed by or on behalf of the Contractor. If the additional insureds have other insurance that is applicable to the loss, such other insurance shall be on an excess or contingent basis. The amount of the**

...

§ A.3.2.10 ~~Coverage **under** Sections A.3.2.8 and A.3.2.9 may be procured through a Combined Professional Liability and Pollution Liability **insurance** policy, with combined **policy** limits of **not** less than ($) per claim and ($) in **the**aggregate.~~**insurer's liability under this insurance policy shall not be reduced by the**

...

§ A.3.2.11 ~~Insurance for maritime liability risks associated with the operation **of** a vessel, if the Work requires **such** activities, with policy limits of not less than ($) per claim **and** ($) in **the**aggregate.~~**existence of such other insurance nor shall it reduce or limit Contractor's contractual obligation to indemnify, save harmless, and defend the**

...

§ A.3.2.12 ~~Insurance **for** the use **or** operation of manned **or** unmanned aircraft, if **the** Work requires such activities, with policy limits **of** not less than ($) per claim and ($) in the aggregate.~~**Owner for claims made or suits brought which result from or are in connection with the performance of this Agreement.**

...

§ A.3.3.1 Insurance selected and described in this Section A.3.3 shall be purchased maintained in force by Contractor, from an insurance company or insurance companies lawfully authorized to issue insurance in ~~the jurisdiction where the Project is located.~~ North Carolina and rated A-VII or better by A.M. Best,. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, unless a different duration is stated below:

PAGE 5

The insurance required by Paragraph 3.3 shall be maintained in effect, unless otherwise provided for in the Contract Documents, until the earliest of the following: (i) the date on which all persons and organizations who are insureds under the policy agree that it shall be terminated, (ii) the date on which final payment has been made; or (iii) the date on which the insurable interests in the property of all insureds other than the Owner have ceased.

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...

[ ] § A.3.3.2.1 ~~Property insurance of the same type and scope satisfying the requirements identified in Section A.2.3, which, if selected in this section A.3.3.2.1, relieves the Owner of the responsibility to purchase and maintain such insurance except insurance required by Section A.2.3.1.3 and Section A.2.3.3. The Contractor shall comply with all obligations of the Owner under Section A.2.3 except to the extent provided below. The Contractor shall disclose to the Owner the amount of any deductible, and the Owner shall be responsible for losses within the deductible. Upon request, the Contractor shall provide the Owner with a copy of the property insurance policy or policies required. The Owner shall adjust and settle the loss with the insurer and be the trustee of the proceeds of the property insurance in accordance with Article 11 of theGeneral Conditions unless otherwise set forth below:~~ Builder's Risk insurance on the entire Work. Such insurance shall be written on a completed value form and in an amount equal to the initial Contract Sum, subject to any subsequent modification of the Contract Sum. The insurance shall apply on a replacement cost basis. Builders Risk insurance shall, at a minimum, cover the perils insured under the ISO special causes of loss form (CP 10 30) and shall be endorsed as needed to provide full coverage for loss or damage from collapse, including collapse resulting from design error. Builders Risk insurance shall include coverage for flood. Builders Risk insurance shall cover the entire Work at the site identified in this Agreement and when applicable include reasonable compensation for Architect's services and expenses made necessary by an insured loss. Insured property shall include portions of the

...

~~*(Where the Contractor's obligation to provide property insurance differs* from the *Owner's obligations as described under Section A.2.3, indicate such differences in the space below. Additionally, if a party other than the Owner will be responsible* for *adjusting and settling a loss with* the *insurer* and *acting as the trustee* of the *proceeds of property insurance* in *accordance with Article 11* of the *General Conditions, indicate the responsible party below.)*~~Work located away from the site but intended for use at the site, and shall also cover portions of the Work in transit. The policy shall cover the cost of removing debris, including demolition as may be legally necessary by the operation of applicable law.

...

[ ] § A.3.3.2.2 ~~**Railroad Protective Liability Insurance**, with policy limits of not less than ($) per claim and ($) in the aggregate, for Work within fifty (50) feet of railroad property.~~**Boiler and Machinery Insurance.**, Boiler and machinery insurance shall be purchased covering insured objects during installation and until final acceptance by the Owner. This insurance shall name as insureds the Owner, the Contractor, and all Subcontractors and Sub-subcontractors in the Work. In lieu of this separate policy, the Contractor may have the boiler and machinery exclusion removed from the Builders Risk policy.

...

~~[ ] § A.3.3.2.3 Asbestos Abatement Liability Insurance, with policy limits [ ] §~~

...

§ A.3.3.3

...

~~of not less than ($) per claim and ($) in the aggregate, for liability arising from the encapsulation, removal, handling, storage, transportation, and disposal ofasbestos-containing materials.~~If the Owner is damaged by the failure of the Contractor to maintain the insurance required by Paragraph A.3.3, then the Contractor shall bear all

reasonable costs properly attributable to that failure. The Owner and the Contractor waive all rights against each other and each of

...

[~~-~~] ~~§ A.3.3.2.4 Insurance for physical damage to property while it is in storage and in transit to the construction site on an "all-risks" completed value form.~~their subcontractors, sub-subcontractors, officers, officials, agents, and employees for recovery of damages caused by fire and other perils to the extent covered by Builders Risk insurance purchased pursuant to Paragraph A.3.3, or any other property insurance applicable to the Work. If such insurance does not allow the insured to waive rights of recovery against others prior to loss, the Contractor shall cause them to be endorsed with a waiver of subrogation as required in the Contract Documents.

...

[~~-~~] ~~§ A.3.3.2.5 Property insurance on an "all-risks" completed value form, covering property owned by the Contractor and used on the Project, including scaffolding and other equipment.~~**§ A.3.3.4** Partial occupancy or use of the Work shall not commence until the insurance company or companies providing Builders Risk insurance have consented to such partial occupancy or use. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies, and agree to take no action, other than upon mutual written consent, with respect to occupancy or use of the Work that could lead to cancelation, lapse, or reduction of insurance.

...

[~~-~~] § ~~**A.3.3.2.6 Other Insurance**~~§ A.3.4 Performance Bond and Payment Bond

...

~~*(List below any other insurance coverage to be provided by the Contractor and any applicable limits.)*~~

...

~~**Coverage** **Limits**~~

PAGE 6

~~§ A.3.4 Performance Bond and~~ A Performance Bond and a Labor and Material Payment Bond

...

are required.

...

The Contractor shall ~~provide surety bonds, from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where theProject is located, as follows:~~obtain a Performance Bond and a Payment Bond acceptable to the Owner from a surety company authorized to do business in North Carolina that has a financial standing rating from A.M. Best Company equal to or better than A and must be included on the approved list of sureties issued by the United States Department of Treasury and satisfactory to the Owner, each bond for the full amount of the Contract Sum and any subsequent increases. The Contractor shall provide surety bond wherein the surety waives notice of any and all modifications, omissions, additions, changes and advance payments or deferred payments in or about the Contract, and agrees that the obligations undertaken by the

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User Notes: (3B9ADA36)

...

~~(Specify type and penal sum ofbonds.)~~*Bond shall not be impaired in any manner by reason of any such modifications, omissions, additions, changes, and advance payments or deferred payments. The surety bond must set forth no requirement that suit be initiated prior to the time stipulated in applicable North Carolina statutes of limitation. The bond shall guarantee the Contractor's faithful performance of*

...

~~Type~~	~~Penal Sum ($0.00)~~
~~Payment Bond~~	
~~Performance Bond~~	

...

~~Payment and Performance Bonds shall be AIA Document A312™, Payment Bond and Performance Bond, or contain provisions identical to AIA Document A312™, current as of the date of this Agreement.~~the Contract and the payment of all obligations arising thereunder. The Contractor shall pay all charges in connection with these bonds. One executed copy of the bonds shall be attached to each copy of the Contract before they are returned to the Architect for the Owner's signature. The Contractor shall require the attorney in fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of his power of attorney indicating the monetary limit of such power. Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds.

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User Notes:

Union County Government
Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-384 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Asphalt Restoration Services

INFORMATION CONTACT:

Andrew Neff, UCW, Water & Wastewater Division Director, 704-296-4215

ACTION REQUESTED:

Authorize the County Manager to (i) negotiate and execute an amendment to the agreement with JA Seagraves, extending the contact to September 28th, 2022, substantially consistent with this agenda item; and (ii) exercise the additional one-year renewal option under the Agreement in the County Manager's discretion.

BACKGROUND:

Union County has a multiyear contract with JA Seagraves providing asphalt repairs to roadways, highways, and parking areas that were necessary as a result of repairs to the water distribution and wastewater collections systems. This amendment increases the contract threshold to accommodate anticipated FY22 expenditures and extends the agreement to September 28, 2022.

Union County Water maintains and operates over 1,000 miles of water system and over 700 miles of wastewater infrastructure. A large portion of the combined 1700+ miles of piping is located in paved roadways and shoulders, as well as parking areas, both residential and commercial. Once water/sewer lines are repaired due to age, material, pressure, third-party damage, etc., numerous restoration activities may be required to take place. The activities include compaction, milling, and repaving asphalt surfaces, among others. In the past, due to this particular service requiring a very specific skill-set and potential scheduling implications, this restoration service has been conducted by industry professionals. This effort has shown a great improvement in customer service by reducing the time required to restore roadways, driveways, and parking areas for governing agencies having jurisdictional authority such as NCDOT, Town of Indian Trail, etc., as well as customers and citizens, therefore reducing the level of complaints that are received.

The agreement, dated September 28, 2018 included a 2-year initial term followed by three (3) one-year renewal options at the County's sole discretion and is conditioned upon budget appropriation.

FINANCIAL IMPACT:

The Water & Wastewater Division anticipates spending approximately $150,000 for this service with JA Seagraves under this amendment. The Division further anticipates expending another $150,000 if

the last renewal term is executed by the County Manager in FY23. Funding is available in the adopted FY22 Water & Wastewater Division budget appropriation and future expenditures are subject to BOCC budget appropriation.

Union County
Government
EST. 1842

Request for Proposal # 2018-069

Asphalt Restoration Services

Due Date: May 24, 2018
Time: 2:00 pm EST
Receipt Location: Government Center
Administrative Services Procurement Division
500 N. Main Street, Suite #709
Monroe, NC 28112

Procurement Contact Person
Name: David Shaul
Title: Procurement Specialist
E-mail: david.shaul@unioncountync.gov
Telephone: 704.283.3601

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2 Submittal Deadline and Addendum Information

2.1 PROPOSAL SUBMISSION DEADLINE

Submittals shall be sealed and labeled on the outside "RFP# 2018-069 Asphalt Restoration Services". RFP's are to be received by the Union County, Procurement Division by **2:00 p.m., May 24, 2018.**

Mail or hand-deliver submission packets to:

Union County Government Building
Administrative Services, Procurement Division
500 North Main Street, Suite #709
Monroe, NC 28112
Attention: David Shaul, Procurement Specialist

The proposal must be submitted electronically on non-returnable CD or flash drive, and in printed form. One (1) original (mark "ORIGINAL COPY") plus five (5) hard copies of the proposal must be submitted. The original proposal package must have original signatures and must be signed by a person who is authorized to bind the proposing firm. All additional proposal sets may contain photocopies of the original package.

Electronic (email) or facsimile submissions will not be accepted.

There is no expressed or implied obligation for Union County to reimburse firms for any expenses incurred in preparing proposals in response to this request.

Union County reserves the right to reject any or all proposals or to select the proposal, which in its opinion, is in the best interest of the County.

2.2 PROPOSAL QUESTIONS

Proposal questions will be due on **May 14, 2018 at 5 pm** EST. The primary purpose of this is to provide participating firms with the opportunity to ask questions, in writing, related to the RFP. The County may respond with an addendum within five (5) calendar days.

Submit questions by e-mail to **David Shaul at david.shaul@unioncountync.gov by the deadlines shown above.** The email should identify the RFP number and project title. All questions and answers may be posted as addenda on www.co.union.nc.us and www.ips.state.nc.us.

2.3 ADDENDUM

Union County may modify the RFP prior to the date fixed for submission of proposals by the issuance of an addendum.

Should a vendor find discrepancies or omissions in this IFB or any other documents provided by Union County, the vendor should immediately notify the County of such potential discrepancy in writing via e-mail as noted above.

Any addendum to these documents shall be issued in writing. No oral statements, explanations, or commitments by anyone shall be of effect unless incorporated in the written addendum. Receipt of Addendum shall be acknowledged by the Proposer on Appendix C, Addendum Receipt and Anti-Collusion form.

3 PURPOSE

3.1 INTRODUCTION

Union County (hereafter the "County"), through its Public Works Department (UCPW), is soliciting proposals from qualified contractors to provide asphalt restoration after a UCPW repair.

This contract generally addresses various driveways and pavement repair work resulting from Union County Public Works' (UCPW) utility repair activities and the scope will typically be to complete asphalt repair following a water or sewer repair, but may include placement and compaction of backfill or other related work.

All work must be performed in a neat and professional manner that is aesthetically pleasing and restored to original condition.

[redacted]

All asphalt work in traffic areas must be finished to provide good ride quality. All roadway repairs must be made to the satisfaction of the North Carolina Department of Transportation (NCDOT) or governing municipality. It is the contractors' responsibility to contact NCDOT regarding requirements and standards for roadway repairs.

The Contractor shall have sufficient resources (manpower, supervision, and equipment) necessary to perform work to the specifications.

No additional work or deviation from the project assignments shall be allowed without written approval from UCPW. Work requested by the property owner, which is not part of the approved assignments/specifications, must be contracted between the property owner and the Contractor. Any additional work by the Contractor for the homeowner shall not begin until all of Union County's work has been completed and accepted. Union County will not be responsible for payment of any additional work performed by the Contractor for property owners. The Contractor shall not suggest or recommend additional work to the property owners during the performance of the work contracted with Union County.

No guarantees will be made of size, amount, or quantity of any specified work orders/projects.

3.2 COUNTY

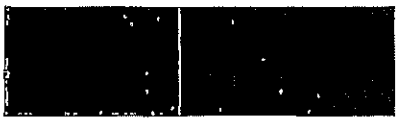
Union County, North Carolina (population 212,756) is located in the central, southern piedmont. The County provides its citizens with a full array of services that include public safety, water/wastewater utilities and sanitation, human services, cultural and recreational activities, and general government administration.

4 SCOPE OF WORK

4.1 ASPHALT REPAIR

Asphalt Repair consists of:

- Furnishing, placing and compacting of asphalt material to return disturbed area to original condition
- Roadway repairs within NCDOT's jurisdiction shall be repaired in accordance to all applicable NCDOT standards and specifications and subject to inspection/approval by NCDOT representative.
- All other roadway repairs must conform to the governing municipality in that area.



- Asphalt driveways, walkways, etc. shall be repaired/replaced to match existing area.
- Excess or loose material (dirt, debris, stone, concrete, asphalt, etc.) shall be removed and disposed.
- Non-excess loose material shall be tamped prior to beginning the asphalt compaction process. No fragments or pieces of asphalt shall be left in the area to be repaved.
- It will be the Contractor's responsibility to assure 100% compaction of this work and assure that the final product is free from ragged edges, rough texture, ruts, bleeding, raveling, or other flaws not considered good workmanship by UCPW.

Cuts will be of variable numbers, sizes (dimensions) at any given time. Areas where asphalt repair is required may be pre-backfilled by UCPW to subgrade or finish grade for continued use until asphalt repair is complete.

There will be no separate measurement or payment for asphalt tack. All tack used as a part of this contract will be considered incidental to the work and no payment will be made by the County for its application.

Project assignments or locations given to the Contractor that is privately owned such as paved driveways, parking lots, etc. shall be repaired to original condition as appropriate.

Materials: All materials shall comply with NC DOT standards. Any material determined to be unsuitable will be removed and replaced at the contractor's expense.

Construction Methods: All construction methods shall comply with NCDOT and OSHA specifications.

Measurement: The quantity of installation and/or repair of asphalt sections to be paid for will be the actual square yards of asphalt measured along the surface which has been incorporated into the completed and accepted work.

Payment: The quantity of asphalt patch, measured as provided above, will be paid for at the contract unit price per square yard (SY) for Asphalt Repair. Such payment will be full compensation for all work covered by this special provision, including but not limited to furnishing, placing and compacting of asphalt patch material, and all work incidental to the completion of the patch. Excess or loose material (dirt, debris, stone, concrete, asphalt, etc.) shall be removed from the patch area and disposed appropriately in accordance with all state laws and local regulations.



[redacted]

Payment will be made under:

Asphalt Repair 0"-2" (2" lift) (Surface Course - S9.5B) .....SY

Asphalt Repair 2"-5" (3" lift) (Intermediate Course – 19.0B).....SY

Asphalt Repair - 5" Lift (Base Course - B25.0C).....SY

4.2 TEMPORARY PATCH

Temporary patches should only be installed at the direction of UCPW and therefore paid appropriately. Any temporary patches installed and subsequently removed by the contractor in order to comply with the required contract timeframe or without direction by UCPW shall be at their sole expense and not paid according to this contract.

- Temporary patch materials and installation shall comply with all appropriate NCDOT standards in traffic areas. Cold patch is acceptable for temporary patching.

Measurement: The quantity of installation of temporary patch of asphalt sections, as approved by UCPW, to be paid for will be the actual square yards of patch material measured along the surface which has been incorporated into the completed and accepted work.

Payment: The quantity of temporary asphalt patch, measured as provided above, will be paid for at the contract unit price per square yard (SY). Such payment will be full compensation for all work covered by this special provision, including but not limited to furnishing, placing and compacting of temporary asphalt patch material, and all work incidental to the completion ofthe patch.

Temporary Patch.....SY

4.3 ASPHALT MILLING

Asphalt milling, up to 2", may be required to ensure smooth transition between existing roadways to new asphalt. Milling shall not be conducted unless directed or approved by UCPW.

Measurement: The quantity of asphalt milling of existing asphalt, as approved by UCPW, to be paid for will be the actual square yards of area milled measured along the surface which has been incorporated into the completed and accepted work.

Payment: The quantity of asphalt milling, measured as provided above, will be paid for at the contract unit price per square yard (SY). Such payment will be full compensation for all work covered by this special provision, including but not limited to milling and removal of existing asphalt material.

[redacted]

Milling.....SY

4.4 MOBILIZATION

Mobilization shall cover all associated costs for equipment, labor, parts etc. to achieve the necessary asphalt repair. The Contractor shall be paid a mobilization fee for each project site as a minimum payment. A work order may contain one or more project sites for repair. If projects are within one (1) mile (as measured by roadways) of other projects, only one (1) mobilization charge will apply. If projects are more than one (1) mile apart, Contractor shall be paid mobilization for each project on the work order.

Payment: Mobilization will be paid to the contractor based on the bid amount provided in the bid tabulation sheet. This fee is in addition to work completed and paid by other unit prices.

Mobilization.....EA

4.5 TRAFFIC CONTROL

The Contractor shall provide UCPW with a notice of no less than 3 days of traffic control needs to allow UCPW the option to perform the required traffic control activities. If UCPW declines the option, the Contractor must provide the appropriate traffic control measures.

The Contractor is responsible for notifying the Union County Communications (Police & Fire) and NCDOT of any work where the number of travel lanes is reduced from normal conditions.

The Contractor shall install advance warning signs for the project(s) as necessary. The Contractor shall begin construction activity on a street on the scheduled date for the closing of the travel lane.

During daily construction work hours, the Contractor will maintain at least one lane of traffic. During periods of construction inactivity, all lanes of traffic will be open unless otherwise specified.

Contractor will not be required to obtain NCDOT Encroachment Agreements, while working within NCDOT Right-of-Ways, prior to any work related to this contract as a result of UCPW construction activities. However, Contractor must comply with the requirements set forth in the NCDOT Encroachment Agreement.

Traffic control will be performed by the Contractor based upon the NCDOT and Manual of Uniform Traffic Control Devices (MUTCD) Traffic Control Provisions. UCPW will not be responsible for any violation of NCDOT traffic control procedures or any damages as a result thereof. The Contractor shall be thoroughly familiar

[redacted]

with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD), the current edition of the North Carolina Department of Transportation (NCDOT) Supplement to the MUTCD for Streets and Highways, the NCDOT Roadway Standard Drawings and the current edition of the NCDOT Standard Specifications for Roads and Structures. All traffic control devices and procedures shall conform to the above standards asapplicable.

The Contractor shall use flagger control in accordance with all NCDOT flagger control training and standards.

The Contractor will be required to maintain ingress and egress to all businesses and dwellings, and easy access to fire hydrants during repair(s).

The Contractor shall not work on both sides of the road simultaneously within the same area, unless approve by Union County Public Works.

The Contractor shall mark all hazards within the work area limits with well-maintained signs, barricades, warning and/or channelizing devices.

Traffic Control Devices: The Contractor shall furnish, install, operate, relocate, maintain and remove all temporary traffic control devices necessary for controlling traffic in accordance with NCDOT requirements. The Contractor shall notify NCDOT before installation, removal or relocation of any permanent signs within the right-of-way. All construction signs and barricades shall remain in place until the appropriate permanent signs and pavement markings are re- installed.

Pedestrian Considerations: The Contractor shall accommodate the needs of all pedestrians.

Equipment and Material Storage: During periods of construction inactivity, all construction materials and equipment shall be stored by the Contractor properly as not to disturb the public or as deemed necessary by NCDOT. The Contractor shall not disturb any traffic signal equipment without prior written approval from NCDOT and notification to UCPW.

Measurement: Traffic Control shall be measured as a unit price for each work order issued where traffic control is necessary.

Payment: Payment will be made under "Traffic Control". Only one traffic control payment shall be made per work order, if necessary for proper completion and worker/public safety. **UCPW must agree and approve the need for traffic control for payment.**

Traffic Control..... EA

[redacted]

4.6 SELECT MATERIAL

Work covered in this special provision consists of furnishing, placing, and compacting select material as directed.

It is anticipated that select material may be used as structural backfill to replace soil deemed unsuitable. The Contractor shall not remove soil from the Project without approval from UCPW. Select material shall not be used without prior UCPW consent.

Materials: Select material shall meet the requirements of NCDOT Standard Specifications for Roads and Structures.

Measurement: The cost to furnish, haul, place and compact select material that meets the requirements will be included in the lump sum price bid for "Select Material". Where select material is used, the quantity of select material to be measured and paid for will be the actual number of tons of select material, weighed in trucks on certified platform scales or other certified weighing devices that has been hauled to the job site and incorporated into the completed and accepted Project.

If the Contractor brings select material onto the Project for its own convenience, that material will not be measured or paid for as Select Material.

Payment: Select material, measured as provided above, will be paid for at the contract unit price per ton for "Select Material". Such payment will be full compensation for all work covered by this special provision, including but not limited to furnishing, hauling, placing and compacting select material.

Payment will be made under:

SELECT MATERIAL .....TN

4.7 MATERIAL DISPOSAL

No payment will be made for removal and disposal of excess material including but not limited to concrete sidewalks, driveways, curb and gutter, asphalt, traffic islands and parking areas, or any other paved or concrete structures. Material disposal shall be included in the repair cost.

UCPW strongly encourages the awarded contractor to recycle all appropriate materials, such as concrete, asphalt, stone, etc.

4.8 LANDSCAPING

Landscaping in this contract will apply only to areas requiring restoration after asphalt repair is complete, i.e. alongside of roadways and paved driveways.

[redacted]

Contractor shall communicate and coordinate landscape restoration with landscaping contractors currently under contract with UCPW. Contractor shall include UCPW in the correspondence with the landscaping contractor and shall include the approximate size of the landscaping area and type of landscaping, i.e. sod, seed/straw, etc. Contact information will be provided to the awarded bidder upon Notice to Proceed.

5 OTHER REQUIREMENTS

5.1 COMPLAINT RESOLUTION PLAN

The Contractor must provide a supervisor to be available by phone 24 hours a day, 7 days a week to answer emergency calls related to the Contractor's work and job sites.

The Contractor must respond immediately when called with emergency situations involving job site safety; unsafe traffic control; ingress/egress concerns or other potentially dangerous situations caused by the Contractor's work.

Non-emergency complaints regarding the Contractor's work/workmanship must be responded to within 24 hours.

The Contractor shall immediately correct problems associated with his/her faulty or poor workmanship at his/her own expense.

5.2 EMERGENCY WORK

UCPW may require repairs to be made immediately due to major roadway damage or other unforeseen circumstances. These projects (work orders) will be of the upmost priority and shall be completed immediately. Contractor will be notified of any emergency repairs as they exist by UCPW representative.

5.3 REFERENCES

Provide a minimum of five (5) professional references related to this specific construction activity. Include company name, address, phone number, and contact name(s).

5.4 CONFORMITY WITH WORK ORDERS AND SPECIFICATIONS

The Contractor shall employ sufficient labor and equipment for executing the work to full completion in the manner and time required by these specifications.

The Contractor will be required to execute the work in a continuous and uninterrupted manner upon notification by UCPW via fax, email, or phone on each

location. It will be the responsibility of the Contractor to keep UCPW informed of his/her schedule, work plan, and progress and to submit weekly reports in an electronic format approved by UCPW of work order status to the appropriate UCPW representative.

Any person employed by the Contractor or by any Subcontractor during the life of this project who, in the opinion of UCPW, does not perform his/her work in a proper and skillful manner or is disrespectful, intemperate, or disorderly shall be removed by the Contractor or Subcontractor from the project, and future worksites with UCPW. The supervisor of the crew at a minimum shall speak fluent English as to have the ability to communicate with UCPW staff and/or the resident.

In the event UCPW or NCDOT finds the materials or the finished product in which the materials used or the work performed have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced by the contractor at no cost to Union County.

All equipment which is proposed to be used on the work of this contract is to be of sufficient size and in such mechanical condition as to meet the requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the project shall be such that no injury to the roadway or other public or private property will result from its use.

5.5 CUSTOMER COMMUNICATION

Any person employed by the Contractor or by any Subcontractor during the life of this project must act professionally and respectful when communicating with customers or the general public. The Contractor and their employees must present credentials, including a picture ID, when approaching customers or upon request. The supervisor of the crew at a minimum shall speak fluent English as to have the ability to communicate with UCPW staff and/or the resident.

The contractor shall communicate with the customer, when necessary, following the steps below.

Before performing the restoration

1. Contractor shall contact the customer or owner providing a 3 day notice of their arrival to perform the restoration.
2. Once on site the contractor shall verbally (in person) advise the customer or owner of the following:
    I. The crew is on site to conduct the restoration(s)
    II. The specific work area where the restoration will

[redacted]

take place, and

III. The estimated time frame the work will require for completion

After performing the restoration

1. The contractor shall notify the customer or owner that the work has been completed
   I. Verbally, or
   II. Leave a door hanger
2. The contractor shall notify the customer or owner, verbally or with a door hanger, of any special instructions regarding the restoration such as watering requirements for grass/sod, the time required for vehicles to stay off new concrete, etc.
3. The contractor shall take appropriate pictures of the restoration and send all pictures in with the invoice.

5.6 GUARANTEE

The Contractor shall guarantee all materials and workmanship for a period of one (1) year from the date of acceptance by Union County and shall replace any portions that fail because of faulty materials or workmanship at no additional cost. Items repaired under the provisions shall have an extended warranty period of twelve (12) months from the date of repair of the item.

5.7 PROJECT WORK ORDERS

A project shall be defined as work orders and/or the construction services to be performed at a specific location(s). UCPW will submit a work order (standard form) to the contractor via fax or email indicating location, type of work to be performed, approximate size area, any special conditions, and date to be completed, and contact information.

All work assigned under this contract shall be completed within 10 business days of assignment, unless otherwise approved by UCPW. If a contractor is unable to meet the completion date UCPW reserves the right to utilize another contractor to complete this work.

5.8 INVOICING AND CORRESPONDENCE

All invoicing shall be sent to the appropriate UCPW representative requesting the work order, no later than 2 weeks, after project or work order completion. Invoicing shall include date of completion, date of invoice, type of work performed, size of restoration area, and all required pictures. Invoicing must also include copies of related load tickets, receipts, etc. from the asphalt vendor.

5.9 ADJUSTMENTS OF MANHOLES, METER AND VALVE BOXES

The contractor may request UCPW to adjust manholes, meter boxes, valve boxes, etc. prior to project completion. This will be completed at no cost to the contractor if adjustments to the above items are due in part to UCPW's construction activities. Failure to request these adjustments may result in the Contractor removing the asphalt in order for UCPW to make the necessary adjustments and corrections and replace the asphalt at no additional cost to the County. Any damage to these structures as a part of the contractor's project completion will be charged against the paid sum for that project.

5.10 RETURN OF COUNTY OWNED TRAFFIC CONTROL DEVICES

There may be occurrences where UCPW has left traffic control devices at the work site for the protection of the public. It shall be the contractor's responsibility to return such equipment to the UCPW Operations Center, 4600 Goldmine Road Monroe, NC 28112, at no charge to UCPW.

6 DETAILED SUBMITTAL REQUIREMENTS

6.1 PROPOSAL FORMAT

Proposers should prepare their proposals in accordance with the instructions outlined in this section. Each proposer is required to submit the proposal in a sealed package. Proposals should be prepared as simply as possible and provide a straightforward, concise description of the proposer's capabilities to satisfy the requirements of the RFP. Utmost attention should be given to accuracy, completeness, and clarity of content. All parts, pages, figures, or tables should be numbered and clearly labeled. Response information should be limited to pertinent information only

The proposal should be organized into sections:

- **Tab A** for Cover Letter / Executive Summary
- **Tab B** for Company Information;
- **Tab C** for References
- **Tab D** for Proposed Pricing; and
- **Tab E** for Required Signature Forms.

Omissions and incomplete answers will be deemed unresponsive. Please initial any corrections.

[redacted]

A. Cover Letter / Executive Summary

An executive Summary shall provide the name, address, telephone, and facsimile numbers of the Offeror along with the name, title, address, telephone, e-mail address and facsimile numbers of the executive that has the authority to contract with the County. The summary must be signed by an individual authorized to contractually bind the firm and include an expression of the firm's ability and desire to meet the requirements of the request for proposal. The Executive Summary should not exceed two (2) pages.

Each Company shall make the following representation and warranty in the cover letter/executive summary, the falsity of which might result in rejection of its proposal: "The information contained in this proposal or any part thereof, including any exhibits, schedules, and other documents and instruments delivered or to be delivered to the County, is true, accurate, and complete. This proposal includes all information necessary to ensure that the statements therein do not in whole or in part mislead the County as to any material facts."

B. Company Information

Include a description of the firm's background, its organizational structure, length of time in business, assets available to meet County service requirements, and experience in providing the type of services solicited herein. Include brief resumes of Supervisory Staff and higher that will be associated with the project. Include copies of certifications and/or licenses.

C. References

List five (5) references serviced by your company. Provide company name & address, contact name(s) and telephone number.

D. Proposed Pricing

Complete the pricing form, Appendix A

E. Required Signature Forms

Proposers should include signed copies of the following documents:

- Proposal Submission Form, Appendix B
- Addendum Receipt and Anti-Collusion Form, Appendix C
- Iran Divestment Certificate, Appendix D
- W-9 Form

7 EVALUATION CRITERIA

7.1 EVALUATION OF PROPOSALS

The County reserves the right to determine the suitability of proposals on the basis of a proposal's meeting administrative requirements, technical requirements, the review team's assessment of the quality, performance of the services proposed, and cost.

Evaluation Committee will make a selection based on criteria listed below (no particular order) and other relevant RFP information. Evaluation factors will include, but are not limited to, the following:

- Demonstrated ability to provide the services,
- References
- Price/Cost
- Compliance with the information listed in the RFP

7.2 AWARD PROCEDURES

The award shall be made in the best interest of the County. This Request for Proposal is not subject to any competitive bidding requirements of North Carolina law. The County reserves the right to accept other than the most financially advantageous proposal. The County reserves the right to accept or reject any and all proposals, to waive any informality in proposals, and unless otherwise specified in writing by the Proposer, to accept any items in any proposal. The County may, at its discretion, require **one or more** proposers to appear before an evaluation committee for an interview or to make a presentation. During such interview, the contractor may be required to orally and otherwise present its proposal and to respond in detail to any questions posed. Additional meetings may be held to clarify issues or to address comments, as deemed appropriate. Proposers will be notified in advance of the time and format of such meetings. Since Union County may choose to award a contract without engaging in discussions or negotiations, the proposal submitted shall define each proposer's best offer for performing the services described in this RFP.

The commencement of such discussions, however, does not signify a commitment by Union County to execute a contract or to continue discussions. The County may terminate discussions at any time and for any reason.

A proposal may be rejected if it is incomplete. Union County may reject any or all proposals and may waive any immaterial deviation in a proposal.

More than one proposal from an individual, firm, partnership, corporation or association under the same or different names, will not be considered.

[redacted]

As the County may award a contract based on the initial offer, a bidder should make its initial offer on the most favorable terms available. The County reserves the right, however, to have discussions with those bidders falling within a competitive range, and to request revised pricing offers from them and to make an award or conduct negotiations thereafter.

County may select and enter into negotiations with the next most advantageous Proposer if negotiations with the initially chosen Proposer are not successful.

The award document may be a Purchase Order incorporating, by reference, all the requirements, terms and conditions of the solicitation and the Proposer's proposal as negotiated.

7.3 AWARD

The term of this contract shall be for two (2) years, from the date of award with the option to renew for three additional one year periods. The award is for a fixed, firm unit price during the initial two (2) year term where product needs are based upon indefinite quantities, and where orders will be based on actual needs that may exceed or be less than projections. All expenditures under a unit price contract are contingent upon appropriations having been made by Union County Board of Commissioners. Price adjustments may be negotiated at the time of renewal, based on the applicable Consumer Price Index adjustment over the preceding twelve months.

Union County shall review the terms and conditions, and confirm performance under this contract has been satisfactory. However, the County reserves the right to terminate the contract or to allow the contract period to elapse.

The parties agree that the contract for services may be terminated by Union County upon providing 60 days written notice.

8 GENERAL CONDITIONS AND REQUIREMENTS

8.1 TERMS AND CONDITIONS

All proposals submitted in response to this request shall become the property of Union County and as such, may be subject to public review.

Union County has the right to reject any or all proposals, to engage in further negotiations with any firm submitting a proposal, and/or to request additional information or clarification. The County is not obligated to accept the lowest cost proposal. The County may accept that proposal that best serves its needs, as determined by County officials in their sole discretion.

All payroll taxes, liability and worker's compensation are the sole responsibility of the Proposer. The Proposer understands that an employer/employee relationship does not exist under this contract.

8.2 SUB-CONTRACTOR/PARTNER DISCLOSURE

A single firm may propose the entire solution. If the proposal by any firm requires the use of sub-contractors, partners, and/or third-party products or services, this must be clearly stated in the proposal. The firm submitting the proposal shall remain solely responsible for the performance of all work, including work that is done by sub-contractors.

8.3 MODIFICATION OR WITHDRAWAL OF PROPOSAL

Prior to the scheduled closing time for receiving proposals, any Contractor may withdraw their proposal. After the scheduled closing time for receiving proposals, no proposal may be withdrawn for 60 days. Only written requests for the modification or correction of a previously submitted proposal that are addressed in the same manner as proposals and are received by the County prior to the closing time for receiving proposals will be accepted. The proposal will be corrected in accordance with such written requests, provided that any such written request is in a sealed envelope that is plainly marked "Modification of Proposal – "2018-069 Asphalt Restoration Services". Oral, telephone, or fax modifications or corrections will not be recognized or considered.

8.4 INSURANCE

At Contractor's sole expense, Contractor shall procure and maintain the following minimum insurances with insurers authorized to do business in North Carolina and rated A-VII or better by A.M. Best.

A. WORKERS' COMPENSATION
Statutory limits covering all employees, including Employer's Liability with limits of:

$500,000	Each Accident
$500,000	Disease - Each Employee
$500,000	Disease - Policy Limit

B. COMMERCIAL GENERAL LIABILITY
Covering all operations involved in this Agreement.

$2,000,000	General Aggregate
$2,000,000	Products/Completed Operations Aggregate
$1,000,000	Each Occurrence
$1,000,000	Personal and Advertising Injury Limit

[redacted]

$5,000 Medical Expense Limit

C. COMMERCIAL AUTOMOBILE LIABILITY

$1,000,000 Combined Single Limit - Any Auto

8.5 ADDITIONAL INSURANCE REQUIREMENTS

A. Contractor's General Liability policy shall be endorsed, specifically or generally, to include the following as Additional Insured:

UNION COUNTY, ITS OFFICERS, AGENTS AND EMPLOYEES ARE INCLUDED AS ADDITIONAL INSURED WITH RESPECT TO THE GENERAL LIABILITY INSURANCE POLICY.

B. Before commencement of any work or event, Contractor shall provide a Certificate of Insurance in satisfactory form as evidence of the insurances required above.

C. Contractor shall have no right of recovery or subrogation against Union County (including its officers, agents and employees), it being the intention of the parties that the insurance policies so affected shall protect both parties and be primary coverage for any and all losses covered by the above-described insurance.

D. Union County shall have no liability with respect to Contractor's personal property whether insured or not insured. Any deductible or self-insured retention is the sole responsibility of Contractor.

E. Notwithstanding the notification requirements of the Insurer, Contractor hereby agrees to notify Union County's Risk Manager, at 500 N. Main Street # 130, Monroe, NC 28112, within two (2) days of the cancellation or substantive change of any insurance policy set out herein. Union County, in its sole discretion, may deem failure to provide such notice as a breach of this Agreement.

F. The Certificate of Insurance should note in the Description of Operations the following:

Department:_____

Contract #: _____

G. Insurance procured by Contractor shall not reduce nor limit Contractor's contractual obligation to indemnify, save harmless and defend Union

[redacted]

County for claims made or suits brought which result from or are in connection with the performance of this Agreement.

H. Certificate Holder shall be listed as follows:

Union County
Attention: Risk Manager
500 N. Main Street, Suite #130
Monroe, NC 28112

I. If Contractor is authorized to assign or subcontract any of its rights or duties hereunder and in fact does so, Contractor shall ensure that the assignee or subcontractor satisfies all requirements of this Agreement, including, but not limited to, maintenance of the required insurances coverage and provision of certificate(s) of insurance and additional insured endorsement(s), in proper form prior to commencement of services.

8.6 INDEMNIFICATION

Contractor agrees to protect, defend, indemnify and hold Union County, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of this agreement and/or the performance hereof that are due, in whole or in part, to the negligence of the Contractor, its officers, employees, subcontractors or agents. Contractor further agrees to investigate, handle, respond to, provide defense for, and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto.

8.7 EQUAL EMPLOYMENT OPPORTUNITY

All Firms will be required to follow Federal Equal Employment Opportunity (EEO) policies. Union County will affirmatively assure that on any project constructed pursuant to this advertisement, equal employment opportunity will be offered to all persons without regard to race, color, creed, religion, national origin, sex, and marital status, status with regard to public assistance, membership or activity in a local commission, disability, sexual orientation, or age.

8.8 MINORITY BUSINESSES (MBE) OR DISADVANTAGED BUSINESSES (DBE)

It is the policy of Union County that Minority Businesses (MBEs), Disadvantaged Business Enterprises (DBEs) and other small businesses shall have the opportunity to compete fairly in contracts financed in whole or in part with public

[redacted]

funds. Consistent with this policy, Union County will not allow any person or business to be excluded from participation in, denied the benefits of, or otherwise be discriminated against in connection with the award and performance of any contract because of sex, race, religion, or national origin.

8.9 LICENSES

The successful Contractor(s) shall have and maintain a valid and appropriate business license (if applicable), meet all local, state, and federal codes, and have current all required local, state, and federal licenses.

8.10 E-VERIFY

E-Verify is the federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to federal law. Contractor shall ensure that Contractor and any Subcontractor performing work under this contract: (i) uses E-Verify if required to do so; and (ii) otherwise complies with applicable law.

8.11 IRAN DIVESTMENT ACT NOTICE FOR LOCAL GOVERNMENTS IN NORTH CAROLINA

Pursuant to G.S. 147-86.59, any person identified as engaging in investment activities in Iran, determined by appearing on the Final Divestment List created by the State Treasurer pursuant to G.S. 147-86.58, is ineligible to contract with the State of North Carolina or any political subdivision of the State. The Iran Divestment Act of 2015, G.S. 147-86.55 *et seq.** requires that each vendor, prior to contracting with the State certify:

1. That the vendor is not identified on the Final Divestment List of entities that the State Treasures has determined engages in investment activities in Iran;
2. That the vendor shall not utilize on any contract with the State agency any sub-contractors that is identified on the Final Divestment List; and
3. That the undersigned is authorized by the Vendor to make this certification.

UNION COUNTY RESERVES THE RIGHT TO REJECT ANY AND/OR ALL BIDS.

Reminder of page blank

[redacted]

9 APPENDIX A - PRICING FORM

RFP # 2018-069
Asphalt Restoration Services

A. Asphalt Repair	Unit of Measure	Price
Asphalt Repair: 0"-2" (2" lift – Surface Course – S9.5B)	SY	
Asphalt Repair: 2"-5" (3" lift – Intermediate Course – I19.0B)	SY	
Asphalt Repair: 5" lift (Base Course – B25.0C)	SY	
Temporary Patch	SY	
Milling	SY	
Mobilization	EA	
Total for Section A		

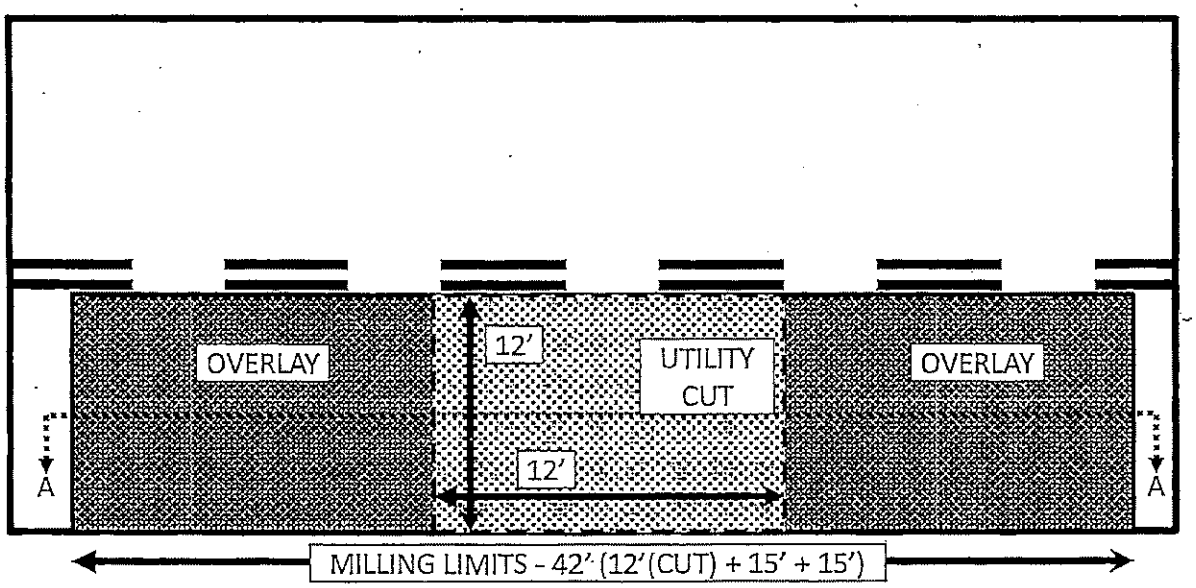
Only the Total Asphalt Repair Amount listed in Section A, including Mobilization, shall be evaluated for bid award.

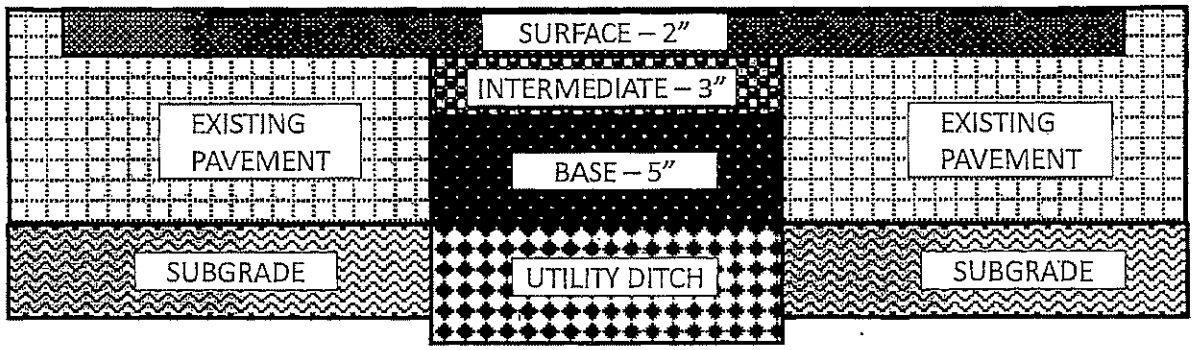
Additional Services must be completed, but will not be used as part of the evaluation.

B. Additional Services	Unit of Measure	Price
Traffic Control	EA	
Select Material	TN	

Company Name: _____

[redacted]





SECTION A-A: PAVEMENT CROSS SECTION

PAYMENT REPAIR CALCULATION EXAMPLE – FULL DEPTH REPAIR:

MILLING: *(NOT REQUIRED ON ALL STREETS)*
42' x 12' = 504 SF = **56 SY**

SURFACE ASPHALT:
42' x 12' = 504 SF = **56 SY**

UTILITY CUT:
INTERMEDIATE ASPHALT:
12' x 12' = 144 SF = **16 SY**
16 SY x UNIT PRICE FOR INTERMEDIATE ASPHALT (3" THICK)

BASE ASPHALT:
12' x 12' = 144 SF = **16 SY**
16 SY x UNIT PRICE FOR BASE (5" THICK)

IF UNIT PRICES ARE AS FOLLOWS:
MILLING - $5.00/SY
SURFACE ASPHALT (2") @ $12.00/SY
INTERMEDIATE ASPHALT (3") @ $17.50/SY
BASE ASPHALT (5") @ $25.00/SY

MOBILIZATION: LS $425
MILLING: 56 SY x $5.00/SY = ... $280
SUR.: 56 SY x 2" x $12.00/SY = ... $672
INTER.: 16 SY x 3" x $17.50/SY = ... $280
BASE: 16 SY x 5" x $25.00/IN/SY = ... $400
TOTAL... $2,057

(Sample unit prices above used for example calculation purposes only)

[redacted]

10 APPENDIX B - PROPOSAL SUBMISSION FORM

RFP # 2018-069
Asphalt Restoration Services

This Proposal is submitted by:

Provider Name: _____

Representative (printed): _____

Representative (**signed**): _____

Address: _____

_____

City/State/Zip: _____

E-Mail Address: _____

Telephone: _____
(Area Code) Telephone Number

Facsimile: _____
(Area Code) Fax Number

It is understood by the Proposer that Union County reserves the right to reject any and all Proposals, to make awards according to the best interest of the County, to waive formalities, technicalities, to recover and rebid this RFP. Proposal is valid for sixty (60) calendar days from the Proposal due date.

The Certificate of Insurance and W-9 must be received before any work is performed.

_____ _____
Proposer Date

_____ _____
Authorized Signature Please type or print name

[redacted]

11 APPENDIX C – ADDENDUM RECEIPT AND ANTI-COLLUSION

RFP # 2018-069
Asphalt Restoration Services

Please acknowledge receipt of all addenda by including this form with your Proposal. Any questions or changes received will be posted as an addendum on www.co.union.nc.us and/or www.ips.state.nc.us. It is your responsibility to check for this information.

ADDENDUM #	DATE ADDENDUM DOWNLOADED

I certify that this proposal is made in good faith and without collusion with any other offeror or officer or employee of Union County.

(Please Print Name) _____ Date _____

Authorized Signature

Title

E-Mail Address

Company Name

[redacted]

12 APPENDIX D – IRAN DIVESTMENT CERTIFICATE

RFP # 2018-069
Asphalt Restoration Services

Name of Vendor or Bidder: _____

_____

IRAN DIVESTMENT ACT CERTIFICATION REQUIRED BY N.C.G.S. 143C-6A-5(a)

As of the date listed below, the vendor or bidder listed above is not listed on the Final Divestment List created by the State Treasurer pursuant to N.C.G.S. 143-6A-4.

The undersigned hereby certifies that he or she is authorized by the vendor or bidder listed above to make the foregoing statement.

_____

Signature Date

_____

Printed Name Title

Notes to persons signing this form:

N.C.G.S. 143C-6A-5(a) requires this certification for bids or contracts with the State of North Carolina, a North Carolina local government, or any other political subdivision of the State of North Carolina. The certification is required at the following times:

- When a bid is submitted
- When a contract is entered into (if the certification was not already made when the vendor made its bid)
- When a contract is renewed or assigned

N.C.G.S. 143C-6A-5(b) requires that contractors with the State, a North Carolina local government, or any other political subdivision of the State of North Carolina must not utilize any subcontractor found on the State Treasurer's Final Divestment List.

The State Treasurer's Final Divestment List can be found on the State Treasurer's website at the address www.nctreasurer.com/Iran and will be updated every 180 days.

[redacted]

[redacted]

9 APPENDIX A - PRICING FORM

RFP # 2018-069
Asphalt Restoration Services

A. Asphalt Repair	Unit of Measure	Price
Asphalt Repair: 0"-2" (2" lift – Surface Course – S9.5B)	SY	$ 50/SY
Asphalt Repair: 2"-5" (3" lift – Intermediate Course – I19.0B)	SY	$ 76/SY
Asphalt Repair: 5" lift (Base Course – B25.0C)	SY	$ 125/SY
Temporary Patch	SY	$ 50/SY
Milling	SY	$ 15/SY
Mobilization	EA	$ 500/EA
Total for Section A		

Only the Total Asphalt Repair Amount listed in Section A, including Mobilization, shall be evaluated for bid award.

Additional Services must be completed, but will not be used as part of the evaluation.

B. Additional Services	Unit of Measure	Price
Traffic Control	EA	$ 1000—
Select Material	TN	$ 50/TN

Company Name: JA Services

Action History (UTC-05:00) Eastern Time (US & Canada)

Submit — by Greg Morgan 2/19/2020 3:42:40 PM (A Routing Form has started)

Approve — by Andy Neff 2/20/2020 7:26:50 AM (Division Director Signature)
Contract time extension
- The task was assigned to Andy Neff. The due date is: February 24, 2020 5:00 PM 2/19/2020 3:42 PM

Approve — by Hyong Yi 2/20/2020 9:44:38 AM (PW Administrator Signature)
- The task was assigned to Hyong Yi. The due date is: February 25, 2020 5:00 PM 2/20/2020 7:26 AM

Correction — by Ava Strawn 2/20/2020 2:45:20 PM (Approve - Contract routing started for Public Works - Water & Wastewater)
- Ava Strawn assigned the task to Ava Strawn 2/20/2020 2:43 PM
- The task was assigned to Procurement Team 2/20/2020 9:44 AM

Submit — by Ava Strawn 2/20/2020 2:46:47 PM (Correction Copy)
- Ava Strawn reassigned the task to Ava Strawn 2/20/2020 2:45 PM
- The task was assigned to Trina Horne 2/20/2020 2:45 PM

Approve — by Ava Strawn 2/20/2020 2:47:11 PM (Approve - Contract routing started for Public Works - Water & Wastewater)
- Ava Strawn assigned the task to Ava Strawn 2/20/2020 2:46 PM
- The task was assigned to Procurement Team 2/20/2020 2:46 PM

Approve — by Keith Richards 2/20/2020 3:03:12 PM (Risk Management)
- The task was assigned to Keith Richards 2/20/2020 2:47 PM

Submit — by Ava Strawn 2/20/2020 3:07:30 PM (Approve - Assign Routing)
- Ava Strawn assigned the task to Ava Strawn 2/20/2020 3:06 PM
- The task was assigned to Procurement Team 2/20/2020 3:03 PM

Approve — by Benjamin Isley 3/4/2020 8:48:29 PM (Legal)
Extension of this Agreement requires BOC approval. The BOC's action on 9/4/18 was to authorize the Manager to approve the agreement for a total of $180,000 over an initial 2-year term. The extension for an additional year beyond the initial term (with an estimated $90,000 annual expenditure) will require BOC authorization. Once authorized by the BOC, the extension letter should be signed by the County Manager and documented as a contract to ensure that the updated term is noted in the records
- Benjamin Isley reassigned the task to Benjamin Isley 2/21/2020 2:51 PM
- The task was assigned to Carolyn Mayer 2/20/2020 3:07 PM

Submit — by Ava Strawn 3/5/2020 10:41:01 AM (Approve - Assign Routing)
Notified Greg Morgan on 3/5/20 this agreement requires board approval. (A.S.)
- Ava Strawn assigned the task to Ava Strawn 3/5/2020 10:31 AM
- The task was assigned to Procurement Team 3/4/2020 8:48 PM

Submit — by Christi Climbingbear 3/5/2020 10:50:58 AM (Finance start with AP)
- Christi Climbingbear assigned the task to Christi Climbingbear 3/5/2020 10:50 AM
- The task was assigned to Christi Climbingbear, Lindsay Helms, Alex Whitaker 3/5/2020 10:41 AM

Approve — by Ebru Cukro 3/6/2020 9:58:19 AM (Budget Signature)
Pending FY2021 Budget
- The task was assigned to Ebru Cukro 3/5/2020 10:51 AM

Submit — by Ava Strawn 3/6/2020 9:58:39 AM (Approve - Assign Routing)
- Ava Strawn assigned the task to Ava Strawn 3/6/2020 9:58 AM
- The task was assigned to Procurement Team 3/6/2020 9:58 AM

Approve

by Trina Horne 3/24/2020 9:55:38 AM (Hold for Agenda)

- The task was assigned to Trina Horne 3/6/2020 9:58 AM

Submit

by Trina Horne 3/24/2020 9:56:51 AM (Approve - Assign Routing)

Pending Fy2021 Budget Approval and BOCC Manager Signatory Approval

- Trina Horne assigned the task to Trina Horne 3/24/2020 9:55 AM
- The task was assigned to Procurement Team 3/24/2020 9:55 AM

Submit

by Trina Horne 6/25/2020 3:19:00 PM (Hold for future budget year)

- The task was assigned to Trina Horne 3/24/2020 9:57 AM

Correction

by Trina Horne 6/25/2020 3:20:42 PM (Approve - Assign Routing)

v#37249

Ebru, please note that these notices of renewal does not require pre-audit, as the underlying contract was pre-audited when originally routed and executed. A copy of the letter is attached as notice that the financial obligation is continuing through the renewal period.

- Trina Horne assigned the task to Trina Horne 6/25/2020 3:19 PM
- The task was assigned to Procurement Team 6/25/2020 3:19 PM

Submit

by Trina Horne 6/25/2020 3:21:47 PM (Correction)

Added copy of renewal letter

- Trina Horne assigned the task to Trina Horne 6/25/2020 3:21 PM
- The task was assigned to Procurement Team 6/25/2020 3:20 PM

Submit

by Trina Horne 6/25/2020 3:25:25 PM (Approve - Assign Routing)

v#37249

Ebru, please note that these notices of renewal does not require pre-audit, as the underlying contract was pre-audited when originally routed and executed. A copy of the letter is attached as notice that the financial obligation is continuing through the renewal period.

- Trina Horne assigned the task to Trina Horne 6/25/2020 3:25 PM
- The task was assigned to Procurement Team 6/25/2020 3:21 PM

Submit

by Christi Climbingbear 6/25/2020 3:31:24 PM (Finance start with AP)

- Christi Climbingbear assigned the task to Christi Climbingbear 6/25/2020 3:31 PM
- The task was assigned to Christi Climbingbear, Lindsay Helms, Alex Whitaker 6/25/2020 3:25 PM

Approve

by Ebru Cukro 6/26/2020 9:33:04 AM (Budget Signature)

- The task was assigned to Ebru Cukro 6/25/2020 3:31 PM

Submit

by Trina Horne 6/26/2020 11:39:32 AM (Approve - Assign Routing)

notice sent to Mark for electronic signature

- Trina Horne assigned the task to Trina Horne 6/26/2020 11:39 AM
- The task was assigned to Procurement Team 6/26/2020 9:33 AM

Submit

by Trina Horne 7/1/2020 9:11:00 AM (Hold for future budget year)

- The task was assigned to Trina Horne 6/26/2020 11:39 AM

Send to Laserfiche

by Trina Horne 7/1/2020 9:47:33 AM (Approve - Assign Routing)

- Trina Horne assigned the task to Trina Horne 7/1/2020 9:11 AM
- The task was assigned to Procurement Team 7/1/2020 9:11 AM

Contract Routing Form

To be completed by Department

Note: Incomplete packages will be returned to the departments.

Submitted By Greg Morgan

Submitted by Email gregmorgan@unioncountync.gov

Submission Date 2/19/2020

Party/Vendor Name JA Segraves

Party/Vendor Contact Person Tony Seagraves

Contract Purpose Description Asphalt Restoration Services after Utility System Repairs

Contact Email tonypaves@hotmail.com

Contact Phone 704-585-1043

Contact Address

Street Address
P.O.Box 2352
Address Line 2
City: Indian Trail
State / Province / Region: NC
Postal / Zip Code: 28079
Country: USA

(If the above information is inaccurate, a delay in contract processing could occur)

Department Public Works - Water & Wastewater

Department Point of Contact Greg Morgan

Dept. Point of Contact Email gregmorgan@unioncountync.gov

Solicitation/Project 2018-069

Budget Code 60026513-5389; 60026514-5389; 60026813-5389; 60026650-5381; 60026651-5381

Amount $ 250,000.00

- ○ Monthly
- ○ Quarterly
- ◉ Yearly
- ○ Other

☐ Amounts expended or received pursuant to this agreement will be more than $50,000.

Contract Start Date

- ◉ Based on Final Signature
- ○ Specific Start Date (note date)

Type of Contract

- ○ New
- ○ Renewal
- ◉ Amendment (Enter Original Contract#)

5589

Additional Comments legal to generate amendment to extend for one year.

Contract is Select all that apply

- ☐ State Funded
- ☐ Federal Funded
- ☐ State Contract
- ☑ Other Based on Budget Appropriation

If this is a grant agreement, pre-application has been authorized by the Board of Commissioners?

○ Yes ◉ No

Additional Comments

Division Director Andrew Neff

Date of Authorization 2/20/2020

Attach Documents

File Upload Upload supporting documentation

Contract_5589(Seagraves).pdf	762KB
Contract_5589(Seagraves)RFQ.pdf	941.24KB
JA Seagraves (6318) Contract Extension.msg	117.5KB

Pending Contract

Executive Director Signature

Executive Director



Date 2/20/2020

Comments

Procurement - Routing

Contract Number Number add by Procurement

6318

Start Date for Internal Routing 2/20/2020

☐ Notify Department to enter Novus Agenda Information with Completed package attached.

Requested Meeting Date 4/20/2020

Approval Needed* Send to Laserfiche

Print Page

Risk Management

Approval of this form confirms that document has been reviewed and approved by the Risk Management leadership.

☐ No Insurance Required

☑ Use Standard Template. Include the following coverages.

Include these coverages

☑ CGL	☑ Auto
☑ Worker's Compensation	☐ Professional
☐ Property	☐ Pollution
☐ Network Security	☐ See Working Copy
☐ No Insurance Required	☐ Sexual Molestation
☐ Builder's Risk	☐ Other (see comments)

☐ Current COI on File

☐ Insurance Memo Sent to Procurement

Notes from Risk Management

Approved By: Keith Richards

Signature



Information Technologies

Approval of this form confirms that document has been reviewed as to technical content and approved by the Information Technology Director.

Approved By:

Sign

Comments:

Legal

Approval of this form confirms that document has been reviewed and approved as to legal form by the Attorney and stamp affixed thereto.

Notes From Legal: Extension of this Agreement requires BOC approval. The BOC's action on 9/4/18 was to authorize the Manager to approve the agreement for a total of $180,000 over an initial 2-year term. The extension for an additional year beyond the initial term (with an estimated $90,000 annual expenditure) will require BOC authorization. Once authorized by the BOC, the extension letter should be signed by the County Manager and documented as a contract to ensure that the updated term is noted in the records

Authorizations: ☐ Approval by Manager ☑ Board Authorization Required

Approved By: Benjamin T. Isley

Signature Benjamin T. Isley

Finance

The Finance Director/ Deputy Finance Director affirm that this has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

☑ W-9 Processed

Vendor Number 37249

R Number

Date 3/5/2020

AP Signature Christi Climbingbear

☑ The Finance Director/Deputy Finance Director affirm that this has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

☐ Sufficient funds available ☑ Conditioned upon appropriation

☐ Budget amendment necessary ☐ NO PRE-AUDIT REQUIRED

Revenue or Expenditure Expenditure

PO Number 216017

Budget Signature Ebru Cukko

County Manager

Approval of this form confirms that document has been reviewed and its approval recommended by the County Manager.

County Manager Signature Sign

Date

Clerk

Approval of this form confirms that document has been reviewed and seal affixed and/or signatures witnessed.

Approved By Board

- ○ No
- ○ Yes, enter approval date

Signatures Required

☐ Board Chairman ☐ County Manager ☐ Finance Director ☐ Clerk ☐ Attorney
☐ Information Tech Director ☐ Other

Clerk Signature Sign

Date

Procurement

Date To Vendor

Date Vendor Return To Procurement

Contract Execution Date 6/26/2020

Contract Effective Date 9/28/2020

Contract Expiration Date 9/27/2021

BOCC 4/20/2020; Item 14
Renewal letter sent certified mail 6/29/2020 and email notification sent 6/30/2020.
Approved COI on file as of 7/1/2020

Print Page

DocuSign Envelope ID: 85AF8B46-A284-4A90-8DB2-9449FEFD86AB

Union County Government
EST. 1842

County Manager's Office
500 N Main St
Suite #913
Monroe, NC 28112

T. 704.283.3636

www.unioncountync.gov

6/26/2020

Via First Class Mail and Certified Mail (Return Receipt Requested)

Mr. James Seagraves
Mr. Tony Seagraves
JA Seagraves
P.O. Box 2352
Indian Trail, NC 28079

Re: Notice of Renewal of Asphalt Restoration Services Agreement between Union County, North Carolina and JA Seagraves

Dear Mr. James Seagraves and Mr. Tony Seagraves:

Pursuant to Section 4 of the Agreement dated September 28, 2018, between Union County and JA Seagraves (the "Agreement"), the Agreement became effective on the date of mutual Agreement execution (the "Effective Date"). Thus, the Agreement's Effective Date is September 28, 2018. Section 4 of the Agreement also provides that following an initial two-year term, Union County may, in its sole discretion, elect to renew the Agreement for up to three (3) additional one-year terms.

This letter shall constitute Union County's notice that it is exercising its option to elect that the Agreement continue for the first additional one-year term. This one-year term shall run from September 28, 2020, through September 27, 2021. Union County reserves the right to exercise its ability to extend the Agreement for up to two additional one-year terms in the future.

If there are any questions or concerns, please let us know.

Sincerely,

DocuSigned by:
William M Watson
A84957CDD7DF479...
William Mark Watson
County Manager

Cc: Hyong Yi, Public Works Administrator

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. James Seagraves
Mr. Tony Seagraves
A Seagraves
P.O. Box 2352
Indian Trail, NC 28079



9590 9402 5860 0038 1170 29

2. Article Number *(Transfer from service label)*

7020 0640 0000 3971 6984

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent
☐ Addressee

B. Received by *(Printed Name)*

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☒ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☒ Return Receipt for Merchandise
- ☒ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

Mail
Mail Restricted Delivery
00)

167

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt



First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

United States Postal Service

• Sender: Please print your name, address, and ZIP+4® in this box•

Union County Procurement
500 North Main Street
Suite #709
Monroe, NC 28112



STATE OF NORTH CAROLINA

AMENDMENT

COUNTY OF UNION

This Amendment, made and entered into as of _____, by and between UNION COUNTY, a political subdivision of the State of North Carolina, hereinafter referred to as "Union," and JA SEAGRAVES, hereinafter referred to as "Contractor," shall modify as indicated that agreement between the parties dated September 28, 2018, as modified by amendment, hereinafter referred to as the "Agreement."

W I T N E S S E T H:

WHEREAS, Union and Contractor entered into an agreement whereby Contractor would provide certain asphalt restoration services (the "Services") to Union on an as-needed basis; and

WHEREAS, Contractor has duly provided the Services to Union pursuant to the terms of the Agreement; and

WHEREAS, Union now desires to use its second option to renew the Agreement for an additional one-year term (the "Renewal Term"); and

WHEREAS, Contractor is willing to continue to provide Services during the Renewal Term.

NOW, THEREFORE, in consideration of the parties' continuing obligations under the Agreement and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto do each contract and agree with the other as follows:

1. This Agreement shall be renewed for one (1) year, beginning on September 29, 2021, and ending September 28, 2022. Union reserves the right to exercise its ability to extend the Agreement for up to one additional one-year renewal term.

2. Except as herein amended, the terms and provisions of the Agreement shall remain in full force and effect.

[Signatures follow on the next page.]

IN WITNESS WHEREOF, the parties hereto, acting under authority of their respective governing bodies, have hereunto set their hands and seals and have caused this Amendment to be duly executed, this the day and year first above written.

WITNESS: UNION COUNTY

By: _____ By: _____(SEAL)
Lynn West, Clerk to the Board William M. Watson, County Manager

WITNESS: JA SEAGRAVES

By: _____ By: _____(SEAL)

Approved as to Legal Form *KLC*

This instrument has been preaudited in the manner required
by The Local Government Budget and Fiscal Control Act.

_____
Deputy Finance Officer

Union County Government
Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-385 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Potable Water Service Parts

INFORMATION CONTACT:

Andrew Neff, UCW, Water & Wastewater Division Director, 704-296-4215

ACTION REQUESTED:

Authorize the County Manager to (i) negotiate and execute an agreement (7349) with Ferguson Enterprises, LLC, substantially consistent with this agenda item; and (ii) exercise up to four one-year renewal terms options under the Agreement, in the County Manager's discretion.

BACKGROUND:

Union County Water maintains and operates over 1,000 miles of water system infrastructure and over 50,000 water meters. Routine and emergency operation and maintenance require timely repairs of the systems water infrastructure due to age, condition and third-party damage in addition to new water service and meter installations. All water and sewer parts that are necessary to operate and maintain the County's utility system are part of a controlled inventory at the Public Works Operations Center Warehouse. This contract provides economical and uninterrupted supply of ¾" and 1" water service parts (valves, yokes, tees, couplings, etc.) required to install and repair potable water services throughout the water distribution system. This contract has a one (1) year initial term followed by four (4) one-year renewals at the sole discretion of the County and is subject to budget appropriation.

IFB 2022-003 was issued and bids were opened on August 31, 2021. Four (4) bids were received with no discrepancies noted. Ferguson Enterprises is the apparent lowest responsive, responsible bidder.

FINANCIAL IMPACT:

The Water & Wastewater Division anticipates spending approximately $125,000 annually for these parts. Since this contract contains a 1-year initial term and four 1-year renewals options, a total of $625,000 is planned to be spent during the 5-year term. Funding is available in the adopted FY22 Water & Wastewater Division budget appropriation with future expenditure subject to BOCC budget appropriation.

Invitation for Bid No. 2022-003
Potable Water Service Parts

Due Date:	August 31, 2021
Time:	2:00 PM Local Time
Submittal Location:	Union County Government Center Procurement Department 500 N. Main Street, Suite 709 Monroe, NC 28112

Procurement Contact:

Ava Strawn
Procurement Specialist
704.283.3886
ava.strawn@unioncountync.gov

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2 NOTICE OF ADVERTISEMENT

Union County, North Carolina
IFB No. 2022-003
Potable Water Service Parts

Sealed bids for Potable Water Service Parts will be received by the Union County Procurement Department *until* ***2:00 PM** local time on **August 31, 2021** at the Union County Government Center, 500 North Main Street, Suite 709, Monroe, NC 28112. The public bid opening will be conducted outdoors, in the front entrance area of the Union County Government Center at the specified bid date and time. **Late bids will not be accepted**.

On August 31, 2021, beginning at ***1:30 PM** local time, bids will be received by the Union County Procurement Department at the bid opening location, outdoors in the front entrance area of the Union County Government Center at 500 North Main Street, Monroe, NC 28112. *If you plan to attend the bid opening social distancing rules apply.*

If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED – 2022-003" and shall be addressed to Union County Procurement Department, Attn: Ava Strawn, 500 North Main Street, Suite 709, Monroe, NC 28112.

Union County, North Carolina, through Public Works – Water & Wastewater, is soliciting bids from qualified firms for purchase and delivery of Potable Water Service Parts for wastewater treatment.

Copies of the solicitation may be obtained from the locations listed below:

1. Download the Bid Documents from the Union County Website www.unioncountync.gov (Procurement Page, Current Bids).
2. Download the Bid Documents from the State of North Carolina IPS Website www.ips.state.nc.us (Bid by Departments, search County of Union).

All questions about the meaning or intent of the Bidding Documents are to be submitted in writing to the Procurement contact person listed on the cover page (ava.strawn@unioncountync.gov). Deadline for questions is **August 17, 2021 at 2:00 PM** local time.

Bidders are required to comply with the non-collusion requirements set forth in the Bidding Documents.

The County reserves the right to reject any and/or all bids, including, without limitation, nonconforming, nonresponsive, unbalanced, or conditional bids. The County also reserves the right to waive informalities.

Bidders are required to comply with the non-collusion requirements set forth in the Bidding Documents.

Union County encourages good faith effort outreach to Minority Businesses (HUB Certified) and Small Businesses.

End of Advertisement

3 BID SUBMISSION

3.1 BID SUBMISSION DEADLINE

Sealed bids for Potable Water Service Parts will be received by the Union County Procurement Department *until* ***2:00 PM** local time on **August 31, 2021** at the Union County Government Center, 500 North Main Street, Suite 709, Monroe, NC 28112. The public bid opening will be conducted outdoors, in the front entrance area of the Union County Government Center at the specified bid date and time. **Late bids will not be accepted**.

On August 31, 2021, beginning at ***1:30 PM** local time, bids will be received by the Union County Procurement Department at the bid opening location, outdoors in the front entrance area of the Union County Government Center at 500 North Main Street, Monroe, NC 28112. *If you plan to attend the bid opening social distancing rules apply.*

3.2 BID DELIVERY REQUIREMENTS

All Bids must be in a sealed box or opaque envelope plainly marked as follows:

[Name of Contractor Submitting Bid]
IFB No. 2022-003
Potable Water Service Parts
Attention: Ava Strawn

If using a delivery service, your company name and the solicitation number must be visible on the outside delivery box/envelope. Ship, Mail, or Hand Deliver to the following address:

Union County Government Center
Procurement Department
500 North Main Street, Suite 709
Monroe, NC 28112
Attention: Ava Strawn

Electronic (email) or facsimile submissions will not be accepted.

There is no expressed or implied obligation for Union County to reimburse firms for any expenses incurred in preparing Bids in response to this request.

Union County reserves the right to reject any or all Bids, to waive technicalities and to make such selection deemed in its best interest. With limited response, Union County reserves the right to extend the solicitation opening date as appropriate in order to assure a competitive procurement.

3.3 BID QUESTIONS

Bid questions will be due on or before **August 17, 2021 at 2:00 PM** local time. The primary purpose of this is to provide participating Contractors with the opportunity to ask questions, in writing, related to the IFB.

Submit questions by email to Ava Strawn at ava.strawn@unioncountync.gov by the deadline shown above. (Do not send question in a graph or Excel sheet format.) The email subject line should be identified as follow: IFB 2022-003 Potable Water Service Parts Questions. All questions and answers may be posted as addenda on www.unioncountync.gov and www.ips.state.nc.us.

3.4 BID ADDENDUM

Union County may modify the IFB prior to the date fixed for submission of Bids by the issuance of an addendum.

Should an Offeror find discrepancies or omissions in this IFB or any other documents provided by Union County, the Offeror should immediately notify the County of such potential discrepancy in writing via email as noted above.

Any addenda to these documents shall be issued in writing. No oral statements, explanations, or commitments by anyone shall be of effect unless incorporated in the written addenda. Receipt of Addenda shall be acknowledged by the Offeror on Appendix C Addendum and Anti-Collusion Form.

4 INSTRUCTIONS

4.1 COMMUNICATIONS

All communications, any modifications, clarifications, amendments, questions, responses or any other matters related to the Invitation for Bid (IFB) must be made only through the Procurement Contact noted on the cover of this IFB. A violation of this provision is cause for the County to reject a Company's bid. No contact regarding this document with other County employees is permitted and may be grounds for disqualification**.**

4.2 BIDDERS ACKNOWLEDMENT

The Bid will remain subject to acceptance for 120 days after the Bid Opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

4.3 DUPLICATE BIDS

No more than one (1) bid from any Bidder will be considered by the County. In the event multiple bids are submitted in violation of this provision, the County will have the right to determine which bid will be considered, or at its sole option, reject all such multiple bids.

4.4 BID SIGNATURES

An authorized company official must sign Bids. Each signature represents binding commitment upon the Bidder to provide the goods and/or services offered to the County if the Bidder is determined to be the lowest responsive, responsible Bidder.

4.5 BIDDERS RESPONSIBILITIES

The Bidder must be capable, either as a firm or a team, of providing all parts as described under Section 6 - Specifications. Exclusion of any service for this Bid may serve as cause for rejection.

5 PURPOSE

5.1 INTRODUCTION

Union County, North Carolina, through Public Works, Water & Wastewater, is soliciting bids from qualified firms for delivery of Potable Water Service Parts for wastewater treatment.

Union County, North Carolina (population 239,859) is located in the central, southern piedmont. The County provides its citizens with a full array of services that include public safety, water/wastewater utilities and sanitation, human services, cultural and recreational activities, and general government administration.

6 SPECIFICATIONS

The County provides retail water services to over 50,000 water customers and provides wholesale water to the Town of Wingate and supplements the City of Monroe with up to 2 million gallons per day. Over the last 12 months, the County has purchased approximately:

	¾"	1"
Ball Corporations	210	14
Iron Yoke Bar	550	14
Angle Yoke Ball Valves	550	14
Straight Dual Check Valves	550	14
CTS Straight Coupling	215	22
Grip Joint Tees	260	0
CTS x MIP Straight Coupling	55	0
IPS x MIP Ribbed Insert	50	5

(Historical data is provided for illustrative purposes only and is in no way meant to imply or guarantee minimum purchase quantities.)

The specifications and requirements are drawn around materials which the County has evaluated and determined to be required for the performance necessary. Specification deviations will not be accepted. Bidders are requested to offer only specified parts, which will provide the features and performance needed and implied. Only brass fittings will be accepted. Do not bid “lead brass” fittings.

The County desires Ford Meter Box Company products, but will accept bids for materials that meet the same AWWA, ASTM, ASF/ANSI standards and certifications.

Parts currently in use:

MFGR	PART #	PART NAME & DESCRIPTION
		3/4" Fittings
FORD	FB1000-3-G-NL	**3/4" BALL CORPORATIONS**, NO LEAD, VALVE SIZE 3/4", INLET SIZE 3/4", OUTLET SIZE 3/4", AWWA/CC TAPER THREAD INLET BY GRIP JOINT OUTLET FOR CTS
FORD	Y502	**5/8" X 3/4" IRON YOKE BAR**
FORD	BA94-223W-G-NL	**3/4" ANGLE YOKE BALL VALVES**, NO LEAD, VALVE SIZE 3/4", SERVICE LINE SIZE AND TYPE 3/4" GRIP JOINT/CTS, METER SIZE 5/8" X 3/4" & 3/4"
FORD	HHS91-323-NL	**3/4" STRAIGHT DUAL CHECK VALVES**, NO LEAD, VALVE SIZE 3/4", METER INLET SIZE 5/8" X 3/4" & 3/4", OUTLET SIZE AND TYPE 3/4" FIP
FORD	C44-33-G-NL	**3/4" CTS STRAIGHT COUPLING**, NO LEAD, GRIP JOINT X GRIP JOINT
FORD	T444-33-G-NL	**3/4" GRIP JOINT TEES,** NO LEAD, BOTH ENDS 3/4" CTS X 3/4" CTS, SIDE OUTLET 3/4" CTS
FORD	C84-33-G-NL	**3/4" CTS X MIP STRAIGHT COUPLING**, NO LEAD, MALE IRON PIPE END SIZE 3/4", CTS END SIZE 3/4"
FORD	PTM-1-NL	**3/4" IPS X MIP RIBBED INSERT**, NO LEAD, 3/4" MALE IRON PIPE THREAD TO 3/4" RIBBED INSERT FOR PE PIPE
		1" Fittings
FORD	FB1000-4-G-NL	**1" BALL CORPORATIONS**, NO LEAD, VALVE SIZE 1", INLET SIZE 1", OUTLET SIDE 1", BODY OUTLET THREADS 1" FLARE COPPER, AWWA/CC TAPER THREAD INLET BY GRIP JOINT OUTLET FOR C
FORD	Y504	**1" IRON YOKE BAR**
FORD	BA94-444-G-NL	**1" ANGLE YOKE BALL VALVES**, NO LEAD, VALVE SIZE 1", SERVICE LINE SIZE AND TYPE 3/4" GRIP JOINT/CTS, METER SIZE 1"
FORD	HHS91-344-NL	**1" STRAIGHT DUAL CHECK VALVE**, NO LEAD, VALVE SIZE 3/4", METER INLET SIZE 1", OUTLET SIZE AND TYPE 1" FIP
FORD	C44-44-G-NL	**1" CTS STRAIGHT COUPLING**, NO LEAD, GRIP JOINT X GRIP JOINT

Bidders are required to state exactly what they intend to furnish as indicated on the price form.

6.1 INFORMATION PROVIDED BY BIDDER

6.1.1 PARTS

The Bidder will provide the following on Appendix A – Price Form:

1. Manufacturer;
2. Part number;
3. Unit Price including all shipping/delivery charges;
4. Warranty must be entered in months.

6.1.2 PRODUCT SPECIFICATIONS

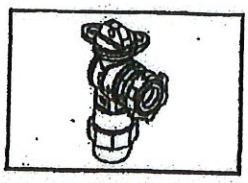
1. Bidders are required to submit product specifications for design-basis equivalent model for each part requested;
2. Product literature should be limited to technical data/specification documents. Please do not include any sales or marketing brochures.

6.1.3 TYPICAL DRAWINGS (IF APPLICABLE)

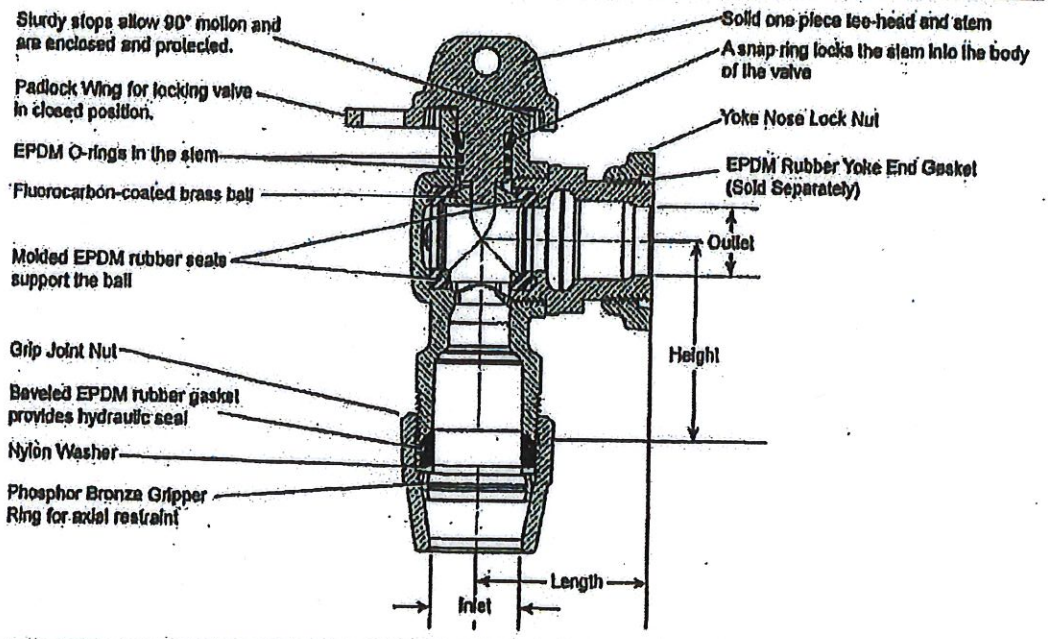
Provide typical drawings for design-basis equivalent model being proposed on if applicable.

SUBMITTAL INFORMATION

Angle Ball Yoke Valves - *(BA94-2xxW-G-NL style)*



GRIP JOINT FOR COPPER OR PLASTIC TUBING (CTS) INLET BY METER YOKE NOSE OUTLET



Valve Size	Inlet Size	Outlet Size	Length	Height	Approx. Wt. Lbs	Part Number	✓ Submitted Item(s)
5/8"	3/4"	5/8"	1-47/64"	2-1/64"	1.6	BA94-213W-G-NL	
5/8"	3/4"	5/8" x 3/4"	1-47/64"	2-1/64"	1.6	BA94-223W-G-NL	

Note: Ford recommends insert stiffeners when using plastic pipe or tubing

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (ASTM B584, UNS C89833)
- The product has the letters "NL" cast into the main body for lead-free identification
- Certified to NSF/ANSI Standard 61 and NSF/ANSI Standard 372 where applicable
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B62 and ASTM B584, UNS C83600, 85-5-5-5)
- Ends are integral or secured with adhesive to prevent unintentional disassembly
- 300 PSI working pressure
- Padlock wing for locking valve in closed position
- EPDM rubber yoke nose gasket sold separately: GT-112 (5/8"), GT-118 (3/4") and GT-123 (1")
  Note: Recommended flow from inlet to outlet

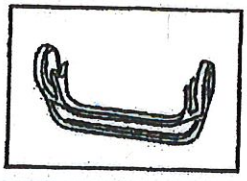
The Ford Meter Box Company considers the information in this submittal form to be correct at the time of publication. Item and option availability, including specifications, are subject to change without notice. Please verify that your product information is current.

The Ford Meter Box Company, Inc.
P.O. Box 443, Wabash, Indiana U.S.A. 46992-0443
Phone: 260-563-3171 / Fax 800-826-3487
Overseas Fax: 260-563-0187
www.fordmeterbox.com
05/03/17

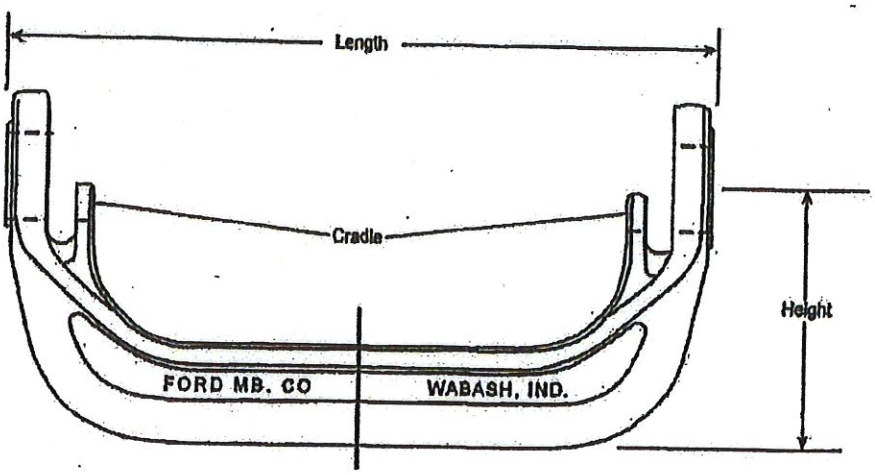
Submitted By:

SUBMITTAL INFORMATION

Iron Yoke Bars - *(Y50x style)*



500 SERIES IRON YOKE BARS FOR 5/8" THROUGH 1" METERS



Meter Size	Length	Height	Approx. Wt. Lbs.	Catalog Number	✓ Submitted Item(s)
5/8"	10-15/16"	4-1/8"	3.6	Y501	
5/8"x3/4"	10-15/16"	4-1/8"	4.2	Y502	
3/4"	12-1/2"	4-1/8"	4.5	Y503	
1"	14-3/4"	5-1/4"	7.2	Y504	

FEATURES

- Material: Cast gray iron, ASTM A48-92, Class 25
- Finish: Black E-coating
- Cradle positions the meter in line with end connections for one hand installation.

The Ford Meter Box Company considers the information in this submittal form to be correct at the time of publication. Item and option availability, including specifications, are subject to change without notice. Please verify that your product information is current.

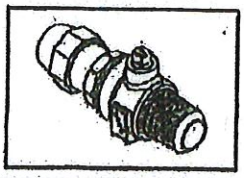
The Ford Meter Box Company, Inc.
P.O. Box 443, Wabash, Indiana U.S.A. 46992-0443
Phone: 260-563-3171 / Fax: 800-826-3487
Overseas Fax: 260-563-0167
http://www.fordmeterbox.com

10/09/03

Submitted By:

SUBMITTAL INFORMATION

Ballcorp Corporation Stops - *(FB1000-xx-G-NL style)*



AWWA/CC TAPER THREAD INLET BY GRIP JOINT COMPRESSION FOR COPPER OR PLASTIC TUBING (CTS) OUTLET

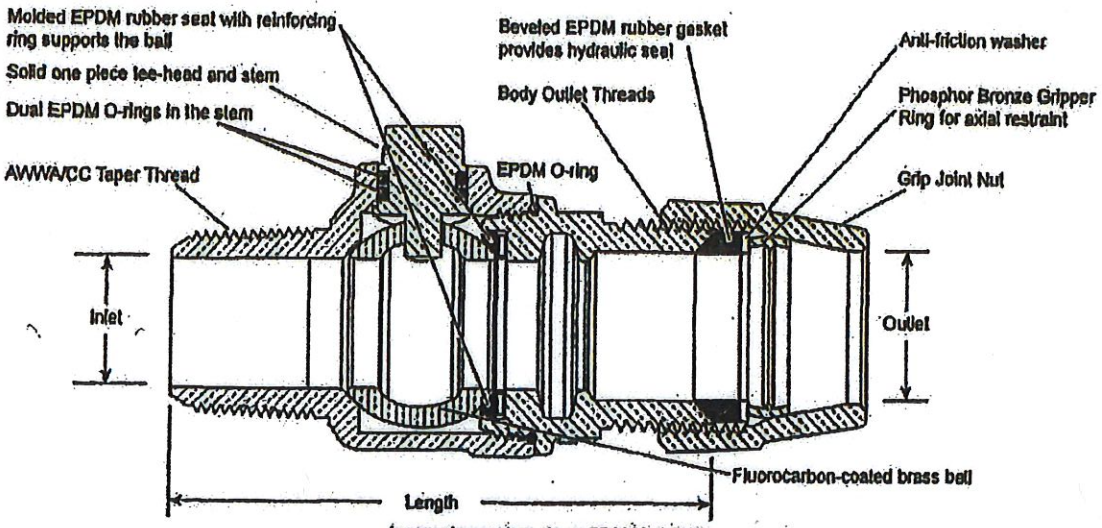


Image shown above is an FB1000-4-G-NL.

Valve Size	Inlet Size	Outlet Size	Valve Length	Body Outlet Threads	Approx. Wt. Lbs	Part Number	✓ Submitted Item(s)
3/4"	3/4"	3/4"	4-19/64"	3/4" Flare Copper	1.5	FB1000-3-G-NL	
3/4"	3/4"	1"	4-7/16"	1" Flare Copper	2.1	FB1000-34-G-NL	
1"	1"	1"	4-1/2"	1" Flare Copper	2.6	FB1000-4-G-NL	
1"	1"	1-1/4"	4-5/16"	1-1/4" Flare Copper	3.0	FB1000-45-G-NL	
1-1/4"	1-1/4"	1-1/4"	6-25/32"	1-1/4" Flare Copper	4.8	FB1000-5-G-NL	
1-1/2"	1-1/2"	1-1/2"	6-13/32"	1-1/2" Flare Copper	5.7	FB1000-6-G-NL	
1-1/2"	1-1/2"	2"	6-29/64"	2" Flare Copper	7.4	FB1000-67-G-NL	
2"	2"	2"	7-1/2"	2" Flare Copper	9.8	FB1000-7-G-NL	

Note: Ford recommends using insert stiffeners with plastic pipe or tubing.

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (ASTM B584, UNS C89833)
- The product has the letters "NL" cast into the main body for lead-free identification
- Certified to NSF/ANSI Standard 61 and NSF/ANSI Standard 372 where applicable
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B62 and ASTM B584, UNS C83600, 85-5-5-5)
- Ends are integral or secured with adhesive to prevent unintentional disassembly
- 300 PSI working pressure

The Ford Meter Box Company considers the information in this submittal form to be correct at the time of publication. Item and option availability, including specifications, are subject to change without notice. Please verify that your product information is current.

The Ford Meter Box Company, Inc.
P.O. Box 443, Wabash, Indiana U.S.A. 46992-0443
Phone: 260-563-3171 / Fax: 800-826-3487
Overseas Fax: 260-563-0167
www.fordmeterbox.com

03/24/17

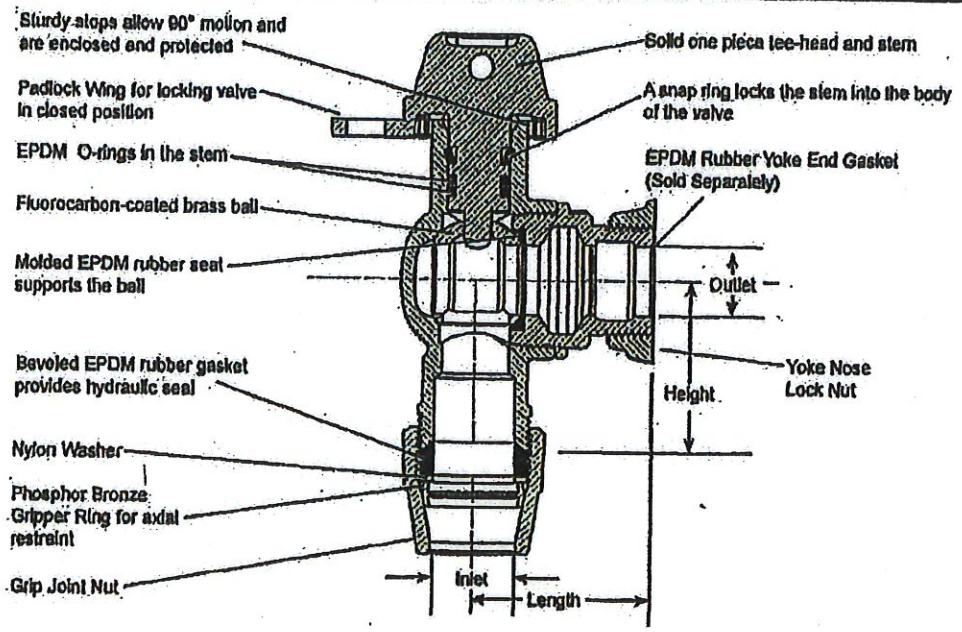
Submitted By:

SUBMITTAL INFORMATION

Angle Ball Yoke Valves - *(BA94-444W-G-NL style)*



GRIP JOINT FOR COPPER OR PLASTIC TUBING (CTS) INLET BY METER YOKE NOSE OUTLET



Valve Size	Inlet Size	Outlet Meter Size	Length	Height	Approx. Wt. Lbs	Catalog Number	✓ Submitted Item(s)
1"	1"	1"	2-19/64"	2-29/64"	2.9	BA94-444W-G-NL	

Note: Ford recommends using insert stiffeners with plastic pipe or tubing.

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (ASTM B584, UNS C89833)
- The product has the letters "NL" cast into the main body for lead-free identification
- Certified to NSF/ANSI Standard 61 and NSF/ANSI Standard 372 where applicable
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B62 and ASTM B584, UNS C83600, 85-5-5-5)
- Ends are integral or secured with adhesive to prevent unintentional disassembly
- 300 PSI working pressure
- Padlock wing for locking valve in closed position
- EPDM rubber yoke nose gasket sold separately: GT-112 (5/8"), GT-11B (3/4") and GT-123 (1")

  Note: Recommended flow from inlet to outlet

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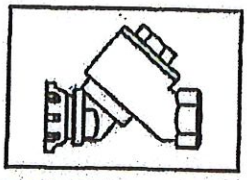
The Ford Meter Box Company, Inc.
P.O. Box 443, Wabash, Indiana U.S.A. 46992-0443
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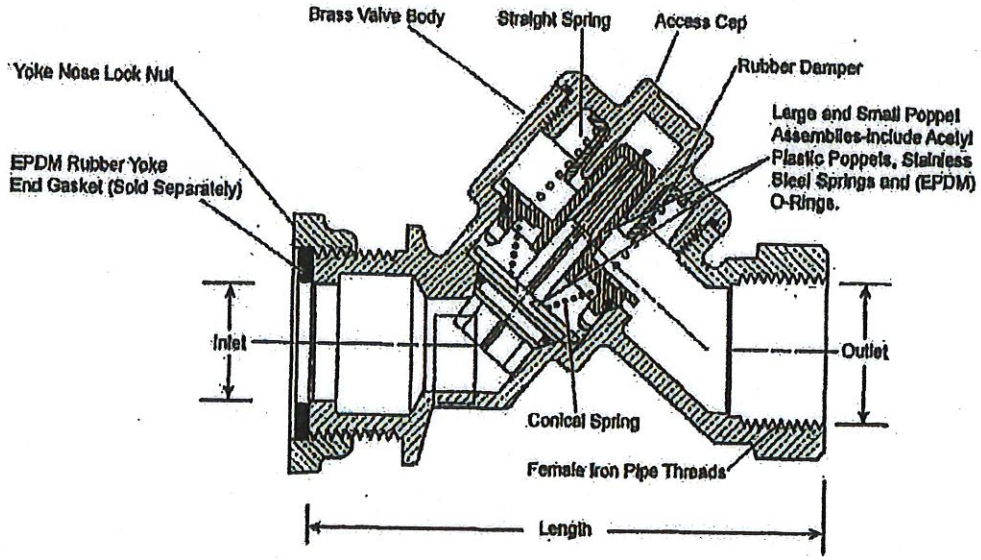
Submitted By:

SUBMITTAL INFORMATION

Straight Cascading Dual Check Valve - *(HHS91-xxx-NL style)*



METER YOKE NOSE INLET BY FEMALE IRON PIPE THREAD OUTLET



Valve Size	Meter Inlet Size	Outlet Size	Length	Approx. Wt. Lbs	Part Number	✓ Submitted Item(s)
3/4"	5/8"	3/4"	4-1/8"	1.9	HHS91-313-NL	
3/4"	5/8"x3/4" & 3/4"	3/4"	4-1/8"	1.7	HHS91-323-NL	
3/4"	1"	1"	4-13/16"	2.3	HHS91-344-NL	

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (ASTM B584, UNS C89833)
- The product has the letters "NL" cast into the main body for lead-free identification
- Certified to NSF/ANSI Standard 61 and NSF/ANSI Standard 372 where applicable
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B62 and ASTM B584, UNS C83600, 85-5-5-5)
- ASSE 1024 approved
- In-line accessible for quick inspection and replacement of internal working parts without removing the valve from the service line. Replacement kits are available
- 175 PSI maximum working water pressure
- 180 degree Fahrenheit maximum constant temperature
- EPDM Rubber Yoke Nose gasket sold separately: GT-112 (5/8"), GT-118 (3/4") and GT-123 (1")

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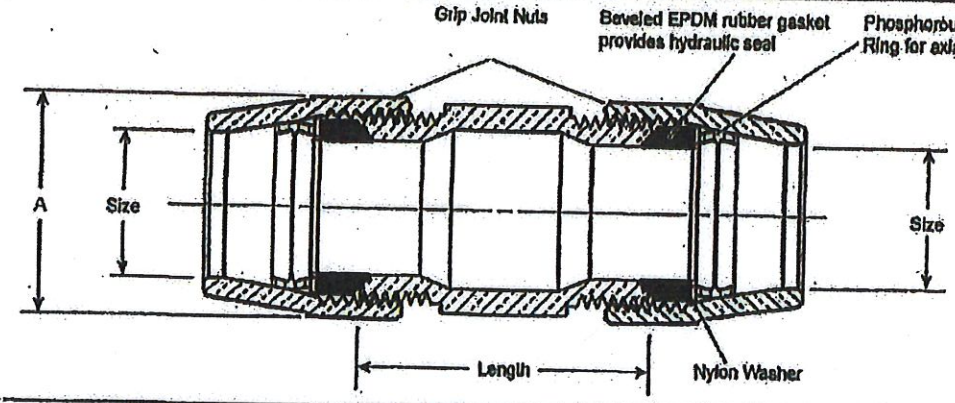
Submitted By:

SUBMITTAL INFORMATION

Grip Joint Coupling - *(C44-xx-G-NL style)*



GRIP JOINT FOR COPPER OR PLASTIC TUBING (CTS) BOTH ENDS



Description		Length	Dim. "A" Maximum O.D.	Approx. Wt. Lbs	Part Number	✓ Submitted Item(s)
G.J. for CTS	G.J. for CTS					
1/2"	3/4"	2"	1-11/16"	.8	C44-13-G-NL	
1/2"	1"	2-5/16"	2-7/16"	.9	C44-14-G-NL	
5/8"	3/4"	2-1/16"	1-7/8"	1.0	C44-23-G-NL	
3/4"	3/4"	2"	1-5/8"	.9	C44-33-G-NL	
3/4"	1"	2-1/8"	1-15/16"	1.0	C44-34-G-NL	
1"	1"	2-1/8"	1-15/16"	1.1	C44-44-G-NL	
1"	1-1/4"	1-5/16"	2-1/3"	1.5	C44-45-G-NL	
1"	1-1/2"	2-5/8"	2-3/4"	2.1	C44-46-G-NL	
1-1/4"	1-1/4"	2-1/2"	2-1/3"	1.5	C44-55-G-NL	
1-1/4"	1-1/2"	3-1/4"	2-2/3"	2.8	C44-56-G-NL	
1-1/2"	1-1/2"	3-5/8"	2-3/4"	3.0	C44-66-G-NL	
1-1/2"	2"	2-1/2"	3-1/4"	3.6	C44-67-G-NL	
2"	2"	3-1/2"	3-1/4"	4.5	C44-77-G-NL	

Note: Ford recommends insert stiffeners when using plastic pipe or tubing.
Note: 1/2" and 5/8" Connections are Pack Joint Style

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (UNS NO C89833)
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B-62 and ASTM B-584, UNS NO C83600 - 85-5-5-5)
- Body design provides larger, more rugged wrench flats for proper installation
- UL Classified to ANSI/NSF Standard 61 and Annex G
- The product has the letters "NL" cast into the main body for proper identification

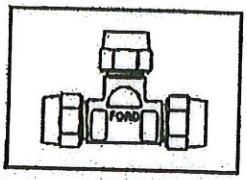
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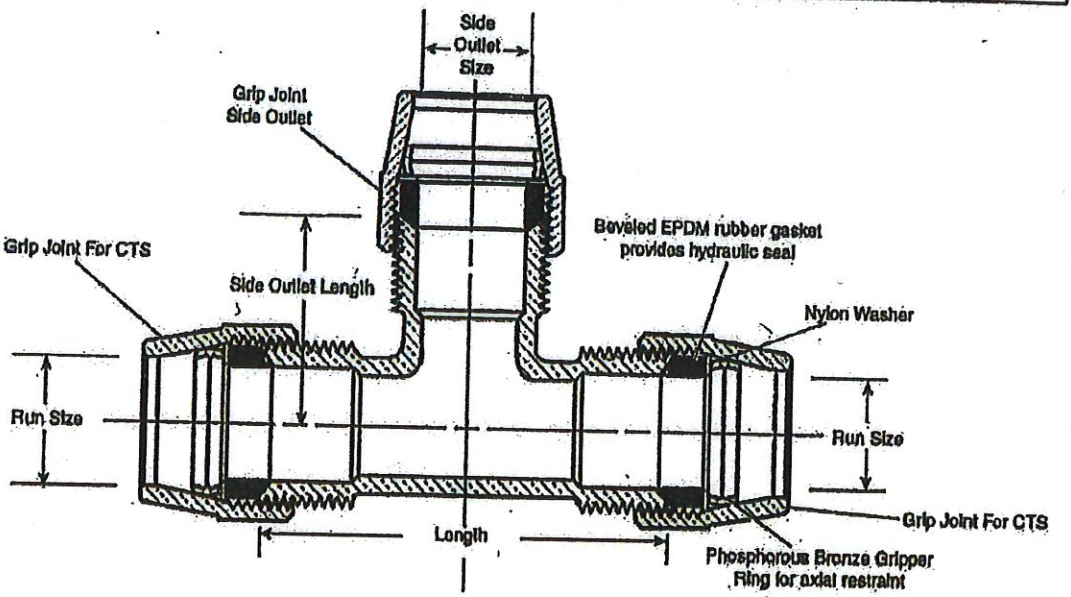
Submitted By:

SUBMITTAL INFORMATION

Grip Joint Tee - *(T444-xxx-G style)*



GRIP JOINT FOR CTS TO GRIP JOINT FOR CTS BY GRIP JOINT FOR CTS



Both Ends (Run Size)	Side Outlet Size	Run Length	Side Outlet Length	Approx Wt. Lbs.	Part Number	✓ Submitted Item(s)
3/4"	3/4"	3-5/16"	1-5/8"	1.4	▼ T444-333-G	
3/4"	1"	3-5/8"	1-15/16"	1.6	▼ T444-334-G	
1"	3/4"	3-1/2"	1-3/4"	1.6	▼ T444-443-G	
1"	1"	3-3/4"	1-15/16"	1.9	▼ T444-444-G	
1"	1-1/4"	3-3/4"	1-13/16"	2.3	▼▼ T444-445-G	
1-1/2"	1-1/2"	4-3/4"	2-3/8"	4.6	▼▼ T444-666-G	
2"	2"	7-3/8"	3-11/16"	13.4	▼▼ T444-777-G	

▼ UL Classified to ANSI/NSF Standard 61.
▼▼ Add "-K" to end of catalog number for item to be UL classified to ANSI/NSF Standard 61.
Note: Ford recommends insert stiffeners when using plastic pipe or tubing.

FEATURES

- All brass conforms to AWWA Standard C800 (ASTM B-62 and ASTM B-584, UNS NO C83600 - 85-5-5-5)

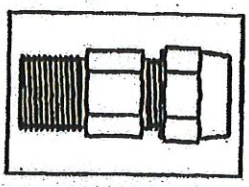
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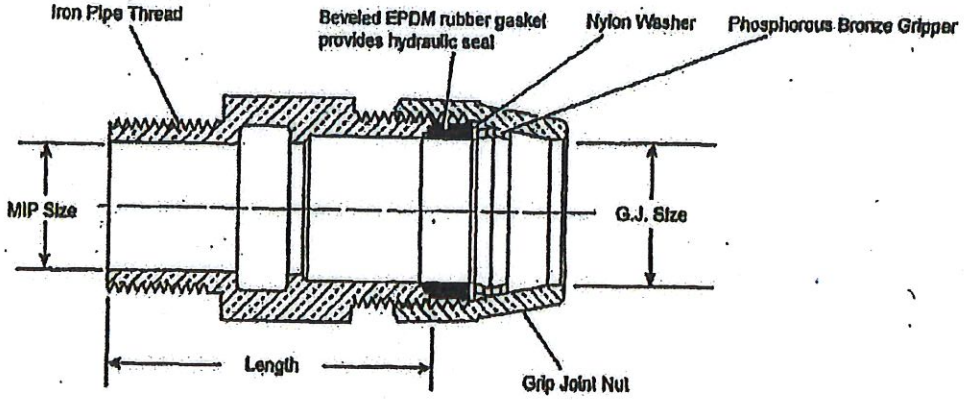
Submitted By:

SUBMITTAL INFORMATION

Grip Joint Coupling - *(C84-xx-G-NL style)*



MALE IRON PIPE THREAD BY GRIP JOINT FOR COPPER OR PLASTIC TUBING (CTS)



Description		Length	Approx. Wt. Lbs	Part Number	✓ Submitted Item(s)
Male Iron Pipe	G.J. for CTS				
1/2"	3/4"	2-1/16"	.5	C84-13-G-NL	
3/4"	3/4"	2-1/4"	.6	C84-33-G-NL	
3/4"	1"	2-3/8"	.7	C84-34-G-NL	
1"	3/4"	2-3/8"	.7	C84-43-G-NL	
1"	1"	2-9/16"	.8	C84-44-G-NL	
1"	1-1/4"	2-1/2"	1.1	C84-45-G-NL	
1"	1-1/2"	2-9/16"	1.8	C84-46-G-NL	
1-1/4"	1-1/4"	2-9/16"	1.3	C84-55-G-NL	
1-1/4"	1-1/2"	2-5/8"	1.7	C84-56-G-NL	
1-1/2"	1-1/2"	3-1/4"	2.0	C84-66-G-NL	
1-1/2"	2"	2-15/16"	2.2	C84-67-G-NL	
2"	2"	3-1/4"	2.9	C84-77-G-NL	

Note: Ford recommends insert stiffeners when using plastic pipe or tubing.

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (UNS NO C89833)
- The product has the letters "NL" cast into the main body for proper identification
- UL Classified to ANSI/NSF Standard 61 and Standard 61 Annex G (NSF/ANSI 372)
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B-62 and ASTM B-584, UNS NO C83600 - 85-5-5-5)
- Ends are integral or secured with adhesive to prevent unintentional disassembly
- 300 PSI working pressure

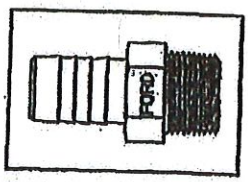
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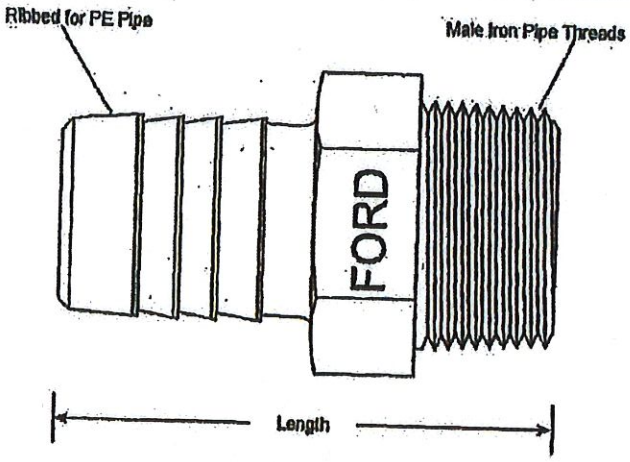
Submitted By:

SUBMITTAL INFORMATION

Insert Fittings for Plastic - *(PTM-x-NL style)*



STRAIGHT RIBBED INSERT FITTINGS FOR POLYETHYLENE PIPE



Description		Length	Approx. Wt. Lbs.	Part Number	✓ Submitted Item(s)
P.E. Pipe	MIP Thread				
3/4"	3/4"	2-15/16"	0.29	PTM-1-NL	
1"	3/4"	3-1/4"	0.38	PTM-21-NL	
1"	1"	3-1/8"	0.41	PTM-2-NL	
1-1/4"	1-1/4"	2-31/32"	0.55	PTM-3-NL	
1-1/2"	1-1/2"	3-11/16"	0.79	PTM-4-NL	
2"	2"	3-11/16"	1.03	PTM-5-NL	

Note: Ford recommends two stainless steel clamps for end of ribbed insert.

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (UNS NO C89833)
- The product has the letters "NL" cast into the main body for proper identification
- UL Classified to ANSI/NSF Standard 61 and Standard 61 Annex G (NSF/ANSI 372)
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B-62 and ASTM B-584, UNS NO C83600 - 85-5-5-5)
- Machined ribs on end prevents easy pull out

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02/13/13

Submitted By:

6.2 DEVIATIONS

Any deviations from specifications and requirements herein must be clearly pointed out by bidder. Otherwise it will be considered that products offered will be in strict compliance with these specifications and requirements, and successful bidder will be held responsible therefor. Deviations must be explained in detail on an attached sheet. However, no implication is made by Union County that deviations will be acceptable. Bidder is advised that the response (or lack thereof) on this question does not take precedence over specific responses or non-responses provided elsewhere in this bid.

6.3 DELIVERY AND CHARGES

All prices quoted shall include all delivery and/or freight charges to addresses specified in this document or other address specified on a Purchase Order. No additional freight shall be charged at time of delivery. Risk of loss and/or damage shall be upon the seller until such time as goods have been physically delivered and received by the County.

6.4 DELIVERY LOCATION

Deliveries shall be FOB Destination to the address shown below:

Water & Wastewater Operations Center
4600 Goldmine Road
Monroe, NC 28110

7 EVALUATION OF BIDS AND AWARD PROCEDURES

7.1 BID INFORMATION

Bids must be made in strict conformance using the Invitation for Bid (IFB) forms provided herein. All blank spaces for bids must be filled in properly. Numbers must be written in ink or typewritten, and the completed forms shall be without erasures, lineation, or alterations. In accepting the bid, the County will assume that no alterations have been made, and if they appear afterward, they shall not be binding on the County.

All Bid Documents shall be signed by an individual who is authorized to contractually bind the company. The signature must indicate the title or position the individual holds in the agency or firm. Agencies or firms which sign contracts with the name of the agency or firm must provide the name of a corporate officer or executive director for signature validation by the County. **All unsigned Bids will be disqualified.** In submitting a Bid, Offeror affirms all statements contained in the bid are true and accurate.

7.2 BID FORMAT

Bids must include the following:

- Appendix A – Price Form
- Appendix B – Bid Submission Form (signed)
- Appendix C – Addendum Receipt and Anti-Collusion Form (signed)

7.3 TERMS OF SUBMISSION

All material received from a person or company ("Respondent") in response to this solicitation shall become the property of Union County and will not be returned to the Respondent. Any and all costs incurred by a Respondent in preparing, submitting, or presenting submissions are the Respondent's sole responsibility and Union County shall not reimburse the Respondent. All responses to this solicitation will be considered a public record and subject to disclosure under applicable public records law.

Any material in a response which the Respondent considers a trade secret and exempt from disclosure as a public record under applicable law, including N.C.G.S. §§ 132-1.2 and 66-152, must be properly designated as a trade secret. In order to properly designate such material, the Respondent must: (i) submit any trade secret materials in a separate envelope, or file, from all other submitted material, being clearly marked as "Trade Secret – Confidential and Proprietary Information," and (ii) stamp the same trade secret/confidentiality designation on each page of the materials therein which contain trade secrets.

To the extent consistent with public records law, Union County will make reasonable efforts to maintain the confidential nature of trade secrets, as determined by Union County and subject to the conditions set forth herein. Respondent understands and agrees by submitting a response to this solicitation, that if a request is made to review or produce a copy of any information in the Respondent's materials which was properly labeled by the Respondent as a trade secret, Union County will notify the Respondent of the request and the date that such materials will be released to the requestor unless the Respondent obtains a court order enjoining that disclosure. If the Respondent fails to obtain the court order enjoining disclosure prior to that date, Respondent understands and agrees that Union County will release the requested information to the requestor on that date.

Furthermore, the Respondent also agrees to indemnify and hold harmless Union County and each of its officers, employees, and agents from all costs, damages, and expenses incurred in connection with refusing to disclose any material that has been designated as a trade secret by Respondent.

7.4 EVALUATION OF BIDS

Qualified bids will be evaluated to determine the **lowest responsive, responsible bidder,** taking into consideration quality, performance, and the time specified in the bid for performance of the contract. Consideration of such factors as: price offered; quality of item offered; general reputation and performance capabilities of offeror; substantial conformity with specifications/other conditions set forth in the bid; suitability of articles for the intended use; related services needed; date of delivery and performance; and such other factors deemed by the County to be pertinent will be used in determining responsiveness and responsibility.

7.5 AWARD PROCEDURES & TERM

The Contract shall have an initial term of one year ("Initial Term"), beginning on the effective date of the Contract. Prior to the end of the Initial Term or a first or second

Renewal Term (as defined herein), the County shall have the option, in its sole discretion and pending budget approval to renew the Contract on the same terms and conditions as the Initial Term (subject to Section 8.6 below), for four additional one-year terms (each a "Renewal Term"). Thus, this allows for the possibility of up to four (4) total Renewal Terms.

The County reserves the right to reject any and all bids, the right to waive informalities, and the right to disregard nonconforming or conditional bids or counter proposals. If the contract is to be awarded, it will be awarded to the lowest responsible, responsible bidder whose evaluation by the County indicates that the award will be in the best interest of County. The County shall have a period of 120 days after opening of bids in which to award the contract.

All payroll taxes, liability and worker's compensation are the sole responsibility of the Offeror. The Offeror understands that an employer/employee relationship does not exist under this contract.

7.6 COST ADJUSTMENTS

The Unit Pricing for the Initial Term shall be based upon the response to this solicitation. However, the Unit Pricing for any Renewal Term may be adjusted at the beginning of such Renewal Term by multiplying the Unit Pricing effective in the previous term by the quotient of the All Urban Consumers Price Index (CPI-U) (South Region), Others Goods and Services, with the Index Period of 2020-2024 as published by the Bureau of Labor Statistics, United States Department of Labor, in effect ninety (90) days prior to the commencement date of the new Renewal Term divided by such CPI in effect for the same month one (1) year prior to such date. However, any Unit Pricing increase pursuant to the previous sentence shall be capped at a five percent (5%) increase from one term to the next. Any such Unit Pricing adjustment for a Renewal Term must be requested by the Vendor or County within thirty (30) days from the date of the County's notice of its exercise of an option to renew the Contract for a Renewal Term.

7.7 APPLICATION OF NORTH CAROLINA GENERAL STATUTES

The General Statutes of North Carolina regarding purchasing and competitive bidding (G.S. § 143-129) are made a part herein and will govern the bidding process as applicable.

8 GENERAL CONDITIONS AND REQUIREMENTS

8.1 MINIMUM REQUIREMENTS FOR BIDDERS

Bids shall be considered only from companies normally engaged in performing the type of work specified in this solicitation. Union County, in its discretion, shall determine whether the evidence of responsibility and ability to perform is satisfactory.

The individual/firm warrants that he/she is fully qualified, with adequate personnel and experience, to undertake the services required. The Offeror shall also certify that insurance coverage that meets or exceeds industry standards for this type of work will be in force to mitigate risk during performance under the contract.

8.2 TERMS AND CONDITIONS

All payroll taxes, liability and worker's compensation are the sole responsibility of the Offeror. The Offeror understands that an employer/employee relationship does not exist under this contract.

The County reserves the right to reject any and all bids, the right to waive informalities, and the right to disregard nonconforming or conditional bids or counter bids. It is the intention of Union County to execute a final, binding Contract with the successful Offeror which incorporates terms and conditions no less onerous than those appropriate to the engagement of a licensed contracting firm in connection with a project of this magnitude.

All bids submitted in response to this request shall become the property of Union County and as such, may be subject to public review.

8.3 IFB EXPENSES

Expenses for developing the bids are entirely the responsibility of the vendor and shall not be chargeable in any way to the County.

8.4 CERTIFICATION

In response to the IFB Request, the Contractor certifies the following:

- This bid is signed by an authorized representative of the firm;
- It can obtain insurance certificates as required within ten (10) calendar days after notice of award;
- All labor costs, direct and indirect, have been determined and included in the proposed cost;
- The potential Contractor has read and understands the conditions set forth in this solicitation.

8.5 FINANCIAL INFORMATION

The Bidder must have the following financial information readily available and have the ability to provide it to the County, without exception, within twenty-four (24) hours upon request during the bid certification process:

1. Annual audited financial reports for the past five (5) fiscal years;
2. Credit reports, credit bulletins, bank and vendor references, and any other
3. published statements by agencies that have been issued or published about the entity within the past five (5) years;
4. Indicate whether the Company (and/or predecessor, guarantor, or subcontractor) has declared bankruptcy within the last five (5) years;
5. Provide a description of the financial impact of any past or pending legal proceedings and judgments that could materially affect the Bidder's financial position or ability to provide service to the County.

8.6 CONTRACTUAL OBLIGATIONS

The contents of this Bid and the commitments set forth in the Bid shall be considered contractual obligations, if a contract ensues. Failure to accept these obligations may

result in cancellation of the award. All legally required terms and conditions shall be incorporated into final contract agreements with the selected Service

8.7 COMPLIANCE WITH LAWS

Seller represents and warrants that the performance of this order and the furnishing of goods or services required shall be in accordance with the applicable standards, provisions and stipulations of all pertinent Federal, State or County laws, rules, regulations, resolutions and ordinances including but not limited to the Fair Labor Standards Act, the Equal Employment Opportunity rules and regulations and the Occupational Safety and Health Acts.

8.8 SUB-CONTRACTOR/PARTNER DISCLOSURE

A single Company may propose the entire solution. If the Bid by any Company requires the use of sub-contractors, partners, and/or third-party products or services, this must be clearly stated in the Bid. The Company submitting the Bid shall remain solely responsible for the performance of all work, including work that is done by sub-contractors.

8.9 MODIFICATION OR WITHDRAWAL OF BID

Prior to the scheduled closing time for receiving bids, any Contractor may withdraw his bid. After the scheduled closing time for receiving bids, no bid may be withdrawn for 90 days. Only written requests for the modification or correction of a previously submitted bid that are addressed in the same manner as bids and are received by the County prior to the closing time for receiving bids will be accepted. The bid will be corrected in accordance with such written requests, provided that any such written request is in a sealed envelope that is plainly marked “Modification of Bid.” Oral, telephone or fax modifications or corrections will not be recognized or considered.

8.10 CONTRACT COMMENCEMENT

Commencement of a contract shall not begin prior to all necessary County approvals, including County Commission approval where required, and receipt of a County Purchase Order. Commencement of a contract without these approvals is solely at the Bidder’s own risk and is likely to result in no payment for services performed or goods received.

8.11 DISPUTES

In case of any doubt or differences of opinion as to the services to be furnished hereunder, the decision of the County shall be final and binding upon both parties.

8.12 EQUAL EMPLOYMENT OPPORTUNITY

All Companies will be required to follow Federal Equal Employment Opportunity (EEO) policies. Union County will affirmatively assure that on any project constructed pursuant to this advertisement, equal employment opportunity will be offered to all persons without regard to race, color, creed, religion, national origin, sex, and marital status, status with regard to public assistance, membership or activity in a local commission, disability, sexual orientation, or age.

8.13 MINORITY AND SMALL BUSINESS PARTICIPATION PLAN

It is the policy of Union County that Minority Businesses (MBEs), Disadvantaged Business Enterprises (DBEs) and other small businesses shall have the opportunity to compete fairly in contracts financed in whole or in part with public funds. Consistent with this policy, Union County will not allow any person or business to be excluded from participation in, denied the benefits of, or otherwise be discriminated against in connection with the award and performance of any contract because of sex, race, religion, or national origin.

8.14 LICENSES

The successful Firm(s) shall have and maintain a valid and appropriate business license (if applicable), meet all local, state, and federal codes, and have current all required local, state, and federal licenses.

8.15 E-VERIFY

E-Verify is the federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to federal law. Offeror/Firm shall ensure that Firm and any Subcontractor performing work under this contract: (i) uses E-Verify if required to do so; and (ii) otherwise complies with applicable law.

8.16 DRUG-FREE WORKPLACE

During the performance of this project, the Firm agrees to provide a drug-free workplace for his employees; post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the workplace and specify the actions that will be taken against employees for violations of such prohibition; and state in all solicitations or advertisements for employees placed by or on behalf of the firm that the Firm maintains a drug-free workplace.

For the purposes of this section, “drug-free workplace” means a site for the performance of work done in connection with a specific contract awarded to a Contractor/Firm in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the Request.

8.17 INSURANCE

One or more of the following insurance limits may be required if it is applicable to the project. The County reserves the right to require additional insurance depending on the nature of the agreement.

At Contractor’s sole expense, Contractor shall procure and maintain the following minimum insurances with insurers authorized to do business in North Carolina and rated

A-VII or better by A.M. Best, or as otherwise authorized by the Union County Risk Manager.

A. WORKERS' COMPENSATION
Statutory (coverage for three or more employees) limits covering all employees, including Employer's Liability with limits of:

$500,000	Each Accident
$500,000	Disease - Each Employee
$500,000	Disease - Policy Limit

B. COMMERCIAL GENERAL LIABILITY
(for any agreement unless otherwise waived by the Risk Manager)
Covering Ongoing and Completed Operations involved in this Agreement.

$2,000,000	General Aggregate
$2,000,000	Products/Completed Operations Aggregate
$1,000,000	Each Occurrence
$1,000,000	Personal and Advertising Injury Limit

C. COMMERCIAL AUTOMOBILE LIABILITY
(for any agreement involving the use of a contractor vehicle while conducting services associated with the agreement)

$1,000,000	Combined Single Limit - Any Auto

D. PROFESSIONAL LIABILITY
(only for any agreement providing professional service such as engineering, architecture, surveying, consulting services, etc.)

$1,000,000	Claims Made

Contractor shall provide evidence of continuation or renewal of Professional Liability Insurance for a period of two (2) years following termination of the Agreement.

ADDITIONAL INSURANCE REQUIREMENTS

A. The Contractor's General Liability policy shall be endorsed, specifically or generally, to include the following as Additional Insured:

UNION COUNTY, ITS OFFICERS, AGENTS AND EMPLOYEES ARE INCLUDED AS ADDITIONAL INSURED WITH RESPECTS TO THE GENERAL LIABILITY INSURANCE POLICY.

Additional Insured status for Completed Operations shall extend for a period of not less than three (3) years from the date of final payment.

B. Before commencement of any work or event, Contractor shall provide a Certificate of Insurance in satisfactory form as evidence of the insurances required above.

C. Contractor shall have no right of recovery or subrogation against Union County (including its officers, agents and employees).

D. It is the intention of the parties that the insurance policies afforded by contractor shall protect both parties and be primary and non-contributory coverage for any and all losses covered by the above-described insurance.

E. Union County shall have no liability with respect to Contractor's personal property whether insured or not insured. Any deductible or self-insured retention is the sole responsibility of Contractor.

F. Notwithstanding the notification requirements of the Insurer, Contractor hereby agrees to notify County's Risk Manager at 500 N. Main Street # 130, Monroe, NC 28112, within two (2) days of the cancellation or substantive change of any insurance policy set out herein. Union, in its sole discretion, may deem failure to provide such notice as a breach of this Agreement.

G. The Certificate of Insurance should note in the Description of Operations the following:

Department: _____
Contract #: _____

H. Insurance procured by Contractor shall not reduce nor limit Contractor's contractual obligation to indemnify, save harmless and defend Union County for claims made or suits brought which result from or are in connection with the performance of this Agreement.

I. Certificate Holder shall be listed as follows:

Union County
Attention: Keith A. Richards, Risk Manager
500 N. Main Street, Suite #130
Monroe, NC 28112

J. If Contractor is authorized to assign or subcontract any of its rights or duties hereunder and in fact does so, Contractor shall ensure that the assignee or subcontractor satisfies all requirements of this Agreement, including, but not limited to, maintenance of the required insurances coverage and provision of certificate(s) of insurance and additional insured endorsement(s), in proper form prior to commencement of services.

8.18 INDEMNIFICATION

Contractor agrees to protect, defend, indemnify and hold Union County, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens,

demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of this agreement and/or the performance hereof that are due, in whole or in part, to the negligence of the Contractor, its officers, employees, subcontractors or agents. Contractor further agrees to investigate, handle, respond to, provide defense for, and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto.

9 APPENDIX A –PRICE FORM

IFB 2022-003 Potable Water Service Parts

SUBMIT WITH BID

Company Name: _____

Unit costs must include all charges, including shipping/delivery.

MFGR	PART #	PART NAME & DESCRIPTION	Unit Cost
		3/4" Fittings	
		3/4" BALL CORPORATIONS, NO LEAD, VALVE SIZE 3/4", INLET SIZE 3/4", OUTLET SIZE 3/4", AWWA/CC TAPER THREAD INLET BY GRIP JOINT OUTLET FOR CTS	$
		5/8" X 3/4" IRON YOKE BAR	$
		3/4" ANGLE YOKE BALL VALVES, NO LEAD, VALVE SIZE 3/4", SERVICE LINE SIZE AND TYPE 3/4" GRIP JOINT/CTS, METER SIZE 5/8" X 3/4" & 3/4"	$
		3/4" STRAIGHT DUAL CHECK VALVES, NO LEAD, VALVE SIZE 3/4", METER INLET SIZE 5/8" X 3/4" & 3/4", OUTLET SIZE AND TYPE 3/4" FIP	$
		3/4" CTS STRAIGHT COUPLING, NO LEAD, GRIP JOINT X GRIP JOINT	$
		3/4" GRIP JOINT TEES, NO LEAD, BOTH ENDS 3/4" CTS X 3/4" CTS, SIDE OUTLET 3/4" CTS	$
		3/4" CTS X MIP STRAIGHT COUPLING, NO LEAD, MALE IRON PIPE END SIZE 3/4", CTS END SIZE 3/4"	$
		3/4" IPS X MIP RIBBED INSERT, NO LEAD, 3/4" MALE IRON PIPE THREAD TO 3/4" RIBBED INSERT FOR PE PIPE	$
		1" Fittings	
		1" BALL CORPORATIONS, NO LEAD, VALVE SIZE 1", INLET SIZE 1", OUTLET SIDE 1", BODY OUTLET THREADS 1" FLARE COPPER, AWWA/CC TAPER THREAD INLET BY GRIP JOINT OUTLET FOR C	$
		1" IRON YOKE BAR	$
		1" ANGLE YOKE BALL VALVES, NO LEAD, VALVE SIZE 1", SERVICE LINE SIZE AND TYPE 3/4" GRIP JOINT/CTS, METER SIZE 1"	$
		1" STRAIGHT DUAL CHECK VALVE, NO LEAD, VALVE SIZE 3/4", METER INLET SIZE 1", OUTLET SIZE AND TYPE 1" FIP	$
		1" CTS STRAIGHT COUPLING, NO LEAD, GRIP JOINT X GRIP JOINT	$
		Total Bid:	$

Warranty in Months: _____

10 APPENDIX B – BID SUBMISSION FORM

IFB 2022-003 Potable Water Service Parts

SUBMIT WITH BID

This Bid is submitted by:

Company Legal Name: _____

Representative Name: _____

Representative Signature: _____

Representative Title: _____

Address: _____

City/State/Zip: _____

Email Address: _____

Phone Number: _____

Website Address: _____

It is understood that Union County reserves the right to reject any and all Bids, to make awards according to the best interest of the County, to waive formalities, technicalities, to recover and re-bid this project. Bid is valid for 120 calendar days from the Bid due date and is submitted by an executive of the company that has authority to contract with Union County, NC.

Name: _____

Title: _____

Signature: _____

Date: _____

11 APPENDIX C – ADDENDUM AND ANTI-COLLUSION FORM

IFB 2022-003 Potable Water Service Parts

SUBMIT WITH BID

Please acknowledge receipt of all addenda by including this form with your Bid. Any questions or changes received will be posted as an addendum on www.co.union.nc.us and/or www.ips.state.nc.us. It is your responsibility to check for this information.

Addendum No.	Date Downloaded

I certify that this Bid is made in good faith and without collusion with any other offeror or officer or employee of Union County.

Company Name: _____

Name: _____

Title: _____

Email Address: _____

Signature: _____

Date: _____

12 APPENDIX D – VENDOR PAYMENT LETTER

IFB 2022-003 Potable Water Service Parts

Do Not Submit with Bid

-----For informational purposes only. -----

Union County Government
EST. 1842

Finance Department
500 North Main Street
Suite #700
Monroe, NC 28112

T. 704-283-3813

www.unioncountync.gov

ATTENTION: ACCOUNTS PAYABLE VENDORS

As part of our Fraud Prevention Program, Union County now prefers two methods for payments to vendor accounts. These methods allow for faster and easier payments to vendors.

The first and preferred method available is to accept a VISA card payment from the County. If you accept payment via VISA, payment is made at the time of the transaction or upon receipt and approval of the invoice.

The second method is an Electronic Funds Transfer. (EFT) This means that you will receive payment of invoices due directly into your bank account. With this method, you will get an email confirmation giving you the date, invoice numbers, and total amount paid. Your payment will be available to you on Monday (or the first banking day if Monday is a bank holiday) following receipt of an approved invoice from the County department invoiced.

An EFT Enrollment Form to enroll in the program is attached for your convenience. You can also visit the Union County website at www.unioncountync.gov at any time to get a new form if your banking information changes. If the banking information changes and you do not notify us, it will delay receipt of payment for invoices.

If you wish to receive payment via the County's VISA card, please contact Heather Howey at 704-283-3539, or send an email to heather.howey@unioncountync.gov and you will be added to the list of vendors accepting the VISA card method of payment.

Union County prefers all vendors participate in one of the two methods described above.

Thank you in advance for your participation.

Please return this completed form and supporting documents to:

Union County -Finance Office
Suite 714, 7th Floor, 500 N. Main Street, Monroe NC 28112

Phone: (704) 283-3886 **Fax:** (704) 225-0664
Email: ap@unioncountync.gov

Authorization for payment via Electronic Funds Transfer (EFT)

☐ Initial Enrollment ☐ Change Information Today's Date _____

Company Name _____

Street Address _____

City, State, Zip _____

By signing below, I hereby authorize Union County to electronically deposit funds into the account indicated below. I understand that if my banking information changes and Union County is not made aware of this change, then payment may be delayed.

Bank Name _____

Address _____

City, State, Zip _____

Routing/ABA # _____ Bank Acct No. _____

Payment Notification: I hereby authorize the following individual to receive an email notification of payment details for all funds deposited to the above account by Union County.

Name & Title _____

Email Address _____

Phone Number _____

Officer Name & Title _____

Phone Number _____

Signature: _____

FOR ACCOUNT VERIFICATION, PLEASE ATTACH A VOIDED CHECK.

This authorization will remain in effect until Union County has received written notice to discontinue.

Print Form

13 APPENDIX E – TEMPLATE AGREEMENT

IFB 2022-003 Potable Water Service Parts

Do Not Submit with Bid

-----For informational purposes only. -----

STATE OF NORTH CAROLINA

TEMPLATE AGREEMENT

COUNTY OF UNION

THIS AGREEMENT is made and entered into as of _____, by and between UNION COUNTY, a political subdivision of the State of North Carolina, whose address is 500 N. Main Street, Monroe, N.C. 28112, hereinafter "Union," and [Contractor's full legal name], a [type of business (corporation, limited liability company, etc.) and state where incorporated], whose address is _____, hereinafter "Contractor."

W I T N E S S E T H

WHEREAS, Contractor is a supplier of certain [describe goods here *(ex: Type K copper tube for potable water)*], hereinafter referred to as "Goods;" and

WHEREAS, Union desires to purchase such Goods from Contractor on an as-needed basis; and

WHEREAS, Contractor is willing to provide such Goods to Union as described in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties hereto do each contract and agree with the other as follows:

1. GOODS PROVIDED. Contractor agrees to provide the Goods in accordance with the specifications in the attached Specifications [*or, if the full IFB (or RFP) is to be attached, state the IFB # and IFB title*]. Contractor shall provide the Goods on an as-needed basis, upon request by Union for such Goods. Union shall provide a purchase order number to Contractor prior to any Goods being delivered. Contractor shall not be required to provide installation services pursuant to this Agreement. Union does not guarantee the purchase of any minimum amount of Goods pursuant to this Agreement.

2. FEE AND PAYMENT SCHEDULE. Union shall pay Contractor for purchase of the Goods in accordance with the attached ["Appendix A – Pricing Form" *(or whatever title was used on the pricing form in the solicitation)*]. Contractor shall invoice Union for Goods after each delivery requested by Union has been completed pursuant to Section 1 herein. Contractor's invoice must reference the purchase order number issued by Union. Payment is due within thirty (30) days of receipt of an accurate invoice by Union's Finance Department. All payments shall be conditioned upon appropriation by the Union County Board of Commissioners of sufficient funds for each request for services.

[*Include this paragraph only if Union agrees to such potential increase over time, or if this provision is included in the IFB.*] If the Agreement is renewed for additional terms in accordance with Section 4 herein, at the beginning of each renewal term, Contractor may adjust the prices listed in [Appendix A] based on the Consumer Price Index agreed upon by both Contractor and Union, limited to the amount of the CPI increase over the previous year.

3. DELIVERY SCHEDULE. Contractor shall ship requested Goods described in Section 1 herein FOB destination, Freight Prepaid, and delivery of such Goods shall be within _____[*length of time, as listed in the IFB*] of the date Contractor receives Union's order.

4. TERM AND TERMINATION. The Effective Date is the date of mutual execution of this Agreement. This Agreement shall have a term of [insert agreement time length]. [*The following sentence is to be used only if renewals might be needed or desired, and then only if the IFB or RFP lists the possible number of renewals. If the contract is just for a single term, this sentence may be deleted.*] Upon completion of the Initial Term, Union may, in its sole discretion, elect to renew this Agreement for up to ____[number of possible additional terms, as stated in the IFB or RFP] additional ___[number of years in each renewal term]-year terms, each a "Renewal Term," upon written notice to the Contractor. Union may terminate this Agreement at any time, with or without cause, by notification to Contractor in writing. In the event of termination without cause, Contractor shall be paid for Goods delivered to the date of notification of termination by Union.

5. OWNERSHIP OF DOCUMENTS. All deliverables and any other contract documents prepared by Contractor, or any subcontractors or subconsultants under the terms of this Agreement ("the Documents"), shall be the property of Union. Contractor further acknowledges that Union is subject to Chapter 132 of the North Carolina General Statutes, the Public Records Act (the "Act"), and that this Agreement, as well as any of the Documents as defined herein, shall be a public record as defined in such Act, and as such, will be open to public disclosure and copying.

6. INSURANCE. The attached Exhibit A, Insurance Requirements, is incorporated herein by reference.

7. INDEMNIFICATION. Contractor agrees to protect, defend, indemnify and hold Union, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of this Agreement and/or the performance hereof that are due, in whole or in part, to the negligence of Contractor, its officers, employees, subcontractors or agents. Contractor further agrees to investigate, handle, respond to, provide defense for, and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto.

8. FEDERAL, STATE, AND LOCAL TAXES. Neither federal, nor state, nor local income tax nor payroll tax of any kind shall be withheld or paid by Union on behalf of Contractor or the employees of Contractor. Contractor shall not be treated as an employee with respect to the services performed hereunder for federal or state tax purposes.

9. NOTICE TO CONTRACTOR REGARDING ITS TAX DUTIES AND LIABILITIES. Contractor understands that Contractor is responsible to pay, according to law, Contractor's income tax. If Contractor is not a corporation, Contractor further understands that Contractor may be liable for self-employment (social security) tax, to be paid by Contractor according to law.

10. FRINGE BENEFITS. Because Contractor is engaged in Contractor's own independently established business, Contractor is not eligible for, and shall not participate in, any employee pension, health or other fringe benefit plan of Union.

11. UNION NOT RESPONSIBLE FOR WORKERS' COMPENSATION. No workers' compensation insurance shall be obtained by Union concerning Contractor or the employees of Contractor. Contractor shall comply with the workers' compensation law concerning Contractor and the employees of Contractor.

12. NO AUTHORITY TO BIND UNION. Contractor has no authority to enter into contracts or agreements on behalf of Union. This Agreement does not create a partnership or any form of agency between the parties.

13. ASSIGNMENT. Neither Union nor Contractor shall assign, sublet or transfer any rights under or interest in this Agreement (including, but without limitation, monies that may become due or monies that are due) without the written consent of the other, except to the extent that any assignment, subletting or transfer is mandated by law or the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to assignment, no assignment shall release or discharge the assignor from any duty or responsibility under this Agreement.

14. NON-WAIVER. The failure of either party to exercise any of its rights under this agreement for a breach thereof shall not be deemed to be a waiver of such rights or a waiver of any subsequent breach.

15. HOW NOTICES SHALL BE GIVEN. Any notice given in connection with this agreement shall be given in writing and shall be delivered either by hand to the party or by certified mail, return receipt requested, to the party at the party's address stated herein. Any party may change its address stated herein by giving notice of the change in accordance with this paragraph.

16. APPLICABLE LAW AND JURISDICTION. This Agreement shall be construed and enforced in accordance with the laws of the State of North Carolina. The parties to this Agreement confer exclusive jurisdiction of all disputes arising hereunder upon the General Courts of Justice of Union County, North Carolina.

17. COMPLETE AGREEMENT. This Agreement contains the complete agreement of the parties regarding the terms and conditions of the Agreement, and there are no oral or written conditions, terms, warranties, understandings or other agreements pertaining thereto which have not been incorporated herein. This Agreement may be modified only by written instrument duly executed by both parties, or their respective successors in interest.

18. SEVERABILITY. The provisions hereof are severable, and should any provision be determined to be invalid, unlawful or otherwise null and void by any court of competent jurisdiction, the other provisions shall remain in full force and effect and shall not thereby be affected unless such ruling shall make further performance hereunder impossible or impose an unconscionable burden upon one of the parties.

19. AUTHORITY. Each party warrants that it has the corporate or other organizational power and authority to execute, deliver and perform this Agreement. Each party

further warrants that the execution, delivery and performance by it of the Agreement has been duly authorized and approved by all requisite action of the party's management and appropriate governing body.

20. E-VERIFY. E-Verify is the federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to federal law. Contractor shall ensure that Contractor and any subcontractor performing work under this Agreement: (i) uses E-Verify if required to do so by North Carolina law; and (ii) otherwise complies with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. A breach of this provision by Contractor will be considered a breach of this Agreement, which entitles Union to terminate this Agreement, without penalty, upon notice to Contractor.

IN WITNESS WHEREOF, the parties hereto, acting under authority of their respective governing bodies, have hereunto set their hands and seals, and have caused this Agreement to be duly executed, this the day and year first above written.

WITNESS:	UNION COUNTY
BY: _____ Lynn G. West, Clerk to the Board	BY: _____(SEAL) William M. Watson, County Manager
WITNESS:	[Contractor Full Legal Name]
BY:_____	BY: _____(SEAL)

Approved as to Legal Form ____

This instrument has been preaudited in the manner required by The Local Government Budget and Fiscal Control Act.

_____
Deputy Finance Officer

Exhibit A
Insurance Requirements

I. **BASIC INSURANCE REQUIREMENTS.** At Contractor's sole expense, Contractor shall procure and maintain the following minimum insurances with insurers authorized to do business in North Carolina and rated A-VII or better by A.M. Best, or as otherwise authorized by the Union County Risk Manager.

A. WORKERS' COMPENSATION
Statutory (coverage for three or more employees) limits covering all employees, including Employer's Liability with limits of:

$500,000	Each Accident
$500,000	Disease - Each Employee
$500,000	Disease - Policy Limit

B. COMMERCIAL GENERAL LIABILITY
Covering all operations involved in this Agreement.

$2,000,000	General Aggregate
$2,000,000	Products/Completed Operations Aggregate
$1,000,000	Each Occurrence
$1,000,000	Personal and Advertising Injury Limit

C. COMMERCIAL AUTOMOBILE LIABILITY

$1,000,000 Combined Single Limit - Any Auto

D. PROFESSIONAL LIABILITY

$1,000,000 Claims Made

Contractor shall provide evidence of continuation or renewal of Professional Liability Insurance for a period of two (2) years following termination of the Agreement.

E. POLLUTION LIABILITY INSURANCE

$1,000,000 Claims Made

Contractor shall provide evidence of continuation or renewal of Pollution Liability Insurance for a period of two (2) years following termination of the Agreement.

F. NETWORK SECURITY & PRIVACY LIABILITY (CYBER)

$1,000,000 Claims Made
$3,000,000 Aggregate Limit

Contractor shall provide evidence of continuation or renewal of Network Security & Privacy Liability Insurance for a period of two (2) years following termination of the Agreement.

II. ADDITIONAL INSURANCE REQUIREMENTS.

A. The Contractor's General Liability policy shall be endorsed, specifically or generally, to include the following as Additional Insured:

UNION COUNTY, ITS OFFICERS, AGENTS AND EMPLOYEES ARE INCLUDED AS ADDITIONAL INSURED WITH RESPECT TO THE GENERAL LIABILITY INSURANCE POLICY.

B. Before commencement of any work or event, Contractor shall provide a Certificate of Insurance in satisfactory form as evidence of the insurances required above.

C. Contractor shall have no right of recovery or subrogation against Union County (including its officers, agents and employees).

D. It is the intention of the parties that the insurance policies afforded by Contractor shall protect both parties and be primary and non-contributory coverage for any and all losses covered by the above-described insurance.

E. Union County shall have no liability with respect to Contractor's personal property whether insured or not insured. Any deductible or self-insured retention is the sole responsibility of Contractor.

F. Notwithstanding the notification requirements of the Insurer, Contractor hereby agrees to notify County's Risk Manager at 500 N. Main Street, Suite #130, Monroe, NC 28112, within two (2) days of the cancellation or substantive change of any insurance policy set out herein. Union, in its sole discretion, may deem failure to provide such notice as a breach of this Agreement.

G. The Certificate of Insurance should note in the Description of Operations the following:

Department: _____
Contract #: _____

H. Insurance procured by Contractor shall not reduce nor limit Contractor's contractual obligation to indemnify, save harmless and defend Union County for claims made or suits brought which result from or are in connection with the performance of this Agreement.

I. Certificate Holder shall be listed as follows:

Union County
Attention: Keith A. Richards, Risk Manager
500 N. Main Street, Suite #130
Monroe, NC 28112

J. If Contractor is authorized to assign or subcontract any of its rights or duties hereunder and in fact does so, Contractor shall ensure that the assignee or subcontractor satisfies all requirements of this Agreement, including, but not limited to, maintenance of the required insurances coverage and provision of certificate(s) of insurance and additional insured endorsement(s), in proper form prior to commencement of services.

STATE OF NORTH CAROLINA

AGREEMENT

COUNTY OF UNION

THIS AGREEMENT is made and entered into as of _____, by and between UNION COUNTY, a political subdivision of the State of North Carolina, whose address is 500 N. Main Street, Monroe, N.C. 28112, hereinafter "Union," and FERGUSON ENTERPRISES, LLC d/b/a FERGUSON WATERWORKS, who has offices at 5001 Sunset Road, Charlotte, NC 28269, hereinafter "Contractor."

W I T N E S S E T H

WHEREAS, Contractor is a supplier of certain potable water service parts, hereinafter referred to as "Goods;" and

WHEREAS, Union desires to purchase such Goods from Contractor on an as-needed basis; and

WHEREAS, Contractor is willing to provide such Goods to Union as described in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties hereto do each contract and agree with the other as follows:

1. GOODS PROVIDED. Contractor agrees to provide the Goods in accordance with, and as further described in Section 6, Specifications, of Union's IFB No. 2022-003 "Potable Water Service Parts" (the "IFB"); and the attached Exhibit B – Price Form (the "Price Form"). The IFB and the Price Form are each attached and incorporated herein by reference. Contractor shall provide the Goods on an as-needed basis, upon request by Union for such Goods. Union shall provide a purchase order number to Contractor prior to any Goods being delivered. Contractor shall not be required to provide installation services pursuant to this Agreement. Union does not guarantee the purchase of any minimum amount of Goods pursuant to this Agreement.

2. FEE AND PAYMENT SCHEDULE. Union shall pay Contractor for purchase of the Goods in accordance with the pricing set forth in the attached Price Form during the Initial Term. However, the unit pricing for any Renewal Term may be adjusted at the beginning of such Renewal Term by multiplying the unit pricing effective in the previous term by the quotient of the All Urban Consumers Price Index (CPI-U) (South Region), Other Goods and Services, with the Index Period of 2020-2024 as published by the Bureau of Labor Statistics, United States Department of Labor, in effect ninety (90) days prior to the commencement date of the new Renewal Term divided by such CPI in effect for the same month one (1) year prior to such date. However, any unit price increase pursuant to the previous sentence shall be capped at a five percent (5%) increase from one term to the next. Any such unit pricing adjustment for a Renewal Term must be requested by the Contractor or Union within thirty (30) days from the date of Union's notice of its exercise to extend the Agreement for a Renewal Term.

Contractor shall invoice Union for Goods after each delivery requested by Union has been completed pursuant to Section 1 herein. Contractor's invoice must reference the purchase order

number issued by Union. No terms or conditions reference in or included on Contractor's invoice shall be deemed to apply unless agreed by Union in a mutually executed amendment of this Agreement. Payment is due within thirty (30) days of receipt of an accurate invoice by Union's Finance Department. All payments shall be conditioned upon appropriation by the Union County Board of Commissioners of sufficient funds for each request for services.

3. DELIVERY SCHEDULE. Contractor shall ship requested Goods requested by Union no more than six (6) weeks from the date of a purchase order from Union, with all orders shipped by Contractor FOB Destination.

4. TERM AND TERMINATION. The Effective Date is the date of mutual execution of this Agreement. This Agreement shall have a term of one year ("Initial Term"), beginning on the effective date of the Agreement. Union shall have the option, in its sole discretion, to extend this Agreement for up to four additional one-year terms (each a "Renewal Term") by providing notice to Contractor prior to the end of the then-current term. Union may terminate this Agreement at any time, with or without cause, by notification to Contractor in writing. In the event of termination without cause, Contractor shall be paid for Goods delivered to the date of notification of termination by Union.

5. OWNERSHIP OF DOCUMENTS. All deliverables and any other contract documents prepared by Contractor, or any subcontractors or subconsultants under the terms of this Agreement ("the Documents"), shall be the property of Union. Contractor further acknowledges that Union is subject to Chapter 132 of the North Carolina General Statutes, the Public Records Act (the "Act"), and that this Agreement, as well as any of the Documents as defined herein, shall be a public record as defined in such Act, and as such, will be open to public disclosure and copying.

6. INSURANCE. The attached Exhibit A, Insurance Requirements, is incorporated herein by reference.

7. INDEMNIFICATION. Contractor agrees to protect, defend, indemnify and hold Union, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of this Agreement and/or the performance hereof that are due, in whole or in part, to the negligence of Contractor, its officers, employees, subcontractors or agents. Contractor further agrees to investigate, handle, respond to, provide defense for, and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto.

8. FEDERAL, STATE, AND LOCAL TAXES. Neither federal, nor state, nor local income tax nor payroll tax of any kind shall be withheld or paid by Union on behalf of Contractor or the employees of Contractor. Contractor shall not be treated as an employee with respect to the services performed hereunder for federal or state tax purposes.

9. NOTICE TO CONTRACTOR REGARDING ITS TAX DUTIES AND LIABILITIES. Contractor understands that Contractor is responsible to pay, according to law, Contractor's income tax. If Contractor is not a corporation, Contractor further understands that

Contractor may be liable for self-employment (social security) tax, to be paid by Contractor according to law.

10. FRINGE BENEFITS. Because Contractor is engaged in Contractor's own independently established business, Contractor is not eligible for, and shall not participate in, any employee pension, health or other fringe benefit plan of Union.

11. UNION NOT RESPONSIBLE FOR WORKERS' COMPENSATION. No workers' compensation insurance shall be obtained by Union concerning Contractor or the employees of Contractor. Contractor shall comply with the workers' compensation law concerning Contractor and the employees of Contractor.

12. NO AUTHORITY TO BIND UNION. Contractor has no authority to enter into contracts or agreements on behalf of Union. This Agreement does not create a partnership or any form of agency between the parties.

13. ASSIGNMENT. Neither Union nor Contractor shall assign, sublet or transfer any rights under or interest in this Agreement (including, but without limitation, monies that may become due or monies that are due) without the written consent of the other, except to the extent that any assignment, subletting or transfer is mandated by law or the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to assignment, no assignment shall release or discharge the assignor from any duty or responsibility under this Agreement.

14. NON-WAIVER. The failure of either party to exercise any of its rights under this agreement for a breach thereof shall not be deemed to be a waiver of such rights or a waiver of any subsequent breach.

15. HOW NOTICES SHALL BE GIVEN. Any notice given in connection with this agreement shall be given in writing and shall be delivered either by hand to the party or by certified mail, return receipt requested, to the party at the party's address stated herein. Any party may change its address stated herein by giving notice of the change in accordance with this paragraph.

16. APPLICABLE LAW AND JURISDICTION. This Agreement shall be construed and enforced in accordance with the laws of the State of North Carolina. The parties to this Agreement confer exclusive jurisdiction of all disputes arising hereunder upon the General Courts of Justice of Union County, North Carolina.

17. COMPLETE AGREEMENT. This Agreement contains the complete agreement of the parties regarding the terms and conditions of the Agreement, and there are no oral or written conditions, terms, warranties, understandings or other agreements pertaining thereto which have not been incorporated herein. This Agreement may be modified only by written instrument duly executed by both parties, or their respective successors in interest.

18. SEVERABILITY. The provisions hereof are severable, and should any provision be determined to be invalid, unlawful or otherwise null and void by any court of competent jurisdiction, the other provisions shall remain in full force and effect and shall not thereby be affected unless such ruling shall make further performance hereunder impossible or impose an unconscionable burden upon one of the parties.

19. AUTHORITY. Each party warrants that it has the corporate or other organizational power and authority to execute, deliver and perform this Agreement. Each party further warrants that the execution, delivery and performance by it of the Agreement has been duly authorized and approved by all requisite action of the party's management and appropriate governing body.

20. E-VERIFY. E-Verify is the federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to federal law. Contractor shall ensure that Contractor and any subcontractor performing work under this Agreement: (i) uses E-Verify if required to do so by North Carolina law; and (ii) otherwise complies with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. A breach of this provision by Contractor will be considered a breach of this Agreement, which entitles Union to terminate this Agreement, without penalty, upon notice to Contractor.

IN WITNESS WHEREOF, the parties hereto, acting under authority of their respective governing bodies, have hereunto set their hands and seals, and have caused this Agreement to be duly executed, this the day and year first above written.

WITNESS:

BY: _____
Lynn G. West, Clerk to the Board

UNION COUNTY

BY: _____(SEAL)
William M. Watson, County Manager

WITNESS:

BY:_____

FERGUSON ENTERPRISES, LLC

BY: _____(SEAL)

Approved as to Legal Form *KLC*

This instrument has been preaudited in the manner required by The Local Government Budget and Fiscal Control Act.

_____
Deputy Finance Officer

Exhibit A
Insurance Requirements

I. BASIC INSURANCE REQUIREMENTS. At Contractor's sole expense, Contractor shall procure and maintain the following minimum insurances with insurers authorized to do business in North Carolina and rated A-VII or better by A.M. Best, or as otherwise authorized by the Union County Risk Manager.

A. WORKERS' COMPENSATION
Statutory (coverage for three or more employees) limits covering all employees, including Employer's Liability with limits of:

$500,000	Each Accident
$500,000	Disease - Each Employee
$500,000	Disease - Policy Limit

B. COMMERCIAL GENERAL LIABILITY
Covering all operations involved in this Agreement.

$2,000,000	General Aggregate
$2,000,000	Products/Completed Operations Aggregate
$1,000,000	Each Occurrence
$1,000,000	Personal and Advertising Injury Limit

C. COMMERCIAL AUTOMOBILE LIABILITY

$1,000,000	Combined Single Limit - Any Auto

II. ADDITIONAL INSURANCE REQUIREMENTS.

A. The Contractor's General Liability policy shall be endorsed, specifically or generally, to include the following as Additional Insured:

UNION COUNTY, ITS OFFICERS, AGENTS AND EMPLOYEES ARE INCLUDED AS ADDITIONAL INSURED WITH RESPECT TO THE GENERAL LIABILITY INSURANCE POLICY.

B. Before commencement of any work or event, Contractor shall provide a Certificate of Insurance in satisfactory form as evidence of the insurances required above.

C. Contractor shall have no right of recovery or subrogation against Union County (including its officers, agents and employees).

D. It is the intention of the parties that the insurance policies afforded by Contractor shall protect both parties and be primary and non-contributory coverage for any and all losses covered by the above-described insurance.

E. Union County shall have no liability with respect to Contractor's personal property whether insured or not insured. Any deductible or self-insured retention is the sole responsibility of Contractor.

F. Notwithstanding the notification requirements of the Insurer, Contractor hereby agrees to notify County's Risk Manager at 500 N. Main Street, Suite #130, Monroe, NC 28112, within two (2) days of the cancellation or substantive change of any insurance policy set out herein. Union, in its sole discretion, may deem failure to provide such notice as a breach of this Agreement.

G. The Certificate of Insurance should note in the Description of Operations the following:

Department: Public Works
Contract #: 7349

H. Insurance procured by Contractor shall not reduce nor limit Contractor's contractual obligation to indemnify, save harmless and defend Union County for claims made or suits brought which result from or are in connection with the performance of this Agreement.

I. Certificate Holder shall be listed as follows:

Union County
Attention: Keith A. Richards, Risk Manager
500 N. Main Street, Suite #130
Monroe, NC 28112

J. If Contractor is authorized to assign or subcontract any of its rights or duties hereunder and in fact does so, Contractor shall ensure that the assignee or subcontractor satisfies all requirements of this Agreement, including, but not limited to, maintenance of the required insurances coverage and provision of certificate(s) of insurance and additional insured endorsement(s), in proper form prior to commencement of services.

9 APPENDIX A –PRICE FORM

IFB 2022-003 Potable Water Service Parts

SUBMIT WITH BID

Company Name: Ferguson Waterworks

Unit costs must include all charges, including shipping/delivery.

MFGR	PART #	PART NAME & DESCRIPTION	Unit Cost
		3/4" Fittings	
Ford	FB10036NL	**3/4" BALL CORPORATIONS**, NO LEAD, VALVE SIZE 3/4", INLET SIZE 3/4", OUTLET SIZE 3/4", AWWA/CC TAPER THREAD INLET BY GRIP JOINT OUTLET FOR CTS	$ 43.50
Ford	Y502	**5/8" X 3/4" IRON YOKE BAR**	$ 9.41
Ford	BA0422366NL	**3/4" ANGLE YOKE BALL VALVES**, NO LEAD, VALVE SIZE 3/4", SERVICE LINE SIZE AND TYPE 3/4" GRIP JOINT/CTS, METER SIZE 5/8" X 3/4" & 3/4"	$ 40.79
Ford	HH5913236NL	**3/4" STRAIGHT DUAL CHECK VALVES**, NO LEAD, VALVE SIZE 3/4", METER INLET SIZE 5/8" X 3/4" & 3/4", OUTLET SIZE AND TYPE 3/4" FIP	$ 55.72
Ford	C44336NL	**3/4" CTS STRAIGHT COUPLING**, NO LEAD, GRIP JOINT X GRIP JOINT	$ 16.42
Ford	T444336NL	**3/4" GRIP JOINT TEES**, NO LEAD, BOTH ENDS 3/4" CTS X 3/4" CTS, SIDE OUTLET 3/4" CTS	$ 39.72
Ford	C84336NL	**3/4" CTS X MIP STRAIGHT COUPLING**, NO LEAD, MALE IRON PIPE END SIZE 3/4", CTS END SIZE 3/4"	$ 13.47
Ford	PTM1NL	**3/4" IPS X MIP RIBBED INSERT**, NO LEAD, 3/4" MALE IRON PIPE THREAD TO 3/4" RIBBED INSERT FOR PE PIPE	$ 7.93
		1" Fittings	
Ford	FB10046NL	**1" BALL CORPORATIONS**, NO LEAD, VALVE SIZE 1", INLET SIZE 1", OUTLET SIDE 1", BODY OUTLET THREADS 1" FLARE COPPER, AWWA/CC TAPER THREAD INLET BY GRIP JOINT OUTLET FOR C	$ 57.21
Ford	Y504	**1" IRON YOKE BAR**	$ 16.96
Ford	BA044446NL	**1" ANGLE YOKE BALL VALVES**, NO LEAD, VALVE SIZE 1", SERVICE LINE SIZE AND TYPE 3/4" GRIP JOINT/CTS, METER SIZE 1"	$ 94.86
Ford	HH5913446NL	**1" STRAIGHT DUAL CHECK VALVE**, NO LEAD, VALVE SIZE 3/4", METER INLET SIZE 1", OUTLET SIZE AND TYPE 1" FIP	$ 62.10
Ford	C4446NL	**1" CTS STRAIGHT COUPLING**, NO LEAD, GRIP JOINT X GRIP JOINT	$ 18.78
		Total Bid:	$ 476.87

Warranty in Months: 12

Invitation for Bid No. 2022-003
Potable Water Service Parts

Due Date:	August 31, 2021
Time:	2:00 PM Local Time
Submittal Location:	Union County Government Center Procurement Department 500 N. Main Street, Suite 709 Monroe, NC 28112

Procurement Contact:

Ava Strawn
Procurement Specialist
704.283.3886
ava.strawn@unioncountync.gov

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2 NOTICE OF ADVERTISEMENT

Union County, North Carolina
IFB No. 2022-003
Potable Water Service Parts

Sealed bids for Potable Water Service Parts will be received by the Union County Procurement Department *until* ***2:00 PM** local time on **August 31, 2021** at the Union County Government Center, 500 North Main Street, Suite 709, Monroe, NC 28112. The public bid opening will be conducted outdoors, in the front entrance area of the Union County Government Center at the specified bid date and time. **Late bids will not be accepted**.

On August 31, 2021, beginning at ***1:30 PM** local time, bids will be received by the Union County Procurement Department at the bid opening location, outdoors in the front entrance area of the Union County Government Center at 500 North Main Street, Monroe, NC 28112. *If you plan to attend the bid opening social distancing rules apply.*

If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED – 2022-003" and shall be addressed to Union County Procurement Department, Attn: Ava Strawn, 500 North Main Street, Suite 709, Monroe, NC 28112.

Union County, North Carolina, through Public Works – Water & Wastewater, is soliciting bids from qualified firms for purchase and delivery of Potable Water Service Parts for wastewater treatment.

Copies of the solicitation may be obtained from the locations listed below:

1. Download the Bid Documents from the Union County Website www.unioncountync.gov (Procurement Page, Current Bids).
2. Download the Bid Documents from the State of North Carolina IPS Website www.ips.state.nc.us (Bid by Departments, search County of Union).

All questions about the meaning or intent of the Bidding Documents are to be submitted in writing to the Procurement contact person listed on the cover page (ava.strawn@unioncountync.gov). Deadline for questions is **August 17, 2021 at 2:00 PM** local time.

Bidders are required to comply with the non-collusion requirements set forth in the Bidding Documents.

The County reserves the right to reject any and/or all bids, including, without limitation, nonconforming, nonresponsive, unbalanced, or conditional bids. The County also reserves the right to waive informalities.

Bidders are required to comply with the non-collusion requirements set forth in the Bidding Documents.

Union County encourages good faith effort outreach to Minority Businesses (HUB Certified) and Small Businesses.

End of Advertisement

3 BID SUBMISSION

3.1 BID SUBMISSION DEADLINE

Sealed bids for Potable Water Service Parts will be received by the Union County Procurement Department *until* ***2:00 PM** local time on **August 31, 2021** at the Union County Government Center, 500 North Main Street, Suite 709, Monroe, NC 28112. The public bid opening will be conducted outdoors, in the front entrance area of the Union County Government Center at the specified bid date and time. **Late bids will not be accepted**.

On August 31, 2021, beginning at ***1:30 PM** local time, bids will be received by the Union County Procurement Department at the bid opening location, outdoors in the front entrance area of the Union County Government Center at 500 North Main Street, Monroe, NC 28112. *If you plan to attend the bid opening social distancing rules apply.*

3.2 BID DELIVERY REQUIREMENTS

All Bids must be in a sealed box or opaque envelope plainly marked as follows:

[Name of Contractor Submitting Bid]
IFB No. 2022-003
Potable Water Service Parts
Attention: Ava Strawn

If using a delivery service, your company name and the solicitation number must be visible on the outside delivery box/envelope. Ship, Mail, or Hand Deliver to the following address:

Union County Government Center
Procurement Department
500 North Main Street, Suite 709
Monroe, NC 28112
Attention: Ava Strawn

Electronic (email) or facsimile submissions will not be accepted.

There is no expressed or implied obligation for Union County to reimburse firms for any expenses incurred in preparing Bids in response to this request.

Union County reserves the right to reject any or all Bids, to waive technicalities and to make such selection deemed in its best interest. With limited response, Union County reserves the right to extend the solicitation opening date as appropriate in order to assure a competitive procurement.

3.3 BID QUESTIONS

Bid questions will be due on or before **August 17, 2021 at 2:00 PM** local time. The primary purpose of this is to provide participating Contractors with the opportunity to ask questions, in writing, related to the IFB.

Submit questions by email to Ava Strawn at ava.strawn@unioncountync.gov by the deadline shown above. (Do not send question in a graph or Excel sheet format.) The email subject line should be identified as follow: IFB 2022-003 Potable Water Service Parts Questions. All questions and answers may be posted as addenda on www.unioncountync.gov and www.ips.state.nc.us.

3.4 BID ADDENDUM

Union County may modify the IFB prior to the date fixed for submission of Bids by the issuance of an addendum.

Should an Offeror find discrepancies or omissions in this IFB or any other documents provided by Union County, the Offeror should immediately notify the County of such potential discrepancy in writing via email as noted above.

Any addenda to these documents shall be issued in writing. No oral statements, explanations, or commitments by anyone shall be of effect unless incorporated in the written addenda. Receipt of Addenda shall be acknowledged by the Offeror on Appendix C Addendum and Anti-Collusion Form.

4 INSTRUCTIONS

4.1 COMMUNICATIONS

All communications, any modifications, clarifications, amendments, questions, responses or any other matters related to the Invitation for Bid (IFB) must be made only through the Procurement Contact noted on the cover of this IFB. A violation of this provision is cause for the County to reject a Company's bid. No contact regarding this document with other County employees is permitted and may be grounds for disqualification**.**

4.2 BIDDERS ACKNOWLEDMENT

The Bid will remain subject to acceptance for 120 days after the Bid Opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

4.3 DUPLICATE BIDS

No more than one (1) bid from any Bidder will be considered by the County. In the event multiple bids are submitted in violation of this provision, the County will have the right to determine which bid will be considered, or at its sole option, reject all such multiple bids.

4.4 BID SIGNATURES

An authorized company official must sign Bids. Each signature represents binding commitment upon the Bidder to provide the goods and/or services offered to the County if the Bidder is determined to be the lowest responsive, responsible Bidder.

4.5 BIDDERS RESPONSIBILITIES

The Bidder must be capable, either as a firm or a team, of providing all parts as described under Section 6 - Specifications. Exclusion of any service for this Bid may serve as cause for rejection.

5 PURPOSE

5.1 INTRODUCTION

Union County, North Carolina, through Public Works, Water & Wastewater, is soliciting bids from qualified firms for delivery of Potable Water Service Parts for wastewater treatment.

Union County, North Carolina (population 239,859) is located in the central, southern piedmont. The County provides its citizens with a full array of services that include public safety, water/wastewater utilities and sanitation, human services, cultural and recreational activities, and general government administration.

6 SPECIFICATIONS

The County provides retail water services to over 50,000 water customers and provides wholesale water to the Town of Wingate and supplements the City of Monroe with up to 2 million gallons per day. Over the last 12 months, the County has purchased approximately:

	¾"	1"
Ball Corporations	210	14
Iron Yoke Bar	550	14
Angle Yoke Ball Valves	550	14
Straight Dual Check Valves	550	14
CTS Straight Coupling	215	22
Grip Joint Tees	260	0
CTS x MIP Straight Coupling	55	0
IPS x MIP Ribbed Insert	50	5

(Historical data is provided for illustrative purposes only and is in no way meant to imply or guarantee minimum purchase quantities.)

The specifications and requirements are drawn around materials which the County has evaluated and determined to be required for the performance necessary. Specification deviations will not be accepted. Bidders are requested to offer only specified parts, which will provide the features and performance needed and implied. Only brass fittings will be accepted. Do not bid "lead brass" fittings.

The County desires Ford Meter Box Company products, but will accept bids for materials that meet the same AWWA, ASTM, ASF/ANSI standards and certifications.

Parts currently in use:

MFGR	PART #	PART NAME & DESCRIPTION
		3/4" Fittings
FORD	FB1000-3-G-NL	**3/4" BALL CORPORATIONS**, NO LEAD, VALVE SIZE 3/4", INLET SIZE 3/4", OUTLET SIZE 3/4", AWWA/CC TAPER THREAD INLET BY GRIP JOINT OUTLET FOR CTS
FORD	Y502	**5/8" X 3/4" IRON YOKE BAR**
FORD	BA94-223W-G-NL	**3/4" ANGLE YOKE BALL VALVES**, NO LEAD, VALVE SIZE 3/4", SERVICE LINE SIZE AND TYPE 3/4" GRIP JOINT/CTS, METER SIZE 5/8" X 3/4" & 3/4"
FORD	HHS91-323-NL	**3/4" STRAIGHT DUAL CHECK VALVES**, NO LEAD, VALVE SIZE 3/4", METER INLET SIZE 5/8" X 3/4" & 3/4", OUTLET SIZE AND TYPE 3/4" FIP
FORD	C44-33-G-NL	**3/4" CTS STRAIGHT COUPLING**, NO LEAD, GRIP JOINT X GRIP JOINT
FORD	T444-33-G-NL	**3/4" GRIP JOINT TEES,** NO LEAD, BOTH ENDS 3/4" CTS X 3/4" CTS, SIDE OUTLET 3/4" CTS
FORD	C84-33-G-NL	**3/4" CTS X MIP STRAIGHT COUPLING**, NO LEAD, MALE IRON PIPE END SIZE 3/4", CTS END SIZE 3/4"
FORD	PTM-1-NL	**3/4" IPS X MIP RIBBED INSERT**, NO LEAD, 3/4" MALE IRON PIPE THREAD TO 3/4" RIBBED INSERT FOR PE PIPE
		1" Fittings
FORD	FB1000-4-G-NL	**1" BALL CORPORATIONS**, NO LEAD, VALVE SIZE 1", INLET SIZE 1", OUTLET SIDE 1", BODY OUTLET THREADS 1" FLARE COPPER, AWWA/CC TAPER THREAD INLET BY GRIP JOINT OUTLET FOR C
FORD	Y504	**1" IRON YOKE BAR**
FORD	BA94-444-G-NL	**1" ANGLE YOKE BALL VALVES**, NO LEAD, VALVE SIZE 1", SERVICE LINE SIZE AND TYPE 3/4" GRIP JOINT/CTS, METER SIZE 1"
FORD	HHS91-344-NL	**1" STRAIGHT DUAL CHECK VALVE**, NO LEAD, VALVE SIZE 3/4", METER INLET SIZE 1", OUTLET SIZE AND TYPE 1" FIP
FORD	C44-44-G-NL	**1" CTS STRAIGHT COUPLING**, NO LEAD, GRIP JOINT X GRIP JOINT

Bidders are required to state exactly what they intend to furnish as indicated on the price form.

6.1 INFORMATION PROVIDED BY BIDDER

6.1.1 PARTS

The Bidder will provide the following on Appendix A – Price Form:

1. Manufacturer;
2. Part number;
3. Unit Price including all shipping/delivery charges;
4. Warranty must be entered in months.

6.1.2 PRODUCT SPECIFICATIONS

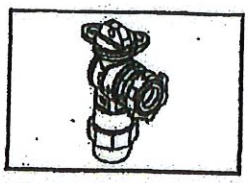
1. Bidders are required to submit product specifications for design-basis equivalent model for each part requested;
2. Product literature should be limited to technical data/specification documents. Please do not include any sales or marketing brochures.

6.1.3 TYPICAL DRAWINGS (IF APPLICABLE)

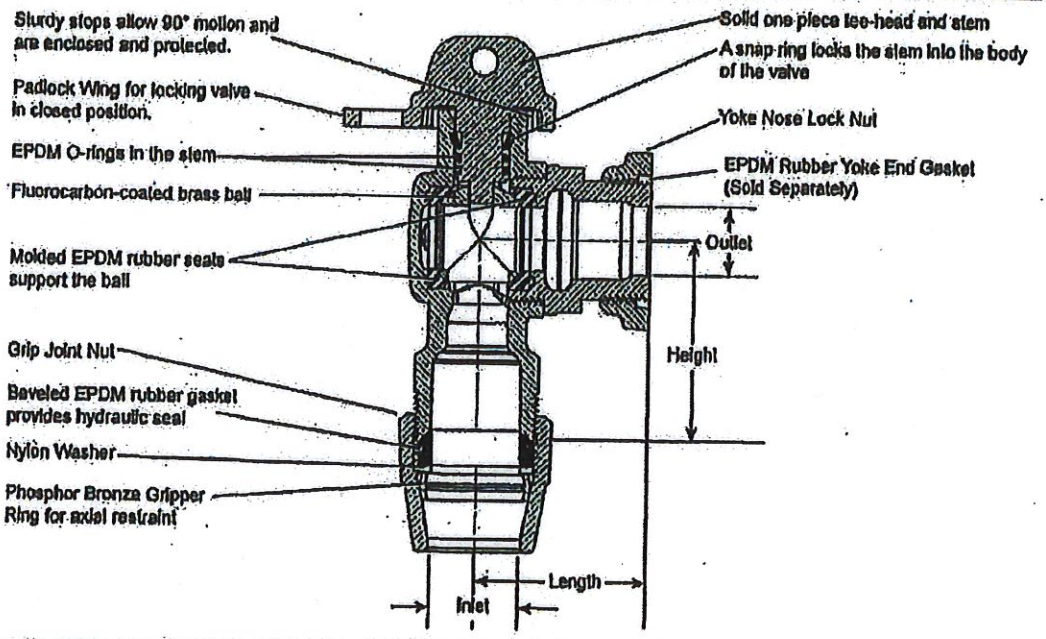
Provide typical drawings for design-basis equivalent model being proposed on if applicable.

SUBMITTAL INFORMATION

Angle Ball Yoke Valves - *(BA94-2xxW-G-NL style)*



GRIP JOINT FOR COPPER OR PLASTIC TUBING (CTS) INLET BY METER YOKE NOSE OUTLET



Valve Size	Inlet Size	Outlet Size	Length	Height	Approx. Wt. Lbs	Part Number	✓ Submitted Item(s)
5/8"	3/4"	5/8"	1-47/64"	2-1/64"	1.6	BA94-213W-G-NL	
5/8"	3/4"	5/8" x 3/4"	1-47/64"	2-1/64"	1.6	BA94-223W-G-NL	

Note: Ford recommends insert stiffeners when using plastic pipe or tubing

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (ASTM B584, UNS C89833)
- The product has the letters "NL" cast into the main body for lead-free identification
- Certified to NSF/ANSI Standard 61 and NSF/ANSI Standard 372 where applicable
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B62 and ASTM B584, UNS C83600, 85-5-5-5)
- Ends are integral or secured with adhesive to prevent unintentional disassembly
- 300 PSI working pressure
- Padlock wing for locking valve in closed position
- EPDM rubber yoke nose gasket sold separately: GT-112 (5/8"), GT-118 (3/4") and GT-123 (1")
  Note: Recommended flow from inlet to outlet

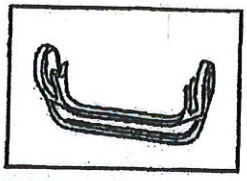
The Ford Meter Box Company considers the information in this submittal form to be correct at the time of publication. Item and option availability, including specifications, are subject to change without notice. Please verify that your product information is current.

The Ford Meter Box Company, Inc.
P.O. Box 443, Wabash, Indiana U.S.A. 46992-0443
Phone: 260-563-3171 / Fax 800-826-3487
Overseas Fax: 260-563-0187
www.fordmeterbox.com
05/03/17

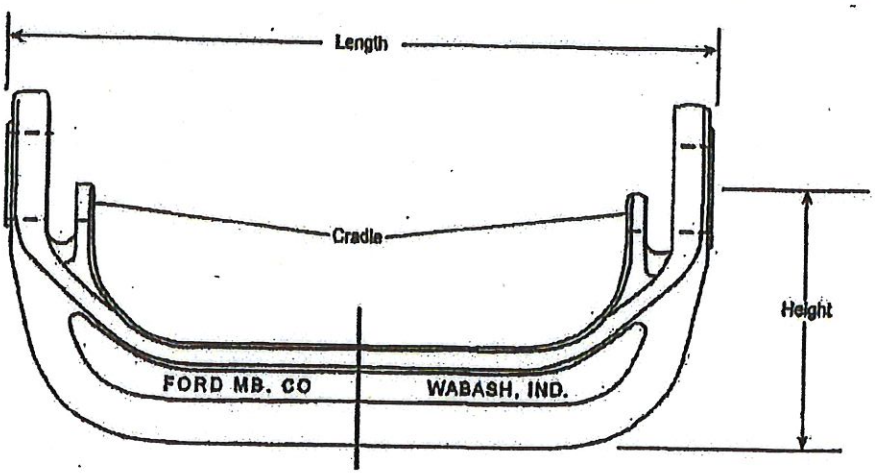
Submitted By:

SUBMITTAL INFORMATION

Iron Yoke Bars - *(Y50x style)*



500 SERIES IRON YOKE BARS FOR 5/8" THROUGH 1" METERS



Meter Size	Length	Height	Approx. Wt. Lbs.	Catalog Number	✓ Submitted Item(s)
5/8"	10-15/16"	4-1/8"	3.6	Y501	
5/8"x3/4"	10-15/16"	4-1/8"	4.2	Y502	
3/4"	12-1/2"	4-1/8"	4.5	Y503	
1"	14-3/4"	5-1/4"	7.2	Y504	

FEATURES

- Material: Cast gray iron, ASTM A48-92, Class 25
- Finish: Black E-coating
- Cradle positions the meter in line with end connections for one hand installation.

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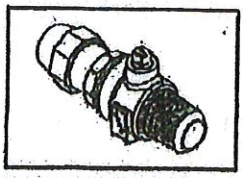
The Ford Meter Box Company, Inc.
P.O. Box 443, Wabash, Indiana U.S.A. 46992-0443
Phone: 260-563-3171 / Fax: 800-826-3487
Overseas Fax: 260-563-0167
http://www.fordmeterbox.com

10/09/03

Submitted By:

SUBMITTAL INFORMATION

Ballcorp Corporation Stops - *(FB1000-xx-G-NL style)*



AWWA/CC TAPER THREAD INLET BY GRIP JOINT COMPRESSION FOR COPPER OR PLASTIC TUBING (CTS) OUTLET

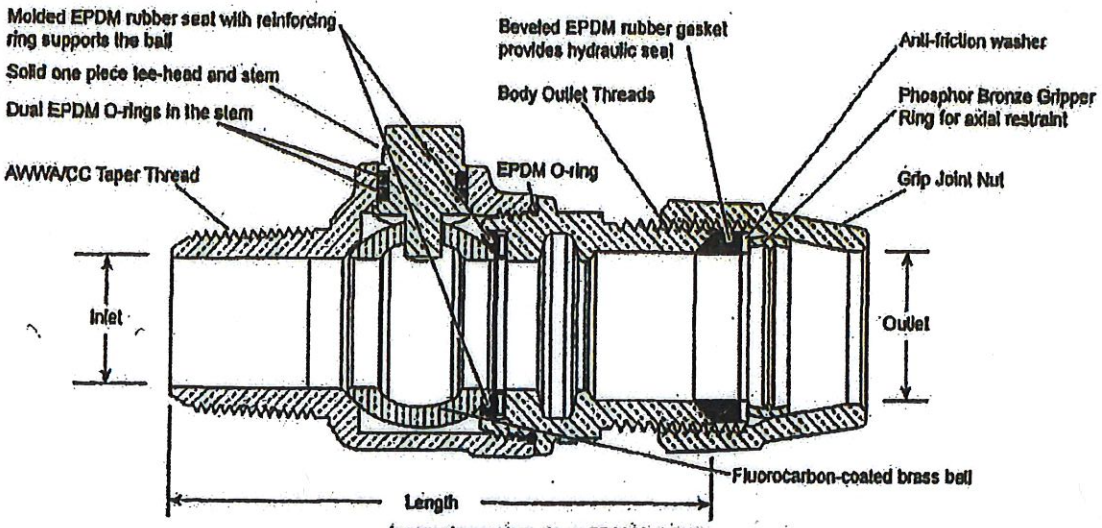


Image shown above is an FB1000-4-G-NL.

Valve Size	Inlet Size	Outlet Size	Valve Length	Body Outlet Threads	Approx. Wt. Lbs	Part Number	✓ Submitted Item(s)
3/4"	3/4"	3/4"	4-10/64"	3/4" Flare Copper	1.5	FB1000-3-G-NL	
3/4"	3/4"	1"	4-7/16"	1" Flare Copper	2.1	FB1000-34-G-NL	
1"	1"	1"	4-1/2"	1" Flare Copper	2.6	FB1000-4-G-NL	
1"	1"	1-1/4"	4-5/16"	1-1/4" Flare Copper	3.0	FB1000-45-G-NL	
1-1/4"	1-1/4"	1-1/4"	6-25/32"	1-1/4" Flare Copper	4.8	FB1000-5-G-NL	
1-1/2"	1-1/2"	1-1/2"	6-13/32"	1-1/2" Flare Copper	5.7	FB1000-6-G-NL	
1-1/2"	1-1/2"	2"	6-29/64"	2" Flare Copper	7.4	FB1000-67-G-NL	
2"	2"	2"	7-1/2"	2" Flare Copper	9.8	FB1000-7-G-NL	

Note: Ford recommends using insert stiffeners with plastic pipe or tubing.

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (ASTM B584, UNS C89833)
- The product has the letters "NL" cast into the main body for lead-free identification
- Certified to NSF/ANSI Standard 61 and NSF/ANSI Standard 372 where applicable
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B62 and ASTM B584, UNS C83600, 85-5-5-5)
- Ends are integral or secured with adhesive to prevent unintentional disassembly
- 300 PSI working pressure

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03/24/17

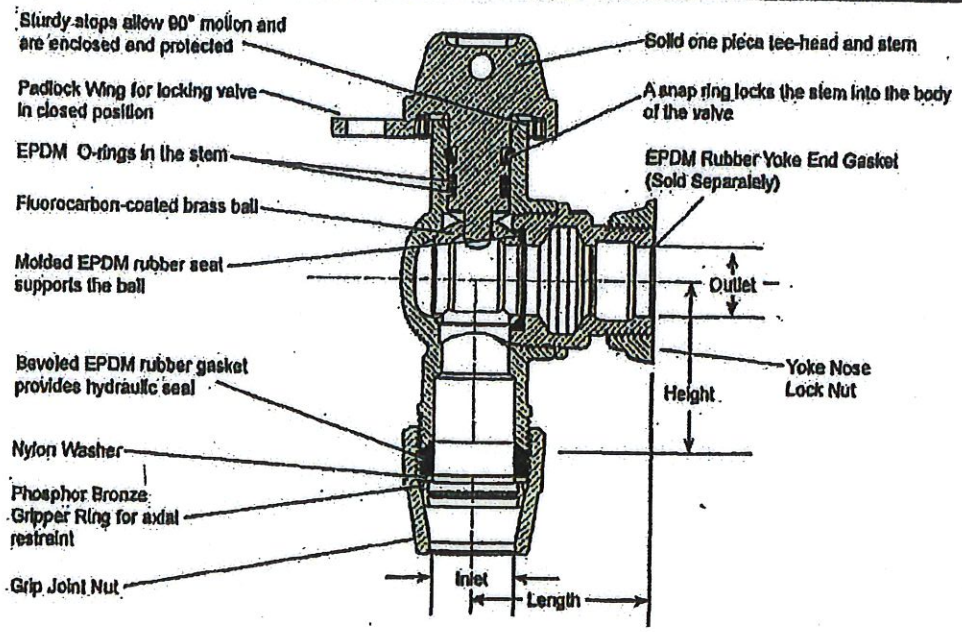
Submitted By:

SUBMITTAL INFORMATION

Angle Ball Yoke Valves - *(BA94-444W-G-NL style)*



GRIP JOINT FOR COPPER OR PLASTIC TUBING (CTS) INLET BY METER YOKE NOSE OUTLET



Valve Size	Inlet Size	Outlet Meter Size	Length	Height	Approx. Wt. Lbs	Catalog Number	✓ Submitted Item(s)
1"	1"	1"	2-19/64"	2-29/64"	2.9	BA94-444W-G-NL	

Note: Ford recommends using insert stiffeners with plastic pipe or tubing.

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (ASTM B584, UNS C89833)
- The product has the letters "NL" cast into the main body for lead-free identification
- Certified to NSF/ANSI Standard 61 and NSF/ANSI Standard 372 where applicable
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B62 and ASTM B584, UNS C83600, 85-5-5-5)
- Ends are integral or secured with adhesive to prevent unintentional disassembly
- 300 PSI working pressure
- Padlock wing for locking valve in closed position
- EPDM rubber yoke nose gasket sold separately: GT-112 (5/8"), GT-11B (3/4") and GT-123 (1")

Note: Recommended flow from inlet to outlet

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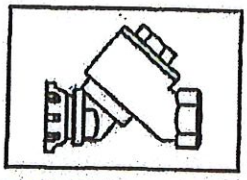
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03/20/17

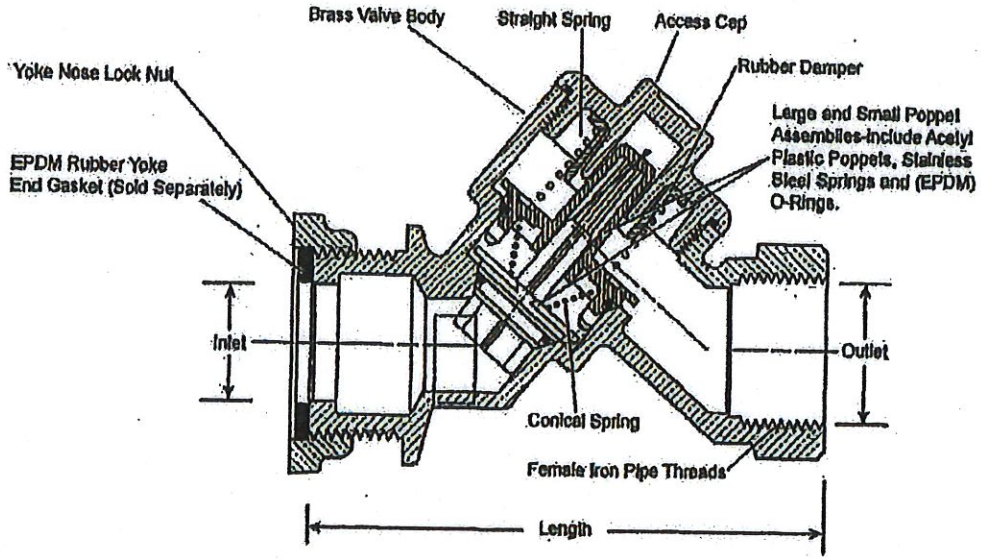
Submitted By:

SUBMITTAL INFORMATION

Straight Cascading Dual Check Valve - *(HHS91-xxx-NL style)*



METER YOKE NOSE INLET BY FEMALE IRON PIPE THREAD OUTLET



Valve Size	Meter Inlet Size	Outlet Size	Length	Approx. Wt. Lbs	Part Number	✓ Submitted Item(s)
3/4"	5/8"	3/4"	4-1/8"	1.9	HHS91-313-NL	
3/4"	5/8"x3/4" & 3/4"	3/4"	4-1/8"	1.7	HHS91-323-NL	
3/4"	1"	1"	4-13/16"	2.3	HHS91-344-NL	

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (ASTM B584, UNS C89833)
- The product has the letters "NL" cast into the main body for lead-free identification
- Certified to NSF/ANSI Standard 61 and NSF/ANSI Standard 372 where applicable
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B62 and ASTM B584, UNS C83600, 85-5-5-5)
- ASSE 1024 approved
- In-line accessible for quick inspection and replacement of internal working parts without removing the valve from the service line. Replacement kits are available
- 175 PSI maximum working water pressure
- 180 degree Fahrenheit maximum constant temperature
- EPDM Rubber Yoke Nose gasket sold separately: GT-112 (5/8"), GT-118 (3/4") and GT-123 (1")

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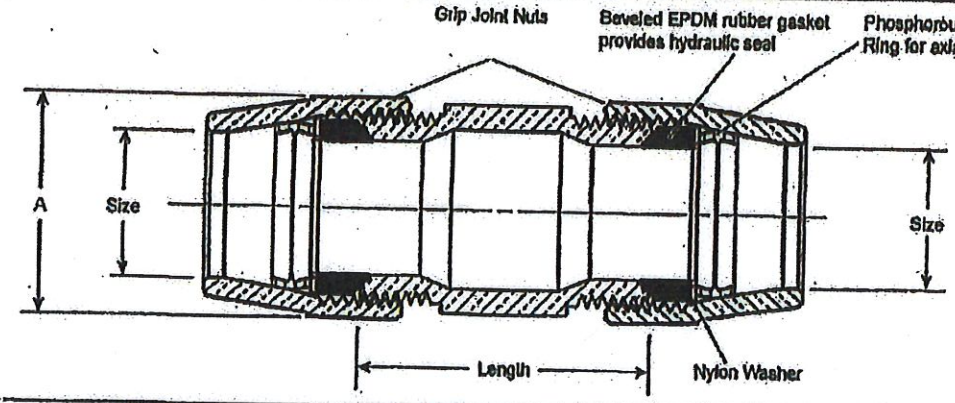
Submitted By:

SUBMITTAL INFORMATION

Grip Joint Coupling - *(C44-xx-G-NL style)*



GRIP JOINT FOR COPPER OR PLASTIC TUBING (CTS) BOTH ENDS



Description		Length	Dim. "A" Maximum O.D.	Approx. Wt. Lbs	Part Number	✓ Submitted Item(s)
G.J. for CTS	G.J. for CTS					
1/2"	3/4"	2"	1-11/16"	.8	C44-13-G-NL	
1/2"	1"	2-5/16"	2-7/16"	.9	C44-14-G-NL	
5/8"	3/4"	2-1/16"	1-7/8"	1.0	C44-23-G-NL	
3/4"	3/4"	2"	1-5/8"	.9	C44-33-G-NL	
3/4"	1"	2-1/8"	1-15/16"	1.0	C44-34-G-NL	
1"	1"	2-1/8"	1-15/16"	1.1	C44-44-G-NL	
1"	1-1/4"	1-5/16"	2-1/3"	1.5	C44-45-G-NL	
1"	1-1/2"	2-5/8"	2-3/4"	2.1	C44-46-G-NL	
1-1/4"	1-1/4"	2-1/2"	2-1/3"	1.5	C44-55-G-NL	
1-1/4"	1-1/2"	3-1/4"	2-2/3"	2.8	C44-56-G-NL	
1-1/2"	1-1/2"	3-5/8"	2-3/4"	3.0	C44-66-G-NL	
1-1/2"	2"	2-1/2"	3-1/4"	3.5	C44-67-G-NL	
2"	2"	3-1/2"	3-1/4"	4.5	C44-77-G-NL	

Note: Ford recommends insert stiffeners when using plastic pipe or tubing.
Note: 1/2" and 5/8" Connections are Pack Joint Style

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (UNS NO C89833)
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B-62 and ASTM B-584, UNS NO C83600 - 85-5-5-5)
- Body design provides larger, more rugged wrench flats for proper installation
- UL Classified to ANSI/NSF Standard 61 and Annex G
- The product has the letters "NL" cast into the main body for proper identification

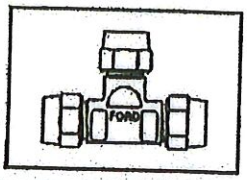
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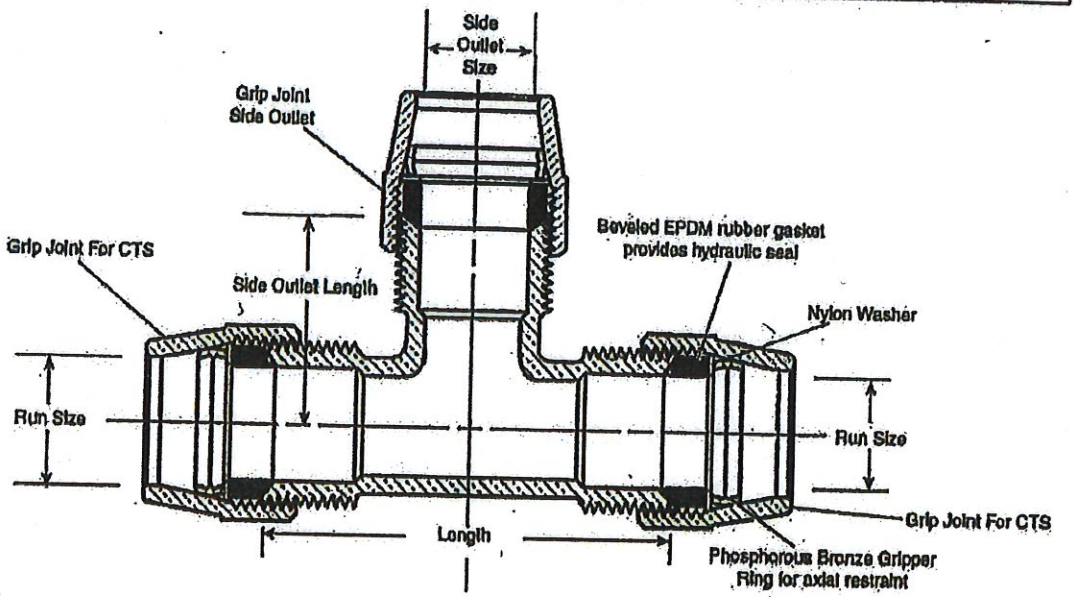
Submitted By:

SUBMITTAL INFORMATION

Grip Joint Tee - *(T444-xxx-G style)*



GRIP JOINT FOR CTS TO GRIP JOINT FOR CTS BY GRIP JOINT FOR CTS



Both Ends (Run Size)	Side Outlet Size	Run Length	Side Outlet Length	Approx Wt. Lbs.	Part Number	✓ Submitted Item(s)
3/4"	3/4"	3-5/16"	1-5/8"	1.4	▼ T444-333-G	
3/4"	1"	3-5/8"	1-15/16"	1.6	▼ T444-334-G	
1"	3/4"	3-1/2"	1-3/4"	1.6	▼ T444-443-G	
1"	1"	3-3/4"	1-15/16"	1.9	▼ T444-444-G	
1"	1-1/4"	3-3/4"	1-13/16"	2.3	▼▼ T444-445-G	
1-1/2"	1-1/2"	4-3/4"	2-3/8"	4.6	▼▼ T444-666-G	
2"	2"	7-3/8"	3-11/16"	13.4	▼▼ T444-777-G	

▼ UL Classified to ANSI/NSF Standard 61.
▼▼ Add "-K" to end of catalog number for item to be UL classified to ANSI/NSF Standard 61.
Note: Ford recommends insert stiffeners when using plastic pipe or tubing.

FEATURES

- All brass conforms to AWWA Standard C800 (ASTM B-62 and ASTM B-584, UNS NO C83600 - 85-5-5-5)

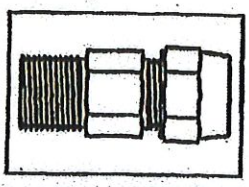
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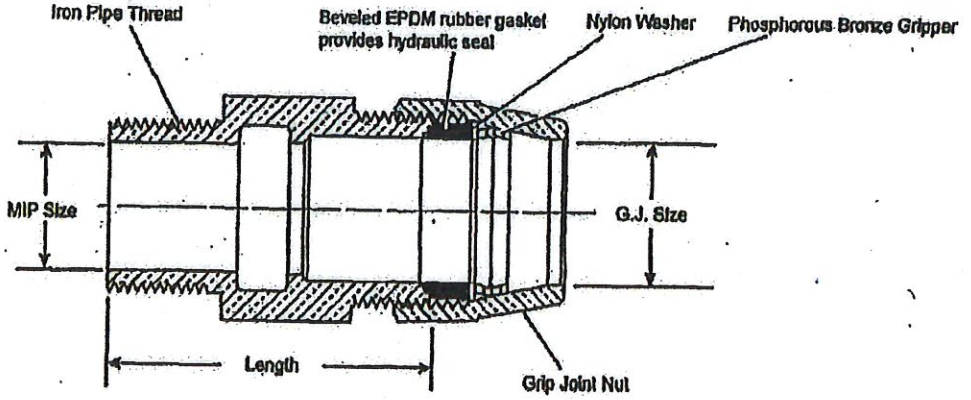
Submitted By:

SUBMITTAL INFORMATION

Grip Joint Coupling - *(C84-xx-G-NL style)*



MALE IRON PIPE THREAD BY GRIP JOINT FOR COPPER OR PLASTIC TUBING (CTS)



Description		Length	Approx. Wt. Lbs	Part Number	✓ Submitted Item(s)
Male Iron Pipe	G.J. for CTS				
1/2"	3/4"	2-1/16"	.5	C84-13-G-NL	
3/4"	3/4"	2-1/4"	.6	C84-33-G-NL	
3/4"	1"	2-3/8"	.7	C84-34-G-NL	
1"	3/4"	2-3/8"	.7	C84-43-G-NL	
1"	1"	2-9/16"	.8	C84-44-G-NL	
1"	1-1/4"	2-1/2"	1.1	C84-45-G-NL	
1"	1-1/2"	2-9/16"	1.8	C84-46-G-NL	
1-1/4"	1-1/4"	2-9/16"	1.3	C84-55-G-NL	
1-1/4"	1-1/2"	2-5/8"	1.7	C84-56-G-NL	
1-1/2"	1-1/2"	3-1/4"	2.0	C84-66-G-NL	
1-1/2"	2"	2-15/16"	2.2	C84-67-G-NL	
2"	2"	3-1/4"	2.9	C84-77-G-NL	

Note: Ford recommends insert stiffeners when using plastic pipe or tubing.

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (UNS NO C89833)
- The product has the letters "NL" cast into the main body for proper identification
- UL Classified to ANSI/NSF Standard 61 and Standard 61 Annex G (NSF/ANSI 372)
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B-62 and ASTM B-584, UNS NO C83600 - 85-5-5-5)
- Ends are integral or secured with adhesive to prevent unintentional disassembly
- 300 PSI working pressure

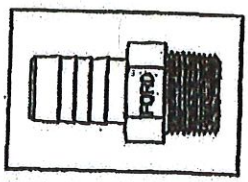
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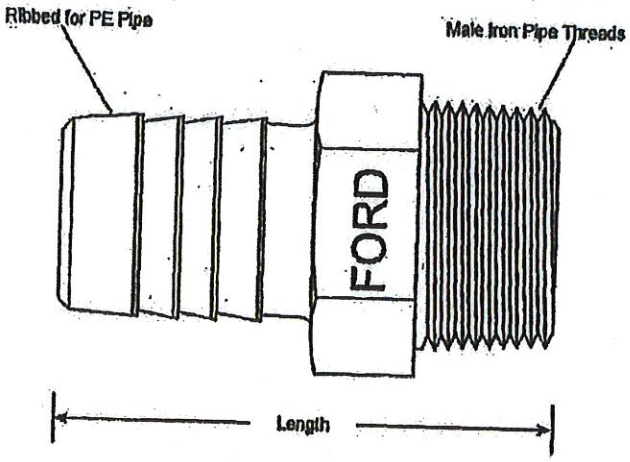
Submitted By:

SUBMITTAL INFORMATION

Insert Fittings for Plastic - *(PTM-x-NL style)*



STRAIGHT RIBBED INSERT FITTINGS FOR POLYETHYLENE PIPE



Description		Length	Approx. Wt. Lbs.	Part Number	✓ Submitted Item(s)
P.E. Pipe	MIP Thread				
3/4"	3/4"	2-15/16"	0.29	PTM-1-NL	
1"	3/4"	3-1/4"	0.38	PTM-21-NL	
1"	1"	3-1/8"	0.41	PTM-2-NL	
1-1/4"	1-1/4"	2-31/32"	0.55	PTM-3-NL	
1-1/2"	1-1/2"	3-11/16"	0.79	PTM-4-NL	
2"	2"	3-11/16"	1.03	PTM-5-NL	

Note: Ford recommends two stainless steel clamps for end of ribbed insert.

FEATURES

- All brass that comes in contact with potable water conforms to AWWA Standard C800 (UNS NO C89833)
- The product has the letters "NL" cast into the main body for proper identification
- UL Classified to ANSI/NSF Standard 61 and Standard 61 Annex G (NSF/ANSI 372)
- Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B-62 and ASTM B-584, UNS NO C83600 - 85-5-5-5)
- Machined ribs on end prevents easy pull out

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02/13/13

Submitted By:

6.2 DEVIATIONS

Any deviations from specifications and requirements herein must be clearly pointed out by bidder. Otherwise it will be considered that products offered will be in strict compliance with these specifications and requirements, and successful bidder will be held responsible therefor. Deviations must be explained in detail on an attached sheet. However, no implication is made by Union County that deviations will be acceptable. Bidder is advised that the response (or lack thereof) on this question does not take precedence over specific responses or non-responses provided elsewhere in this bid.

6.3 DELIVERY AND CHARGES

All prices quoted shall include all delivery and/or freight charges to addresses specified in this document or other address specified on a Purchase Order. No additional freight shall be charged at time of delivery. Risk of loss and/or damage shall be upon the seller until such time as goods have been physically delivered and received by the County.

6.4 DELIVERY LOCATION

Deliveries shall be FOB Destination to the address shown below:

Water & Wastewater Operations Center
4600 Goldmine Road
Monroe, NC 28110

7 EVALUATION OF BIDS AND AWARD PROCEDURES

7.1 BID INFORMATION

Bids must be made in strict conformance using the Invitation for Bid (IFB) forms provided herein. All blank spaces for bids must be filled in properly. Numbers must be written in ink or typewritten, and the completed forms shall be without erasures, lineation, or alterations. In accepting the bid, the County will assume that no alterations have been made, and if they appear afterward, they shall not be binding on the County.

All Bid Documents shall be signed by an individual who is authorized to contractually bind the company. The signature must indicate the title or position the individual holds in the agency or firm. Agencies or firms which sign contracts with the name of the agency or firm must provide the name of a corporate officer or executive director for signature validation by the County. **All unsigned Bids will be disqualified.** In submitting a Bid, Offeror affirms all statements contained in the bid are true and accurate.

7.2 BID FORMAT

Bids must include the following:

- Appendix A – Price Form
- Appendix B – Bid Submission Form (signed)
- Appendix C – Addendum Receipt and Anti-Collusion Form (signed)

7.3 TERMS OF SUBMISSION

All material received from a person or company ("Respondent") in response to this solicitation shall become the property of Union County and will not be returned to the Respondent. Any and all costs incurred by a Respondent in preparing, submitting, or presenting submissions are the Respondent's sole responsibility and Union County shall not reimburse the Respondent. All responses to this solicitation will be considered a public record and subject to disclosure under applicable public records law.

Any material in a response which the Respondent considers a trade secret and exempt from disclosure as a public record under applicable law, including N.C.G.S. §§ 132-1.2 and 66-152, must be properly designated as a trade secret. In order to properly designate such material, the Respondent must: (i) submit any trade secret materials in a separate envelope, or file, from all other submitted material, being clearly marked as "Trade Secret – Confidential and Proprietary Information," and (ii) stamp the same trade secret/confidentiality designation on each page of the materials therein which contain trade secrets.

To the extent consistent with public records law, Union County will make reasonable efforts to maintain the confidential nature of trade secrets, as determined by Union County and subject to the conditions set forth herein. Respondent understands and agrees by submitting a response to this solicitation, that if a request is made to review or produce a copy of any information in the Respondent's materials which was properly labeled by the Respondent as a trade secret, Union County will notify the Respondent of the request and the date that such materials will be released to the requestor unless the Respondent obtains a court order enjoining that disclosure. If the Respondent fails to obtain the court order enjoining disclosure prior to that date, Respondent understands and agrees that Union County will release the requested information to the requestor on that date.

Furthermore, the Respondent also agrees to indemnify and hold harmless Union County and each of its officers, employees, and agents from all costs, damages, and expenses incurred in connection with refusing to disclose any material that has been designated as a trade secret by Respondent.

7.4 EVALUATION OF BIDS

Qualified bids will be evaluated to determine the **lowest responsive, responsible bidder,** taking into consideration quality, performance, and the time specified in the bid for performance of the contract. Consideration of such factors as: price offered; quality of item offered; general reputation and performance capabilities of offeror; substantial conformity with specifications/other conditions set forth in the bid; suitability of articles for the intended use; related services needed; date of delivery and performance; and such other factors deemed by the County to be pertinent will be used in determining responsiveness and responsibility.

7.5 AWARD PROCEDURES & TERM

The Contract shall have an initial term of one year ("Initial Term"), beginning on the effective date of the Contract. Prior to the end of the Initial Term or a first or second

Renewal Term (as defined herein), the County shall have the option, in its sole discretion and pending budget approval to renew the Contract on the same terms and conditions as the Initial Term (subject to Section 8.6 below), for four additional one-year terms (each a "Renewal Term"). Thus, this allows for the possibility of up to four (4) total Renewal Terms.

The County reserves the right to reject any and all bids, the right to waive informalities, and the right to disregard nonconforming or conditional bids or counter proposals. If the contract is to be awarded, it will be awarded to the lowest responsible, responsible bidder whose evaluation by the County indicates that the award will be in the best interest of County. The County shall have a period of 120 days after opening of bids in which to award the contract.

All payroll taxes, liability and worker's compensation are the sole responsibility of the Offeror. The Offeror understands that an employer/employee relationship does not exist under this contract.

7.6 COST ADJUSTMENTS

The Unit Pricing for the Initial Term shall be based upon the response to this solicitation. However, the Unit Pricing for any Renewal Term may be adjusted at the beginning of such Renewal Term by multiplying the Unit Pricing effective in the previous term by the quotient of the All Urban Consumers Price Index (CPI-U) (South Region), Others Goods and Services, with the Index Period of 2020-2024 as published by the Bureau of Labor Statistics, United States Department of Labor, in effect ninety (90) days prior to the commencement date of the new Renewal Term divided by such CPI in effect for the same month one (1) year prior to such date. However, any Unit Pricing increase pursuant to the previous sentence shall be capped at a five percent (5%) increase from one term to the next. Any such Unit Pricing adjustment for a Renewal Term must be requested by the Vendor or County within thirty (30) days from the date of the County's notice of its exercise of an option to renew the Contract for a Renewal Term.

7.7 APPLICATION OF NORTH CAROLINA GENERAL STATUTES

The General Statutes of North Carolina regarding purchasing and competitive bidding (G.S. § 143-129) are made a part herein and will govern the bidding process as applicable.

8 GENERAL CONDITIONS AND REQUIREMENTS

8.1 MINIMUM REQUIREMENTS FOR BIDDERS

Bids shall be considered only from companies normally engaged in performing the type of work specified in this solicitation. Union County, in its discretion, shall determine whether the evidence of responsibility and ability to perform is satisfactory.

The individual/firm warrants that he/she is fully qualified, with adequate personnel and experience, to undertake the services required. The Offeror shall also certify that insurance coverage that meets or exceeds industry standards for this type of work will be in force to mitigate risk during performance under the contract.

8.2 TERMS AND CONDITIONS

All payroll taxes, liability and worker's compensation are the sole responsibility of the Offeror. The Offeror understands that an employer/employee relationship does not exist under this contract.

The County reserves the right to reject any and all bids, the right to waive informalities, and the right to disregard nonconforming or conditional bids or counter bids. It is the intention of Union County to execute a final, binding Contract with the successful Offeror which incorporates terms and conditions no less onerous than those appropriate to the engagement of a licensed contracting firm in connection with a project of this magnitude.

All bids submitted in response to this request shall become the property of Union County and as such, may be subject to public review.

8.3 IFB EXPENSES

Expenses for developing the bids are entirely the responsibility of the vendor and shall not be chargeable in any way to the County.

8.4 CERTIFICATION

In response to the IFB Request, the Contractor certifies the following:

- This bid is signed by an authorized representative of the firm;
- It can obtain insurance certificates as required within ten (10) calendar days after notice of award;
- All labor costs, direct and indirect, have been determined and included in the proposed cost;
- The potential Contractor has read and understands the conditions set forth in this solicitation.

8.5 FINANCIAL INFORMATION

The Bidder must have the following financial information readily available and have the ability to provide it to the County, without exception, within twenty-four (24) hours upon request during the bid certification process:

1. Annual audited financial reports for the past five (5) fiscal years;
2. Credit reports, credit bulletins, bank and vendor references, and any other
3. published statements by agencies that have been issued or published about the entity within the past five (5) years;
4. Indicate whether the Company (and/or predecessor, guarantor, or subcontractor) has declared bankruptcy within the last five (5) years;
5. Provide a description of the financial impact of any past or pending legal proceedings and judgments that could materially affect the Bidder's financial position or ability to provide service to the County.

8.6 CONTRACTUAL OBLIGATIONS

The contents of this Bid and the commitments set forth in the Bid shall be considered contractual obligations, if a contract ensues. Failure to accept these obligations may

result in cancellation of the award. All legally required terms and conditions shall be incorporated into final contract agreements with the selected Service

8.7 COMPLIANCE WITH LAWS

Seller represents and warrants that the performance of this order and the furnishing of goods or services required shall be in accordance with the applicable standards, provisions and stipulations of all pertinent Federal, State or County laws, rules, regulations, resolutions and ordinances including but not limited to the Fair Labor Standards Act, the Equal Employment Opportunity rules and regulations and the Occupational Safety and Health Acts.

8.8 SUB-CONTRACTOR/PARTNER DISCLOSURE

A single Company may propose the entire solution. If the Bid by any Company requires the use of sub-contractors, partners, and/or third-party products or services, this must be clearly stated in the Bid. The Company submitting the Bid shall remain solely responsible for the performance of all work, including work that is done by sub-contractors.

8.9 MODIFICATION OR WITHDRAWAL OF BID

Prior to the scheduled closing time for receiving bids, any Contractor may withdraw his bid. After the scheduled closing time for receiving bids, no bid may be withdrawn for 90 days. Only written requests for the modification or correction of a previously submitted bid that are addressed in the same manner as bids and are received by the County prior to the closing time for receiving bids will be accepted. The bid will be corrected in accordance with such written requests, provided that any such written request is in a sealed envelope that is plainly marked “Modification of Bid.” Oral, telephone or fax modifications or corrections will not be recognized or considered.

8.10 CONTRACT COMMENCEMENT

Commencement of a contract shall not begin prior to all necessary County approvals, including County Commission approval where required, and receipt of a County Purchase Order. Commencement of a contract without these approvals is solely at the Bidder’s own risk and is likely to result in no payment for services performed or goods received.

8.11 DISPUTES

In case of any doubt or differences of opinion as to the services to be furnished hereunder, the decision of the County shall be final and binding upon both parties.

8.12 EQUAL EMPLOYMENT OPPORTUNITY

All Companies will be required to follow Federal Equal Employment Opportunity (EEO) policies. Union County will affirmatively assure that on any project constructed pursuant to this advertisement, equal employment opportunity will be offered to all persons without regard to race, color, creed, religion, national origin, sex, and marital status, status with regard to public assistance, membership or activity in a local commission, disability, sexual orientation, or age.

8.13 MINORITY AND SMALL BUSINESS PARTICIPATION PLAN

It is the policy of Union County that Minority Businesses (MBEs), Disadvantaged Business Enterprises (DBEs) and other small businesses shall have the opportunity to compete fairly in contracts financed in whole or in part with public funds. Consistent with this policy, Union County will not allow any person or business to be excluded from participation in, denied the benefits of, or otherwise be discriminated against in connection with the award and performance of any contract because of sex, race, religion, or national origin.

8.14 LICENSES

The successful Firm(s) shall have and maintain a valid and appropriate business license (if applicable), meet all local, state, and federal codes, and have current all required local, state, and federal licenses.

8.15 E-VERIFY

E-Verify is the federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to federal law. Offeror/Firm shall ensure that Firm and any Subcontractor performing work under this contract: (i) uses E-Verify if required to do so; and (ii) otherwise complies with applicable law.

8.16 DRUG-FREE WORKPLACE

During the performance of this project, the Firm agrees to provide a drug-free workplace for his employees; post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the workplace and specify the actions that will be taken against employees for violations of such prohibition; and state in all solicitations or advertisements for employees placed by or on behalf of the firm that the Firm maintains a drug-free workplace.

For the purposes of this section, “drug-free workplace” means a site for the performance of work done in connection with a specific contract awarded to a Contractor/Firm in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the Request.

8.17 INSURANCE

One or more of the following insurance limits may be required if it is applicable to the project. The County reserves the right to require additional insurance depending on the nature of the agreement.

At Contractor’s sole expense, Contractor shall procure and maintain the following minimum insurances with insurers authorized to do business in North Carolina and rated

A-VII or better by A.M. Best, or as otherwise authorized by the Union County Risk Manager.

A. WORKERS' COMPENSATION
Statutory (coverage for three or more employees) limits covering all employees, including Employer's Liability with limits of:

$500,000	Each Accident
$500,000	Disease - Each Employee
$500,000	Disease - Policy Limit

B. COMMERCIAL GENERAL LIABILITY
(for any agreement unless otherwise waived by the Risk Manager)
Covering Ongoing and Completed Operations involved in this Agreement.

$2,000,000	General Aggregate
$2,000,000	Products/Completed Operations Aggregate
$1,000,000	Each Occurrence
$1,000,000	Personal and Advertising Injury Limit

C. COMMERCIAL AUTOMOBILE LIABILITY
(for any agreement involving the use of a contractor vehicle while conducting services associated with the agreement)

$1,000,000	Combined Single Limit - Any Auto

D. PROFESSIONAL LIABILITY
(only for any agreement providing professional service such as engineering, architecture, surveying, consulting services, etc.)

$1,000,000	Claims Made

Contractor shall provide evidence of continuation or renewal of Professional Liability Insurance for a period of two (2) years following termination of the Agreement.

ADDITIONAL INSURANCE REQUIREMENTS

A. The Contractor's General Liability policy shall be endorsed, specifically or generally, to include the following as Additional Insured:

UNION COUNTY, ITS OFFICERS, AGENTS AND EMPLOYEES ARE INCLUDED AS ADDITIONAL INSURED WITH RESPECTS TO THE GENERAL LIABILITY INSURANCE POLICY.

Additional Insured status for Completed Operations shall extend for a period of not less than three (3) years from the date of final payment.

B. Before commencement of any work or event, Contractor shall provide a Certificate of Insurance in satisfactory form as evidence of the insurances required above.

C. Contractor shall have no right of recovery or subrogation against Union County (including its officers, agents and employees).

D. It is the intention of the parties that the insurance policies afforded by contractor shall protect both parties and be primary and non-contributory coverage for any and all losses covered by the above-described insurance.

E. Union County shall have no liability with respect to Contractor's personal property whether insured or not insured. Any deductible or self-insured retention is the sole responsibility of Contractor.

F. Notwithstanding the notification requirements of the Insurer, Contractor hereby agrees to notify County's Risk Manager at 500 N. Main Street # 130, Monroe, NC 28112, within two (2) days of the cancellation or substantive change of any insurance policy set out herein. Union, in its sole discretion, may deem failure to provide such notice as a breach of this Agreement.

G. The Certificate of Insurance should note in the Description of Operations the following:

Department: _____
Contract #: _____

H. Insurance procured by Contractor shall not reduce nor limit Contractor's contractual obligation to indemnify, save harmless and defend Union County for claims made or suits brought which result from or are in connection with the performance of this Agreement.

I. Certificate Holder shall be listed as follows:

Union County
Attention: Keith A. Richards, Risk Manager
500 N. Main Street, Suite #130
Monroe, NC 28112

J. If Contractor is authorized to assign or subcontract any of its rights or duties hereunder and in fact does so, Contractor shall ensure that the assignee or subcontractor satisfies all requirements of this Agreement, including, but not limited to, maintenance of the required insurances coverage and provision of certificate(s) of insurance and additional insured endorsement(s), in proper form prior to commencement of services.

8.18 INDEMNIFICATION

Contractor agrees to protect, defend, indemnify and hold Union County, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens,

demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of this agreement and/or the performance hereof that are due, in whole or in part, to the negligence of the Contractor, its officers, employees, subcontractors or agents. Contractor further agrees to investigate, handle, respond to, provide defense for, and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto.

9 APPENDIX A –PRICE FORM

IFB 2022-003 Potable Water Service Parts

SUBMIT WITH BID

Company Name: _____

Unit costs must include all charges, including shipping/delivery.

MFGR	PART #	PART NAME & DESCRIPTION	Unit Cost
		3/4" Fittings	
		3/4" BALL CORPORATIONS, NO LEAD, VALVE SIZE 3/4", INLET SIZE 3/4", OUTLET SIZE 3/4", AWWA/CC TAPER THREAD INLET BY GRIP JOINT OUTLET FOR CTS	$
		5/8" X 3/4" IRON YOKE BAR	$
		3/4" ANGLE YOKE BALL VALVES, NO LEAD, VALVE SIZE 3/4", SERVICE LINE SIZE AND TYPE 3/4" GRIP JOINT/CTS, METER SIZE 5/8" X 3/4" & 3/4"	$
		3/4" STRAIGHT DUAL CHECK VALVES, NO LEAD, VALVE SIZE 3/4", METER INLET SIZE 5/8" X 3/4" & 3/4", OUTLET SIZE AND TYPE 3/4" FIP	$
		3/4" CTS STRAIGHT COUPLING, NO LEAD, GRIP JOINT X GRIP JOINT	$
		3/4" GRIP JOINT TEES, NO LEAD, BOTH ENDS 3/4" CTS X 3/4" CTS, SIDE OUTLET 3/4" CTS	$
		3/4" CTS X MIP STRAIGHT COUPLING, NO LEAD, MALE IRON PIPE END SIZE 3/4", CTS END SIZE 3/4"	$
		3/4" IPS X MIP RIBBED INSERT, NO LEAD, 3/4" MALE IRON PIPE THREAD TO 3/4" RIBBED INSERT FOR PE PIPE	$
		1" Fittings	
		1" BALL CORPORATIONS, NO LEAD, VALVE SIZE 1", INLET SIZE 1", OUTLET SIDE 1", BODY OUTLET THREADS 1" FLARE COPPER, AWWA/CC TAPER THREAD INLET BY GRIP JOINT OUTLET FOR C	$
		1" IRON YOKE BAR	$
		1" ANGLE YOKE BALL VALVES, NO LEAD, VALVE SIZE 1", SERVICE LINE SIZE AND TYPE 3/4" GRIP JOINT/CTS, METER SIZE 1"	$
		1" STRAIGHT DUAL CHECK VALVE, NO LEAD, VALVE SIZE 3/4", METER INLET SIZE 1", OUTLET SIZE AND TYPE 1" FIP	$
		1" CTS STRAIGHT COUPLING, NO LEAD, GRIP JOINT X GRIP JOINT	$
		Total Bid:	$

Warranty in Months: _____

10 APPENDIX B – BID SUBMISSION FORM

IFB 2022-003 Potable Water Service Parts

SUBMIT WITH BID

This Bid is submitted by:

Company Legal Name: _____

Representative Name: _____

Representative Signature: _____

Representative Title: _____

Address: _____

City/State/Zip: _____

Email Address: _____

Phone Number: _____

Website Address: _____

It is understood that Union County reserves the right to reject any and all Bids, to make awards according to the best interest of the County, to waive formalities, technicalities, to recover and re-bid this project. Bid is valid for 120 calendar days from the Bid due date and is submitted by an executive of the company that has authority to contract with Union County, NC.

Name: _____

Title: _____

Signature: _____

Date: _____

11 APPENDIX C – ADDENDUM AND ANTI-COLLUSION FORM

IFB 2022-003 Potable Water Service Parts

SUBMIT WITH BID

Please acknowledge receipt of all addenda by including this form with your Bid. Any questions or changes received will be posted as an addendum on www.co.union.nc.us and/or www.ips.state.nc.us. It is your responsibility to check for this information.

Addendum No.	Date Downloaded

I certify that this Bid is made in good faith and without collusion with any other offeror or officer or employee of Union County.

Company Name: _____

Name: _____

Title: _____

Email Address: _____

Signature: _____

Date: _____

12 APPENDIX D – VENDOR PAYMENT LETTER

IFB 2022-003 Potable Water Service Parts

Do Not Submit with Bid

-----For informational purposes only. -----

Union County Government
EST. 1842

Finance Department
500 North Main Street
Suite #700
Monroe, NC 28112

T. 704-283-3813

www.unioncountync.gov

ATTENTION: ACCOUNTS PAYABLE VENDORS

As part of our Fraud Prevention Program, Union County now prefers two methods for payments to vendor accounts. These methods allow for faster and easier payments to vendors.

The first and preferred method available is to accept a VISA card payment from the County. If you accept payment via VISA, payment is made at the time of the transaction or upon receipt and approval of the invoice.

The second method is an Electronic Funds Transfer. (EFT) This means that you will receive payment of invoices due directly into your bank account. With this method, you will get an email confirmation giving you the date, invoice numbers, and total amount paid. Your payment will be available to you on Monday (or the first banking day if Monday is a bank holiday) following receipt of an approved invoice from the County department invoiced.

An EFT Enrollment Form to enroll in the program is attached for your convenience. You can also visit the Union County website at www.unioncountync.gov at any time to get a new form if your banking information changes. If the banking information changes and you do not notify us, it will delay receipt of payment for invoices.

If you wish to receive payment via the County's VISA card, please contact Heather Howey at 704-283-3539, or send an email to heather.howey@unioncountync.gov and you will be added to the list of vendors accepting the VISA card method of payment.

Union County prefers all vendors participate in one of the two methods described above.

Thank you in advance for your participation.

Please return this completed form and supporting documents to:

Union County -Finance Office
Suite 714, 7th Floor, 500 N. Main Street, Monroe NC 28112

Phone: (704) 283-3886 **Fax:** (704) 225-0664
Email: ap@unioncountync.gov

Authorization for payment via Electronic Funds Transfer (EFT)

☐ Initial Enrollment ☐ Change Information Today's Date _____

Company Name _____

Street Address _____

City, State, Zip _____

By signing below, I hereby authorize Union County to electronically deposit funds into the account indicated below. I understand that if my banking information changes and Union County is not made aware of this change, then payment may be delayed.

Bank Name _____

Address _____

City, State, Zip _____

Routing/ABA # _____ Bank Acct No. _____

Payment Notification: I hereby authorize the following individual to receive an email notification of payment details for all funds deposited to the above account by Union County.

Name & Title _____

Email Address _____

Phone Number _____

Officer Name & Title _____

Phone Number _____

Signature: _____

FOR ACCOUNT VERIFICATION, PLEASE ATTACH A VOIDED CHECK.

This authorization will remain in effect until Union County has received written notice to discontinue.

Print Form

13 APPENDIX E – TEMPLATE AGREEMENT

IFB 2022-003 Potable Water Service Parts

Do Not Submit with Bid

-----For informational purposes only. -----

STATE OF NORTH CAROLINA

TEMPLATE AGREEMENT

COUNTY OF UNION

THIS AGREEMENT is made and entered into as of _____, by and between UNION COUNTY, a political subdivision of the State of North Carolina, whose address is 500 N. Main Street, Monroe, N.C. 28112, hereinafter "Union," and [Contractor's full legal name], a [type of business (corporation, limited liability company, etc.) and state where incorporated], whose address is _____, hereinafter "Contractor."

W I T N E S S E T H

WHEREAS, Contractor is a supplier of certain [describe goods here *(ex: Type K copper tube for potable water)*], hereinafter referred to as "Goods;" and

WHEREAS, Union desires to purchase such Goods from Contractor on an as-needed basis; and

WHEREAS, Contractor is willing to provide such Goods to Union as described in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties hereto do each contract and agree with the other as follows:

1. GOODS PROVIDED. Contractor agrees to provide the Goods in accordance with the specifications in the attached Specifications [*or, if the full IFB (or RFP) is to be attached, state the IFB # and IFB title*]. Contractor shall provide the Goods on an as-needed basis, upon request by Union for such Goods. Union shall provide a purchase order number to Contractor prior to any Goods being delivered. Contractor shall not be required to provide installation services pursuant to this Agreement. Union does not guarantee the purchase of any minimum amount of Goods pursuant to this Agreement.

2. FEE AND PAYMENT SCHEDULE. Union shall pay Contractor for purchase of the Goods in accordance with the attached ["Appendix A – Pricing Form" *(or whatever title was used on the pricing form in the solicitation)*]. Contractor shall invoice Union for Goods after each delivery requested by Union has been completed pursuant to Section 1 herein. Contractor's invoice must reference the purchase order number issued by Union. Payment is due within thirty (30) days of receipt of an accurate invoice by Union's Finance Department. All payments shall be conditioned upon appropriation by the Union County Board of Commissioners of sufficient funds for each request for services.

[*Include this paragraph only if Union agrees to such potential increase over time, or if this provision is included in the IFB.*] If the Agreement is renewed for additional terms in accordance with Section 4 herein, at the beginning of each renewal term, Contractor may adjust the prices listed in [Appendix A] based on the Consumer Price Index agreed upon by both Contractor and Union, limited to the amount of the CPI increase over the previous year.

3. DELIVERY SCHEDULE. Contractor shall ship requested Goods described in Section 1 herein FOB destination, Freight Prepaid, and delivery of such Goods shall be within _____[*length of time, as listed in the IFB*] of the date Contractor receives Union's order.

4. TERM AND TERMINATION. The Effective Date is the date of mutual execution of this Agreement. This Agreement shall have a term of [insert agreement time length]. [*The following sentence is to be used only if renewals might be needed or desired, and then only if the IFB or RFP lists the possible number of renewals. If the contract is just for a single term, this sentence may be deleted.*] Upon completion of the Initial Term, Union may, in its sole discretion, elect to renew this Agreement for up to ____[number of possible additional terms, as stated in the IFB or RFP] additional ___[number of years in each renewal term]-year terms, each a "Renewal Term," upon written notice to the Contractor. Union may terminate this Agreement at any time, with or without cause, by notification to Contractor in writing. In the event of termination without cause, Contractor shall be paid for Goods delivered to the date of notification of termination by Union.

5. OWNERSHIP OF DOCUMENTS. All deliverables and any other contract documents prepared by Contractor, or any subcontractors or subconsultants under the terms of this Agreement ("the Documents"), shall be the property of Union. Contractor further acknowledges that Union is subject to Chapter 132 of the North Carolina General Statutes, the Public Records Act (the "Act"), and that this Agreement, as well as any of the Documents as defined herein, shall be a public record as defined in such Act, and as such, will be open to public disclosure and copying.

6. INSURANCE. The attached Exhibit A, Insurance Requirements, is incorporated herein by reference.

7. INDEMNIFICATION. Contractor agrees to protect, defend, indemnify and hold Union, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of this Agreement and/or the performance hereof that are due, in whole or in part, to the negligence of Contractor, its officers, employees, subcontractors or agents. Contractor further agrees to investigate, handle, respond to, provide defense for, and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto.

8. FEDERAL, STATE, AND LOCAL TAXES. Neither federal, nor state, nor local income tax nor payroll tax of any kind shall be withheld or paid by Union on behalf of Contractor or the employees of Contractor. Contractor shall not be treated as an employee with respect to the services performed hereunder for federal or state tax purposes.

9. NOTICE TO CONTRACTOR REGARDING ITS TAX DUTIES AND LIABILITIES. Contractor understands that Contractor is responsible to pay, according to law, Contractor's income tax. If Contractor is not a corporation, Contractor further understands that Contractor may be liable for self-employment (social security) tax, to be paid by Contractor according to law.

10. FRINGE BENEFITS. Because Contractor is engaged in Contractor's own independently established business, Contractor is not eligible for, and shall not participate in, any employee pension, health or other fringe benefit plan of Union.

11. UNION NOT RESPONSIBLE FOR WORKERS' COMPENSATION. No workers' compensation insurance shall be obtained by Union concerning Contractor or the employees of Contractor. Contractor shall comply with the workers' compensation law concerning Contractor and the employees of Contractor.

12. NO AUTHORITY TO BIND UNION. Contractor has no authority to enter into contracts or agreements on behalf of Union. This Agreement does not create a partnership or any form of agency between the parties.

13. ASSIGNMENT. Neither Union nor Contractor shall assign, sublet or transfer any rights under or interest in this Agreement (including, but without limitation, monies that may become due or monies that are due) without the written consent of the other, except to the extent that any assignment, subletting or transfer is mandated by law or the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to assignment, no assignment shall release or discharge the assignor from any duty or responsibility under this Agreement.

14. NON-WAIVER. The failure of either party to exercise any of its rights under this agreement for a breach thereof shall not be deemed to be a waiver of such rights or a waiver of any subsequent breach.

15. HOW NOTICES SHALL BE GIVEN. Any notice given in connection with this agreement shall be given in writing and shall be delivered either by hand to the party or by certified mail, return receipt requested, to the party at the party's address stated herein. Any party may change its address stated herein by giving notice of the change in accordance with this paragraph.

16. APPLICABLE LAW AND JURISDICTION. This Agreement shall be construed and enforced in accordance with the laws of the State of North Carolina. The parties to this Agreement confer exclusive jurisdiction of all disputes arising hereunder upon the General Courts of Justice of Union County, North Carolina.

17. COMPLETE AGREEMENT. This Agreement contains the complete agreement of the parties regarding the terms and conditions of the Agreement, and there are no oral or written conditions, terms, warranties, understandings or other agreements pertaining thereto which have not been incorporated herein. This Agreement may be modified only by written instrument duly executed by both parties, or their respective successors in interest.

18. SEVERABILITY. The provisions hereof are severable, and should any provision be determined to be invalid, unlawful or otherwise null and void by any court of competent jurisdiction, the other provisions shall remain in full force and effect and shall not thereby be affected unless such ruling shall make further performance hereunder impossible or impose an unconscionable burden upon one of the parties.

19. AUTHORITY. Each party warrants that it has the corporate or other organizational power and authority to execute, deliver and perform this Agreement. Each party

further warrants that the execution, delivery and performance by it of the Agreement has been duly authorized and approved by all requisite action of the party's management and appropriate governing body.

20. E-VERIFY. E-Verify is the federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to federal law. Contractor shall ensure that Contractor and any subcontractor performing work under this Agreement: (i) uses E-Verify if required to do so by North Carolina law; and (ii) otherwise complies with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. A breach of this provision by Contractor will be considered a breach of this Agreement, which entitles Union to terminate this Agreement, without penalty, upon notice to Contractor.

IN WITNESS WHEREOF, the parties hereto, acting under authority of their respective governing bodies, have hereunto set their hands and seals, and have caused this Agreement to be duly executed, this the day and year first above written.

WITNESS:	UNION COUNTY
BY: _____ Lynn G. West, Clerk to the Board	BY: _____(SEAL) William M. Watson, County Manager
WITNESS:	[Contractor Full Legal Name]
BY:_____	BY: _____(SEAL)

Approved as to Legal Form ____

This instrument has been preaudited in the manner required by The Local Government Budget and Fiscal Control Act.

_____
Deputy Finance Officer

Exhibit A
Insurance Requirements

I. **BASIC INSURANCE REQUIREMENTS.** At Contractor's sole expense, Contractor shall procure and maintain the following minimum insurances with insurers authorized to do business in North Carolina and rated A-VII or better by A.M. Best, or as otherwise authorized by the Union County Risk Manager.

A. WORKERS' COMPENSATION
Statutory (coverage for three or more employees) limits covering all employees, including Employer's Liability with limits of:

$500,000	Each Accident
$500,000	Disease - Each Employee
$500,000	Disease - Policy Limit

B. COMMERCIAL GENERAL LIABILITY
Covering all operations involved in this Agreement.

$2,000,000	General Aggregate
$2,000,000	Products/Completed Operations Aggregate
$1,000,000	Each Occurrence
$1,000,000	Personal and Advertising Injury Limit

C. COMMERCIAL AUTOMOBILE LIABILITY

$1,000,000 Combined Single Limit - Any Auto

D. PROFESSIONAL LIABILITY

$1,000,000 Claims Made

Contractor shall provide evidence of continuation or renewal of Professional Liability Insurance for a period of two (2) years following termination of the Agreement.

E. POLLUTION LIABILITY INSURANCE

$1,000,000 Claims Made

Contractor shall provide evidence of continuation or renewal of Pollution Liability Insurance for a period of two (2) years following termination of the Agreement.

F. NETWORK SECURITY & PRIVACY LIABILITY (CYBER)

$1,000,000 Claims Made
$3,000,000 Aggregate Limit

Contractor shall provide evidence of continuation or renewal of Network Security & Privacy Liability Insurance for a period of two (2) years following termination of the Agreement.

II. ADDITIONAL INSURANCE REQUIREMENTS.

A. The Contractor's General Liability policy shall be endorsed, specifically or generally, to include the following as Additional Insured:

UNION COUNTY, ITS OFFICERS, AGENTS AND EMPLOYEES ARE INCLUDED AS ADDITIONAL INSURED WITH RESPECT TO THE GENERAL LIABILITY INSURANCE POLICY.

B. Before commencement of any work or event, Contractor shall provide a Certificate of Insurance in satisfactory form as evidence of the insurances required above.

C. Contractor shall have no right of recovery or subrogation against Union County (including its officers, agents and employees).

D. It is the intention of the parties that the insurance policies afforded by Contractor shall protect both parties and be primary and non-contributory coverage for any and all losses covered by the above-described insurance.

E. Union County shall have no liability with respect to Contractor's personal property whether insured or not insured. Any deductible or self-insured retention is the sole responsibility of Contractor.

F. Notwithstanding the notification requirements of the Insurer, Contractor hereby agrees to notify County's Risk Manager at 500 N. Main Street, Suite #130, Monroe, NC 28112, within two (2) days of the cancellation or substantive change of any insurance policy set out herein. Union, in its sole discretion, may deem failure to provide such notice as a breach of this Agreement.

G. The Certificate of Insurance should note in the Description of Operations the following:

Department: _____
Contract #: _____

H. Insurance procured by Contractor shall not reduce nor limit Contractor's contractual obligation to indemnify, save harmless and defend Union County for claims made or suits brought which result from or are in connection with the performance of this Agreement.

I. Certificate Holder shall be listed as follows:

Union County
Attention: Keith A. Richards, Risk Manager
500 N. Main Street, Suite #130
Monroe, NC 28112

J. If Contractor is authorized to assign or subcontract any of its rights or duties hereunder and in fact does so, Contractor shall ensure that the assignee or subcontractor satisfies all requirements of this Agreement, including, but not limited to, maintenance of the required insurances coverage and provision of certificate(s) of insurance and additional insured endorsement(s), in proper form prior to commencement of services.

Union County, NC

Staff Report

Union County Government
Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-388 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Replacement Excavator

INFORMATION CONTACT:

Andrew Neff, UCW, Water & Wastewater Division Director, 704-296-4215

ACTION REQUESTED:

Authorize the County Manager to negotiate and execute a purchase order or agreement with Carolina CAT to replace an excavator substantially consistent with this agenda item.

BACKGROUND:

Union County Water maintains and operates over 1,059 miles of water system infrastructure and over 677 miles of wastewater infrastructure. This excavator is utilized to excavate and repair large diameter pipelines including capability for much deeper excavations. The original excavator has reached the end of its useful life (18 years old) and is becoming more costly to repair and maintain. In FY21 UCW spent $13,547.83 to repair this piece of equipment with additional repairs needed in FY22 if this equipment is not replaced.

Following research into available purchasing opportunities, UC Water determined that its best option for purchasing the excavator is from Carolina CAT for $209,544.51 using the NC DOT State Term Contract 760H in accordance with N.C.G.S. §143-129 (e)(3). This is a planned purchase for FY22.

FINANCIAL IMPACT:

The requested $209,544.51 is available for this needed purchase in the adopted FY22 Water & Wastewater Division Budget.

UNION COUNTY PUBLIC WORKS

VENDOR NUMBER	
VENDOR: Carolina CAT 9000 Statesville Road Charlotte, NC 28269	
Is vendor coming onsite to work?	
ACCOUNT	AMOUNT
60026513-5550	$209,544.51

Bill TO: Union County Water
500 North Main Street Suite 500
Monroe, NC 28112-4730

SHIP TO: Union County Water
4600 Goldmine Rd
Monroe NC 28110

QTY	UNIT	PRICE	DESCRIPTION	TOTAL
1	1	209,544.51	CAT 317 Excavator	$209,544.51
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
			Total:	$209,544.51

IF QUOTES NOT ATTACHED PLEASE INITIAL APPROPRIATE RESPONSE

_____ Complete specifications are included and Purchasing should seek competitive quotes.

_____ Quotes have been obtained for this requisition in compliance with County Policy and information is on file.

X I request that a purchase order be issued without additional quotes because:
This Machine is under NC DOT State Terms Contract 760H

I have a copy and have read the County Purchasing Policy.

SIGNATURE:

INTERNAL CHECKLIST	
	New vendor? W-9 needed
	COI if vendor coming onsite
	Purchase <$5K - One quote has been obtained
	Purchase >$5K - Three quotes have been obtained
	Purchase >$5K - Division Director Signature
	Construction, repair or other services <$10k - One quote has been obtained
	Construction, repair, or other services >$10K and <$30k - three quotes have been obtained
	Purchase, construction, repair or other services >$20K - Executive Director Signature
	Capital, IT or sole source - Executive Director Signature

SALES AGREEMENT

Carolina CAT, 9000 Statesville Road, Charlotte, NC 28269
Phone (800) 277-1212
THIS AGREEMENT IS SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE

DATE Oct 14, 202
Quote No 197598

MONROE NC

SOLD TO
PURCHASER: UC WATER
STREET ADDRESS: 4600 GOLDMINE RD SUITE 0000
CITY/STATE: MONROE, NC
COUNTY: UNION
POSTAL CODE: 28110
PHONE NO.:
CUSTOMER CONTACT: EQUIPMENT
PRODUCT SUPPORT
INDUSTRY CODE: GENERAL GOVERNMENT HC(9199)
PRINCIPAL WORK CODE

SHIP TO

F.O.B. AT: monroe nc

CUSTOMER NUMBER: 769326
Sales Tax Exemption # (if applicable): N/A
CUSTOMER PO NUMBER:

TERMS
PAYMENT TERMS: (All terms and payments are subject to Finance Company - OAC approval)
NET PAYMENT ON RECEIPT OF INVOICE ☐ | NET ON DELIVERY ☐ | FINANCIAL SERVICES ☐ ISC ☐ LEASE

CASH WITH ORDER	$0.00	BALANCE TO FINANCE	$0.00	CONTRACT INTEREST RATE	0		
PAYMENT PERIOD		PAYMENT AMOUNT	0.00	NUMBER OF PAYMENTS	0	OPTIONAL BUY-OUT	$0.00

DESCRIPTION OF EQUIPMENT ORDERED / PURCHASED

MAKE: CATERPILLAR INC. | MODEL: 317 | YEAR: 2022
STOCK NUMBER: TBA | SERIAL NUMBER: TBA | SMU: new

317 THUMB & QC HYDS	598-9754	TRACK, 28" TG, W/STEPS	541-5174	STORAGE PROTECTION (EXPORT)	0G-4126
564-4391 COMMON ARRANGEMENT		GUARD, TRACK GUIDING, CENTRE	538-8494	ROLL ON-ROLL OFF	0G-4201
565-1415 317 07 HEX		HYDRAULIC PKG, COMB,ONE SLIDER	599-0914	INSTRUCTIONS, ENGLISH	0P-3380
134-8875 GUARD, SWIVEL, STD		LINES, CYLINDER BOOM W/O BLCV	565-1952	FILM, ROPS	586-6180
163-3754 GUARD, TRAVEL MOTOR		CAMERA, REAR & RH VIEW	565-1422	FILM, EMC	528-4738
561-4616 BOTTOM GUARD, STANDARD		LIGHTS, BOOM LH 1P	585-8704	STORAGE PROTECTION (EXPORT)	0P-7563
585-8703 LIGHTS, CHASSIS		LIGHTS, BOOM RH 1P	585-8706	CONTROL, QC PIN GRABBER	565-7254
589-5272 TRAVEL ALARM		LIGHTS, CAB, W/O 360	577-3853	LINES, QUICK COUPLER BOOM	565-1973
597-3209 ENGINE HOOD		BATTERY, STD	558-1734	LINES, QC, 10'2" STICK	565-1982
564-5521 SWING FRAME, STD		WASHER RADIAL WIPER	525-5166	THUMB GROUP	595-6394
565-1420 FINE SWING		PROD LINK, PLE643/PLE743 RADIO	589-6846		
565-4819 UNDERCARRIAGE, LONG		NETWORK MANAGER, STD	555-7286		
490-7715 PEDAL, STRAIGHT TRAVEL		CAT GRADE, 2D	558-2814		
502-7166 INTEGRATED RADIO, W/O DAB		GRADE SENSOR, 1 PC BOOM	565-4617		
511-9428 MONITOR, 10"		GRADE SENSOR,10'2" STICK	565-4621		
520-9418 FILM, OPERATING PATTERN, 2WAY		COUNTERWEIGHT, 3050LB	561-4613		
525-7678 MACHINE ECM		UPPER COVER, STD	573-6719		
546-0101 CAB, DELUXE		DECALS, EXTERIOR, ANSI	565-2162		
549-4728 LINES, AIR CONDITIONER		DECALS, CAB, ANSI	573-4351		
AVAILABLE FOR: AM-N		DECALS, STICK WARNING, ANSI	567-3815		
BOOM, W/ EOU MOUNTS	565-2163	LINES, HIGH PRESSURE BOOM	565-1971		
STICK, R10'2" W/ EOU MOUNTS	565-2182	LINES, HP, 10'2" STICK	565-1980		
LINKAGE, BKT 315 GRADE W/O EYE	525-4937	SUPPORT, LINES AUXILIARY	565-1990		
CYLINDER, BOOM, W/O BLCV	565-1353	BKT GD 36" 0.81YD3 315	552-8150		
CYLINDER, STICK, W/O SLCV	540-1324	TIP, PENETRATION PLUS ADVANSYS	505-4083		
CYLINDER, BUCKET	540-1328	SIDECUTTERS, GENERAL PURPOSE	380-1204		

TRADE-IN EQUIPMENT

MODEL: _____ YEAR: _____ SN.: _____
PAYOUT TO: _____ AMOUNT: _____ PAID BY: _____
MODEL: _____ YEAR: _____ SN.: _____
PAYOUT TO: _____ AMOUNT: _____ PAID BY: _____
MODEL: _____ YEAR: _____ SN.: _____
PAYOUT TO: _____ AMOUNT: _____ PAID BY: _____
MODEL: _____ YEAR: _____ SN.: _____
PAYOUT TO: _____ AMOUNT: _____ PAID BY: _____

ALL TRADES-INS ARE SUBJECT TO EQUIPMENT BEING IN "AS INSPECTED CONDITION" BY VENDOR AT TIME OF DELIVERY OF REPLACEMENT MACHINE PURCHASE ABOVE.

PURCHASER HEREBY SELLS THE TRADE-IN EQUIPMENT DESCRIBED ABOVE TO THE VENDOR AND WARRANTS IT TO BE FREE AND CLEAR OF ALL CLAIMS, LIENS, MORTGAGES AND SECURITY INTEREST EXCEPT AS SHOWN ABOVE.

SELL PRICE	$209,544.51
EXT WARRANTY	Included
NET BALANCE DUE	**$209,544.51**
SUBTOTAL	**$209,544.51**
TOTAL (APPLICABLE TAXES MAY APPLY)	**$209,544.51**

☑ CATERPILLAR EQUIPMENT WARRANTY — INITIAL

The customer acknowledges that he has received a copy of the CAROLINA CAT Inc./Caterpillar Warranty and has read and understood said warranty. Scheduled oil sampling (S.O.S.) is mandatory with this warranty. The customer is responsible for taking oil samples at designated intervals from all power train components and failure to do so may result in voiding the warranty.
Warranty applicable including experation date where necessary:
12 Month/1,500 Hour Standard Machine Warranty
317-60 MO/5000 HR POWERTRAIN + HYDRAULICS + TECH (Tier 4)

☐ USED EQUIPMENT WARRANTY — INITIAL

All used equipment is sold as is where is and no warranty is offered or implied except as specified here:
Warranty applicable:

CSA:

NOTES: Priced using NC DOT State Terms Contract 760H 22% List Disc, 10% options List Discount

ORDER RECEIVED BY: Carolina Tractor & Equipment — John Crocker — REPRESENTATIVE

PURCHASER
APPROVED AND ACCEPTED ON _____
UC WATER — PURCHASER
BY _____ — SIGNATURE

Title:

Replacement Excavator

Action Requested:

Authorize the County Manager to approve the Purchase Order to replace an excavator.

Background:

Union County Water maintains and operates over 1,059 miles of water system infrastructure and over 677 miles of wastewater infrastructure. This excavator is utilized to excavate and repair large diameter pipelines including capability for much deeper excavations. The original excavator has reached the end of its useful life (18 years old) and is becoming more costly to repair and maintain.

Following research into available purchasing opportunities, UC Water determined that its best option for purchasing the excavator is from Carolina CAT for $209,544.51 using the NC DOT State Term Contract 760H in accordance with N.C.G.S. §143-129 (e)(3). This is a planned purchase for FY22.

Financial Impact:

Sufficient funds are available for this needed purchase in the adopted FY22 Water & Wastewater Division Budget



Cat® 317
Hydraulic Excavator

The 317 Hydraulic Excavator boosts productivity on your jobsite. Standard, easy-to-use Cat® technologies, performance upgrades, and low fuel and maintenance costs allow you to move material all day with speed and precision while keeping more money in your pocket.

Not all features are available in all regions. Consult your Cat dealer for specific configurations available in your region.

High Performance and Productivity

- Increased breakout forces and hydraulic power increase productivity by up to eight percent over the previous model.
- The advanced hydraulic system provides the optimum balance of power and efficiency while giving you the control you need for precise digging requirements.
- Reduce fuel consumption by up to five percent over the previous model.
- Match your machine to the job with power modes. Let Smart mode automatically match engine and hydraulic power to working conditions. Power mode constantly provides maximum productivity, and ECO mode minimizes fuel consumption in less-demanding applications.
- Get higher production in demanding applications, easier penetration into piles, and faster cycle times with Cat Advansys™ bucket tips. Quickly change tips with a simple lug wrench instead of a hammer or special tool, improving safety and uptime.
- Auxiliary hydraulic options give you the versatility to use a wide range of Cat attachments.
- The Cat C4.4 engine meets U.S. EPA Tier 4 Final emission standards.
- Don't let the temperature stop you from working. The 317 has an optional cold-start capability of -25°C (-13°F).

Boost Efficiency and Productivity with Cat Technology

- Boost productivity up to 45 percent versus traditional grading with the standard Cat Grade with 2D system – includes indicate-only and laser capability.
- Dig with guidance to depth, slope, and horizontal distance to grade. You can set up to four different depth and slope targets to help save time and money.
- Standard 2D E-Fence prevents your machine from moving outside operator-defined parameters.
- Achieve precise load targets and increase loading efficiency with standard Cat Payload which provides on-the-go weighing and real-time estimates of your payload without swinging.
- Upgrade to Cat Grade with Advanced 2D to create and edit grade designs with ease on a second high-resolution 254 mm (10 in) touchscreen monitor.
- Upgrade to Cat Grade with 3D to create and edit designs with ease and see the front linkage's full range of motion on a second high-resolution 254 mm (10 in) touchscreen monitor.
- Know the excavator's exact position relative to GPS and GLONASS systems. The machine automatically compensates for excavator pitch and roll caused by sloping ground conditions.
- Use the excavator's onboard cell technology to quickly connect to 3D services like Trimble Connected Community or Virtual Reference Station.
- Remote Troubleshoot connects you to a dealer service pro to help solve your problem and quickly get you to work.
- Remote Flash works around your schedule to ensure your machine's software is up to date for optimal performance.
- The Cat App helps you manage fleet location, hours, and maintenance schedules; it also alerts you for required maintenance and even allows you to request service from your local Cat dealer
- Standard Product Link™ automatically and accurately collects data from your connected assets – any type and any brand. Information such as location, hours, fuel usage, productivity, idle time, maintenance alerts, diagnostic codes, and machine health can be viewed online through web and mobile applications.

CAT®

Cat® 317 Hydraulic Excavator

Work in Comfort in the All-New Cab

- Increase operator productivity with an all-new, larger cab.
- The Comfort cab is equipped with a mechanical suspension seat. The Deluxe seat is heated and air adjustable, while the Premium seat is heated and cooled and adjusts automatically.
- Get in and out of the cab easier using the tip-up left console.
- Advanced viscous mounts reduce cab vibration.
- Control the excavator comfortably with easy-to-reach controls, all located in front of you.
- Stow your gear with plenty of in-cab storage beneath and behind the seat, overhead, and in the consoles. A cup holder, document holder, and coat hook are also provided.
- Use the standard radio's USB ports and Bluetooth® technology to connect personal devices and make hands-free calls.

Simple to Operate

- Start the engine with the push of a button, a Bluetooth key fob, a smartphone app, or the unique Operator ID function.
- Program your preferred power mode and joystick settings using your Operator ID. The excavator will automatically remember your selections.
- Navigate quickly on the standard high-resolution touchscreen monitor or with the aid of the jog dial control.
- The Cat PL161 Attachment Locator is a Bluetooth device that makes finding your attachments and other gear quick and easy. The excavator's onboard Bluetooth reader or Cat App on your phone will locate the device automatically.
- Save time and energy with work tool recognition. A simple shake of the attached tool confirms its identity, ensuring all attachment settings are correct, so you can get to work quickly and efficiently.
- Not sure how a function works or how to maintain your machine? Simply access the operator's manual through the touchscreen monitor.

Lower Maintenance Costs

- Expect up to 20 percent less maintenance costs over the previous model.
- Quickly check and service your machine with all daily maintenance points accessible from ground level.
- Check the engine oil level quickly and safely from the ground. Fill and check engine oil on top of the machine with a conveniently located second dipstick.
- Track your machine's filter life and maintenance intervals on the in-cab monitor.
- The new hydraulic oil filter provides improved filtration performance, anti-drain valves to keep oil clean when the filter is replaced, and longer life with a 3,000-hour replacement interval – 50 percent longer than previous filter designs.
- S·O·S℠ ports are located at ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.

Safety

- Access all daily maintenance points from ground level – no need for you to climb on top of the machine.
- The standard ROPS cab meets ISO 12117-2:2008 requirements.
- A ground-level shutoff switch stops all fuel to the engine and shuts down the machine when activated.
- A rearview and right-side-view camera are standard. Upgrade to 360° visibility to easily see objects and personnel around the excavator in a single view.
- New service platform design provides easy, safe, and quick access to the upper service platform. Prevent slipping with the anti-skid punch plate on the platform steps.
- Optional boom and stick lowering check valves prevent reverse flow, keeping your front linkage securely in place should the hydraulic system unexpectedly lose power.
- Brightly colored seatbelts allow easy recognition of properly utilized safety restraints.
- Antennas have theft-prevention bolts; a special tool makes them easy to remove at the end of a shift.

Standard and Optional Equipment

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional
BOOMS AND STICKS		
5.1 m (16'9") Reach boom	✓	
R2.6 m (8'6") stick		✓
R2.9 m (9'6") stick		✓
2.9 m (9'6") thumb ready stick		✓
R3.1 m (10'2") stick		✓
CAB		
ROPS, sound suppression	✓	
Deluxe cab: air suspension heated seat, 10" touchscreen monitor	✓	
CAT TECHNOLOGIES		
Cat Product Link	✓	
Cat Grade with 2D	✓	
Cat Grade with Advanced 2D		✓
Cat Grade with 3D		✓
Cat Payload	✓	
2D E-Fence	✓	
Remote Flash capability	✓	
Remote Troubleshoot capability	✓	
Work tool recognition	✓	
Work tool tracking	✓	
Auto hammer stop	✓	
ELECTRICAL SYSTEM		
Maintenance free battery	✓	
LED chassis light, left-side/right-side boom lights, cab lights	✓	
Programmable time-delay LED working lights	✓	
360° lighting		✓
ENGINE		
C4.4 Tier 4 Final diesel engine	✓	
One-touch low idle with automatic engine speed control	✓	
Automatic engine shutdown	✓	
-18°C (-0°F) cold start capability		✓
-25°C (-13°F) cold start capability		✓
Electric fuel priming pump	✓	
Two-stage fuel filtration system with water separator and indicator	✓	
Sealed double element air filter with integrated precleaner	✓	
Electric cooling fans	✓	
Biodiesel capability up to B20	✓	

	Standard	Optional
HYDRAULIC SYSTEM		
Boom and stick regeneration circuits	✓	
Automatic hydraulic warm up	✓	
Automatic two-speed travel	✓	
Electric main control valve	✓	
Boom and stick drift reduction valve	✓	
Boom and stick lowering check valves		✓
Element-type main hydraulic filter	✓	
Single-type electronic main pump	✓	
SAFETY AND SECURITY		
Rear- and right-side-view cameras	✓	
360° visibility		✓
Ground level engine shutoff switch	✓	
Service platform with anti-skid plate and countersunk bolts	✓	
Signaling/warning horn	✓	
Hydraulic lock out lever	✓	
SERVICE AND MAINTENANCE		
Side entry to service platform	✓	
Grouped engine oil and fuel filters	✓	
Ground level engine oil dipstick	✓	
S·O·S sampling ports	✓	
UNDERCARRIAGE AND STRUCTURES		
Grease lubricated track link	✓	
Tie-down points (ISO 15818:2017 compliant)	✓	
600 mm (24") triple grouser shoes		✓
600 mm (24") rubber track shoe		✓
700 mm (28") triple grouser shoes		✓
3.05 mt (6,720 lb) counterweight		✓
3.57 mt (7,870 lb) counterweight		✓

Cat® 317 Hydraulic Excavator

Technical Specifications

Engine

Engine Model	C4.4	
Engine Power – ISO 14396:2002	98 kW	131 hp
Net Power – ISO 9249:2007	97 kW	130 hp
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in³

- No engine power derate required below 3000 m (9,840 ft) altitude.
- Net power available at the flywheel when the engine is equipped with fan, air cleaner, aftertreatment, and alternator with engine speed at 2,200 rpm.

Hydraulic System

Main System – Maximum Flow	296 L/min	78 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,076 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	25 800 kPa	3,741 psi

Swing Mechanism

Swing Speed	8.7 rpm	
Maximum Swing Torque	61 kN-m	44,990 lb-ft

Weights

Operating Weight	18 200 kg	40,200 lb

- Long undercarriage, Reach boom, R3.1 (10'2") stick, GD 0.76 m³ (0.99 yd³) bucket, 700 mm (28") triple grouser shoes and 3.57 mt (7,870 lb) counterweight.

Service Refill Capacities

Fuel Tank Capacity	271 L	71.6 gal
Cooling System	28 L	7.4 gal
Engine Oil	15 L	4.0 gal
Final Drive	6 L	1.6 gal
Hydraulic System (including tank)	94 L	24.8 gal
Hydraulic Tank	87 L	23.0 gal
DEF Tank	22 L	5.9 gal

Dimensions

Boom	**Reach 5.1 m (16'9")**	
Stick	**Reach R2.9 m (9'6")**	
Bucket	**GD 0.76 m³ (0.99 yd³)**	
Shipping Height (top of cab)	2930 mm	9'7"
Handrail Height	2940 mm	9'8"
Shipping Length	8570 mm	28'1"
Tail Swing Radius	2500 mm	8'2"
Counterweight Clearance	1010 mm	3'4"
Ground Clearance	430 mm	1'5"
Track Length	3970 mm	13'0"
Length to Center of Rollers	3170 mm	10'5"
Track Gauge	1990 mm	6'6"
Transport Width – 700 mm (28") Shoes	2690 mm	8'10"

Working Ranges

Boom	**Reach 5.1 m (16'9")**	
Stick	**Reach R2.9 m (9'6")**	
Bucket	**GD 0.76 m³ (0.99 yd³)**	
Maximum Digging Depth	6400 mm	21'0"
Maximum Reach at Ground Line	9010 mm	29'7"
Maximum Cutting Height	8900 mm	29'2"
Maximum Loading Height	6280 mm	20'7"
Minimum Loading Height	1990 mm	6'6"
Maximum Depth Cut for 2400 mm (8'0") Level Bottom	6170 mm	20'3"
Maximum Vertical Wall Digging Depth	4960 mm	16'3"
Minimum Working Equipment Radius	2940 mm	9'8"
Bucket Digging Force (ISO)	123 kN	27,650 lbf
Stick Digging Force (ISO)	75 kN	16,860 lbf

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.9 kg of refrigerant which has a CO_2 equivalent of 1.287 metric tonnes.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com.

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, Advansys, Product Link, S•O•S, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEXQ3069-01 (01-2021)
Replaces AEXQ3069-00
Build Number: 07A
(N Am)

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-389 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Replacement Articulating Wheel Loader

INFORMATION CONTACT:

Andrew Neff, UCW, Water & Wastewater Division Director, 704-296-4215

ACTION REQUESTED:

Authorize the County Manager to negotiate and execute a purchase order or agreement to replace an Articulating Wheel Loader with James River Equipment substantially consistent with this agenda item.

BACKGROUND:

Union County Water maintains and operates over 1,059 miles of water system infrastructure and over 677 miles of wastewater infrastructure. This loader is utilized to load gravel, dirt, lift manhole sections, vaults, large pipe, and unloading of trucks. The original Loader has reached the end of its useful life (19 years old) and is becoming costly to repair and maintain. In FY21, UCW spent $8,882.05 repairing this piece of equipment with more expenditures needed in FY22 if this equipment isn't replaced.

Following research into available purchasing opportunities, UC Water determined that its best option for purchasing the excavator is from James River Equipment for $170,398.00 using the Sourcewell Contract #032119-JDC in accordance with N.C.G.S. §143-129 (e)(3). This is a planned purchase for FY22.

FINANCIAL IMPACT:

The requested $170,398.00 is available for this needed purchase in the adopted FY22 Water & Wastewater Division Budget.

UNION COUNTY PUBLIC WORKS

VENDOR NUMBER	
VENDOR: James River Equipment 411 S Regional Road Greensboro, NC 27409	
Is vendor coming onsite to work?	
ACCOUNT	AMOUNT
60026514-5550	$170,398.00

Bill TO: Union County Water
500 North Main Street Suite 500
Monroe, NC 28112-4730

SHIP TO: Union County Water
4600 Goldmine Rd
Monroe NC 28110

QTY	UNIT	PRICE	DESCRIPTION	TOTAL
1	1	170,398.00	JOHN DEERE 444 P WHEEL LOADER - High Lift - 4and1	$170,398.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
			Total:	$170,398.00

IF QUOTES NOT ATTACHED PLEASE INITIAL APPROPRIATE RESPONSE

_____ Complete specifications are included and Purchasing should seek competitive quotes.

_____ Quotes have been obtained for this requisition in compliance with County Policy and information is on file.

X I request that a purchase order be issued without additional quotes because:
This Machine is under Sourcewell Contract #032119-JDC

I have a copy and have read the County Purchasing Policy.

SIGNATURE:

INTERNAL CHECKLIST	
	New vendor? W-9 needed
	COI if vendor coming onsite
	Purchase <$5K - One quote has been obtained
	Purchase >$5K - Three quotes have been obtained
	Purchase >$5K - Division Director Signature
	Construction, repair or other services <$10k - One quote has been obtained
	Construction, repair, or other services >$10K and <$30k - three quotes have been obtained
	Purchase, construction, repair or other services >$20K - Executive Director Signature
	Capital, IT or sole source - Executive Director Signature

Title:

Replacement Articulating Wheel Loader

Action Requested:

Authorize the County Manager to approve the Purchase Order to replace an Articulating Wheel Loader.

Background:

Union County Public Works' maintains and operates over 1,059 miles of water system infrastructure and over 677 miles of wastewater infrastructure. This loader is utilized to load gravel, dirt, lift manhole sections, vaults, large pipe, and unloading of trucks. The original Loader has reached the end of its useful life (19 years old) and is becoming more costly to repair and maintain.

Following research into available purchasing opportunities, UC Water determined that its best option for purchasing the excavator is from James River Equipment for $170,398.00 using the Sourcewell Contract #032119-JDC in accordance with N.C.G.S. §143-129 (e)(3). This is a planned purchase for FY22.

Financial Impact:

Sufficient funds are available for this needed purchase in the adopted FY22 Water & Wastewater Division Budget

JOHN DEERE

Quote Id: 25399499

Prepared For:

UNION COUNTY WATER



Prepared By: **NICHOLAS WOOD**

James River Equipment
411 S Regional Road
Greensboro, NC 27409

Tel: 336-668-2762
Fax: 336-668-3714
Email: nick.wood@jamesriverequipment.com

Date: 07 October 2021

Offer Expires: 07 November 2021

JOHN DEERE

Quote Summary

Prepared For:
UNION COUNTY WATER
4600 GOLDMINE RD
MONROE, NC 28110
Business: 704-289-3288
greg.morgan@unioncountync.gov

Prepared By:
NICHOLAS WOOD
James River Equipment
411 S Regional Road
Greensboro, NC 27409
Phone: 336-668-2762
nick.wood@jamesriverequipment.com

Quote Id: 25399499
Created On: 07 October 2021
Last Modified On: 14 October 2021
Expiration Date: 07 November 2021

Equipment Summary	Suggested List	Selling Price		Qty		Extended
JOHN DEERE 444 P WHEEL LOADER - High Lift - 4and1 - Price Based on Sourcewell Contract #032119-JDC	$ 170,398.00	$ 170,398.00	X	1	=	$ 170,398.00
Equipment Total						**$ 170,398.00**

Quote Summary	
Equipment Total	$ 170,398.00
SubTotal	$ 170,398.00
Total	$ 170,398.00
Down Payment	(0.00)
Rental Applied	(0.00)
Balance Due	**$ 170,398.00**

Salesperson : X _____

Accepted By : X _____

JOHN DEERE

Selling Equipment

Quote Id: 25399499 **Customer:** UNION COUNTY WATER

JOHN DEERE 444 P WHEEL LOADER - High Lift - 4and1 - Price Based on Sourcewell Contract #032119-JDC

Hours:
Stock Number:

Suggested List $ 170,398.00
Selling Price $ 170,398.00

Code	Description	Qty	Unit	Extended
6010DW	444 P WHEEL LOADER	1	$ 176,754.00	$ 176,754.00
	Standard Options - Per Unit			
170K	JDLink™	1	$ 0.00	$ 0.00
0924	John Deere PowerTech Engine	1	$ 14,304.00	$ 14,304.00
1010	Standard Wheel Loader	1	$ 0.00	$ 0.00
1105	4-Speed Powershift Transmission	1	$ 0.00	$ 0.00
1210	100 amp Alternator	1	$ 0.00	$ 0.00
1310	Flat Black Curved Stack	1	$ 0.00	$ 0.00
1410	Standard Engine Air Intake System	1	$ 0.00	$ 0.00
1510	Standard Hydraulic Fan	1	$ 0.00	$ 0.00
1610	Standard Fuel Filter with Water Separator and Standard Fuel Fill	1	$ 0.00	$ 0.00
1905	Standard Cab	1	$ 0.00	$ 0.00
1945	7 inch Monitor with Dedicated Rear Camera Display	1	$ 1,645.00	$ 1,645.00
1970	Hydrau Hydraulic Fluid	1	$ 0.00	$ 0.00
2020	High Lift Z-BAR	1	$ 4,012.00	$ 4,012.00
2120	Steering Wheel Only	1	$ 0.00	$ 0.00
2220	Deluxe Seat, Cloth with Air Suspension	1	$ 0.00	$ 0.00
2360	Joystick Controls	1	$ 0.00	$ 0.00
2403	Three Function Hydraulics	1	$ 2,231.00	$ 2,231.00
2510	Ride Control	1	$ 4,015.00	$ 4,015.00
2605	English Decals and Manuals	1	$ 0.00	$ 0.00
2708	8 Amp Converter	1	$ 0.00	$ 0.00
2890	No Payload Scale without Cycle Counter	1	$ 0.00	$ 0.00
3046	Front Hydraulically Locking Differential and Rear Conventional Differential Axles	1	$ 0.00	$ 0.00
3120	Manual Axle Differential Lock	1	$ 0.00	$ 0.00
4931	No Brand Preferred, 17.5R25 1 Star L2 Radial On 3pc. Rims	1	$ 9,674.00	$ 9,674.00
5530	Standard Front Fenders	1	$ 0.00	$ 0.00
5610	Left Side Steps Only	1	$ 0.00	$ 0.00
5760	60 in (1524mm) Wide Fork Frame	1	$ 6,405.00	$ 6,405.00
5870	60 Inch (1524mm) Construction Tines	1	$ 1,628.00	$ 1,628.00
7140	Premium LED Work and Drive Lights	1	$ 1,449.00	$ 1,449.00

JOHN DEERE

Selling Equipment

Quote Id: 25399499 **Customer:** UNION COUNTY WATER

8220	Rear Hitch and Counterweight	1	$ 0.00	$ 0.00
8240	Rear Camera	1	$ 0.00	$ 0.00
8275	LED Strobe Beacon with Left Beacon Bracket	1	$ 275.00	$ 275.00
8310	Standard Exterior Mirrors	1	$ 0.00	$ 0.00
8360	Standard Radio	1	$ 576.00	$ 576.00
8450	Cab with Air A/C Charge	1	$ 0.00	$ 0.00
8560	Hydraulic Coupler - JRB 416 Pattern	1	$ 5,383.00	$ 5,383.00
8850	Bolt-on Cutting Edge	1	$ 919.00	$ 919.00
8905	2.75 Cu. Yd. Bucket	1	$ 6,860.00	$ 6,860.00
9240	Engine Compartment Light	1	$ 180.00	$ 180.00
9410	Transmission and Bottom Guards	1	$ 2,034.00	$ 2,034.00
9706	17.5R25 1 Star L2 Radial No Brand Preferred On 3pc. Rims	1	$ 0.00	$ 0.00
	Standard Options Total			**$ 61,590.00**
	Technology Options			
Deduct	Deduct 37% Based on Sourcewell Contract #032119-JDC	1	$ -88,187.00	$ -88,187.00
	Technology Options Total			**$ -88,187.00**
	Dealer Attachments			
250MP	GEM 2.5 Cu Yd Multi Purpose Bucket, 4 and 1	1	$ 16,665.00	$ 16,665.00
	Dealer Attachments Total			**$ 16,665.00**
	Value Added Services Total			**$ 0.00**
	Other Charges			
	Freight	1	$ 3,576.00	$ 3,576.00
	Other Charges Total			**$ 3,576.00**
	Suggested Price			**$ 170,398.00**
	Customer Discounts			
	Customer Discounts Total		**$ 0.00**	**$ 0.00**
Total Selling Price				**$ 170,398.00**

Union County, NC

Staff Report

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-390 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Crooked Creek WRF Clarifier Repairs

INFORMATION CONTACT:

Andrew Neff, UCW, Water & Wastewater Division Director, 704-296-4215

ACTION REQUESTED:

Authorize the County Manager to negotiate and execute an agreement with Kemp Construction, Inc. to purchase Clarifier Corrective Maintenance repairs to clarifier 301 at the Crooked Creek WRF, substantially consistent with this agenda item.

BACKGROUND:

Union County Water ("UCW") operates and maintains various wastewater treatment processing equipment at Crooked Creek WRF. The clarifiers separate the effluent to be discharged into the receiving stream from the more dense material that is sent to the digesters for land application. Clarifier 301 is one of four clarifiers at the site. This clarifier requires replacement of the gear reducer, main drive and sweep arms in order to continue functioning as designed. A malfunction of this unit will result in reduced capacity at the WRF with potential regulatory impact.

UCW issued IFB 2022-020 with an opening date of October 5, 2021 for qualified vendors to supply the material and labor to affect the needed repairs. Two (2) bids were received with Kemp Construction, Inc. selected to perform the work.

FINANCIAL IMPACT:

The requested amount of $57,992.00 is available in the adopted FY22 Water & Wastewater Division budget.

Request to Solicit / Advertise Form

(*IFB, RFP, RFQ, etc...)

This form is required when requesting to purchase Goods, Apparatus, or Supplies and for Construction and Repair projects valued at $30,000.00 or more (applies to Informal and Formal solicitations). For all services, use this form to request the creation of an RFP. For purchases under $30,000.00, continue to follow the applicable purchase procurement processes listed in the Procurement Policy.

Project Name *
FY22 RR Clarifier Corrective Maintenance

Requesting Department / Office *
Public Works - Water & Wastewater

Person Submitting Request *
Matthew Ferrell

Submitter Email *
matthew.ferrell@unioncountync.gov

Project Contact Person
Matthew Ferrell

Phone
704-301-3811

Proposed Evaluation Team Members

Odd #: 3, 5 or 7: Attach list below

3

Estimated Project Budget Amt
$ 50,000.00

Budget Code(s)

*

60026753-5352

Funding Source *

Check all that apply

- [x] Union County
- [ ] State
- [ ] Federal
- [ ] Grant
- [ ] Other

Please use the upload button below to attach applicable supporting documentation *

Scope/Statement of Work, Drawings/Specifications, List of Suggested Vendors (include contact information and HUB businesses), Evaluation Team Members, Copy of Grant (include procurement regulations), State of NC Business License, and/or Special License/Permit Required

FY22 RR Clarifier Corrective Maintenance IFB Review Team.docx	11.6KB
FY 22 RR Clarifier Corrective Main RFB Scope.docx	13.96KB
FY22 RR Clarifier Corrective Maintenance IFB list of Suggested Vendors.docx	11.59KB

Check all that apply

- [ ] **Bid Bond**
- [ ] **Performance Bond**
- [ ] **Payment Bond**

Requested Advertising Date

9/3/2021

Proposed Solicitation Due Date

9/17/2021

Instructions/Comments

This IFB will likely include a site visit to the Crooked Creek WRF at 4015 Sardis Church Rd. Monroe.

Date Submitted

8/19/2021

9 APPENDIX A –PRICE FORM

IFB 2022-020 Clarifier Corrective Maintenance

SUBMIT WITH BID

Company Name: Kemp Construction Inc.

Cost must include delivery, replacement, installation, and applicable warranty information for clarifier 301 at the Crooked Creek WRF. Vendor will be responsible for providing all materials, labor, parts using original OEM parts (described in section 6.1) in the replacement of these key components, and drive. If applicable, include warranty price in the Cost listed below.

Location	Scope	Cost	
Crooked Creek Wastewater Reclamation Facility (WRF)	Constant Speed Reducer, Main Drive of Clarifier 301, all RAS (return activated sludge) Seals and Rubber Sweeps on Lower Rake Arms		$57,992.00
		TOTAL COST:	$57,992.00

Warranty in Months: 12

10 APPENDIX B – BID SUBMISSION FORM

IFB 2022-020 Clarifier Corrective Maintenance

SUBMIT WITH BID

This Bid is submitted by:

Company Legal Name:	Kemp Construction Inc.
Representative Name:	Colin H. Kemp
Representative Signature:	
Representative Title:	President
Address:	2217 Lynmore Dr.
City/State/Zip:	Sherrills Ford, NC 28673
Email Address:	luke@kempinc.com
Phone Number:	828-478-3040
Website Address:	www.kempinc.com

It is understood that Union County reserves the right to reject any and all Bids, to make awards according to the best interest of the County, to waive formalities, technicalities, to recover and re-bid this project. Bid is valid for 120 calendar days from the Bid due date and is submitted by an executive of the company that has authority to contract with Union County, NC.

Name:	Colin H. Kemp
Title:	President
Signature:	
Date:	10-1-21

11 APPENDIX C – ADDENDUM AND ANTI-COLLUSION FORM

IFB 2022-020 Clarifier Corrective Maintenance

SUBMIT WITH BID

Please acknowledge receipt of all addenda by including this form with your Bid. Any questions or changes received will be posted as an addendum on www.co.union.nc.us and/or www.ips.state.nc.us. It is your responsibility to check for this information.

Addendum No.	Date Downloaded
1	10-1-21

I certify that this Bid is made in good faith and without collusion with any other offeror or officer or employee of Union County.

Company Name:	Kemp Construction Inc.
Name:	Colin H. Kemp
Title:	President
Email Address:	luke@kempinc.com
Signature:	
Date:	10-1-21

UNION COUNTY PUBLIC WORKS

VENDOR NUMBER	
VENDOR: Kemp Construction, Inc. 2217 Lynmore Dr. Sherrills Ford, NC 28673 P: 828-478-3040	
Is vendor coming onsite to work?	
ACCOUNT	AMOUNT
60026753-5352	$57,992.00

Bill TO: Union County Public Works
500 North Main Street Suite 500
Monroe, NC 28112-4730

SHIP TO: Union County Public Works
4600 Goldmine Rd
Monroe NC 28110

QTY	UNIT	PRICE	DESCRIPTION	TOTAL
1	ea	$57,992.00	IFB 2022-020 Clarifier Corrective Maintenance	$57,992.00
			Replace gear reducer, main drive and rubber sweeps on lower rake arms.	$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
			Total:	$57,992.00

IF QUOTES NOT ATTACHED PLEASE INITIAL APPROPRIATE RESPONSE

_____ Complete specifications are included and Purchasing should seek competitive quotes.

X Quotes have been obtained for this requisition in compliance with County Policy and information is on file.

_____ I request that a purchase order be issued without additional quotes because:

I have a copy and have read the County Purchasing Policy.

SIGNATURE:

Matthew Ferrell

INTERNAL CHECKLIST	
	New vendor? W-9 needed
	COI if vendor coming onsite
	Purchase <$5K - One quote has been obtained
	Purchase >$5K - Three quotes have been obtained
	Purchase >$5K - Division Director Signature
	Construction, repair or other services <$10k - One quote has been obtained
	Construction, repair, or other services >$10K and <$30k - three quotes have been obtained
	Purchase, construction, repair or other services >$20K - Executive Director Signature
	Capital, IT or sole source - Executive Director Signature

Union County Government
Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-398 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Project SW110 - STEG Gravity Sewer Improvements (Gray Water System) Stallings - Bid Award

INFORMATION CONTACT:

John Shutak, Engineering Division Director, Union County Water, 704-283-3651

ACTION REQUESTED:

(i) Accept the low bidder, authorize award of the construction contract to Mountaineer Contractors, Inc., in the amount of $834,005.55, (ii) authorize the County Manager to negotiate and execute an agreement substantially consistent with this Agenda item, and (iii) adopt a Resolution of the Union County Board of Commissioners Providing Notice of SW110 - STEG Gravity Sewer Improvements Stallings Project Construction.

BACKGROUND:

The currently approved Capital Improvement Program includes funding for sanitary sewer projects to replace aging gravity sewer infrastructure. The Septic Tank Effluent Gravity (STEG) (Gray Water system) Asset Inventory and Assessment memorandum outlined a 10-year CIP schedule to replace the existing 4-inch and 6-inch septic tank effluent gravity system with conventional 8-inch gravity mains and manholes. The Project consists of the construction of approximately 4,745 linear feet of 8-inch gravity sewer mains and 24 manholes on Smith Circle, Greenbriar Drive, and Spruce Street. The work includes, but is not limited to pipe, manholes, services, clean outs, erosion control, and restoration.

On October 14, 2021, Union County Procurement Division received and opened three (3) bids for the project. All bids were reviewed and certified by the engineer per the attached engineering report for bids and bid tabulation. The bids ranged from $834,005.55 to $1,453,457.00 and, based on the engineer's review and Procurement Division approval of the bids, staff recommends that the project be awarded to the lowest responsive, responsible bidder, Mountaineer Contractors, Inc., in the amount of $834,005.55.

FINANCIAL IMPACT:

Funding is available within the adopted Capital Improvement Program for this project to support the construction contract amount of $834,005.55.

WK DICKSON
community infrastructure consultants

October 29, 2021

Mr. Fred Braun, P.E.
CIP Senior Engineer – Project Manager
Union County Public Works
500 N. Main Street, Suite 615
Monroe, North Carolina 28112

RE: IFB# 2022-007R STEG Gravity Sewer Improvements – Stallings
WKD Project Number: 20190522.00.CL
Bid Tabulation and Recommendation

Dear Mr. Braun:

Enclosed is the Certified Bid Tabulation for the referenced project. A total of three (3) bids were submitted. The bidders, in ascending order of bid price are Mountaineer Contractors, Inc., North American Pipeline Management, Inc., and Dellinger, Inc. All three bids appear to be complete and compliant with the Contract Documents.

Mountaineer Contractors, Inc. is the apparent lowest responsive, responsible bidder.

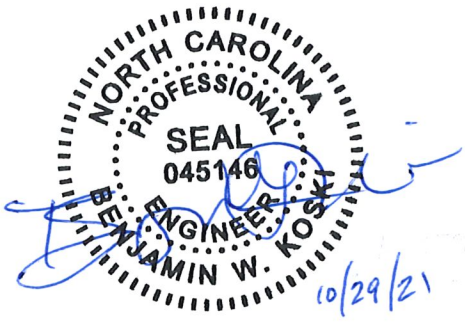
Based on the information received at this time, I recommend Union County award the contract to Mountaineer Contractors, Inc. in the amount of $834,005.55.

We appreciate the opportunity to provide this service for Union County and we are available to answer any questions you may have.

Sincerely,

W.K. Dickson & Co., Inc.

Ben Koski, PE
Project Manager



Enclosures (1)

1213 W. Morehead Street, Suite 300
Charlotte, NC 28208
Tel. 704.334.5348
www.wkdickson.com

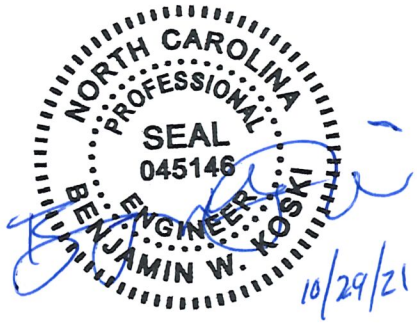
BID TABULATION

STEG Gravity Sewer Improvements - Stallings
Union County
BID DATE: October 14, 2021
IFB# 2022-007R
WKD# 20190522.00.CL

				Mountaineer Contractors, Inc. P.O. Box 606 Kingwood, WV 26537 License No. 76264		North American Pipeline Mana 62 Hamby Road SE Marietta, GA 30067 License No. 70877		Dellinger, Inc. P.O. Box 929 Monroe, NC 28111 License No. 5992	
Item No.	Item Description	Unit	Quantities	Unit Price	Total	Unit Price	Total	Unit Price	Total
1	Mobilization (4%)	LS	1	$30,590.00	$30,590.00	$50,000.00	$50,000.00	$55,000.00	$55,000.00
2	8" PVC SDR 35 Gravity Sewer (3-6 ft deep)	LF	305	$36.00	$10,980.00	$120.00	$36,600.00	$115.00	$35,075.00
3	8" PVC SDR 35 Gravity Sewer (6-8 ft deep)	LF	1,870	$39.00	$72,930.00	$130.00	$243,100.00	$122.00	$228,140.00
4	8" PVC SDR 35 Gravity Sewer (8-10 ft deep)	LF	2,250	$43.00	$96,750.00	$140.00	$315,000.00	$132.00	$297,000.00
5	8" PVC SDR 26 Gravity Sewer (10-12 ft deep)	LF	320	$52.00	$16,640.00	$180.00	$57,600.00	$145.00	$46,400.00
6	8" DI Gravity Sewer Material Adder	LF	80	$68.00	$5,440.00	$50.00	$4,000.00	$20.00	$1,600.00
7	16" dia. Steel Casing (t=0.250"), No Carrier Pipe, Jack & Bor	LF	20	$1,100.00	$22,000.00	$600.00	$12,000.00	$800.00	$16,000.00
8	4' Diameter Manhole (0-6 ft deep)	EA	24	$4,250.00	$102,000.00	$4,000.00	$96,000.00	$6,000.00	$144,000.00
9	4' Diameter Manhole Additional Vertical Footage (Item 9 A	VF	62	$185.00	$11,470.00	$350.00	$21,700.00	$275.00	$17,050.00
10	Connect to Existing Manhole	EA	4	$1,650.00	$6,600.00	$3,000.00	$12,000.00	$6,000.00	$24,000.00
11	4" PVC Service Lateral	LF	1410	$30.00	$42,300.00	$110.00	$155,100.00	$35.00	$49,350.00
12	Clean Out Assembly	EA	57	$468.00	$26,676.00	$650.00	$37,050.00	$650.00	$37,050.00
13	Demo existing Clean Out Outside of Trench Excavation	EA	25	$525.00	$13,125.00	$200.00	$5,000.00	$320.00	$8,000.00
14	Abandonment/Removal of Existing Septic Tank	EA	20	$2,200.00	$44,000.00	$3,400.00	$68,000.00	$2,600.00	$52,000.00
15	Trench Rock Excavation	CY	90	$105.00	$9,450.00	$100.00	$9,000.00	$310.00	$27,900.00
16	Select Backfill	CY	1150	$82.00	$94,300.00	$20.00	$23,000.00	$48.00	$55,200.00
17	Driveway Concrete Repair	SY	160	$155.00	$24,800.00	$60.00	$9,600.00	$120.00	$19,200.00
18	Driveway Gravel Repair	SY	40	$33.00	$1,320.00	$30.00	$1,200.00	$12.00	$480.00
19	Driveway Asphalt Repair	SY	100	$107.00	$10,700.00	$50.00	$5,000.00	$120.00	$12,000.00
20	Road Asphalt Repair	SY	1590	$38.00	$60,420.00	$55.00	$87,450.00	$120.00	$190,800.00
21	Dual 24" RCP Culvert Realignment (Sheet C.8)	LS	1	$20,100.00	$20,100.00	$26,000.00	$26,000.00	$28,000.00	$28,000.00
22	Erosion Control	LS	1	$22,200.00	$22,200.00	$10,000.00	$10,000.00	$18,000.00	$18,000.00
23	Seeding, Mulching, Site Grading, and Landscape Restoratic	LS	1	$49,500.00	$49,500.00	$18,000.00	$18,000.00	$22,000.00	$22,000.00
			SUB-TOTAL BASE BID		$794,291.00		$1,302,400.00		$1,384,245.00
24	Contingency Allowance (5%)	LS	1	$39,714.55	$39,714.55	$65,120.00	$65,120.00	$69,212.00	$69,212.00
			TOTAL BASE BID		$834,005.55		$1,367,520.00		$1,453,457.00

I hereby certify that the above is a true and correct
(to the best of my knowledge) tabulation of bids received on August 18, 2020.

Benjamin W. Koski, PE
W.K. Dickson & Co., Inc.



10/29/21

RESOLUTION OF THE UNION COUNTY BOARD OF COMMISSIONERS PROVIDING NOTICE OF SW110 – STEG Gravity Sewer Improvements Stallings PROJECT CONSTRUCTION

WHEREAS, pursuant to G.S § 153A-457, a county shall notify property owners and adjacent property owners prior to commencement of any construction project by the county; and

WHEREAS, G.S. § 153A-457 provides that notice of a county construction project is deemed sufficient if notice of the construction project is given in any open meeting of the county prior to the commencement of the construction project; and

WHEREAS, the Union County Board of Commissioners desires to give notice of construction of the SW110 STEG Gravity Sewer Improvements Stallings Project prior to commencement of project construction as required by G.S. § 153A-457.

NOW, THEREFORE, BE IT RESOLVED BY THE Union County Board of Commissioners that:

1. Union County may commence construction of the SW110 STEG Gravity Sewer Improvements Stallings Project on property as shown on the attached map after the award date of the construction contract for the project.

2. This resolution and notice is adopted in accordance with the construction notice requirements of G.S. § 153A-457.

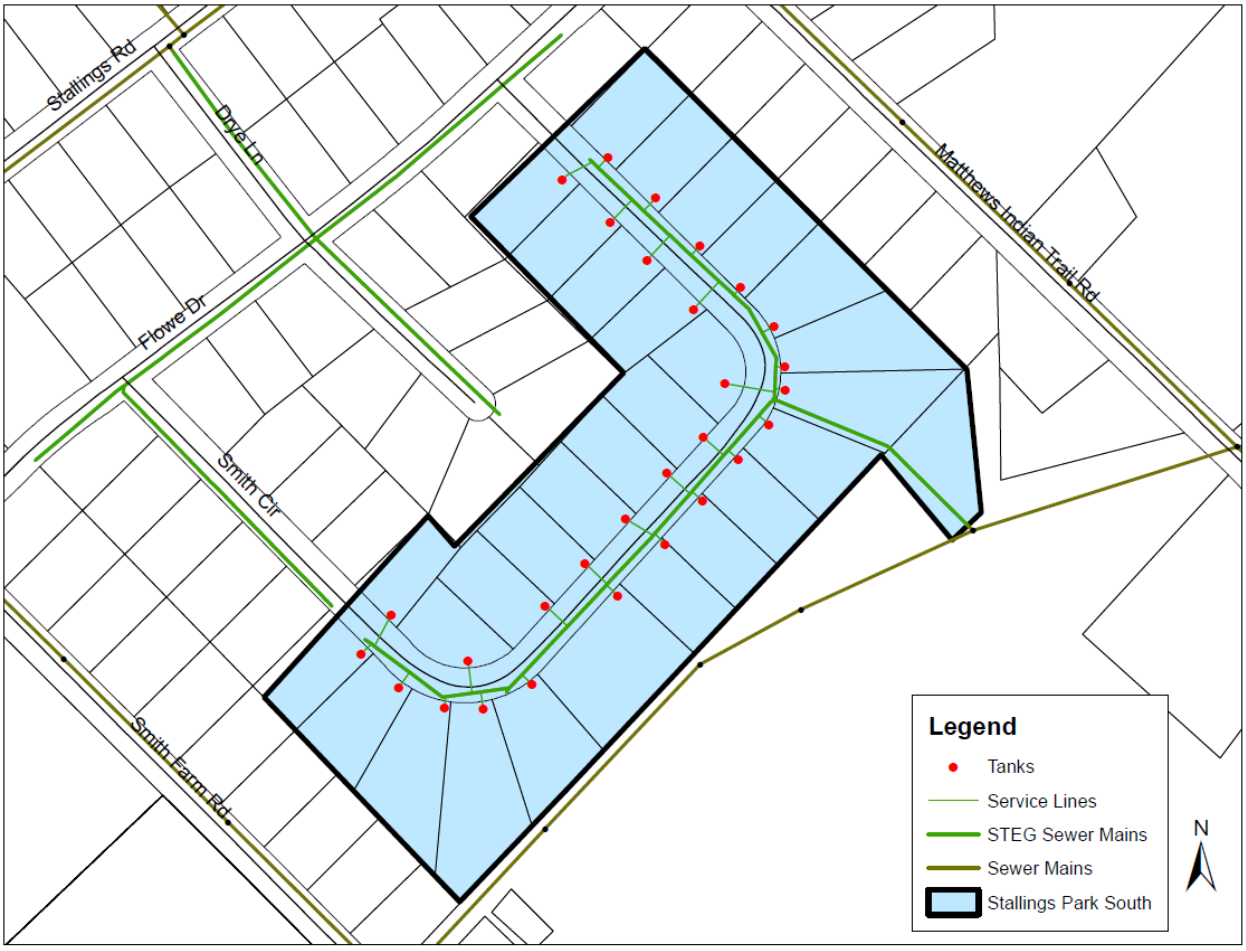
Adopted this the 15th day of November 2021.

Attest:

Lynn West Clerk to the Board	Richard B. Helms, Sr. Chairman Union County Board of Commissioners

Stallings Park South: Streets included – Southeastern portion of Smith Circle

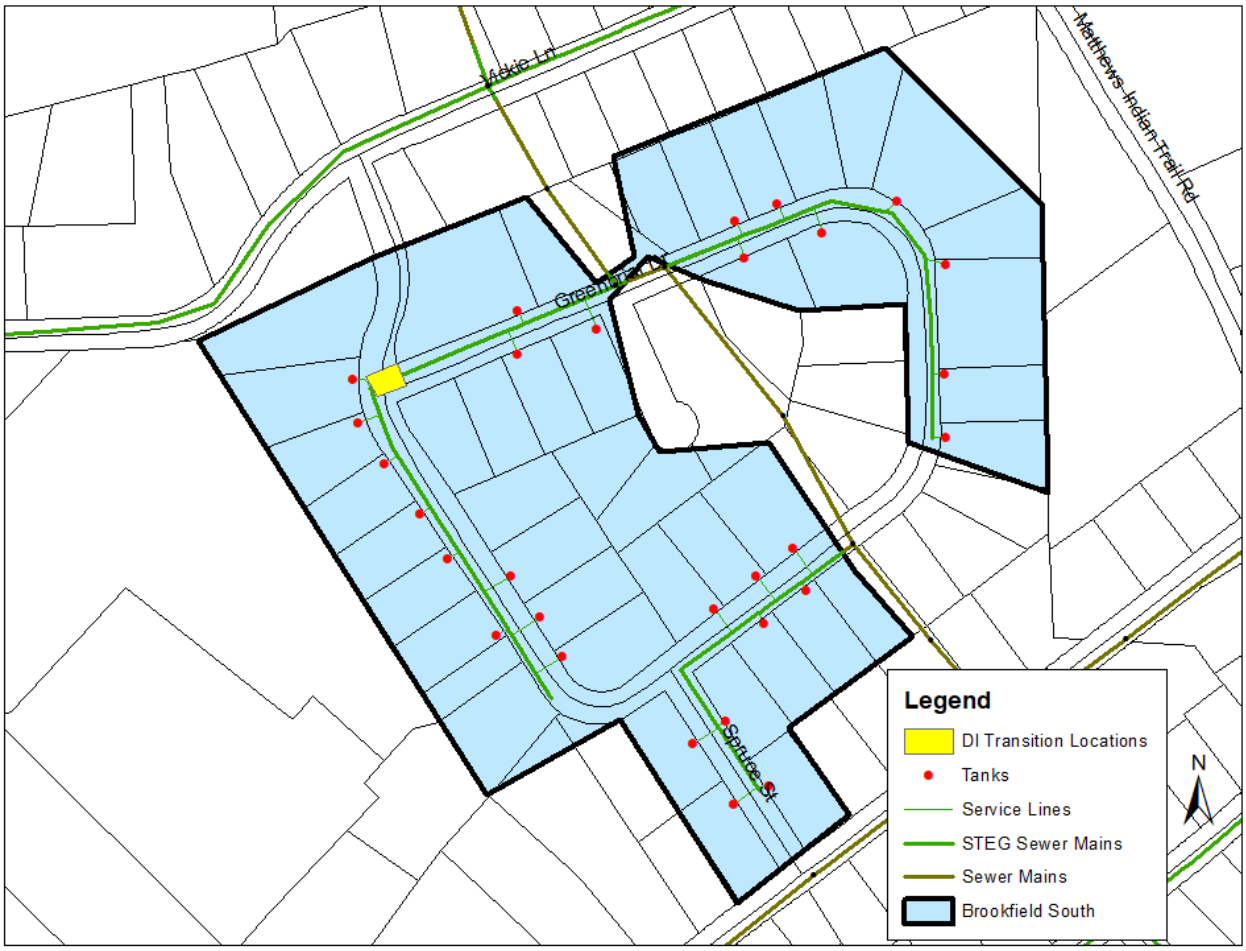
Stallings Park South	
Total Existing LF of Gravity Sewer	1,890
Total Existing Services/Septic Tanks	29
Total Existing Material Transitions/ DI Road Crossings	0
Total Existing Services Upstream of Material Change	0



Prioritization Level
2 of 26

Brookfield South: Streets included – Greenbriar Drive and Spruce Street

Brookfield South	
Total Existing LF of Gravity Sewer	2,340
Total Existing Services/Septic Tanks	29
Total Existing Material Transitions/ DI Road Crossings	1
Total Existing Services Upstream of Material Change	9



Prioritization Level
3 of 26

Union County Government
Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-395 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

415 WIC Breastfeeding Peer Counseling Program - Budget Amendment #9

INFORMATION CONTACT:

Stephanie Starr, Human Services Agency, Director Community Support and Outreach, 704-296-4302

ACTION REQUESTED:

Recognize, receive, and appropriate $16,425 of additional Agreement Addendum funding for WIC Client Services, in the Community Support & Outreach Division's operating budget. (Budget Amendment #9).

BACKGROUND:

Exclusive breastfeeding is the normative standard for infant and child nutrition. It is universally endorsed by the world's health and scientific community as the standard way to feed infants and children. Breastfeeding provides immediate and lifelong nutrition and health benefits for both mother and child, as well as larger economic, environmental, and social benefits to families and communities.

The Women's and Children's Health Section of the US Department of Health and Human Services (USDHHS) has the goal to increase and sustain the portion of infants who are breastfed exclusively through age 6 months to 42.4% and who are breastfed at 1 year to 54.1%. Breastfeeding promotion and support are required components of the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). The North Carolina WIC Program strives to increase the incidence and duration of breastfeeding among women enrolled in the Program. One of the most effective methods to support breastfeeding is the implementation and maintenance of the Breastfeeding Peer Counselors (BFPC) Program.

North Carolina receives special funding from the United States Department of Agriculture (USDA) to build and sustain BFPC Programs in the local health departments. This year, our WIC BFPC Program was allocated $44,025 in funding from the Women's and Children's Health Section Nutrition Services Branch of the North Carolina Division of Public Health, an increase of $16,425 from last year.

FINANCIAL IMPACT:

$16,425 was awarded at 100% through NC DHHS, with no required local match.

BUDGET AMENDMENT

BUDGET	General Fund	REQUESTED BY	Stephanie Starr
FISCAL YEAR	FY 2022	DATE	November 15, 2021

INCREASE

Description		DECREASE Description		
Fed Grant	16,245			
Personnel Expenses	16,245			

Explanation: To appropriate additional funding in the WIC Program Agreement Addendum. The funding is to support the Breastfeeding Peer Counselor program.

DATE 11/15/2021

APPROVED BY

Bd of Comm/County Manager
Lynn West/Clerk to the Board

FOR POSTING PURPOSES ONLY

DEBIT Code	Account	Amount	CREDIT Code	Account	
10130531-5121-11463	Salaries & Wages	13,106	10130531-4320-11463	Fed Grant-BF Peer Coun.	16,245
10130531-5131-11463	FICA Contributions	1,003			
10130531-5134-11463	401-K Supp Ret Plan	655			
10130531-5136-11463	Ret Contrib.	1,481			
	Total	16,245		Total	16,245

Prepared By LG
Posted By
Date

Number 9

Union County, NC

Staff Report

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-397 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Amendment to the Union County Pay and Classification Plan

INFORMATION CONTACT:

Julie Broome, Human Resources, Human Resources Director, (704) 283-3869

ACTION REQUESTED:

Approve revision of the Union County Pay Plan to Include new job classification titles and pay grades.

(A) Add the following classifications and associated pay grades
   a. Division Manager, Nursing - pay grade 330
   b. Nursing Program Manager - pay grade 327
   c. Clinical Assistant - pay grade 113
   d. Clinical Assistant PT - pay grade 113

(B) Remove the following classifications and associated pay grades
   a. Nursing Manager - pay grade 330

BACKGROUND:

Updates to the Union County Pay Plan are necessary to add, update, and remove job classification titles to align with current and future organizational needs.

FINANCIAL IMPACT:

No additional funding required. Sufficient funding is included in the FY22 budget.

Union County Government
Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-381 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Surplus Vehicle Sale

INFORMATION CONTACT:

Cheryl Wright, Procurement, Director of Procurement & Contract Management, 704-283-3563

ACTION REQUESTED:

Adopt Resolution Authorizing Surplus Property Sale by Internet Auction which:
1. Declares the property itemized on Attachment A as “Surplus” to the needs of Union County.
2. Authorizes sale at electronic auction of the surplus property described in Attachment A as per the terms and conditions as specified in the online auction service provider contract.
3. Authorizes the Procurement Director or her designee to execute any and all documents necessary to transfer title to said property on behalf of Union County.

BACKGROUND:

North Carolina General Statutes allow the disposition of personal property by local governments through a variety of means including private negotiations and sale; advertisement for sealed bids; negotiated offer, advertisement, and upset bid; public auction; or exchange. In 2001, the legislature amended the Statues to provide for disposition of property through electronic auction.

The sale will begin November 22, 2021, at 9:00 AM and end December 7, 2021, with incremental closings as indicated on Attachment A.
The vehicles are to be picked up at 610 Patton Avenue, Monroe, NC with the following terms of sale:
1. Sale to the highest bidder with all sales final.
2. All items sold “as is” with no warranty, expressed or implied, which extends beyond the description of the item.
3. Purchasers must remove vehicles(s) within ten (10) business days from the time and date of issuance of the Buyer’s Certificate.
4. Payment must be made online though the online auction website. Payment in full is due not later than five (5) business days from the time and date of the Buyers Certificate. Payment will not be accepted onsite.

FINANCIAL IMPACT:

Estimated revenue is $115,000. The revenue will be returned to the fund from which the asset came.

Tag Number	Description	Serial/Parcel	Milage	Auction Start	Auciton End
02-12	2012 DODGE CHARGER	2C3CDXAT3CH201477	129379	11/22/21 9:00 AM	12/7/21 9:00 AM
26-11	2011 FORD CROWN VICTORIA	2FABP7BV6BX135337	131314	11/22/21 9:00 AM	12/7/21 9:10 AM
29-11	2011 FORD CROWN VICTORIA	2FABP7BV6BX135340	142591	11/22/21 9:00 AM	12/7/21 9:20 AM
11-12	2012 DODGE CHARGER	2C3CDXAT7CH201482	127083	11/22/21 9:00 AM	12/7/21 9:30 AM
12-12	2012 DODGE CHARGER	2C3CDXAT9CH201483	121961	11/22/21 9:00 AM	12/7/21 9:40 AM
23-12	2012 CHEVROLET CAPRICE	6G1MK5U29CL646298	138264	11/22/21 9:00 AM	12/7/21 9:50 AM
21-12	2012 CHEVROLET CAPRICE	6G1MK5U26CL640460	156969	11/22/21 9:00 AM	12/7/21 10:00 AM
24-12	2012 CHEVROLET CAPRICE	6G1MK5U20CL640499	137777	11/22/21 9:00 AM	12/7/21 10:10 AM
15-13	2013 DODGE CHARGER	2C3CDXAT8DH627702	75229	11/22/21 9:00 AM	12/7/21 10:20 AM
17-13	2013 DODGE CHARGER	2C3CDXAT3DH627705	120944	11/22/21 9:00 AM	12/7/21 10:30 AM
14-13	2013 DODGE CHARGER	2C3CDXAT1DH627704	132383	11/22/21 9:00 AM	12/7/21 10:40 AM
39-13	2013 HYUNDAI SONATA SD	5NPEC4AC0DH585555	89694	11/22/21 9:00 AM	12/7/21 10:50 AM
71-14	2014 DODGE CHARGER	2C3CDXAT1EH350716	120913	11/22/21 9:00 AM	12/7/21 11:00 AM
22-12	2012 CHEVROLET CAPRICE	6G1MK5U22CL644487	102997	11/22/21 9:00 AM	12/7/21 11:10 AM
12-13	2013 DODGE CHARGER	2C3CDXAT9DH627708	111819	11/22/21 9:00 AM	12/7/21 11:20 AM
13-11	2011 FORD F150 EXT CAB	1FTFX1EF8BFB04289	176244	11/22/21 9:00 AM	12/7/21 11:30 AM
13-13	2013 DODGE CHARGER	2C3CDXAT0DH627712	122701	11/22/21 9:00 AM	12/7/21 11:40 AM
14-10	2010 CROWN VICTORIA	2FABP7BVXAX126266	126595	11/22/21 9:00 AM	12/7/21 11:50 AM
18-10	2010 CROWN VICTORIA	2FABP7BV5AX126269	93933	11/22/21 9:00 AM	12/7/21 12:00 PM
21-13	2013 DODGE CHARGER	2C3CDXAT9DH627711	114413	11/22/21 9:00 AM	12/7/21 12:10 PM
21-14	2014 DODGE CHARGER	2C3CDXAT7EH145854	124795	11/22/21 9:00 AM	12/7/21 12:20 PM
25-13	2013 DODGE CHARGER	2C3CDXAT0DH661407	100040	11/22/21 9:00 AM	12/7/21 12:30 PM
27-11	2011 FORD CROWN VICTORIA	2FABP7BV8BX135338	145411	11/22/21 9:00 AM	12/7/21 12:40 PM
27-14	2014 DODGE CHARGER	2C3CDXAT1EH145865	113369	11/22/21 9:00 AM	12/7/21 12:50 PM
42-16	2016 DODGE CHARGER	2C3CDXAT1GH116109	127863	11/22/21 9:00 AM	12/7/21 1:00 PM
77-14	2014 DODGE CHARGER	2C3CDXAT6EH350713	132698	11/22/21 9:00 AM	12/7/21 1:10 PM

RESOLUTION AUTHORIZING SURPLUS PROPERTY SALE BY INTERNET AUCTION

WHEREAS, G.S. 160-270(c) allows Union County to sell personal property at electronic auction upon adoption of a resolution authorizing the Procurement Manager or her designee to dispose of the property at electronic auction; and

WHEREAS, the Procurement Manager has developed a list of these items as shown on Attachment "A" for review by the Board of Commissioners for disposal by electronic auction;

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Union County Board of Commissioners that the items of personal property included on Attachment "A" and incorporated herein by reference, be declared surplus and that the Procurement Manager or her designee be authorized to sell at electronic auction, beginning November 22, 2021 at 9:00 a.m. and ending December 7, 2021, with incremental closings as indicated on Attachment "A", the surplus property described on Attachment "A", as per the terms and conditions as specified in the County's existing contract with the on-line auction Service Provider to the highest bidders.

BE IT FURTHER RESOLVED that the Procurement Director or her designee is authorized to execute any and all documents necessary to transfer said property on behalf of Union County.

BE IT FURTHER RESOLVED that the terms of sale applicable at the aforementioned auction of the items listed on Attachment "A" shall be as follows:

1. Sale to the highest bidder with all sales final.

2. All items sold "as is" and "where is" with no warranty, expressed or implied, which extends beyond the description of the items.

3. Purchasers must remove vehicle(s) within ten business days from the time and date of issuance of the Buyer's Certificate. The vehicles are to be picked up at 610 Patton Avenue, Monroe, North Carolina. Purchasers shall bear sole risk of loss for all items remaining on the premises ten (10) calendars days from the time and date of issuance of the Buyer's Certificate.

4. Payment must be made online through the on-line auction Website. Payment in full is due not later than five (5) calendar days from the time and date of the Buyer's Certificate. Payment cannot be accepted onsite.

BE IT FURTHER RESOLVED that payment of advertising and miscellaneous expenses be paid from the proceeds of the sale.

Adopted this 15th day of November, 2021

ATTEST:

_____ _____

Lynn G. West, Clerk to the Board Richard B. Helms, Sr., Chairman

Union County Government
Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-328 **Agenda Date:** 12/6/2021 **Agenda #:**

TITLE:

Fixed Price Term Agreements Policy

INFORMATION CONTACT:

Jason Kay, Office of Legal Counsel, General Counsel, 704-283-3784

ACTION REQUESTED:

Approve the Fixed Price Term Agreements Policy

BACKGROUND:

As part of Union County's day-to-day business functions, the County regularly procures fixed price service and bulk purchase agreements ("Fixed Price Term Agreements") to utilize the County's bargaining position to obtain lower-priced goods and services. These agreements contain a set price or rate list for the products or services (usually on an as-needed basis) which cannot be altered during the term of the agreement except by limited price escalation such as annual CPI increases. Fixed Price Term Agreements are often the kinds of agreements which are utilized by multiple departments, such as office supplies, printing services, landscaping services, County uniforms, and other routine service arrangements or bulk purchases. Leveraging the ability of multiple County departments to make purchases under a single Fixed Price Term Agreement allows the County to solicit better quality goods and services for better rates, ensuring that the County is an efficient steward of public funds.

In order to allow the County to more efficiently purchase goods and services under these Fixed Price Term Agreements, the Fixed Price Term Agreements Policy would require that each master Fixed Price Term Agreement be presented to the Board of County Commissioners for initial authorization prior to execution by the County Manager. Following initial approval, purchases under these agreements would not return to the BOCC for additional authorizations during the term of the agreements set out in and authorized by the Procurement solicitation for the goods or services, provided that the amounts spent remain within the authorized expenditures provided in the annual budget.

The Contracting and Procurement Department will provide the BOCC with quarterly reports detailing the current Fixed Price Term Agreements and the amounts expended under each. All spending under Fixed Price Term Agreements is required to stay within the amounts appropriated by the BOCC in the annual budget for the current fiscal year. The Policy excludes certain types of agreements, such as agreements for capital construction or agreements originated by an enterprise fund department. Any agreement in one of the listed excluded categories would be presented to the

BOCC for authorization. The excluded categories of agreements are listed in the Policy.

FINANCIAL IMPACT:

All expenditures under the Fixed Price Term Agreements Policy will remain within the amounts appropriated by the BOCC in the annual budget in a given fiscal year.

Fixed Price Term Agreements Policy

Applicability

This Policy applies only to fixed price service and bulk purchase agreements ("Fixed Price Term Agreements") which have been properly procured through the applicable procurement method, and which contain a set price or rate list for the term of the agreement which cannot be altered except by limited price escalation such as annual CPI increases. This Policy does not apply to any professional services performed by architects, engineers, surveyors, or construction managers at risk, nor to any consulting agreements, capital project agreements, construction agreements, agreements involving the expenditure of federal funds, or to agreements originating in an enterprise fund department or expending enterprise funds. Some examples of agreements to which this Policy applies include, but are not limited to, office supplies, maintenance services, temporary staffing services, printing services, County uniforms, and other routine services or bulk purchases which have not been specifically excluded from this Policy.

Policy

Fixed Price Term Agreements which have been properly procured under the County's Procurement Policy and which have received the requisite internal approvals through the contract review and execution process will be submitted to the Board of County Commissioners ("BOCC") for approval prior to signature of the initial agreement by the County Manager. Following initial BOCC approval, the County Manager shall be authorized to execute amendments and authorize spending under each Fixed Price Term Agreement during the initial term of the agreement and any renewal terms as authorized by the Procurement solicitation. Once a Fixed Price Term Agreement has received BOCC approval, the agreement shall not be subject to the County Manager's then-current contracting authority limits. All spending under Fixed Price Term Agreements shall remain restricted to the amounts appropriated by the BOCC in in the annual budget in a given fiscal year.

The Procurement Division shall maintain a list of all currently effective Fixed Price Term Agreements, and shall report to the BOCC on a quarterly basis the total amounts spent under such agreements.

Union County, NC

Staff Report

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-392 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Minutes for Approval

INFORMATION CONTACT:

Lynn G. West, Clerk to the Board of Commissioners, 704-283-3853

ACTION REQUESTED:

Approve Minutes for November 1, 2021 Regular Meeting

BACKGROUND:

Draft minutes have been provided to the Board of Commissioners for review and approval.

FINANCIAL IMPACT:

N/A

Union County, NC

Staff Report

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-331 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Wastewater Treatment Capacity - Monthly Update

INFORMATION CONTACT:

John Shutak, Engineering Division Director, 704-283-3651

ACTION REQUESTED:

Receive status update on wastewater treatment capacity for the Twelve Mile Creek, Crooked Creek, Olde Sycamore, Tallwood, and Grassy Branch facilities.

BACKGROUND:

Union County Water is closely monitoring the wastewater treatment capacities at our Water Reclamation Facilities. Permitting Capacity is evaluated using the Actual Plant Flows plus the Permitted/Obligated Flows (unconnected). Union County Water was asked to provide regular updates. Below information is up to date through October 2021.

Twelve Mile Creek

- Permitted Capacity (MGD) = 7.5
- Actual Average Daily Flow (MGD) = 5.855
- Actual + Permitted Obligated Flows (MGD) = 7.348
- Percent of Permitted Flow Used = 98.0%
- Actual Rainfall (in) = 1.1

Crooked Creek

- Permitted Capacity (MGD) = 1.9
- Actual Average Daily Flow (MGD) = 0.952
- Actual + Permitted Obligated Flows (MGD) = 1.512
- Percent of Permitted Flow Used = 79.6%
- Actual Rainfall (in) = 1.1

Olde Sycamore

- Permitted Capacity (MGD) = 0.15
- Actual Average Daily Flow (MGD) = 0.037
- Actual + Permitted Obligated Flows (MGD) = 0.037
- Percent of Permitted Flow Used = 24.7%
- Actual Rainfall (in) = 1.1

Tallwood

- Permitted Capacity (MGD) = 0.05
- Actual Average Daily Flow (MGD) = 0.029
- Actual + Permitted Obligated Flows (MGD) = 0.029
- Percent of Permitted Flow Used = 58.0%
- Actual Rainfall (in) = 2.0

Grassy Branch

- Permitted Capacity (MGD) = 0.05
- Actual Average Daily Flow (MGD) = 0.049
- Actual + Permitted Obligated Flows (MGD) = 0.050
- Percent of Permitted Flow Used = 100.2%
- Actual Rainfall (in) = 1.4

In addition to the wastewater treatment capacities, the following summarizes flow volumes associated with development projects that are in the planning and review process within the 12-mile Creek and Crooked Creek WRF service areas. The information shown is up to date through October 2021.

Twelve Mile Creek

- Approved - Permit Submittal Pending
  - Number of Projects = 7
  - Requested Flow (MGD) = 0.178
- Engineering Plan Review
  - Number of Projects = 18
  - Requested Flow (MGD) = 0.514
- Sketch Plan Review
  - Number of Projects = 24
  - Requested Flow (MGD) = 0.742
- Totals
  - Number of Projects = 49
  - Requested Flow (MGD) = 1.434

Crooked Creek

- Approved - Permit Submittal Pending
  - Number of Projects = 1
  - Requested Flow (MGD) = 0.051
- Engineering Plan Review
  - Number of Projects = 10
  - Requested Flow (MGD) = 0.292
- Sketch Plan Review
  - Number of Projects = 10
  - Requested Flow (MGD) = 0.262

- Totals
  - Number of Projects = 21
  - Requested Flow (MGD) = 0.605

WRF	Permitted Capacity (MGD)	Actual Average Daily Flow* (MGD)	Actual + Permitted Obligated Flows (MGD)	Percent of Permitted Flow Used	Actual Rainfall (in)
Twelve Mile Creek	7.5	5.855	7.348	98.0%	1.1
Crooked Creek	1.9	0.952	1.512	79.6%	1.1
Olde Sycamore	0.15	0.037	0.037	24.7%	1.1
Tallwood	0.05	0.029	0.029	58.0%	2.0
Grassy Branch	0.05	0.049	0.050	100.2%	1.4

12-Mile Creek WRF		
Backlog Type	**Number of Projects**	**Requested Flow (MGD)**
Approved – Permit Submittal Pending	7	0.178
Engineering Plan Review	18	0.514
Sketch Plan Review	24	0.742
Totals	**49**	**1.434**

Crooked Creek WRF		
Backlog Type	**Number of Projects**	**Requested Flow (MGD)**
Approved – Permit Submittal Pending	1	0.051
Engineering Plan Review	10	0.292
Sketch Plan Review	10	0.262
Totals	**21**	**0.605**

FINANCIAL IMPACT:

None

Union County, NC

Staff Report

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-378 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Tax Collector's Departmental Report for September 2021

INFORMATION CONTACT:

Mitzie Baucom, Tax Administration-Revenue, Director of Revenue, 704-283-3591

ACTION REQUESTED:

N/A - Information only

BACKGROUND:

This report reflects the totals of all tax transactions within the Tax Collector's office for the month of September 2021 as required by NCGS 105-350(7)

FINANCIAL IMPACT:

N/A

SEPTEMBER 2021
PERCENTAGE FOR REGULAR TAX

SEPTEMBER 30, 2021 REGULAR TAX	**2021**	**2020**	**2019**	**2018**
BEGINNING CHARGE	204,409,963.53	191,726,436.40	186,242,952.11	180,609,305.70
TAX CHARGE				
PUBLIC UTILITIES CHARGE				
DISCOVERIES	39,189.15			
NON DISCOVERIES	46,223.17	11,478.81	12,139.57	12,150.69
RELEASES	(96,740.39)	(7,158.92)	(3,843.09)	(1,468.44)
TOTAL CHARGE	**204,398,635.46**	**191,730,756.29**	**186,251,248.59**	**180,619,987.95**
BEGINNING COLLECTIONS	7,066,059.84	191,429,759.09	186,029,997.65	180,500,964.46
COLLECTIONS	17,968,348.25	28,013.91	17,536.36	13,108.50
TOTAL COLLECTIONS	**25,034,408.09**	**191,457,773.00**	**186,047,534.01**	**180,514,072.96**
BALANCE OUTSTANDING	179,364,227.37	272,983.29	203,714.58	105,914.99
PERCENTAGE OF REGULAR	**12.25%**	**99.86%**	**99.89%**	**99.94%**
OVERALL CHARGED	**204,398,635.46**	**191,730,756.29**	**186,251,248.59**	**180,619,987.95**
OVERALL COLLECTED	**25,034,408.09**	**191,457,773.00**	**186,047,534.01**	**180,514,072.96**
OVERALL PERCENTAGE	**12.25%**	**99.86%**	**99.89%**	**99.94%**

SEPTEMBER 2021
PERCENTAGE FOR REGULAR TAX

SEPTEMBER 30, 2021 REGULAR TAX	2017	2016	2015	2014
BEGINNING CHARGE	186,658,306.84	176,861,177.53	174,193,867.65	179,337,088.21
TAX CHARGE				
PUBLIC UTILITIES CHARGE				
DISCOVERIES				
NON DISCOVERIES	80.21			
RELEASES	(990.17)	(923.71)	(156.38)	(220.00)
TOTAL CHARGE	**186,657,396.88**	**176,860,253.82**	**174,193,711.27**	**179,336,868.21**
BEGINNING COLLECTIONS	186,568,908.31	176,797,623.78	174,155,034.14	179,273,312.62
COLLECTIONS	907.17	1,639.62	1,134.61	1,964.38
TOTAL COLLECTIONS	**186,569,815.48**	**176,799,263.40**	**174,156,168.75**	**179,275,277.00**
BALANCE OUTSTANDING	87,581.40	60,990.42	37,542.52	61,591.21
PERCENTAGE OF REGULAR	**99.95%**	**99.97%**	**99.98%**	**99.97%**
OVERALL CHARGED	**186,657,396.88**	**176,860,253.82**	**174,193,711.27**	**179,336,868.21**
OVERALL COLLECTED	**186,569,815.48**	**176,799,263.40**	**174,156,168.75**	**179,275,277.00**
OVERALL PERCENTAGE	**99.95%**	**99.97%**	**99.98%**	**99.97%**

SEPTEMBER 2021
PERCENTAGE FOR REGULAR TAX

SEPTEMBER 30, 2021 REGULAR TAX	**2013**	**2012**
BEGINNING CHARGE	152,735,434.53	150,368,249.59
TAX CHARGE		
PUBLIC UTILITIES CHARGE		
DISCOVERIES		
NON DISCOVERIES		
RELEASES	(192.12)	(192.12)
TOTAL CHARGE	**152,735,242.41**	**150,368,057.47**
BEGINNING COLLECTIONS	152,674,839.26	150,307,020.63
COLLECTIONS	1,530.70	1,990.25
TOTAL COLLECTIONS	**152,676,369.96**	**150,309,010.88**
BALANCE OUTSTANDING	58,872.45	59,046.59
PERCENTAGE OF REGULAR	**99.96%**	**99.96%**
OVERALL CHARGED	**152,735,242.41**	**150,368,057.47**
OVERALL COLLECTED	**152,676,369.96**	**150,309,010.88**
OVERALL PERCENTAGE	**99.96%**	**99.96%**

UNION COUNTY
north carolina

Memorandum

To: Board of County Commissioners
Mark Watson, County Manager
Lynn West, Clerk to the Board

From: Vann Harrell
Tax Administrator

Date: October 22, 2021

Re: Departmental Monthly Report

The Tax Collector's monthly/year to date collections report for the month ending September 30, 2021 is attached for your information and review.

Should you desire additional information, I will provide that at your request.

Attachment

VH/JM

Tax Administration | Revenue Division
500 N. Main St., Suite 119
Monroe, NC 28112

T 704.283.3848

Union County, NC

Staff Report

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-380 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Union EMS Quarterly Report September 2021

INFORMATION CONTACT:

Mark Watson, County Manager, 704-292-2625

ACTION REQUESTED:

None - Information Only.

BACKGROUND:

The Union EMS Quarterly Report includes the unaudited financial statements and the detailed schedules on receivables and liabilities for the period ending September 30, 2021 in accordance with the Union EMS agreement. The statements and schedules are prepared on a modified accrual basis.

FINANCIAL IMPACT:

None.

Union Emergency Medical Services

October 25, 2021

Mr. Mark Watson, County Manager
Union County
500 North Main St., Suite 901
Monroe, N.C. 28112

Mr. Watson,

In accordance with the Union EMS agreement, enclosed are the unaudited financial statements and the detailed schedules on receivables and liabilities for the period ending September 30, 2021. Please keep in mind when reviewing these statements and schedules that they are prepared on a modified accrual basis. Therefore, there will be timing differences from this basis as compared to a cash basis.

If you have any questions, please contact me at tina.hampton@atriumhealth.org.

Sincerely,

Tina Hampton
Manager, Financial Services

cc: Michael Lutes, President Southeast Division/Senior Vice President, CHS
Jeffrey Yates, Executive Director, Union County
Jeff Griffin, AVP Finance, CHS Southern Division
Bryan Edwards, Director, EMS

Union Emergency Medical Services

QUARTERLY UNAUDITED FINANCIAL REPORTS

AS OF SEPTEMBER 30, 2021

PAGE

1. UNAUDITED STATEMENTS OF ASSETS AND LIABILITIES
2. UNAUDITED COMPARATIVE STATEMENTS OF OPERATIONS
3. UNAUDITED STATEMENTS OF SOURCES AND USES OF CASH
4. ACCOUNT RECEIVABLE AND ACCOUNTS PAYABLE ANALYSIS
5. SCHEDULE OF EXCESS FUND BALANCE/CASH

UNION EMERGENCY MEDICAL SERVICES
Statements of Assets and Liabilities
September 30, 2021

ASSETS

CURRENT ASSETS	September 2021	June 2021	$ CHANGE
Cash and cash equivalents	$5,893,823	$4,059,217	$1,834,606
Patient accounts receivable - net	1,183,510	1,116,519	66,991
Other accounts receivable	14,458	8,069	6,389
Prepaid expenses	239,108	56,699	182,409
TOTAL CURRENT ASSETS	7,330,899	5,240,504	2,090,395
TOTAL ASSETS	$7,330,899	$5,240,504	$2,090,395

LIABILITIES AND FUND BALANCE

CURRENT LIABILITIES			
Accounts payable	$1,000,681	$962,619	$38,062
Salaries and Wages Payable	542,694	488,050	54,644
Curr Port LTD - Notes Payable	148,628	148,628	-
Other liabilities and accruals	15,937	11,075	4,862
Deferred revenue	1,880,079	-	1,880,079
TOTAL CURRENT LIABILITIES	3,588,019	1,610,372	1,977,647
OTHER LIABILITIES			
Long Term Debt - Notes Payable	445,885	520,199	(74,314)
TOTAL OTHER LIABILITIES	445,885	520,199	(74,314)
FUND BALANCE			
Unrestricted	2,796,995	2,609,933	187,062
Restricted	500,000	500,000	-
TOTAL FUND BALANCE	3,296,995	3,109,933	187,062
TOTAL LIABILITIES AND FUND BALANCE	$7,330,899	$5,240,504	$2,090,395

These statements are prepared on a modified accrual basis and not prepared in accordance with GAAP.

UNION EMERGENCY MEDICAL SERVICES
COMPARATIVE STATEMENTS OF OPERATIONS
For the Month and Year to Date Ended September 30, 2021

CURRENT MONTH				YEAR-TO-DATE		
ACTUAL	BUDGET	% CHANGE		ACTUAL	BUDGET	% CHANGE
			REVENUE			
$345,400	$309,828	11%	Basic Life Support Revenue	$1,119,725	$929,484	20%
492,766	443,789	11%	Advanced Life Support Revenue	1,531,080	1,331,367	15%
2,000	8,686	-77%	Other Patient Revenue	10,799	26,058	-59%
154,201	145,005	6%	Mileage Revenue	496,886	435,015	14%
994,367	907,308	10%	TOTAL PATIENT REVENUE	3,158,490	2,721,924	16%
526,984	492,894	7%	TOTAL REVENUE DEDUCTIONS	1,686,735	1,478,682	14%
467,383	414,414	13%	NET PATIENT REVENUE	1,471,755	1,243,242	18%
626,693	799,953	-22%	County Funding Revenue	1,880,079	2,399,859	-22%
10,275	2,500	311%	OTHER OPERATING REVENUE	12,600	7,500	68%
1,104,351	1,216,867	-9%	TOTAL OPERATING REVENUE	3,364,434	3,650,601	-8%
			OPERATING EXPENSES			
644,490	655,195	-2%	Salaries & Wages	1,930,383	1,965,585	-2%
179,582	204,372	-12%	Benefits	553,139	613,116	-10%
824,072	859,567	-4%	TOTAL PERSONNEL	2,483,522	2,578,701	-4%
51,153	49,480	3%	Supplies	185,180	148,440	25%
37,974	31,190	22%	Professional Fees	101,301	93,570	8%
23,848	25,526	-7%	Purchased Services	55,531	76,578	-27%
19,749	20,674	-4%	Insurance	59,247	62,022	-4%
37,608	27,403	37%	Utilities	101,295	82,209	23%
70,711	63,136	12%	Other Operating Expense	191,429	189,408	1%
1,065,115	1,076,976	-1%	TOTAL OPERATING EXPENSES	3,177,505	3,230,928	-2%
39,236	$139,891	100%	RESULTS OF OPERATIONS	186,929	$419,673	100%
			NON-OPERATING REVENUE (EXPENSE)			
1,060	-	100%	Interest Income	2,064	-	100%
-	-	0%	Interest Expense	(1,931)	-	-100%
-	-	0%	Proceeds from Sale of Fixed Assets	-	-	0%
-	(87,042)	-100%	Vehicles	-	(261,126)	-100%
-	(52,849)	-100%	Equipment	-	(158,547)	-100%
-	(139,891)	-100%	Non-Operating Expense - Capital Total	-	(419,673)	-100%
1,060	(139,891)	-1%	TOTAL NON-OPERATING REVENUE (EXPENSE)	133	(419,673)	0.3%
$40,296	$0	100%	TOTAL MARGIN	$187,062	$0	100%
			STATISTICS			
1,449	1,317	10%	TRIPS	4,609	3,950	17%

**The budget presented on these statements is the amount requested by Union EMS. The budget does not match the amount currently approved/funded by Union County.

These statements are prepared on a modified accrual basis and not prepared in accordance with GAAP.

UNION EMERGENCY MEDICAL SERVICES

Statements of Sources and Uses of Cash
For the Year to Date Ended September 30, 2021

	Y-T-D 2022
CASH FLOWS FROM OPERATING ACTIVITIES	
Cash Received from Patients	2,032,229
Cash Received from Union County	3,760,158
Cash Paid for Goods and Services	(2,126,871)
Cash Paid to Employees for Services	(1,756,865)
.	
Net Cash Provided by Operating Activities	1,908,651
CASH FLOWS FROM CAPITAL AND RELATING FINANCING ACTIVITIES	
Purchases of Property and Equipment	-
Proceeds/(Payments) from Notes Payable	(74,314)
Proceeds for Sale of Fixed Assets	-
Net Cash Used in Capital and Related Financing Activities	(74,314)
CASH FLOWS FROM INVESTING ACTIVITIES	
Interest Income	2,200
Interest Expense	(1,931)
Net Cash Provided by Investing Activities	269
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	1,834,606
Cash and Equivalents at Beginning of Year	4,059,217
CASH AND CASH EQUIVALENTS -September 30, 2021	5,893,823
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES	
Operating Income	$186,929
Adjustments to Reconcile Operating Income to Cash Provided by Operating Activities:	
(Increase) Decrease in Patient Account Receivable, Net	(66,991)
Change in Other Operating Assets and Liabilities	1,788,713
Net Cash Provided by Operating Activities	1,908,651

These statements are prepared on a modified accrual basis and not prepared in accordance with GAAP.

Union Emergency Medical Services

SEPTEMBER 2021

Quarterly Report on Receivables

	Aging of Receivables					
	0-30	31-60	61-90	91-120	over 120	Total
Gross Patient A/R	$1,646,805	$557,972	$328,214	$116,655	$385,227	$3,034,873
Other A/R	$14,458	$0	$0	$0	$0	$14,458
Total Receivables	$1,661,263	$557,972	$328,214	$116,655	$385,227	$3,049,331
Allowance						($1,851,363)
Net Receivables						$1,197,968

Collection Rates		
	Total Billed	Total adjusted Collection Rate
Quarter Ending September 2021	$3,158,490	45%
Quarter Ending December 2021		
Quarter Ending March 2022		
Quarter Ending June 2022		
Fiscal Year to Date	**$3,158,490**	**45%**

Quarterly Report on Payables

	Aging of Payables					
	0-30	31-60	61-90	91-120	over 120	Total
Vendor Payables	$1,000,681	$0	$0	$0	$0	$1,000,681
Accrued Payables	$542,694	$0	$0	$0	$0	$542,694
Current Portion of Notes Payable	$148,628	$0	$0	$0	$0	$148,628
Other Liabilities	$15,937	$0	$0	$0	$0	$15,937
Total Liabilities	$1,707,940	$0	$0	$0	$0	$1,707,940

UNION EMS

EXCESS FUND BALANCE/CASH

For the Month and Year to Date Ended September 30, 2021

Cash & Cash Equivalents	$5,893,823
Less:	
Accounts Payable	1,000,681
Salaries & Wages Payable	542,694
Current Portion of Notes Payable	148,628
Other Liabilities & Accruals	15,937
Deferred Revenue	1,880,079
TOTAL LIABILITIES	3,588,019
Net Cash from Operations	$2,305,804
Less: Restricted Fund Balance	500,000
EXCESS CASH AVAILABLE BEFORE CAPITAL:	$1,805,804

Capital Expenditures

Remaining Approved Capital (2020/21)to be spent		
Replace Ambulance (4)	$	1,257,992
Suport Vehicle	$	40,000
MARVLIS Client	$	25,000
Rescue Task Force Bags	$	6,000
Requested Capital (2021/2022)		
Ambulance - Remounts(4)	$	892,000
Supervisor Vehicle(2)	$	112,500
Support Vehicle(1)	$	40,000
Ruggedized Laptops(Toughbook or comparable) w/ 5 yr warranty(10)	$	35,000
Powerload Cots(8)	$	333,184
ZOLL Payments - Cardiac Monitors(28)	$	83,000
Educational Simulation/Equipment(1)	$	100,000
Remaining Approved/Requested Capital	$	2,924,676
EXCESS CASH AVAILABLE FOR USE:	$	(1,118,872)

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-185 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Advanced Metering Infrastructure (AMI) Program

INFORMATION CONTACT:

Aubrey Lofton, Union County Water, 704-296-4241

ACTION REQUESTED:

(i) Adopt Capital Project Ordinance #292; (ii) approve the purchase of water meters, AMI transmitters, base stations, and associated apparatus, supplies, and equipment through an agreement with Ferguson Enterprises, LLC, with apparatus, supplies, and equipment standardization and compatibility as the overriding consideration in this purchase, as set forth in N.C.G.S. § 143-129(e)(6); and (iii) authorize the County Manager to negotiate and execute an agreement with Ferguson Enterprises, LLC, in the amount of $13,657,018.17 substantially consistent with this agenda item.

BACKGROUND:

Union County Water (UCW) has evaluated current metering and billing operations for its water utility operations. UCW has used Automated Meter Reading (AMR) technology since 2004. This method requires significant staff time for manual (drive-by) meter reading. It also provides limited data for customers and for analytical research by the utility. With improving technology, more capable meter reading technology has become available. AMI is an integrated system of water meters, communication networks, and data management systems that enables two-way communication between water meters and utilities. AMI has many benefits with the most obvious being that AMI utilizes a fixed network to communicate with customer meters rather than utilizing the drive-by reading system of the AMR technology. AMI also has several other important business benefits as identified:

1) Customer Service
    - More robust customer portal
    - Detailed insight on consumption
    - Leak alert/monitoring and communication options
    - Simplified billing management
2) Operational Efficiency
    - Eliminates drive-by meter reading process
    - Provides easy access to critical information for field investigations and service requests
    - Allows staff to shift from reactive to proactive work and monitoring the distribution system in real time
3) Resource Conservation

- Leak monitoring/detection
- Real-time understanding of system and usage
- Detailed data on customer usage patterns
- Improved customer class rate development

4) Data Management
    - Real-time view of distribution system
    - Increase/improve data flow across system silos
    - Becoming a “Smart Water” utility
    - IBT management and insight

UCW conducted a feasibility study in 2018 to evaluate migrating from AMR to AMI and determine the best path forward. In 2019, an RFP was issued for the purchase of water meters with consideration for a product that would be compatible with the existing meter infrastructure that had significant useful life remaining as well as capable of migrating to AMI in the future. UCW selected the Sensus meter and reading technology. UCW is ready to migrate to AMI to realize these benefits and complete the replacement of aging infrastructure.

To ensure compatibility with existing UCW meters that have significant remaining useful life, UCW has selected Sensus for this sole source selection. Sensus is the only vendor who can provide the compatible meters and base stations. In addition, Sensus is the license holder of the radio frequency used for communication between the meters, the transmitter towers, and the AMI host servers. Ferguson Waterworks is the exclusive Authorized Distributor of Sensus products for the state of North Carolina. This contract includes the replacement of approximately 20,000 meters that are at the end of their useful life, 50,000 new AMI Transmitters, and 17 Base Stations. Subsequent contracts will also be presented at a later date for a new Customer Portal and Professional Services for Data Management and Integration. If this item is approved, the County Manager will also be executing the agreement with Sensus related to the licensing and maintenance of the related software which will be paid for through this contract with Ferguson.

FINANCIAL IMPACT:

Funding for the Contract Sum of $13,657,018.17 (with a total amount to be paid including software licensing and support over a 5-year period of $14,316,618.69) is available within the adopted Water and Rehabilitation and Replacement Program for the Advanced Meter Infrastructure Project, and the amounts for software licensing and support in future fiscal years will be requested to be appropriated in those future fiscal years.

UNION COUNTY, NC

ADVANCED METERING FEASIBILITY ANALYSIS

Evaluating meter technology contributions to operations, finance and customer service

Original: July 11, 2018
Revised: September 24, 2018
Revised: October 1, 2018
Final: October 12,2018



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Executive Summary

Union County Public Works (UCPW) initiated the Automated Meter Reading (AMR)/Advanced Metering Infrastructure (AMI) Feasibility Study in 2017 to evaluate current metering and billing operations for its water utility operations. Through this study, the County has developed a defined roadmap for metering and billing operations based on the need for improved customer service, greater water resource conservation management, expanded operational efficiencies, and improved utility system data. These operational enhancements through properly configured metering technology should serve UCPW reliably over the anticipated 15-20 years of useful life from the system.

Summary of Current Environment: UCPW collects meter reads on average every 30 days using a mobile data collector from technology commonly referred to as Automated Meter Reading (AMR) since 2004. UCPW is currently replacing failed Elster/AMCO C700 and Itron encoded receiver transmitters (ERTs) if either unit has failed to collect or transmit consumption reads to be received by the mobile data collector. Of the approximately 52,000 meters in the County system, more than 21,000 meters are greater than 10 years, over 10,000 of these meters are greater than 15 years, and over 6,000 meters within the group are beyond the 20 years considered maximum useful life. The failures experienced by the County are exponentially increasing due primarily to moisture intrusion into the electrical components of the register thereby placing a substantial challenge on both metering and billing staff to maintain read performance of the system.

In recent years, the County has allocated funds for the replacement of approximately 2,800 meters and ERTs in addition to the 1,300 new meter sets due to system growth each year. At the current rate of replacement, it will take more than six years to complete and require more than $4.7 million in additional funds allocated to replace meters and transmitters up to 3” in size and does not include internal labor costs associated with installation. The County has a range of Itron ERT models that span from the most recent 100W model to the original 50W ERT. Older meter transmitter versions are only compatible with AMR meter reading and contribute the most to high failure rates. While an estimated 23,000 Elster AMCO meters remain operational at just under 98% water flow measurement accuracy, the failure rates and contributing issues with moisture intrusion into the registers present an unpredictable and unreliable read environment for metering and billing operations. Both the Elster/AMCO legacy meters and the variations of Itron ERTs present UCPW with a decaying platform for its operations.

The current process of meter and ERT replacement has created a “continuance intention” for the County utility metering infrastructure that is defined with no practical ability to expand to newer metering technologies for the 15-20 years of useful life for meters and transmitters. Contributing to the challenges faced by UCPW with the existing metering environment is the end of support for the County’s Itron integrated metering software, MV-RS, in 2021 which will be replaced by Itron Field Collection System (FCS) software built for AMR and AMI applications. The current 100W ERTs currently being installed by UCPW will not fully communicate on OpenWay Riva, Itron’s newest AMI network platform and the new OpenWay Riva ERT (500W) will not communicate on ChoiceConnect, the legacy AMI platform from Itron.

UCPW possesses an operational culture of continual improvement through its infrastructure investments, technology utilization, and high-quality workforce, but is significantly constrained by the lack of data available from the existing AMR system to support operational efficiencies, water resource management and proactive customer service. The growth rate for utility customers is exceeding 3.4% per year and work order data trends present a continued significant increase in required tasks across both metering and billing operations. High customer growth rates have

defined a clear need for additional staffing, so it will be vitally important for the County to leverage technology in areas where automation works effectively to re-allocate resources to operations that cannot be automated.

The physical and organizational separation between key business processes within metering and billing contributes to systems utilization challenges, limited data governance and standardization, operational/workflow silos, minimal or absent KPI/operational performance measurements, and prioritization alignment of budgetary and capital plans. The operational separations within metering and billing may be most attributable to the lack of integrated systems serving in a coordinated manner both field and back-office staff resulting in manual-heavy work order management, limited water conservation program management capabilities, and virtually no data for water customer inquiries and historical consumption needs. A properly designed and applied Meter Data Management System (MDMS) would exponentially improve key work processes in utility billing and metering and would automate many of the activities of operations through integration with the County's new Lucity work order management system.

AMR is a meter reading technology introduced in the mid- 1980s and is limited to only collecting reads one time each billing period. AMI, however, has been the preferred technology for utilities and, since 2014, has surpassed AMR in new units sold and will continue to outpace AMR making it functionally obsolete moving forward. The capital cost of AMI network infrastructure above the necessary replacement of end of useful-life meters and transmitters for AMR is only 12.5% ($1.8 million) of the total estimated capital expenditure of $13.5 million for equipment, labor, software, and professional services to convert the entire County system yet the net present value (NPV) is more than $2.6 million higher utilizing AMI when compared to AMR.

Metering Technology Recommendations: We recommend the County consider meter and endpoint replacement a matter of necessary maintenance of utility infrastructure and the AMI network investment for its financial viabilities and contributions to customer service, operational efficiencies, and County water resource conservation initiatives. Considering the noted limitations of the existing AMR meter reading platform for Union County, it is recommended the utility convert the remaining Elster/AMCO meters to new encoded meters compatible with AMI systems and covert the meter reading infrastructure to a preferred vendor selected through competitive bidding.

AMI for Union County Public Works will:

- Eliminate "Drive-by" and 98% of Manual "Direct Read" Labor Costs
- Balance Work-load Across the Service Territory for Greater Operational Predictability
- Reduce Billing Staff Meter Reading Resource Costs by 98% and Up To 80% of Manual Disconnects/Reconnects
- Improve Metering/Billing/Utility Data Quality
- Improve Customer Responsiveness Through Increasing Reads from 1 Per 30 Day to 720 Per 30 Days
- Eliminate Meter System Work Order Management by Customer Service
- Establish Customer Self-Service through Access to Consumption Data
- Shift from Conservation Information to Conservation Management for Compliance with the Water Shortage Response Plan
- Expand Distribution Monitoring and Sensing (Upstream/Downstream Pressure, Water Quality, Pump Status, Liquid Chemical Levels and Facility Protection
- Monitor and Manage Non-Revenue Water (NRW) Through District Metering Areas (DMAs)
- Reduce Consumption Supporting Plant Capacity

Next Steps: Upon authorization to proceed, the project team will finalize business requirements for AMI metering technology and issue to qualified vendors. The solicitation and award process should take 6 months from initiation and full conversion of AMI should be completed within 24 months from award. Through this process, the County will have access to expanded meter technology functionalities, infrastructure standardization and economies of scale.

Section 1. Advanced Metering Feasibility Analysis Summary

1. Background

Union County Public Works (UCPW) affirmed its priority for defining a roadmap for metering and billing operations through issuance of its RFQ #2017-042 for Automated Meter Reading (AMR)/Advanced Metering Infrastructure (AMI) Feasibility Study. MeterSYS entered into a professional services agreement on September 13, 2017 with an approved scope of work to evaluate the current metering and billing operations within UCPW and establish a clearly defined roadmap in coordination with the project team. Utility staff recognizes that maintaining the current course of action within metering and billing eliminates options for innovation and expanded functionalities within the current AMR (also known as drive-by) replacement environment over other options for metering and billing, specifically AMI (also known as fixed-base) technology. UCPW wanted to consider all options that would accomplish the key goals of establishing a return on investment (value proposition) from a viable and sustainable metering solution that supports improved operations, greater revenues, and better customer service.

The key tasks of the analysis included: (1) evaluating current state operations, policies, procedures, and assets; (2) outlining future operational state recommendations, including the operational and financial business case for a metering technology project with solution goals and objectives; (3) identifying the financial feasibility of both AMR and AMI technologies through Operational Expenditure (OpEx) and Capital Expenditure (CapEx) modeling and; (4) establishing a recommendation, in detail, for implementation of the preferred solution and presenting the findings of the study to the project team and UCPW leadership.

Table 1. Project Scope of Work

RFQ Goals and Objectives	MeterSYS SOW Objectives and Project Deliverables
Current State Analysis	▪ Meter Performance Analysis ▪ Policy/Ordinance Review ▪ Key Process Mapping ▪ System and Software Interface Mapping ▪ SCADA Masterplan/Hydraulic Modeling Synergy Evaluation
Future State Analysis	▪ Technical Memoranda ▪ Network Design Analysis and Multi-Vendor Propagation Analysis ▪ Process/Procedure/Policy Recommendations ▪ Solution Recommendations/Alternatives
Development of AMI Goals/Objectives and RFP Requirements	▪ Communications Plan ▪ County Asset Field Inventory (Future Collector Site Assessment) ▪ Procurement Requirements ▪ RFP Planning

RFQ Goals and Objectives	MeterSYS SOW Objectives and Project Deliverables
Financial Analysis	▪ Full Economic (CapEx/OpEx) Analysis ▪ Feasibility Modeling (AMI/AMR/Hybrid) ▪ Risk Analysis ▪ Implementation Analysis
Project Planning and Implementation	▪ Vendor Management ▪ Data Analysis, Document Retention and Review ▪ Project Team Coordination (Scheduling) ▪ Project Plan Development ▪ Procurement Compliance and Process Management

UCPW operates with a team of dedicated and high-performing professionals focused on the continual improvement culture clearly established within the utility. As with most all large public utilities, the physical and organizational separation between contributing key business process owners contributes to some level of systems utilization challenges. When contemplating a future state metering system, implications to stranded assets, utilization synergies, staff training, system reliability and performance, risks, and costs must be contemplated to arrive at a validated recommendation for moving forward. It should be noted that the project team was very intentional about considering all options within both AMR and AMI read technologies and there were no forgone conclusions on what the Feasibility Assessment would identify as the recommended system, software or operational improvements for UCPW. This analytical approach allowed the MeterSYS team to collaboratively and objectively work with staff to uncover pain points and identify the best course for resolution and optimization.

If the County considers replacement of end-of-life infrastructure to be a normal component of water system management, then the business case for metering technology may be considered only to involve additional costs associated with mobile (AMR) or fixed (AMI) gateways and related software costs.

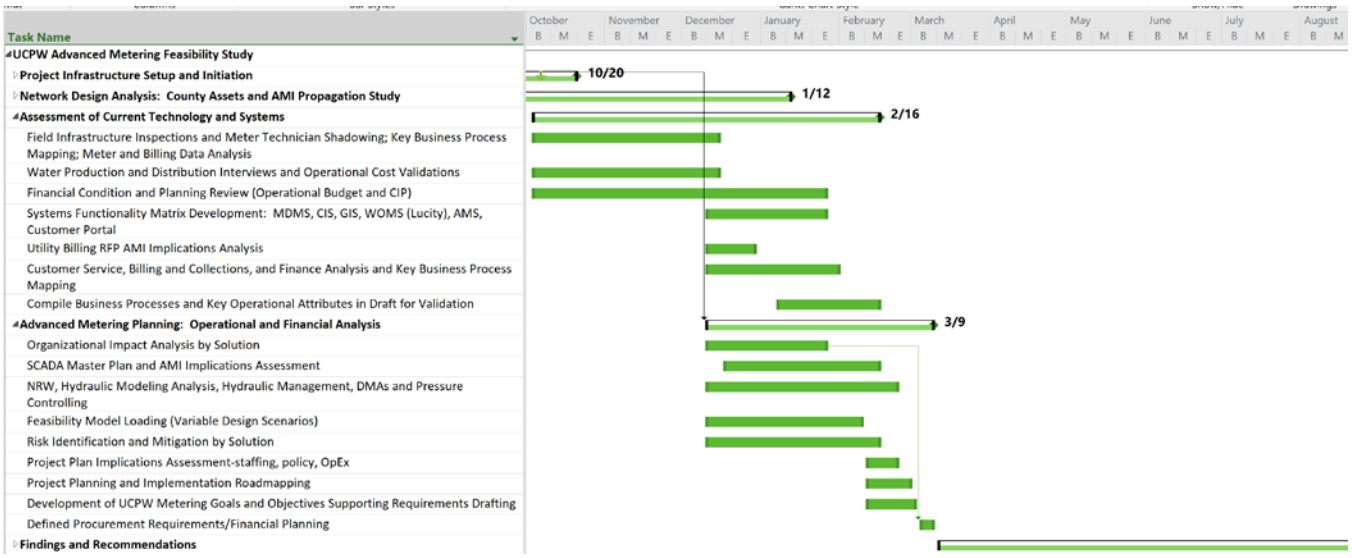


Figure 1. Feasibility Project Milestone Timeline

2. AMR and AMI Technologies Comparison

A primary task associated with the UCPW Metering Feasibility Analysis was the contemplation of continuing the existing approach to meter reading and its associated business processes against the practicality of advancing the County's metering solution for greater efficiencies and customer service. Specifically, UCPW must first consider the advantages and disadvantages of AMR and AMI reading systems among the major manufacturers.

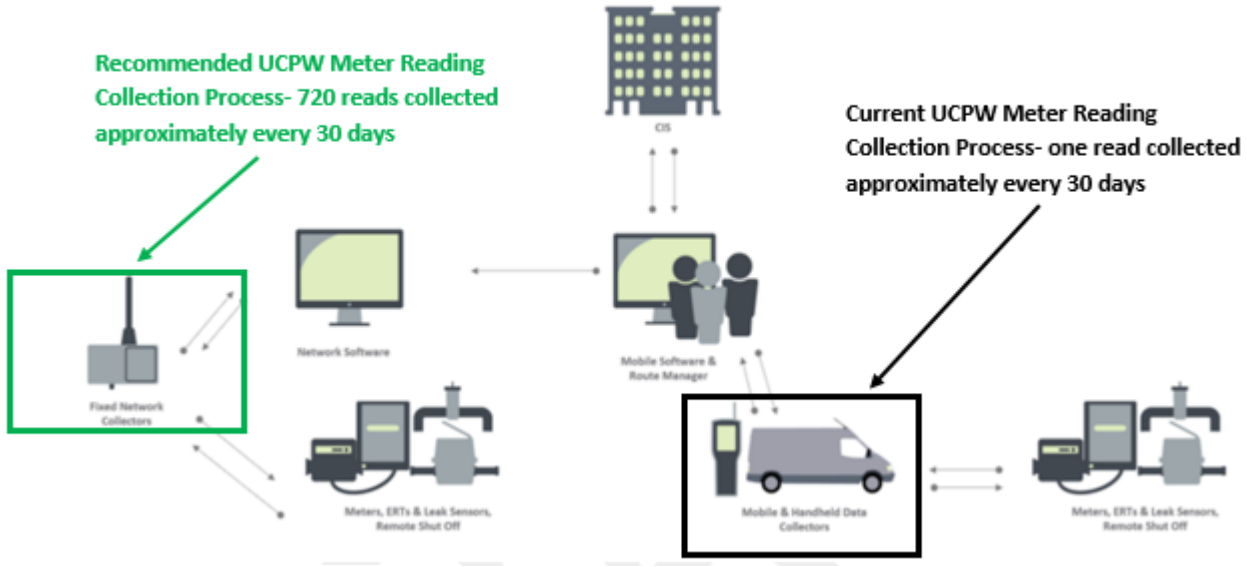


Figure 2. Itron AMR and AMI Data Flow

Automated Meter Reading: UCPW currently utilizes Itron AMR read technology for collecting monthly reads from the approximately 52,000 meters within the water utility. AMR is a mobile reading system in which a meter is read by a gateway that is either in a laptop or handheld device, allowing the meter reader to collect reads by walk-by or drive-by methods. These methods are one-way communications, simply transferring read data from the meter to the utility's billing system to generate a monthly bill. Reads are collected on-the-go and the meter reader downloads the meter data onto a memory card or a laptop computer that is connected to the reading device. Then, the meter data is transferred to the billing system and the consumption is converted into a bill for that customer.

Advanced Metering Infrastructure: AMI read technology provides for the collection of consumption and other reporting data to be transmitted continuously at one hour and even down to 15-minute intervals to a Meter Data Management System (MDMS) in support of historical usage profiling across the entire system, leak alerts, meter "health", and other valued data. This data would be available to UCPW staff and customers, thereby increasing the responsiveness of CSSs, improving field operations and customer service through near real-time read data and leak detection. More information on the differences, advantages, and disadvantages of AMR and AMI are noted in the Appendix of this report.

3. The Future of Metering for UCPW - Technology Goals and Design Scenarios

Successful metering technology projects establish well-defined utility solution goals early in the evaluation process then proceed to build requirements into the project approach and technology selection. The project team identified

goals for the project focused within infrastructure, customer service, and financial improvements through operational efficiencies and revenue. These goals provide the criteria by which the project team evaluated the scenarios for future state design within water metering. They include:

- Optimize meter reading, customer service, and water-use efficiency
- Accurate registration and reporting of customer consumption
- Effective metering analytics through qualified MDMS
- Customer engagement and usage conservation through Customer Portal
- Supportive of distribution operations (sensing and leak detection)
- Aligned with County systems; Customer Information System (CIS), Work Order Management (WOM), hydraulic modeling, SCADA reporting
- Long-term viability and expandability of solution by the Internet of Things (IoT)
- Cost effective and reliable meter reading technology

Other important contributing factors included avoiding increasing costs of maintaining and repairing aging infrastructure (break-fix model), minimizing risks of safety to meter readers, improving data quality concerns from manual entries, systems interfacing design, and the resource implications of manual read environment.

Once metering and billing goals were established, the project team worked collectively to identify solution requirements to help shape the design scenarios of AMI or AMR for the County. These requirements provide direction for the project team to begin assessing metering and billing options and the implications of each against UCPW's established goals. The metering and billing solution requirements established during the feasibility analysis foundationally is based upon AMI technologies each with a connection to the three elements of value - operational efficiencies, revenue, and customer service.

AMR and AMI technology solutions provided by qualified vendors were evaluated against the design goals of UCPW for identifying, to what extent, each potential manufacturer could provide the greatest level of current and forward-looking goals for the utility. Of the standard performance specifications considered, there are certain functionalities deemed critical for successful system-wide implementation of advanced metering. In consideration of all elements of the Feasibility Assessment, the project team identified feasibility of various options for meter reading technology through the evaluation of current utility operations and costs, comparing future network design options, and providing a cost-benefit analysis of Advanced Metering Infrastructure (AMI) technology.

By its design, AMR technology has limited functionalities by which to compare as its purpose is to automatically retrieve monthly meter reads through a mobile gateway (drive-by). Therefore, evaluation of functionality is most relevant when considering AMI (fixed-base) technologies.

AMI Technology Functionalities	Aclara	Badger	Itron	Master Meter	Mueller	Neptune	Sensus
Remote Disconnect Meter	**N/A**	✗	✗	✗	✓	✗	✓
Badger Meter Compatibility	✓	✓	✓	✗	✓	✓	✓
AMR/AMI Read Capability	✗	✓	✓	✓	✓	✓	✓

AMI Technology Functionalities	Aclara	Badger	Itron	Master Meter	Mueller	Neptune	Sensus
Open Source Network Alliance	✗	✗	✓	✗	✓	✓	✗
Distribution Sensor Capable Product Lines	✓	✗	✓	✗	✓	✓	✓
Pressure and Temperature Measured at Meter	N/A	✗	✗	✗	✗	✗	✓
Network Design Utilizes Only Existing Infrastructure	✗	✓	✗	✗	✗	N/A	✗
>30 Days of Read Held at Meter	N/A	✓	✓	✓	✓	✓	✓

Table 2. Vendor Functionality Comparison Summary Matrix

While the electric utility industry has been utilizing both AMR and AMI for several years, AMI has emerged as a significant tool for water utilities for keeping pace with rising customer expectations, water conservation initiatives, distribution management, rising operational costs, and flow measurement accuracy. Through enhanced data, utilities are now populating operational performance measurements and gaining greater insight to the key drivers of the water enterprise.

Scenarios for Water Metering Technology: From the onset of the project, the UCPW project team established its critical objectives to be the development of a metering technology roadmap derived from analysis and contemplation of all possible design scenarios beyond status quo. Considering the existing Itron AMR technology is layered on top of several meter types throughout the County service territory, predominantly end-of-life AMCO (now Elster) and replacement meters from Badger, there are four design options (referred to as "scenarios") the County may choose for future metering technology solutions other than continuing to replace failing meter infrastructure by the break-fix model (**Status Quo**). Scenarios most appropriate for UCPW involve: **1. Retro-fit Existing AMR by RFP:** replacing existing Elster/AMCO meters and Itron ERTs other than 100W models; **2. Full AMR Replacement by RFP:** implementing full program meter and AMR transmitter replacement including contracted labor and updated software; **3. Full AMI Replacement by RFP:** replacing all meters and the existing Itron read technology with AMI through a new, integrated solution; and **4. Retro-fit AMI by RFP:** retrofitting the approximately 25k Badger meters with AMI compatible endpoints, network, and applications through an open (vendor solicited) solution. MeterSYS and the County project team evaluated options and complexities of each solution design and their implications to existing operations, capital funding, operational benefits and risks, and influences on customer service.

Scenario comparisons allow the project team the ability to compare varying functionalities among potential metering solutions for Union County and how these variations contribute to the required capital and ongoing operational expenditures by the utility to maintain sustainable performance of the system.

Status Quo Replacement: Continuation of County Repair and Replacement (AMR): Maintaining current replacement plan using internal labor for meter sizes up to 4" with estimated completion by March 2025.

Scenario 1 – Retro-fit Replacement(AMR) Through RFP: Replacement of remaining Elster/AMCO meters and associated ERTs including labor.

Scenario 2 – Full Meter Replacement (AMR) Through RFP: Full AMR deployment to completely replace all legacy meter infrastructure with Badger meters and Itron transmitters. In this scenario, Union County may consider the benefit of replacing the legacy AMR solution with a new AMR technology that presents the best option for conversion from AMR to AMI at a point in the future while achieving standardization of infrastructure and economies of scale.

Scenario 3 – Full Meter Replacement (AMI) Through RFP: Replacement of all metering infrastructure with singular, integrated metering solution including standardized transmitters and MDMS/customer portal with network for AMI solutions. For a full meter replacement, the County would benefit from its infrastructure operating in the same life-cycle for assistance with capital planning, system maintenance, system performance, infrastructure standardization, and gaining economies of scale.

Scenario 4 – Retro-fit Through RFP (AMI): Utilizes existing Badger water meter infrastructure with procurement of new compatible water transmitters, AMI network, and preferred MDMS and customer portal.

Specific Vendor Options for Scenario 4: Considering the goals of UCPW for its long-range metering and billing strategy, MeterSYS conducted several design reviews with vendors to compare OpEx and CapEx solution costs and determining, in detail, the network design plan of potential vendors for AMI. By leveraging existing Badger meters purchased and installed by the utility through retro-fitting, UCPW will avoid costs associated with the meter and installation labor valued at over $2,870,000.

Also evaluated were compatibility factors between various manufacturers to determine if utilization of existing meter equipment would effectively be applied in a new, open source design for water and utilities. UCPW's existing Badger water meters are compatible with a variety of endpoints (transmitters) including Aclara MTU, Itron ERT, Mueller Systems Mi.Node, and Sensus MXU for continuity of operation as well as Master Meter's Allegro under the Glass (UTG) register and Neptune R900. Beyond meter and endpoint compatibility, UCPW must consider specifically the various AMI network designs since AMR collects data through a mobile gateway that has only minor variations across manufacturers. The network design summary for UCPW is summarized in Section 4.

MeterSYS modeled Aclara, Badger, Itron, and Sensus for their estimated capital and operational costs to provide UCPW with a concept of the variations of each vendor solution over the useful-life of the solution. Neptune was not modeled since they did not respond to the request for network design and Master Meter was not modeled due to their recent entry into the AMI market, limited pricing data, and range of potential cost variations with their UTG design associated with UCPW's widespread use of cast iron meter box lids.



Summary of Scenario 4 – Retro – fit Open Solution AMI by *Vendor Estimates for AMI Planning*



Vendor Estimate 1 – Aclara AMI: Application of Aclara Star 3400 MTU and associated network layered on existing and newly installed Badger metering with MDMS and customer portal. Utilizes existing Badger water meter infrastructure with procurement.

Vendor Estimate 2 – Badger Hybrid AMI (Cellular): Installation of endpoints utilizing cellular networking. The County would not be required to own or operate network infrastructure but would have higher OpEx costs associated with monthly per transmitter service fees.

Vendor Estimate 3 – Itron Conversion: Leveraging existing Itron 100W ERTs for total build-out of Itron network and analytics. Utilizes existing Badger water meter infrastructure with procurement.





Vendor Estimate 4 – Sensus AMI: Retro-fitting Badger meter infrastructure and deploying Sensus metrology, networks, and gateways for metering and distribution solutions. Utilizes existing Badger water meter infrastructure with procurement.

Certifications and authorizations for meter and endpoint compatibility between manufacturers changes often and should be validated by vendors prior to making any specific determinations for utilization of meters and endpoints by different companies. The impacts to compatibility include the quality and type of data transmitted to the Headend System (HES), product performance, warranty coverages, and firmware updates. UCPW will need to have all solution compatibilities and coverages included in the contractual language with the selected vendor.

Compatibility for the Badger HRE, currently the preferred meter by UCPW, is detailed in the table below:

Table 3. Badger HRE Compatibility Summary Chart

	Aclara	Itron	Sensus	Master Meter	Neptune	Kamstrup
Badger HR-E and Encoder (Radio replacement only)	MTU compatible w/all major brands	Itron 100W compatible with all Badger	Smartpoint only compatible with Badger ADE	UTG is incompatible	R900 Wall or Pit Unit Interface (MIU)	UTG is incompatible

4. Network Design Summary - AMI

To determine the viability of AMI covering 100% of the ~632 square miles of service territory of Union County, MeterSYS invited companies with experience in AMI technology delivery to develop an engineering frequency propagation analysis for their solution, utilizing 8 UCPW-owned elevated storage tanks and 76 other County controlled properties for collectors/base stations at varying heights.



Figure 3. Union County Controlled Potential Network Asset Locations

Each AMI vendor has unique solutions and designs related to network design. For water utilities that have pit-set water meters, the conditions are far less favorable for operation and requires a focus on meter data transmissions to the network to maximize the value of the infrastructure. MeterSYS places a high value on limiting the amount of infrastructure required to achieve a read rate performance level of 98.5% of all available reads, the ongoing operational expenditures required to support the network, and the risks/exposures of network assets considering their expected useful life.

The propagation analysis summary provides an overview of the network characteristics of seven market-leading advanced meter vendors invited to

participate in the design analysis – Aclara, Badger, Itron, Master Meter, Mueller Systems, Neptune, and Sensus with only Neptune electing not to issue a response (Neptune currently offers information on their Network as a Service offering. All companies have expressed interest in providing an advanced metering solution for UCPW, and each company provides similar yet unique solution characteristics to UCPW's metering network.

Table 4. Summary of Vendor Network Design

Vendor	System and Frequency	Collector Design	Integration Details
Aclara	Traditional AMI; Licensed 450-470 MHz	21 Collectors (DCU's) on Water Tanks and Substations	Network and software by Aclara; meter type open
Badger	Hybrid Cellular	9 Collectors (NGT's) serving 6,700 endpoints plus 42,225 cellular endpoints	Third-party cellular network; software and meter by Badger
Itron	Traditional AMI; Unlicensed 902-928 MHz band	106 Collectors (CCU's); 89 Repeaters	Network and software by Itron, and meter type open
Master Meter	Traditional AMI; Licensed 450-470 MHz	18 Base Stations (DCUs); 53 Repeaters	Network, software, and meter by Master Meter
Mueller Systems	Traditional AMI; Unlicensed 900 MHz band	10 XR-R Collectors on Towers; 96 XR Collectors at various locations; ~100 possible Repeaters	Network, software, and meter by Mueller
Neptune	Traditional AMI; Unlicensed 910-920 MHz	Did not submit	Network, software, and meter by Neptune
Sensus	Traditional AMI; Licensed 433 or 868 MHz	18 Collectors on Tanks/Tower	Network, software, and meter by Sensus

A numerical break-down of the UCPW network design outlines the substantial differences between AMI vendors and establishes a concept of the variations of influence on the Utility's operational and financial responsibilities.

Table 5. OpEx Summary of Vendor Network Components

Network Design	Gateway	Repeaters	Cellular Endpoints	New Locations	Estimated Annual Network OpEx
Aclara	21	0		5	$44,940

Network Design	Gateway	Repeaters	Cellular Endpoints	New Locations	Estimated Annual Network OpEx
Badger	9	0	42,225	0	$442,188
Itron	106	89		111	$140,400
Master Meter	18	53		50	$78,716
Mueller Systems	106	~100		80	$125,710
Sensus	18	0	0	10	$63,160

5. Financial Modeling

Through data gathering and inputs, the feasibility of AMR and AMI among various scenarios was determined by financial modeling within a *Discounted Cash Flow (DCF)* valuation approach as well as a *realized cash flow model* to evaluate the costs and benefits of various operational assumptions and capital cost scenarios within UCPW. The model incorporates the cost of AMI/AMR capable meters, radio transmitters and data collectors, software, project management, and ongoing operation and maintenance.

For comparison of differences between various scenario costs, MeterSYS summarized the detailed cost estimates into the categories of network, meters, labor, and professional services. The elements of these categories are as follows:

Table 6. Feasibility Model Category Elements

Network	Meters
AMI/AMR Head End Software	5/8 X 3/4 Meter and Register
Mobile Gateway	1 inch Meter and Register
Fixed Gateway	1 1/2 inch Meter and Register
Repeater	Retro-fit Meter
New Tower Location	2 inch Meter and Register
Field Deployment Tool	3 inch Meter and Register
Water Meter Endpoints	4 inch Meter and Register
Network Installation	6 inch Meter and Register
Pit Mount Hanger Bracket	8 inch Meter and Register

Software Applications and Professional Services
MDM Software

Labor	Customer Portal
Water Meter Exchange (5/8" - 1")	Professional Services - AMI MDM
Water Meter Exchange (1 1/2")	Bonding, Mobilization and Training
Water Meter Exchange (2")	Professional Services - Systems Integration
Water Meter Exchange (3")	Program Management - AMI / AMR
Water Meter Exchange (4")	
Water Meter Exchange (6")	
Water Meter Exchange (8")	
Water meter lid retrofit (Drill)	
Lid Bracket Installation	

The key elements for determining financial feasibility involve estimating capital (equipment, labor, and professional services), ongoing operational costs (data/backhaul, software/applications, gateway maintenance, and power), debt, and depreciation against the benefits of technology through efficiencies, increased revenues, and avoided costs.

The model calculates the Net Present Value (NPV) of the costs and savings for each alternative over 15 years using a discount rate tied to UCPW's estimated borrowing costs, as well as the Internal Rate of Return (IRR). For both AMR and AMI, the actual life-cycle of the infrastructure is between 15 and 20 years and the model applies a 15-year term for debt and 15-year term for depreciation.

Model Metrics Summary

Net Present Value: Provides the net present value of the investment based on a discount rate of 3.5% and the sum of capital expenditures (costs) and revenues and savings (income) over the entirety of the investment. It is a function applied to the discount rate and the sum of the total net value.

Internal Rate of Return: The annualized rate of return without consideration to external influences. It is a function applied to the sum of total net value.

Return on Investment (ROI): The percentage increase or decrease of the investment over a set period of time. It is calculated as the difference of metering technology benefits minus CapEx/OpEx costs divided by the CapEx/OpEx.

Payback Period: Calculated as the first year when total cumulative value is greater than the amount invested cumulatively.

The following financial summaries considered capital and operational costs of AMR and AMI and the benefits derived through full or partial new meter replacement including personnel, equipment, work order reductions, collection efficiencies, and the transition of annual budgetary allocations for meter replacement to debt service over 15 years.

When considering the current meter replacement approach (Status Quo), the higher IRR and ROI may be associated with the absorption of labor into operational expenses of the County that is fully burdened in all of the comparative Scenarios. Considering the differential costs associated with layering on AMI infrastructure (network/software) to existing AMR meters and transmitters, the capital costs add $1.769 million to the overall project and for the network presents a compelling business case with higher NPV and IRR with a payback period of 6 years for the AMI network infrastructure versus 10 years for the current replacement program approach.

Table 7. Financial Modeling Comparison Summary by Scenario

		NPV	IRR	ROI	Payback (DCF)	Total CapEx
Current	**Status Quo Replacement**	$2,996,186	14.6%	91.7%	10	$ 4,726,000
Scenario 1	**Retrofit AMR (RFP)**	$4,727,306	14.9%	92.1%	11	$ 7,566,000
Scenario 2	**Full Replacement AMR (RFP)**	$4,197,833	8.0%	66.8%	14	$12,760,000
Scenario 3	**Full Replacement AMI (RFP)**	$6,327,742	8.4%	66.8%	13	$16,540,000
Scenario 4	**Retrofit AMI (RFP) Average of Estimates**	$5,692,240	8.6%	65.9%	13	$13,447,000
Estimate 4.1	**Aclara AMI Retrofit**	$6,955,512	10.4%	86.9%	12	$12,858,000
Estimate 4.2	**Badger Retrofit (Cellular) AMI**	$2,380,567	5.6%	24.5%	16	$14,061,000
Estimate 4.3	**Itron Retrofit AMI**	$7,692,461	9.9%	81.2%	12	$12,676,000
Estimate 4.4	**Sensus Retrofit AMI**	$5,740,421	8.6%	70.9%	13	$14,194,000
AMI Network Only Comparison (Collectors/ Software)		$3,812,112	28.6%	88.6%	6	$1,769,000

Based on the final metrics, Status Quo Replacement has the greatest ROI and IRR but significantly lower NPV and operational value considering the functionality is limited to 30-day automated reading. Additionally, under this design, the County would be responsible for the installation labor coupled with the uncertainty of failures over the 6-year installation process. These factors along with system growth demands on staff present this Scenario as not viable operationally.

Should the County accept, as a matter of required maintenance and replacement, that the balance of aged meter infrastructure, including transmitters, has reached operational end-of-life, then financially, consideration of metering technology from a business case financial perspective may appropriately be limited to the feasibility of an AMI network separate and independent of the other capital costs. Should this be the case, the financial viability of AMI is far greater than modeling infrastructure in totality especially when considering NPV, IRR, and payback.

Should UCPW elect to apply all CapEx and OpEx costs in calculating the business case for metering infrastructure, Scenario 4- Retro-fit AMI through Competitive Bid is recommended for the contributing operational value to UCPW and the lowest entry into advanced metering infrastructure by leveraging existing assets of the County with remaining useful life.

Savings from an AMI system would come primarily from redirecting current meter replacement and operations funding, plus savings resulting from the proposed reductions in personnel and vehicle costs (by reassigning meter readers to other tasks and vacant positions), deferred costs due to not filling proposed new positions, and modest revenue gains in water and sewer from an estimated 2% improvement in meter registration.

In addition to capital cost considerations, ongoing operational budgetary impacts must be factored into the solution prioritization for UCPW. The operational costs of each scenario and vendor estimate is tied to variables primarily

related to network operations, network maintenance services, and software licensing. The outlier in operational costs is through a monthly Badger Beacon cellular cost modeled at $.84 per month per meter.

Table 8. OpEx Comparison Summary by Scenario

		OpEx
	Status Quo	$8,500* (Software Update, Mobile Collector Service)
Scenario 1	**Retro-fit AMR**	$36,800
Scenario 2	**Full Replacement AMR**	$36,800
Scenario 3	**Full Replacement AMI**	$160,253
Scenario 4	**Retro-fit AMI**	$173,227
Estimate 4.1	**Aclara AMI**	$119,940
Estimate 4.2	**Badger Hybrid AMI**	$ 517,188
Estimate 4.3	**Itron Conversion AMI**	$ 236,505
Estimate 4.4	**Sensus AMI**	$138,160

Modeling Benefits of AMR and AMI: To determine the cost-benefit of AMI investment across water utilities, MeterSYS applied data gathered through the current state analysis to allocate costs for various meter to billing functions and then assign predicted benefits, either direct savings or revenue along with indirect efficiency gains. Indirect benefits include meter reading and service order efficiencies, reduction in repair and replacement labor costs, and customer service and collections efficiencies. Direct benefits include water and wastewater revenues associated with more accurate meter registration, direct fleet costs, and staffing reductions through established set points during the metering automation process. A breakdown of benefits considering AMI automation is as follows:

OPERATIONAL COST SAVINGS AND REVENUES	SCENARIO 4 – RETRO-FIT AMI	STATUS QUO AMR
1.0 METER READING	$ 33,084	$ 4,417
2.0 SERVICE ORDERS- RE-READS, CUSTOMER COMPLAINTS, DISCONNECT/RECONNECT SERVICE	$ 96,479	$ -
3.0 REPAIR AND REPLACEMENT	$ 318,503	$ 163,335
4.0 SERVICE TERMINATION AND RESTORATION	$ 3,891	$ -
5.0 CUSTOMER SERVICE ACCOUNT MANAGEMENT	$ 95,591	$ -
6.0 CUSTOMER SERVICE BILLING EXCEPTION AND PAYMENT PROCESSING	$ 82,245	$ 32,465
7.0 ASSET MANAGEMENT AND CONSERVATION	$ (96,137)	$ -
STAFFING REDUCTIONS: CUSTOMER SERVICE	$ 87,155	
STAFFING REDUCTIONS: METER READING	$ 59,942	
ACCOUNT DELINQUENCY AGED COLLECTION	$ 105,506	$ 17,584

OPERATIONAL COST SAVINGS AND REVENUES	SCENARIO 4 – RETRO-FIT AMI	STATUS QUO AMR
REVENUE CAPTURE FROM WATER METERS	$ 154,191	$ 77,096
WASTEWATER REVENUE RECOVERY	$ 169,745	$ 84,872
THEFT AND METER TAMPERING	$ 10,440	$ -
METER SCRAP VALUE	$ 81,770	$ 85,625
FLEET COSTS (METER READING)	$ 86,263	$ -
ANNUAL METER REPLACEMENT BUDGET (NEW METERS INCLUDED IN CAPEX)	$ 369,443	
COMPARISON OF ANNUAL BENEFIT (FIRST FULL YEAR 2022)	$ 1,658,111	$ 465,394

Table 9. Detailed Breakdown of Benefits

KEY BUSINESS PROCESSES: UCPW METERING AND BILLING

Benefits of AMI and AMR were determined through data gathering, evaluation of the seven key business processes and the influence of both technologies on operations as well as considerations of revenue and avoided costs.

1.0 Initial Meter Reads

1.1 Initial Meter Reads (AMR): Collection of meter readings via AMR only

1.2 Initial Meter Reads (Manual/Direct): Collection of meter readings via manual entry

2.0 Service Orders

2.1 Service Orders - Re-reads: Field revisits to verify reads - utility issued

2.2 Service Orders - Disconnect/Reconnect Service: Disconnection and reconnection for non-payment

2.3 Service Order - Reconnect Site Revisit: Site revisit for reconnection of service due

2.4 Service Orders - Customer Complaints: Customer requested rereads, meter checks, high-bill complaints

2.5 Verify No Service: Site visit to verify zero flow for vacant properties

3.0 Troubleshooting and Repair

3.1 Troubleshooting and Repair/Replacement Meter repair and replacement (AMR ERT failure, zero readings)

3.2 Meter and Box Repair - other

4.0 Customer Service

4.1 Customer Service Account Management - Setup and Maintenance: Verifying new service availability, validating proper receipt of forms and payment from customer, setting up account in CIS

4.2 Customer Service Billing Exception: Review of initial read data for high/low parameters and field re-checks

4.3 Customer Service Billing and Presentment: Preparing final read data within utility billing module; transferring read file for printing

4.4 Customer Service Payment Processing/Collections:Receiving and processing payments through various channels including bank draft, lock box, mail, counter, and web payments (including shared Tax resource)

4.5 Customer Service Work Order Management: Creating, issuing, and closing out work orders within CIS /Lucity

4.6 Customer Service Account Delinquency Management: Management of accounts within 30, 60, 90, 90+ delinquency including internal collections, debt setoff, and 3rd party collections (including shared Tax resource)

5.0 Theft and Meter Tampering: Response to damage of meters and ERTs due to customer tampering or removal

6.0 Asset Management Activities: Meter location, stock management, and tracking

7.0 Water Loss and Conservation: Account and field activities supporting leak management, conservation programs

Realized Cashflow and Debt Obligations Comparison of AMI and AMR: For practical consideration of affordability and value, MeterSYS includes expected capital costs and considers the practical encumbrance of annualized operational expenditures (OpEx) and debt service. These expected costs are modeled against direct benefits (realized cost reductions and additional revenues) and in-direct benefits (realized through resource efficiency gains). The following model reflects direct estimated capital costs of Scenario 4, Retrofit Open Vendor and does not include recommended contingencies or any applicable sales tax.

Table 10: Realized Cashflow Comparison- Scenario 4 and Status Quo

REALIZED CASHFLOW CONSIDERING DIRECT BENEFITS, OPEX, AND DEBT SERVICE	SCENARIO 4: RETRO-FIT AMI	STATUS QUO AMR
100% DEBT FINANCING	$ 13,447,250	$ 4,725,710
TERM (YEARS)	15	15
RATE	3.5%	3.5%
DEBT PAYMENT	$ 1,153,584	$ 405,396
ANNUALIZED OPEX COSTS	$ 173,227	$ 20,300
TOTAL DIRECT ANNUALIZED COSTS	$ 1,326,811	$ 425,696
DIRECT BENEFIT VALUE	$ 926,739	$ 431,596
NET ANNUAL CASH BENEFIT	$ (400,072)	$ 5,900
INDIRECT BENEFITS- RESOURCE EFFICIENCIES	$ 621,818	$ 200,217
NET ANNUAL OPERATIONAL VALUE	$ 221,746	$ 206,116

The AMI and AMR realized cashflow analysis for UCPW compares the direct and indirect influences of each solution based on cashflow and soft cost (efficiencies). The realized cash flow shows a direct cost outflow for debt and OpEx of $1,326,811 for Scenario 4: Retro-fit AMI compared to the comparative outflow of cash for Status Quo AMR of $425,696 attributable to significant differences in debt service fees and on-going operational costs.

When considering the totality of both direct and indirect benefits of both solutions, AMR presents a greater value to UCPW annually but does not apply monetary value on improved customer service, operational performance management, distribution monitoring, water conservation, and future cost avoidance that are not quantifiable to the extent that those benefits could be accurately modeled. This realized view of infrastructure costs and benefits provides a practical assessment of the viability of various design scenarios and contemplates the financial metrics of the Discounted Cash Flow Model which applies depreciation to the financial business case.

6. Data Management and Systems Summary

Currently, the main systems utilized by UCPW include Harris NorthStar CIS, Munis, ESRI Geographic Information System (GIS), and Crystal Reports. The County is working through a phased deployment of Lucity, which will automate the manual work order process and interface with NorthStar, ESRI, and Crystal Reports. UCPW systems supporting metering and billing remain functionally isolated with limited data exchange. The shift in approach to treat information as an asset will require the adoption of standards that will drive efficiency and effectiveness between workgroups, and those changes, along with the automation of data workflow from Lucity and recommended approach to governance for future system change consideration, evaluation, and implementation to be more holistic, will improve the enterprise architecture and system design.

UCPW will need to make foundational improvements and adopt a more formal governance structure to support the deployment, integration, and improved business operations alignment of the existing systems and applications.

Data Governance

- Establish data governance program to be overseen by new AMI Systems and Technology Administrator position
- Adopt and deploy a customer portal in advance of AMI implementation
- Align systems and interfaces to accommodate operations workflow, standardize data entry, streamline data sharing, and facilitate report generation

Data Standardization

- Establish creation, assignment, and resolution standards for Work Orders in Lucity
- Create terms and definitions for key words (data dictionary)
- Delay CIS change; scrub CIS database and leverage AMI data and systems
- Empower the Planning and Resource Management Division to be responsible of managing UCPW systems architecture design and databases

System Performance and Reporting

- Evaluate historical data reporting options (Crystal Reports, NorthStar)
- Create test scripts in Crystal Reports
- Designate Work Orders to serve as KPIs for operations insight

Establishing a formal data governance program will create a stable information architecture to serve as a foundation for AMI and the pursuit of an analytics-driven business environment. Increasing standardization and removing departmental silos that currently curtail shared use and access to data will increase the effectiveness and accuracy of reports. Empowering the Planning and Resource Management Division of Public Works to address and implement these initiatives should provide UCPW with more business-aligned IT support, and we recommend creating an AMI Systems and Technology Administrator position that will be dedicated to data and systems maintenance and oversight.

7. Consultant Recommendations

The UCPW project team recognizes that meter infrastructure and related technology replacement will require a significant monetary and internal resource investment to support sustainable and measurable change within the metering and billing key processes. The current AMR replacement program is neither operationally sustainable nor the best use of utility resources and presents ongoing and prevalent risks to customer service, utility revenues, and utility operations. UCPW, at a minimum, will have to undertake significant additional costs to simply continue to meet departmental demands of the AMR read system and stopped/aged meter replacement estimated greater than $4.7 million for completion of the current replacement program over a period of more than 6 years to complete.

AMI utilizing Scenario 4, Retro-fit AMI, far beyond AMR, provides significant benefits for UCPW and meets the three elements of viability- operations, finance, and customer service.

The recommended scenario for utilization of Badger water meters and installing selected solution meters, transmitters, and network along with converting the current reading application from Itron MV-RS to a new integrated water MDMS solution provides a significant shift forward in automation, data access and accuracy. Scenario 4 presents the best overall operational return on investment when compared to the other scenarios and their combined direct and indirect benefits.

Capital Planning: Implementing a multi-year project like an AMR to AMI conversion will require the Utility to plan for the impacts of capital costs over the life-cycle of implementation, as well as ongoing budget projections for annual operational expenditures. The capital drawdown schedule is anticipated to reflect these allocations considering implementation will begin in FY2018-2019. Any shifts in implementation will obviously shift the assumed allocations by year. It is generally accepted as a preferred approach for AMI implementation to do so at a pace that the Utility can manage both operationally and financially…and not any longer. The presented implementation scheduled is based on project initiation by April 2019, network construction through November of 2019, full deployment in 2020 and concluding by March of 2022. This schedule may be accelerated should the project team identify both need and ability to assume change management of systems and infrastructure.

	FY 2019-2020	FY 2020-2021	FY 2021-2022
ESTIMATED SPEND BY FISCAL YEAR	$6,073,361	$6,837,328	$536,561

Table 11. Estimated Capital Drawdown by Fiscal Year

MeterSYS recommends UCPW pursue fixed-base AMI, over the current AMR replacement program. Specifically, we recommend UCPW proceed with completion of the replacement of its water metering infrastructure retrofitting newer installed and compatible Badger meters with a solution selected through the procurement process. AMI for Union County has predictable costs of $14.3 million, a useful life of 15-20 years, comprehensive and proactive meter data analytics, and will provide improved revenues through meter registration accuracy. A breakdown of the annual estimated spend by network, meters, labor, software and professional services, and contingency is in Section 7.4. Recommended Metering Solution for UCPW.

Organizational Change: Through analysis of the current state of operations and the future state key business processes, organizational changes within metering and billing were evaluated and opportunities were identified to adjust personnel to more accurately reflect the requirements, only for an AMI technology deployment, as there would be no material change to operations should the County continue collecting meter reads through AMR.

To fully leverage the exponential benefits of meter technology, more specifically AMI, the County should support the development of a comprehensive change management program of work that encompasses the many aspects of utility metering and billing influenced by the new technologies.

MeterSYS worked with project team members to chart the efforts of staff contributing to metering and billing key processes, to determine current allocation of resources to those efforts. In doing so, we also considered the implications of AMI to those processes and the resulting efficiencies gained within the organization. These efficiencies contribute to organizational redesign and conceptual staffing changes to reflect new meter reading automation. Ultimately, organizational changes will be defined by the level of training, technology adoption, and performance measurements across the key business processes. Done correctly, UCPW should experience no greater resource demands while achieving greater management and delivery of key utility objectives within billing and metering through:

BUSINESS OPERATIONS DIVISION	METERING SERVICES
Reduce: ▪ 1 FTE Billing Customer Service Specialist ▪ 1 FTE Customer Service Specialist ▪ .5 PTE Customer Service Specialist	Reduce: ▪ 2 FTE Meter Technicians ▪ .5 PTE Meter Technician
Authorize: ▪ New Position for Communications/Conservation Specialist	Authorize: ▪ New Position for AMI Systems and Technology Analyst (*Planning & Resource Management Division*) ▪ New Position for Metering Systems Quality and Compliance Technician
	Avoid: ▪ 1 Meter Technician 1 Meter Technician (Meter Testing)

Table 12. Conceptual Future State Organizational Change Summary

Included in this proposed organizational redesign is a Communications and Conservation Specialist position, AMI Systems and Technology Analyst, and Utility Systems Quality and Compliance Technician position. These positions will enhance UCPW's operational leverage and benefits output of AMI technology with focus on customer engagement, resource management, and utility systems data quality.

8. Management Summary

Union County Public Works is operated by a highly dedicated and skilled workforce supporting a broad and adapted culture to customer service and continual improvement and maintains a commitment to analysis and data-driven decision making especially when considering investment of public resources. Through its partnership with MeterSYS, the County now has a detailed understanding of both current and future state operations that will support decisions for its investments in meter reading infrastructure, systems, and organizational change management.

With technology solutions, the lowest cost is not always an indication of the best option. The lowest cost solution for Union County is to maintain the current replacement strategy and fully deploy AMR across the system, but UCPW will

not accomplish the goals established for metering and billing and there are significant risks in converting metering infrastructure in the future to fixed-base technology. Water meter costs and installation are the highest unit costs within the conversion of a system from AMR to AMI. By leveraging the estimated 25,000 existing Badger meters, UCPW will maintain protection of more than $2.9M in infrastructure investment, both equipment and the value of labor, already installed.

General Findings and Recommendations for Metering- UCPW:

- Automation and standardization of meters will reduce read labor costs. Multiple re-reads and work orders will be alleviated by on-demand reads. Access to reports and improved data quality will result from conversion from AMR to AMI.
- Organizational resource re-design will be an important contributor to the value of AMI investment.
- Internal and external communication and education will be necessary to gain project support and confidence.
- Policies and procedures should be evaluated for opportunities to leverage AMI features and functionality including disconnection procedures, leak adjustments, and customer communication practices.
- Utility customers will gain improved access to data (leak detection, consumption monitoring, and customer portal) and improved lead times on service orders/requests.
- UCPW should pursue interface options to enhance functionality of work order management, GIS, and customer account management systems. UCPW should engage the next phase of technology conversion, procurement, to define costs and detailed solution specifications.

Key Detailed Recommendations for Metering - UCPW:

Category	Key Action
Meter Infrastructure	▪ Maintain current specification and installation of Badger meters with HRE registers for new services or replacement of stopped meters ▪ Continue installation of Itron 100W ERTs for new services and failed ERTs ▪ Apply AMI solution selection standards for new service installs and replacements ▪ Install or replace (as needed) composite (RF friendly) lids
Network	▪ Analyze network design of preferred solution for areas requiring new elevated asset locations for alternatives ▪ Revisit planning and cooperation opportunities between SCADA master plan, hydraulic data, and AMI network and gateway devices for expansion of distribution system sensor monitoring and seek authorization of agreed synergies
Systems and Data Management	▪ Authorize and fill AMI System and Technology Analyst Position ▪ Establish internal Metering and Billing systems governance team to support MDMS and Customer Portal requirements development in cooperation with procurement efforts ▪ Activate and properly configure Lucity WOM for Meter Reading and Meter Services ▪ Defer systems ERP or CIS change activities until post-deployment of AMI and related MDMS and Customer Portal systems ▪ Activate Customer Portal at onset of AMI implementation as part of the customer service overall strategy and in support of customer participation goals

Category	Key Action
Organizational Structure	▪ Develop key performance metrics (KPIs) in support of the seven primary business processes utilizing Lucity WOM ▪ Develop and gain approval of recommended new positions including job duties and pay/classification ahead of deployment ▪ Develop management oversight of KPIs and align with organizational redesign concepts of the future state design and adjust according to shifting operational parameters
Organizational Finance	▪ Authorize CapEx allocation for AMI of $13.5M plus $561K in CapEx project contingency for a total authorization of $14.1M (excluding tax) ▪ Finalize source of funds for total expected capital spend of $14.1M and authorize Procurement for solution selection by February 1, 2019 ▪ Allocate drawdown of funds by FY upon approved project timeline

Table 13. Actions for Metering and Billing

Both procurement and AMI implementation is best achieved by utilizing the experiences and focused support of an AMI solutions company like MeterSYS with a defined and targeted plan of work. Applying proven methodologies for solution selection and deployment, UCPW will benefit from proper specifications development, transparent and compliant procurement actions, and broad oversight throughout the anticipated deployment phase.

With authorization to procure, Union County is further defining the capital and operational costs of advanced metering in comparison to consultant estimates and the modeled business case while having at any point following receipt of vendor bids. This ensures the County is properly prepared to manage both capital and operational expenditures of AMI over the technology useful life.

Concurrently, with requirements development ahead of formal authorization to proceed, it is recommended UCPW work with the County budget office and the capital planning team to identify funding sources and drawdowns as well as any implications with rate planning or setting. Should the County seek funding through conventional lending sources, an RFP will be necessary to identify the loan sources as well as LGC approval for most projects and debt amounts related to metering and AMI. If authorized to award, it is anticipated that under Scenario 4, UCPW will complete conversion of its current meter reading technology to full AMI operations within a 24-month implementation period.



Figure 4. UCPW Advanced Metering Vendor Bid Milestone Chart

Effective advanced metering is the result of detailed requirements determination specific to the operational and financial requirements of the County. Requirements define the unique functionalities of meter equipment, AMI networking, meter data management, and detailed customer data access applied to utility goals and is detailed in Section 9.

Section 2. Metering and Billing/Customer Service Operational Analysis

Overview: The County performs meter reading and billing professionally and consistently across its large service territory with virtually no scheduling tolerances or flexibility within the reading and billing monthly deadlines to account for staffing or weather interruptions. Given the complexities of the read design, the County will not be able to sustain the level of service expected internally and by utility customers.

Recognizing that the current state environment is not ideal and with the desire to improve operational efficiencies across all the major components of the utility, from meter reading, to customer service and billing, in addition to improving customer service and water conservation management, the County has engaged in this Feasibility Analysis to identify the current state issues and opportunities. Through evaluation of the current state of operations for metering and billing, the benefits of expanded meter reading technologies may be accurately applied to the cost/benefit analysis and supports the Future State opportunities for the County.

MeterSYS assembled a project team for the Feasibility Analysis that was comprised of representatives from all major workgroups of the utility. The current state analysis was compiled by MeterSYS based on the data requested and provided by staff, through onsite interviews and observations of staff, and through targeted meetings. All elements of the current and future state analysis, including the assumptions and inputs in the financial model have all been discussed and verified by utility staff. The following sections summarize the results of the current state analysis and future state analysis, including key findings and recommendations for meter reading, customer service, and finance functions.

1. Current State Metering Operations

Organization: The existing metering operational environment is maintained to a high degree of performance despite troubleshooting demands due to failures between the Elster C700 Invision meters and Itron Encoder Receiver Transmitters (ERTs). The meter reading group is tasked with AMR "drive-by" read data collection, manual "direct reading" of meters that do not transmit data, and related service order support. As these meters fail due to end-of-useful life, the utility is replacing meters at high percentages. Customer service staff must assign reread work orders to Meter Technicians for meter rechecks to confirm questionable reads, stopped meters, and other field validation work orders. As of today, the utility is still operating in a reactive environment while the metering services organization has expanded to support the high volume of work orders and the significant growth rates of the utility. Still, the 10.5 Full-time Employment (FTE) metering services staff, including the Metering Services Supervisor, is not able to manage the true volume of work orders thereby creating a

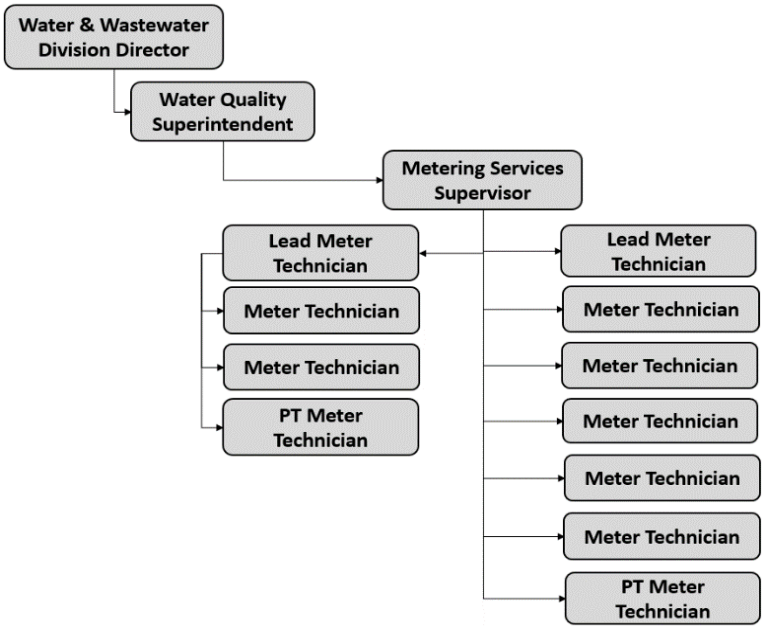


Figure 5. Current Metering Services Organizational Chart

need for additional staffing. The Metering Operations Group has recently added a part-time Meter Technician and requested funding to add one more Meter Technician next year. The following section provides greater detail on the labor-intensive work processes that the metering services organization operates under and the high work demands associated with the existing metering environment.

Reading Environment: The drive-by reading environment that the County operates under creates significant drag on utility resources. The operational challenges and inefficiencies of a system with a complex read design, expansive service territory, and manual heavy work processes creates pressure on metering and billing staff to collect reads, manage exceptions and work orders, and bill on time. Despite these challenges, the metering services group is cross-trained to be knowledgeable of the work order processes and the complexities of the read system and maintains a strict read accuracy rate of at least 98.5% each month.

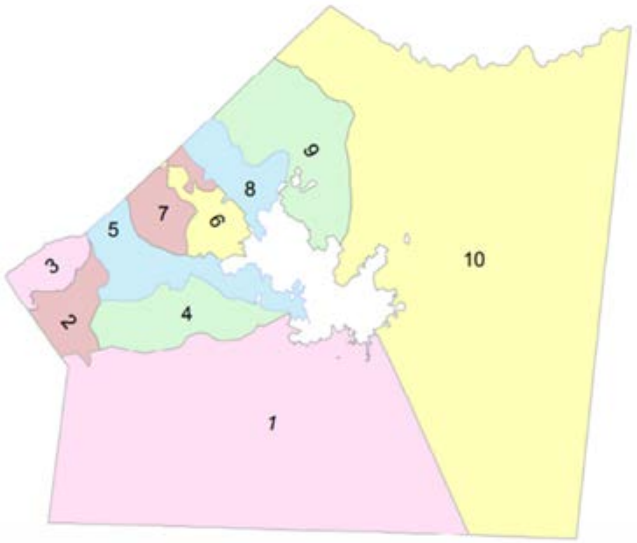


Figure 6. County Read Cycle Map

The County's read design mimics that of a clock and the 10 cycles follow a clockwise pattern. The system is comprised of about 100 routes and approximately 51,000 meters. In 2006, the number of cycles increased from 4 to 10 cycles to accommodate for rapid growth in new development and the related high work demands. The redesign was helpful in flattening out the high-volume of work orders, evenly distributing the work load, and alleviating pressure on staff. However, population growth hasn't subsided since then, and as a result, the cycles greatly vary in size.

Figure 7 illustrates the variance in cycle sizes, from a few hundred to a couple thousand, with the largest cycles being 6 through 9. Staff are consistently burdened by the heavier workload associated with the larger cycles because it creates a compressed reading window, and regardless of cycle size, staff are expected to finish and submit reads and rereads within the standard reading window of only a few days.

Metering and Billing Operations Schedule: About half of the meter reading group are also responsible for reading the 10 cycles. Each cycle is billed once a month and to push bills out 10 times a month, Meter Technicians are required to read and finish a cycle every other day. In between meter reading days, they're tasked with route maintenance and reread work orders. Rereads are issued as soon as meter reading is done and the turn-around time to complete rereads is usually 1-2 days from when they were assigned. Overall, Meter Technicians are finishing reads and rereads within 1-3 days. Immediately thereafter, the process begins all over again

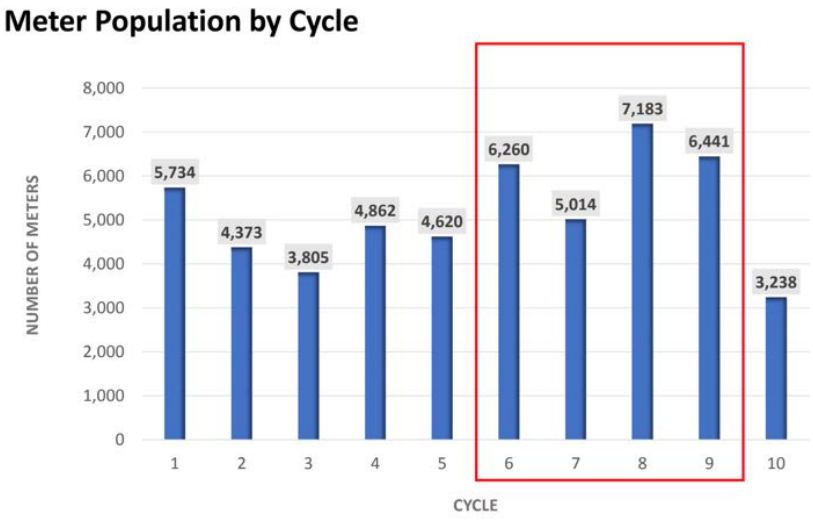


Figure 7. Estimated Number of Meters per Cycle (Point in Time)

for the next cycle. Meanwhile, the remaining Meter Technicians are disconnecting and reconnecting service multiple times a week.

Figure 8 highlights a normal month of operations with the key dates for metering and billing activities. Metering and Billing operations function in a very strict monthly schedule to generate monthly bills for its 50,000 customers. This creates strains on operations considering the unpredictable nature of water distribution operations and weather uncertainty influencing overtime and deadlines. Approximately 160 hours are spent per month reading meters and in the past few years, distribution staff were pulled from another division to support reading allowing more time for Meter Technicians to respond to service work orders.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
	1	2	3	4	5
C1 begin night reads	C1 finish reads C1 start re-reads C1 disconnects Reconnects	C1 finish re-reads C2 begin night reads Reconnects	C2 finish reads C2 start re-reads C2 disconnects Reconnects	C2 finish re-reads C3 begin night Reconnects	C3 finish reads C3 start re-reads Reconnects
7	8	9	10	11	12
C4 begin night reads	C3 finish re-reads C4 finish reads C4 start re-reads C3 disconnects Reconnects	C4 finish re-reads C5 begin night reads Reconnects	C5 finish reads C5 start re-reads C4 disconnects Reconnects	C5 finish re-reads C6 begin night reads Reconnects	C6 finish reads C6 start re-reads Reconnects
14	15	16	17	18	19
C7 begin night reads	C6 finish re-reads C7 finish reads C7 start re-reads C5 disconnects Reconnects	C7 finish re-reads C8 begin night reads Reconnects	C8 finish reads C8 start re-reads C6 disconnects Reconnects	C8 finish re-reads C9 begin night reads Reconnects	C9 finish reads C9 start re-reads Reconnects
21	22	23	24	25	26
C10 begin night reads	C10 finish reads C10 start re-reads C7 disconnects done Reconnects C1 bills due	C10 finish re-reads C1 begin night reads Reconnects	C1 finish reads C1 start re-reads C8 disconnects Reconnects	C2 begin night reads C1 finish re-reads Reconnects	C2 finish reads C2 start re-reads Reconnects

Figure 8. Metering and Billing Operational Calendar

Meter Reading Process*:* The County relies on nine full-time Meter Technicians and two part-time Meter Technicians to meet the work demands related to reading meters and service work orders. The designated meter reading group consists of the part-time Meter Technician who is dedicated solely to collecting AMR reads and another Meter Technician who spends half of their time reading meters, and half of their time troubleshooting rereads and performing route maintenance. Meter Technicians are assigned routes and after finishing reads and they perform route maintenance to identify meter issues, more specifically reporting stopped or failing meters, and ensuring that those issues are resolved in a timely manner.



To relieve some pressure on staff, the part-time Meter Technician was hired to begin the reading process at night. Deploying a night-time reader enables the utility to operate more efficiently because it allows for quicker collection of reads when traffic is at its lowest and without safety concerns due to high-volume traffic areas. Remaining reads are recorded the next day, typically in the morning, and the rest of the day is dedicated to “cleaning up” the reads from the route by troubleshooting meters with read anomalies and rereading meters for billing. A best practice noted within the organization is the sharing of responsibility among all Meter Technicians to maintain the highest read accuracy percentage as possible each month. The utility meets the high percentage of automated reads by instilling accountability among the Meter Technicians to maintain their assigned routes and using

a team approach for issue resolution. Two additional Meter Technicians support meter reading, troubleshooting rereads, and performing route maintenance. The designated meter services work group consists of six Meter Technicians who spend most of their time on service work orders, including disconnect/reconnect activities, troubleshooting meter issues, and meter setting and repair/replacement.

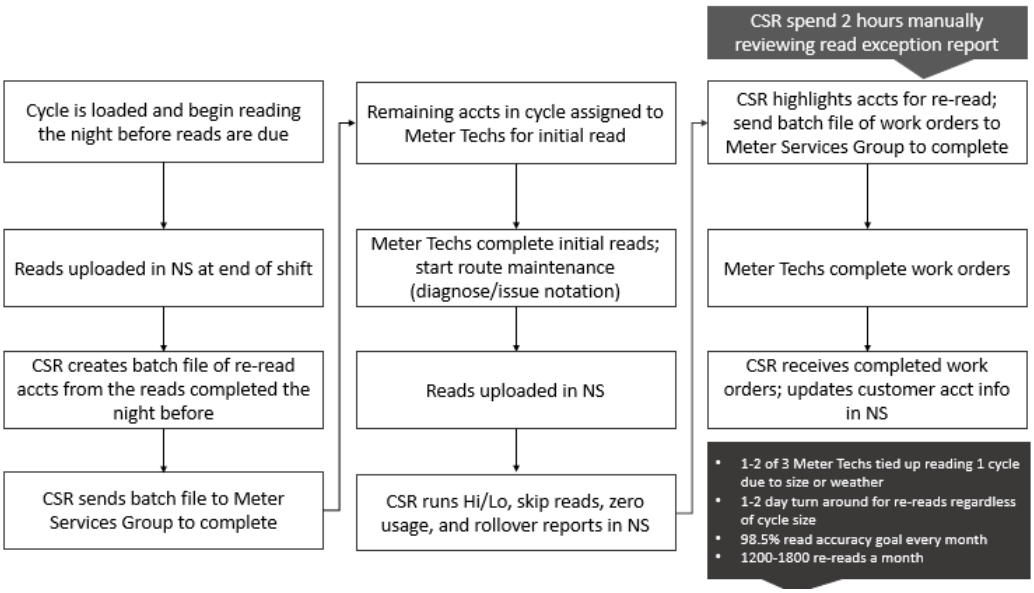


Figure 9. Flowchart of Meter Reading and Rereading Process

Meter Rereading Process: As reads are uploaded into the Utility's CIS system, Harris Northstar, CSSs are generating and printing multiple reports from Northstar to manually investigate accounts for rereads. Rereads are done for any reads that were flagged by the system as being too high or low based on the system's algorithm, to obtain final reads for move-in/move out accounts, any reads that were missed, or any that are deemed unusual by the Customer Service Supervisor. The utility will also reread meters upon customer request. A single batch file of exception accounts is sent to the Meter Services Supervisor, who distributes and assigns the work amongst the meter reading group. New reads are collected and returned to the CSS for her to update customer account information in Northstar. Figure 9 displays the workflows of the initial read and reread processes.

Contributing to the aggressive reread list is the utility's history of failing meters, creating a sense of mistrust in the metering infrastructure amongst utility staff, and results in the rereading of meters for accuracy. There are still approximately, 20,000-25,000 meters remaining in the ground that has aged out, producing unreliable reads. About 300-400 of these meters (Elster brand) fail each month, and as a result, these meters are automatically pulled when they are found in the field and replaced with a new meter.

Disconnect/Reconnect Process: Close to one-third of each of the six Meter Technician's time is utilized performing disconnect and reconnect activities. They are disconnecting multiple times a week and reconnecting service every single day. The CSSs create a batch file of accounts that are eligible for disconnect every morning. Five Meter Technicians report to one cycle and work together to complete the disconnect list. Meanwhile, the sixth Meter Technician is reconnecting service as requests are trickling in throughout the day from CSSs. Currently, the CSSs will informally send a text message or call Meter Technicians to reconnect service.

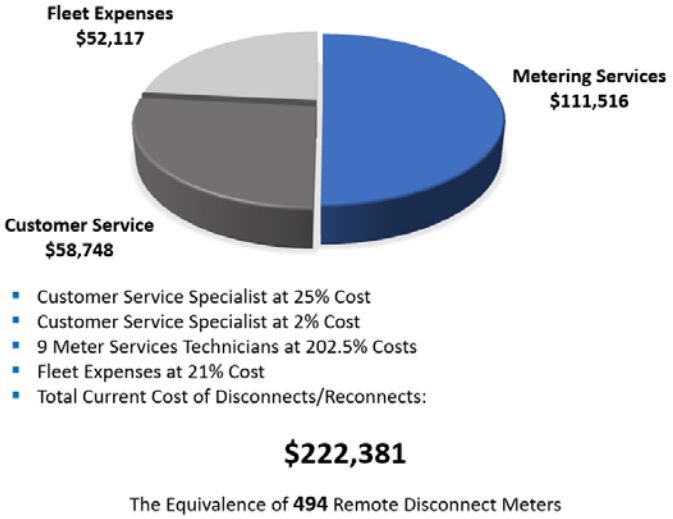


Figure 10. Cost-Benefit of Disconnect/Reconnect Operations

Additional challenges for metering staff are the batch auditing process of reread and disconnect/reconnect accounts, which makes it difficult for staff to complete the long list of work orders that are issued to them at a single time, while more work order assignments are trickling in throughout the day, adding to the workload. Consequently, work levels fluctuate, and bottlenecks occur. This is evidenced in the metering/billing calendar when Meter Technicians are at one end of the County recording rereads in Cycle 1 and simultaneously cutting off service in Cycle 8, which is the largest cycle and is located across from Cycle 1 at the other end of the service territory. The peak work demand that falls between these 2 cycles creates a strain on utility resources and added pressure to meet the quick one to three-day turn-around time of work orders for billing.

The utility's current expense on disconnect and reconnect activities among the metering services group is $111,516 and the fleet expenses to support these activities is $52,117. The total cost of disconnect and reconnect service activities for metering and customer service staff is $154, 415. This correlates to 343 average priced remote disconnect (RDM) meters which more than covers 293 of the utility's chronic offenders, who were disconnected three times in the last year for non-payment. The graphic above provides a detailed breakdown of the current disconnect and reconnect costs and net benefits). Remote disconnect meters until recently were only offered by one manufacturer, Mueller Systems, but now is emerging on the market through solutions from Sensus and Badger for devices built within the existing lay-length of the meter setting. Itron offers remote disconnect functionality as a separate device in a separate pit installed box.

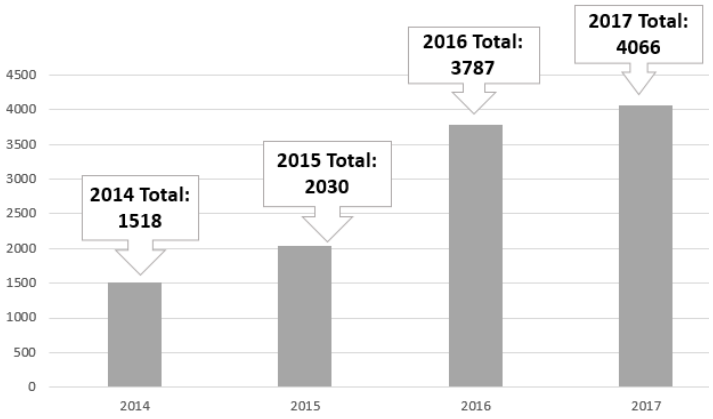


Figure 11. Annual Meter Replacement Totals

Meter Replacement: Since 2012, the County added about 8,000 new meter sets for an average of 1,300 a year. While new meters were being installed, old meters that were beyond their useful life were failing. Within the past 4 years, around 11,000 meters were replaced due to failure (see bar graph of annual meter replacement totals). In between the year 2016 to 2017, the County experienced its highest failure of meters and ERT components. As a result, the County's expected number of new meter purchases doubled from about 3,000 to 6,800 meters to meet both the replacement rate of failing meters and new meters due to new development. Currently, the utility is managing the challenging pace of meter replacements as quickly as they are failing. However, operating under the current break-fix model of replacing meters, while recognizing the need to plan for new growth, will exhaust utility resources and is not sustainable.

2. Key Findings and Recommendations – Metering Operations

A significant amount of data from the UCPW project team provide the details necessary to comprehensively understand the current metering operational conditions so that opportunities for automation and contributing value of metering technologies could be determined. Through this current state evaluation, key findings were discovered, and subsequent recommendations were developed to support the proper solution requirements/specification planning of a preferred metering solution.

Table 14 summarizes the key findings and recommendations that supports the County's goals to enhance operational efficiencies, invest in sustainable metering infrastructure, and benefit customer service excellence.

Key Findings	Recommendations
Variability of meter age, type and body/radio pairing creates inconsistency in field replacement and failure point Lack of standardization presents variation in useful life predictions and capital planning	▪ To retrofit recent installs to capture full remaining useful life of meters ▪ Full transition utilizing standard meter, endpoint, read collection infrastructure, and applications
Cycle growth disparities and route designs present pressure periods each month and creates uneven workloads and operational inefficiencies	▪ Automate reads with AMI technology to free up staff capacity for other tasks ▪ Dissolution of current cycles and routes through AMI deployment and creation of balanced read cycles
Batch assignment creates uneven workload Reactive scheduling creates bottlenecks, overtime, and outside department support	▪ Leverage enhanced advanced metering system-generated alerts that can be assigned based on responsibilities; this is auto division of labor for work order
Repeat site visits for re-reads, verity off-service, zero read, and high/low read validation	▪ Leverage on-demand reads and interval read data to allow for more insight into consumption trends, as well as soft-disconnect function for disconnect/reconnect services
Having the ability to perform only limited preventative maintenance and managing loss of efficiencies through travel time and manual and redundant business processes	▪ Automate reads with AMI frees up staff to perform proactive system maintenance (backflow prevention, meter testing, system health monitoring)
Failures due to old age, stopped meters, compatibility issues, and mix of versions complicate the creation of a more formal replacement program; currently a break-fix model	▪ Convert to full AMI system to: o Create standardization in metering infrastructure o Obtain “Clean slate” of asset management data, which allows for scheduled and planned maintenance o Leverage system alerts and alarms that notify staff of meters approaching end-of-useful life for replacement; more proactive system maintenance and health monitoring
Revenue loss is certain given the age of the meters and estimating for predictable loss of accuracy performance over time	▪ Leverage AMI technology to allow for system leak alerts and trending of data to detect leaks early and minimize NRWL ▪ Leverage AMI system reporting and functionalities to monitor system health
Data logging on request/troubleshooting Pilot of 10 participants showing value of interval read for customers	▪ Employ to have the ability for scheduled and planned maintenance to free up staff for same-day service provision ▪ Leverage AMI to obtain Interval reads for issue resolution trending and customer “self-service” via customer portal

Table 14. Key Findings and Recommendations in Metering Operations

It is recommended that the utility consider implementing these recommendations to support the migration away from a reactive and manual operating environment to one that is more proactive and operationally sustainable. By standardizing metering infrastructure and automating the labor-intensive work order processes, the metering services organization should be able to focus on more strategic service needs. The following section describes the future state impacts to metering operations that should occur in an AMI environment.

3. Future State Impacts to Metering

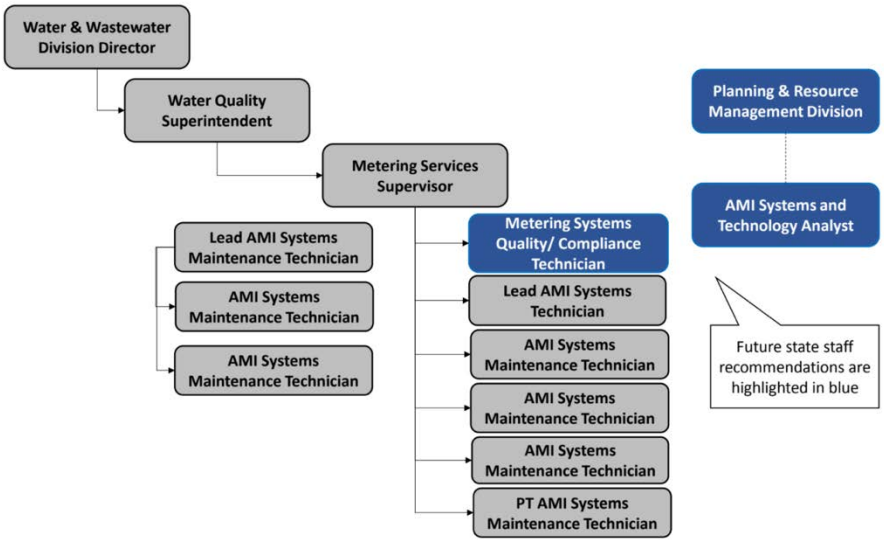


Figure 12. Future State Metering Services Organization Chart

Organization: The efficiency gains from implementing an AMI system are the basis of its appeal. Issues that currently plague meter readers, from safety concerns to visiting meters that are failing to read, will no longer be an impediment to collecting reads. Since meter reading will be the process most affected by AMI, it will require a redesign of the roles and responsibilities of the County's Meter Technicians. Leveraging AMI technology will automate the reading process and the related metering work order processes, which should result in operational improvements and efficiency gains. Additionally, the utility should require less staff, creating greater capacity for new positions that will fill the existing resource void of much needed preventative system maintenance functions (see Section 9 for detailed information on new AMI roles and responsibilities). The following section describes the future state changes to metering operations, which allows for the metering services organization to use their time more strategically and perform as "true" Meter Technicians.

Reading Environment: The utility's existing AMR read technology significantly enhances and expedites the reading process over manual read technology using a touch wand. However, by automating the reads with AMI read technology, frustration to manage reads and related service work orders associated with a complex and expansive service territory should subside, and only a small portion of an employee's time will be required to read meters, mostly to collect the reads of any meters having issues reporting for whatever reason. Although, the utility is not currently using the profiling of metered data. Doing so will allow the profiling of interval read data by selected meters, but not as a batch of the entire system. Currently, the utility has limited access to interval consumption data and significantly less trending and analysis data for proactive system monitoring and insight. In contrast, AMI technology allows for continuous hourly consumption recordings. With the copious amount of data and the functionalities made available by an AMI system, the metering services organization will have the luxury of remotely troubleshooting communication in the future.

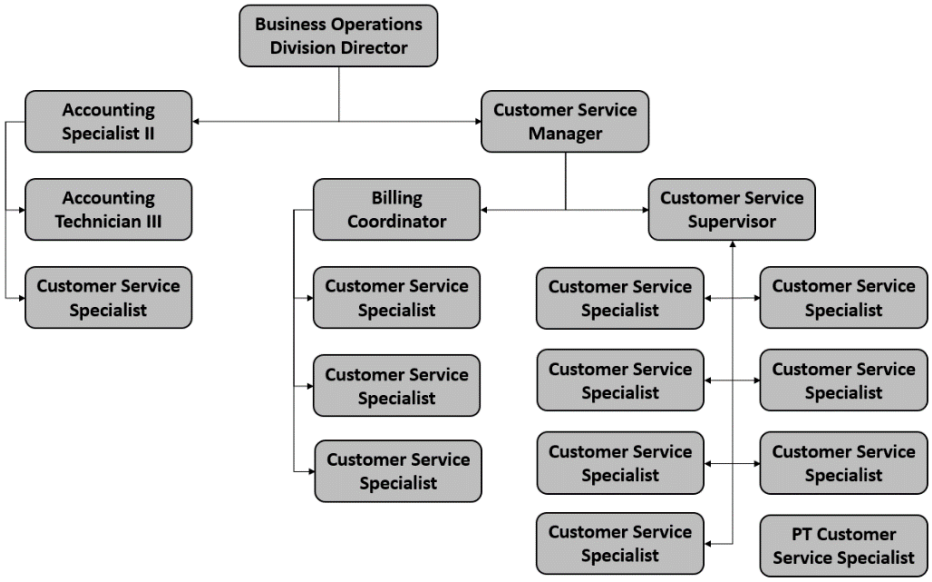
Disconnect/Reconnect Process: This process involves unscheduled and informal communication between metering and customer service staff throughout the day, creating repeat site visits, and requires extensive traveling across the large service territory to the same cycles multiple times a day due to customer service mobile requested work orders

that are trickling in throughout the day. This resource-intensive process can be automated by having the CSS's flag eligible accounts for disconnect and applying a "soft disconnect" until payment is received. This will reduce the need to roll a truck to confirm zero usage and is especially helpful for chronic delinquent accounts. In addition, the selective deployment of Remote Disconnect Meters (RDMs) will alleviate the time and effort spent on disconnecting and reconnecting service. The convenience of remotely turning service on, off, or reducing flow to perpetual non-payment offenders should limit the subsequent field requests of Meter Technicians.

Asset Management: The metering services organization continually strives to manage metering assets and operations under key performance indicators related to various work orders, meter and ERT component repair and replacement, existing metering brands and count that is in the ground, and other performance objectives. However, the tracking process is manual intensive, involves managing printed work orders that can get lost in the field, and the manual keying in of data can create misinformation. The change to electronic management of the field orders should enable staff to better manage service requests. Errors should occur less frequently, automation of key entry values as defaults should further increase efficiency and accuracy, and minor modifications to record keeping procedures should round out the change process. Another impactful functionality to the work order process is the use of codes in lieu of writing comments into the work order. Codes will allow for expediency in work order generation and reduce confusion around wording or phrasing.

4. Current State Billing/Customer Service Operations

Figure 13. Current State Business Operations Organization Chart



Organization: Union County continually strives to provide excellence in customer service account support and utility management. This is evidenced in the merging of billing and customer service functions under one program within the Business Operations Division of the utility about three years ago, to optimize business operations and improve customer service responsiveness. The assigned tasks for each position varies from service work order creation and pre-billing activities, to customer account management. Aside from assigned tasks, all staff are expected to be knowledgeable of the key business processes, including the complexities of the meter reading and billing system. By working together under one arm of the utility, there is now greater capacity to support the labor-intensive activities associated with exception reporting, service work order creation, and the processing of billing 10 times each month. The work demands associated with a strict billing window creates a high level of pressure on staff, in addition to operating by informal and manual heavy processes, to deliver accurate reads and bill on time. Recognizing that staff are working at maximum capacity to maintain the current meter reading environment, the utility has recently added on a full-time Customer Service Specialist (CSS) to alleviate some of the stress on existing staff.

Operational Capacity and Staffing: The low salary and high-performance standards expected of the CSS positions presents exposure for employee turnover. The CSSs are an integral part of the utility as the front line of defense to provide quality customer service support and responsiveness. Recently a class study was conducted to evaluate opportunities for promotion and increased pay and retention.

Newly hired CSSs are trained by an informal and best practices approach. A CSS will rotate between various utility workgroups to gain a general understanding of the related business processes and become familiar with the technical terminology necessary to successfully perform a composite of billing, customer service account management, and service work order functions, amongst other responsibilities. It is evident that the County is investing a significant amount of time, effort, and resources to properly train CSSs who can support the manual heavy business processes that is associated with the existing metering and billing environment, while providing quality customer service.

Exception Reporting: The manual work processes that billing and customer service staff is currently operating under is a product of system settings that are not properly utilized. This limits the effectiveness of the read exception reports and instead of being able to identify legitimate read exceptions, the current CIS system is pulling a high number of accounts with normal readings. This leads to staff printing and manually reviewing several exception reports at a time, including the high/low, skipped reads, rollover, and zero usage reports, to identify legitimate rereads. Another system issue is the limitations for data entry and available field options that CSSs can populate and use for improved customer account information management. Since Harris Northstar is the predominantly used system for account management and customer service/billing issue investigation, a deeper dive into the system settings is critical to leverage the system to its full potential. Section 5 analyzes the utility's current system settings in greater detail.

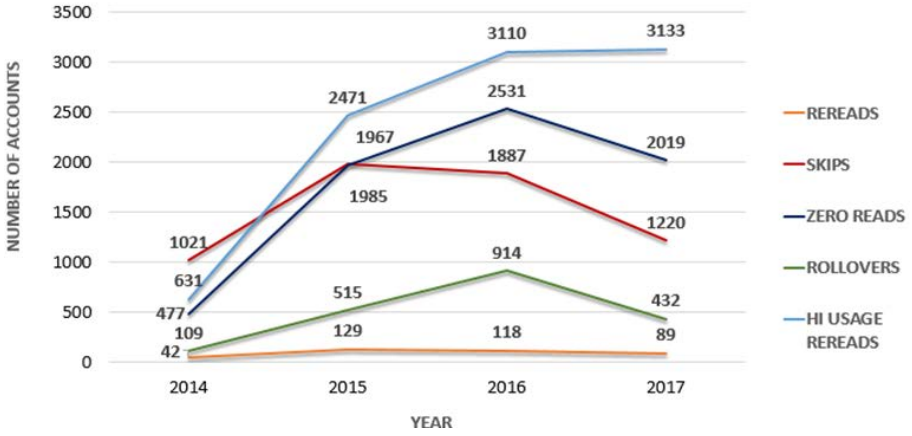


Figure 14. Annual Reread Accounts by Type

The lack of system flexibility has led to manual workarounds. For instance, CSS's are reviewing individual accounts for exceptions (edits/rereads). In addition, reading a cycle every other day requires staff to immediately tend to reread exception list creation, to keep pace with the read schedule, and not fall behind in billing customers on time. A CSS spends up to 2 hours a day creating the reread list and according to the reread data tracked in billing, reread work order creations due to various reasons has exponentially increased since 2014. For accounts with new reads that are still high, CSS's will contact the customer to notify them of the high usage and attempt to troubleshoot the issue with the customer. However, beyond asking issue resolution questions, CSS's are limited with monthly reading data and does not have the ability to investigate and pinpoint when the high usage occurred.

Disconnect-for-Nonpayment Process: Customer service and field staff spend a significant amount of their time on disconnect/reconnect activities. A CSS spends about 2 hours on this process almost every single day. The process requires the CSS to create a disconnect-for-nonpayment list by manually reviewing a report listing all customer accounts for those that have made bill payments. Then, the list is provided to the Meter Reader Supervisor for assignment amongst the meter services group. Once disconnect work orders are completed, they are returned to the CSS to update customer account information. Accounts are eligible for disconnection service when they are 2 months behind in payment and owe more than $30. A disconnect processing fee of $50 is applied to their account and their

account must be paid in full prior to 4pm for same day service. Two CSSs are currently spending a combined total of 27% of their full-time job on disconnect and reconnect activities at an expense of $58,748 to the utility.

A significant challenge for both Meter Technicians and CSSs is the reconnection of service process. As soon as customers make payment, the CSS calls or sends a text message of the customer's account information for field staff to turn service back on. However, the CSS is unaware of the Meter Technician's availability and that they are busy juggling disconnect work orders that come in a batch instead of discrete packets and other service work orders.

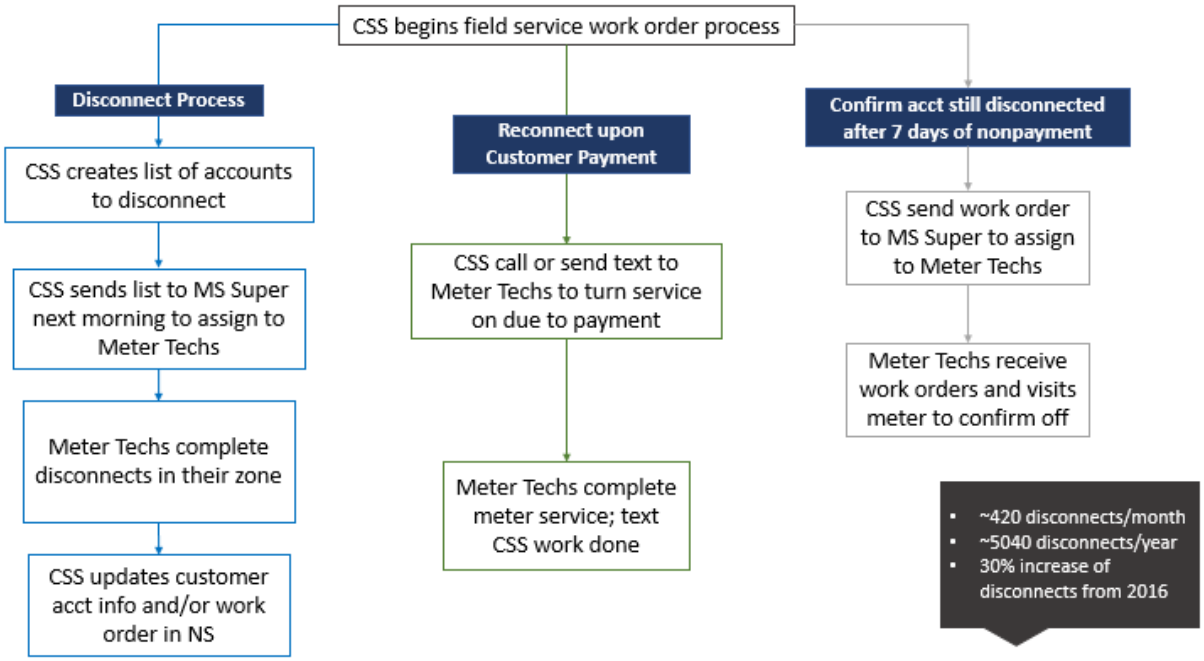


Figure 15. Flowchart of Disconnect/Reconnect Process

This creates a substantial load of work on the frontend and is a constant daily struggle for Meter Technicians to complete work orders as quickly as they come in and on time for bill processing. Reconnect service requests are constantly trickling in throughout the day, which adds to the Meter Technician's workload and further exacerbates the situation. When reconnect work orders are completed, CSSs are unaware of the time of completion or any comments or special concerns from the meter technician. The lack of communication between staff has resulted in multiple repeat site visits for zero usage validation. Additionally, the utility still loads and reads disconnected meters, which contributes to unnecessary site visits and inefficient use of staff resources. According to data provided by staff, there were 2,927 disconnect-for-nonpayment customers last year, 749 customers were disconnected at least twice in a year, and 293 were disconnect three times in a year, while some larger customer accounts have been disconnected up to 16 times a year. Finally, the utility is averaging 159 repeat visits for accounts that were never reconnected due to indicators still spinning.

Leak Adjustments: For 2013 to 2017, the County received 10,421 customer complaints about a leak. Of those customers, 2,886 requested for the County to verify if the leak has been repaired, and the remaining 7,535 requested for leak checks. CSS are limited with monthly read data to confidently verify a leak and rely on field visits to inspect for any signs of a leak. The County will grant a billing adjustment for suspected leaks according to the leak credit policy, which is demanding on staff time to determine the amount of credit due. Between 2014 to September of 2017, the County issued 2,895 leak credits, costing the County an estimated $647,809. With AMI, utilities can receive leak alerts and hourly interval consumption data to trend and identify customer side leaks, thus eliminating the need of truck rolls for investigation and the leak credit policy to adjust customer bills.

Billing and Customer Service Support: UCPW takes a very customer-centric approach to utility billing management and customer account support. The County offers a diverse channel of payment acceptance options, from online payments and automatic bank draft options, to personal check payments. The pie chart shows a detailed percentage breakdown of the payments received by payment channel. Currently, about 39% of the County's customer base still prefer to pay their water bill by check. Bank draft payments are highly promoted by the County to ensure prompt payment by the customer. However, only about 9% of the County's customer base is utilizing bank draft payment. As a best practice to promote ACH, the utility should consider developing key performance indicators and performance objectives to meet target performance initiatives (see section 10.2 for KPI development for billing and customer service).

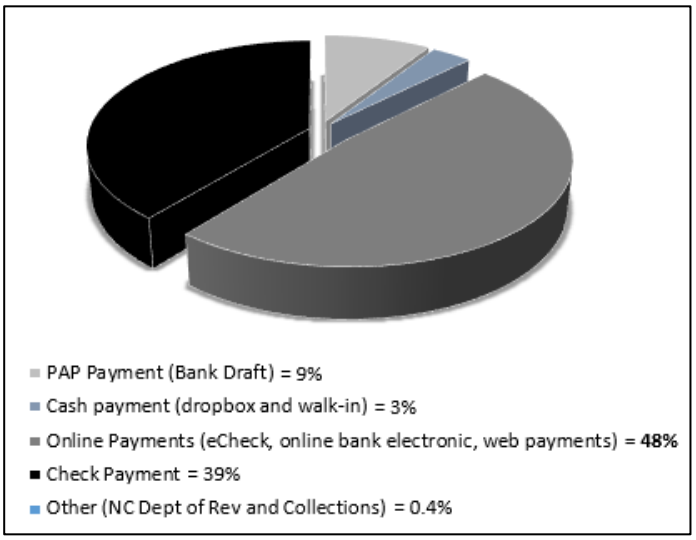


Figure 16. Breakdown of UCPW's payment channels

Most customers are using some form of electronic payment, such as electronic check payments, electronic bank payments, and web payments using the Paymentus payment portal either online or by mobile phone. Around 48% of the County's customers are using some form of electronic payment, which makes the County a great candidate to expand customer service support through a customer portal. Although the County is not doing any meter profiling for its water customers, trending consumption and the complex algorithms built into an MDMS will significantly reduce the impact of leaks. The County could consider doing data logging, that is, pulling interval read data for the 100w radios for those eligible meters, recognizing that it is limited to a 30-day time frame and, while usually that would be too short to see when a leak or an issue arose, it can start to highlight the helpfulness of interval read data and help make the case for AMI for all customers.

The desire to provide the best customer service is a driving motivation of utility policy and customer-facing features. For example, the County provides customers with a packet of information on Paymentus, and customer can sign-up for an account after receiving their first bill. This initiative has been extremely successful and has resulted in an estimated 4,200 e-bill customers. It is this customer-first approach that permeates the organization which makes the County a prime candidate for AMI adoption to provide improved services and support to their end users.

5. Key Findings and Recommendations – Billing/Customer Service

In cooperation with utility staff, a detailed analysis of the County's data was completed, and key findings of the current operational conditions within utility billing and customer service were identified. The table below highlights the key findings and recommendations. Findings are followed by recommendations that were developed specific to the County's goals to improve customer service excellence, streamline business operations, and enhance system capabilities for operational efficiency gains.

Key Findings	Recommendations
System settings and exception thresholds are not tailored to account designations or seasons Exception reports are manually reviewed	Meter replacement allows for "clean-slate" data Leverage account designation and robust reporting in MDMS
Batch review and audit of reads creates bottlenecks due to route/cycle read process (field work done, submitted, then reviewed)	Ability of field staff to maintain read rate % Ability to segment work by region and cycle for service orders with MDMS – GIS integration
Batch process due to hybrid read process creates fluctuation of workload	Automation of reads frees up staff for other tasks Full system monitoring removes cycle/route
Don't trust reads High number of re-reads and repeat site visits	On-demand reads and alerts/alarms for repeat visits and improved WOM
Limited ability for customer self-service High adoption rates by customers of online and remote payment features	Customer Portal allows for SSO and robust self-service functionality User sets notification; education and conservation
Read cycles and route designs present pressure periods each month and creates operational inefficiencies	Automation of reads frees up staff for other tasks Dissolution of cycles and routes in AMI
Customer service is the highest priority for the County, and attempts at providing increased support for the end user, through online payment, is a best practice supporting that goal	Customer portal allows for hourly interval consumption data/trending and "self-service"
Many of the pain points and high cost of service provision due to the current read environment can be alleviated	Enhance customer service features and functionality through the adoption of AMI technology

Table 15. Billing/Customer Service Key Findings and Recommendations

The key recommendations should be considered by the utility to alleviate the high work demand and pressure that is related to meeting a strict billing window and for a large customer base, while operating under a failing metering infrastructure environment that requires significant utility resources to investigate and manage service work orders. The existing manual and time intensive work processes takes way from providing superb customer service support that is a standard for UCPW. By automating reads and leveraging enhanced AMI functionalities, the billing and customer service staff should gain operational efficiencies, thereby, being able to redirect their time, efforts, and focus on more strategic service needs. The following section describes the future state impacts to billing and customer service operations that should occur in an AMI environment.

6. Future State Impacts to Billing/Customer Service

Organization: Leveraging technologies through business process adjustments is the most challenging and opportunistic component of an AMI deployment. Billing and customer service staff currently spend the majority of

their time adjusting bills or processing payments, with limited time dedicated to troubleshooting or actively managing customer accounts. In an AMI environment, staff will have the ability to leverage consumption data and enhanced functionalities to more proactively resolve customer service calls. A CSS's time can be redirected to identify issues, allowing for more preventative or at least responsive customer issue resolution and customer education. Additionally, automating the reading process will relieve time spent manually reviewing exceptions reports for rereads and disconnect services. This will in turn reduce the volume of service work order creation and result in operational improvements and efficiency gains. By automating and streamlining business operations, the utility should require less staff support. The creation of new positions that will fill the existing resource void of customer service communications support and management, communications and business operations performance management through KPI establishment, conservation management, and direct collaboration with the County's Media and Relations organization for enhanced customer service engagement efforts (see Section 9 for detailed information on new AMI roles and responsibilities). The following section looks at the future state changes to the County's current metering and billing functions which will achieve higher levels of efficiency for customers and operations.

Reading Environment: AMI offers convenient services, such as specific service start/stop scheduling through on-demand reads. The on-demand read functionality will greatly benefit customer service efficiency because currently, CSS's final bills for move in/move out by creating 1 work order that is actually tied to 2 work orders, one for move in and one for move out. This process is time consuming and the complexities of the 2 work orders that is packaged into one makes it difficult to track and monitor over time. Especially, when this type of work order is created for rental properties that have a high turn-over rate. Problems arise when there is consumption between when the account was designated as active and then made inactive, and the CSS has no ability to pinpoint when the usage occurred. AMI will allow the CSS to get an on-demand read to final the account, and if it is setup as a rental with a landlord already assigned, the account can be automatically reverted to them, upon which another on-demand read can be generated as the start read for the new bill. If no consumption is expected, a "soft disconnect" can be set to flag usage.

Exception Reporting: By deploying AMI, customer service staff will see immediate relief of the time spent managing service work orders and reviewing exception reports to create reread and disconnect-for-non-payment lists. Due to enhanced reporting functionalities, CSSs can print reports by exception in a single file and issue service work in less time than it took before. In addition, the capabilities of the MDMS to validate reads and identify issues with complex algorithms, and the system flags to provide alerts by exception will further alleviate strain on staff.

Disconnect-for-Nonpayment Process: An expanded functionality of AMI is RDM technology that conveniently allows staff to turn off, turn on, or reduce flow to meters. This is advantageous to utilities like UCPW with a high degree of chronic non-payment offenders. The current and manual heavy process of creating the disconnect list multiple times a week and the immediate reconnection of service almost every single day by Meter Technicians is inefficient use of utility resources and staff time that can be better spent on other tasks. This process can be automated by flagging eligible accounts and applying a "soft disconnect" function until payment is received or the utility can deploy RDMs and remotely turn off or reduce flow to eligible accounts. The CSSs will also have the ability to automate the reconnection of accounts for faster restoration of service. Modifying the existing manual process to one that is more streamlined will increase operational efficiencies by reducing the time and resources it takes to service accounts or check meters for unauthorized or suspicious usage.

Billing and Customer Service Support: A professional customer service culture is very evident throughout the County, as is the frustration with the current meter reading environment and its negative effects impacting responsiveness to the customer. With AMI, reads are automated and hourly consumption data is available to customer service staff, who can access this data and provide more information to customers on their account with the data from the system. The flowchart displayed in this section depicts the potential process by which a CSS can leverage the functionalities offered by an AMI and MDMS to troubleshoot a high bill complaint call. Currently, the CSSs spend the majority of

their time managing customer accounts, with limited time dedicated to troubleshooting customer service calls and proactive customer service engagement efforts.

By operating in an AMI environment, Customer Service staff will have the ability to:

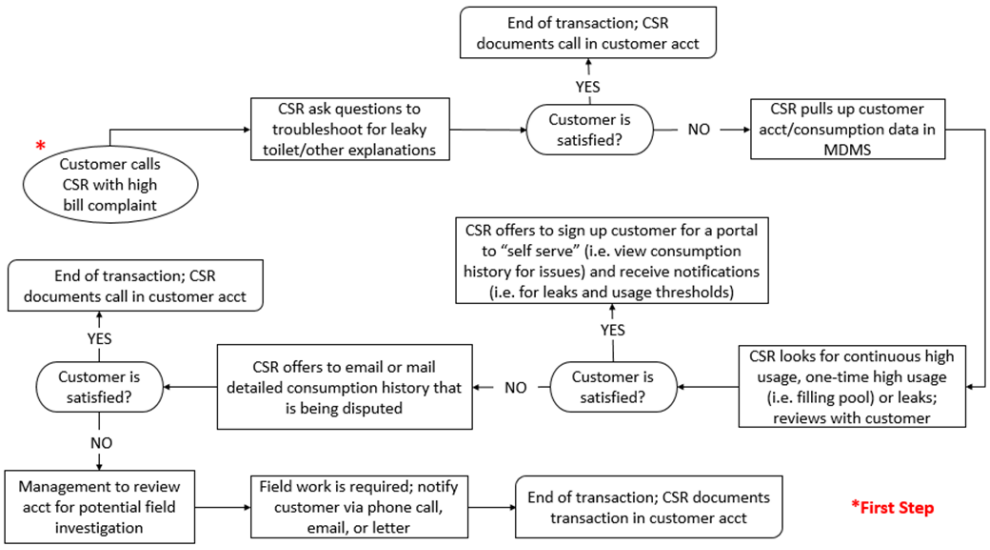


Figure 17: CSR Customer Complaint Process

- Perform extensive troubleshooting through exception and diagnostic reporting options, which allows for more preventative measures and improved customer responsiveness
- Monitor high consumption for all accounts on a continuous basis by the MDMS and through leak alerts and alarms
- Provide prompt customer notification when a constant consumption alert is triggered, as opposed to after they receive their bill for an inordinate amount of usage
- Promote customer education during support calls and register customers to view consumption history and "self-serve" through the customer portal
- Leverage RDM technology to flag eligible accounts for disconnect service by applying a soft disconnect function until payment is received; CSSs will receive a notification if usage occurs

Empowering customers to take action for their services behind the meters is critical to change their behavior around water consumption and conservation. System automation and leak alerts and alarms will notify customers within 24 hours of continuous flow that a potential leak has occurred thereby providing opportunities to address potential high-bill issues before they happen. This will also empower customers to be accountable for their water usage and monitor consumption that is available through a customer portal.

Customer Portal: Currently, the County offers no self-service options, outside of online or automatic bill payment. In an AMI environment, customer-facing tools such as the customer portal allows customer to benefit from more detail into their consumption, reducing the need to contact customer service for information. Additionally, the customer portal option for AMI systems provides for automation, billing, and usage data access by the customer through an on-line site designed to provide customers with all relevant information about their account and consumption. This data access provides the County with the ability to adopt and promote customer service policies that help customers manage and conserve water resources, minimize subsidization among customers for leaks and service orders, and create opportunities for pre-payment of accounts, and aid commercial customers that value utility billing and consumption as part of their operations. Lastly, a customer portal would provide an additional platform to communicate and educate, increasing positive customer behavior management, on top of the benefit of allowing the customer to better monitor their consumption and "self-serve."

Through AMI technology, customer service and billing staff will have the ability to provide greater insight into consumption data, thus reducing calls or call length to customer service, field visits and clerical time. The enhanced

system capabilities provide the ability for CSSs to get near real-time data to troubleshoot issues, field staff to respond quicker to meter alerts and equipment issues and improve customer accountability through transparency of a portal. These system advantages should provide increased operational management and system oversight. Ultimately, an AMI system will improve business operations and procedures, provide efficiency gains, and enhance customer service across all aspects of the organization.

7. Procedures, Policies, and Ordinances – Current vs. Future State

One of the most overlooked aspects of change management when a utility implements an AMR program of work is the influences of reading technology, more specifically AMI, to the existing procedures, policies, and ordinances of the utility. The County should consider adoption of internal procedures that support operational performance indicators aligned with Utility goals in the areas of customer service, finance, and operations. The current state and future state policies and procedures recommendations are presented in the following section.

Current: The disconnect policy the County currently has is flexible and designed to be customer friendly. Accounts are eligible for disconnection when they are 2 months behind in payment and owe more than $30. Recommendation: In the future, it is recommended that the utility notify the customer via phone call or send an email to pay the first month's late bill within 48 hours or be penalized in the form of a $50 disconnect processing fee that will be applied to their account. It would be in the utility's best interest to try to collect payment after accounts are in one-month delinquency, instead of 2 months. This will limit financial liability on the utility and encourage customers to make payment for one month, which is financially easier on the customer, than struggling to pay off two months' worth of bills. It is also recommended that the disconnect processing feed be changed to be called a Disconnect Eligibility Fee, as the charge is to cover the costs the County incurs which occurs even if the customer is not physically shut-off.

The County should consider enacting a tamper policy that reflects the replacement costs of each of the smart meter components. This would require creating an itemized pricing schedule to identify the per unit replacement costs. We recommend this be done immediately following solution selection, so the County can educate customers on the change during the project communications. The County can then determine if they want to cover the first replacement, with any additional replacement due-to-damage being added to a customer's bill. It is also recommended that the County enact a policy dictating that customers must keep the area surrounding the meter box clear of all gardens, including mulch or shrubbery that might interfere with signal transmittance.

Customer Service Specialists are the front-line for dealing with customers and resolving their account issues. When a customer calls to ask the CSS to address high usage on their bills, the CSS is limited with the information available to troubleshoot or to resolve the issue. Most commonly, the CSS will create a work order to have a technician go out and inspect the meter for any obvious signs of a leak, such as water in the meter box or a constantly spinning dial. If a leak is suspected, a billing adjustment can be granted according to the leak credit policy. Since utility staff will have the ability to obtain more accurate and timely information from the AMI system, the County should discourage no-cost field investigations.

When the data is available for consumption management, there is an ability to understand where water consumption is occurring and better anticipate patterns of consumption from the perspective of a customer or the municipality. These are all key in water conservation due to the need to better understand the nature of consumption rather than simply documenting the resulting consumption.

Water Conservation: UCPW should be commended for their pre-emptive action in water conservation through the current conservation program, including the irrigation plan. Currently, Union County has a Soil and Water

Conservation Plan as well as a Water Resources Plan to encourage both residential and industrial customers to conserve resources in the County. These have a proven record with the County and offer customers the opportunity to be more informed about the limitations on water consumption under varying consumption as well as being informed on opportunities to limit consumption whether under water consumption limitations or not.

More effective communication was noted in the Water Resources page due to its direct call to action to customers in posing and answering the question of 'How can I help conserve?'. These are the moments where education can occur, and customer behavior can be changed. AMI takes this type of educational opportunity to the next level by providing responsive data to the back office and to the customers the County is trying to influence. AMI customer portals would allow customers to keep track of their own water consumption with more frequent feedback than monthly bills with engaging water consumption programs. Seeing consumption displayed in this manner allows customers to set goals for consumption, budget for bills based on consumption, and stay within County ordained water consumption limits in times of water stress. Interactive and engaging data results in stronger customer response to water conservation needs and sustain continuous behavior augmentation.

Additionally, the County would have numerous opportunities with the implementation of AMI to support the already present County campaign for general conservation. AMI can assist in the following areas:

- Increasing water consumption data to the back office to allow for inquisition on questionable consumption patterns limiting consumption discrepancies.
- Acoustic Leak detection capabilities allow the utility to know where leaks are occurring to protect water resources and limit Non-Real Water Loss (NRWL). District Metering Areas (DMAs) allow for the deployment of Acoustic leak detection in only high value areas as well as simply throughout the entire water system.
- By receiving metering data, truck roll-out can be limited which lowers carbon dioxide release and has the added benefit of lowering the cost of monthly meter reading. Truck roll-out would be limited to special cases such as a zero read or meter maintenance.
- AMI allows the opportunity to better monitor and manage pressure to prevent blow-out events to maintain water quality and distribution system health while saving on water consumption.
- The ability for an AMI network to notify the utility of Reverse flow or no flow events allow for better management of the water quality in the distribution system to prevent water contamination and for better conservation of potable water.

All of these AMI capabilities can easily be added into an advanced metering system to meet the ever-growing demands of conserving water, lowering financial expenditure, and limiting negative environmental impacts. Additionally, this influx of data allows the utility to focus on higher level management rather than in the current state of County operations. For example, meter readers would be able to troubleshoot meter management in the field rather than being highly focused on simply reading meters and new roles such as a Communications and Conservation Specialist can be created to keep customers engaged in the conservation effort as well as effectively inform and communicate with them to encourage action. New roles and innovations in current roles in an advanced metering networks bring new value dynamics to the utility (Reference Section 10.2 for more information).

As the utility works toward better functionality, AMI offers the opportunity to monitor water consumption in real-time, trend water usage between neighborhoods for comparative studies, and would allow for a faster response due to abnormal and high water usage. UCPW's current policies and procedures require the water utility to function as a patron of the County's water resources. This has manifested in the County procedures as:

- The water utility maximizing water usage all year round for the County's water supply with conservation practices
- Reducing seasonal peak day demands to eliminate expansion of the water treatment facilities

- Implementing voluntary and mandatory water reduction measures
- Minimizing the adverse impacts in the event of a drought
- Complying with the CW-LIP (Catawba Water Low Inflow Protocol) to not allow complete depletion of natural water resources and allow precipitation renewals [Active since December 2006]
- Complying with the Water Shortage Response Plan (WSRP) [Active since May 2015]

In times of drought, the County has five stages of varying standards that customers should comply with. AMI helps in the management of these stages by identifying irrigation use outside of authorized times (8pm-8am), limit leaks with acoustic leak detection technology, and allow customers the ability to review their personal water consumption through the customer portal. A direct benefit AMI brings to drought management is the ability to monitor irrigation usage by leveraging the threshold functionality. Customers and CSSs can set threshold levels to limit water consumption and, when usage is over the threshold setting, customers and CSSs will receive notifications. The utility can encourage customers to use the threshold functionality by using rewards and rebates and will also publicly demonstrate the efforts taken to support sustainability initiatives and leverage AMI technology to provide improved public education, engagement, and conservation.

Section 3. Meter Infrastructure Summary

UCPW currently has several variations of meters and AMR transmitters, with about half of the systems still using legacy Elster Invision C700 Positive Displacement (PD) mechanical meters and the other half of the system using Badger M25 PD meters with High Resolution Encoder (HR-E) registration.

For read data transmission, UCPW utilizes Itron Encoder Receiver Transmitters (ERTs) for all reporting AMR reads with the exception of a small number of industrial accounts that are transmitting data through a Badger Beacon AMI program utilizing cellular networking. UCPW installs around 140 new meters each month in response to system growth which creates a continuation of the current meter and transmitter specification. All Elster meters are considered to have reached end of operational life due in large part to moisture/condensation within the encoded registers despite the accuracy performance of these meters.

The County maintains a variety of systems and data points related to asset management including CIS, GIS and spreadsheet work order tracking. Each of these systems have discrepancies in asset types and counts, so quantities for figures such as the number of retro-fit eligible meters, the number of 100W and non-100W Itron ERTs, meter asset ages, and other critical meter attributes are estimated.

Union County serves primarily residential accounts with a small percentage of Commercial and Industrial (C&I) services. Recent large meter upgrades have utilized Master Meter Octave ultrasonic

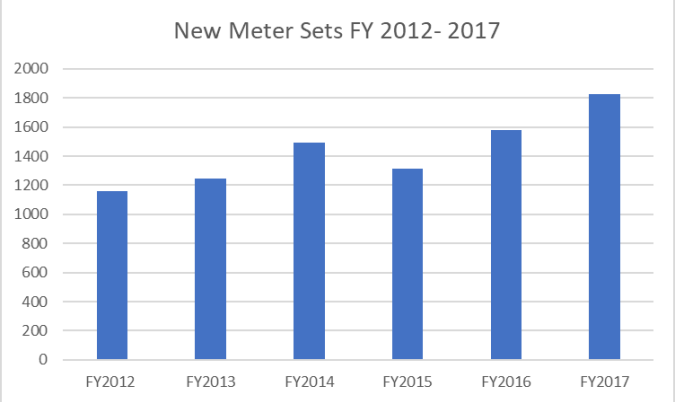


Figure 18. New Meter Sets FY2012-2017

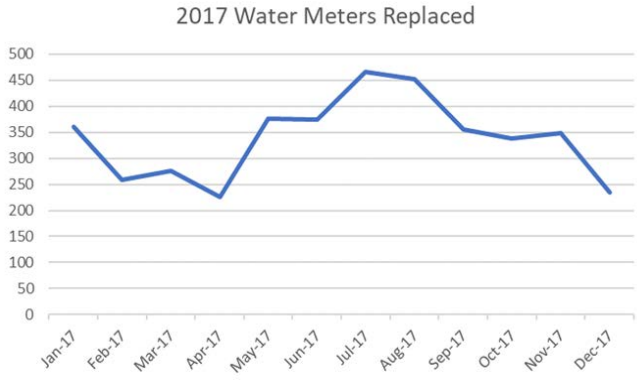


Figure 19. 2017 Water Meters Replaced

technology considered exceptional for read accuracy at both low and high flow conditions with an acceptable level of operational maintenance.

The incredible growth of the County creates resource strains for completing new meter set work orders. This accelerated growth enables the continuation of the status quo meter replacement program due to the investments made for current standards and the lack of time for considering alternatives. Meters replaced each year coupled with new meter sets requires significant annual investments by UCPW without the benefit of refined specifications or long-range technology planning.

Meter Testing: As a matter of data validation, MeterSYS issued ten test meters to MARS, Inc., a certified meter testing company based in Florida, to determine the read accuracy performance of the existing Elster/AMCO meters. Although UCPW has internally testing capabilities, it is a good exercise to have certified results to support modeling estimates and ensure objectivity. The results of the testing were consistent with the 2% weighted inaccuracy determination by County staff and is a credit to both the methodology and professionalism within the UCPW Metering Services group.

The Weighted Percentage Measurement for purposes of determining a single percentage of accuracy is based on 15% low flow (.25 gpm), 15% high flow (15gpm) and 70% mid-range flows (2gpm).



Figure 20. MARS, Inc. Testing- UCPW Meters

Table 17. MARS, Inc. Testing Results - UCPW Meters

METER BRAND	SIZE	SERIAL#	FLOWRATE	ACTUAL VOLUME	PERCENTAGE	WEIGHTED PERCENTAGE
AMCO C700 METERSYS M-2323	5/8"	17368957	15 GPM	100.26	98.64%	98.60%
			2 GPM	9.7	98.97%	
			.25 GPM	10.02	96.81%	
AMCO C700 METERSYS M-2323	5/8"	16558865	15 GPM	100.26	98.84%	99.35%
			2 GPM	9.7	100.00%	
			.25 GPM	10.02	96.81%	
AMCO C700 METERSYS M-2323	5/8"	16579535	15 GPM	100.26	99.24%	99.53%
			2 GPM	9.7	101.03%	
			.25 GPM	10.02	92.81%	
AMCO C700 METERSYS M-2323	5/8"	15429023	15 GPM	100.26	98.44%	97.40%
			2 GPM	9.7	97.94%	
			.25 GPM	10.02	93.81%	
AMCO C700 METERSYS M-2323	5/8"	15429649	15 GPM	100.26	98.84%	96.11%
			2 GPM	10.02	95.81%	
			.25 GPM	10.02	94.81%	
					AVG Accuracy	98.20%

Section 4. Network Infrastructure Summary

1. Radio Frequency Analysis Summary

AMI networks, whether as a traditional gateway system or a cellular system, utilize radio signals and the frequency data transmission is influenced by many environmental factors including humidity and vegetation as well as man-made interferences like buildings and competing radio waves. RF propagation refers to the modeled analysis of radio signal reach at certain power outputs and frequencies. In order to determine the viability of AMI for Union County, a full understanding of the specific design criterias of potention solutions should be considered and evaluated for operational and financial implications.

MeterSYS collected data from UCPW on certain assets controlled by the utility as potential locations for AMI network infrastructure, then conducted a site survey of each of these locations to understand the requirements of each site to support a base station for data collection. The supplemental Propagation Summary Report, submitted as a complementary deliverable to this Feasibility Analysis Report, provides greater detail into the utility's network design and metering infrastructure options as proposed by the six network propagation studies that were received by the six interested companies. This analysis provides a detailed summary of the network propagation characteristics of six market-leading smart meter vendors – Aclara, Badger, Itron, Master Meter, Mueller, and Sensus. All six companies have expressed interest in providing a smart metering solution for Union County and each company provides similar yet unique solution characteristics to the County's metering network.

2. Data Validation

The County provided an initial list of available assets, which included the address, site name, and tower height for 84 potential collector locations. The MeterSYS Field Lead was accompanied by a designated County employee to physically inspect all locations over the course of several days. Through this exercise, it was found that 38 locations were inaccurately described, as the tower at the sight either did not exist or was much smaller than presented in the database. In addition to height discrepancies at several locations, the field audit was able to verify the availability of power, access requirements, backhaul, and other elements that are important, both for identifying any connectivity issues and for accurately assessing future capital and operational network costs. It is recommended that, as part of the procurement process, an updated propagation study be ran using this updated asset information, ensuring that any variation to the network design from what is presented in the Propagation Summary Report is understood and that the final design is certified by the proposing vendor.

3. Infrastructure Comparison

VENDOR	COLLECTORS	AVERAGE SQ. MILE PER COLLECTOR	REQUIRES NEW POLE SET	REPEATERS	REQUIRES NEW POLE SET	REQUIRES CELLULAR SERVICE
ACLARA	21	30	5	0	0	0
BADGER	9	N/A	3	0	0	42,225
ITRON	106	6	22	89	89	0

VENDOR	COLLECTORS	AVERAGE SQ. MILE PER COLLECTOR	REQUIRES NEW POLE SET	REPEATERS	REQUIRES NEW POLE SET	REQUIRES CELLULAR SERVICE
MASTER METER	18	35	12	53	38	0
MUELLER	106	6	80	~100	0	0
SENSUS	18	35	10	0	0	0

Table 18. Vendor Prop Study Infrastructure Comparison Summary

4. MeterSYS Recommendation

Network planning is a critical aspect of developing an AMI project implementation strategy and is a significant element in vendor solution selection specifically related to capital and operational costs aligned with performance reliability. UCPW's expansive service territory creates network design challenges that create a separation in total infrastructure required significantly between 1-watt and 2-watt output solutions. The ability to essentially double total power output from the endpoint provides for a substantial reduction in base station infrastructure and directly influences CapEx and OpEx over the life-cycle of the network. Significant infrastructure creates greater opportunities for failure even with system redundancy and remains a weak point in the network for vandalism or cyber-attack. Nonetheless, the ability to expand functionality of the network through Smart City initiatives, LoRA, WiSUN, and other IoT enabled networks create greater potential for new technologies and network leverage.

Network as a Service, like solutions offered through Neptune and Mueller Systems, is emerging as an alternative to traditional utility-owned networks and should be considered as an alternative for any solicited vendor responses for Requests for Proposals. Under NaaS, the utility would partner with its preferred vendor through a service agreement that eliminated any operational or capital expenditure responsibility for the network and would transfer network costs to an annual service agreement based on performance standards determined by the Utility and accepted by the vendor. If this option is considered viable, UCPW would need to carefully evaluate the impacts of transitioning capital costs over to operational expenses and the indirect influences to costs that solutions requiring greater amounts of network infrastructure would require.

For vendors that propose utilization of utility poles or other electric utility assets, careful evaluation of the ability to for co-location (joint use agreements) should be applied as part of the solution due diligence. Joint Use Agreements can be challenging to get approved depending on the provider (Investor Owned Utility or Electric Cooperative). While the propagation study results provided by vendors during this Feasibility Study phase are not binding or certified by the vendors, these initial designs allow for more accurate network costing and should serve as an introduction into the top tier vendors and their respective smart metering solutions.

Section 5. Data and Systems Infrastructure and Management

This section will depict the current state software environment as understood through several onsite meetings with key staff and work to make recommendations to allow the County to make foundational improvements to main applications, including increasing the adoption and functionality of key systems and improving data governance to help prepare for a future AMI implementation. The key objectives of this analysis are as follows:

Conduct a Systems Assessment	Formalize System Governance and Data Standardization Efforts
Identify opportunities to enhance the effectiveness of existing systems	Identify “scrubbing/clean-up” needs for key databases
Recommend actions to improve functionality and usability	Improve information exchange/interfaces between systems and work groups
Understand drivers for changing CIS and consider options	Facilitate data-driven decision-making across the organization

Table 19. Data and Systems Analysis Key Objectives

Actionable data insights, when applied to management and operational decisions, will allow the utility to better plan for long-term financial investments like infrastructure replacement and water supply planning. In the near-term, practical application of data analytics will allow for informed resource allocation, increasing the efficiency of customer service provision and system maintenance efforts. Aligning systems with operations and allowing the data to move unrestrained between the various systems for the full field-to-finance workflow will ensure that manual work-arounds or information roadblocks no longer hinder the process or paint an incomplete picture, but instead, support staff in their work and provide data that is accurate, verifiable, and comprehensive regardless of the particular system of record. The following assessment will seek to identify the issues and opportunities within the key applications to provide UCPW with specific interface and database changes that should be made to improve information flow, data governance and standardization efforts.

1. Systems Assessment

The figure below depicts the County’s current enterprise architecture of applications and platforms used by utility billing, customer service, and metering field groups. Manual work-arounds are frequently used, and the underlying data is deemed unclean and in need of scrubbing and standardization. The lack of interoperability, indeed, the current incompatibility of the main databases used by the main workgroups, has a negative impact on efficiency of the organization and undermined report accuracy.

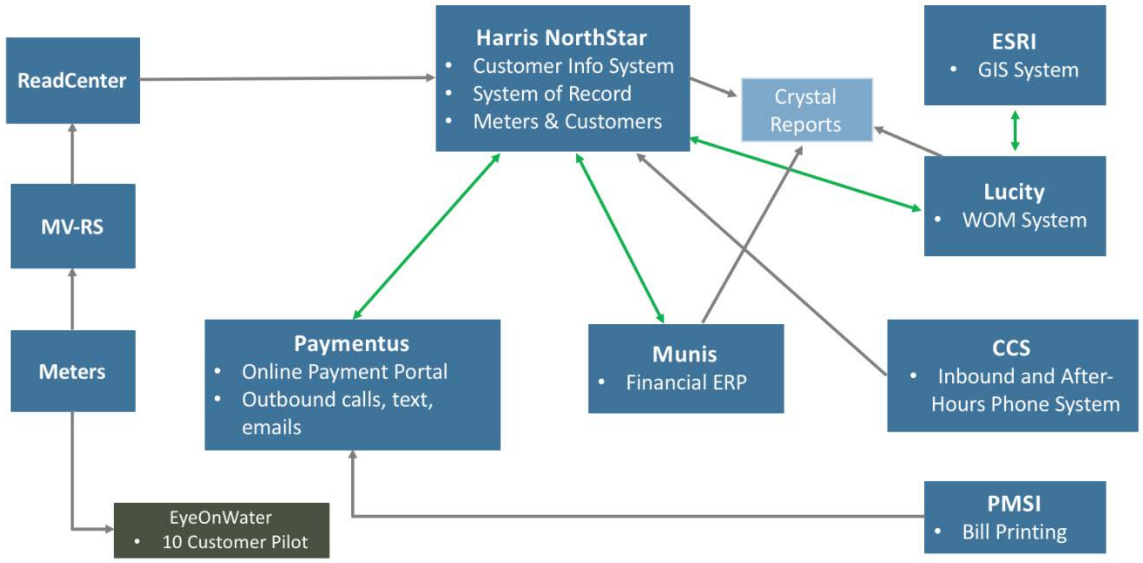


Figure 21. System Summary - Billing and Metering

NorthStar: The system of record for customer accounts is the CIS, which is Harris NorthStar. This is where customer account information, payment and consumption history, and account details and contact information are stored. Deployed in the early 2000's, it is mostly used by the Business Operations Department, which includes customer service and utility billing staff. Implemented over 15 years ago, a major limitation of this system is the accuracy of the data within it. Currently operating on version 6.4, the County is behind on updates. The lack of features and functionality has fostered a culture of using manual work arounds to accomplish daily operations. Based on feedback from key users, the main challenges with NorthStar are as follows:

- It is a legacy system with dated technology that is not user friendly
- The data entry and field limitations restrict functionality
- Screen navigation is not intuitive
- Data considered un-clean creating errors and inconsistencies in reporting and analysis
- Inability to run historical reports
- Limited interoperability due to expensive interface requirements
- Lack of customer portal or self-service capabilities

The 15 billing and customer service representatives that mainly use NorthStar are at the mercy of its limitations, which in turn hinders the service they are able to provide customers. Serving as the source for financial metrics and water use data, this is arguable the most important database UCPW has to keep accurate and up-to-date. One of the most profound pain points identified during interviews and onsite meetings with key users is the lack of confidence staff have in the system and the accuracy of the data. This further reduces the effectiveness of the already limited canned reports and makes the utilization of customized reports from Crystal Reports much more difficult. An example of the limitations of the reporting feature is that NorthStar can't run historical reports. Pulling a report to display old transactions or billing records is a common practice for issue resolution and customer service for billing representatives. It is recommended that the County consider pulling SQL server back-ups to retain and archive this data independent of the constraints within NorthStar.

The County recognizes the opportunity to adopt a more robust CIS and recently published a Request for Information (RFI) to test the market and receive input from interested vendors on the availability of other solutions that may better meet the organization's requirements. The various scenarios of Maintaining Status Quo, Leveraging AMI Systems, or Adopting a Different CIS are presented later in Section 5.4.

Munis: Tyler Technologies' software, Munis, serves as the County's financial software. Munis contains all the purchasing, sales, and finance data and interfaces with NorthStar. The daily flat file exchange between NorthStar and Munis keeps the systems in sync and updates the account balance and payments made on customer accounts. The specific version and interface requirements will need to be included in an RFP for validation of a vendor's experience aligning their MDMS with Munis.

Lucity: Lucity was recently purchased to be UCPW's work order management tool, automating what has traditionally been a very manual and paper-heavy process. The Planning and Resource Management Division was heavily involved in the implementation planning process, including conducting the business process mapping with the key users since the point of award. In July 2017, the Warehouse component of Lucity was launched, followed by Facility Maintenance and Inspections Departments adoption for work orders.

Currently, CSSs create a work order in NorthStar and print that. The Metering Supervisor then assigns these work orders to the Meter Technicians based on territories. The work is completed, and the Tech writes the information, like the current read and other relevant details, on the work order and turns that back into a CSS, who then types the information into the account and closes the work order. Automating the work order process between field and customer service staff will expedite the exchange of necessary information, should improve the efficiency of field staff in the distribution of work, in addition to locating and completing assigned work orders, and will allow CSSs insight into the status of a work order without having to call technicians or wait for them to turn in the paper work orders upon completion.

The Metering and Utility Billing/Customer Service work groups have not adopted Lucity yet, although the interface work necessary to automate the work flow for work orders is currently under development. An API proposed by NorthStar to import Lucity files is currently under review and pending approval, will then be tested and launched. This API will allow for service requests, customer requests to be opened and closed within NorthStar and Lucity. The close interface with ESRI is a major benefit of the Lucity system and will allow for location information to be provided on a work order (as available), which will help field technicians quickly navigate to an address.

In an AMI environment, Union County should include an interface with Lucity as a requirement of an MDMS. This will allow field technicians to export network and meter alarms to Lucity to be assigned as work orders and should update the CIS with account-specific changes like meter or radio change-out, disconnects, reconnects, etc. As the Lucity application is adopted, UCPW should ensure work order types are created and tracked following standards for entry, assignment, and resolution. These can then be tracked as Key Performance Indicators (KPIs) and serve as benchmarks for tracking and trending work load, system health, and staff efficiencies.

Crystal Reports: Crystal Reports is interfaced to pull data from Munis, NorthStar, and Lucity. The County should consider developing test scripts to validate reports. In addition, standardizing the report design (creating common headers, footers, logo, etc.), using database views and applying common filters and formula fields can create additional structure that would benefit users not as familiar with these features. Creating a data dictionary that has common or business critical reports, attributes, standards, and contacts will help promote standardization across business groups (although this should be done in conjunction with scrubbing the databases it pulls from to increase the effectiveness). Monitoring and measuring the impacts of these standards should be the responsibility of an AMI Systems and Technology Analyst, ideally that would be a new position within the Planning and Resource Management Department.

Paymentus: This is an online, browser-based payments application that allows UCPW's customers to create an account and pay their bill online. With an API to NorthStar, account balance and amount owed updates an account, so Customer Service and Billing staff can see which customers have paid online and create a list of customers eligible for a late fee or disconnect for non-payments after accounting for those online payments. PMSI, the County's bill print vendor, provides a PDF of customer bills to Paymentus to post within a user's account, which allows customers to see a copy of their current and past water bills within the Paymentus portal. Over 8,000 customers currently use the Paymentus portal to pay their water bill.

Upon applying for service, customers are given a packet of information that explains how to access Paymentus after they receive their first bill. The high adoption rate of the Paymentus portal, plus an increase in the use of online or automatic payments like automatic bank drafts, bodes well for future usage of a customer portal. A best practice that was recently launched by UCPW is that CSSs are now collecting a customer's email and phone number allowing the utility to leverage the ability to communicate through Paymentus and the outbound IVR system and will also facilitate the future deployment of a more robust customer portal. Increasing a customer's self-service options and allowing them increased insight into their consumption patterns and usage stands to improve customer satisfaction and the success of conservation initiatives.

In summary, applications should be easy to use and almost blend in to the tasks, enabling staff to accomplish their work rather than consider how their task needs to be translated to execute within a particular application. The lack of flexibility, interoperability, and ease-of-use are noted as limiting factors of NorthStar but seem to be an overall byproduct of piecemeal system adoption, evidenced through the disparate architecture. One way to alleviate some of the frustration is to improve the standards of the data being used and improving the channels whereby the data can move between systems. Actionable recommendations on how to treat information as an asset will require the adoption of governance and standards but will allow staff to have confidence that a term or status in one application is comparable with that designation in another system and drive efficiency and effectiveness.

2. Data Governance

Creating common terminology will allow for data to be used by more than the department that is responsible for creating or uploading it, increasing the effectiveness and diversifying the application and analysis potential. This terminology can be maintained in a data dictionary with a glossary of key terms; the Systems and Technology Administrator should oversee the routine maintenance of this document. After the key terms are established, creating a common set of standards for updating and accessing the data will help regulate information management and promote better usage, increase the accuracy, and promote sharing. Read-only access should be assigned to staff that would benefit from having the data but do not need to modify or edit the data; common information access guidelines will help staff know what data exists and how to retrieve it.

Information sharing implies a significant cultural shift that is necessary if UCPW wants to take full advantage of its future AMI system. The current lack of governance and disparate systems with legacy data will inhibit the adoption of data sharing and stifle analysis and interfacing efforts. The original source of information must be protected against unauthorized or accidental modifications, fraud, disaster/failures, or disclosure, and proper backup and recovery protocols should be established, with current data retention and archival procedures reviewed and updated as necessary. The exercise of establishing data governance measures is an undertaking with implications that are both technical and organizational. As UCPW continues to expand its data sources and inputs, and due to the fact that the data entry points are spread across the organization, the need to establish data governance measures is a necessary pursuit for the County at this level in maturity.

The following are several key elements MeterSYS recommends be considered when implementing data governance standards.

Data Quality: The impetus for implementing standards is to increase trust in that the database is accurate and that any reports and analytics utilizing this data will therefore be using accurate data

Integrated and Planned Systems Architecture: Data and systems silos follow organizational silos. When staff create work-arounds (e.g. emailing or texting instead of creating a work order), it further complicates efforts of standardization and breaks up the workflow. Standard protocols should be developed to drive data export/import/integration between systems so that business processes are seamless. For instance, a well-integrated system would allow customer service and operations to move a work order through the process of identifying a repair need, executing a request for the work, completing the work in the field, and updating the customer account with the relevant data, allowing authorized staff to view the status of the work order as it progresses towards completion.

Data Quality and Operational Optimization: UCPW rightly places a premium on system reliability, and this is supported by the allocation of meter technicians and readers to maintaining such a high read rate. With system reliability always recognized as being important, data reliability should now be the focus, which will further enhance and optimize system reliability, especially in an AMI environment. Data quality can be maintained through properly built and maintained integrations and interfaces, adequate management of standardization efforts, such as the data dictionary, to ensure individual elements and entry points can be melded with

Align Data and Analytics with Business Strategy: Aligning systems with operations creates efficiency benefits. For example, translating reports that are critical to utility operations and management and designating system alerts that should drive field activities or work orders will help make data actionable. Databases and key information should be identified as “mission critical” where that designation is accurate. If the utility wants to quantify the efficiency gains, we recommend using designated performance indicators to track and trend or identify outliers or anomalies. Identifying the value drivers for management will allow data to drive decision making and will allow for over-time trending and the adoption of targets and goals for operations, ensuring the utility maintains its culture of continual improvement.

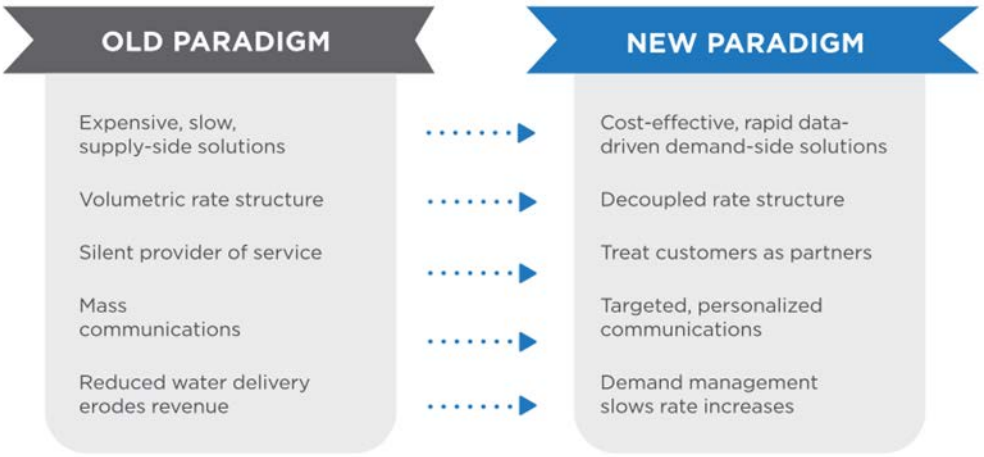
In addition to the above recommendations, the ability for UCPW to truly optimize a future AMI system is dependent on the creation of stable system architecture and underlying data consistency. The lack of system integrations and legacy data compartmentalized within and between departments has created redundancy, inconsistency, and inaccuracy. By focusing on data management through a formalized governance strategy, the County will be able to rely on the data and benefit from increase data-driven decision-making opportunities. Establishing standards for the availability and integrity of data will improve reporting, compliance, and operations in ways that were not previously possible.

3. Systems Governance and Oversight

The current governance of software and systems has recently become more concentrated within Public Works. While network and hardware support remain under the domain of County IT, the Planning and Resource Management Division, comprised of a systems analyst, GIS specialist, and AMI Systems and Technology Administrator, provides planning and software support specific to Public Works and reports to the Utilities Director. As Public Works continues to require more IT support to increasingly complex applications, it makes more sense to have the Planning and Resource Management Division support these, with continued facilitation by the County’s IT Department. The County IT Department maintains the network and domain responsibility, including backups, recovery, and basic help-

desk function. As the utility continues to adopt advanced technology, the role of the Planning and Resource Management Division will become increasingly involved and necessary. Open lines of communication should be maintained with County IT staff to ensure collaboration continues and that responsibilities and issue escalation protocol are clearly defined.

Figure 22. WaterSmart Paradigm Shift on Water-use Efficiency



As UCPW looks to identify IT opportunities to manage and in efforts to create a closer alignment of technology and utility management strategy, two key areas the Planning and Resource Management Division should consider establishing responsibility and oversight accountability for are integration and business process management systems and business intelligence and reporting systems. Serving as the conduit between Public Works' business needs and technical support for the systems they use and providing necessary system operations, maintenance, and support functions should be a function primarily assumed by the Planning and Resource Management Division. A key area where collaboration with County IT will be prudent is the exercise of considering migrating away from Harris NorthStar. The various scenarios available to UCPW are presented in the following section, with the perceived risks and benefits of each briefly outlined. The feasibility from a technical perspective, that is, the IT-level analysis of sunsetting NorthStar and rolling out a new CIS in terms of system requirements like server and hosting responsibility should be discussed between a steering or selection committee comprised of all stakeholders, to include Finance, IT, Planning and Resource Management, Utility Billing, Customer Service, and Public Works.

UCPW is right to recognize the trend of technology becoming a necessary component of all utility operations and management functions and to create the Planning and Resource Management Division to help. The next major change management element that will be required of UCPW is to remove the barriers to the data flow between and across systems. Now that the governance structure is in place to provide support, the effort of improving the data, specifically, cleaning up key databases, and improving the connectivity, allowing data to pass between or be pulled from specific applications, will provide dividends. Being able to glean accurate, point-in-time snapshots of a utility by sourcing data from CIS, WOM, and AMI will allow management to trend, benchmark, and model. The graphic above is from a white paper by WaterSmart, a customer portal provider, that depicts the impact data-driven-decision-making has had on water-use efficiency.

4. CIS Scenarios for Consideration

Maintain the Status Quo: If the County chooses to maintain the current CIS, NorthStar's inability to designate a premise ID will need to be addressed early on by MDMS vendors, as a standard AMI software field requirement is a constant, non-repeating unique ID for each service location (separate from an account ID, which can be shared by

multiple meters). The pros of maintaining the status quo include the lack of change and requisite change management that would accompany a wholesale shift to another platform and the comfort and familiarity that existing staff have with NorthStar. Also, the County is spending $35,000 to build a custom API between NorthStar and Lucity so migrating away to a new CIS would make this a sunk cost. The cons of this scenario center on the lack of change, although there are some changes that should be adopted immediately, such as:

- Retain historical data (copy back-ups or work with Harris to resolve inability to archive)
- Conduct training session with Harris on NorthStar to improve competency
- Implement data governance to promote standardization and clean-up database
- Facilitate sharing of responsibility and system support so IT Director is not the only technician able to provide troubleshooting and issue resolution help

Leverage AMI: This scenario would direct UCPW to delay a CIS change until after implementing an AMI system. By implementing AMI, the data requirements of the MDMS and Customer Portal can then help drive CIS requirements and value proposition. Additionally, a well-designed and implemented MDMS and Customer Portal would alleviate most of the pain points associated with NorthStar. For instance, a top-tier MDMS will offer robust reporting, allowing CSSs to see consumption history and trends, and at hourly read increments as opposed to once-per-month read intervals. MDMS offers multiple account designation fields where a CSS can assign groups based on rate (outside, inside), account type (residential, commercial, industrial), status (non-billable, vacant), or description of usage (irrigation) that can't be accommodated within NorthStar.

Customer-facing options are offered by AMI vendors and third-party companies. An industry leader, WaterSmart, has a pre-existing integration with Paymentus that the County could consider adopting in advance of an AMI deployment. This would allow WaterSmart to serve as a customer information platform in addition to having Paymentus embedded, giving customers the ability to create an account to receive updates on the meter replacement progress, see their usage, and pay their bill, even before the full functionality of AMI is realized, which would then include the ability to receive leak alerts and notifications among other information.

Adopt an Alternative CIS: The wheels are already in motion for this, as an RFI was issued in February 2018 to test the marketplace and initialize the search for a replacement for NorthStar. No easy undertaking, the decision to migrate to a new Utility Billing platform will require staff to operate in dual environments throughout the transition period. A risk to any new software is that the system is dependent on the quality of the underlying data ("garbage in, garbage out"). Without allocating resources to improve the standardization and "scrub" the database, the County stands to limit the benefits a new CIS would offer. If UCPW decides that NorthStar truly can no longer meet the business needs and needs to be replaced, MeterSYS would recommend the selection be delayed until after deployment of AMI so that the utility can see if the MDMS and Customer Portal resolve enough issues or that those requirements should be factored into the interface standards and help drive selection.

Section 6. Distribution Systems Infrastructure and Operations

The County has invested in both infrastructure planning and applications significantly through hydraulic modeling and SCADA systems design. The intersection of distribution operations and advanced metering networks is now a reality as utility operators and AMI manufacturers are seeking opportunities to increase the contributive value of capital investments and integrate data access and utilization through better systems coordination. As an element of feasibility analysis, MeterSYS reviewed both the most recent updates of the County's Black & Veatch Water Systems Update (2016) and the HDR Radio Path Study (2017) to find correlations between the UCPW capital strategy for

hydraulic planning and the supporting expansion of the County's SCADA infrastructure and a potential AMI network. Any possible correlations or operational synergies presents opportunities for greater data access and reduced network costs (both OpEx and CapEx) and increases significantly the investment leverage of all distribution monitoring systems. Surprisingly neither the B & V Water Systems Master Plan nor the HDR Radio Path Study considered metering technology within future designs for water distribution or SCADA systems. It is recommended UCPW require the technical specifications of AMI to be included in future planning initiatives related to water production, distribution and SCADA systems.

MeterSYS is working collaboratively with hydraulic engineering and AMI technical developers to broaden the opportunities for greater leverage of utility-controlled networks for access to a global view of operational data that thereby feeds systems planning, management, and automation. While still in early phases of development and deployment, UCPW must consider expandability of an AMI system for distribution data as an important technical requirement when considering selection of a specific metering solution.

1. Hydraulic Management

With continued growth of new connections on the UCPW water utility system, the County has taken great efforts to properly plan for proper and sustainable delivery of water to the approximately 50,000 connections. The Black & Veatch (B&V) Water System Planning Update (2016) considered resource demands, resource capacities, resource production, emergency plans, and capital investments for UCPW during a planning period of 15 years which, coincidentally, aligns with the typical useful life of most metering technologies. The innovation of metering data for two-way communications between the meter and the HES presents utility operators with access to field information like customer-side leak detection, tampering, reverse-flow, no-flow, battery health, and district metering areas along with recent additions to monitoring for pressure and temperature at the meter.

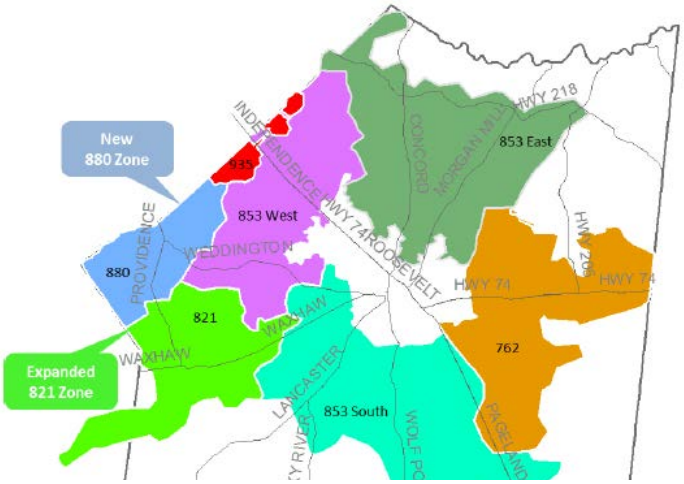


Figure 23. B&V Pressure Zone

According to B&V, UCPW has altered its pressure zones by expanding 821 Zone and adding new 880 Zone from construction of a Booster Pumping Station and Elevated Storage Tank within the 880 Zone. Important to managing future demand and required infrastructure, it is important for non-revenue water (NRW) to be properly calculated and understood at a sub-system (zone) level. Since the County does not have flow metering between pressure zones, the NRW calculations were applied across the system evenly based on their source of supply.

Recommendation: The County should consider, as part of its metering strategy, to add distribution flow metering and the use of District Metering Areas (DMAs) to improve its ability to determine more granular NRW percentages and its correlation to zones and infrastructure.

There is also operational interest in managing high and low pressures throughout the UCPW service area with a specific priority on low pressure areas understandably for regulatory compliance, public health protection, and quality of service to customers. Low Pressure Area 1 is recommended, according to the B&V report for evaluation of the 935 Pressure Zone boundary while Low Pressure Areas 2 and 3 will require significant capital investments for new loop distribution lines in these areas. Analysis from the B&V hydraulic monitoring identified two areas have a predicted pressure above the maximum performance criteria of 150 psi and high pressure areas are considered lower priority to that of low pressure areas by UCPW staff.

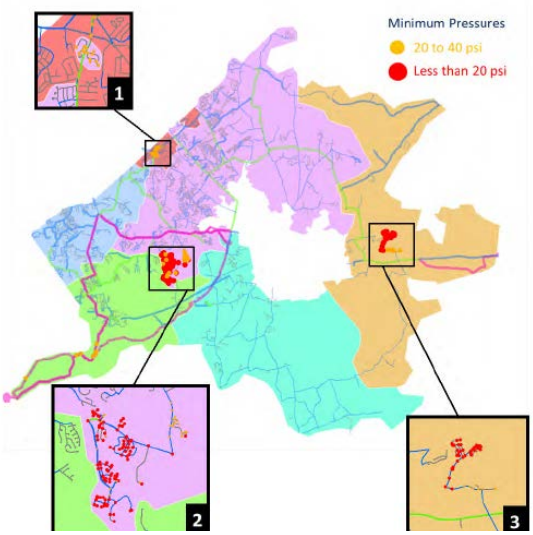


Figure 24. Low Pressure Zones- Source Black & Veatch Water Report

Recommendation: Capital investments for water distribution lines may be determined with a greater level of confidence through utilization of pressure monitoring at the point of delivery in addition to mainline pressure data to determine the areas of greatest concerns, the realized impacts of pressure fluctuations, and trending data to aid with prioritization of funding. Pressure monitoring at the service level along with tracking water temperature at the point of delivery provides critical data contributions for management of water and service quality. Lastly, AMI networks have the capability of applying sensors for upstream/downstream pressure, water quality (chlorine, pH, conductivity, temperature), pump status, liquid chemical levels and facility protection (door status) for low cost options to more traditional SCADA devices.

2. SCADA and AMI

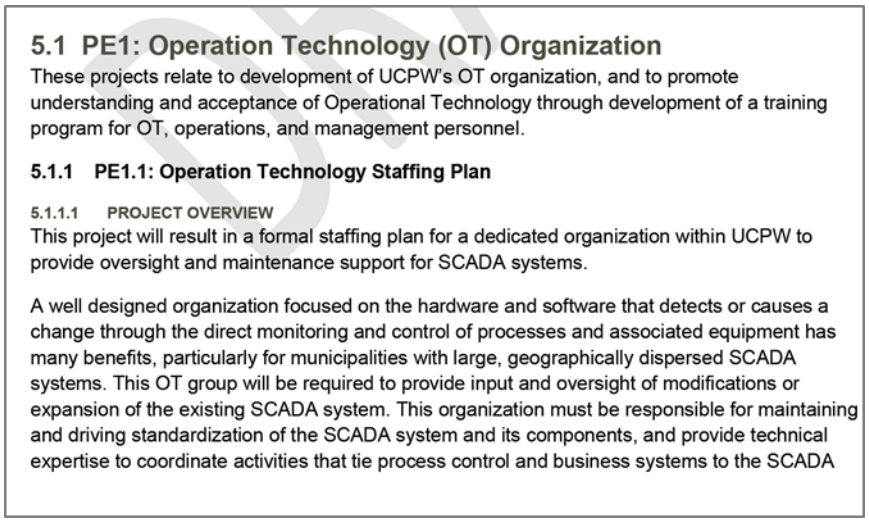
During the study of feasibility for metering, UCPW, in cooperation with HDR, completed the Radio Path Study in support of SCADA enhancements for water production and distribution and is the initial task required for completing design of telemetry system updates. Like AMI technologies, SCADA operates on a Radio Frequency (RF) network and the Radio Path Study establishes options for network frequencies and the assets associated with the SCADA design connected to either a County-owned and controlled network or utilization of existing cellular networking for data and process command transfers. Similar to most AMI network frequencies, the HDR study recommends that the preferred alternative to cellular networking would be through a County controlled 900MHz frequency band with utilization of repeaters to gain effective coverage across the expansive service territory

The HDR Radio Path Study also provides certain capital improvement recommendations as part of the master plan strategy for the County's SCADA system. The two largest projects are responsible for design and replacement of the existing RTUs at 75 sites. Smaller improvements projects provide for incorporating new monitoring points for flow metering, vibration/temperature, water quality, power and Catawba River WTP supply. Because of the close alignment between the SCADA Master Plan and functionalities associated with AMI networks, MeterSYS, UCPW, and HDR entered into discussions about the development of synergies between the two systems. While cooperation was identified, there is a clear desire by HDR engineers to maintain broad separation between AMI and the proposed SCADA initiatives on the basis of critical infrastructure. Specifically, HDR has issued a response to the planning concept of technology leveraging by stating:

"We are recommending physical segregation of the AMI and SCADA networks because shared communications (radios) would greatly increase the attack surface available to bad actors for entry into the SCADA system. AMI is business critical and far more tolerant of interruption than SCADA. By incorporating segmentation, we are able to create a manageable number of zones which prevent devices from communicating with each other if they do not need to communicate as is the case with AMI and SCADA systems and help mitigate interruptions to SCADA.

We understand that there may be opportunities to add pressure monitoring locations near AMI data collectors and share this information with operations (SCADA). In this case, we recommend pulling the AMI data from Meter Data Management (MDM) head end system (most likely a cloud service) and push that information down from the business network into the DMZ and integrate the data with the process control historian in this zone. This would allow users on the business and SCADA networks to benefit from combined data."

Recommendations: For the concept of leveraging infrastructure between similarly designed networks, it is understood that synergies would not include process controls and that SCADA must be protected from outside threats. Nonetheless, we believe there are specific actions that UCPW SCADA and AMI technicians may take cooperatively to expand distribution monitoring and data sharing in addition to the physical infrastructure that may be shared such as towers, electrical services, installation, and backhaul depending upon schedule of construction implementation between the AMI and SCADA projects. It is recognized that there are design challenges associated with linking the two systems, but there is a responsibility to collectively explore options for cost savings and reduction of functional duplication. Program elements of the HDR Report related to Operational Technology Organization, SCADA network improvements, distribution improvements, and system operational enhancements all have potential for cost-effective augmentation and expansion of sensors and monitoring through coordination with AMI planning.



5.1 PE1: Operation Technology (OT) Organization

These projects relate to development of UCPW's OT organization, and to promote understanding and acceptance of Operational Technology through development of a training program for OT, operations, and management personnel.

5.1.1 PE1.1: Operation Technology Staffing Plan

5.1.1.1 PROJECT OVERVIEW

This project will result in a formal staffing plan for a dedicated organization within UCPW to provide oversight and maintenance support for SCADA systems.

A well designed organization focused on the hardware and software that detects or causes a change through the direct monitoring and control of processes and associated equipment has many benefits, particularly for municipalities with large, geographically dispersed SCADA systems. This OT group will be required to provide input and oversight of modifications or expansion of the existing SCADA system. This organization must be responsible for maintaining and driving standardization of the SCADA system and its components, and provide technical expertise to coordinate activities that tie process control and business systems to the SCADA

Figure 25. HDR OT Organization Recommendation

Ideally, each pump station in the distribution system would be equipped with a flow meter which would allow flows to be measured, recorded, and utilized in the calculation of zone-specific demands and peaking factors for use in model calibration. The Union County pump stations, however, (with the exception of the Watkins BPS) are not currently equipped with flow meters that are tied into the SCADA system. In order to estimate pump station flows at the Waxhaw-Marvin BPS and New Stallings BPS for use in calibration, SCADA records reporting pump status and suction and discharge pressures were used in conjunction with the available pump curves to estimate flows during the calibration period. Because the combined 853 West / East Zone was the focus of this calibration and the 821 Zone was not active, suction pressures at the Watkins BPS and Waxhaw-Marvin BPS were modeled as varying hydraulic grade lines based on the SCADA data. (B&V Water Master Plan 2016 1.2.4 Pump Station Flows)

With the HDR recommendation under OT Organization, we believe there is an opportunity to capture the critical importance of data governance, systems standardization, and technical expertise to more global utility data and systems oversight. The continuance of AMI sensing and reporting for distribution operations requires planning initiatives to balance the importance of systems security with the responsibility of expanding data and data driven decisions that protect public health and safety in a dynamically-changing water utility environment.

UCPW should consider establishing the staffing recommendations of Section 9 of this report in the development of an Operation Technology Organization suggested by HDR that encompasses hydraulic modeling, SCADA design and operations, AMI operations, LIMS, Lucity WOMs, and GIS for proper management of systems, controls, and data.

Section 7. Future State Risk Mitigation for AMI Adoption

UCPW is taking appropriate risk management measures through conducting a feasibility study. This data-driven approach recognizes that first the business case must be made prior to the pursuit of funding or adoption and will prevent unnecessary risk due to rushed decision-making or lack of information. This measured approach is to be commended and should continue through implementation, using the same mitigation measures such as soliciting expertise; involving all stakeholder groups; establishing quality assurance and rigorous QA/QC checkpoints with strict "go/no-go" approvals; providing appropriate safeguards to secure sensitive customer and utility information; implementing detailed project control procedures; and adopting comprehensive project management and communications plans. The most high-profile risks that the County faces in moving forward with AMI are identified here, along with the recommended actions and strategies to minimize or avoid the chance of occurrence.

Procurement Phase Risk and Mitigation Recommendations:

Risk: Narrowly defined scope requirements limit competitive bid responses received

Mitigation Actions: RFP draft is product of continued refinement and input from vendors to reduce exclusionary language; when possible, consider alternative bid options; ensure proper advertisement of RFP

Risk: Network and meter compatibilities have unforeseen display issues/data inconsistencies in MDMS or other software applications

Mitigation Actions*:* Include language in RFP to have vendor disclose any limitations to compatibilities, including any data loss or corruption experienced; request references be provided for instances of similar compatibility for due diligence

Risk: Limited competitive bid responses received influence cost

Mitigation Actions: MeterSYS is familiar with itemized pricing across vendors and is experienced in negotiating the best cost solution for utilities

Risk: OpEx costs vary from model estimates or are more than anticipated

Mitigation Actions: Require vendors to certify propagation results, making network infrastructure variance costs their responsibility and protecting UCPW from unforeseen network cost increases

Risk: New collector site location requirements contingent upon external authorization outside of UCPW control

Mitigation Actions: Reduce number of new pole sets for collectors; work with UCPW to expedite site authorization as required

Risk: Aligning utility growth to procurement

Mitigation Actions: Ensure appropriate due diligence, especially large meter field audits, is conducted in advance of equipment ordering to improve accuracy of ordering; work with Planning Department to ensure any approved developments are factored into meter order; per-unit contract allows flexibility in ordering as needed and contingency funds should be inflated to accommodate high growth

Implementation Phase Risks and Mitigation Recommendations:

Risk: Funding is not properly aligned or authorized with capital spend estimates

Mitigation Actions: Include estimated spend schedule provided as a deliverable of the Feasibility Analysis; work with Finance to ensure appropriations follow modeled capital and operational project requirements

Risk: Network design fails to achieve modeled performance

Mitigation Actions: In contract documents, MeterSYS includes language requiring vendor warranties performance of network to achieve 98.5% read rate with any required costs due to infrastructure additions or deviations be covered by the vendor; the Alpha Phase/Pilot will test network reach to all edges of the service territory

Risk*:* Software vendor cooperation is limited; integration issues create project delays

Mitigation Actions*:* Creating a sub-team focused on Systems and comprised of key UCPW staff will ensure issues are identified and resolved accordingly; MeterSYS SME will facilitate all software integrations, managing each as its own program of work with milestones, testing, and UCPW approval/acceptance to maintain appropriate timelines and accountabilities

Risk: UCPW experiences significant shifts in organizational priority, resulting in challenges to balance utility responsibilities and implementation requirements

Mitigation Actions: Having MeterSYS as a trusted advisor to serve as Project Manager will provide continuity and allow for measured use of UCPW staff and resources to manage the project; adopting a long-term project plan and ensuring appropriate funding allocation will provide confidence and will protect against any future unplanned redirections

Risk: Vendor supply chain disruptions create unexpected and extended equipment lead times

Mitigation Actions: A well-designed project plan will accommodate expected lead times; working closely with the distributor and manufacturer will ensure any impacts to production or fulfillment are quickly identified and accommodated

Risk: Political or customer interference threaten the project

Mitigation Actions: Stakeholder engagement and customer communication are key elements of implementation; identifying potential risks and roadblocks will be a critical exercise for the project team to undertake at the beginning of implementation

Deployment Phase Risks and Mitigation Strategies:

Risk: Network crash or collector failure

Mitigation Actions: Ensuring the network is designed with redundancy in mind offers built-in backup in case of system or network device failure; a network maintenance contract with the distributor of choice will provide extra support and service to rely on

Risk: Business case assumptions are misaligned or proven inaccurate

Mitigation Actions: MeterSYS has taken every effort to ensure the data used as inputs were accurate and confirmed all inputs and assumptions with utility staff. The model used conservative estimates, but it is a predictive model based on estimates and assumptions, and therefore should be used as a guideline. The Return on Investment (ROI) as predicted by the model, is dependent on the County implementing some policy and procedure changes post AMI deployment; not adopting the recommendations as presented in this report may cause the County to not reach the ROI as proposed.

Risk: Cybersecurity threat or breach; data loss or corruption

Mitigation Actions: Properly designing network security (firewalls), and creating disaster recovery/backup plan and procedures, and ensure monitoring, oversight, and testing measures are in place are critical to addressing this area of risk. Currently, all top-tier vendors provide the necessary encryption of data at the endpoint and collector, and the MDMS has built-in access restriction and permission settings that can be assigned and customized by the utility. As for cybersecurity breaches or threats, water data is low-value target, but precautionary measures should be taken to secure data regardless

Risk: The software integration created or perpetuated errors in the database

Mitigation Actions*:* This is an area of the AMI project that is consistently the most painful part of the process, because it effects billing, is dependent on the involvement of multiple third-party vendors, and because it is very technical in nature. By starting the billing integration immediately after kick-off, assigning a sub-team of key staff and vendors to focus on this project with weekly communication and checkpoints, and by creating and following an integration plan with all interface standards clearly defined and described, much of the headaches of this process can be removed or controlled. Having standards for the file interfaces and established testing and approval timelines and procedures adopted from the beginning of this process helps assign accountability and predictability to the integration.

Risk: The project experiences significant public pushback

Mitigation Actions: "Advanced meters" have received some pushback from people who deem RF exposure to be hazardous, despite numerous studies denying that claim and the high regulatory and compliance standards required by the US Government. Additional concerns around privacy have been raised by people claiming the precision of the meters allows for an unnecessary insight into a person's water use or incorrectly believes that personally identifying information is included in the meter transmissions (it is not). The best way to prevent public pushback of AMI is to follow the Communications Plan, as created by the UCPW and MeterSYS project team, which addresses both internal (staff) and external (customers and public) components. The RF health and privacy concerns should be addressed and supported with facts clearly conveyed and sources sited.

Post Deployment Environment Risks and Mitigation Strategies:

Risk: UCPW experiences excessive or premature meter failure

Mitigation Actions: Battery life depends on transmission duration, power, and frequency (e.g., once per hour), as well as environmental conditions, such as fluctuations in temperature. Some early AMI installations, now more than ten years old, are still performing satisfactorily, such as Cary, North Carolina. A utility's greatest protection from obsolescence is to consider future needs in its design specifications, to insist on extended support from prospective vendors, and to create a reserve fund for planned replacement costs.

Risk: System maintenance and troubleshooting protocols are not applied

Mitigation Actions: Creating an AMI system maintenance plan and assigning components and routine activities to specific staff as part of their core job duties, along with routinely monitoring and tracking KPIs for system performance and goal achievement will ensure UCPW provides the appropriate level of upkeep and oversight to fully leverage and maintain the AMI system once deployed

Risk: Training on the AMI system is point-in-time and after a few years, new staff are unfamiliar; use of system is concentrated to a few key staff

Mitigation Actions: Establishing an ongoing training program, both for field staff and back office applications, is necessary for proper knowledge retention and transfer. Creating job aid instructional guides at the point of initial training will allow for improved task and system use support; "how-to" guides

Risk: UCPW service territory experiences such high growth, soon after installation is complete, new infrastructure is needed to support additional developments

Mitigation Actions: Because Union County is such a high-growth community, MeterSYS will work with the project team and the vendor of choice to establish an appropriate growth plan to accommodate pending developments; propagation studies can be used to identify additional network infrastructure needs to plan for growth

Risk: Customer facing policies and/or rates are not changed to accommodate or leverage AMI system

Mitigation Actions: The Feasibility Analysis highlighted some key procedural and policy changes that are recommended to allow UCPW to fully realize the benefits of the AMI technology and to share those service gains with customers through leak notifications. After the AMI vendor is selected and implementation is under way, the County should consider aligning specifications to the new equipment, along with the itemized equipment replacement costs for tamper and damage deterrence.

Risk: Lack of confidence in data from reports or database remains (or is created)

Mitigation Actions: Ongoing efforts to cleanup and standardize the CIS database are necessary to maintain, as the mass meter replacement will provide UCPW with basically a "clean slate" of data. Establishing the necessary governance, accountability, and oversight to maintain the database and to oversee the ongoing upkeep are critical to system operations.

The MeterSYS Project Manager will be well-versed in common project pitfalls and will help the County project team navigate around these issues and to avoid them when possible and mitigate them when they happen. While all of these risks mentioned above may seem alarming, the County will have the benefit of strong warranty language and standards written into the Request for Proposals, and MeterSYS will support unequivocal performance and quality demands with appropriate recompense measures to protect the County from worst-case scenarios.

MeterSYS recommends that the County pursue risk reduction measures that are cost- effective in comparison to the risk factors themselves, and the recommended procurement and installation project plan contains preventative measures and checkpoints, such as the Proof of Concept for Phase A installation, which directs the installation of a sub-set of meters to test signal strength and finalize the billing integration, prior to full scale replacement. This approach ensures the distributor, installer, and manufacturer are all parties to sharing the risk of the installation and integration, the components with the highest risk factors, which reduces the burden on the County and ensures the appropriate levels of performance are achieved before the project advances.

Section 8. Organizational Transition to Advanced Metering

Throughout the evaluation phase of this project, it has been apparent that customer service and continued improvement influence almost every aspect of utility operation for the County. It was the goal of the MeterSYS team to help design the future organizational structure that would best accommodate upward mobility and cross-departmental collaboration between Metering Services and Billing/Customer Service. The recommended organizational changes are aligned with the utility's interest in ensuring employee institutional knowledge is retained, continual learning and improvement are encouraged, and performance metrics are measured and managed against goals.

The current utility organizational structure has been evolving to meet the demands of a changing environment and to exceed customer expectation. However, the efficiencies of the organization are challenged by limited support or automation from technology and continual strain of resources. To capture a baseline for future comparison of the transitional change management process, MeterSYS conducted a deep analysis of the Metering Services and Billing/Customer Service to quantify resource allocations by key business process to compare against estimated resource and time allocations that will be required in a future AMI environment. The following section represents the key organizational changes and recommendations, including new staffing positions that are necessary to successfully operate in a post-AMI environment. Because these new positions would be much more technical in nature, the reassignment would require a planned training schedule in coordination to attain the necessary skills for proper maintenance of the AMI system, and strategic implementation of the organizational changes in coordination with the deployment phase of this project.

1. Metering Services Operation

Since meter reading will be the process most affected by AMI, it will require a redesign of the roles and responsibilities of the County's Meter Technicians. Currently, the County has staff dedicated to reading meters and other manual-heavy processes that will become automated in the future state AMI environment. However, automating these roles does not mean that these positions will not be needed, but that staff's internal knowledge of the system can be enhanced with the capabilities of AMI to offer more proactive activities, empowering them to operate as "true technicians." These activities should include proactively identifying and resolving leak issues, enhanced distribution system planning, enhancing customer responsiveness, and using system alerts and alarms to conduct proactive system maintenance. These changes would not be expected to occur until the County is past the deployment phase and fully operational.

By deploying AMI, the County should consider eliminating the part-time Meter Technician position plus 2 full-time Meter Technicians, as well as reconsider planning for the 2 additional full-time Meter Technicians (one position to support service work orders and the second position to support the meter testing program) in next year's fiscal budget. According to the Water and Wastewater's FY2019 requests for staff funding, the total avoided costs of adding on the new Meter Technicians is $124,827. Currently, the County's metering staff are cross-trained and knowledgeable of the read design and service work processes that are assigned to them daily. Since the 7 remaining Meter Technicians have valuable knowledge of the system, their experience should be retained and applied post-AMI deployment. MeterSYS recommends that the County reclassify three Meter Technicians as AMI Systems Maintenance Technicians and redirect their current responsibilities of meter reading and rereading to maintenance support

functions. Regarding the 4 remaining Meter Technicians, MeterSYS recommends that the County reclassify their positions as AMI Technicians to support proactive maintenance of meter assets and customer requested work orders.

Maintaining the integrity of the AMI system and metering assets is critical; therefore, MeterSYS recommends that the County redirect a portion of the cost-savings achieved by eliminating the 2.5 Meter Technicians at $125,528 to support a new position called AMI Systems Quality and Compliance Technician. Operating in an AMI environment allows for a significant volume of data for trending and analysis and will require someone to properly manage the data. It would be in the best interest of the County to redirect a portion of the staff cost-savings to support an AMI Systems and Technology position.

AMI System Maintenance Technician Role (3 FTEs): The main responsibility of the future AMI System Maintenance Technicians will be to maintain the entire AMI system by troubleshooting for communication or equipment failures. This includes manually reading meters in case the network is compromised for whatever reason. The technicians will have a general understanding of the AMI system to commission meter nodes, as well as be familiar with the MDM software as it relates to system alerts and alarms for field investigation. This group will perform some investigative functions relative to meter tampering and theft. AMI system alerts and alarms such as meter theft/tampering, leaks, and end of battery life immediately notify the utility of issues and to deploy field staff for issue resolution as is necessary.

AMI Technician Role (4 FTEs): The future technicians will support proactive system maintenance in the field to extend the useful life of the AMI system and metering equipment through improved asset management. This group will provide field support for the AMI System Quality and Compliance technician, regarding valve testing/exercising and meter testing/inspection. This role will change out meters for testing and repair due to any damage, as well as perform valve repair/replacement. Other key functions include new meter installs due to the increasing growth in new development and performing some leak root cause analysis and resolution for leak monitoring and control. Lastly, these technicians will be responsible for completing service work orders as assigned by customer service and billing staff.

AMI System and Technology Analyst Role: This person will possess the experience and skills to effectively analyze various data sets in near real-time, to mitigate potential problems, such as leaks, and perform much needed daily system health and maintenance for the County. Deploying this role will bring a level of objective assessment that is required of a robust AMI system and to manage a significant amount of data from varying software applications in order to make data-driven decisions where they can offer the greatest impact. The analyst can fill this resource void by applying the proper skills to maintain, track, organize and monitor the data for quality, as well as analyzing it to establish subsequent action. Additional responsibilities expected of this position will be system reporting and maintenance for performance purposes, identifying data patterns and investigating for anomalies, issue resolution analysis and issue ticket creation as necessary.[1]

The analyst will manage application configurations, as well as collect data between multiple software applications within the AMI system network. This is important because aside from managing the MDMS, this person will also be working in the AMI communication network where incoming metered data is received and transmitted to the MDMS. A core function of this position will be to establish standards for data consistency, standardize firmware for radios, and develop Standard Operating Procedures for ongoing maintenance and issue resolution of the meter data.

[1] https://www.governmentjobs.com/jobs/1317008/ami-senior-analyst-ooc-sr-management-systems-analyst/agency/seattle/apply

AMI System Quality and Compliance Technician Role: The majority of staff time and attention is spent on the substantial workload related to customer service generated work orders and meter replacement/repair of aged infrastructure. As a result, limited time is available to perform critical system and performance maintenance activities. By automating meter reading and leveraging enhanced AMI functionalities, the utility has the capacity now to support proactive system maintenance. A goal of the utility is to develop a more formal meter testing program as compared to the current condition of testing only upon customer request or to check meters for errors as they are found in the field. This person will allow the utility to perform in-house testing of a subset of residential meters and new meter installs. Testing results will allow the utility to make informed decisions and responsibly plan for meter replacement and maintenance. This will require the technician to have a general understanding of the methods and materials used in testing, calibrating, programming, and maintenance of meters.[2] Large meters would also be tested for optimal performance and this would be done at least every 3 years, adhering to AWWA standards.

Another goal of the utility is to better manage backflow which can be supported by this position. In support of developing a backflow prevention program, staff are currently identifying locations throughout the system with backflow by stamping work orders. This person will monitor pressure data produced by distribution pressure sensors to identify backflow events. Early detection of backflow events is critical to identify distribution line breaks, as well as limit customer concern over potential contamination of drinking water[3]. Other responsibilities include fire service inspection and meter box maintenance and change out as is necessary.

2. Billing and Customer Services Operations

Customer service and billing functions involve CSSs spending the majority of their time on customer support calls and issue resolution, billing exception functions that include reviewing customer account notes and read audit reports for rereads, work order creation, and following up on work orders for progress and completion in the CIS system. With AMI and the ability to print reports by exception in a single file, the utility should see immediate relief of CSS time spent manually reviewing reports to create reread lists and the issuing of service work orders in less time than it took before. We anticipate that the 2.5 CSS positions no longer being necessary after deploying AMI. Currently, the 1 FTE CSS spends the majority of the time supporting customer calls and service work orders. This person spends 50% of the time establishing customer accounts and facilitating new service, along with the part-time position who spends 75% of the time on the same functions. Through Lucity, this work process will be automated and streamlined and should reduce the time and resource dedicated to this current manual process. The CSSs are now equipped with robust customer service features and ample consumption data to be more proactive in customer support and manage customer support calls more efficiently.

The resource benefits in time and effort by eliminating the 2.5 CSSs should be redirected to creating a new Customer Service Communication/Conservation Specialist position. The current informal communication process between metering and billing should benefit from someone who can create standard operating procedures to streamline work processes and improve internal communications. Currently, communication with customers are dispersed across customer service staff, who are multitasking between customer support and email correspondence/inquiries.

Communications and Conservation Specialist: We anticipate that the Communications and Conservation Specialist should be able to support the majority of customer email and phone correspondence, and through consumption data and reporting and customer education to self-service. Centralizing communications under a single person should

[2] http://www.wcremc.com/userfiles/file/Meter%20Technician.pdf
[3] http://www.abpa.org/page/BackflowPrevention

streamline the current informal process and provide the capacity to develop standard operating procedures and templates to support and improve customer service correspondence and engagement. This person should be the key administrator to the customer portal to ensure that internal and customer facing dashboards are properly designed for customers to self-serve. In working with Media and Public Relations, this person should create customer/public campaigns and educational support materials and manage social media and press releases. By dedicating more time to customer service engagement efforts and leveraging a customer portal, this person should develop and execute conservation management programs to promote resource conservation and customer engagement initiatives. Lastly, this person will fill the resource void in developing and managing performance targets related to portal sign-up, email open rate, and webpage clicks.

Throughout the evaluation phase of this project, the organizational focus on customer service and continued improvement within operations influenced almost every aspect of utility operations for the County. In addition to optimizing the organizational structure, ensuring upward mobility and cross-departmental collaboration are encouraged between Metering Services and Billing/Customer Service. The recommended organizational changes that are presented in this section are aligned with the utility's interest in ensuring employee institutional knowledge is retained, continual learning and improvement are encouraged, and performance metrics are measured and managed against goals.

3. Utility Operational Performance Initiatives

KPIs should tell a story of the success of goal achievement and identify areas for improvement. By trending over time, management can determine the effects of policy and procedural changes have on operations. For instance, tracking customer service complaints can identify high-priority areas to improve the transactional experience of customers. KPIs should be used to establish performance standards and track the effectiveness of initiatives such as NRWL reductions and the achievement of conservation goals. While the below KPIs are based on best practice use cases, UCPW is encouraged to adopt measures that align with business operations. In the interim, UCPW should consider exploring existing data sets to understand the potential to establish baseline data to serve as a comparison post AMI deployment.

Business Process	**Description**	**Future KPIs**
Meter Reads	Interval read data; generate read file weekly from MDMS	▪ 98.5% read rate achieved ▪ SNR level >40 ▪ Number of stale meters
Service Orders - Re-reads	Field revisits to verify reads - utility issued	▪ Investigate stale meters ▪ Investigate alerts/alarms
Service Orders - Disconnect/Reconnect Service	Disconnection and reconnection for non-payment	▪ Frequent flyer list (RDM potential)
Service Order - Reconnect Site Revisit	Site revisit for reconnection of service due to water flow without customer on premise	▪ Number of repeat site visits for reconnection

Business Process	Description	Future KPIs
Service Orders - Customer Complaints	Customer requested rereads, meter checks, high-bill complaints, etc.	▪ Customer complaints by category
Verify No Service	Site visit to verify zero flow for vacant properties	▪ Investigate zero usage ▪ Soft disconnect ▪ Inactive list maintenance
Troubleshooting and Repair/Replacement	Meter repair and replacement	▪ Battery failure ▪ Failed communication ▪ Stopped meter
Service Orders - Other	Miscellaneous service orders	▪ Utility initiatives ▪ Ongoing maintenance ▪ Field audits
Customer Service Account Management- Setup and Maintenance	Verifying new service availability, validating proper receipt of forms and payment from customer, setting up account in CIS	▪ New accounts created ▪ Use of online forms ▪ Use of self-service features ▪ Customer portal sign-up rates
Customer Service Billing Exception	Review of initial read data for high/low parameters and field re-checks	▪ Pre-bill high consumption calls ▪ Number and amount of bill adjustments granted
Customer Service Billing and Presentment	Preparing final read data within utility billing module; transferring read file for printing	▪ 98.5% read rate maintained ▪ Number of field visits for bill creation
Customer Service Payment Processing/Collections	Receiving and processing payments through various channels including bank draft, lock box, mail, counter, and web payments (including shared Tax resource)	▪ Payment by channel type ▪ Customer portal use rates ▪ Online bill pay use rates
Customer Service Work Order Management	Creating, issuing, and closing out work orders within CIS and Lucity	▪ WO by type ▪ % WO closed within 48 hours
Customer Service Account Delinquency Management	Management of accounts within 30, 60, 90, 90+ delinquency including internal collections, debt setoff, and 3rd party collections (including shared Tax resource)	▪ Collection success rates ▪ Total accounts in 30, 60, 90, 90+ delinquency
Theft and Meter Tampering	Response to damage of meters and ERTs due to customer tampering or removal	▪ Tamper/theft instances ▪ Tamper fees charged/collected

Business Process	Description	Future KPIs
Asset Management Activities	Meter location, stock management, and tracking	▪ % meters geo-located ▪ # of meters by size in inventory
Water Loss and Conservation	Account and field activities supporting leak management, conservation programs, etc.	▪ Conservation goal achievement ▪ Irrigation usage trends

Table 22. Future Utility Key Business Processes KPIs

Marking progress and understanding where success is occurring and why while confronting shortcomings in the transition after deployment offer the opportunity for lasting change. County critical thinking as the future state takes hold may adjust these KPIs or add more and that is natural in a system growing into itself that will, ultimately, better serve the utility and its customers.

4. Communications Strategy (Internal and External)

MeterSYS and UCPW collaborated on developing an effective and robust communication plan for utility staff and the general population being served by UCPW. The communication plan serves to keep the utility customers informed throughout the metering project, the utility itself updated on performance and progress, and formalize the channels of communication internally amongst project team members. Goal setting was critical early on during communications planning and is important to provide strategic direction into the development of key communication initiatives and assessment of the varying levels of risk as it relates to the goals. The communications project team established the following County communications goals and it is summarized here:

- Educate our staff on the functionalities of AMR and AMI including the benefits analysis findings and metering program change plans
- Educate our customers on the benefits of metering technology investment supporting operations, finance, and enhance customer service
- Educate customers on costs associated with converting UCPW infrastructure to advanced metering
- Educate customers on the importance of utilizing the UCPW customer portal

A key to keeping the plan effective is identifying effective “champions” for the project that will be touchstones for the project management team and work to better communicate and engage with utility customers. Champions and the new Communications and Conservation Specialist position can introduce and implement the strategies of the customer communication plan. The communications project team can leverage various mediums with the intent to reach every type of customer by their preferred communications channel. Some of these mediums are:

- Employee networks and County intranet channels
- Monthly water bill inserts
- UCPW Twitter posts and NextDoor alerts
- GovDelivery emails

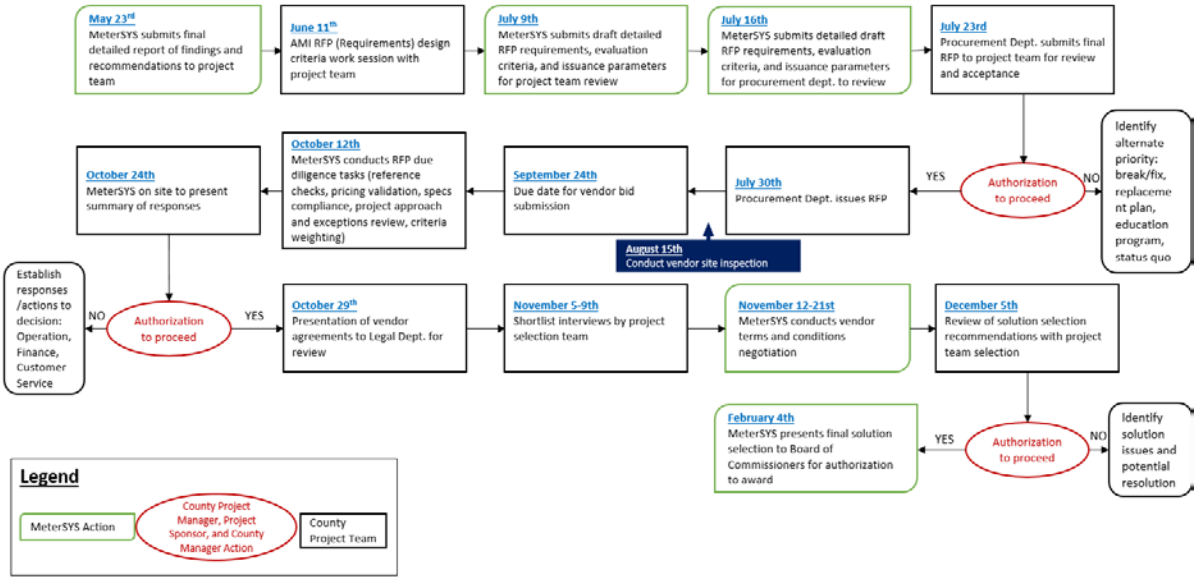
The communication plan brings value to all parties involved, particularly, to the County by focusing thoughts in the creation of the County communication plan to be shaped by the needs and concerns of its constituents and typical areas of concern in communication plans being noted. Additionally, the focus on educating staff on the functionalities

of the AMI system allows for not only training on system capabilities, but effective delivery of the AMI benefits for customers and UCPW as stewards of water conservation, as well as successful deployment of the AMI system to serve the utility and its customers.

Section 9. Solution Selection and Implementation Planning

1. Metering Technology Procurement

AMI specifications are connected to the dynamic technology environment and the utilization of data within utility metering and billing operations. By establishing multiple "off-ramps" during the evaluation phase, UCPW will have the ability to validate planning estimates and benefits against the industry's response before any capital commitments are required. At the point of proposal assessment, the County will have multiple "go/no go" opportunities as outlined in the Decision Action Diagram including controls ahead of the RFP issuance, in advance of issuing the responses and recommendations to County leadership staff, and at the elected official level before or after legal review of processes and contracts. By creating a roadmap for procurement as part of the feasibility analysis, the County will have direct market feedback to consultant estimates (cost validation), detailed specifications for infrastructure and technology (design validation), and broad understanding and support of the technology (user acceptance).



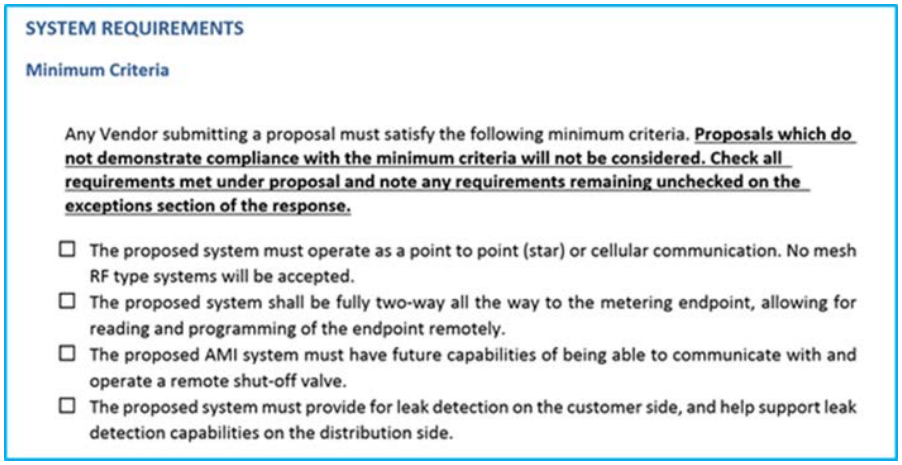
As either a matter of expanded feasibility analysis through market-based pricing or as manner of solution selection based on accepted feasibility and recommendations, the development of specific requirements for metering technology is an appropriate step in the evaluation and implementation process. A component of feasibility analysis included a discovery session with the County Procurement Office to review the process for advanced metering selection, confirm compliance with North Carolina General Statutes, and confirm the duration of the project against continual or renewable contracts. The Procurement Office confirmed utilization of the "best value" provisions of N.C.G.S. 143-135.9 as it relates predominantly to technology, acceptance of a four-year term for contracts as initial project implementation, and the potential to have a longer term contract (above the initial 4 years) which would address the long term metering costs along with any software maintenance costs and other ancillary annual

expenses. The County would have to develop a model or utilize consumer price indexing (CPI) for protections on a multi-year pricing structure.

Creation of detailed specifications based on UCPW metering and billing requirements will involve:

RFP Development: Effective advanced metering is the result of detailed requirements determination specific to the operational and financial requirements of the County. Requirements define the unique functionalities of meter equipment, AMI networking, meter data management, and detailed customer data access applied to utility goals. The actions of this step articulate County utility objectives for:

- Professional Services (Software and Systems Integration, RF Analysis, Site Access, Legal)
- Hardware (Water Meters, Radio Endpoints, AMI Network, Remote Disconnect, Leak Sensor, IoT)
- Labor (Network and Meter Installation, Large Meter Services)
- Software (Licensing, Servers, Storage, etc.)
- Annual Maintenance and Support



SYSTEM REQUIREMENTS

Minimum Criteria

Any Vendor submitting a proposal must satisfy the following minimum criteria. **Proposals which do not demonstrate compliance with the minimum criteria will not be considered. Check all requirements met under proposal and note any requirements remaining unchecked on the exceptions section of the response.**

- ☐ The proposed system must operate as a point to point (star) or cellular communication. No mesh RF type systems will be accepted.
- ☐ The proposed system shall be fully two-way all the way to the metering endpoint, allowing for reading and programming of the endpoint remotely.
- ☐ The proposed AMI system must have future capabilities of being able to communicate with and operate a remote shut-off valve.
- ☐ The proposed system must provide for leak detection on the customer side, and help support leak detection capabilities on the distribution side.

The main components to develop UCPW-specific requirements include the following:

- Business operations
- Systems and applications (software)
- Meter specifications
- Systems integration planning
- Installation and quality controls
- Meter Data Management functions and customer portal access

Task Descriptions:

Requirements Determination (Business Process, Operational Goals, Data Management, System Technology Needs)	Identification of key advanced metering/infrastructure requirements critical to meeting long-term operational goals of the utility. Integration opportunities with UB and WOM.
RFP Development and Authorization for Issuance	Building detailed specifications in cooperation with the County Procurement Office that represent the County's requirements for operations, performance quality, meter data management, training, implementation and service support.
Proposal Solicitation, Specifications Q&A Process, Compliance Oversight	In cooperation with the County Procurement Office, actively recruit qualified vendors responsive to requirements and bid specifications authorized by the County. Respond to bid inquiries and requests for clarification. Ensure bid process is successfully executed compliant with statutes and local purchasing requirements.

Response Evaluation, Scoring, Shortlist, Vendor/Design Due Diligence, Selection	Vendor Q&A, Evaluate RFPs, Cost Normalizing, Short List Interviews, Reference Checks

Table 23. Procurement Task Descriptions

The Vendor selection and due diligence process will include contacting vendor references, confirming compliance with all requirements, and validating information as presented in the vendor bid documents. Presenting summary documents with the results of these investigation efforts will allow for quick review of the

On June 11, 2018, the MeterSYS team will be onsite with the County project team to map out the requirements for procurement in support of:

- Refinement of contract stipulations consistent with County requirements and requests
- Development of requirements for software functionality and integration points
- Management of vendor communications and outreach
- Facilitation of site visits, vendor presentations, and other ancillary evaluation activities as directed by the County
- Development of grading matrix and evaluation procedures
- Negotiated cost and contract terms with selected vendor

As a component of the process, we will provide all coordination and support of requirements determination, RFP documentation, solicitation support services, as well as the review, shortlist processing, selection, and contracting with the preferred solution vendor. Our team will be coordinating with members of the Selection Committee.

	Task Name	Start	Finish
0	**UCPW Advanced Metering Vendor Bid Plan**	**Mon 1/7/19**	**Mon 7/29/19**
1	Develop preliminary planning requirements for metrology, network, installation, software	Mon 1/7/19	Fri 1/18/19
2	Conduct procurement specifications session with Project Team and refined based on input	Mon 1/21/19	Fri 1/25/19
3	Submit and receive feedback from Project Team on draft requirements	Mon 1/28/19	Fri 2/8/19
4	Submit accepted requirements to County Procurement for drafting	Mon 2/11/19	Fri 2/22/19
5	County Procurement submits final draft of Metering RFP to Project Team for review	Mon 2/25/19	Fri 3/1/19
6	County Procurement issues RFP for vendor response	Mon 3/4/19	Wed 3/6/19
7	Due Date for RFP vendor response	Thu 4/11/19	Fri 4/12/19
8	RFP tabulation, due dilligence, and analysis	Thu 4/11/19	Fri 4/26/19
9	Presentation of response summary and recommendations	Mon 4/29/19	Fri 5/3/19
10	Authorization to Proceed with Legal review	Mon 4/29/19	Fri 5/3/19
11	Shortlist vendor interviews with Project Team	Mon 5/6/19	Fri 5/17/19
12	Preferred vendor Terms and Conditions negotiation	Mon 5/20/19	Fri 6/7/19
13	Report to Project Team of final solution selection, terms, and final contract review	Wed 6/12/19	Fri 6/28/19
14	Authorization to Proceed with Board of Commissioners presentation	Mon 7/1/19	Fri 7/19/19
15	Present final solution selection to Board of Commissioners	Mon 7/15/19	Mon 7/29/19

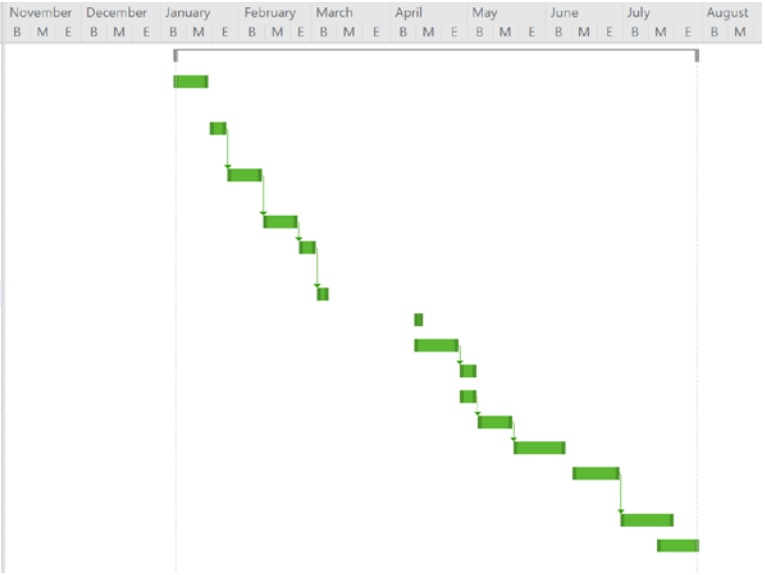


Figure 30. UCPW Sample AMI Procurement Project Plan

2. UCPW Advanced Metering Implementation Planning

While consistent in the basics of design and delivery, advanced metering technologies vary significantly when considering its deployment and integration into the existing business processes of the utility. Therefore, the solution process is a critical point in the development of detailed and technology specific implementation tasks based on how the infrastructure functions related to Union County network design, software implementation, and meter

integration. For purposes of considering the business case for AMI, the following table details the key action items that are aligned to the milestones of AMI implementation planning based on standard assumptions that generally apply to all potential solutions.

UCPW Initial Implementation Project Plan Sample		
Task Name	Start	Finish
	Mon 7/15/19	**Fri 10/30/21**
Project Initiation	**Mon 7/15/19**	**Fri 9/20/19**
Purchase Order Received	Thu 7/25/19	Tue 7/30/19
Project Tasks and Scheduling Refinement	Mon 7/29/19	Fri 8/2/19
Project Charter Completed	Mon 8/5/19	Fri 8/9/19
Kickoff Meeting	Mon 8/19/19	Thu 8/22/19
Project Management Infrastructure/Team Orientation	Mon 8/19/19	Fri 8/23/19
Site Walk and Large Meter Inspection	Mon 8/19/19	Fri 8/23/19
CIS data dump / import	Mon 8/26/19	Fri 9/6/19
Integration Review / Planning / Task	Mon 8/26/19	Fri 9/6/19
Receipt and Validation of Meter Sizes and Quantities	Mon 8/26/19	Fri 8/30/19
Order Infrastructure Devices	Mon 8/26/19	Fri 9/6/19
Billing Interface Tasks- Direct to AMI Conversion	Mon 9/2/19	Fri 9/13/19
Network Infrastructure survey and design	Mon 9/9/19	Fri 9/13/19
Network Infrastructure Permitting and Permissions	Mon 9/16/19	Fri 9/20/19
System Testing	**Mon 10/14/19**	**Fri 5/1/20**
Site Prep- AC Power and Backhaul	Mon 10/28/19	Fri 12/27/19
Establish and Test Meter Swap Interface	Mon 10/28/19	Fri 1/3/20
Delivery of C&I meters	Mon 11/25/19	Fri 12/27/19
Delivery of Infrastructure Product	Mon 11/4/19	Fri 11/22/19
Install Collectors	Mon 11/11/19	Fri 12/13/19
Network Test	Mon 12/30/19	Fri 1/17/20
Test Meters (C&I, Test Residentials) Installation	Mon 1/20/20	Fri 1/31/20
Mitigation work based on testing	Mon 2/3/20	Fri 4/3/20
Updated Interface Testing & Signoff	Mon 4/6/20	Fri 5/1/20
Full Deployment Phase	**Fri 5/1/20**	**Tue 7/13/21**
Critical Customer Identification and Management	Tue 5/5/20	Mon 5/18/20
Limited Production Install	Mon 5/11/20	Fri 6/26/20
Non-Standard Installation Management	Mon 5/18/20	Mon 8/17/20
Equipment RMA Process Check	Mon 5/25/20	Wed 7/1/20
Project Financials Final Reconciliation	Mon 6/14/21	Tue 7/13/21
System Substantially Complete	Mon 5/3/21	Fri 6/25/21
AMI Installation Project Closeout	**Tue 6/1/21**	**Fri 10/29/21**
Meter Punch list / Clean up	Tue 6/1/21	Mon 8/30/21
Network Optimization	Mon 6/7/21	Fri 9/3/21
Mitigation work based on Optimization	Mon 6/14/21	Thu 9/23/21
Sensus Analytics/Field Installation Final Training	Wed 6/23/21	Mon 9/20/21
Infrastructure Acceptance Quality Validation	Mon 7/5/21	Fri 10/15/21
Project Signoff Acceptance	Mon 8/30/21	Fri 10/29/21

Table 24. Sample UCPW Implementation Planning Key Actions

Section 10. Project Summary, Decision Points, and Next Steps

As UCPW seeks to streamline operations, leveraging technology to drive efficiency, the highest return on investment will be enhancing current applications through conducting a utility-wide database scrubbing effort. Once old, inactive, duplicative, and or erroneous data has been purged from the main systems of record, standards for key terms and definitions should be established. Either simultaneous to or immediately following data cleanup and standardization efforts, interfaces, either through APIs or FTP file exchanges, should be implemented between all major systems to facilitate the flow of data between work groups. Improving the data and systems architecture will provide UCPW with the strong foundation with which to implement AMI and leverage all the benefits of the technology and the data it provides.

A key decision UCPW should decide quickly is whether to deploy a customer portal in advance of AMI or to wait until after the meter replacement program is complete. By implementing a third-party portal soon, the County could maintain their online payments vendor, Paymentus, and simply embed that as a module within the portal to allow an integrated user experience for the customer. A major benefit of this approach would be to inform customers of the AMI project and allow them to gain immediate benefit of receiving leak alert notifications and become familiar with visiting the portal to receive notifications on consumption and to access self-service options like online bill payments or fill out forms for service requests or account changes. If the utility would prefer to utilize a vendor-specific customer portal, that would require the selection of an AMI vendor first and deploying the portal after the AMI implementation is complete. MeterSYS recommends the UCPW project team consider the early selection and award of customer portal to a qualified third-party vendor that will integrate with the future AMI system and MDMS of choice, allowing the portal launch to precede installation and providing improved service delivery to customers.

UCPW will need to assign key staff to the Systems Sub-Team and authorize the team to make important decisions and resolve issues independent, but in concert with, the full project team and UCPW leadership. MeterSYS will facilitate project management of sub-team operations through an established plan peppered with ongoing meetings, report-outs to the project team, document retention, and task tracking to maintain accountability.

Assign key staff to Communications Sub-Team:

- Implement actions outlined in communications plan
- Leverage customer portal as available
- Establish internal team communications process and escalation protocols
- Create internal County staff communications requirements; AMI information and educational materials

Assign key staff to Systems Sub-Team and:

- Identify key system interfaces; develop interface requirements
- Facilitate vendor file exchange; create integration standards
- Assign system access and permissions
- Establish interface project plan; identify testing and acceptance milestones
- Incorporate systems project plan into AMI project plan

Assign key staff to Installation Sub-Team and:

- Map out installation; zone mapping and route-by-route
- Conduct pre-install field audits; verify account data (meter size, location, etc.)
- Identify Special (commercial/water-dependent/large meters;) and Do Not Replace (vacant/inactive) accounts for install planning purposes and equipment ordering

Section 11. Appendices

SEE ATTACHED APPENDICES

Union County Public Works
500 North Main Street
Suite 600
Monroe, NC 28112

T. 704-296-4212

www.unioncountync.gov

Memo

To: **Brian Matthews, Assistant County Manager**

CC: **Aubrey Lofton, Director of Planning and Resource Management (UCPW)**

From: **Hyong Yi, Public Works Administrator**

Subject: **Automated Meter Infrastructure contract**

Date: **February 19, 2021**

Union County Public Works is proposing a sole source contract solution for procuring Advanced Metering Infrastructure (AMI) for upgrading our water meters and infrastructure. This proposal is based on two requirements for "Exceptions to State Competitive Bidding Requirements" for North Carolina Local Government:

1. Sole Source is available when standardization or compatibility is the overriding consideration: UCPW seeks to facilitate the standardization of equipment and systems and long-term operational simplicity by having only one system and standard.
2. Product is available from only one source, due to the current standard set with RFP: Specification compatibility – only one bidder met all the specifications listed in the RFP.

The purpose of this memo is to outline the events and decisions that steer towards a proposed sole source procurement of Advanced Metering Infrastructure (AMI) for Union County Public Works water meters and the fixed-network meter reading infrastructure.

Two reasons justify a sole source procurement:

1. Standardization and Compatibility

In 2019, Union County Public Works, in accordance with its meter replacement program strategy, published an RFP for Cold Water Meters (No. 2019-064). This was in response to an aging meter infrastructure and significant compatibility issues with Public Works' standard electronic read transceiver (ERT) and register components by two legacy meter brands.

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Suite 600
Monroe, NC 28112

T. 704-296-4212

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Two specifications in particular were required in the RFP:

1. The new meter and ERT had to conform to current Advanced Meter Reading (AMR) Radio Based Mobile Reading Software, and be compatible with the existing iTron AMR equipment and/or meter reading system that was in use at the time. The purpose of this specification was to ensure that only one AMR based reading system would be required for meter reading purposes without replacing all existing infrastructure.
2. The new meter and ERT could convert to a fixed network through software (AMI) at a future point in time.

The subsequent result of the competitive RFP was the selection and formation of a contract with Sensus for meters, and a new standard for AMR reading software, FlexNet, also by Sensus. The new reading software would be used for the new Sensus meters and ERTs, but could also access and read existing meters (that weren't due for replacement) which had iTron AMR ERT devices. This satisfied the first requirement specified above, that only one reading system would be required to read meters.

The second specification was also satisfied with the selection of the Sensus product. The new meter and reading system (FlexNet) could easily convert to an AMI fixed network system. This provided a cost-efficient opportunity to migrate to AMI, by avoiding a complete meter and ERT replacement in an AMI transition.

2. One Source for Product

The Sensus meter, ERT, and reading system standard was established for Public Works in the competitive bid for Cold Water Meters RFP on September 3, 2019, when the Board of County Commissioners voted to "approve Sensus Metering System as the County's standard metering system…". Sensus meter devices and FlexNet software were chosen in part, for its compatibility to the current meter infrastructure, and ease of entry and conversion to a future AMI program.

One of the primary components to consider for a transition to AMI is the network infrastructure. Several scenarios were outlined in an AMI Feasibility Analysis completed in October 2018 conducted by a consultant, MeterSYS, one of which was a "traditional licenses frequency", which consisted of a network of towers, base-stations, collectors, and a licensed MHz band frequency. Several vendors met this preferred solution and criteria, including Sensus.

However, only one vendor has the capability to create an AMI fixed network that's compatible with Public Works' current AMR/AMI-ready meter infrastructure and Sensus meter standard. That company is Sensus.

Conclusion

Union County Public Works
500 North Main Street
Suite 600
Monroe, NC 28112

T. 704-296-4212

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It's important to reiterate that other AMI solutions exist and are available for selection in a competitive bidding process. However, none of these solutions could adapt to the current meter infrastructure and Sensus meter standard that Union County Public Works has in place. This means that in addition to the purchase of a fixed network, using an alternative vendor could potentially require a complete replacement of more than 56,000 meters or meter devices, registers, and/or ERTs, at an additional cost of millions of dollars of expense and lengthening the project timeline by creating unnecessary work to replace functioning meters. For these reasons, UCPW's preferred procurement method is to sole source the acquisition of the meters, sensors, and/or any other related infrastructure for this project.

If you would like to discuss further, I am happy to do so.

Attachments:

1. A memo from Sensus confirming that the company is the sole source manufacturer of radio components (our standard), and the primary license holder of the 900mHz narrowband spectrum used for the AMI fixed network (our preference).
2. A memo that acknowledges Ferguson Waterworks as the exclusive Authorized Distributor of Sensus products for the state of North Carolina. The forthcoming AMI contract will list both Sensus USA and Ferguson Waterworks as vendors for the AMI project.

April 24, 2020

To: Union County Government Center
Attn: Aubrey Lofton, PE
500 North Main Street
Monroe, NC 28112

Re: Sensus FlexNet sole source

Dear Ms. Lofton,

This letter serves as acknowledgement that Sensus is the sole source of private licensed frequencies within the 900mHz narrowband private communications system (MAS) spectrum, used for AMI, in the Union County/Monroe, NC area. Furthermore; Sensus is the only vendor to provide an AMI endpoint with a 2-watt transceiver and an AMI base station with a 16-watt transceiver. Sensus is both the manufacturer of the radio components and the primary license holder of the MAS narrowband spectrum used to enable the system.

Sincerely,

Tom Galuska

Thomas Galuska
Senior Product Manager
Sensus, USA
Tom.galuska@xyleminc.com

May 02, 2019

To Whom It May Concern:

Sensus, USA is pleased to announce that Ferguson Waterworks is the exclusive Authorized Distributor of Sensus products for the state of North Carolina. Please contact Ferguson Waterworks for all of your Sensus needs. Purchasing Sensus, USA products from the authorized distributor for your area ensures that your products will be properly supported and warranted.

We look forward to the opportunity of providing your firm with quality water measurement equipment and support in the near future. Please feel free to contact me at andrea.davis@xyleminc.com regarding this or any other matter.

Sincerely,

Andrea M. Davis

Andrea Davis
Sensus, USA
Director, Channel Marketing

Andrea Davis
Director, Channel Marketing
8601 Six Forks Road, Suite 700
Raleigh, NC 27615 USA
T: 919.424.8995
andrea.davis@xyleminc.com
sensus.com

CONTRACT AGREEMENT

Owner:	Union County, NC	Contractor:	Ferguson Enterprises, LLC.
Address:	500 North Main St Monroe, NC 28112	Address:	1044 Taylors Creek Drive Greenville, NC 27835
Phone:	704-283-3500	Phone:	252-321-1132

Project Description: AMI Meter System including 17 base stations, approximately 20,000 meters and 48,000 transmitters.
Contract Date: Mutual Execution 12/1/2021
Contract Sum: $13,657,018.17

Union County, North Carolina ("Owner") and Ferguson Enterprises, LLC. ("Contractor") have entered into this Contract Agreement ("Agreement" or "Contract") as of the date set forth above. The Owner and the Contractor agree as follows:

1 WORK.

1.1 The Contractor shall furnish all the labor, services, and materials as described in the Scope of Work attached hereto as Exhibit "A" (collectively called the "Work") necessary for the timely and proper completion of the Work described in this Agreement. The Contractor will provide a Payment Bond and Performance Bond, in a form acceptable to Owner, for the full amount of the Contract Sum. The Payment Bond and Performance Bond shall be with a surety authorized to do business in North Carolina and acceptable to Owner (as determined in its reasonable discretion). The Payment Bond and Performance Bond shall be provided until (i) the Work is completed and accepted by Owner, and (ii) this Agreement has terminated or expired. The Payment Bond and Performance Bond must be provided to Owner within thirty (30) days of mutual execution of this Agreement. Failure to provide a Payment Bond or Performance Bond within the time period noted herein, or failure to maintain such bonds as required, shall be considered a default under this Agreement.

1.2 CLEANUP. Contractor shall cleanup, repair, restore, and otherwise return any site or location to the condition in which it was immediately prior to Contractor's commencement of any portion of the Work at such site or location.

1.3 COMPLETION. The date for final completion of the Work is 12/1/2023 ("Completion Date"), unless otherwise agreed to in writing or as provided herein. The Contractor shall perform the Work in conformance with the Contract Documents so as to complete the Work by the Completion Date. All materials and equipment provided shall be new, free from liens and covered by manufacturer warranties against defects. A copy of the manufacturer's warranty is attached hereto as Exhibit "C".

1.4 FEES. Contractor is subject to and responsible for paying fees to obtain all applicable contractor or business licenses. Owner will be responsible for obtaining any permits or approvals required by local, state or federal agencies to permit the Work.

2 CONTRACT DOCUMENTS.

2.1 The Contract Documents consist exclusively of the documents set forth below, all of which are incorporated into this Agreement:

-Agreement (this document)
-Scope of Work, Exhibit "A" (including Attachment 2 thereto)
-Pricing, Exhibit "B"
-G500 Product Warranty, Exhibit "C"
-Spectrum Lease Agreement/AMI Agreement, Exhibit "D"
-Additional Terms of Agreement Exhibit "E"
-Route Acceptance Form, Exhibit "F"
-Organizational Requirements and Future System Architecture, Exhibit "G"
-Propagation Study and Territory, Exhibit "H"

3 TIME FOR COMPLETION AND WORK COORDINATION.

3.1 TIME SCHEDULE OF THE WORK. The Work will begin on the date Owner issues a notice to proceed upon execution of the Agreement and shall be substantially completed by the Completion Date, unless the Owner and Contractor agree to different commencement and completion dates in writing. The Work will be deemed to be substantially complete when all of the Work required is ready for use by the Owner, subject to punchlist items to correct any matters noted by Owner in its final inspection which do not effect Owner's ability to use the deliverables under the Work as intended, and excluding items turned over to the Owner to address due to being outside the scope of Work or due to lack of Contractor ability to gain access to private property after reasonable efforts as required by this Agreement. The date of completion shall be extended for any delays beyond the reasonable control of Contractor in an amount equal to the time lost due to such delay. Delays beyond the control of Contractor shall include, but not limited to, acts of neglect by Owner, acts or neglect of utility owners or other contracts performing other works, fires, floods, epidemics, abnormal weather conditions, inability to obtain materials, , acts of God, or any other causes of any kind whatever beyond the control of Contractor. The date of completion shall be extended for any delays beyond the reasonable control of Contractor in an amount equal to the time lost due to such delay. Delays beyond the control of Contractor shall include, but not be limited to acts of neglect by Owner, acts or neglect of utility owners or other contractors performing other work, fires, floods, epidemics, abnormal weather conditions, inability to obtain materials, or acts of God or any other causes of any kind whatever beyond the control of Contractor. In the event of uncooperative property owners, the Owner will reasonably assist the Contractor in gaining access to any required premises. If Contractor is unable to gain access with the Owner's assistance within thirty (30) days after completion of all other components of the Work (in accordance with this Agreement), then the installation in question will be turned over to the Owner who will be responsible for the installation.

3.2 Contractor is responsible for scheduling its subcontractors and for any delay resulting from their performance.

4 DELAYS AND ACCELERATIONS.

4.1 NOTICE OF DELAYS. The Contractor shall give the Owner written notice of any delay affecting its Work within three (3) days after Contractor becomes aware of the delay.

4.2 ACCELERATION OF THE WORK. If the Contractor fails to perform as required by the Project Schedule, the Owner may require the Contractor to accelerate its Work by adding workers or working additional

shifts, extended shifts or overtime, so that the Work is in final form before the Completion Date at no cost to Owner, as set forth in Section 4.2.1 below. If the Owner requires the Contractor to accelerate its Work, the Contractor shall take action reasonably required within ten days of the Notice.

4.2.1 OWNER'S OBLIGATION TO PAY. The Owner shall pay the Contractor, as provided in this Paragraph, for the Contractor accelerating its Work so that its Work is in final form before the Completion Date so long as the acceleration is not required as a result of the Contractor's failure to perform as required by the Project Schedule.

4.2.2 COMPENSATION FOR ACCELERATION OF THE WORK. To the extent that the Owner requires the Contractor to accelerate its Work and is obligated to pay under Section 4.2.1, the Owner shall pay the Contractor for the Contractor's additional costs of accelerating its Work, as determined in accordance with this Paragraph. The additional costs of accelerating the Work shall be: (a) any premium for overtime, additional shift work, or extended shift work; (b) the cost of any additional supervision required by the acceleration; and (c) out of pocket cost of any additional equipment required for the acceleration.

5 CORRECTIVE ACTION.

5.1 If the Owner determines that the Contractor is not cooperating or coordinating its work properly with its subcontractors, not supplying sufficient skilled workers, not cleaning up, not furnishing the necessary materials, equipment, or any temporary services or facilities to perform the Work in strict conformance with the Contract Documents, or is not otherwise performing its obligations under the Contract Documents, the Contractor shall within ten (10) days after notice of such determination commence such action as is reasonably necessary to correct the deficiencies noted by the Owner, including but not limited to, increasing the number of skilled workers, providing temporary services or facilities, and cleaning up the Work.

6 CONTRACT SUM. The Contract Sum to be paid by the Owner to the Contractor, as provided herein, for the satisfactory performance and completion of the Work and all of the duties, obligations, and responsibilities of the Contractor under this Agreement and the other Contract Documents will be $13,3657,018.17 (the "Contract Sum"). The Contract Sum is based upon the unit prices set forth in Exhibit A, Scope of Work, and Exhibit B, Pricing, and may be adjusted based upon the unit costs to reflect the actual Work. The Contract Sum excludes all taxes imposed by law, including but not limited to any sales, use, and personal property taxes payable by or levied against the Contractor on account of the Work or the materials incorporated into the Work. All items in the Contract are pre-taxed unit cost and are subject to NC sales tax which will be applied to Owner at time of sale/work. Notwithstanding anything herein to the contrary, all payments under this Agreement shall be conditioned upon appropriation by the Union County Board of Commissioners of sufficient funds for each request for service.

7 RESERVED.

8 LIMITATION AND LIABILITY.

8.1 Under no circumstances shall the elected officials, officers, employees, or agents of the Owner be personally liable for any obligations or claims arising out of or related to this Agreement.

9 PAYMENT

9.1 APPLICATIONS FOR PAYMENT. The Owner has agreed to pay in accordance with the terms of this Contract after submission of a pay application reflecting the amount of Work completed as of the date the application for payment is submitted and including invoice for work performed and materials and equipment provided for the previous pay period and lien waivers for prior payments. Contractor will bill and Owner agrees to pay for equipment, including meters, radios and AMI equipment, based on prices set forth on Exhibit B, Pricing. Contractor will bill and Owner agrees to pay monthly for documented labor charges at the unit prices set forth on Exhibit B, Pricing. If any additional work beyond a standard meter installation (as defined in Exhibit A, Scope of Work, attached hereto) is required due to the condition of existing pipe or meter connections such work shall be completed on a time and material basis if approved by the Owner. In the event Owner does not approve such additional work then Contractor shall not complete the installation of such meter and shall not bill the Owner the installation charge for such meter.

9.2 The Owner may withhold payment in whole or in part to protect the Owner from loss because of: 1) Contractor's default or failure to perform any of its obligations under the Contract Documents, including but not limited to failure to provide sufficient skilled workers; 2) Work, including equipment or materials, which is defective or otherwise does not conform to the Contract Documents; 3) The filing of third party claims, or reasonable evidence that third party claims have been or will be filed; 4) The Work has not proceeded to the extent set forth in the application for payment or the application for payment or invoice is otherwise inaccurate; 4) The failure of the

Contractor to make payments to its subcontractors; 5) Liens filed or reasonable evidence indicating the probable filing of such liens; and/or 6) claims made by subcontractors or suppliers against the payment bond of Contractor.

9.3 The Owner will pay the Contractor within 30 days after receipt of the Contractor's accurate payment application, if the payment application has been properly submitted on a timely basis and is accompanied by all of the required documentation.

10 RETAINAGE.

10.1 AMOUNT OF PAYMENTS. The amount of the payments to the Contractor shall be determined in accordance with the following paragraphs:

10.2 PAYMENTS. Payments under the Contract shall be made at the rate of 100% of the amount set forth in the Contractor's payment application and as approved by the Owner. Contractor agrees to issue a Retainage Bond, in a form acceptable to Owner, on the amount of 10% of the Contract Sum in lieu of holding retainage in payment. The Retainage Bond shall be with a surety authorized to do business in North Carolina and acceptable to Owner as an unconditional retainage bond (as determined in its reasonable discretion). The Retainage Bond shall be provided until (i) the Work is completed and accepted by Owner, including Owner's acceptance of the final application for payment, and (ii) this Agreement has terminated or expired. The Retainage Bond must be provided to Owner within thirty (30) days of mutual execution of this Agreement. Failure to provide a Retainage Bond within the time period noted herein, or failure to maintain such bond as required, shall be considered a default under this Agreement.

10.3 DOCUMENTATION. Upon request, the Contractor immediately shall supply the Owner with such information as may be requested so as to verify the amounts due to the Contractor. Contractor intends to bill for stored materials.

10.4 FINAL PAYMENT.

10.4.1 The final application for payment shall be itemized, and the Contractor shall ensure that the final application for payment shall contain one copy of each of the following documents, if not previously delivered to the Owner: a) copies of applicable manufacturer warranties; b) a list of all Claims that Contractor believes are unsettled; c) Such other documentation as required by the Contract

Documents or applicable law; and d) a waiver of claims by Contractor (in a form satisfactory to Owner).

10.4.2 The making and acceptance of final payment by the Owner shall not constitute a waiver of Claims by the Owner.

10.5 ESCROW ACCOUNT. The Owner and the Contractor agree that no escrow account shall be required in connection with this Agreement and that retained funds will not earn interest.

11 CHANGE ORDERS.

11.1 A "Change Order" is a written instrument signed by the Owner and the Contractor stating their agreement upon a change in the Work, the amount of the adjustment or the method for computing the amount of the adjustment of the Contract Sum, if any, and the extent of the adjustment in the Project Schedule, if any.

12 CLAIMS AND DISPUTES.

12.1 A "Claim" is a demand or assertion by one of the parties seeking, as a matter of right, adjustment, or interpretation of the terms of the Contract Documents, payment of money, extension of time, or other relief with respect to the terms of the Contract Documents. The responsibility to substantiate claims shall rest with the party making the Claim. Neither party shall knowingly present or cause to be presented a false or fraudulent Claim. As a condition precedent to making a claim, such party shall submit an affidavit sworn to before a notary public or other person authorized to administer oaths, which states that:

12.1.1 The Claim submitted herewith complies with Paragraph 13.1 or 14.1 of the Agreement, as applicable.

12.1.2 The respective party "does not knowingly present or cause to be presented a false or fraudulent Claim."

12.1.3 If the Contractor wishes to make a Claim for additional time, the Contractor shall include an estimate of cost and probable effect of delay on progress of the Work. In the event of continuing delay, only one Claim is necessary. If adverse weather conditions are the basis for a Claim for additional time, such claim shall be documented by data substantiating that abnormal weather conditions had an adverse effect on the scheduled construction.

12.2 Claims must be made by written notice.

12.3 If the Contractor wishes to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work which would result in the increase in the Contract Sum, except upon authorization by Owner.

12.4 The Owner acknowledges and agrees that the installation prices set forth in Exhibit B are based upon a standard meter installation as described in the Exhibit A, Scope of Work, attached. Any conditions encountered which require additional work beyond a standard meter installation as described in the Exhibit A, Scope of Work, shall be handled as described herein or as otherwise agreed by the parties.

12.5 A party shall make all Claims in writing within ten (10) days after the occurrence of the event giving rise to the Claim.

12.5.1 Within ten (10) days of its receipt of a written request, a party shall make available to the other party or its consultant any books, records, or other documents in its possession or to which it has access relating to any Claim and shall require its subcontractors, regardless of tier, and materialmen

to do likewise.

13 DEFAULT OF THE CONTRACTOR.

13.1 EVENTS OF DEFAULT. Each of the following constitutes an event of default of the Contractor:

13.1.1 The Contractor's failure to perform any of its obligations under the Contract Documents and to proceed to commence to correct such failure within five (5) days after written notice thereof from the Owner or such other time as is provided in the Contract Documents, or

13.1.2 The Contractor's failure thereafter to use its reasonable efforts to correct such failure,

13.1.3 The Contractor's failure to pay its obligations as they become due or the Contractor's insolvency; or

any event which is otherwise defined as a default in this Agreement.

13.1.4 OWNER'S REMEDIES. Upon the occurrence of an event of default the Owner shall have the following remedies, which shall be cumulative:

13.1.5 Order the Contractor to stop the Work, which the Contractor shall do immediately;

13.1.6 To perform through others all or any part of the Work remaining to be done and to deduct the cost thereof from the unpaid balance of the Contract Sum or, if the unpaid balance of the Contract Sum is inadequate, to demand reimbursement of amounts previously paid to the Contractor;

13.1.7 To terminate this Agreement and take possession of, for the purpose of completing the Work or any part of it, all materials and equipment to be installed as part of the Work, and to employ any person or persons to complete the Work, and the Contractor shall not be entitled to receive any further payment until the Work is completed; and/or,

13.1.8 All other remedies which the Owner may have at law or in equity or otherwise under the Contract Documents.

13.2 TERMINATION OF AGREEMENT. The termination of this Agreement shall be without prejudice to the Owner's rights and remedies, including without limitation the Owner's right to be indemnified by the Contractor.

13.3 PAYMENTS DUE CONTRACTOR. If the cost of finishing the Work, including any costs, expenses or damages incurred by the Owner as a result of the event of default exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The obligations under this Paragraph shall survive the termination of this Agreement.

14 DEFAULT OF THE OWNER.

14.1 EVENTS OF DEFAULT. The following constitutes the exclusive events of default of the Owner:

14.1.1 The failure of the Owner to perform any of its obligations under the Contract Documents and to correct such failure within thirty (30) days after receipt of written notice thereof from the Contractor specifying the default and the necessary corrective action; and/or

14.1.2 The failure of the Owner to pay any undisputed amounts when due and such failure continues for 10 days after notice from the Contractor that such amount is unpaid.

14.2 CONTRACTOR'S REMEDY.

14.2.1 The Contractor's sole and exclusive remedy for the default of the Owner, other than the failure of the Owner to pay the Contractor, will be to bring a suit for damages. The Contractor's right to

exercise that remedy shall be subject to its giving the Owner the required notices and following any other procedures required by the Contract Documents.

14.2.2 If the Owner fails to pay the Contractor as payment becomes due, the Contractor may, upon ten (10) days written Notice, stop the Work until payment of an undisputed amount owing has been received. An adjustment to the Contract Sum will be made as if the Work had been suspended for the convenience of the Owner under Section 15 of this Agreement.

15 SUSPENSION OR TERMINATION FOR THE CONVENIENCE OF THE OWNER.

15.1 SUSPENSION FOR THE CONVENIENCE OF THE OWNER.

15.1.1 The Owner may, without cause, order the Contractor to suspend, delay, or interrupt the Work in whole or in part for such period of time as the Owner may determine.

15.1.2 An adjustment may be made for increases in the cost of performance of the Work, including profit and overhead on the increased cost of performance, caused by the suspension, delay or interruption.

15.1.3 In the event the Work is suspended by the Owner for more than thirty (30) days for any reason other than breach or default by the Contractor, then the Contractor shall have the right, upon fifteen (15) days notice to terminate this Agreement as to any remaining Work.

15.2 TERMINATION FOR THE CONVENIENCE OF THE OWNER.

15.2.1 After giving thirty (30) days written notice to the Contractor, the Owner may, in its discretion and without cause, terminate this Agreement for the Owner's convenience.

15.2.2 Upon receipt of a written notice from the Owner terminating this Agreement without cause and for the Owner's convenience, the Contractor shall: (a) immediately cease performing the Work, unless otherwise directed by the Owner, in which case the Contractor shall take the action directed by the Owner; (b) take all reasonable and necessary action to protect and preserve the Work; and (c) unless otherwise directed by the Owner, terminate all agreements with subcontractors and suppliers.

15.2.3 If this Agreement is terminated without cause and for the Owner's convenience and there exists no event of the Contractor's default, as defined in this Agreement, the Owner will pay the Contractor for Work performed under this Agreement up to the date the notice of termination is received by the Contractor at the rates for Work provided under this Agreement. Owner will also pay Contractor for all equipment and meters purchased by Contractor solely for the purpose of installation as part of the Work (and Contractor is not able to reasonably use such equipment or meters on other work it may be performing in the ordinary course of its business) if not previously billed and paid by Owner.

15.2.4 The termination of this Agreement shall be without prejudice to any rights or remedies that exist at the time of termination.

16 INSURANCE AND INDEMNIFICATION.

16.1 At Contractor's sole expense, Contractor shall procure and maintain the following minimum insurances with insurers authorized to do business in North Carolina and rated A-VII or better by A.M. Best, or as otherwise authorized by the Union County Risk Manager.

A. WORKERS' COMPENSATION

Statutory (coverage for three or more employees) limits covering all employees, including Employer's Liability with limits of:

$500,000	Each Accident
$500,000	Disease - Each Employee
$500,000	Disease - Policy Limit

B. COMMERCIAL GENERAL LIABILITY
Covering Ongoing and Completed Operations involved in this Agreement.

$2,000,000	General Aggregate
$2,000,000	Products/Completed Operations Aggregate
$1,000,000	Each Occurrence
$1,000,000	Personal and Advertising Injury Limit

C. COMMERCIAL AUTOMOBILE LIABILITY

$1,000,000	Combined Single Limit - Any Auto

ADDITIONAL INSURANCE REQUIREMENTS

A. Contractor's General Liability policy shall be endorsed, specifically or generally, to include the following as Additional Insured:

UNION COUNTY, ITS OFFICERS, AGENTS AND EMPLOYEES ARE INCLUDED AS ADDITIONAL INSURED WITH RESPECTS TO THE GENERAL LIABILITY INSURANCE POLICY.

Additional Insured status for Completed Operations shall extend for a period of not less than one (1) year from the date of final payment.

B. Before commencement of any work or event, Contractor shall provide a Certificate of Insurance in satisfactory form as evidence of the insurances required above.

C. Contractor shall have no right of recovery or subrogation against Union County (including its officers, agents and employees).

D. It is the intention of the parties that the insurance policies afforded by Contractor shall protect both parties and be primary and non-contributory coverage for any and all losses covered by the above-described insurance.

E. Union County shall have no liability with respect to Contractor's personal property whether insured or not insured. Any deductible or self-insured retention is the sole responsibility of Contractor.

F. Notwithstanding the notification requirements of the Insurer, Contractor hereby agrees to notify County's Risk Manager at 500 N. Main Street, Suite #130, Monroe, NC 28112, within thirty (30) days prior to the cancellation of any insurance policy set out herein.

G. The Certificate of Insurance should note in the Description of Operations the following:

Department: Public Works
Contract #: 7134

H. Insurance procured by Contractor shall not reduce nor limit Contractor's contractual obligation to indemnify, save harmless and defend Union County for claims made or suits brought which result from or are in connection with the performance of this Agreement.

I. Certificate Holder shall be listed as follows:

Union County
Attention: Keith A. Richards, Risk Manager
500 N. Main Street, Suite #130
Monroe, NC 28112

J. If Contractor is authorized to assign or subcontract any of its rights or duties hereunder and in fact does so, Contractor shall ensure that the assignee or subcontractor satisfies all requirements of this Agreement, including, but not limited to, maintenance of the required insurances coverage and provision of certificate(s) of insurance and additional insured endorsement(s), in proper form prior to commencement of services.

16.2 Insurance furnished by the Owner, if any, is not intended and shall not cover equipment and materials before they are physically incorporated into the Work or tools. The Contractor shall bear the entire risk of loss with respect to tools, equipment, and materials prior to incorporation into the Work.

16.3 To the maximum extent permitted by law, the Contractor agrees to protect, defend, indemnify and hold Owner, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with this Agreement and/or the performance hereof that are caused in whole or in part by the negligence of Contractor, its officers, employees, subcontractors or agents. Contractor further agrees to investigate, handle, respond to, provide defense for, and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto.

16.4 The Contractor and/or the Contractor's subcontractors shall comply with Occupational Safety and Health Act of 1970 during the conduct and performance on and in connection with the Work.

17 WARRANTIES.

17.1 The Contractor warrants and guarantees that:

- The Owner will have good title to the Work and all materials and equipment incorporated into the Work will be new; and general care and good workmanship will be taken during installation.
- Contractor guarantees installation services for a period of one (1) year from execution of the applicable Route Acceptance Form, a copy of which is attached hereto as Exhibit "F". All materials and equipment incorporated into the Work will be covered by applicable manufacturer's warranties provided to Owner and as set forth on Exhibit "C";
- All manufacturers' warranties shall be made available to Owner. Contractor shall coordinate manufacturer warranty service with the Owner at Owner's request. The sole warranty applicable to installation service provided (as applicable) is delineated as noted above in this

Section 17.2. Product warranties are solely from the respective manufacturer. With respect to the underlying products provided by manufacturers, **THE OWNER'S SOLE AND EXCLUSIVE WARRANTY IS THAT PROVIDED BY THE PRODUCT'S MANUFACTURER. CONTRACTOR HEREBY DISCLAIMS ALL EXPRESSED OR IMPLIED WARRANTIES, WHETHER IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS OR FITNESS FOR A PARTICULAR PURPOSE RELATED TO THE MANUFACTURED PRODUCT ITSELF.** All manufacturers' warranty and service obligations shall be for the benefit of the Owner. However, notwithstanding anything herein to the contrary, Contractor agrees that if a product provided in the Work is one of a type identified under the terms of the manufacturer's warranty set forth in Exhibit C, and the manufacturer's warranty does not sufficiently cover any damages sustained by Owner related to the product due to Contractor's or product manufacturer's negligence or intentional misconduct, then Contractor may be liable to Owner for direct damages suffered by Owner due to the Contractor's or product manufacturer's negligence or intentional misconduct, up to an amount not to exceed the amount paid by Owner to Contractor under this Agreement for all products of a type that are identified in the manufacturer's warranty set forth in Exhibit C.

18 GENERAL.

18.1 MODIFICATION. No modification or waiver of any of the terms of this Agreement or of any other Contract Documents shall be effective against a party unless set forth in writing and signed by or on behalf of a party by a duly authorized agent. Under no circumstances shall forbearance, including the failure or repeated failure to insist upon compliance with the terms of the Contract Documents, constitute the waiver or modification of any such terms. The parties acknowledge that no person has authority to modify this Agreement or the other Contract Documents or to waive any of its or their terms, except as expressly provided in this Paragraph.

18.2 ASSIGNMENT. The Contractor may not assign this Agreement without the written consent of the Owner, which the Owner may withhold in its sole discretion.

18.3 THIRD PARTIES. Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Owner or the Contractor.

18.4 LAW AND JURISDICTION. All questions regarding the validity, intention, or meaning of this Agreement or any modifications of it relating to the rights and obligations of the parties shall be construed and resolved under the laws of the State of North Carolina. The parties to this Agreement confer exclusive jurisdiction of all disputes arising hereunder upon the General Courts of Justice of North Carolina sitting in Union County, North Carolina.

18.5 NOTICES. Notices, requests, or demands by either party shall be in writing, unless otherwise expressly authorized, and shall be personally served, forwarded by expedited messenger service, or be given by registered or certified mail, return receipt requested, postage prepaid, and, in the case of the Owner,

addressed to the address set forth at the beginning of this Agreement and, in the case of the Contractor, addressed to its address set forth at the beginning of this Agreement. Any party may change its address by giving notice hereunder. All notices, requests, and demands shall be deemed received upon receipt in the case of personal delivery or delivery by expedited messenger service; upon the expiration of three (3) days from the time of deposit in the United States mail or one day after delivery to overnight messenger with delivery receipt.

18.6 CONSTRUCTION. The parties acknowledge that each party has reviewed this Agreement and the other Contract Documents and has voluntarily entered into this Agreement. Accordingly, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement, the other Contract Documents, or any amendments or exhibits to it or them.

18.7 APPROVALS. Any approvals required hereunder shall be made in the reasonable discretion of the individual providing approval.

18.8 PARTIAL INVALIDITY. If any term or provision of this Agreement is found to be illegal, unenforceable, or in violation of any laws, statutes, ordinances, or regulations of any public authority having jurisdiction, then, notwithstanding such term or provision, this Agreement shall remain in full force and effect, and such term shall be deemed stricken; provided this Agreement shall be interpreted, when possible, so as to reflect the intentions of the parties as indicated by any such stricken term or provision.

18.9 COMPLIANCE WITH LAWS AND REGULATIONS. The Contractor, at its expense, shall comply with all applicable federal, state, and local laws, rules, and regulations applicable to the Work.

18.10 SAFETY. The Contractor shall follow all applicable safety and health regulations during the progress of the Work and shall monitor all of its employees and its subcontractors for compliance with such safety and health regulations. In undertaking the responsibilities set forth in this paragraph, the Contractor does not assume any duty or responsibility to the employees of any subcontractor or supplier, regardless of tier, with respect to providing certain employer-employee related insurance benefits, including, but not limited to, disability and workers compensation coverage. The Owner assumes no responsibility for the development, review, or implementation of the any project safety plan or for Work-safety and has no authority to direct the means and methods of the Contractor.

18.11 EQUAL OPPORTUNITY. Contractor agrees that neither it, its subcontractors, or any person on the Contractor's or subcontractor's behalf, in any manner, shall discriminate against or intimidate any employee hired for the performance of work under the contract on account of race, color, citizenship status, religion, creed, gender, national origin, ancestry, age, physical or mental disability, military status, veteran status, genetic status, or any other characteristic protected by law.

18.12 ENTIRE AGREEMENT. This Agreement and the other Contract Documents constitute the entire agreement among the parties with respect to their subject matter and will supersede all prior and contemporaneous, oral or written, agreements, negotiations, communications, representations, and understandings with respect to such subject matter, and no person is justified in relying on such agreements, negotiations, communications, representations, or understandings.

18.13 ADDITIONAL AGREEMENT TERMS. Contractor and Owner agree to the terms set forth in the attached Exhibit “E”.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their properly authorized representatives as of the date first set forth above.

Union County, NC

By: _____
Name: _____
Title: _____

Ferguson Enterprises, LLC.

By: _____
Name: _____
Title: _____

Exhibit A: Scope Of Work

Exhibit A Scope of Work

Attachment 1
Union County, AMI Project Terms and Conditions
General Conditions, Responsibilities of Ferguson Enterprises, LLC ("CONTRACTOR") and Responsibilities of Union County, NC ("COUNTY"); Customer Acceptance

CONTRACTOR DUTIES AND RESPONSIBILITIES:

CONTRACTOR shall implement and install a fully operable AMI System which will enable interval automatic reading of all the water meters within the COUNTY's Territory, in accordance with the Agreement. Installation of "Units" (meter units and associated equipment) will require CONTRACTOR to interrupt water service and access the water meters' applicable utility infrastructure in performance of the Work. CONTRACTOR shall provide, and require all its subcontractors to provide, its services in a manner that will minimize disruption of and avoid annoyance to COUNTY's water customers, will reflect well on the COUNTY, and will maintain the COUNTY's reputation for providing high quality customer service. The following summarizes specific duties that CONTRACTOR shall provide:

GENERAL

1. *Times for Work*. All Work shall be performed between the hours of 8 a.m. and 6 p.m. Monday through Saturdays during times of mutual consent between CONTRACTOR and COUNTY, provided all activity ends before dusk ('Regular Work Hours'). In the event of an emergency, Work may be performed outside of these hours with the prior approval of the COUNTY, consistent with all applicable law. Exceptions to these times for Work must be approved by COUNTY and the parties understand it may be required for commercial areas that are not reasonably accessible during normal business hours. Access to residential areas outside of Regular Work Hours may be required based on the needs of an individual End User (as such term is defined in Exhibit D) and will be approved at the sole discretion of COUNTY. All Work shall be conducted in accordance with COUNTY ordinances, policies, and procedures.

2. *Scheduling of Work*. All Work will be undertaken in accordance with the Project Schedule agreed upon by the parties. CONTRACTOR shall be responsible for notifying End Users/customers and homeowners associations of the dates work will be performed in their meter boxes in accordance with communications and access procedures established and mutually agreed to by both CONTRACTOR and COUNTY prior to initiation of installation portions of the Work, including any procedures included in the Contract Documents.

3. *General Inquiries/Complaints from End Users/Residents*. CONTRACTOR will respond to one hundred percent (100%) of general resident project inquiries and End User complaints received by CONTRACTOR, or received by COUNTY and forwarded to CONTRACTOR, within one business day through the completion of the Work.

4. *Service Complaints*. CONTRACTOR will respond to one hundred percent (100%) of End User service problems involving leaks or water availability within four hours of the time the initial complaint is received by CONTRACTOR from End User or COUNTY. COUNTY will make dispatch decision identical to existing service levels. CONTRACTOR will respond to one hundred percent (100%) of End User complaints or service problems involving meter installation, property restoration and the like within one business day of receipt of complaint from End User or COUNTY through Substantial Completion.

5. *Supervision of On-site Crews*. The Work requires work in End User meter boxes, which are generally in the public right of way adjacent to private property. CONTRACTOR shall insure that all on-site crews display the highest level of professionalism, courtesy, and respect toward COUNTY End Users, staff and residents and respect the property of others. On-site crewmembers shall always carry photo identification, the CONTRACTOR Project Manager's business card and other credentials linking them to the AMI System Project. CONTRACTOR shall provide on-site crews with copies of a COUNTY approved 'Fact Sheet' to hand out to inquiring citizens.

On-site crews shall leave property as undisturbed as possible replacing appropriate shard materials and shall properly dispose of all trash before leaving any property or job site and shall properly dispose of all debris found in meter boxes. On-site crews shall observe the noise and/or nuisance ordinance of any jurisdiction in which the Work is being performed and keep noise levels as low as reasonably possible and shall refrain from using lewd, improper, or otherwise disruptive language in the presence of the End User, residents, or general public. On-site crew shall observe designated smoking areas and always extinguish and dispose of smoking materials properly. Complaints from the general public, residents, or End Users about on- site crews or crewmembers will not be tolerated. Upon receiving complaints about crews or crewmembers, CONTRACTOR shall investigate and shall remove on-site crewmembers that are incompetent, disorderly or otherwise unsatisfactory. CONTRACTOR shall be responsible for replacing crewmembers that do not maintain an acceptable level of professionalism, courtesy and respect and performance level.

6. *Vehicles*. All vehicles used by CONTRACTOR in performing the Work must meet minimum standards of quality and the COUNTY reserves the right to object to vehicles that do not appear to meet minimum standards of quality and appearance. All vehicles shall be operated in accordance with all applicable law. Vehicles must be labeled with COUNTY designed magnetic signs identifying the vehicle and crew as working under a contract with the COUNTY. Signs shall be removed if vehicle is to be used for transportation outside of the scope of performance of the Work. Vehicles shall not enter a job site in or near a residential neighborhood before 7AM unless otherwise specified in writing by the COUNTY. Vehicles shall not double park. Crew vehicles shall not violate any applicable parking laws. Crew vehicles shall never be parked on private residential lots or driveways unless they have been given direct permission from the property owner. Vehicles must not display signs, posters or pictures, which are in conflict with COUNTY's standards.

METER INSTALLATION

1. CONTRACTOR will furnish and install equipment as outlined in Exhibit B, Pricing. All Units shall be owned by COUNTY upon payment by COUNTY and any Units for which COUNTY has paid that are not installed shall be delivered to the COUNTY. COUNTY will use such Units as inventory for future use or, at the COUNTY'S option, as substitutes at other locations within the COUNTY's Territory. The parties acknowledge that COUNTY has provided database extracts to use for obtaining Unit inventory. The accuracy of these numbers is solely the responsibility of the COUNTY. At kickoff of the Work, both parties will collectively determine an updated End User address list.

2. CONTRACTOR will replace meters with like size and type and is not responsible for any previously improperly specified meters. COUNTY shall provide an updated list of active and inactive accounts at or prior to the time of installation.

3. CONTRACTOR shall furnish and install all required labor, material, and equipment necessary for a

complete installation of an AMI Meter System, including approximately 55,000 meters.

Meter installation will include a standard meter installation. A "standard meter installation" is recognized as one which involves the replacement of an existing meter meeting the following conditions: 1) meters will be located in outside meters or pits with vaults with adequate access or if access is restricted CONTRACTOR will be able to obtain access from the COUNTY within one week of request during normal business hours; 2) meter access will not subject CONTRACTOR's employees to dangerous or unsafe working conditions; 3) CONTRACTOR will remove the typical dirt and silt from the meter box; but will not be required to remove excess amounts of dirt or silt from meter boxes(15 minutes maximum of digging); 4) CONTRACTOR will not be required to repair or replace pipe due to corrosion, existing damage, plumbing irregularities, substandard conditions or existing connections not in conformity to current building codes; 5) water meters are on setters or equipped with standard meter connections that can be reused during meter installation; 6) meter exchanges are **like-for-like**, same lay length and no major plumbing is required; 7) no additional labor or groundwork will be needed to access meters, including, but not limited to, cutting, removal and replacement of asphalt or tree roots; and 8) existing meter boxes or meter vaults will be used and curb stops and valves are in working condition.

In the event CONTRACTOR reasonably determines that any meter installation is not a standard meter installation the CONTRACTOR will immediately bring the matter to the attention of the COUNTY's representative who will inspect the condition and advise CONTRACTOR how to proceed. If additional work is requested by COUNTY, such work will be completed at an agreed upon hourly rate plus materials as set forth in Exhibit B, Pricing. In the event such additional work requires a license not required for a standard meter installation, then COUNTY will be responsible for engaging the services of a contractor to perform such work prior to CONTRACTOR proceeding with the meter installation.

4. In the event COUNTY decides that they wish to contract themselves the line item of cutting meter box lids for the AMI system, they must have all lids cut prior to meter installation. Meter lids must be cut and replaced in boxes as necessary and CONTRACTOR will not be held responsible for lids cut by COUNTY. CONTRACTOR also will not be held responsible for such lids fitting properly or improperly in existing meter box. If COUNTY requires the hole to be plugged while there is not a transmitter installed this cost and task will be on COUNTY. COUNTY will have all meter box lids cut and installed in box in a timely manner so to not unreasonably delay progress of CONTRACTOR. COUNTY, if it so chooses to outsource lid cutting not to CONTRACTOR, will have all lids cut and replaced within two (2) months after notice to proceed.

5. The following is the field process when CONTRACTOR approaches a meter pit with an obvious issue/problem that will need additional materials/labor to complete install beyond a standard meter installation. On first occurrence, CONTRACTOR will flag location to COUNTY as a "RTU" (Return to Utility). RTU will be addressed onsite with COUNTY and COUNTY will have the ability to choose which path of repair such location will need.

- Path I : COUNTY will handle repair of location to meet standards for the CONTRACTOR to install meter/transmitter. COUNTY will handle all materials and labor needed to achieve such condition. COUNTY will fix location in a timely manner as to not interrupt CONTRACTOR with installation of Units. The goal would be to fix location before CONTRACTOR finishes with that route/book/cycle. If such work

cannot be fixed/repaired in a timely manner, then such location will be taken off CONTRACTOR's install list and fully given to COUNTY. Timely manner is described as ten (10) working days from time RTU is presented to COUNTY.

- Path II : COUNTY will allow CONTRACTOR to make necessary repair to location(s) to meet standard craftmanship of meter pit. CONTRACTOR will supply own materials as needed to be charged with labor based on Exhibit B, Pricing. If such item is not in Exhibit B, Pricing, then CONTRACTOR will use "Out of Scope Work" pricing by the hour as set forth in Exhibit B, Pricing. Out of Scope Work can be broken down in to 15-minute cost as the amount of time needed for repair is completed.

If such task or obvious issue/problem is deemed to be an on-going occurrence COUNTY can use Path II for the remaining of the Work or a period agreed upon between the parties. CONTRACTOR shall show documentation of each occurrence with which Path II was used and bill accordingly each month on the pay application. COUNTY can stop the use of Path II as needed during the project in its sole discretion, but must supply a notice of five (5) days to the CONTRACTOR.

Path I or Path II can be used for a multitude of items in the field for installation as long as proper processes are followed as described in this document.

GENERAL INSTALLATION

1. *AMI Software and Reading Equipment*: CONTRACTOR shall provide and configure the software and AMI reading system. This includes:

- Applicable Water Meter
  - CONTRACTOR shall follow guidelines of installation based upon "Meter Installation" Section previously stated in Scope of Work. CONTRACTOR shall also capture old/previous meter's reading for final read of existing meter. CONTRACTOR shall take picture of existing read to keep for verification of final read. CONTRACTOR shall capture all information of new meter's serial number and beginning reading in meter installation software.
- Applicable SmartPoint transmitters
  - CONTRACTOR shall install SmartPoint transmitters through meter box lid with the transmitter head setting above lid. CONTRACTOR shall activate SmartPoint transmitters in final resting place to communicate with AMI meter system. CONTRACTOR shall capture SmartPoint transmitter serial number and store in meter installation software.
- Integration with billing system
  - CONTRACTOR shall work with COUNTY billing software to integrate meter data to and from the meter reading software. CONTRACTOR to charge for billing integration based upon "Billing Integration" fee in Exhibit B, Pricing. Any and all charges from COUNTY billing system to work with CONTRACTOR are to be paid by COUNTY.
- System network
  - CONTRACTOR to install collectors with antennas based upon an agreed upon Statement of Work (SOW) which will be written for each site, as such sites are shown on Exhibit H. CONTRACTOR price in Exhibit B, Pricing, is based upon normal collector installation standards. CONTRACTOR to provide walk through of normal installation on site walk inspection with COUNTY.
- Meter-programming handhelds

- CONTRACTOR to setup purchased handhelds from Exhibit B, Pricing with COUNTY installation information. This information is used to program transmitters to communicate with AMI meter reading system.

- Professional Services
  - CONTRACTOR to use "Professional Services" as needed during project for additional integrations with third party software as outlined in Exhibit G. CONTRACTOR to charge a "scoping" fee priced in Exhibit B, Pricing for a scoping session with COUNTY, Professional Services, & Third- Party software. Once scoping session is completed CONTRACTOR will provide COUNTY with a quote for cost to complete integration with third party based upon the requirements laid out in scoping session.
- Annual Software Maintenance and Support

  CONTRACTOR agrees that Software (as defined in Exhibit D) maintenance and support will be provided by third-party Sensus (as defined in Exhibit D) in accordance with the terms of the agreement between COUNTY and Sensus for such services attached in Exhibit D. However, in accordance with that agreement between COUNTY and Sensus for such services attached in Exhibit D, COUNTY shall pay CONTRACTOR for these annual maintenance services, with such amount to be passed on to Sensus. The annual fees for such services, for the first year, as well as for future annual software maintenance years (through five years), will be as set forth in Exhibit B, Pricing.

2. *Advanced Metering Reading (AMI) Training*: CONTRACTOR shall provide a knowledgeable representative for up to three (3) to five (5) days of on-site training at COUNTY's place of business. Dates for the training will be coordinated with the COUNTY for timing, attendance of COUNTY Staff and location. Training will specifically address AMI System use in conjunction with COUNTY'S Billing System, installation, maintenance, management reports, web based reporting, trouble-shooting and support of devices installed under this Agreement, and programming of transmitting devices for additions to the system by the COUNTY in the future. The COUNTY will identify persons for training who will be responsible for generating bills and overseeing the AMI System. CONTRACTOR shall also facilitate field training as requested by the COUNTY and will provide documented training materials specific to the COUNTY's solution/design during and at the completion of training. CONTRACTOR will also provide a detailed and clear training agenda to enable the COUNTY to determine appropriate designees for each functional training session. The COUNTY staff can shadow CONTRACTOR's install staff during the meter installation process to learn as long as such shadowing does not slow CONTRACTOR's meter installation progress. Additional training in the future can be provided with negotiated pricing and separate agreement by COUNTY and CONTRACTOR.

3. *Meter Boxes, Vaults & Roadways*: CONTRACTOR shall reasonably repair any damages to meter boxes, vaults, water mains, private service lines and roadways incurred because of installation by CONTRACTOR or its subcontractors. CONTRACTOR acknowledges that if real or personal property located outside of existing easements and right-of-way is damaged, CONTRACTOR shall be solely responsible for obtaining access for all required CONTRACTOR repairs. Any new meter boxes will be equal to a COUNTY standard box and lid. CONTRACTOR may use salvageable meter box parts to repair existing meter boxes. CONTRACTOR will be accountable for any work in repairing areas affected, including, but not limited to: masonry/brick, carpentry, asphalt, or concrete that is damaged by CONTRACTOR during course of work. CONTRACTOR is not responsible for currently broken meter boxes, vaults, and roadways. CONTRACTOR shall document existing conditions and report existing broken meter boxes, vaults, and roadways in advance of beginning Work at the specific installation site. CONTRACTOR is not responsible for correcting existing meter boxes that were initially installed at improper depth, etc. For meters between
1" and 2", meter box and service depth/position will not be adjusted during installation and CONTRACTOR

is not responsible for meter box repair or adjustment should meter and AMI device not fit properly in meter box. All repairs for which CONTRACTOR is responsible shall be completed within three (3) business days. CONTRACTOR shall ensure that all areas are clearly marked and shall provide protection to pedestrian and vehicular traffic at all such times. CONTRACTOR will be responsible for tracking field issues associated with meter site while performing installation through a field management tool. These issues include but are not limited to; broken lids, leaks, meter box issues, etc.

4. *Liability:* CONTRACTOR is responsible for any damages to underground infrastructure resulting from or related to meter removal or installation within two (2) feet of either side of the meter. Such damages shall be repaired promptly at the expense of CONTRACTOR. CONTRACTOR is not liable for damages outside the two (2) feet zone, either on the water distribution side or on the end user side, incurred from the meter replacement process (i.e. shutoff, temporary outage, and restart of water service), unless the damage was the result of negligence by CONTRACTOR. CONTRACTOR and its subcontractors shall answer to and be responsible for any damage or injury to person or property that did not exist prior to CONTRACTOR commencing the Work. Repair damages shall be limited specifically to the reasonable repair of the damaged area only and to return the damaged area to its condition prior to the Work being performed. Should there be any locations where meter installation is not possible without damage to either infrastructure or real or personal property, CONTRACTOR will promptly notify COUNTY for a determination on appropriate course of action. Should COUNTY direct CONTRACTOR to install a meter at such a location where CONTRACTOR has reasonably determined meter installation is not possible without damage to either infrastructure or real or personal property, COUNTY will be responsible for repairs or corrections to the infrastructure or real or personal property identified by the CONTRACTOR, which it may choose to address through a Change Order. All repairs for which CONTRACTOR is responsible shall be completed within three (3) business days weather permitting. CONTRACTOR shall ensure that all areas are clearly marked and shall provide protection to pedestrian and vehicular traffic at all such times.

5. *Shutoffs*: CONTRACTOR is responsible for shutting off the water to each meter serviced as well as for notifying each End User of the shutoff. Some assistance may be required of the COUNTY in notifying End Users. To obtain COUNTY assistance, CONTRACTOR shall contact COUNTY's designated Project Manager proactively to ensure no negative impacts to project timelines are created when these contacts are necessary. The COUNTY is responsible for all costs associated with call outs for utility problems unrelated to the Work, including all overtime costs incurred by COUNTY staff. CONTRACTOR will knock on the doors of residential End Users and shall leave notifications on their doors prior to Work on the premises (along with following the Access Program as set forth below). In the case of commercial End Users special efforts will be made to ensure minimum disruption to their utility needs and with a minimum 24 hour notice. The COUNTY will also work with CONTRACTOR to coordinate such efforts with large End Users to provide meter access and schedule service disruption that has minimal, if any, impact of business operation. To prevent any damage from running flush valves or any other plumbing fixtures that are sensitive to water shutoff's, CONTRACTOR will schedule the replacements with these commercial End Users and will notify the maintenance personnel when turning the water back on to the End User facilities. Ultimately the responsibility of operating fixtures inside the buildings is the responsibility of the End User.

6. *Miscellaneous Reporting*: In addition to any other reporting obligations set forth in Agreement, CONTRACTOR shall promptly on the same business day unless otherwise provided report to COUNTY of any of the following:

Immediately

- Safety issues that develop or are discovered, including worker injuries,

imm ely by telephone
ediat
- Media contacts

Daily

- Any apparent leaks located on either side of the meter;
- Any COUNTY facilities or property, and any private facilities or property, damaged by CONTRACTOR;
- Any errors discovered in the COUNTY'S database, such as meters not in COUNTY'S database or meters that are noted as the incorrect size in the database.

- Any meter bypasses that are found in open position, in which instance CONTRACTOR shall also immediately take corrective action
- Customer complaints and damage claims and actions CONTRACTOR has taken or will take in response to such complaint
- Need for additional maintenance at site not noted above
- Unusual conditions (leaks, corrosion, theft, etc.)

Weekly

- Provide COUNTY'S Project Manager with a written progress report
- Provide Installation schedule updates and production schedule status
- Provide Route Saturation, which is the percentage of the billing District that is complete, together with an Installation Quality Control report
- Material inventory update report

7. *Labor, Materials, and Warranty Included in Work*: As provided herein, all labor, material, and necessary equipment required for the installation of the Units and other equipment proposed are included in the Contract Sum. The terms of the meter manufacturer(s) warranty will be in place and enforced and, the installation of any replacement meter is the responsibility of the COUNTY, per meter manufacturer's warranty. Any existing code violations that may exist and are discovered during the implementation of Work will immediately be brought to the attention of the COUNTY for corrective action deemed necessary by the COUNTY; any associated repair cost to the facility, system, or equipment to make it code compliant will be the responsibility of the COUNTY.

8. *Timing, Notification, and Access Program*:

a) Installation of End User meters shall be completed on a meter reading 'route' basis, unless otherwise agreed to by the COUNTY project leadership. Route saturation (completion percentage) shall be tracked and reported to COUNTY as prescribed at Work initiation. A complete route is defined as a route in which all meters have been either: (1) successfully installed, or (2) deemed inaccessible, unsafe or damaged per the documented access attempt process below.

b) CONTRACTOR shall provide to each End User in accordance with the times provided herein COUNTY provided door hangers. The CONTRACTOR and COUNTY shall jointly be responsible for additional customer communications as deemed appropriate given the scope the project beyond the responsibilities outlined in the Access Program below.

c) CONTRACTOR and COUNTY shall follow the following Access Program:

- COUNTY will notify End User no less than two weeks prior to installation via mail, bill insert, public notification, or other communication channel determined by the COUNTY.
- Before temporarily interrupting individual End Users' utility service, CONTRACTOR will make every effort to ensure that doing so will not impose undue hardship on the End User. Such efforts will include at a minimum observing the meter to see if water is being used and knocking on doors to contact those who may be inside. CONTRACTOR will make reasonable adjustments to the installation schedule to accommodate End User requests. CONTRACTOR will be responsible for scheduling meter installation with all commercial and industrial accounts as required and

advanced notification when bypassing is available considering water discoloration or other occurrences because of utilizing bypass valves.

- If a specific Unit installation cannot reasonably be completed due to discovery of an unsafe condition such as a damaged or deteriorated meter service, or any other special or unsafe working conditions (to be mutually identified and documented in writing) the CONTRACTOR work order identifying the End User and such other information as COUNTY may reasonably require will be forwarded to the COUNTY for COUNTY follow-up. CONTRACTOR may close the work order and the End User account may be removed from the population targeted for CONTRACTOR completion.
- Before leaving the site, door hangers will be left at the property informing the End User of the status of the visit: for instance: 'installation complete', 'installation pending' or other similar approved messages.

9. *Quality Control*: CONTRACTOR will implement a field validation procedure in connection with each Unit installation that will include all of the following in a field validation report. Exception warnings while entering field data into handheld for:

- Customer Information System meter number mismatch
- Transmitter Number mismatch
- Register ID mismatch
- Customer address mismatch
- High/Low consumption reading
- Valid AMI unit: Verify that number exists in inventory and is not a duplicate. Field verification will be conducted on exceptions, when appropriate

CONTRACTOR shall ensure that all Units have barcodes. The barcode shall match the meter number set by the manufacturer to eliminate data entry error. CONTRACTOR will scan all bar code information into field work order management system while installing new products.

Field Audits shall be conducted to verify installation is in accordance with (i) the recommendations set forth in Chapter 4 "Meter Installation" of the AWWA M6 Manual Water Meters- Selection, Installation, Testing, and Maintenance, Fourth Edition, (ii) the COUNTY's Standard Specifications and details, and (iii) manufacturer's guidelines. All AMI modules shall be installed according to the AMI manufacturer written instructions. Results of field audits shall be documented and reported to COUNTY electronically and shall be conducted as follows:

a.) One hundred percent (100%) field audits on first ten (10) days of new CONTRACTOR employees/ subcontractor employees performing any of the Work;
b.) Minimum five percent (5%) random audits of all employees/subcontractor employees during entire installation period within one week of installation; and
c.) Proof of radio read software reading 100% of units accurate and providing file to load in billing system fully tested through integration.
d.) Standard Quality Assurance form: Results of field audits are documented and reported electronically. CONTRACTOR shall re-train when necessary.

10. *Employee Hiring*: CONTRACTOR will perform and report to COUNTY the following qualification and training for employees performing installation (and shall require the same of all subcontractors performing any of the Work):

- Drug Test/Background Check

- Meter Reading training
- Hand held training
- AMI technology training
- Safety training
- Meter installation training conducted by the appropriate meter manufacturer or trained designee.

COUNTY DUTIES AND RESPONSIBILITIES

In order for CONTRACTOR to perform its obligations under this Agreement with respect to the Work, COUNTY shall be responsible for:

1. Providing key point of contact for project management activities to work with CONTRACTOR to facilitate a timely installation of the AMI System ('COUNTY Project Manager');

2. Comply with the terms of the manufacturers' Base Warranties set forth in Exhibit C and as of installation date, to the extent responsibility does not rest with CONTRACTOR hereunder;

3. Executing the electronic process of transfer of meter reading data into meter management system that CONTRACTOR establishes; on a mutually agreed upon schedule;

4. Effectively read meters until Route acceptance;

5. Provide reviews and approvals of design submissions, proposed Change Orders, and other documents related to the Work within 21 days of receipt of complete documents for consideration;

6. Where applicable and if available to COUNTY, providing the following information with respect to the Work and Project Site(s) as soon as practicable following CONTRACTOR's request. Project Site means locations where Work is conducted.

    a. GIS information describing the property, boundaries, and reference points for use during installation, including existing service and utility lines if available;
    b. Temporary and permanent easements, zoning and other requirements and encumbrances affecting land use, or necessary to permit the proper design and installation of the Work and enable CONTRACTOR to perform the Work;
    c. As-built and record drawings of any existing structures at the Project Sites owned by COUNTY

COUNTY is not responsible for the accuracy or completeness of any such information or data provided. CONTRACTOR is responsible for obtaining such reports and surveys, as it deems necessary;

7. Providing assistance to obtain any permits, approvals, and licenses that are necessary for the performance of the Work and are not CONTRACTOR's responsibility to obtain as set forth in Agreement;

8. Isolating the utility system to allow for meter change out, including identification of all shut-off valves as needed;

9. Scheduling shutdowns, downtimes, and relocation of new commercial vaults;

10. Providing ongoing care and maintenance of the AMI System, including all meters, AMI equipment and meter boxes and vaults at or above manufacturers' specifications and process;

11. Participating in training for COUNTY staff provided by CONTRACTOR for installation of endpoints;

12. Providing payment of any future taxes, renewal, regulatory or license fees associated with the hardware and software after final acceptance of the Work; and

13. Providing adequate refuse containers for cardboard and trash as needed… Also scrap meter bins as needed (if applicable)

ATTACHMENT 2: AMI System

1. PURPOSE AND PROJECT.

The purpose of this Agreement is to set forth the expectations of the parties concerning the AMI System Project. The AMI System Project is the furnishing and installation by CONTRACTOR of a complete radio frequency advanced automatic meter infrastructure system in the COUNTY utility service area ('Territory'), including all infrastructure and equipment and using the Sensus Systems Solution and software (); the testing, at different levels, of such installations and AMI System; the provision for a Maintenance and License Agreement between COUNTY and Sensus Systems for software, and fixed pricing; other guarantees of performance; and other equipment and services as described herein. AMI System Project is also called 'AMI' or 'AMI System'. This Agreement sets forth the Work, other obligations of the parties, the performance metrics to be met, and the intended outcomes, pricing, and timeline. The intent of this Agreement is to include all items necessary for the proper execution and completion of the AMI System by CONTRACTOR.

2. SCOPE OF THE WORK AND CONTRACTOR RESPONSIBILITIES.

A. Except for responsibilities of COUNTY specified herein CONTRACTOR shall do all that is necessary to install a functionally complete and operable AMI in the COUNTY'S Territory, including arranging for enhanced warranties from manufacturers to COUNTY, completion of all training, responding to all public inquiries and complaints, and guaranteeing its own performance, all as provided herein.

B. The Work, as described herein and defined in the Agreement above, generally consists of (i) replacing or retrofitting approved existing and new water meters, and installing encoders and transmitting devices manufactured by Sensus and furnished by CONTRACTOR in End Users' meter boxes in Territory. Such installation shall be done by 'Route' determined by reference to COUNTY utility billing cycles and timed in coordination with such utility billing cycles; (ii) software interface into existing COUNTY billing system and web-based customer interface; (iii) quality control and testing at various stages; (iv) securing and providing performance guarantees; (v) provision of reports and documentation and training and (vi) provision of the labor, materials, equipment, apparatus and supplies in connection therewith. The equipment includes water meters, encoder registers, Sensus transceivers/transmitters, couplings, connectors, gaskets, piping, meter setters and other accessories. The Work includes all labor, materials, equipment, apparatus and supplies and services to fulfill CONTRACTOR obligations, unless specifically provided otherwise herein. There shall be no substitution of equipment specified in this Agreement without the written consent of COUNTY, which shall be at the COUNTY's sole discretion.

C. Upon receipt of Notice to Proceed, CONTRACTOR will, among all other duties described in this Agreement:

- Attend and participate in a Kickoff meeting involving COUNTY Project Manager and other appropriate COUNTY staff, AMI Project Manager and other appropriate CONTRACTOR employees and representatives of all CONTRACTOR's subcontractors at which time the

parties will coordinate to establish an updated End User address list; a schedule of Unit installation ("Installation Schedule"), initial equipment shipment dates and quantities, and an overall AMI System installation timeline (collectively 'Project Schedule') and deliver a project plan post completion of understanding kick off details. The participants shall also designate responsible personnel; agree upon equipment delivery and storage; establish procedures; and establish and agree upon such other matters as may be necessary or appropriate. The Installation Schedule shall be established by Route with regard to COUNTY billing cycles, routes and dates so as to minimize disruption to End Users and COUNTY utility billing. The Project Schedule shall show at least, the earliest starting, earliest completion, latest starting, latest completion, projected cycle implementation, average installation average per week to support start and end dates and the total float times for each Route Installation Schedule. Additionally CONTRACTOR shall prepare for review and approval a schedule of values allocating the Contract Sum to the various portions of the Work (which shall be based on Unit prices and numbers of Units installed, where applicable), including specific value for business review services, and prepared in such form and supported by such data to substantiate its accuracy as COUNTY may require. This schedule, unless objected to by COUNTY, shall be used as a basis for reviewing
CONTRACTOR's Applications for Payment.

- It is anticipated that CONTRACTOR will be instructed to facilitate purchase of Units in separate batch purchases by the COUNTY. All Units shall remain in CONTRACTOR care, custody, and control until installation and be delivered to the installation sites in new condition in the manufacturer's original, labeled containers until the approximate time for their installation. The CONTRACTOR shall be liable for all units until either installed and tested or given to COUNTY as surplus. New and satisfactory items at CONTRACTOR expense shall replace any Units, equipment or materials that become damaged or deteriorated from any cause of the CONTRACTOR. Title to all Units and other equipment shall pass to COUNTY upon payment by COUNTY.
- Perform quality control and test the functionality of interface with the COUNTY's utility billing system.
- In coordination with COUNTY, comply with Access Program described herein
- Puncture lids as provided herein.
- Schedule and perform 'Unit' installation in commercial and residential End User meter boxes and flush End User water lines (as provided herein) after each installation. Some commercial installations will need to be done during non-working hours. The property owner/operator, COUNTY, and CONTRACTOR shall agree upon the timing for these installations.
- Record each Unit installation with before and after photographs, meter id, register id, transmitter id, address verification, maintenance needs (if applicable) and a GPS coordinate reading, and provide such Unit installation records to COUNTY in COUNTY approved electronic format daily reflecting installations made the previous day.
- Conduct Route acceptance testing as provided per Exhibit F.
- Conduct AMI System testing, final acceptance testing and warranty final acceptance testing as provided herein. This testing includes testing through actual bill creation for all installed meters.
- Provide agreed-upon warranties and assure that enforceable extended warranties are provided to COUNTY and assure provision of fixed pricing on equipment.
- Enter COUNTY facilities and End User sites only for the purpose of executing the Work and only during Regular Working Hours and only in accordance with applicable

permissions and authority. After hours work must be done in coordination with COUNTY.

- Reasonably repair and restore any property damaged or injured as a result of any act or omission or neglect of CONTRACTOR as provided herein.
- Conduct routine and reoccurring progress meetings at a location and time selected by the COUNTY, with COUNTY Project Manager and provide all reports described herein. The principal purpose of these progress meetings is to effect coordination, cooperation and assistance in every practical way toward the end of maintaining progress of the Work on schedule and to complete the Work within the Contract Times. The typical agenda will include: review and approve minutes of previous meeting, review progress of Work since last meeting, review proposed 30 day installation schedule; field observations, problems and conflicts; problems that impede progress; corrective measures and procedures; submittal status; pending changes; maintenance of quality and standards; status of community relations and complaint resolution and the like.
- Adhere to Project Schedule
- If any equipment or software used in the Work is subject to patent or copyrights calling for the payment of any license fee or royalty to others, such shall be disclosed to COUNTY in this Agreement, other than the maintenance and license agreement between Sensus and
  COUNTY.

D. In carrying out all the Work CONTRACTOR shall, among all other duties set forth in this Agreement:

- Be aware of all the requirements of Work attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with Agreement;
- Be solely responsible for the means, methods, techniques, sequences and procedures of Work;
- Assign a competent AMI Project Manager who shall be a full-time employee of CONTRACTOR and is acceptable to the COUNTY. COUNTY shall have up to seven (7) days to review resume and experience.
- Conduct and carry out all Work in a manner designed to avoid all but short-term disruption of services to COUNTY and End Users and to prevent damage to COUNTY and End User property, including utilities.
- Notify COUNTY immediately (within one hour) by telephone, of any emergency or other situation compromising the safety of persons or property and follow up such report in writing.
- Not permit the employment (by CONTRACTOR or subcontractors) of unfit persons or persons not properly skilled in tasks assigned to them in the performance of the Work and be responsible to COUNTY for the acts and omissions of CONTRACTOR's employees, subcontractors, and other persons or entities performing portions of the Work;
- Comply with all applicable law;
- Be solely and completely responsible for conditions for which it has responsibility under this Agreement or are within its control of each installation site in connection with the Work, including safety of all persons and property. This requirement shall apply continuously and not be limited to Regular Working Hours.
- Promptly correct Work failing to conform to the requirements of Agreement whether discovered before or after Substantial Completion at CONTRACTOR's cost and expense pursuant to warranties and this Agreement.
- Complete the Work as provided herein.

Exhibit B: Pricing

DESCRIPTION	QUANTITY	SELL PRICE	TOTAL SELL PRICE
RNI SETUP FEE	1	$ 24,205.00	$ 24,205.00
SENSUS ANALYTICS ENHANCED SETUP FEE	1	$ 25,000.00	$ 25,000.00
BILLING INTERGRATION	1	$ 20,000.00	$ 20,000.00
*BILLING VENDOR FEE NOT COVERED			
ANNUAL RNI FEE	1	$ 55,000.00	$ 55,000.00
ANNUAL SENSUS ANALYTICS ENHANCED FEE	1	$ 49,113.00	$ 49,113.00
*ANNUAL FEE BASED OFF 1/2 SYSTEM DEPLOYMENT IN YEAR 1. INCREASE IN ANNUAL FEE WILL OCCUR IN YEAR 2 AS SET FORTH BELOW REGARDING ANNUAL SOFTWARE MAINTENANCE.			
RNI TRAINING	2	$ 6,000.00	$ 12,000.00
SENSUS ANALYTICS ENHANCED TRAINING	3	$ 5,000.00	$ 15,000.00
HANDHELD TRAINING	3	$ 1,500.00	$ 4,500.00
PROJECT MANAGEMENT	1	$ 150,000.00	$ 150,000.00
MOBILIZATION	1	$ 30,000.00	$ 30,000.00
TRASH, CARDBOARD & SCRAP CONTAINERS	1	$ 8,000.00	$ 8,000.00
MASS METER CHANGEOUT FILE	1	$ 40,000.00	$ 40,000.00
* BIILING VENDOR FEE NOT COVERED			
PERFORMANCE & RETAINAGE BOND	1	$ 40,000.00	$ 40,000.00
IP ACTIVATION	17	$ 500.00	$ 8,500.00
SITE SURVEY & SOW'S	17	$ 1,000.00	$ 17,000.00
M400 COLLECTOR	17	$ 25,000.00	$ 425,000.00
*EACH COLLECTOR REQUIRES 120V POWER RAN TO UNIT & INTERNET (STATIC IP ADDRESS)			
M400 INSTALL	9	$ 25,000.00	$ 225,000.00
M400 INSTALL	4	$ 30,000.00	$ 120,000.00

M400 INSTALL	4	$ 35,000.00	$ 140,000.00
POLE INSTALL	1	$ 100,000.00	$ 100,000.00
*DOES NOT INCLUDE ANY PERMITS REQUIRED			
5/8 X 3/4 SRII METER	19935	$ 106.00	$ 2,113,110.00
1" SRII METER	465	$ 188.28	$ 87,550.20
1.5" METER	86	$ 1,450.00	$ 124,700.00
2" METER	52	$ 1,650.00	$ 85,800.00
3" METER	1	$ 2,150.00	$ 2,150.00
4" METER	AS NEEDED	$ 2,675.00	
6" METER	AS NEEDED	$ 6,350.00	
8" METER	AS NEEDED	$ 10,250.00	
*LARGE METERS ARE QUOTED AS COMPOUND STYLE METER			
ITRON TO TRPL ADAPTER	27603	$ 37.49	$ 1,034,836.47
*1 FOOT ADAPTER WIRE			
520M TOUCHCOUPLER TRANSMITTER	48201	$ 110.00	$ 5,302,110.00
INSTALLATION ITEMS			
5/8 X 3/4" INSTALL	19935	$ 55.00	$ 1,096,425.00
1" INSTALL	465	$ 60.00	$ 27,900.00
1.5" INSTALL	86	$ 300.00	$ 25,800.00
2" INSTALL	52	$ 400.00	$ 20,800.00
3" INSTALL	1	$ 1,000.00	$ 1,000.00
4" INSTALL	AS NEEDED	$ 1,100.00	
6" INSTALL	AS NEEDED	$ 1,200.00	
8" INSTALL	AS NEEDED	$ 1,400.00	
SUB METER GPS (PER INSTALL)	48201	$ 3.00	$ 144,603.00

ADDITIONAL NOTE DATA FIELD CAPTURED (PER INSTALL)	48201	$ 2.50	$ 120,502.50
TRANSMITTER ONLY INSTALL	27603	$ 45.00	$ 1,242,135.00
LID HOLE CUTTING FEE	51019	$ 12.00	$ 612,228.00
LID EXCHANGE FEE	AS NEEDED	$ 4.00	
*LID EXCHANGE FEE IS PUTTING IN ADDITIONAL LID (LID COST SEPARATE)			
ADDITIONAL ITEMS			
WIRED TRANSMITTER	510	$ 130.00	$ 66,300.00
*WIRED TRANSMITTER USED TO RETRO-FIT LARGE METER EXISTING REGISTERS ONLY (LABOR NOT INCLUDED)			
SMART GATEWAY	5	$ 400.00	$ 2,000.00
5/8 X 3/4 ALLY METER	25	$ 450.00	$ 11,250.00
DATA INTERGRATION / WORKSHOP	1	$ 2,500.00	$ 2,500.00
*DATA INTEGRATION WORKSHOP WOULD CONSIST OF MEETING WITH COUNTY & 3RD PARTY TO SCOPE OUT SUCH WORK. PRICING TO FOLLOW FOR WORK NEEDED BY FERGUSON/SENSUS.			
ADDITIONAL FIELD MATERIALS ITEMS			
WATER METER LID ONLY NON-TRAFFIC RATED RESIDENTIAL	AS NEEDED	$ 18.50	
WATER METER LID ONLY TRAFFIC RATED RESIDENTIAL	AS NEEDED	$ 33.50	
WATER METER BOX & LID NON-TRAFFIC RATED RESIDENTIAL	AS NEEDED	$ 30.00	
WATER METER BOX & LID TRAFFIC RATED RESIDENTIAL	AS NEEDED	$ 70.00	
LARGE METER BOX & LID 17 X 30 PLASTIC JUMBO	AS NEEDED	$ 300.00	
ADDITIONAL FIELD LABOR ITEMS			
WATER METER LID REPLACEMENT LABOR ONLY	AS NEEDED	$ 4.00	
WATER METER BOX & LID REPLACEMENT LABOR ONLY	AS NEEDED	$ 33.00	
LARGE METER BOX & LID REPLACEMENT LABOR ONLY	AS NEEDED	$ 72.50	
NON-PERMIT CONFINED SPACE ENTRY LABOR ONLY	AS NEEDED	$ 430.00	
ADJUST METER BOX LABOR ONLY	AS NEEDED	$ 20.00	

RECONFIGURE CONNECTION 1-1/2" - 4" LABOR ONLY	AS NEEDED	$ 790.00	
RECONFIGURE CONNECTION 6" - 12" LABOR ONLY	AS NEEDED	$ 1,185.00	
OUT OF SCOPE LABOR (2 MEN) PER HOUR	AS NEEDED	$ 150.00	$ 25,000.00
***ALL PRICING ABOVE DOES NOT INCLUDE SALES TAX. SALES TAX WILL BE APPLIED TO ALL LINE ITEMS ONCE ITEM/S HAVE BEEN SHIPPED AND/OR WORK PERFORMED**			

YEAR	ANNUAL SENSUS ANALYTICS ENHANCED	ANNUAL RNI SAAS	COLLECTOR ANNUAL FEE (COVERS 17)
YEAR 2	$ 61,391.25	$ 68,700.00	$ 27,353.00
YEAR 3	$ 63,289.95	$ 70,824.74	$ 28,198.97
YEAR 4	$ 65,247.37	$ 73,015.20	$ 29,071.10
YEAR 5	$ 67,265.33	$ 75,273.40	$ 29,970.21
*SOFTWARE QUOTE FOR YEARS 1-5 IS TO ALLOW GROWTH UP TO 75,000 END USERS BEFORE ADJUSTMENT WOULD BE NECESSARY			
***ALL PRICING ABOVE DOES NOT INCLUDE SALES TAX. SALES TAX WILL BE APPLIED TO ALL LINE ITEMS ONCE ITEM/S HAVE BEEN SHIPPED AND/OR WORK PERFORMED**			

Exhibit C: Manufacturer Warranty

Sensus Limited Warranty

1. General Product Coverage. Unless otherwise provided herein, Sensus USA Inc. ("Sensus") warrants its products and parts to be free from defects in material and workmanship for one (1) year from the date of Sensus shipment and as set forth below.

2. SR II® and accuSTREAM™ 5/8", 3/4" & 1" Meters are warranted to perform to new meter accuracy level set forth in the SR II and accuSTREAM Data Sheets available at sensus.com for five (5) years from the date of Sensus shipment or until the registration shown below, whichever occurs first. Sensus further warrants that the SR II and accuSTREAM meters will perform to at least AWWA Repaired Meter Accuracy Standards for fifteen (15) years from the date of Sensus shipment or until the registration shown below, whichever occurs first:

	New Meter Accuracy	Repair Meter Accuracy
5/8" SR II Meter and accuSTREAM Meter	500,000 gallons	1,500,000 gallons
3/4" SR II Meter and accuSTREAM Meter	750,000 gallons	2,250,000 gallons
1" SR II Meter and accuSTREAM Meter	1,000,000 gallons	3,000,000 gallons

3. ally® Meters that register water flow are warranted to perform to the accuracy level set forth in the ally Data Sheet available at sensus.com for fifteen (15) years from the Date of Installation, but no longer than sixteen (16) years from date of manufacture, not including the meter's sensors, valve, and gear motor, which are warranted under different terms described below. As used herein, "Date of Installation" means the date after which the ally Meter has been out of empty pipe for seven (7) consecutive days, as those days are measured by the ally Meter and stored in the meter's nonvolatile memory.

4. iPERL® Meters that register water flow are warranted to perform to the accuracy levels set forth in the iPERL Data Sheet available at sensus.com for twenty (20) years from the date of Sensus shipment. The iPERL System Component warranty does not include the external housing.

5. SR II maincases are warranted to be free from defects in material and workmanship for twenty-five (25) years from the date of Sensus shipment. accuSTREAM maincases will be free from defects in material and workmanship for fifteen (15) years from the date of Sensus shipment.

6. Sensus OMNI™ Meters and Propeller Meters are warranted to perform to as set forth in OMNI and Propeller data sheets for one (1) year from the date of Sensus shipment.

7. Sensus accuMAG™ and Hydroverse™ Meters are warranted to be free from defects in material and workmanship, under normal use and service, for 18 months from the date of Sensus shipment or 12 months from startup, whichever occurs first.

8. Sensus Registers are warranted to be free from defects in material and workmanship from the date of Sensus shipment for the periods stated below or until the applicable registration for AWWA Repaired Meter Accuracy Standards, as set forth above, are surpassed, whichever occurs first:

5/8" thru 1" SR II, accuSTREAM Standard Registers	25 years
5/8" thru 1" SR II, accuSTREAM Encoder Registers	10 years
All HSPU, IMP Contactor, R.E.R. Elec. ROFI	1 year
Standard and Encoder Registers for Propeller Meters	1 year
OMNI and OMNI+ Registers with Battery	10 years

9. Sensus Electric and Gas Meters are warranted pursuant to the General Limited Warranty available at sensus.com/TC.

10. Batteries, iPERL System Components, AMR and FlexNet® Communication Network AMI Interface Devices are warranted to be free from defects in material and workmanship from the date of Sensus shipment for the period stated below:

Electronic TouchPad	10 years
Act-Pak® Remote Monitoring Instruments	1 year
Gas SmartPoint® Modules and Batteries	20 years[1]
6500 series Hand-Held Device	2 years
Vehicle Gateway Base Station (VGB) and other AMR Equipment	1 year
EasyLink Reader	1 Year
CPTP100	20 Years[2]
FlexNet Base Station (including the R100NA and M400 products)	1 year
RM4160	1 Year
iPERL System Battery and iPERL System Components	20 years[3]
Sensus® Electronic Register+™	20 years[4]
Sensus® Smart Gateway Sensor Interface	1 year[5]
SmartPoint® 510M/520M/515M/512M Modules and Batteries	20 years[3]

11. ally® Meter Batteries and Components, including SmartPoint 510M/520M Modules are warranted to be free from defects in material and workmanship from the Date of Installation, as defined in Section 3, for the period stated below:

Batteries	15 years[6]
Sensors	5 years
Valve & Gear Motor	5 years[7]
SmartPoint 510M/520M Modules and Batteries in service w/ally	15 years[6]

[1] Sensus will repair or replace non-performing Gas SmartPoint Modules (configured to the factory setting of six transmissions per day under normal system operation of up to one demand read to each SmartPoint Module per month and up to five firmware downloads during the life of the product) and batteries.

[2] Sensus will repair or replace non-performing CPTP100 modules (configured at factory setting of four transmissions per day under normal system operations of up to one demand read per month and up to five firmware downloads during the life of the product) and batteries.

[3] Sensus will repair or replace non-performing:

- iPERL System Batteries, and/or the iPERL System flowtube, the flow sensing and data processing assemblies, and the register ("iPERL System Components") with hourly reads,
- SmartPoint 510M/520M/515M//512M-PLS Modules (configured to the factory setting of six transmissions per day under normal system operation of up to one demand read to each SmartPoint Module per month and up to five firmware downloads during the life of the product) and batteries, unless the SmartPoint 510M/520M Module is ever paired with an ally Meter, which event immediately amends the warranty terms to those described in Section 11;

at no cost for the first fifteen (15) years from the date of Sensus shipment, and for the remaining five (5) years at a prorated percentage, applied towards the published list price in effect for the year the product is accepted by Sensus under the warranty conditions according to the following schedule:

Years	Replacement Price
1 – 15	0%
16	30%
17	40%
18	50%
19	60%
20	70%
>20	100%

[4] Sensus will repair or replace non-performing Sensus Electronic Register+ with hourly reads for the first ten (10) years from the date of Sensus shipment, and for the remaining ten (10) years, at a prorated percentage, applied towards the published list prices in effect for the year product is accepted by Sensus under warranty conditions according to the following schedule:

Years	Replacement Price	Years	Replacement Price
1 – 10	0%	16	55%
11	30%	17	60%
12	35%	18	65%
13	40%	19	70%
14	45%	20	75%
15	50%	>20	100%

[5] Sensus® Smart Gateway Sensor Interface warranty valid only for analog Meter Sample Rates of four times per hour with a Standard Tranmsit Rate of hourly or greater for the analog channel(s).

[6] If applicable, any SmartPoint 510M/520M Modules ever paired with an ally Meter are warranted with the following limitations:

- When configured to the default installation setting of six transmissions of metrology and pressure per day and one update of temperature per day, the SmartPoint is warranted to perform up to five (5) firmware upgrades for the SmartPoint Module and up to five (5) firmware upgrades for the ally Meter;
- 2500 Operational Commands, where "Operational Commands" include on demand reads (such as consumption, pressure, temperature), an ally valve command, or a configuration command; and
- 15 Diagnostic Commands, which includes two-way communications tests and installations

for the first ten (10) years from Date of Installation at no cost. For the remaining five (5) years, Customer will pay the reduced Replacement Price of the then-current list price in effect at the time the product is accepted for return in accordance with the following schedule:

Years	Replacement Price	Years	Replacement Price
1 – 10	0%	14	65%
11	35%	15	75%
12	45%	>15	100%
13	55%		

[7] Notwithstanding the foregoing, valve and gear motor components of ally Meters are not warranted beyond two thousand (2000) Valve State Operations, even if the warranty period provided herein has not yet expired. As used herein, "Valve State Operations" means adjustments of the Meter to open, close, or reduce flow.

637 Davis Drive
Morrisville, NC 27560
1-800-638-3748

12. iPERL and ally Connectors and Cables are warranted to be free from defects in materials and workmanship, under normal use and service, for ten (10) years from the date of Sensus shipment. Nicor or Itron connectors included with a Sensus product are warranted according to the terms for Third-Party Devices in Section 13.

13. Third-Party Devices are warranted to be free from defects in materials and workmanship, under normal use and service, for one (1) year from the date of Sensus shipment. As used in this Sensus Limited Warranty, "Third Party Devices" means any product, device, or component part used with a Sensus product that is manufactured or sold by any party that is not Sensus. Failure of a Third Party Device which subsequently causes failure to a Sensus device shall be the responsibility of the manufacturer of the Third Party Device.

14. **Software.** Software supplied and/or licensed by Sensus is supported according to the terms of the applicable software license or usage agreement. Sensus warrants that any network and monitoring services shall be performed in a professional and workmanlike manner.

15. Return. Sensus' obligation, and Customer's exclusive remedy, under this Sensus Limited Warranty is, at Sensus' option, to either (i) repair or replace the product, provided the Customer (a) returns the product to the location designated by Sensus within the warranty period; and (b) prepays the freight costs both to and from such location; or (ii) deliver replacement components to the Customer, provided the Customer installs, at its cost, such components in or on the product (as instructed by Sensus), provided, that if Sensus requests, the Customer (a) returns the product to the location designated by Sensus within the warranty period; and (b) prepays the freight costs both to and from such location. In all cases, if Customer does not return the product within the time period designated by Sensus, Sensus will invoice, and Customer will pay within thirty days of the invoice date, for the cost of the replacement product and/or components.

The return of products for warranty claims must follow Sensus' Returned Materials Authorization (RMA) procedures. Water meter returns must include documentation of the Customer's test results. Test results must be obtained according to AWWA standards and must specify the meter serial number. The test results will not be valid if the meter is found to contain foreign materials. If Customer chooses not to test a Sensus water meter prior to returning it to Sensus, Sensus will repair or replace the meter, at Sensus' option, after the meter has been tested by Sensus. The Customer will be charged Sensus' then current testing fee. All product must be returned in accordance with the RMA process. For all returns, Sensus reserves the right to request meter reading records by serial number to validate warranty claims.

For products that have become discontinued or obsolete ("Obsolete Product"), Sensus may, at its discretion, replace such Obsolete Product with a different product model ("New Product"), provided that the New Product has substantially similar features as the Obsolete Product. The New Product shall be warranted as set forth in this Sensus Limited Warranty.

THIS SECTION 15 SETS FORTH CUSTOMER'S SOLE REMEDY FOR THE FAILURE OF THE PRODUCTS, SERVICES OR LICENSED SOFTWARE TO CONFORM TO THEIR RESPECTIVE WARRANTIES.

16. Warranty Exceptions and No Implied Warranties. This Sensus Limited Warranty does not include costs for removal or installation of products, or costs for replacement labor or materials, which are the responsibility of the Customer. The warranties in this Sensus Limited Warranty do not apply to and Sensus has no liability for goods that have been: installed improperly or in non-recommended installations; installed to a socket that is not functional, or is not in safe operating condition, or is damaged, or is in need of repair; tampered with; modified or repaired with parts or assemblies not certified in writing by Sensus, including without limitation, communication parts and assemblies; improperly modified or repaired (including as a result of modifications required by Sensus); converted; altered; damaged; read by equipment not approved by Sensus; for water meters, used with substances other than water, used with non-potable water, or used with water that contains dirt, debris, deposits, or other impurities; subjected to misuse, improper storage, improper care, improper maintenance, or improper periodic testing (collectively, "Exceptions."). If Sensus identifies any Exceptions during examination, troubleshooting or performing any type of support on behalf of Customer, then Customer shall pay for and/or reimburse Sensus for all expenses incurred by Sensus in examining, troubleshooting, performing support activities, repairing or replacing any Equipment that satisfies any of the Exceptions defined above. The above warranties do not apply in the event of Force Majeure, as defined in the Terms of Sale.

THE WARRANTIES SET FORTH IN THIS SENSUS LIMITED WARRANTY ARE THE ONLY WARRANTIES GIVEN WITH RESPECT TO THE GOODS, SOFTWARE, SOFTWARE LICENSES AND SERVICES SOLD OR OTHERWISE PROVIDED BY SENSUS. SENSUS EXPRESSLY DISCLAIMS ANY AND ALL OTHER REPRESENTATIONS, WARRANTIES, CONDITIONS, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE, REGARDING ANY MATTER IN CONNECTION WITH THIS SENSUS LIMITED WARRANTY OR WITH THE TERMS OF SALE, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, NON-INFRINGEMENT AND TITLE.

SENSUS ASSUMES NO LIABILITY FOR COSTS OR EXPENSES ASSOCIATED WITH LOST REVENUE OR WITH THE REMOVAL OR INSTALLATION OF EQUIPMENT. THE FOREGOING REMEDIES ARE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES FOR THE FAILURE OF EQUIPMENT, LICENSED SOFTWARE OR SOFTWARE SERVICES, AND OTHER SERVICES TO CONFORM TO THEIR RESPECTIVE WARRANTIES.

17. Limitation of Liability. SENSUS' AGGREGATE LIABILITY IN ANY AND ALL CAUSES OF ACTION ARISING UNDER, OUT OF OR IN RELATION TO THIS AGREEMENT, ITS NEGOTIATION, PERFORMANCE, BREACH OR TERMINATION (COLLECTIVELY "CAUSES OF ACTION") SHALL NOT EXCEED THE TOTAL AMOUNT PAID BY CUSTOMER TO SENSUS UNDER THIS AGREEMENT. THIS IS SO WHETHER THE CAUSES OF ACTION ARE IN TORT, INCLUDING, WITHOUT LIMITATION, NEGLIGENCE OR STRICT LIABILITY, IN CONTRACT, UNDER STATUTE OR OTHERWISE.

AS A SEPARATE AND INDEPENDENT LIMITATION ON LIABILITY, SENSUS' LIABILITY SHALL BE LIMITED TO DIRECT DAMAGES. SENSUS SHALL NOT BE LIABLE FOR: (I) ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES; NOR (II) ANY REVENUE OR PROFITS LOST BY CUSTOMER OR ITS AFFILIATES FROM ANY END USER(S), IRRESPECTIVE OF WHETHER SUCH LOST REVENUE OR PROFITS IS CATEGORIZED AS DIRECT DAMAGES OR OTHERWISE; NOR (III) ANY IN/OUT COSTS; NOR (IV) MANUAL METER READ COSTS AND EXPENSES; NOR (V) DAMAGES ARISING FROM MAINCASE OR BOTTOM PLATE BREAKAGE CAUSED BY FREEZING TERMPERATURES, WATER HAMMER CONDITIONS, OR EXCESSIVE WATER PRESSURE. "IN/OUT COSTS" MEANS ANY COSTS AND EXPENSES INCURRED BY CUSTOMER IN TRANSPORTING GOODS BETWEEN ITS WAREHOUSE AND ITS END USER'S PREMISES AND ANY COSTS AND EXPENSES INCURRED BY CUSTOMER IN INSTALLING, UNINSTALLING AND REMOVING GOODS. "END USER" MEANS ANY END USER OF ELECTRICITY/WATER/GAS THAT PAYS CUSTOMER FOR THE CONSUMPTION OF ELECTRICITY/WATER/GAS, AS APPLICABLE.

The limitations on liability set forth in this Agreement are fundamental inducements to Sensus entering into this Agreement. They apply unconditionally and in all respects. They are to be interpreted broadly so as to give Sensus the maximum protection permitted under law.

Exhibit D : Spectrum Lease Agreement/AMI Agreement

Software as a Service Agreement

between

Union County, NC
("Customer")

and

Sensus USA Inc.
("Sensus")

IN WITNESS WHEREOF, the parties have caused this Software as a Service ("Agreement") to be executed by their duly authorized representatives as of the day and year written below. The date of the last party to sign is the "Effective Date."

This Agreement shall commence on the Effective Date and continue for/until: 5 Years from the date Sensus first makes the Software as a Service available for Customer's use, as set forth in Section 1(B) of Exhibit A to this Agreement ("Initial Term"). At the end of the Initial Term, the Customer shall have the option, at its sole discretion, to renew the Agreement for an additional term of 5 years ("Renewal Term"), by providing written notice to Sensus of its desire to renew the Agreement one hundred twenty (120) days before the end of the Initial Term. The "Term" shall refer to both the Initial Term and the Renewal Term.

Sensus USA Inc.	**Customer: Union County, NC**
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

Contents of this Agreement:

Agreement
- Exhibit A Software
- Exhibit B Technical Support
- Exhibit C Insurance Requirements
- Exhibit D Xylem Data Privacy Policy

Agreement

1. General
   A. **Agreement Generally.** The scope of this Agreement includes usage terms for Sensus' hosted Software solution, technical support, and supporting terms and conditions for an advanced metering infrastructure solution that Customer will purchase from Sensus' authorized distributor. Customer is not paying Sensus directly for the services provided by Sensus under the Agreement; rather, Customer shall pay Sensus' authorized distributor pursuant to a separate agreement between Customer and such authorized distributor.
2. Software.
   A. **Software as a Service (SaaS).** Sensus shall provide Customer with Software as a Service, as defined in Exhibit A, only so long as Customer is current in its payments for such services.
   B. **UCITA.** To the maximum extent permitted by law, the Parties agree that the Uniform Computer Information Transaction Act as enacted by any state shall not apply, in whole or in part, to this Agreement.
   C. **EasyLink Software.** Sensus shall: (1) cause Clevest Solutions, Inc. ("Clevest") to license the proprietary EasyLink software directly to Customer, and (2) cause Clevest to grant Customer continuing access to the Clevest SaaS offering, but only for so long as Customer is current in its undisputed payments for such services.
3. Spectrum
   A. **Spectrum Lease.** The parties previously entered into a spectrum manager lease on 9/26/2019 (the "Spectrum Lease"), which is hereby specifically incorporated by reference.
4. Equipment.
   A. **Purchase of Equipment.** Customer shall purchase all Field Devices, RF Field Equipment, and other goods (collectively, "Equipment") from Sensus' authorized distributor pursuant to the terms and conditions (including any warranties on such Equipment) agreed by Customer and Sensus' authorized distributor. This Agreement shall not affect any terms and conditions, including any warranty terms, agreed by Customer and Sensus' authorized distributor. If Customer elects to purchase any equipment or services directly from Sensus, or if Customer pays any fees or other costs to Sensus, then Sensus' Terms of Sale shall apply. The "Terms of Sale" are available at: https://www.sensus.com/tc, or 1-800-METER-IT
   B. THERE ARE NO WARRANTIES IN THIS AGREEMENT, EXPRESS OR IMPLIED. SENSUS EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS, WARRANTIES AND/OR CONDITIONS, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE, REGARDING THIS AGREEMENT, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, NON-INFRINGEMENT AND TITLE.
5. Services.
   A. **Installation of Equipment.** Installation services for Field Devices, other goods, and RF Field Equipment will be as agreed between the Customer and Sensus' authorized distributor. Sensus will not provide installation services pursuant to this Agreement
   B. **Technical Support.** Sensus shall provide Customer the technical support set forth in Exhibit B.
   C. **Project Management.** Sensus' authorized distributor will provide project management services to Customer. Any project management of the FlexNet System provided by Sensus shall be subject to a separate agreement which describes the scope and pricing for such work.
   D. **Training.** Sensus' authorized distributor will provide Customer with training on the use of the FlexNet System. Any training provided by Sensus shall be subject to a separate agreement which describes the scope and pricing for such work.
   E. **IT Systems Integration Services.** Except as may otherwise be provided herein, integration of the Software into Customer's new or existing internal IT systems is not included in this Agreement. Any integration work shall be subject to a separate agreement which describes the scope and pricing for such work.
6. General Terms and Conditions.
   A. **Infringement Indemnity.** Sensus shall indemnify and hold harmless Customer from and against any judgment by a court of competent jurisdiction or settlement reached from any litigation instituted against Customer in the United States by a third party which alleges that the FlexNet System provided hereunder infringes upon the patents or copyrights of such third party, provided that Sensus shall have the right to select counsel in such proceedings and control such proceedings. Notwithstanding the foregoing, Sensus shall have no liability under this indemnity unless Customer cooperates with and assists Sensus in any such proceedings and gives Sensus written notice of any claim hereunder within fourteen (14) business days of receiving it. Further, Sensus shall have no liability hereunder if such claim is related to; (i) any change, modification or alteration made to the FlexNet System by Customer or a third party, (ii) use of the FlexNet System in combination with any goods or services not provided by Sensus or a Sensus authorized dealer hereunder, (iii) Customer's failure to use the most recent version of the Software or to otherwise take any corrective action as reasonably directed by Sensus, (iv) compliance by Sensus with any designs, specifications or instructions provided by Customer or compliance by Sensus with an industry standard, or (v) any use of the FlexNet System other than for the Permitted Use. In the event the FlexNet System is adjudicated to infringe a patent or copyright of a third party and its use is enjoined, or, if in the reasonable opinion of Sensus, the FlexNet System is likely to become the subject of an infringement claim, Sensus, at its sole discretion and expense, may; (i) procure for Customer the right to continue using the FlexNet System or (ii) modify or replace the FlexNet System so that it becomes non-infringing. THIS SECTION STATES CUSTOMER'S SOLE AND EXCLUSIVE REMEDY AND SENSUS' ENTIRE LIABILITY FOR ANY CLAIM OF INFRINGEMENT.
   B. **Limitation of Liability.** To the extent permitted by law, Sensus' aggregate liability in any and all causes of action arising under, out of or in relation to this Agreement, its negotiation, performance, breach or termination (collectively "Causes of Action") shall not exceed the greater of; (a) the total amount paid by Customer directly to Sensus or its authorized distributor under this Agreement; or (b) ten thousand US dollars (USD 10,000.00). This is so whether the Causes of Action are in tort, including, without limitation, negligence or strict liability, in contract, under statute or otherwise. As separate and independent limitations on liability, Sensus' liability shall be limited to direct damages. Sensus shall not be liable for; (i) any indirect, incidental, special or consequential damages; nor (ii) any revenue or profits lost by Customer or its Affiliates from any End User(s), irrespective whether such lost revenue or profits is categorized as direct damages or otherwise; nor (iii) any In/Out Costs; nor (v) damages arising from maincase or bottom plate breakage caused by freezing temperatures, water hammer conditions, or excessive water pressure. The limitations on liability set forth in this Agreement are fundamental inducements to Sensus entering into this Agreement. They apply unconditionally and in all respects. FOR CLARITY AND AVOIDANCE OF DOUBT, THE FOREGOING LIMITATIONS OF LIABILITY SHALL NOT BE CONSTRUED TO LIMIT ANY INSURANCE PROCEEDS AVAILABLE AS A RESULT OF THE COVERAGE REQUIRED IN EXHIBIT C, WHICH IS ATTACHED AND INCORPORATED HEREIN BY REFERENCE.
   C. **Termination.** Either party may terminate this Agreement earlier if the other party commits a material breach of this Agreement and such material breach is not cured within forty-five (45) days of written notice by the other party. Upon any expiration or termination of this Agreement, Sensus' and Customer's obligations hereunder shall cease and the software as a service and Spectrum Lease shall immediately cease.
   D. **Force Majeure.** If either party becomes unable, either wholly or in part, by an event of Force Majeure, to fulfill its obligations under this Agreement, the obligations affected by the event of Force Majeure will be suspended during the continuance of that inability. The party affected by the force majeure will take reasonable steps to mitigate the Force Majeure.
   E. **Intellectual Property Rights.**
      i. Software and Materials. No Intellectual Property is assigned to Customer hereunder. Excluding Customer Data, Sensus shall own or continue to own all right, title, and interest in and to the Intellectual Property associated with the Software and related documentation, including any derivations and/or derivative works (the "Sensus IP"). To the extent, if any, that any ownership interest in and to such Sensus IP does not automatically vest in Sensus by virtue of this Agreement or otherwise, and instead vests in Customer, Customer agrees to grant and assign and hereby does grant and assign to Sensus all right, title, and interest that Customer may have in and to such Sensus IP. Customer agrees not to reverse engineer any Sensus Products purchased or provided hereunder.
      ii. Customer Data. Notwithstanding the prior paragraph, as between Customer and Sensus, Customer remains the owner of all right, title or interest in or to any Customer Data. "Customer Data" means solely usage data collected by the Field Devices. To avoid doubt, Customer Data does not include non- End User usage data collected by the Field Devices, Software, or FlexNet System, such as network and equipment status information or the like.
      iii. Consent to Use of Customer Data. Customer hereby irrevocably grants to Sensus a royalty-free, non-exclusive, irrevocable right and license to access, store, and use such Customer Data and any other data or information provided to Sensus, to (1) provide the Service; (2) analyze and improve the Service; (3) analyze and improve any Sensus equipment or software; or (4) for any other internal use. As used herein, "Service" means Sensus' obligations under this Agreement.
      iv. Access to Customer Data. Within 45 days of Customer's written request, Sensus will provide Customer with a copy of the previous 24 months CMEP interval file and deliver the file to a drop location specified by Customer.
   F. **Data Privacy.** Customer acknowledges that Sensus and its Affiliates (collectively, "Xylem") will collect and process personal data for the purposes outlined in this Agreement Xylem's data privacy policy is attached as Exhibit D Customer acknowledges that it has read and understood Xylem's privacy policy and agrees to the use of personal data outlined therein. The collection and use of personal data by Customer is Customer's responsibility.
   G. **Confidentiality.** Except as may be required under applicable law (including, without limitation, Chapter 132 of the North Carolina General Statutes), court order, or regulation, or to the extent required to perform and enforce this Agreement, both parties shall (and shall cause their employees and contractors to) keep all Confidential Information strictly confidential and shall not disclose it to any third party. The Confidential Information may be transmitted orally, in writing, electronically or otherwise observed by either party. Notwithstanding the foregoing, "Confidential Information" shall not include; (i) any information that is in the public domain other than due to Recipient's breach of this Agreement; (ii) any information in the possession of the Recipient without restriction prior to disclosure by the Discloser; or (iii) any information independently developed by the Recipient without reliance on the information disclosed hereunder by the Discloser. "Discloser" means either party that discloses Confidential Information, and "Recipient" means either party that receives it.
   H. **Compliance with Laws.** Customer shall comply with all applicable country, federal, state, and local laws and regulations, as set forth at the time of acceptance and as may be amended, changed, or supplemented. Customer shall not take any action, or permit the taking of any action by a third party, which may render Sensus liable for a violation of applicable laws.
      i. **Export Control Laws.** Customer shall; (i) comply with all applicable U.S. and local laws and regulations governing the use, export, import, re-export, and transfer of products, technology, and services; and (ii) obtain all required authorizations, permits, and licenses. Customer shall immediately notify Sensus, and immediately cease all activities with regards to the applicable transaction, if the Customer knows or has a reasonable suspicion that the equipment, software, or services provided hereunder may be directed to countries in violation of any export control laws. By ordering equipment, software or services, Customer certifies that it is not on any U.S. government export exclusion list.
      ii. **Anti-Corruption Laws.** Customer shall comply with the United States Foreign Corrupt Practices Act (FCPA), 15 U.S.C. §§ 78dd-1, et seq.; laws and regulations implementing the OECD's Convention on Combating Bribery of Foreign Public Officials in International Business Transactions; the U.N. Convention Against Corruption; the Inter-American Convention Against Corruption; and any other applicable laws and regulations relating to anti- corruption in the Customer's county or any country where performance of this Agreement, or delivery or use of equipment, software or services will occur.
   I. **Non-Waiver of Rights.** A waiver by either party of any breach of this Agreement or the failure or delay of either party to enforce any of the articles or other provisions of this Agreement will not in any way affect, limit or waive that party's right to enforce and compel strict compliance with the same or other articles or provisions.
   J. **Assignment and Sub-contracting.** Either party may assign, transfer or delegate this Agreement without requiring the other party's consent; (i) to an Affiliate; (ii) as part of a merger; or (iii) to a purchaser of all or substantially all of its assets. Apart from the foregoing, neither party may assign, transfer or delegate this Agreement without the prior written consent of the other, which consent shall not be unreasonably withheld. Furthermore, Customer acknowledges Sensus may use subcontractors to perform RF Field Equipment installation, the systems integration work (if applicable), or project management (if applicable), without requiring Customer's consent.
   K. **Amendments.** No alteration, amendment, or other modification shall be binding unless in writing and signed by both Customer and by a vice president (or higher) of Sensus.
   L. **Governing Law and Dispute Resolution.** This Agreement shall be governed by, construed and enforced in accordance with the laws of the State of North Carolina. Exclusive venue for any disputes arising hereunder is conferred upon the General Courts of Justice of the State of North Carolina sitting in Union County, North Carolina.
   M. **Public Records.** Sensus acknowledges and agrees that Customer is subject to Chapter 132 of the North Carolina General Statutes, the Public Records Act (the "Act"), and that this Agreement, including all attachments and exhibits thereto, shall be a public record as defined in such Act, and as such, will be open to public disclosure and copying. However, if Customer receives a public records request concerning this Agreement Customer shall give written notice to Sensus of any such request for the disclosure of such records, together with a copy of the request. Customer's failure to provide written notice of such a request, or copy of such request, to Sensus shall not be considered a material breach of this Agreement.
   N. **E-Verify.** E-Verify is the federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to federal law. Sensus shall ensure that Sensus and any subcontractor performing work under this Agreement: (i) uses E-Verify if required to do so by North Carolina law; and (ii) otherwise complies with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. A breach of this provision by Sensus will be considered a breach of this Agreement, which entitles Customer to terminate this Agreement, without penalty, upon notice to Sensus
   O. **Acknowledgement of Events.** The Parties acknowledge and agree that the global COVID-19 pandemic ("COVID-19") is ongoing, dynamic, unpredictable, and as such may impact the ability of Sensus or Customer to meet its obligations under this Agreement. The parties agree that, if either party becomes unable, either wholly or in part, due directly to COVID-19, to fulfill its obligations under this Agreement, the obligations affected will be suspended during the continuance of that inability. The parties will exercise reasonable care and diligence to avoid the impact of COVID-19 on their performance under this Agreement, and if such performance is impacted, the party whose performance of its obligations is impacted by COVID-19 will take reasonable steps to mitigate the impact of COVID-19 on its performance.
   P. **Survival.** The provisions of this Agreement that are applicable to circumstances arising after its termination or expiration shall survive such termination or expiration.

Q. Severability. In the event any provision of this Agreement is held to be void, unlawful or otherwise unenforceable, that provision will be severed from the remainder of the Agreement and replaced automatically by a provision containing terms as nearly like the void, unlawful, or unenforceable provision as possible; and the Agreement, as so modified, will continue to be in full force and effect.

R. Four Corners. This written Agreement, including all of its exhibits and the Spectrum Lease, represents the entire understanding between and obligations of the parties and supersedes all prior understandings, agreements, negotiations, and proposals, whether written or oral, formal or informal between the parties. Any additional writings shall not modify any limitations or remedies provided in the Agreement. There are no other terms or conditions, oral, written, electronic or otherwise. There are no implied obligations. All obligations are specifically set forth in this Agreement. Further, there are no representations that induced this Agreement that are not included in it. The ONLY operative provisions are set forth in writing in this Agreement. Without limiting the generality of the foregoing, no purchase order placed by or on behalf of Customer shall alter any of the terms of this Agreement. The parties agree that such documents are for administrative purposes only, even if they have terms and conditions printed on them and even if and when they are accepted and/or processed by Sensus. Any goods, software or services delivered or provided in anticipation of this Agreement (for e.g., as part of a pilot or because this Agreement has not yet been signed but the parties have begun the deployment) under purchase orders placed prior to the execution of this Agreement are governed by this Agreement upon its execution and it replaces and supersedes any such purchase orders.

S. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Additionally, this Agreement may be executed by facsimile or electronic copies, all of which shall be considered an original for all purposes.

7. Definitions. As used in this Agreement, the following terms shall have the following meanings:

A. "*Affiliate*" of a party means any other entity controlling, controlled by, or under common control with such party, where "control" of an entity means the ownership, directly or indirectly, of 50% or more of either; (i) the shares or other equity in such entity; or (ii) the voting rights in such entity. An Affiliate of Customer is also specifically defined to include the Union County Water and Sewer District.

B. "*Confidential Information*" means, to the extent permitted by law, including, without limitation, Chapter 132 of the North Carolina General Statutes, any and all non-public information of either party, including, Customer's End Users' data, Customer Data, and all proprietary information or trade secrets of either party.

C. "*End User*" means any end user of electricity, water, and/or gas (as applicable) that pays Customer for the consumption of electricity, water, and/or gas, as applicable.

D. "*Field Devices*" means the SmartPoint Modules.

E. "*FlexNet Base Station*" identifies the Sensus manufactured device consisting of one transceiver, to be located on a tower that receives readings from the SmartPoint Modules (either directly or via an R100 unit) by radio frequency and passes those readings to the RNI by TCP/IP backhaul communication. For clarity, FlexNet Base Stations include Metro Base Stations.

F. "*FlexNet System*" is comprised of the SmartPoint Modules, RF Field Equipment, Server Hardware, software licenses, Spectrum Lease, and other equipment provided to Customer hereunder. The FlexNet System only includes the foregoing, as provided by Sensus. The FlexNet System does not include goods, equipment, software, licenses or rights provided by a third party or parties to this Agreement.

G. "*Force Majeure*" means an event beyond a party's reasonable control, including, without limitation, acts of God, hurricane, flood, volcano, tsunami, tornado, storm, tempest, mudslide, vandalism, illegal or unauthorized radio frequency interference, strikes, lockouts, or other industrial disturbances, unavailability of component parts of any goods provided hereunder, acts of public enemies, wars, blockades, insurrections, riots, epidemics, earthquakes, fires, restraints or prohibitions by any court, board, department, commission or agency of the United States or any States, any arrests and restraints, civil disturbances and explosion.

H. *"Hosted Software"* means those items listed as an Application in Exhibit A.

I. "*In/Out Costs*" means any costs and expenses incurred by Customer in transporting goods between its warehouse and its End User's premises and any costs and expenses incurred by Customer in installing, uninstalling and removing goods.

J. "*Intellectual Property*" means patents and patent applications, inventions (whether patentable or not), trademarks, service marks, trade dress, copyrights, trade secrets, know-how, data rights, specifications, drawings, designs, maskwork rights, moral rights, author's rights, and other intellectual property rights, including any derivations and/or derivative works, as may exist now or hereafter come into existence, and all renewals and extensions thereof, regardless of whether any of such rights arise under the laws of the United States or of any other state, country or jurisdiction, any registrations or applications thereof, and all goodwill pertinent thereto.

K. "*LCM*" identifies the load control modules.

L. "*Ongoing Fee*" means the annual or monthly fees, as applicable, to be paid by Customer to Sensus' authorized distributor during the Term of this Agreement.

M. "*Patches*" means patches or other maintenance releases of the Software that correct processing errors and other faults and defects found previous versions of the Software. For clarity, Patches are not Updates or Upgrades.

N. "*Permitted Use"* means only for reading and analyzing data from Customer's Field Devices in the Service Territory. The Permitted Use does not include reading third devices not provided by Sensus or reading Field Devices outside the Service Territory.

O. *"R100 Unit*" identifies the Sensus standalone, mounted transceiver that takes the radio frequency readings from the SmartPoint Modules and relays them by radio frequency to the relevant FlexNet Base Station or directly to the RNI by TCP/IP backhaul communication, as the case may be.

P. "*Release*" means both Updates and Upgrades.

Q. "*Remote Transceiver*" identifies the Sensus standalone, mounted relay device that takes the radio frequency readings from the SmartPoint Modules and relays them directly to the RNI by TCP/IP backhaul communication.

R. "*RF Field Equipment*" means, collectively, FlexNet Base Stations, R100 units (if any) and Remote Transceivers (if any).

S. "*RNI*" identifies the regional network interfaces consisting of hardware and software used to gather, store, and report data collected by the FlexNet Base Stations from the SmartPoint Modules. The RNI hardware specifications will be provided by Sensus upon written request from Customer.

T. "*RNI Software*" identifies the Sensus proprietary software used in the RNI and any Patches, Updates, and Upgrades that are provided to Customer pursuant to the terms of this Agreement.

U. *"Service Territory"* identifies the geographic area where Customer utilizes Sensus equipment to provide services to End Users as of the Effective Date. This area will be described on the propagation study in the parties' Spectrum Lease filing with the FCC.

V. "*Server Hardware*" means the RNI hardware.

W. *"SmartPoint™ Modules*" identifies the Sensus transmission devices installed on devices such as meters, distribution automation equipment and demand/response devices located at Customer's End Users' premises that communicate with the relevant devices and transmit those communications by radio frequency to the relevant piece of RF Field Equipment.

X. "*Software*" means all the Sensus proprietary software provided pursuant to this Agreement, and any Patches, Updates, and Upgrades that are provided to Customer pursuant to the terms of this Agreement. The Software does not include any third party software.

Y. "*Updates*" means releases of the Software that constitute a minor improvement in functionality.

Z. "*Upgrades*" means releases of the Software which constitute a significant improvement in functionality or architecture of the Software.

AA. "*WAN Backhaul*" means the communication link between FlexNet Base Stations and Remote Transceivers and RNI

Exhibit A
Software

Software as a Service

1. Description of Services.

This exhibit contains the details of the Software as a Service that Sensus shall provide to Customer if both; (i) pricing for the application of Software as a Service has been provided to the Customer; and (ii) the Customer is current in its payments to Sensus' authorized distributor for such application of Software as a Service.

A. Software as a Service Generally.

Software as a Service is a managed service in which Sensus will be responsible for the day-to-day monitoring, maintenance, management, and supporting of Customer's software applications. In a Software as a Service solution, Sensus owns all components of the solution (server hardware, storage, data center, network equipment, Sensus software, and all third-party software) required to run and operate the application. These software applications consist of the following (each an "Application"):

- Regional Network Interface (RNI) Software
- Sensus Analytics
  - Enhanced Package

The managed application systems consist of the hardware, Sensus Software, and other third-party software that is required to operate the software applications. Each Application will have a production, and Disaster Recovery (as described below) environment Test environments are not provided unless otherwise specifically agreed by Sensus in writing. Sensus will manage the Applications by providing 24 x 7 x 365 monitoring of the availability and performance of the Applications.

B. Use of Software as a Service. Subject to the terms of this Agreement, Sensus shall make Software as a Service available to Customer to access and use solely for the Permitted Use and solely for so long as Customer is current in its payments to Sensus or its authorized distributor for Software as a Service. The Software as a Service term commences on the date that Sensus first makes Software as a Service available to Customer for use, and ends upon the earlier of: (i) the expiration or termination of the Agreement; (ii) breach by Customer of this exhibit or the Agreement and failure to cure such breach; or (iii) Customer's termination of Software as a Service as set forth in paragraph (C) below.

C. Termination of an Application. Customer shall have the option at any time before the end of the Term to terminate any Application by giving Sensus one hundred twenty (120) days prior written notice. Such notice, once delivered to Sensus, is irrevocable. Should Customer elect to terminate any Application, Customer acknowledges that; (a) Customer shall pay all applicable fees, including any unpaid Software as a Service fees due in the current calendar year plus a ten percent (10%) early termination fee, where such fee is calculated based on the annual Software as a Service fee due in the current calendar year; and (b) Software as a Service for such Application shall immediately cease on the termination date. If Customer elects to terminate the RNI Application in the Software as a Service environment but does not terminate the Agreement generally, then upon delivery of the notice to Sensus, Customer shall purchase the necessary (a) RNI hardware from a third party and (b) RNI software license at Sensus' then-current pricing. No portion of the Software as a Service fees shall be applied to the purchase of the RNI hardware or software license.

D. Software as a Service means only the following services:

i. Sensus will provide the use of required hardware, located at Sensus' or a third-party's data center facility (as determined by Sensus), that is necessary to operate the Application.

ii. Sensus will provide production and disaster recovery environments for Application.

iii. Sensus will provide patches, updates, and upgrades to latest Sensus Hosted Software release.

iv. Sensus will configure and manage the equipment (server hardware, routers, switches, firewalls, etc.) in the data centers:

(a) Network addresses and virtual private networks (VPN)
(b) Standard time source (NTP or GPS)
(c) Security access points
(d) Respond to relevant alarms and notifications

v. Capacity and performance management. Sensus will:

(a) Monitor capacity and performance of the Application server and software applications 24x7x365 using KPI metrics, thresholds, and alerts to proactively identify any potential issues related to system capacity and/or performance (i.e. database, backspool, logs, message broker storage, etc.)
(b) If an issue is identified to have a potential impact to the system, Sensus will open an incident ticket and manage the ticket through resolution per Exhibit B, Technical Support.
(c) Manage and maintain the performance of the server and perform any change or configuration to the server, in accordance to standard configuration and change management policies and procedures.
(d) Manage and maintain the server storage capacity and performance of the Storage Area Network (SAN), in accordance to standard configuration and change management policies and procedures.
(e) Exceptions may occur to the system that require Sensus to take immediate action to maintain the system capacity and performance levels, and Sensus has authority to make changes without Customer approval as needed, in accordance to standard configuration and change management policies and procedures.

vi. Database management. Sensus will:

(a) Implement the data retention plan and policy, and will provide the policy upon request.
(b) Monitor space and capacity requirements.
(c) Respond to database alarms and notifications.
(d) Install database software upgrades and patches.
(e) Perform routine database maintenance and cleanup of database to improve capacity and performance, such as rebuilding indexes, updating indexes, consistency checks, run SQL query/agent jobs, etc.

vii. Incident and Problem Management. Sensus will:

(a) Proactively monitor managed systems (24x7x365) for key events and thresholds to proactively detect and identify incidents.
(b) Respond to incidents and problems that may occur to the Application(s).
(c) Maintain policies and procedures for responding to incidents and performing root cause analysis for ongoing problems.
(d) Correlate incidents and problems where applicable.
(e) Sensus personnel will use the self-service portal to document and track incidents.
(f) In the event that Sensus personnel is unable to resolve an issue, the issue will be escalated to the appropriate Subject Matter Expert (SME).
(g) Maintain responsibility for managing incident and problems through resolution and will coordinate with Customer's personnel and/or any required third-party vendor to resolve the issue.
(h) Provide telephone support consistent with Exhibit B, Technical Support in the case of undetected events. viii. Security Management. Sensus will:
(a) Monitor the physical and cyber security of the server and Application(s) 24x7x365 to ensure system is highly secure in accordance with NIST Security Standards.
(b) Perform active intrusion prevention and detection of the data center network and firewalls, and monitor logs and alerts.
(c) Conduct period penetration testing of the network and data center facilities.
(d) Conduct monthly vulnerability scanning by both internal staff and external vendors.
(e) Perform anti-virus and Malware patch management on all systems.
(f) Install updates to virus protection software and related files (including virus signature files and similar files) on all servers from the update being generally available from the anti-virus software provider.
(g) Respond to any potential threat found on the system and work to eliminate any virus or malware found.
(h) Adhere to and submit certification to NERC/CIP Cyber Security standards.
(i) Monitors industry regulation/standards regarding security – NERC, FERC, NIST, OpenSG, etc. through the dedicated Sensus security team.
(j) Provide secure web portal access (SSL) to the Application(s).
(k) If it becomes aware of a Data Breach (defined as any disclosure of Confidential Information or Customer Data which is not authorized by this Agreement, including any reasonable belief that any such disclosure of such Confidential Information or Customer Data which is not authorized by this Agreement has occurred), Sensus will do the following: (i) promptly take steps to minimize the Data Breach; (ii) take appropriate measures to secure the Confidential Information or Customer Data and endeavor to reasonably prevent a recurrence of a similar Data Breach, (iii) inform Customer of the Data Breach without delay and in no case later than forty-eight (48) hours from when Sensus becomes aware of the Data Breach, including providing reasonable information to Customer (including as may be reasonably requested by Customer) about its remediation efforts and make any applicable notifications to a regulator, (iv) to the extent available to Sensus, provide Customer with reasonable details of the Data Breach, including, description of the information subject to the Data Breach and the date and time of the Data Breach, and (v) take appropriate industry-standard steps to remediate the root cause(s) of the Data Breach and give Customer a summary of the results of the investigation and any remediation efforts taken by Sensus.

ix. Backup and Disaster Recovery Management. Sensus will:

(a) Perform daily backups of data providing one (1) year of history for auditing and restoration purposes.
(b) Back-up and store data (on tapes or other storage media as appropriate) off-site to provide protection against disasters and to meet file recovery needs.
(c) Conduct incremental and full back-ups to capture data, and changes to data, on the Application(s).
(d) Replicate the Application(s) environments to a geographically separated data center location to provide a full disaster recovery environment for the Application production system.
(e) Provide disaster recovery environment and perform fail-over to Disaster Recovery environment within forty-eight (48) hours of declared event.
(f) Generate a report following each and any disaster measuring performance against the disaster recovery plan and identification of problem areas and plans for resolution.
(g) Maintain a disaster recovery plan. In the event of a disaster, Sensus shall provide the services in accordance with the disaster recovery plan.
(h) In the case of a disaster and loss of access to or use of the Application, Sensus would use commercially reasonable efforts per the Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO) specified herein to restore operations at the same location or at a backup location within forty-eight (48) hours.
(i) The Application shall have a RTO of forty-eight (48) hours.
(j) The RPO shall be a full recovery of the Application(s), with an RPO of one (1) hours, using no more than a twenty-four (24) hour old backup. All meter-related data shall be pushed from each Base Station/TGB restoring the database to real-time minus external interfaced systems from the day prior.
(k) Data from external interfaced systems shall be recreated within a forty-eight (48) hour period with the assistance of Customer personnel and staff, as needed.

E. Customer Responsibilities:

i. Coordinate and schedule any changes submitted by Sensus to the system in accordance with standard configuration and change management procedures.
ii. Participate in all required configuration and change management procedures.
iii. Customer will log incidents related to the managed Application with Sensus personnel via email, web portal ticket entry, or phone call.
iv. Responsible for periodic processing of accounts or readings (i.e., billing files) for Customer's billing system for billing or other analysis purposes.
v. Responsible for any field labor to troubleshoot any SmartPoint modules or smart meters in the field in populations that have been previously deployed and accepted.
vi. First response labor to troubleshoot FlexNet Base Station, R100s, Remote Transceivers or other field network equipment.
vii. Responsible for local area network configuration, management, and support.
viii. Identify and research problems with meter reads and meter read performance.
ix. Create and manage user accounts.

x. Customize application configurations.
xi. Support application users.
xii. Investigate application operational issues (e.g., meter reads, reports, alarms, etc.).
xiii. Respond to alarms and notifications.
xiv. Perform firmware upgrades over-the-air, or delegate and monitor field personnel for on-site upgrades.

F. Software as a Service does not include any of the following services:
i. Parts or labor required to repair damage to any field network equipment that is the result of a Force Majeure event.
ii. Any integration between applications, such as Harris MeterSense, would require a Professional Services contract agreement to be scoped, submitted, and agreed in a signed writing between Sensus and all the applicable parties.

If an item is not listed in subparagraphs in item (D) above, such item is excluded from the Software as a Service and is subject to additional pricing.

2. Further Agreements

A. System Uptime Rate.

i. Sensus (or its contractor) shall manage and maintain the Application(s) on computers owned or controlled by Sensus (or its contractors) and shall provide Customer access to the managed Application(s) via internet or point to point connection (i.e., Managed-Access use), according to the terms below. Sensus endeavors to maintain an average System Uptime Rate equal to ninety-nine (99.0) per month (as defined below). For clarity and avoidance of doubt, each reference to month in this Agreement means a calendar month. The System Uptime Rate, cumulative across all Applications, shall be calculated as follows:

$$\text{System Uptime Rate} = 100 \times \frac{(\text{TMO} - \text{Total Non-Scheduled Downtime minutes in the month})}{\text{TMO}}$$

ii. Calculations
a. *Targeted Minutes of Operation* or *TMO* means total minutes cumulative across all Applications in the applicable month minus the Scheduled Downtime in the month.
b. *Scheduled Downtime* means the number of minutes during the month, as measured by Sensus, in which access to any Application is scheduled to be unavailable for use by Customer due to planned system maintenance. Sensus shall provide Customer notice (via email or otherwise) at least seven (7) days in advance of commencement of the Scheduled Downtime.
c. *Non-Scheduled Downtime* means the number of minutes during the month, as measured by Sensus, in which access to any Application is unavailable for use by Customer due to reasons other than Scheduled Downtime or the Exceptions, as defined below (e.g., due to a need for unplanned maintenance or repair).

iii. Exceptions. Exceptions mean the following events:
- Force Majeure
- Emergency Work, as defined below; and
- Lack of Internet Availability, as described below.

a. Emergency Work. In the event that Force Majeure, emergencies, dangerous conditions or other exceptional circumstances arise or continue during TMO, Sensus shall be entitled to take any actions that Sensus, in good faith, determines is necessary or advisable to prevent, remedy, mitigate, or otherwise address actual or potential harm, interruption, loss, threat, security or like concern to any of the Application(s) ("Emergency Work"). Such Emergency Work may include, but is not limited to: analysis, testing, repair, maintenance, re-setting and other servicing of the hardware, cabling, networks, software and other devices, materials and systems through which access to and/or use of the Application(s) by the Customer is made available (the "Managed Systems"). Sensus shall endeavor to provide advance notice of such Emergency Work to Customer when practicable and possible.
b. Lack of Internet Availability. Sensus shall not be responsible for any deterioration of performance attributable to latencies in the public internet or point-to-point network connection operated by a third party. Customer expressly acknowledges and agrees that Sensus does not and cannot control the flow of data to or from Sensus' networks and other portions of the Internet, and that such flow depends in part on the performance of Internet services provided or controlled by third parties, and that at times, actions or inactions of such third parties can impair or disrupt data transmitted through, and/or Customer's connections to, the Internet or point-to-point data connection (or portions thereof). Although Sensus will use commercially reasonable efforts to take actions Sensus may deem appropriate to mitigate the effects of any such events, Sensus cannot guarantee that such events will not occur. Accordingly, Sensus disclaims any and all liability resulting from or relating to such events.

iv. System Availability. For each month that the System Uptime Rates for the production RNI falls below 99.0%, Sensus will issue Customer the following Service Level Credits:

System Uptime Rate per calendar month	Service Level Credit
Less than 99.0% but at least 97.5%	5% of the monthly RNI SaaS Fees in which the service level default occurred (Note: SaaS fees are pre-paid annually and for purposes of SLA Credits are computed on a monthly basis.)
Less than 97.5% but at least 95.0%	10% of the monthly RNI SaaS Fees in which the service level default occurred
Less than 95.0%	20% of the monthly RNI SaaS Fees in which the service level default occurred

Service Level Credits for any single month shall not exceed 20% of the RNI SaaS Fee associated with the month in which the service level default occurred. Sensus records and data will be the sole basis for all Service Level Credit calculations and determinations, provided that such records and data must be made available to Customer for review and agreement by Customer. To receive a Service Level Credit, Customer must issue a written request no later than ten (10) days after the Service Level Credit has accrued. Sensus will apply each valid Service Level Credit to the Customer's invoice within 2 billing cycles after Sensus' receipt of Customer's request and confirmation of the failure to meet the applicable Service Level Credit. Service Level Credits will not be payable for failures to meet the System Uptime Rate caused by any Exceptions. No Service Level Credit will apply if Customer is not current in its undisputed payment obligations under the Agreement. Service Level Credits are exclusive of any applicable taxes charged to Customer or collected by Sensus. Sensus shall not refund an unused Service Level Credits or pay cash to Customer for any unused Service Level Credits. Any unused Service Level Credits at the time the Agreement terminates will be forever forfeited. THE SERVICE LEVEL CREDITS DESCRIBED IN THIS SECTION ARE THE SOLE AND EXCLUSIVE REMEDY FOR SENSUS' FAILURE TO MEET THE SYSTEM UPTIME REQUIREMENT OR ANY DEFECTIVE SAAS PERFORMANCE. IN NO EVENT SHALL THE AGGREGATE AMOUNT OF SERVICE LEVEL CREDITS IN ANY ANNUAL PERIOD EXCEED 20% OF THE ANNUAL RNI SAAS FEE.

B. Data Center Site-Security. Although Sensus may modify such security arrangements without consent or notice to Customer, so long as such modifications do not materially decrease the overall level of effectiveness of security arrangements set forth herein, Customer acknowledges the following are the current arrangements regarding physical access to and support of the primary hardware components of the Managed Systems:
i. The computer room(s) in which the hardware is installed is accessible only to authorized individuals.
ii. Power infrastructure includes one or more uninterruptible power supply (UPS) devices and diesel generators or other alternative power for back-up electrical power.
iii. Air-conditioning facilities (for humidity and temperature controls) are provided in or for such computer room(s) and can be monitored and adjusted for humidity and temperature settings and control. Such air systems are supported by redundant, back-up and/or switch-over environmental units.
iv. Such electrical and A/C systems are monitored on an ongoing basis and personnel are available to respond to system emergencies (if any) in real time.
v. Dry pipe pre-action fire detection and suppression systems are provided.
vi. Data circuits are available via multiple providers and diverse paths, giving access redundancy.

C. Responsibilities of Customer.
i. Customer shall promptly pay all Software as a Service fees.
ii. Customer may not (i) carelessly, knowingly, intentionally or maliciously threaten, disrupt, harm, abuse or interfere with the Application(s), Managed Systems or any of their functionality, performance, security or integrity, nor attempt to do so; (ii) impersonate any person or entity, including, but not limited to, Sensus, a Sensus employee or another user; or (iii) forge, falsify, disguise or otherwise manipulate any identification information associated with Customer's access to or use of the Application(s).
iii. The provisioning, compatibility, operation, security, support, and maintenance of Customer's hardware and software ("Customer's Systems") is exclusively the responsibility of Customer. Customer is also responsible, in particular, for correctly configuring and maintaining (i) the desktop environment used by Customer to access the Application(s) managed by Sensus; and (ii) Customer's network router and firewall, if applicable, to allow data to flow between the Customer's Systems and Sensus' Managed Systems in a secure manner via the public Internet.
iv. Upon receiving the system administrator account from Sensus, Customer shall create username and passwords for each of Customer's authorized users and complete the applicable Sensus registration process (Authorized Users). Such usernames and passwords will allow Authorized Users to access the Application(s). Customer shall be solely responsible for maintaining the security and confidentiality of each user ID and password pair associated with Customer's account, and Sensus will not be liable for any loss, damage or liability arising from Customer's account or any user ID and password pairs associated with Customer. Customer is fully responsible for all acts and omissions that occur through the use of Customer's account and any user ID and password pairs that are due to Customer, Customer's employees, Customer's agents. Customer agrees (i) not to allow anyone other than the Authorized Users to have any access to, or use of Customer's account or any user ID and password pairs at any time; (ii) to notify Sensus immediately of any actual or suspected unauthorized use of Customer's account or any of such user ID and password pairs, or any other breach or suspected breach of security, restricted use or confidentiality; and (iii) to take the Sensus-recommended steps to log out from and otherwise exit the Application(s) and Managed Systems at the end of each session. Customer agrees that Sensus shall be entitled to reasonably rely, without inquiry, on the validity of the user accessing the Application(s) application through Customer's account, account ID, usernames or passwords.
v. Customer shall be responsible for the day-to-day usage operations of the Application(s) and FlexNet System. This includes, without limitation, (i) researching problems with meter reads and system performance, (ii) creating and managing user accounts, (iii) customizing application configurations, (iv) supporting application users, (v) investigating application operational issues, (vi) responding to alarms and notifications, and (vii) performing over-the-air commands (such as firmware updates or configuration changes).

D. Software Solution Components.
i. Description of Software Solutions. Sensus software consists of a core communication module and a set of applications. Some applications are required to perform basic solution capabilities, other applications are optional and add additional capabilities and function to the overall solution. As Customer's business process expands and/or new Sensus offerings are made available, additional applications and functionality can dynamically be added to the solution, provided Customer purchases such additional applications.
ii. Regional Network Interface. The Regional Network Interface (RNI) or Sensus head-end is the centralized intelligence of the FlexNet network; the RNI's primary objective is to transfer endpoint (such as meters) data to the Customer and the advanced feature applications. The RNI is adaptable to Customer configurations by simultaneously supporting a wide range of FlexNet enabled endpoints; including but not limited to meters (electric, water, gas), street lighting, and Home Area Network devices.
a. Core Package
(i) Communication
1. Manages all inbound and outbound traffic to and from endpoints
2. Outbound routing optimization
3. Route analyzer
4. AES256 bit encryption of radio messages
5. Reports and metric details of network performance and troubleshooting aids
6. Management of RF equipment (base stations and endpoint radios) (ii) Data Collection
1. Missing read management
2. Management of duplicate reads
3. 60 day temporary storage
(iii) Application integration
1. To Sensus Analytics applications
2. Enable 3rd party application integration

3. Batch CMEP file export
4. Real-time access through MultiSpeak

(iv) Endpoint Management
1. Gas, water, electric, lighting concurrent support
2. Remote configuration
3. Remote firmware updates
4. Reports, metrics and Troubleshooting

(v) User Management
1. Secure access
2. Password management
3. Definable user roles
4. User permissions to manage access to capabilities

b. Integration of RNI. Sensus shall provide RNI integration support services to Customer only to the extent specifically provided below:

(i) Sensus shall meet with the representative from the Customer's system(s) targeted for integration to determine which integration method is appropriate (e.g., Multispeak, CMEP, etc.).
1. In scope and included integration efforts: Provide the gateway URLs to the integrating system as needed, provide Customer with standard integration API documentation, validate and test that the correct Customer information is flowing into and/or out of the RNI.
2. Out of scope and subject to additional charges: Modifications or extensions to the standard API provided by Sensus and any integration efforts not outlined above as in scope and included.

(ii) Customer Responsibilities:
1. Provide Sensus with information about the relevant information Customer wishes to transfer and integrate with the RNI.
2. Establish the network and security required for the two systems to reasonably communicate.
3. Verify integration to third party system functionality is working as intended.

(iii) If an item is not listed in subparagraph (i) above, such item is excluded from the integration of Sensus RNI Support and is subject to additional pricing.

3. Sensus Analytics

Sensus Analytics is a cloud-based solution and data platform that allows storage and retrieval of raw reads and data from other sources for analysis, exportation, and inquiry or reporting. The platform provides applications and reporting capabilities.

A. Essential Package. The Essential Package of the Sensus Analytics Application shall consist of the following modules:

i. Device Access
a. Allows search for meter details by using data imported from the billing system or the Sensus Device ID or AMI ID.
b. Allows a view of the meter interval or register reads.
c. Meter data is available to be copied, printed, or saved to certain user programs or file formats, specifically CSV, PDF, and Spreadsheet.
d. Allows the current and historical data to be viewed.
e. Allows the current usage to be compared to historical distribution averages.
f. Allows the user to see the meter location on a map view.
g. Allows notifications for an event on a single meter to be forwarded to a Customer employee.
h. Allows details to be viewed about a meter – (dependent on the data integrated from other systems).

ii. Meter Insight (provides the following)
a. # of active meters.
b. # of orphaned meters with drill down to the list of meters.
c. # of inactive meters with usage drill down to the list of meters.
d. # of stale meters with drill down to the list of meters.
e. # of almost stale meters with drill down to the list of meters.
f. # of meters where no read is available with drill down to the list of meters.
g. # of meters with maximum threshold exceptions with drill down to the list of meters.
h. # of meters with minimum threshold exceptions with drill down to the list of meters.
i. # of unknown radios with drill down to the list of meters.

iii. Report Access
a. Allows the user to see meter alarms and choose a report from a list of standard reports.
b. Master Route Register Reads: Shows the latest reads for all meters within specified time window.
c. Meter Route Intervals Reads: Allows users to inspect intervals of a single meter over a period of time.
d. Master Route No Readings: List all meters that are active in the system, but have not been sending reads within the specified time window.
e. Consumption Report: List meters' consumption based on meter readings within the specified time window.
f. Zero Consumption for Period: List meters whose readings do not change over a period of time.
g. Negative Consumption: Shows the number of occurrences and readings of negative consumption for the last 24hr, 48hr and 72hr from the entered roll up date.
h. High Low Exception Report: Displays meters whose reads exceed minimum or/and maximum threshold, within a time range
i. Consumption vs Previous Reported Read: Compares latest reading (from RNI) with last known read received from CIS.
j. Consumption Exception 24 hour Report: This report shows meters that satisfy these two conditions: (1) The daily average consumptions exceed entered daily consumption threshold; (2) The number of days when daily thresholds are exceeded are greater than the entered exception per day threshold.
k. Endpoint Details: Shows the current state of meters that are created within the specified time range.
l. Orphaned Meters: List meters that are marked as 'orphaned', which are created as of entered Created as of parameter.
m. Billing Request Mismatch: Displays meters in a billing request that have different AMR id with the ones sent by RNI. It also shows AMR id in billing request that have different meter Id in the RNI. Users must enter which billing request file prior to running the report.
n. All Alarms Report: List all alarms occurred during a time window. Users can select which alarm to show.

iv. Billing Access
a. Initiate the creation of billing export files formatted to the import needs of the billing system.
b. Receive billing request files from the billing system to identify what meters to include in the billing export file in the case where billing request file option is used.
c. Provides a repository of past billing files that were either used for billing preparation or actually sent to the billing system.
d. Will store created billing files for a period of three years unless otherwise denoted.
e. The system will allow creation of test files before export to the billing system.

v. Billing Adaptor
a. The underlying configurator and tools mapping the extraction of billing data to enable integration to the utility's billing system

vi. Data Store
a. Allows storage of meter reading data including Intervals, Registers, and Alarms to be stored.
b. Stored data is available online for reports and analysis.
c. Data will be retained for 3 years. Additional duration can be purchased.

B. Enhanced Package. The Enhanced Package shall consist of the modules listed above in the Essential Package, as well as the following additional modules:

i. Alarm Insight
a. Allows the user to summarize and filter alarms by a date range
b. Allows the user to review all alarm types on a single screen.
c. The user can filter out the alarms not wanted on the screen. d.Alarm totals can be visualized.
e. Adds a view of trending alarms over time.
f. Click to drill down on an alarm to gain more information on specific events.
g. Click to analyze a specific event on a particular device.

ii. Alert Manager
a. Allows creation of alert groups who will be notified when an alarm occurs.
b. Users can manage alert groups by adding and removing group members.
c. Allows selection of notification method for how end users in the group will be notified; email or SMS (text message).
d. Allows creation of an alert from the available system events from smart points and assign to a group.
e. Monitors the systems meters for events. When an event is triggered, all users in the group will be notified.

C. Integration of Sensus Analytics. Sensus shall provide integration support services to Customer only to the extent specifically provided below:

i. Sensus shall provide Customer with a simple flat file specification known as VFlex for the integration of the Customer's back office system to the Sensus Analytics modules. The VFlex shall contain the following types of information: Device ids, end users in the system, end user status, end user account information, end user name, and other end user details. This flat file may be delimited or fixed width. Customer shall produce this file and transmit it to the FTP location designated by Sensus. When sent to the Sensus FTP servers, this file exchange will enable the system to become operational with the Customer's systems. Customer shall produce this file and transmit it to the FTP location designated by Sensus. Sensus will provide reasonable support to explain to Customer the required vs. optional fields that are in the specification, testing and validation of the file format and content.

ii. In scope and included integration efforts: kick-off meeting to engage all required parties, mapping the Customer's fields to the VFlex specification, validation of expected output, and a two (2) hour system review of Sensus Analytics application and integration with the Customer's system (conducted remotely).

iii. Out of scope and subject to additional charges will be the transformation of data where business logic including code must be written to modify the field content or format of the data to meet the VFlex specification.

iv. Sensus' integration services consist of four (4) hours of assistance (remote or on-site, as determined by Sensus). If additional time is needed to complete the integration efforts, Sensus shall invoice Customer for additional fees on an actual time and materials basis.

v. If an item is not listed in subparagraphs (i) or (ii) above, such item is excluded from the integration of Sensus Analytics Support and is subject to additional pricing.

vi. Data Import. The Sensus Analytics Application contains adapters for the import of data from; (a) Customer's FlexNet System; and/or (b) AutoRead application for handheld and drive by systems, as applicable. vii. Customer Acknowledgements.
a. Customer acknowledges that the Sensus Analytics Application provides up to fifty (50) user logins for Customer's use.
b. Customer acknowledges and agrees the Sensus Analytics Application is based upon the actual number of End Users within Customer's Service

Territory. Pricing may increase if Customer's Service Territory or actual number of End Users expands.

c. Customer acknowledges that all data related to the Sensus Analytics Applications is geographically hosted within the United States of America. Customer accepts the geographic location of such hosting.

d. Customer acknowledges and agrees that the Intellectual Property provisions of this Agreement apply in all respects to Customer's access to and use of the Sensus Analytics Applications.

e. Customer is responsible for validating the data analyzed by the Sensus Analytics Applications. Sensus makes no promises of improving Customer's operations or saving Customer money, nor is Sensus liable for any damages resulting from decisions made by Customer related to Customer's use of Sensus Analytics.

Exhibit B
Technical Support

1. Introduction

Technical SupporSensus Technical Services provides utility customers with a single point of contact for Tier 1 support of technical issues as well as any coordination of additional resources required to resolve the issue. Requests that require specialized skills are to be forwarded to a senior support enginer or Technical Advisor within the team for further analysis. If Technical Services has exhausted all troubleshooting efforts for the product type, the issue will escalate to the Engineering Support Team. Occasionally, on-site troubleshooting/analysis may be required. The preferred order of on-site support is:

a) The Customer (for assistance with the easiest and lowest time-consuming activities such as power on/power off). b) The local distributor.

c) Sensus employees or contracted personnel, if required to fulfill a contract commitment.

2. Support Categories

2.1. General questions regarding functionality, use of product, how-to, and requests for assistance on Sensus AMR, AMI, RF Network Equipment, Metering Products, Sensus Lighting Control, and Demand Response Management System (FlexNet Home).

2.2. Proactive reporting and resolution of problems.

2.3. Reactive reporting to isolate, document, and solve reported hardware/software defects.

2.4. Responding to service requests and product changes.

2.5. Addressing customer inquiries with printed or electronic documentation, examples, or additional explanation/clarification.

3. Support Hours

3.1. Standard Support Hours: Toll-free telephone support (1-800-638-3748 option #2) is available Monday thru Friday from 8:00 a.m. EST to 8:00 p.m. EST. After- hours, holiday and weekend support for Severity 1 and Severity 2 issues is available by calling 1-800-638-3748, option #8.

4. Support Procedures

4.1. Customer identifies an issue or potential problem and calls Technical Services at 1-800-638-3748 Option #2. The Customer Service Associate or Technical Support Engineer will submit a SalesForce ticket.

4.2. The Customer Service Associate or Technical Support Engineer will identify the caller name and utility by the assigned software serial number, city, and state based on where the call originated. The Customer Service Associate or Technical Support Engineer will require a brief description of the problem symptoms, or error messages depending on nature of the incident. The nature of the problem and severity levels will be mutually agreed upon by both parties (either at the time the issue is entered or prior to upgrading or downgrading an existing issue) using the severity definitions below as a guideline. The severity level is then captured into SalesForce for ticket creation and resolution processing. Any time during the processing of this ticket, if the severity level is changed by Sensus (in accordance with the severity descriptions below), the customer will be updated.

A. Severity Levels Description:

Sev1 Customer's production system is down. The system is unusable resulting in total disruption of work. No workaround is available and requires immediate attention.

Example: Network mass outage, all reading collection devices inoperable, inoperable head end software (e.g., FlexWare, Sensus MDM). Not able to generate billing files.

Sev2 Major system feature/function failure. Operations are severely restricted; there is a major disruption of work, no acceptable work-around is available, and failure requires immediate attention.

Examples: Examples: Network equipment failure (e.g., FlexNet Echo, FlexNet Remote, Base Station transceiver, or VGB); inoperable reading devices (e.g., AR5500, VXU, VGB, or CommandLink); head end software application has important functionality not working and cannot create export file for billing system operations.

Sev3 The system is usable and the issue doesn't affect critical overall operation.

Example: Minor network equipment failure (e.g., Echo/Remote false alarms or Base Station transceiver false alarms); head end software application operable but reports are not running properly, modification of view or some non-critical function of the software is not running.

4.3. The Customer Service Associate or Technical Support Engineer identifies whether or not the customer is on support. If the customer is not on support, the customer is advised of the service options as well as any applicable charges that may be billed.

4.4. Calls are placed in a queue from which they are accessible to Technical Support Engineers on a first-come-first-served basis. A 1st level Customer Service Associate may assist the customer, depending on the difficulty of the call and the representative's technical knowledge. Technical Support Engineers (Tier 1 support) typically respond/resolve the majority of calls based on their product knowledge and experience. A call history for the particular account is researched to note any existing pattern or if the call is a new report. This research provides the representative a basis and understanding of the account as well as any associated problems and/or resolutions that have been communicated.

a. Technical Services confirms that there is an issue or problem that needs further analysis to determine its cause. The following information must be collected: a detailed description of the issue's symptoms, details on the software/hardware product and version, a description of the environment in which the issue arises, and a list of any corrective action already taken.

b. Technical Services will check the internal database and product defect tracking system, to see if reports of a similar problem exist, and if any working solutions were provided. If an existing resolution is found that will address the reported issue, it shall be communicated to the customer. Once it is confirmed that the issue has been resolved, the ticket is closed.

c. If there is no known defect or support that defines the behavior, Technical Services will work with the customer to reproduce the issue. If the issue can be reproduced, either at the customer site or within support center test lab, Technical Services will escalate the ticket for further investigation / resolution.

If the issue involves units that are considered to be defective with no known reason, the representative will open a Special Investigation RMA through the SalesForce system. If it is determined that a sample is required for further analysis, the customer will be provided with instructions that detail where to send the product sample(s) for a root cause analysis. Once it is determined that the issue cannot be resolved by Tier 1 resources, the ticket will be escalated to Tier 2 support for confirmation/workarounds to resolve immediate issue. Technical Services will immediately contact the customer to advise of the escalation. The response and escalation times are listed in Section 5. At this time, screen shots, log files, configuration files, and database backups will be created and attached to the ticket.

5. Response and Resolution Targets.

A. Sensus Technical Support will make every reasonable effort to meet the following response and resolution targets:

Severity	Standard Target Response	Standard Target Resolution	Resolution (one or more of the following)
1	30 Minutes	Immediately assign trained and qualified Services Staff to correct the error on an expedited basis. Provide ongoing communication on the status of a correction (24 hours).	• Satisfactory workaround is provided. • Program patch is provided. • Fix incorporated into future release. • Fix or workaround incorporated into SalesForce Knowledge Base.
2	4 hours	Assign trained and qualified Services Staff to correct the error. Provide communication as updates occur (48 hours).	• Satisfactory workaround is provided. • Program patch is provided. • Fix incorporated into future release. • Fix or workaround incorporated into SalesForce Knowledge Base.
3	1 Business Day	30 business days	• Answer to question is provided. • Satisfactory workaround is provided. • Fix or workaround incorporated into SalesForce Knowledge Base. • Fix incorporated into future release.

6. Problem Escalation Process.

6.1. If the normal support process does not produce the desired results, or if the severity has changed, the issue may be escalated as follows to a higher level of authority.

6.1.1.1. Severity 1 issues are escalated by Sales or Technical Services to a Supervisor if not resolved within 2 hours; to the Manager level if not resolved within 4 hours; to the Director level if not resolved within the same business day; and to the VP level if not resolved within 24 hours.

6.1.1.2. A customer may escalate an issue by calling 1-800-638-3748, Option 2. Please specify the SalesForce ticket number and the reason why the issue is being escalated.

6.1.1.3. In the event that a customer is not satisfied with the level of support or continual problem with their products, they may escalate a given SalesForce ticket to Manager of Technical Services (1-800-638-3748, Option 2).

7. General Support Provisions and Exclusions.

7.1. Sensus provides online documentation for Sensus products, and all Sensus customers are provided access to this online database, which includes operation, configuration and technical manuals. The customer shall provide names and email accounts to Sensus so Sensus may provide access to the product documentation.

7.2. Specialized support from Sensus is available on a fee basis to address support issues outside the scope of this support plan or if not covered under another specific contract or statement of work. For example: specialized systems integration services or out of warranty network equipment repair

Exhibit C
Insurance Requirements

TYPE OF INSURANCE COVERAGE	COMMERCIAL GENERAL LIABILITY (CGL)	UMBRELLA	AUTO LIABILITY	WORKERS'S COMPENSATION	PROFESSIONAL LIABILITY (Errors and Omissions)
REQUIRED BY CONTRACT?	YES	YES	YES	YES	YES, For Professional Services
MINIMUM LIMITS OF COVERAGE	$1,000,000 per occurrence of claim, $2,000,000 aggregate (see comment 1 below)	$5,000,000 per occurrence (see comment 1 below)	$1,000,000 per occurrence (see comment 1 below)	Workers Compensation to Statutory Limits; $1,000,000 Employers' Liability limit	$1,000,000 per occurrence or claim, $2,000,000 aggregate with a reporting period of no less than 2 years (if applicable, see comment 2 below)
MINIMUM BEST'S GUIDE RATING/OTHER REQUIREMENTS	A /AVII	A /AVII	A /AVII		A /AVII
ADDITIONAL INSURED? Minimum language if required: "COL, LUB, its elected officials, directors, officers, agents, employees, and volunteers are additional insureds"	YES, (see comment 3 below)	YES, (see comment 3 below)	NO	NO	NO
WAIVER OF SUBROGATION?	NO	NO	NO	YES	NO

COMMENTS

1) Minimum Limits are subject to change based upon scope of project. Coverage must be primary and non-contributory.

2) Coverage only if required by contract. Reporting periods are subject to change based upon scope of project.

3) Certificate of insurance must be attached and specifically name Customer – Blanket endorsement OK as long as contract is in effect.

Xylem Privacy Statement

Thank you for visiting the Xylem website. Xylem and its operating divisions and subsidiaries (collectively "Xylem", "We", "Us", or "The Company") maintain and operate this and other websites (collectively, the "Xylem Sites" or "Sites") and are committed to safeguarding your privacy.

This Privacy Statement is meant to help you understand what data we collect, how we use it, and what safeguards are in place to protect your data on the Sites. This Privacy Statement also applies to information collected offline through trade shows, seminars, conferences, or through other activities.

SUMMARY OF KEY POINTS

WHAT INFORMATION DOES XYLEM COLLECT?

Xylem collects the following types of information about you when you visit our Sites (collectively, "Personal Data") or through the offline means described above:

- If you visit our sites, we automatically collect your domain name and/or IP address;
- If you communicate with us by email, we collect your email address;
- If you seek employment with us and provide us with information through offline means, we collect information in connection with employment opportunities, through our online recruiting tool.
- Otherwise, Personal Data is only collected on Xylem Sites or via offline means if you voluntarily choose to provide it. Such Personal Data includes your name and/or that of your employer, title, address, telephone number and email address as well as account or transaction information collected as part of our business relationship with you.

HOW THE COMPANY USES YOUR PERSONAL DATA

We collect your Personal Data in order to:

- Conduct our business, including providing you the products or services you requested
- Send you marketing communications about new or updates to our existing products and services
- Comply with our legal obligations
- Maintain and improve our Sites and tailor the user experience
- Protect the security of you and the Sites
- Provide customer service and otherwise administer our business relationship with you

As required by applicable law, we rely on several different legal bases to collect, use, and share your Personal Data:

- **Necessity to Perform Contract with You** - we need to process your Personal Data to provide our products and services, ensure products and services are working as they should, answer questions and requests from you, manage our business relationship with you and provide customer support;
- **Compliance with Legal Obligations** - we need to process your Personal Data to comply with relevant laws, regulatory requirements and to respond to lawful requests, court orders, and legal process;
- **Consent for Direct Marketing Communications** - we rely on your consent to send you direct marketing, which you can unsubscribe from at any time by clicking the unsubscribe link in the relevant communications or contact us as detailed below; and
- **Based on Legitimate Interests** - we process your Personal Data to protect your security and the security of the Sites; to detect and prevent fraud; to protect and defend the rights or property of others, or our own rights and interests; and to maintain and improve the user experience.

We do not use automated decision-making, or perform data profiling, that is, in a way that produces legal effects concerning you or significantly affects you.

You are not required to provide all Personal Data identified in this Privacy Statement to use our Sites or to interact with us offline, but certain functionality will not be available if you do not provide certain Personal Data. If you do not provide certain Personal Data, we may not be able to respond to your requests, perform a transaction with you, or provide you with marketing that we believe you would find valuable.

ARE COOKIES USED ON XYLEM SITES?

In addition to a domain name and/or IP address, Xylem collects information about you automatically when you visit our Sites. The information that is automatically collected does not include your name, address, telephone number, or email address. This information tells us such things as how many users visited our site and the pages they have accessed. By collecting this information, we learn how to best tailor our Sites for our current and future visitors. To collect this information, we use a number of different analytics, media optimization tools, analytics tags and pixel tracking activity through 'cookie' technology or with 'web beacons,' as explained below:

- **Cookies**
  A cookie is a small text file that is placed on your computer's hard drive by your web browser when you first visit the Site. Xylem uses cookies to both ensure functioning of the site as well as record user-specific information on what pages you visited as well as record past activities on our site in order to provide better service when visitors return to our site. There are two kinds of cookies that Xylem uses:

  Session Cookies - also called a transient cookie, a session cookie stores information about a user on its temporary memory so that it can remember something about you when you are visiting that site. Session cookies do not collect information from your computer and are erased when you close your Web browser.

  Persistent Cookies - Also called a permanent cookie, or a stored cookie, a persistent cookie collects identifying information about the user including web-surfing behavior and user preferences for a specific website. Persistent cookies are set with an expiration date and stored on your hard drive until it expires or until you delete from your computer.

  In some instances, cookies may enhance your online experience by saving your preferences while you are visiting a particular site. Most Internet browsers accept cookies automatically, but usually you can change the settings of your browser to erase cookies or prevent automatic acceptance altogether if you prefer. Please be advised that if you choose to not allow browser cookies, you may not be able to take full advantage of all the website features offered by Xylem.

- **Web Beacons**
  Certain pages on our website(s) contain 'web beacons' also known as internet tags, pixel tags and clear GIFs. A web beacon is a small graphic image placed on the web page designed to allow Xylem to monitor incoming traffic and obtain information such as the IP address of the computer that downloaded the page on which the beacon appears as well as the URL of the page, the time the page was viewed, the type of browser used to view the page, and the information in cookies set by the third party. We also use web beacons to recognize a unique cookie on your web browser, which enables us to learn which advertisements brought you to our website(s).

In order to help gather more information about site usage, all Xylem Sites use advertising, analytics, media cookies and tags powered by tools such as Yahoo, Google, Adobe, Omniture, Rubicon and others. Additionally, the Sites also use Google Analytics, a web analytics service provided by Google, Inc. ("Google"), which also uses cookies. The information generated by the cookie about your use of the website

xylem

(including your IP address) is transmitted to and stored by Google on servers in the United States. Google uses this information for the purpose of evaluation activity, compiling website reports and providing other services relating to website activity usage. Google may also transfer this information to third parties where required to do so by law, or where such third parties process the information on Google's behalf.

The information collected by all cookies and web beacons includes general information about your computer settings, your connection to the Internet, the operating system and platform, IP address, your browsing patterns and timings of browsing on the site and geographical location. It does not contain your name, address, telephone number, or email address.

In order to help gather more information about site usage, xyleminc.com and its affiliated sites use advertising, analytics, media cookies and tags, including:

Collection of data through Internet Service provider (ip address, time, location, browser, etc)
Cookies
contact form
transfer of personal data
Google Analytics
Facebook
Twitter
Google +1
LinkedIn
Xing
YouTube
Google Adsense
Google Analytics Remarketing
Comments in a blog
Google AdWords and conversion tracking
BrightEdge
Lead Forensics

LinkedIn Insights
Marketo Tracking
Mouseflow

To learn more about certain cookies used for interest based advertising by third parties, including through cross-device tracking, and to exercise certain choices regarding such cookies, please visit the Digital Advertising Alliance, Network Advertising Initiative, Digital Advertising Alliance-Canada, European Interactive Digital Advertising Alliance or your device settings for if you have the DAA or other mobile app.

Do-Not Track: At this time, our Site is not configured to honor browsers' "Do Not Track" signals.

HOW THE COMPANY SHARES YOUR PERSONAL DATA WITH THIRD PARTIES

- If we are requested to disclose Personal Data by law, court of law, or as requested by a **governmental or law enforcement authority**, we may do so.
- We may pass your Personal Data or details of your use of the web site to **other companies within the Xylem group of companies**.
- We may share information as necessary to **prevent fraud or other illegal activities**, such as willful attacks on Xylem's information technology systems, and **as necessary to establish or preserve a legal claim or defense**.
- Xylem **does not** sell to third parties any Personal Data derived from a visitor's visit to or use of a Xylem Site except as part of the **sale of a subsidiary or of all or substantially all of the assets of an operating division**, which subsidiary or division collected or uses such information in the ordinary course of business.
- Xylem takes appropriate steps to keep Personal Data confidential and only discloses this information to personnel in a Xylem firm or a third party that needs to have access to the information for **legitimate business purposes**. We may make your information available to our distributors, sales representatives or other business affiliates so that they may respond to a visitor's inquiry or provide information about our own or related goods or services that we believe support your business needs.

LINKS TO THIRD-PARTY WEBSITES

Occasionally, Xylem Sites may provide links to the web sites of our distributors, sales representatives or other business affiliates. In these situations, we are not responsible for the content or privacy practices they employ and encourage you to read their own privacy disclosures.

HOW THE COMPANY STORES, TRANSFERS, OR PROCESSES YOUR PERSONAL DATA ACROSS BORDER

As permitted by applicable law, Xylem may transmit the Personal Data we collect on Xylem Sites to representatives, global affiliates, and service providers in the United States or other countries where we do business that are outside your home country, and have different standards of data protection than your home country. We provide appropriate protections for cross-border transfers as required by law, including information transferred to third parties. With respect to such transfers from the European Economic Area ("EEA") to the United States and other non-EEA jurisdictions, we may rely on European Union ("EU") Model Clauses and Binding Corporate Rules and/or the need to process your information in order to provide the requested services (e.g., performance of a contract) to transfer your Personal Data. As permitted by applicable law, you may request details about the suitable safeguards we have in place by contacting us as described below.

YOUR RIGHTS

As permitted by applicable law, you may have the right to obtain confirmation of the existence of certain Personal Data relating to you, to verify its content, origin, and accuracy, as well as the right to access, review, port, delete, or to block or withdraw consent to the processing of certain Personal Data (without affecting the lawfulness of processing based on consent before its withdrawal), by contacting us at datasubject.requests@xyleminc.com Please note that we may need to retain certain Personal Data as required or permitted by applicable law.

YOUR CHOICES

You have the following choices regarding our use and disclosure of your Personal Data:

- **Marketing Communications.** If you no longer wish to receive any marketing communications, remain on a mailing list to which you previously subscribed or receive any other communication from Xylem, please follow the unsubscribe link in the relevant communications or contact us using the link below.
- **Cookies and Similar Technologies.** Please review your browser or computer settings for certain cookies and see above to exercise certain choices regarding cookies.

HOW THE COMPANY RETAINS YOUR PERSONAL DATA

- Xylem only retains your Personal Data for the minimum amount of time necessary to accomplish the purpose for which it was collected.

HOW THE COMPANY PROTECTS THE SECURITY OF YOUR INFORMATION

Xylem uses industry-standard encryption technologies when transferring and receiving data exchanged with our site. We have appropriate security measures in place in our physical facilities to protect against loss, misuse or alteration of information that we have collected from you at our site. We also employ reasonable technologies to keep the Personal Data you provide on Xylem Sites secure.
Xylem maintains a Data Security Incident Response Plan that would provide notification as required by applicable law in the event of an unlawful or unauthorized disclosure of personal data.

CHANGES TO OUR PRIVACY STATEMENT

Xylem may update this Privacy Statement from time to time as our business (e.g. merger/acquisition) and services change, or as required by law. The effective date of our Privacy Statement is posted above, and we encourage you to visit our Sites periodically to stay informed about Xylem's privacy practices. We will post the updated version of the Privacy Statement on our Site, and ask for your consent to the changes if legally required to do so.

HOW YOU CAN CONTACT US

- If you have any questions regarding this Privacy Statement or our privacy practices in general, please contact our Director of Global Trade and Data Privacy Compliance with any concerns or inquiries via phone at +1-914-323-5700 or via email at data.privacy@xyleminc.com
- You may also have a right to lodge a complaint with a supervisory authority.

Exhibit E: Additional Terms of Agreement

Exhibit E

Additional Terms of Agreement

1. Public Records. Contractor acknowledges and agrees that Owner is subject to Chapter 132 of the North Carolina General Statutes, the Public Records Act (the "Act"), and that this Agreement, including all attachments and exhibits thereto, shall be a public record as defined in such Act, and as such, will be open to public disclosure and copying.

2. E-Verify. E-Verify is the federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to federal law. Contractor shall ensure that Contractor and any subcontractor performing work under this Agreement: (i) uses E-Verify if required to do so by North Carolina law; and (ii) otherwise complies with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. A breach of this provision by Contractor will be considered a breach of this Agreement, which entitles Owner to terminate this Agreement, without penalty, upon notice to Contractor.

Exhibit F: Route Acceptance Form

ROUTE ACCEPTANCE DOCUMENT

SYSTEM READ PERFORMANCE TEST

Customer Name _____

Route Number/Name _____

This test is designed to prove that the system performance has reached a level of 98.5% or better successful reads during the defined acceptance period. In order to accomplish phased acceptance, system read percentage testing should be calculated on an individual route basis.

The system read percentage is determined by dividing the number of installed meters in the route being tested by those that have successfully provided a reading during a three 3-5 day reading window.

The 98.5% read percentage parameters will be confirmed as a result of the propagation study prepared for the customer. Completed propagation studies that identify areas of non-coverage that would reduce the percentages below 98.5% will be communicated to the customer and new read percentages will be mutually agreed upon or additional infrastructure will be identified to achieve these numbers.

Note: This is intended to be a phased acceptance test and routes previously tested with a successful result will not be tested again.

Comments:

Routes below has currently heard and passing current reads for a billing window of 3 days and has meet our acceptance standards at Ferguson.

Route Read Percentage Above_____

Utility Representative Signature _____

Ferguson Signature _____

Exhibit G: Use Case and Future System Architecture

Exhibit G: Use Case and Future Architecture

Ferguson acknowledges receipt of Exhibit G: Use Case and Future Architecture, but the parties understand that nothing in this Exhibit related to future architecture shall be construed to be included in Ferguson's scope of work under this Agreement, as any such work related to future architecture will be subject to a separate agreement.

Union County Public Works

AMI Use Cases and System Architecture

(Jan 2021)

Prepared by Dewberry **Ver 1.0.011521**

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Introduction

Dewberry conducted a high-level requirements workshops to understand the use cases and review existing system architecture. This work effort included detailed workshops with key stakeholders from the following divisions. Meter Services and Fiscal; Customer Service; Water Wastewater Maintenance; Engineering and Planning and Resource Management. The purpose of these workshops is to identify the data sources (Systems of Record), Data flow across divisions, business process analysis to identify potential redundancies/gaps, establish uniform data schema, and potentially identify key fields to link the current Asset data with future AMI to harness necessary business intelligence from the legacy data to meet UCPW business requirements and support continuous and sustainable data driven decision making for the UCPW stakeholders.

This document provides three (3) exhibits that summarize the workshop discussions that took place during the AMI Workshops in December, 2020. The exhibits will demonstrate the following:

1) the priorities of the AMI system/software functions and benefit within each key group at UCPW
2) use cases that details the high-level scenarios for how UCPW will use/benefit from AMI within each key group and
3) how key information needs to flow between groups and how the systems need to be architected to meet these needs via mapping.

These exhibits can be used to help Planning & Resource Management prioritize AMI system components to include in their upcoming purchase contract with their AMI vendor. In addition, the exhibits can be used to help map out future IT architecture needs.

AMI System Modules

The following table summarizes the key Sensus components and each key group's ranking of the components. The qualitative ranking scores are based on a scale of N/A 0 'blank', Low 1 🟥, 2 🟨, High 3 🟩.

Component	Description	Billing Team	Customer Service Team	Meter Services	Maintenance	Wastewater	Water Distribution
Regional Network Interface (RNI) - Core Package							
Communication	Manages traffic from endpoints; routing optimization; route analyzer; encryption; network performance reports and troubleshooting aids; management of RF equipment	2 🟨	1 🟥	3 🟩	1 🟥	1 🟥	1 🟥
Data Collection	Missing read and duplicate reads management; 60-day temp. storage	2 🟨	2 🟨	3 🟩	1 🟥	1 🟥	1 🟥
Application Integration	To Sensus Analytics applications; enables 3rd party application integration; batch CMEP file export; real-time access through MultiSpeak	2 🟨	1 🟥	3 🟩	1 🟥	1 🟥	1 🟥

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Component	Description	Billing Team	Customer Service Team	Meter Services	Maintenance	Wastewater	Water Distribution
Endpoint Management	Utility concurrent support; remote configuration; remote firmware updates; reports, metrics and troubleshooting	2	1	3	1	1	1
Sensus Analytics (SA) - Essential Package							
Device Access	**Overall**	3	3	3	1	1	1
Device Access	Search meters details by using data imported from the billing system	3	3	3	1	1	1
Device Access	View meter interval or register reads	3	3	3	1	1	1
Device Access	Save data to CSV, PDF and Spreadsheet	3	3	3	1	1	1
Device Access	View current and historical data	3	3	3	1	1	1
Device Access	Compare current usage to historical distribution averages	3	3	3	1	1	1
Device Access	See meter locations on a map view	1	2	3	2	3	3
Device Access	Event notifications forwarded to a Customer employee	3	3	3	2	2	2
Device Access	View details about a meter (dependent on the data integrated from other systems)	3	3	3	1	1	2
Meter Insight	**Overall**	2	2	3	1	1	1
Meter Insight	# of active meters			3			
Meter Insight	# of orphaned meters			3			
Meter Insight	# of inactive meters	3	3	3			
Meter Insight	# of stale meters			3			
Meter Insight	# of no read meters			3			
Meter Insight	# of max. threshold exception meters			3			
Meter Insight	# of min threshold exception meters			3			
Meter Insight	# of unknown radios			3			
Report Access	**Overall**	3	2	3	1	1	1
Report Access	Master Route Register Reads	3					
Report Access	Meter Route Intervals Reads	3					
Report Access	Master Route No Readings	3					
Report Access	Consumption Report	3					
Report Access	Zero Consumption for Period	3					
Report Access	Negative Consumption	3					
Report Access	High Low Exception Report	3					
Report Access	Consumption vs Previous Reported Read	3					
Report Access	Consumption Exception 24-hour Report	3					
Report Access	Endpoint Details	3					
Report Access	Orphaned Meters	3					
Report Access	Billing Request Mismatch	3					
Report Access	All Alarms Report	3					
Billing Access	**Overall**	3	1		1	1	1
Billing Access	Create billing export files formatted to work with billing system	3					
Billing Access	Receive billing request files from billing system	3					

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Component	Description	Billing Team	Customer Service Team	Meter Services	Maintenance	Wastewater	Water Distribution
Billing Access	Provide repository of past billing files	3					
Billing Access	Store billing files for a period of 3 years	3					
Billing Access	Create test files before export	3					
Billing Adaptor	Maps the extraction of billing data to enable integration with billing system	3					
Data Store	**Overall**	3	1		1	1	1
Data Store	Store Intervals, Registers, and Alarms						
Data Store	Data available online for reports and analysis						
Data Store	Data retained for 3 years						
SA - Enhanced Package							
Alarm Insight	**Overall**	1	3	3	1	1	1
Alarm Insight	Summarize and filter alarms by a date range		3	3			
Alarm Insight	Review all alarm types on a single screen		3	3			
Alarm Insight	Filter out the alarms not wanted on the screen		3	3			
Alarm Insight	Visualize alarm totals		3	3			
Alarm Insight	View trending alarms over time		3	3			
Alarm Insight	Click to drill down alarm		3	3			
Alarm Insight	Click to analyze a specific event on a particular device		3	3			
Alert Manager	**Overall**	1	3	3	1	1	1
Alert Manager	Create alarm groups with notifications		3				
Alert Manager	Manage alarm groups		3				
Alert Manager	Select notification method		3				
Alert Manager	Create an alert from the available system events from smart points and assign to a group		3				
Alert Manager	Monitors the system's meters for events and notifies group		3				
Customer Portal (CP)							
Standard Features	**Overall**		3	3			
Standard Features	Self-serve sign-up						
Standard Features	Dynamic browser sizing						
Standard Features	Access to your bill and water usage		3				
Standard Features	Customizable logo and background images						
Standard Features	Capable of supporting multiple languages						
Standard Features	Provides links to bill payment and support web locations						
Standard Features	Supports multiple accounts and multiple meters						
Standard Features	Supports multiple Units of Measure						
Standard Features	Exportable data						
Standard Features	Alerts and Notifications		3				
Standard Features	Multiple alert recipient suport						
Standard Features	Admin Management of Widgets Displayed						

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Component	Description	Billing Team	Customer Service Team	Meter Services	Maintenance	Wastewater	Water Distribution
Additional Features	**Overall**		3	1			
Additional Features	Single Sign-on						
Additional Features	Water usage down to 15-minute intervals						
Additional Features	Presentation of Tier Limits and Tier Alerts						
Dashboard Page Widgets	**Overall**		3				
Dashboard Page Widgets	Current Billing Cycle View Widget						
Dashboard Page Widgets	Alerts						
Dashboard Page Widgets	Notifications						
Dashboard Page Widgets	Billing Cycle Threshold						
Add-on Dashboard Page Widgets	**Overall**		3				
Add-on Dashboard Page Widgets	Watering Schedule						
Add-on Dashboard Page Widgets	Bill Estimate						
Add-on Dashboard Page Widgets	Sandbox						
Usage Details Features	**Overall**		3	3			
Usage Details Features	Consumption in various time periods						
Usage Details Features	Exportable to other file formats						
Usage Details Features	Temperature and rainfall data						
Meters Features	**Overall**		3	3			
Meters Features	Meter information including meter #, address and current reading						
Meters Features	Meter nicknames						
Meter Tab Additional Features	Google Maps view of meter location		3	3			
Settings – Usage Alerts	**Overall**		3	3			

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Component	Description	Billing Team	Customer Service Team	Meter Services	Maintenance	Wastewater	Water Distribution
Settings – Usage Alerts	Billing Cycle Usage Alert						
Settings – Usage Alerts	Daily Usage Alert						
Settings – Usage Alerts	Vacation Alerts						
Settings – Usage Alerts Additional Features	Tier Alerts		3 ■				
Alert Recipients Features	**Overall**		3 ■	3 ■			
Alert Recipients Features	Editable selection of alerts to receive						
Alert Recipients Features	Additional Recipient management						
User Settings Features	**Overall**		3 ■	3 ■			
User Settings Features	Email address						
User Settings Features	Points of contacts						
User Settings Features	Additional accounts						
User Settings Features	Password management						

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AMI Use Cases

Each key group also identified how each AMI feature can add value to their work functions and developed several use cases on how AMI can improve their job functions, which are outlined in the table below.

AMI Feature	Key Group	Value UCPW is looking for	Use Case
RNI - Communication	Meter Services	More proactive approach to managing radios and hardware	Early notification of meter communication issues
RNI – Data Collection	Meter Services	Can quickly correct misreads	▪ Check misreads report to identify misreads ▪ Check long-term misreads report to identify systemic meter/radio problems
RNI – Endpoint Management	Meter Services	Communication done remotely; no need for rolling trucks	Can troubleshoot from a distance
SA – Essential Package – Device Access	Meter Services	Increased coordination with customer service by utilizing same good data	Coordinating issues with customer service and/or billing
SA – Essential Package – Device Access	Billing Team	Proactive communication around water usage	Working with customers on water usage
SA – Essential Package – Device Access	Customer Service	Proactive communication when water usage is above historical	Discussing abnormal water usage with customer
SA – Essential Package – Report Access	Meter Services	Early look at data and reads makes customer interaction easier; reduce escalation (burden of proof is shifted to customer)	Can track customer interaction versus water usage
SA – Essential Package – Report Access	Billing Team	Makes for more accurate and timely billing, effective working unit, conflict resolution with customer	▪ Zero consumption - check within the same month as they come in vs all at one time, billing mismatch will indicate where config/setup is incorrect ▪ Compare last month

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AMI Feature	Key Group	Value UCPW is looking for	Use Case
			daily usage to previous year on the bill
SA – Enhanced Package – Alarm Insight	Meter Services	Proactive customer interaction	Leak detection and can contact customer
SA – Enhanced Package – Alarm Insight	Customer Service/ Billing Team	Move organization from reactive to proactive customer relations	Enhanced workflow; working with customers on usage and how to set alerts/alarms; seeing issues when they happen; promoting customer use of portal
SA – Enhanced Package – Alert Manager	Customer Service	Targeting specific customers with alert unique to their location (targeted messaging)	High priority customers, notify about water outages, boil notices, planned outages
Customer Portal – Standard Features	Customer Service	Move into different level of utility, improves accessibility and reaction time, educate customers, tools and data present, reduce customer conflict, if customers have access to their info it should mean less questions and interaction	Compare customer calls to portal usage

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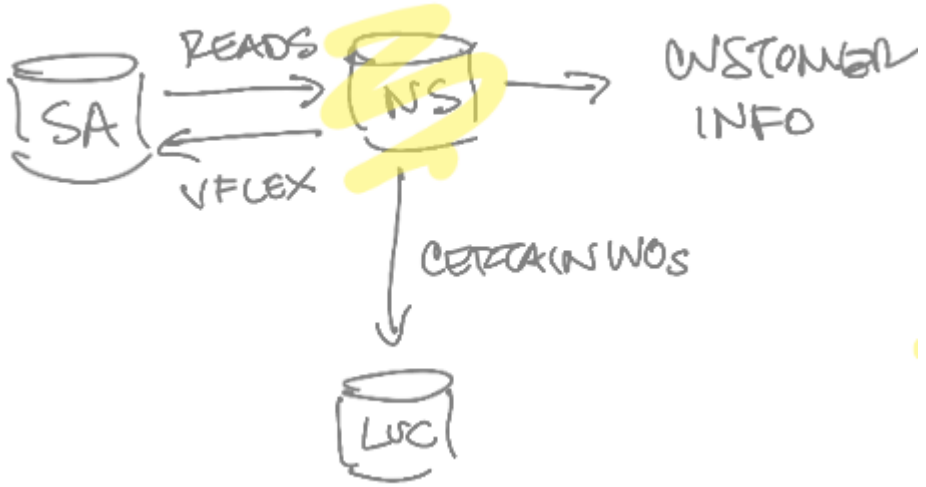
Data Architecture

The following graphics depict how various systems will be used when implementing Sensus AMI and the critical information that is needed from across the systems. This information begins to define what data should flow into a UC master data management hub – termed "the Hub". The fields likely to be used as unique linkages between systems are highlighted.

Northstar (CIS)

System of record Information
Address, Account number, Northstar Service Orders, Phone and contact information, Meter ID, Meter specific information, Account information

Key fields
meterID, AcctNo, CustNo, Name, Address, Service Orders



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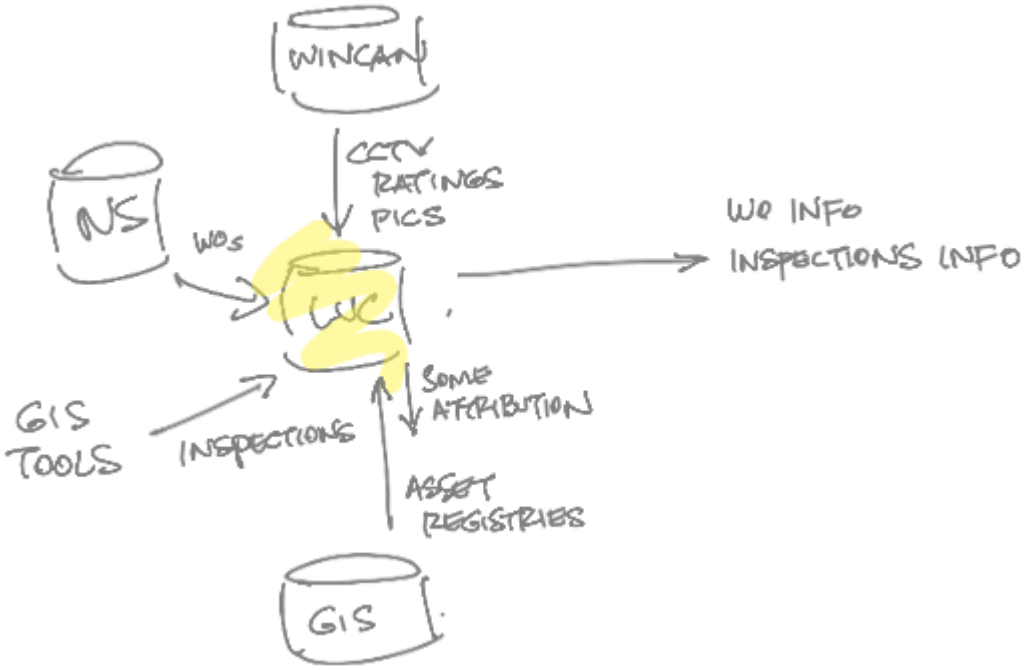
Lucity (CMMS)

System of record Information
Work Order information, Inspections information

Key fields
Meterset – AssetID, XY coordinates, MetersetID, MeterID, AMRID
Meter device – MeterID, MetersetID

- Problem, task, Type components (for Business Intelligence and status)
- Labor Hours (planning and budget)
- Aging (workload planning)

GIS key fields – AssetID (meter box/vault), XY, AcctNo



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AMI (Sensus Analytics)

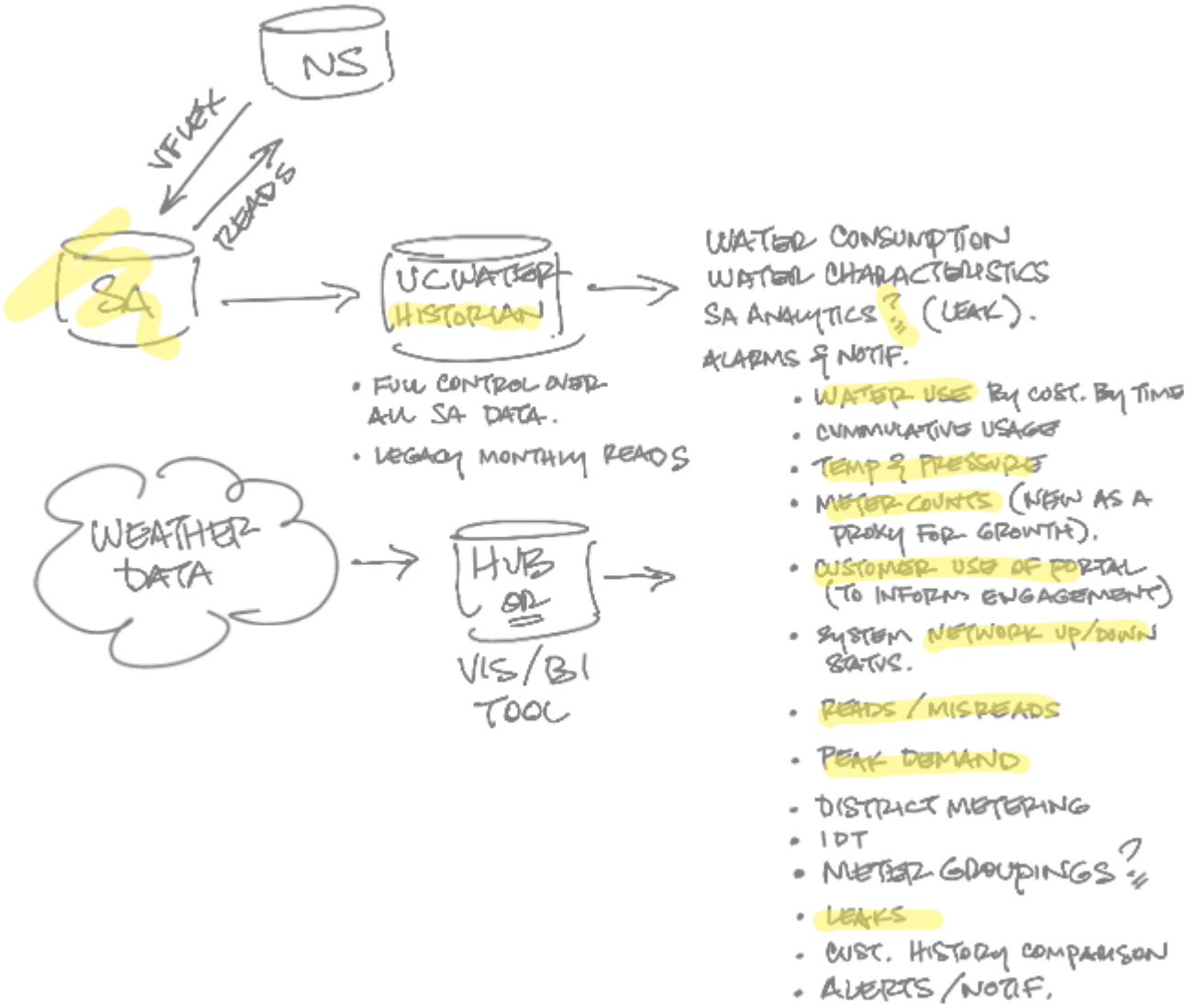
System of record Information
Meter read information, Meter status, sensor information

Key fields
MeterID, ERT, Status, Read, Read History, XY

Tracking Potential
- Water meter reads
- Pressure
- Flow meters (types)
- Temperature
- Vehicles
- Field staff location
- Outage information
- SSO's
- Stream/rain gage
- Planned outages
- Work Order activity (status/type)
- Road closures
- Valve shutoffs/state
- SCADA status/alarms

Future Opportunities
- Operational status
- Activities
- Outage information (time, affected, issue)
- Operational dashboard (regulatory, management, operations)

***Outside SA



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The Hub (master data backend)

Trusted Source for business data

Business data needed across the organization flows from systems of record into the Hub

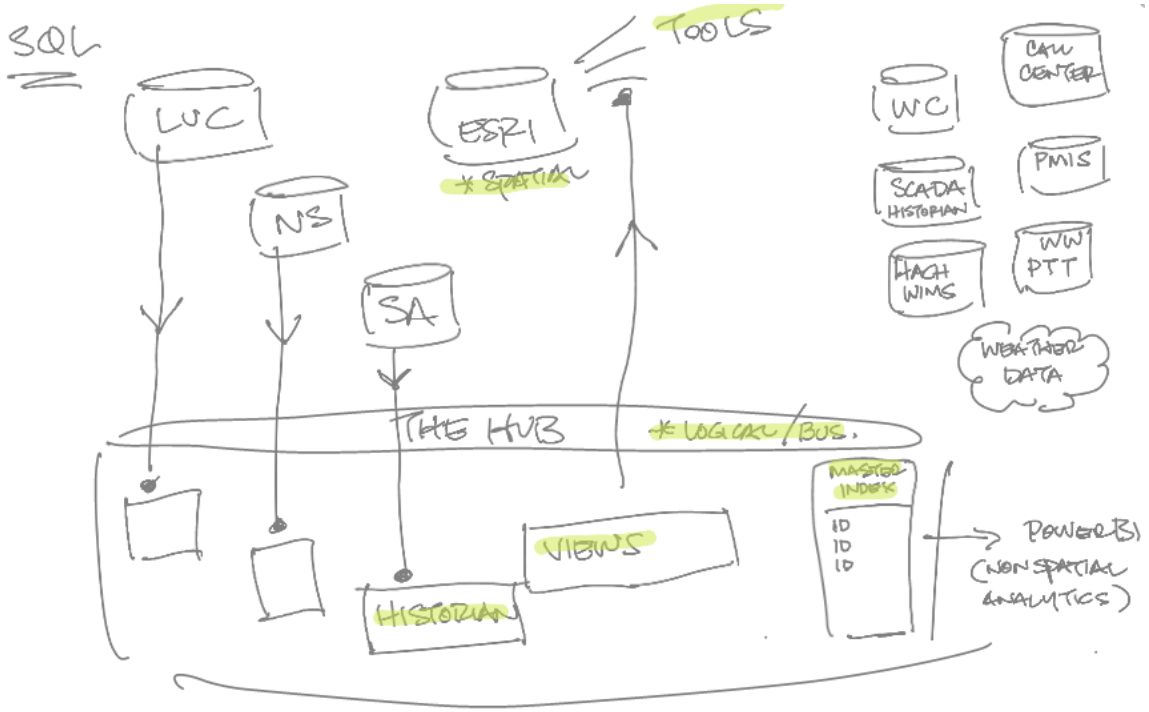
Synchronization/publication/subscription strategy ensures information reflects current operations

Logical and business layers separated for data and tools

Database best practices used to index, view, and bin data to optimize performance and never hit operations systems for business analytics needs

GIS and BI tools access data to visualize/analyze for planning, insights, and decisions

Additional systems to incorporate into the Hub shown at the right



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Proposed Schedule
Subject to change
June, 2021

Title	Start date	Due date	Predecessors
Implementation	08/01/2021	08/01/2023	
Customer Portal		06/01/2021	
Base Station Network		12/31/2021	
SaaS Implementation and Integ...		12/31/2021	
AMI Data Management (Data ...	08/16/2021	07/14/2022	13FS
Meter Infrastructure		12/30/2022	

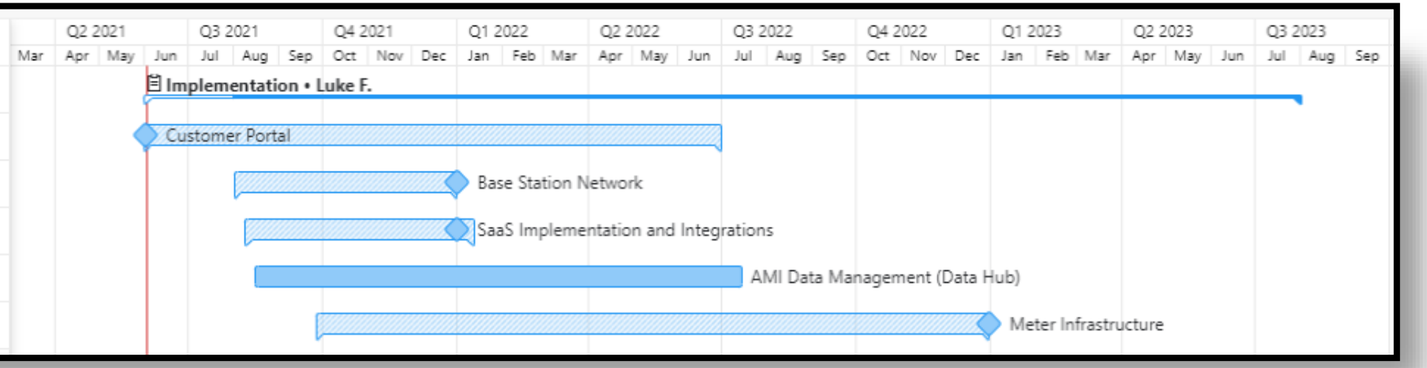
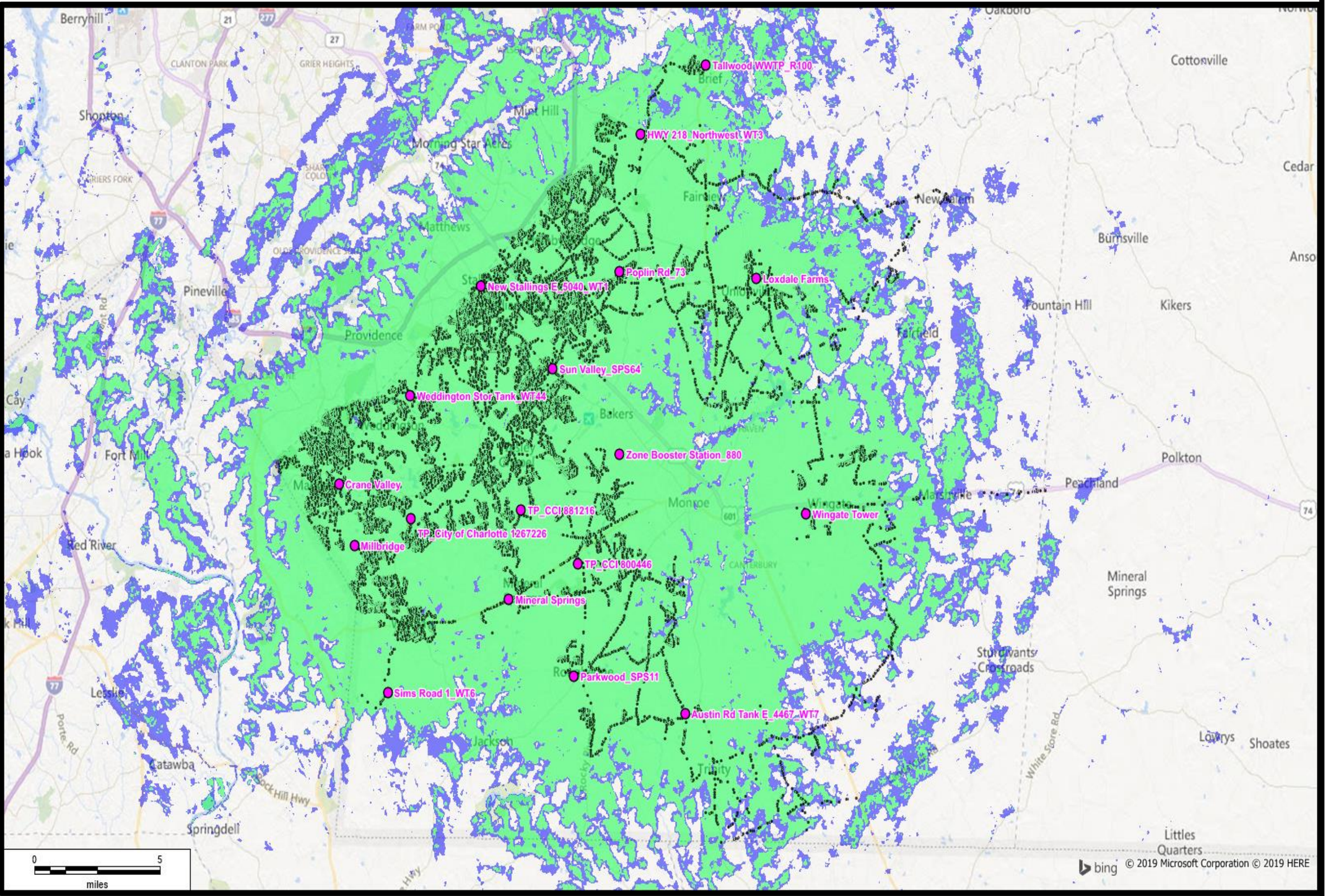


Exhibit H: Propagation Study and Territory



This propagation study is based on actual information provided by the utility pertaining to meter type, Smart point Location, potential antennae height on structure, structure height, and structure location. Any changes, deletions and/or additions that are not provided to the design engineers during the creation of this design may result in a study that does not correlate to actual field conditions.

FlexNet Design

Propagation Analysis

8289 - Union County, NC
Monroe, NC

RF Engineer: Joel Sedeski
Date: 10/24/2019

Proposed Site Details

Total Site Locations: 18
Total Base Station Counts: 19
M400B2 = 18
R100 Collector = 1

Design Factors

Flex Net Version: V1
Endpoint Type: Water
Smart point Location: Pitset AL
Attenuation: 10dB

	Count	%
Total Endpoints Covered	48,725	99.60%
2 Way Coverage	47,992	98.10%
1 Way Coverage	733	1.50%
Total Endpoints Analyzed	48,921	

LEGEND

- 2 Way Coverage
- 1 Way Coverage
- Site Location
- Endpoint Location

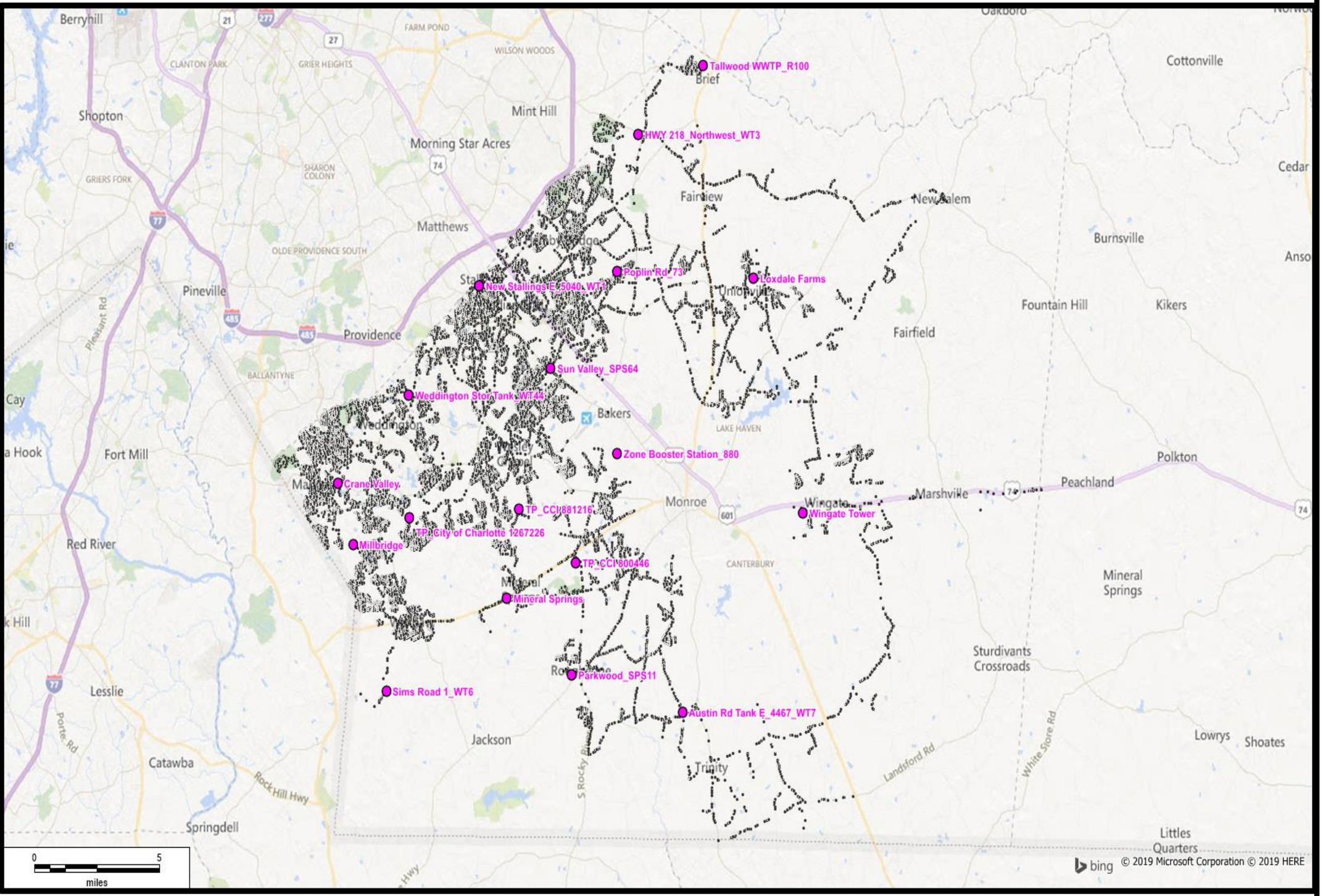
SENSUS a xylem brand

FlexNet Design

Base station and Meter Locations

8289 - Union County, NC
Monroe, NC

RF Engineer: Joel Sedeski
Date: 10/24/2019



LEGEND

- Site Location
- Endpoint Location

This propagation study is based on actual information provided by the utility pertaining to meter type, Smart point Location, potential antennae height on structure, structure height, and structure location. Any changes, deletions and/or additions that are not provided to the design engineers during the creation of this design may result in a study that does not correlate to actual field conditions.

SENSUS a xylem brand

FlexNet Design

Base station and Clutter

8289 - Union County, NC
Monroe, NC

RF Engineer: Joel Sedeski
Date: 10/24/2019

Tallwood WWTP_R100
HWY 218_Northwest_WT3
Poplin Rd_73
Loxdale Farms
New Stallings E_5040_WT1
Sun Valley_SPS64
Weddington Stor Tank_WT44
Zone Booster Station 880
Crane Valley
TP_CCI 881216
TP_City of Charlotte 1267226
Millbridge
Wingate Tower
TP_CCI 800446
Mineral Springs
Parkwood_SPS11
Sims Road 1_WT6
Austin Rd Tank E_4467_WT7

0 5
miles

LEGEND

- Site Location
- High Density Urban
- Commercial - Industrial
- Suburban Few Trees
- Suburban With Trees
- Airports
- Major Transportation
- Open
- Grass - Agriculture
- Forest
- Wetland
- Inland Water
- Sea Water

This propagation study is based on actual information provided by the utility pertaining to meter type, Smart point Location, potential antennae height on structure, structure height, and structure location. Any changes, deletions and/or additions that are not provided to the design engineers during the creation of this design may result in a study that does not correlate to actual field conditions.

SENSUS
a xylem brand

UNION COUNTY, NORTH CAROLINA
PUBLIC WORKS PROJECTS – 2022
CAPITAL PROJECT ORDINANCE #292

NOW, THEREFORE BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF UNION COUNTY, NORTH CAROLINA:

Section I. That for the purpose of providing funds, together with any other previously appropriated available funds, for the following project:

Advanced Metering Infrastructure

Including the assessment of existing metering infrastructure, development of AMI requirements, financial analysis and business case development, and project planning and implementation, an additional $1,000,000 is hereby appropriated for a total project cost of $16,600,000.

Section II. That it is estimated that the following revenues will be available during the construction period to meet the appropriations in Section I, as set forth in the following schedule:

Interfund Transfer from:	
Water and Sewer Fund	$4,100,000
Revenue Bond Proceeds	$10,635,000
Revenue Bond Premiums	$1,865,000

Section III. The attached CPO #292 chart is incorporated herein showing appropriations to date, additions as of this capital project ordinance, and the total appropriation.

Section IV. That the finance officer is authorized from time to time to transfer as a loan from the General Fund or unspent County proceeds in the Capital Projects Funds, cash in an amount necessary to meet obligations until such time as financing is arranged, at which time repayment will be made and the finance officer is authorized to sign the Declaration of Official Intent to Reimburse Expenditures as required by Internal Revenue Service regulations.

Section V. This capital project ordinance is adopted and effective this 15th day of November 2021.

ATTEST:

_____
Lynn G. West,
Clerk to the Board

_____
Richard B. Helms, Sr.
Chairman, Union County Board of Commissioners

CAPITAL PROJECT ORDINANCE AMENDMENT

BUDGET **Public Works CIP Fund** REQUESTED BY **Public Works**

FISCAL YEAR **FY 2022** DATE **November 15, 2021**

PROJECT SOURCES				**PROJECT USES**			
Source Description and Code	Project To Date	Requested Amendment	Revised Project	Project Description and Code	Project To Date	Requested Amendment	Revised Project
IFT from W&S Operating Fund	3,100,000	1,000,000	4,100,000	Advanced Metering Infrastructure	15,600,000	1,000,000	16,600,000
Revenue Bond Proceeds	10,635,000	-	10,635,000				
Revenue Bond Premiums	1,865,000	-	1,865,000				
Total	15,600,000	1,000,000	16,600,000	**Total**	15,600,000	1,000,000	16,600,000

EXPLANATION: Appropriate funds to purchase water meters, AMI transmitters, base stations, and associated apparatus, supplies, and equipment.

DATE: APPROVED BY:

Bd of Comma/County Manager
Lynn West/Clerk to the Board

FOR FINANCE POSTING PURPOSES ONLY

PROJECT SOURCES				**PROJECT USES**			
Source Description and Code	Project To Date	Requested Amendment	Revised Project	Project Description and Code	Project To Date	Requested Amendment	Revised Project
Advanced Metering Infrastructure				**Advanced Metering Infrastructure**			
IFT from W&S Operating Fund	3,100,000	1,000,000	4,100,000	Miscellaneous Admin Engineer Geotech	200,000	-	200,000
60184108-4061				60184108-5593			
Revenue Bond Proceeds	10,635,000	-	10,635,000	Architectural & Engineering	2,300,000	-	2,300,000
60184108-4720				60184108-5594			
Revenue Bond Premiums	1,865,000	-	1,865,000	Construction	13,100,000	1,000,000	14,100,000
60184108-4727				60184108-5595			
Total	15,600,000	1,000,000	16,600,000	Total	15,600,000	1,000,000	16,600,000

Prepared By **DP**
Posted By
Date

Number **CPO - 292**

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-382 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

RZ-2021-005 Sherin Rezoning

INFORMATION CONTACT:

Bjorn E. Hansen, Planning Department, Senior Planner - Long Range Planning, 704.283.3690

ACTION REQUESTED:

Consider approving or denying the rezoning petition.

BACKGROUND:

This is a request to amend the Zoning Map of Union County by rezoning a parcel of land from R-20 (Residential, 20,000 square foot minimum lot size) to RA-20 (Residential, 20,000 square foot minimum lot size). The applicant requests the rezoning in order to allow cattle on the property. Uses on the site, if approved, would be limited to all uses found within the RA-20 zoning district. Since this is a straight rezoning request there is no site plan or list of conditions associated with the application. The Planning Board voted 6-0 to recommend approval of this rezoning at its August 3, 2021 meeting. The Board of Commissioners held a public hearing on November 1, 2021. The applicant spoke to provide information about his proposed uses on the property, but no one else spoke for or against the petition.

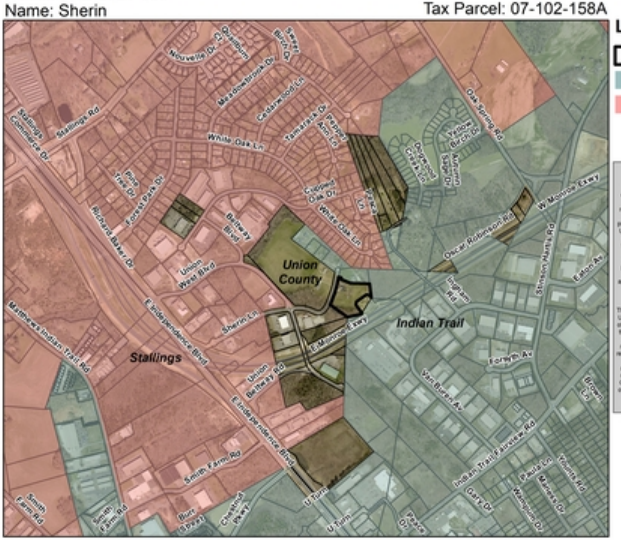
FINANCIAL IMPACT:

None.

Vicinity Map

Petition: RZ-2021-005
Name: Sherin

Size: 3.729 acres
Tax Parcel: 07-102-158A



Legend

- Rezoning Parcel
- Indian Trail
- Stallings

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UNIONCOUNTY
north carolina

0 500 1,000 2,000 Feet

Created on June 28, 2021 by Bjorn E. Hansen, AICP CTP.
Contact: (704) 283-3690 or bjorn.hansen@unionnc.org

470

Parcel Map

Petition: RZ-2021-005
Name: Sherin

Size: 3.729 acres
Tax Parcel: 07-102-158A



Legend

Rezoning Parcel

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0 62.5 125 250 Feet

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Contact: (704) 283-3690 or bjorn.hansen@unioncountync.gov

471

Planning Staff Report
Rezoning Case: RZ-2021-005
Staff Contact: Bjorn Hansen

Summary of Request

This is a request to amend the Zoning Map of Union County by rezoning a parcel of land from R-20 (Residential, 20,000 square foot minimum lot size) to RA-20 (Residential, 20,000 square foot minimum lot size). The applicant requests the rezoning in order to allow cattle on the property. Uses on the site, if approved, would be limited to all uses found within the RA-20 zoning district. Since this is a straight rezoning request there is no site plan or list of conditions associated with the application.

Owner/Applicant

Owner: Pankaj Kumar Verma
9938 Karras Common Way
Matthews, NC 28105

Applicant: Pankaj Kumar Verma
9938 Karras Common Way
Matthews, NC 28105

Property Information

Location: 404 Sherin Lane; more specifically identified as tax parcel 07-102-158A.









Existing Land Use: The parcel is currently zoned R-20 and is 3.729 acres. The land is currently utilized as a single family residence. There are no significant environmental features on the site.

UNIONCOUNTY
north carolina

Development Status

Petition: RZ-2021-005
Name: Sherin

Size: 3.729 acres
Tax Parcel: 07-102-158A



Legend

- Rezoning Parcel
- 2007 Structures

Development Status

- Developed
- Permanent Open Space
- Underdeveloped
- Undeveloped

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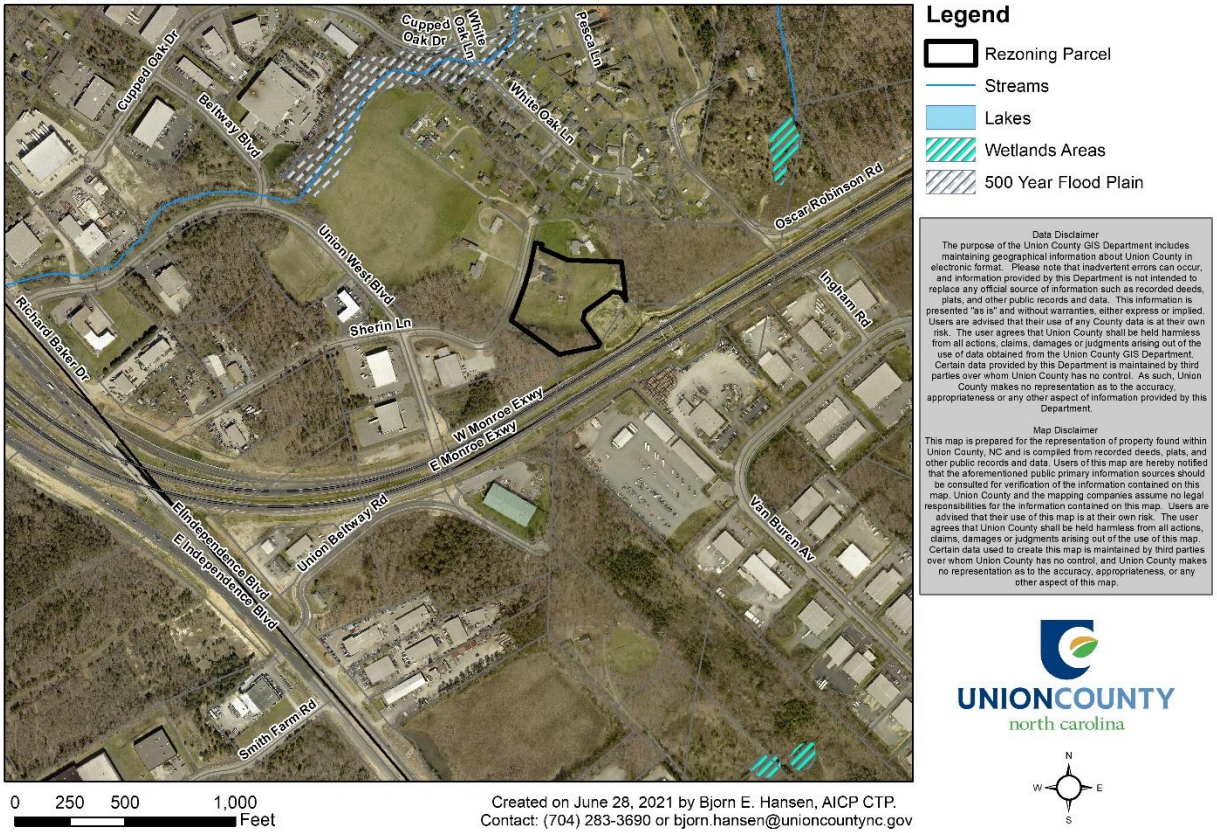
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Contact: (704) 283-3690 or bjorn.hansen@unioncountync.gov

Environmental Features

Petition: RZ-2021-005
Name: Sherin

Size: 3.729 acres
Tax Parcel: 07-102-158A



Created on June 28, 2021 by Bjorn E. Hansen, AICP CTP.
Contact: (704) 283-3690 or bjorn.hansen@unioncountync.gov

Surrounding Land Use: The surrounding land use is a combination of residential on tracts of at least one acre and tracts of a third acre. There is also commercial and light industrial development to the west. The Monroe Expressway is immediately south of the site. The town of Indian Trail is to the immediate north and east of the site. The town of Stallings is to the west.

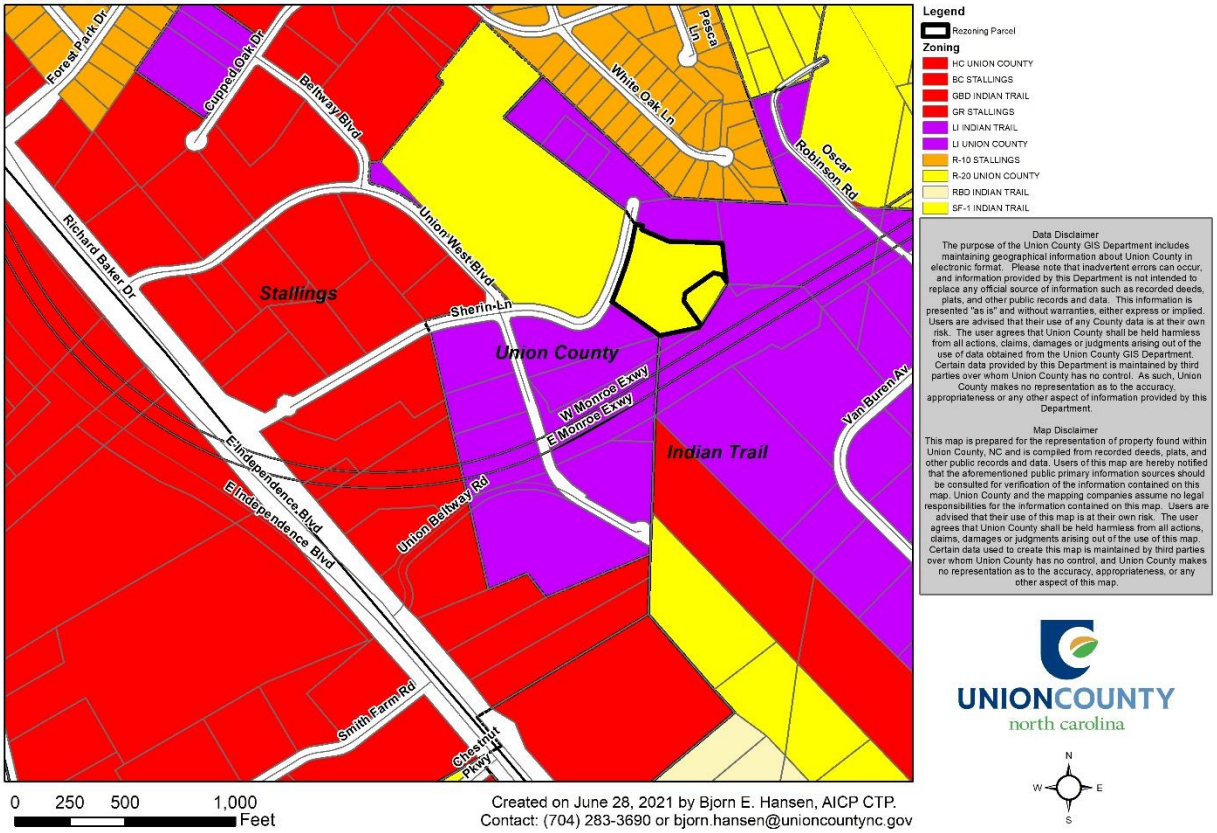
Utilities: Properties in this area are served by wells and septic systems. Public water and sewer systems are not available to the property.

Zoning and Land Use History: This parcel has been zoned R-20 since Union County established zoning. There are no other zoning actions related to this property.

Zoning

Petition: RZ-2021-005
Name: Sherin

Size: 3.729 acres
Tax Parcel: 07-102-158A



Schools: Union County Public Schools was not consulted about this rezoning because the lot yield for this property would not change due to the rezoning.

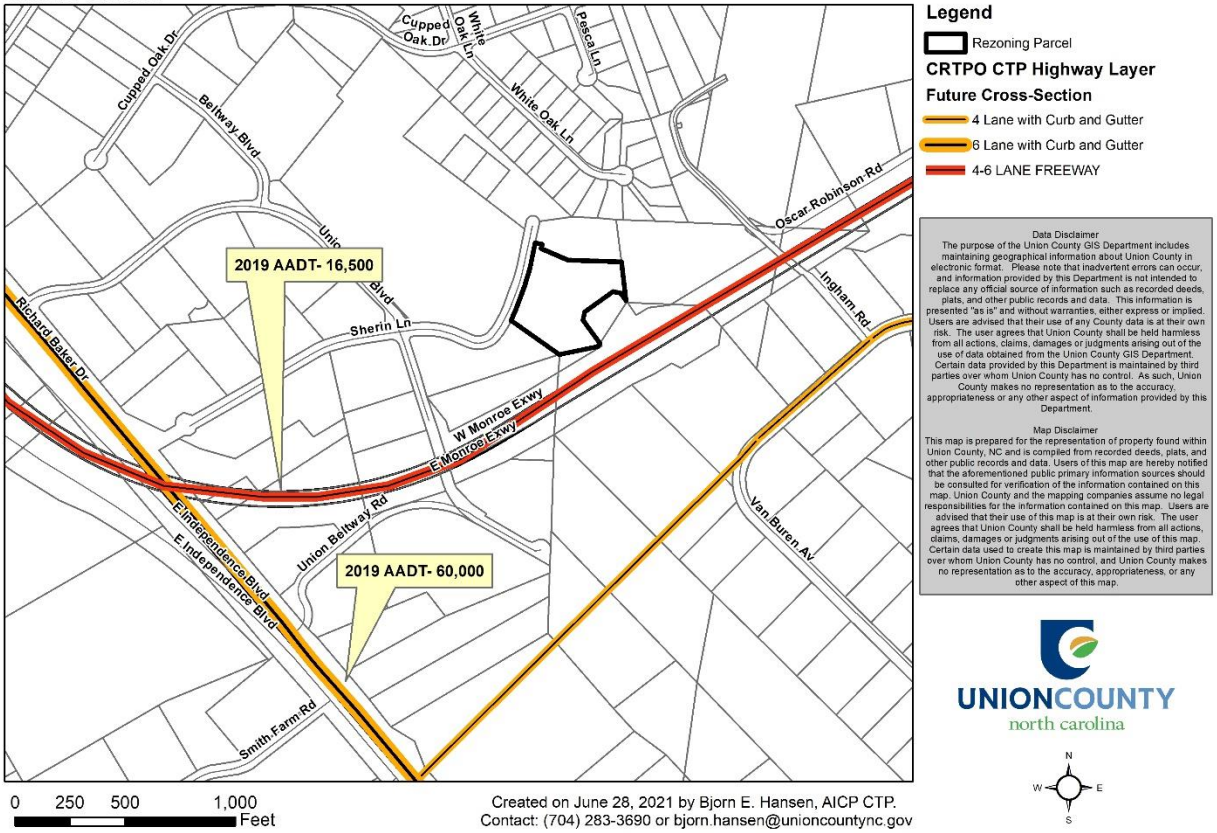
Transportation: This development would be served by access onto Sherin Road, which would connect to Union West Boulevard, and then to Richard Baker Drive and US 74. There are no traffic counts for these roads.

UNIONCOUNTY
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Transportation

Petition: RZ-2021-005
Name: Sherin

Size: 3.729 acres
Tax Parcel: 07-102-158A



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Contact: (704) 283-3690 or bjorn.hansen@unioncountync.gov

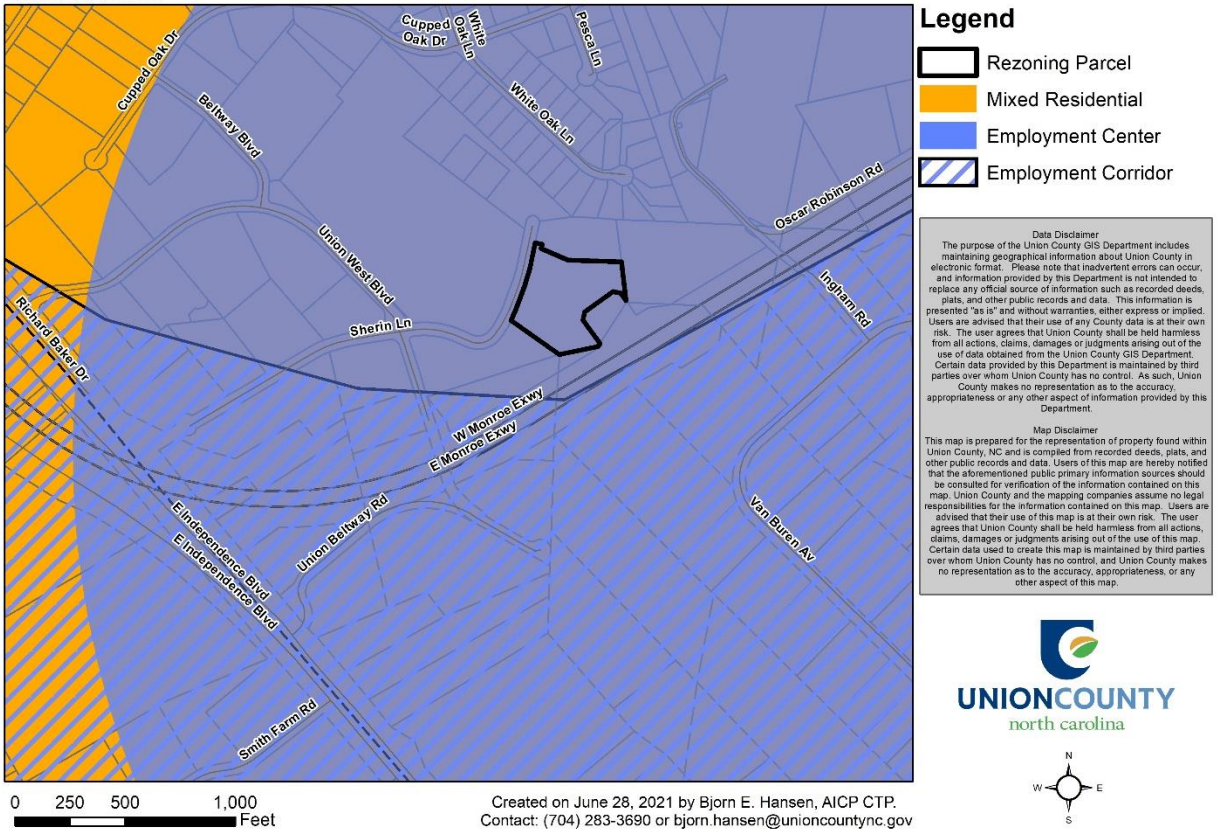
Planning Documents

Union County Comprehensive Plan: This property lies in the several land use districts. The underlying recommendation is for Mixed Residential, which supports small lot single family, townhouse, and apartment residential uses. Due to the proximity to an interchange of the Monroe Expressway, the area is also included in an Employment Center. Depending on road access and site constraints, industrial and commercial uses similar to what exists west of the site would be supported. Finally, this area is covered by the Employment Corridor overlay, which affects the US 74 corridor. Many of the same uses as in the Employment Center would be supported, along with retail uses.

Land Use Plan

Petition: RZ-2021-005
Name: Sherin

Size: 3.729 acres
Tax Parcel: 07-102-158A

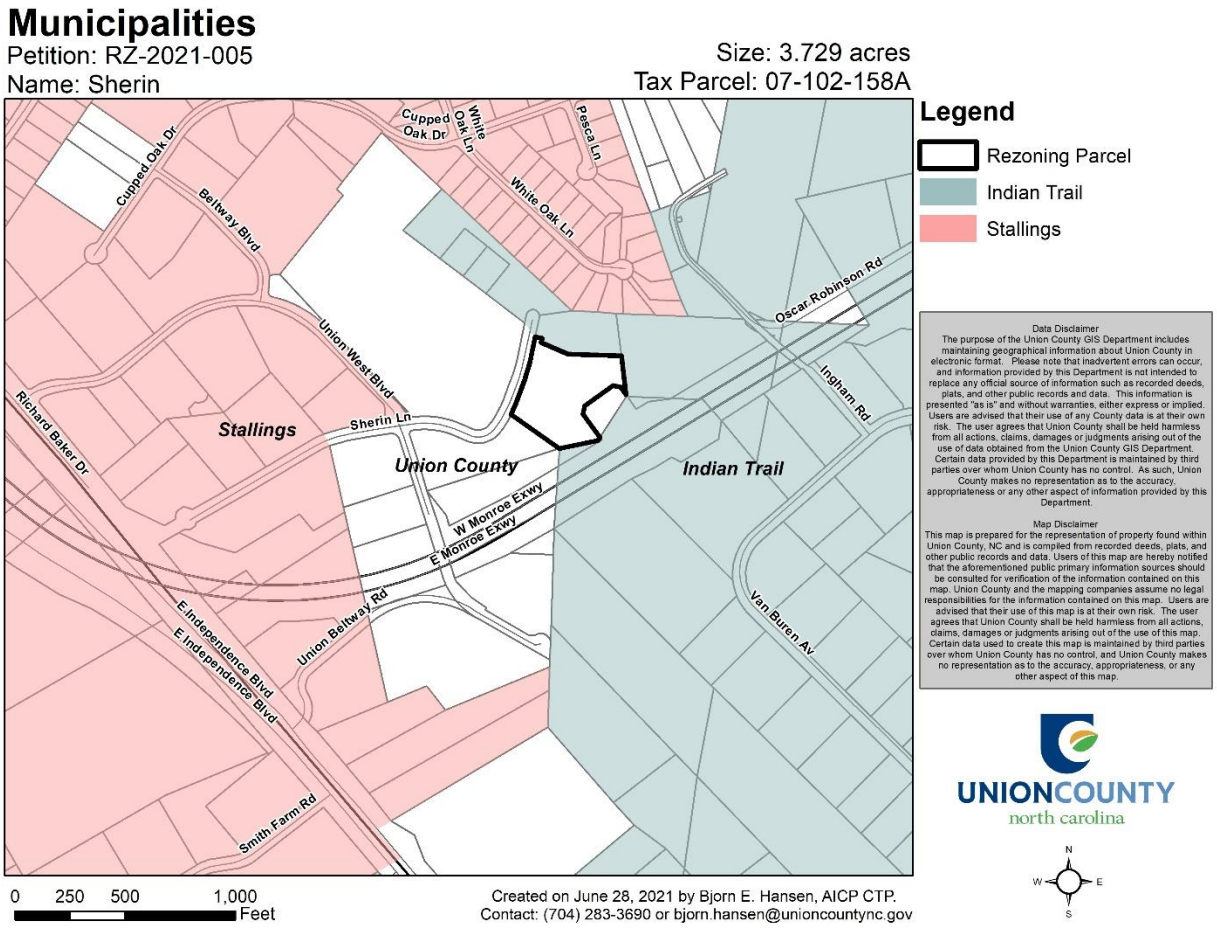


Union County 2050 Plan Recommendations: The Coordinating Committee has completed its work and recommended an updated comprehensive plan to the planning board and county commission. The plan was recommended by the planning board and is scheduled for adoption on July 19, so the recommendations from the plan are for information only.

- Land Use: The proposed plan identifies this area as Employment Corridor and Employment Center, similar to the existing land use plan. If not being used for employment uses, this area would be considered a "Transition Zone," meaning that since it is surrounded by one or municipalities, Union County should not approve rezonings in this area.
- Environment: The proposed plan recommends increasing stormwater standards to design infrastructure for 50 or even 100 year storms.
- Municipal Coordination: The proposed plan recommends consistent development patterns along corridors and closing donut holes for small islands of unincorporated land designated for residential development only.

Public and Municipal Comments

Public Comments: No community meeting was held since this is not a conditional rezoning request, however one letter from a nearby resident was received on July 26, 2021. The resident felt the smell of cows would be a negative, and there would not be sufficient shelter or water source for them on the property.

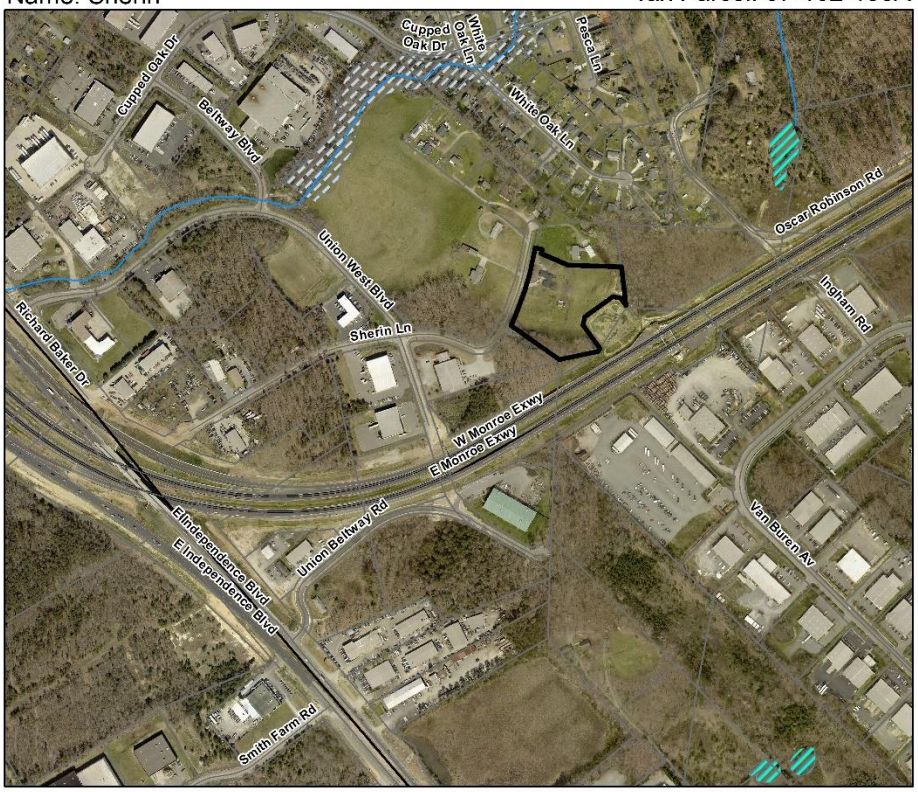


Municipal Comments: This parcel is adjacent to Indian Trail, and also near Stallings. Stallings noted that keeping farm animals would be allowed on site due to the size of the parcel.

Environmental Features

Petition: RZ-2021-005
Name: Sherin

Size: 3.729 acres
Tax Parcel: 07-102-158A



Legend

- Rezoning Parcel
- Streams
- Lakes
- Wetlands Areas
- 500 Year Flood Plain

Data Disclaimer
The purpose of the Union County GIS Department includes maintaining geographical information about Union County in electronic format. Please note that inadvertent errors can occur, and information provided by this Department is not intended to replace any official source of information such as recorded deeds, plats, and other public records and data. This information is presented "as is" and without warranties, either express or implied. Users are advised that their use of any County data is at their own risk. The user agrees that Union County shall be held harmless from all actions, claims, damages or judgments arising out of the use of data obtained from the Union County GIS Department. Certain data provided by this Department is maintained by third parties over whom Union County has no control. As such, Union County makes no representation as to the accuracy, appropriateness or any other aspect of information provided by this Department.

Map Disclaimer
This map is prepared for the representation of property found within Union County, NC and is compiled from recorded deeds, plats, and other public records and data. Users of this map are hereby notified that the aforementioned public primary information sources should be consulted for verification of the information contained on this map. Union County and the mapping companies assume no legal responsibilities for the information contained on this map. Users are advised that their use of this map is at their own risk. The user agrees that Union County shall be held harmless from all actions, claims, damages or judgments arising out of the use of this map. Certain data used to create this map is maintained by third parties over whom Union County has no control, and Union County makes no representation as to the accuracy, appropriateness, or any other aspect of this map.

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Created on June 28, 2021 by Bjorn E. Hansen, AICP CTP.
Contact: (704) 283-3690 or bjorn.hansen@unioncountync.gov

Staff Comments and Recommendation

Properties in the general area are a variety of sizes and land uses. This parcel is on the edge of residential areas versus more industrial and commercial uses. The requested rezoning classification is not a change in density, and provides greater flexibility to the property owner for more rural uses. This is seen as a temporary use for the property as adjacent parcels continue to develop, and may actually serve as a buffer between the more intensive uses and the residential to the north.

There are no site specific details to comment on at this time. Any future development would have to comply with the unified development ordinance in effect at the time of submittal.

The proposed development is not consistent with the current Union County Comprehensive Plan and land use map, but is not an upzoning in terms of density or intensity of uses. This use is considered transitional and will not affect the development potential of adjacent parcels. **For these reasons, staff recommend approval of the rezoning request.**

Planning Board Recommendation

The Planning Board voted 6-0 to recommend approval of this rezoning at its August 3, 2021 meeting.

Public Hearing Results

The Board of Commissioners held a public hearing on November 1, 2021. The applicant spoke on behalf of his petition, but no one else spoke.

Motions and Statements of Consistency and Reasonableness for Proposed Amendment to the Union County Zoning Map

The Union County Planning Board recommended approval concerning the rezoning petition (#RZ-2021-005) submitted by Pankaj Kumar Verma to rezone the property appearing on Tax Map as parcel #07-102-158A in the Vance Township from R-20 to RA-20.

TO APPROVE THE AMENDMENT (THE PROPOSAL IS INCONSISTENT WITH THE CURRENT PLAN)

Motion

(i) Approve rezoning petition RZ-2021-005 to rezone the property appearing on the Tax Map as parcel #07-102-158A in the Vance Township from R-20 to RA-20, and (ii) adopt the consistency and reasonableness statement for approval.

Consistency and Reasonableness Statement

Pursuant to N.C.G.S. § 160D-605, the Union County Board of Commissioners (the "Board") does hereby find and determine that adoption of the proposed map amendment is inconsistent with the currently adopted Union County Comprehensive Plan (the "Plan"). The Board declares that this adoption of the proposed map amendment is deemed an amendment to any future land use map in the Plan. The adoption of the proposed map amendment is reasonable and in the public interest because:

1. There is significant undeveloped residential land in the immediate vicinity that is not currently developed for employment land uses as identified in the adopted land use map. This rezoning of a relatively small tract of land will not impact the ability of the area to absorb future commercial and industrial development.
2. There are several existing single-family residences in the vicinity of the subject property; thereby allowing the type of development on this property which is consistent with development already present in the vicinity of the property.
3. The additional uses allowed on this property under an RA-20 zoning designation would not increase the intensity of uses.

TO DENY THE AMENDMENT (THE PROPOSAL IS INCONSISTENT WITH THE CURRENT PLAN)

Motion

(i) Deny the rezoning petition RZ-2021-005 to rezone the property appearing on the Tax Map as parcel #07-102-158A in the Vance Township from R-20 to RA-20, and (ii) adopt the consistency and reasonableness statement for denial.

Consistency and Reasonableness Statement

Whereas, pursuant to N.C.G.S. § 160D-605, the Union County Board of Commissioners (the "Board") does hereby find and determine that this rezoning petition is inconsistent with the Union County Comprehensive Plan (the "Plan") and that denial of the proposed map amendment is reasonable and in the public interest because:

1. The area is designated as an employment corridor in the existing land use map, and this area is attractive for such uses due to the completion of the Monroe Expressway.
2. An approved residential rezoning inconsistent with the plan could stimulate further residential rezonings in an area identified for non-residential uses in the long range plan.
3. The rezoning of a property for residential use in an area designated for commercial uses can impact nearby properties by potentially deterring nearby industrial and commercial development due to residential concerns over noise, light, dust, or smell which may occur along with such commercial and industrial developments.

Union County, NC

Staff Report

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-386 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Union County 2050 Strategy Implementation Committee Recruitment

INFORMATION CONTACT:

Bjorn E. Hansen, Planning Department, Senior Planner - Long Range Planning, 704.283.3690

ACTION REQUESTED:

Approve process and recruitment period.

BACKGROUND:

The Union County 2050 comprehensive plan includes several strategies that require additional analysis to recommend changes to development standards or policies in order to implement. The Planning Department recommends small committees to oversee each of these strategies and make recommendations to the Board of Commissioners. These committees would meet for approximately six months in 2022, with committee composition approved by the Board of Commissioners. The suggested process is as follows:

November

- Social media posts
- Contacting municipalities
- Contacting Union County 2050 committee members
- Media release

December

- Analyze applications and make recommendations (five per committee)
- Prioritize relevant experience, and geographic and gender balance

January

- Present recommendations to BOCC
- Appoint members to committees

February - August:

- Conduct work and bring recommendations to BOCC

FINANCIAL IMPACT:

None.

Union County 2050 Implementation Committees Process Template

- February
    - Introduce team members.
    - Background on the goal to be implemented.
        - Example - Creation of a county wide litter task force.
            - What is the issue?
            - What are the goals this strategy is attempting to achieve?
            - Final note to leave with: What does this strategy look like in the context of Union County?
- March
    - Brainstorming ideas
    - Present staff research for examples and strategies
- April
    - Brainstorming Ideas
    - Present staff research for examples and strategies
- May
    - Evaluating strategies
        - Which strategies are effective and viable in Union County?
- June
    - Proposed descriptions of supported strategies
        - Bring together the ideas researched into concrete, clear strategies
    - Implementation Timeframe
        - Create an implementation timeframe
- July
    - Final Implementation Framework
        - Decide on final framework for implementation plan.
            - Goals
            - Strategies to meet goals
            - Timeframe for strategies, goals
            - Set timeframe to review success of strategies

Planning Department
500 North Main Street Suite 70
Monroe, NC 28112
T 704.283.3565

unioncountync.gov

Strategies to Implement:

- Storm water Standards
- School Siting Requirements
- Open Space Requirements in Rural Areas
- Cluster Standards in Rural Areas
- Litter Task Force
- Broadband Internet Access


Union County
Government
EST. 1842
UNION COUNTY 2050
STRATEGY IMPLEMENTATION
COMMITTEE RECRUITMENT
Union County
2050

Background

- Comprehensive plan adopted in August
- Plan included several strategies that required developing policies or ordinance language
- Staff recommends appointing committees to develop recommendations to BOCC

Strategies Requiring Details to Implement

- Stormwater Development Standards
- School Siting Requirements
- Open Space in Rural Areas
- Cluster Allowance in Rural Areas
- Litter Task Force
- Broadband Internet

Committee Recruitment Efforts and Process

November
- Social media posts
- Contacting municipalities
- Contacting Union County 2050 committee members
- Media release

December
- Analyze applications and make recommendations (five per committee)
- Prioritize relevant experience, and geographic and gender balance

January
- Present recommendations to BOCC
- Appoint members to committees

February – August:
- Conduct work and bring recommendations to BOCC

Requested Action

Approve process and authorize staff to open a committee application period

QUESTIONS?

Union County, NC

Staff Report

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-417 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

ARPA Funding Allocation

INFORMATION CONTACT:

Michelle Lancaster, Deputy County Manager, 704-283-3656

ACTION REQUESTED:

Approve revised funding allocation strategy for American Rescue Plan Act (ARPA) Funds as recommended by staff.

BACKGROUND:

At their November 1, 2021, Regular Meeting, the Board of Commissioners received information and a presentation from staff that provided updates on the status of ARPA funds and recommendations on funding allocations by priority groupings. Staff received feedback from the Board and revised the recommendations.

FINANCIAL IMPACT:

None.

Union County, NC

Staff Report

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-420 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Options for Board of Commissioners Regular Meeting Schedule

INFORMATION CONTACT:

Michelle Lancaster, Deputy County Manager, 704-283-3656

ACTION REQUESTED:

None - Information Only

BACKGROUND:

Staff is providing options to the Board of Commissioners for their 2022 Regular Meeting Schedule as requested by the Board at their November 1, 2021, Regular Meeting.

FINANCIAL IMPACT:

None.

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-468 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Sharp Business Systems - Printer Contract

INFORMATION CONTACT:

Christopher Liersaph, Assistant Director, Information Technology, 704.292.2520

ACTION REQUESTED:

Authorize the County Manager to negotiate and execute an agreement substantially consistent with this Agenda item.

BACKGROUND:

Union County currently maintains a MFP Print/Copy technology in our cost per copy program. The current contract was obtained through a Cooperative Agreement. In September 2021, through its Information Technology Department, Union County solicited proposals from experienced and qualified firms to provide a multi-function printer (MFP) solution and cost per copy program countywide, as well as supplies and services to maintain production. An evaluation team was created staffed by the department's business managers, Finance, and Human Resources. RFP 2022-014 was designed to have vendors submit a solution that provides a mix of black & white and color printers and multifunction printing devices and printing services. The multifunction devices requirements included scanning, copying, two-sided printing, multiple paper sizes, and fax over IP solution. In addition, the County desired to enter into a contract providing supplies and services to maintain production. The County received numerous bids, and the County has chosen the vendor of choice to be Sharpe Business Systems.

FINANCIAL IMPACT:

The total estimated contract cost for a three year period is $585,000. The estimated cost for each fiscal year will be included in the annual operating budget ordinance adoption.

EQUIPMENT FINANCE

TERMS AND CONDITIONS ADDENDUM

AGREEMENT # 2825859

Addendum to Agreement # 2825859 and any future supplements/schedules thereto, between **County of Union**, as Customer and U.S. Bank Equipment Finance, a division of U.S. Bank National Association ("U.S. Bank Equipment Finance"), as Lessor/Secured Party ("Agreement"). The words "you" and "your" refer to Customer. The words "we," "us" and "our" refer to Lessor/Secured Party.

The parties wish to amend the above-referenced Agreement as follows:

Paragraph 12. END OF TERM:
Sentence 2 has been modified to read as follows:

"If you fail to so purchase or return the Equipment at or before the end of the final renewal term, you shall be a holdover tenant with respect to this Agreement and the Equipment, and this Agreement shall renew on a 12 month basis under the same terms hereof until the Equipment has been purchased or returned."

By signing this Addendum, Customer acknowledges the above changes to the Agreement and authorizes Lessor/Secured Party to make such changes. In the event of any conflict between this Addendum and the Agreement, this Addendum shall prevail. In all other respects, the terms and conditions of the Agreement remain in full force and effect and remain binding on Customer.

U.S. Bank Equipment Finance		**County of Union**	
Lessor/Secured Party		Customer	
		X	
Signature		Signature	
Title	Date	Title	Date

NOTE: CAPITALIZED TERMS IN THIS DOCUMENT ARE DEFINED AS IN THE AGREEMENT, UNLESS SPECIFICALLY STATED OTHERWISE.

EQUIPMENT FINANCE

LESSEE'S GENERAL AND INCUMBENCY CERTIFICATE

AGREEMENT
2825859

GENERAL CERTIFICATE

Re: Lease Agreement # 2825859, between County of Union, as Lessee ("Lessee") and U.S. Bank Equipment Finance, a division of U.S. Bank National Association, as Lessor.

The undersigned, being the duly elected, qualified and acting official of Lessee holding the title stated in the signature line below, does hereby certify as of the date of this Certificate and the date of the Agreement (as defined below), as follows:

1. Lessee did, at a meeting of the governing body of the Lessee, by resolution or ordinance duly enacted, in accordance with all requirements of law, approve and authorize the execution and delivery of the above-referenced Lease Agreement (the "Agreement") by the undersigned.
2. The meeting(s) of the governing body of the Lessee at which the Agreement was approved and authorized to be executed was duly called, regularly convened and attended throughout by the requisite quorum of the members thereof, and the enactment approving the Agreement and authorizing the execution thereof has not been altered or rescinded. All meetings of the governing body of Lessee relating to the authorization and delivery of the Agreement have been: (a) held within the geographic boundaries of the Lessee; (b) open to the public, allowing all people to attend; (c) conducted in accordance with internal procedures of the governing body; and (d) conducted in accordance with the charter of the Lessee, if any, and the laws of the state where Lessee is located.
3. No event or condition that constitutes, or with the giving of notice or the lapse of time or both would constitute, an event of default or a nonappropriation event exists at the date hereof with respect to this Agreement.
4. The acquisition of all of the Equipment under the Agreement has been duly authorized by the governing body of Lessee.
5. Lessee has, in accordance with the requirements of law, fully budgeted and appropriated sufficient funds for the current budget year to make the Payments scheduled to come due during the current budget year under the Agreement and to meet its other obligations for the current budget year and such funds have not been expended for other purposes.
6. As of the date hereof, no litigation is pending, (or, to my knowledge, threatened) against Lessee in any court (a) seeking to restrain or enjoin the delivery of the Agreement or of other agreements similar to the Agreement; (b) questioning the authority of Lessee to execute the Agreement, or the validity of the Agreement; (c) questioning the constitutionality of any statute, or the validity of any proceedings, authorizing the execution of the Agreement; or (d) affecting the provisions made for the payment of or security for the Agreement.

IN WITNESS WHEREOF, the undersigned has signed this Certificate on the date stated below.

County of Union	X	
Lessee	Signature of Person to Sign Agreement	Print Title of Person to Sign Agreement
Print Name of Person to Sign Agreement	Print Date that Above Person Signed this Certificate	

INCUMBENCY CERTIFICATE

Re: Lease Agreement # 2825859, between County of Union, as Lessee ("Lessee") and U.S. Bank Equipment Finance, a division of U.S. Bank National Association, as Lessor.

The undersigned, being the duly elected, qualified and acting Secretary, Clerk, or other duly authorized official or signatory of the Lessee does hereby certify, as of the date of this Certificate and the date of the Agreement (as defined in the General Certificate above)as follows:

As of the date of the meeting(s) of the governing body of the Lessee at which the above-referenced Agreement was approved and authorized to be executed, and as of the date hereof, the below-named representative of the Lessee held and holds the office set forth below, and the signature set forth below is his/her true and correct signature.

NAME OF -PERSON SIGNING AGREEMENT	TITLE OF PERSON SIGNING AGREEMENT	SIGNATURE OF PERSON SIGNING AGREEMENT
		X

IN WITNESS WHEREOF, the undersigned has signed this Certificate on the date stated below.

X	
Signature of Secretary, Clerk or other duly authorized official or signatory of Lessee (Cannot be same as Person Signing Agreement)	Print Title of Person who signed this Certificate
Print Name of Person Signing this Certificate	Print Date that Above Person Signed this Certificate

NOTE: CAPITALIZED TERMS IN THIS DOCUMENT ARE DEFINED AS IN THE AGREEMENT, UNLESS SPECIFICALLY STATED OTHERWISE.

EQUIPMENT FINANCE

OMNIBUS STATE VARIATION ADDENDUM

AGREEMENT # 2825859

Addendum to Agreement # 2825859 and any future supplements/schedules thereto, between County of Union, as Customer ("Customer") and U.S. Bank Equipment Finance, a division of U.S. Bank National Association ("U.S. Bank Equipment Finance"), as Lessor. The words "you" and "your" refer to Customer. The words "we" and "us" refer to Lessor. In the event of any conflict between the terms and conditions of the Agreement and this Addendum, the terms and conditions of this Addendum shall control.

1. With respect to any "Financed Items," the following provisions shall be applicable to such Financed Items:

This Addendum concerns the granting to you of certain software and/or software license(s) ("Licensed Software"), the purchase by you of certain software components, including but not limited to, software maintenance and/or support ("Products") and/or the purchase by you of certain implementation, integration, training, technical consulting and/or professional services in connection with software ("Services") (collectively, the "Financed Items") from software licensor(s) and/or supplier(s) (collectively, the "Supplier"), all as further described in the agreement(s) between you and Supplier (collectively, the "Product Agreement"). For essential governmental purposes only, you have requested and we have agreed that instead of you paying the fees pursuant to the Product Agreement to Supplier for the Financed Items, we will satisfy your obligation to pay such fees to Supplier, and in consideration thereof, you shall repay the sums advanced by us to Supplier by promptly making certain installment payments to us, which are included in the Payments set forth in the Agreement.

To the extent permitted by law, you grant us a security interest in the license(s), including without limitation, all of your rights in the Licensed Software granted thereunder, the Products, all rights to payment under the Product Agreement, the Financed Items, and all proceeds of the foregoing to secure all amounts you owe us under this Agreement. You authorize and ratify our filing of any financing statement(s) to show our interest.

Ownership of any Licensed Software shall remain with Supplier thereof. All Financed Items shall be provided by a Supplier unrelated to us, and your rights with respect to such Financed Items shall be governed by the Product Agreement between you and Supplier, which shall not be affected by this Agreement. IN NO EVENT SHALL WE HAVE ANY OBLIGATION TO PROVIDE ANY FINANCED ITEMS, AND ANY FAILURE OF SUPPLIER TO PROVIDE ANY FINANCED ITEMS SHALL NOT EXCUSE YOUR OBLIGATIONS TO US IN ANY WAY. YOU HAVE SELECTED SUPPLIER AND THE FINANCED ITEMS BASED UPON YOUR OWN JUDGMENT. WE DO NOT TAKE RESPONSIBILITY FOR THE INSTALLATION OR PERFORMANCE OF THE FINANCED ITEMS. SUPPLIER IS NOT AN AGENT OF OURS AND WE ARE NOT AN AGENT OF SUPPLIER, AND NOTHING SUPPLIER STATES OR DOES CAN AFFECT YOUR OBLIGATIONS HEREUNDER. **YOU WILL MAKE ALL PAYMENTS UNDER THIS AGREEMENT REGARDLESS OF ANY CLAIM OR COMPLAINT AGAINST ANY SUPPLIER, LICENSOR OR MANUFACTURER, AND ANY FAILURE OF A SERVICE PROVIDER TO PROVIDE SERVICES WILL NOT EXCUSE YOUR OBLIGATIONS TO US UNDER THIS AGREEMENT. WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AS TO THE FINANCED ITEMS COVERED BY THE PRODUCT AGREEMENT AND TAKE ABSOLUTELY NO RESPONSIBILITY FOR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR AS TO ANY PATENT, TRADEMARK OR COPYRIGHT INFRINGEMENT, CONDITION, QUALITY, ADEQUACY, TITLE, DATA ACCURACY, SYSTEM INTEGRATION, FUNCTION, DEFECTS OR ANY OTHER ISSUE IN REGARD TO THE FINANCED ITEMS.** YOU HEREBY WAIVE ANY CLAIM (INCLUDING ANY CLAIM BASED ON STRICT LIABILITY OR ABSOLUTE LIABILITY IN TORT) THAT YOU MAY HAVE AGAINST US FOR ANY LOSS, DAMAGE (INCLUDING, WITHOUT LIMITATION, LOSS OF PROFITS, LOSS OF DATA OR ANY OTHER DAMAGES) OR EXPENSE CAUSED BY THE FINANCED ITEMS COVERED BY THE PRODUCT AGREEMENT OR A TERMINATION OF THE FINANCED ITEMS PURSUANT TO AN EVENT OF DEFAULT, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE, LOSS, EXPENSE OR COST.

The following shall be additional events of default under the Agreement: (i) you fail to perform in accordance with the covenants, terms and conditions of the Product Agreement, or (ii) the Product Agreement is terminated, suspended, materially restricted or limited.

The following shall be additional remedies we have for your default under the Agreement: We shall have the right to: (a) cause the termination of the Financed Items and you irrevocably consent to such termination of the Financed Items by Supplier; and (b) require you to immediately stop using the Financed Items (regardless of whether you are in default under the Product Agreement) and you shall, at our option, either deliver to us a certification executed by a duly authorized officer certifying that you have ceased use of the Financed Items or deliver the Financed Items to a location designated by us. In the event you are entitled to transfer the right to use the Financed Items to any third party, you hereby agree to transfer any such right to use the Financed Items to any third party selected by us and acknowledge that you shall have no right to fees payable by any third party in connection with such transfer. However, we shall not be required to mitigate our damages caused by a default by transferring any Financed Items to a third party.

2. If you are a political subdivision of any of the States of Colorado, Georgia, Louisiana, Minnesota, Ohio or Oklahoma, and if your end-of-term option is the purchase of all Equipment for $1.00 or $101.00, the following applies: Notwithstanding anything to the contrary set forth in the Agreement, title to the Equipment shall be in our name, subject to your interest under the Agreement.

3. If you are a political subdivision of the State of Arizona, the following applies: We understand that you may cancel the Agreement within three years after the start date of the Agreement if any person significantly involved in negotiating, drafting, securing or obtaining the Agreement for or on your behalf becomes, during the term of the Agreement, our employee or agent or becomes, during the term of the Agreement, a consultant to us with respect to the subject matter of the Agreement.

4. If you are a school district in the State of California and your end-of-term option is the purchase of all Equipment for $1.00 or $101.00, the following applies: You will be deemed to have acquired title to the Equipment from the Supplier on the date we pay for it, and you hereby sell, transfer and convey the Equipment to us on that date. You represent to us that the resolution of your governing body authorizing the execution and delivery of the Agreement contained a finding that the Equipment is a major item of equipment or data processing equipment and that the sale and leaseback of the Equipment was the most economical means of providing the Equipment to you.

5. If you are a political subdivision of the State of Florida, the following applies: We agree that there is no intention to create under the Agreement a right in us to dispossess you involuntarily of your interests in or the right of use of the Equipment. We hereby irrevocably waive any right to specific performance of your covenant to return possession of the Equipment to us if you default or exercise your right not to appropriate funds to make Payments. We acknowledge that Payments may not be payable from ad valorem taxes, and in no event may we compel the use of ad valorem taxing power for you to make Payments.

If the end-of-term option for the Agreement is the purchase of all Equipment for $1.00 or $101.00, you agree that you will give all notices and file all reports with the State Division of Finance as may be required in connection with the Agreement by Florida Statutes Annotated Section 218.38 and the rules adopted thereunder.

6. If you are a county of the State of Florida and your end-of term option is the purchase of all Equipment for $1.00 or $101.00, the following applies: If the term of the Agreement exceeds five (5) years, you represent and covenant to us that Payments will be paid from sources other than ad valorem taxes, and that the Agreement has been approved by our Board of County Commissioners.

7. If you are a political subdivision in the State of Georgia, the following applies: You represent to us that your acquisition or lease (or other financing) of the Equipment has not been the subject of a referendum or a proposed issuance of bonded debt which failed to receive the approval of your voters within the four calendar years immediately preceding the start date of the Agreement.

8. If you are a school district in the State of Georgia, the following applies: The term of the Agreement will consist of an original term, which will commence on the date we pay the Supplier and will continue through the end of the then-current calendar year, and a series of renewal terms, each having a duration of one calendar year. You will have the right to terminate the Agreement pursuant to the Non-Appropriation or Renewal paragraph at the end of each calendar year, and at the end of each fiscal year, if sufficient funds are not appropriated for such fiscal year or calendar year to make Payments. If you do not exercise your right to terminate this Agreement pursuant to the Non-Appropriation or Renewal paragraph at the end of any calendar year or fiscal year, the Agreement will be deemed to have been automatically renewed for the next calendar year or fiscal year, as applicable.

9. If you are a political subdivision of the State of Idaho, the following applies: If you are required under the Agreement to make any payments to us (other than a Payment) during any fiscal year during the term of the Agreement in the event of (a) a late payment charge for Payments, (b) an advance by us which you are required to repay, (c) an indemnity payment you owe to us, or (d) any other additional payment obligation you owe to us under the Agreement (collectively, the "Additional Payments"), the Additional

Payments shall be payable solely from legally appropriated funds available for such fiscal year ("Available Funds"). To the extent Available Funds are not available for such fiscal year for payment of the Additional Payments, then the Additional Payments shall be subject to appropriation for the following fiscal year, or the fiscal year following the final fiscal year of the term of the Agreement, if the Additional Payment was incurred in the final fiscal year of the term of this Agreement. Failure to so appropriate the Additional Payments for the following fiscal year in each such case shall be a non-appropriation described in the Non-Appropriation or Renewal paragraph of the Agreement, providing the remedies to us for such an event in said paragraph. You will not be entitled to prepay the Agreement or to exercise your option to purchase the Equipment at the end of the term of the Agreement so long as any Additional Payments are outstanding and unpaid.

10. If you are a political subdivision of the State of Kansas, the following applies: We agree that you are obligated only to pay Payments under the Agreement as may lawfully be made from funds budgeted and appropriated for that purpose during the then-current fiscal year, or funds made available from any lawfully operated revenue producing source. If you are a school district, you represent and warrant to us that your Board of Education, by resolution approved by a majority of members of the Board of Education, has elected to omit the mandatory contract provisions prescribed by the Kansas Department of Administration in form DA-146a, as amended, from the Agreement, and such provisions are hereby so omitted; provided, however, that this election does not authorize the omission from the Agreement of the provisions of Kansas Statutes Annotated ("K.S.A.") § 72-1146 (related to indemnification and hold harmless provisions) or § 72-1147 (applicable law shall be Kansas law and applicable courts shall be Kansas courts), as amended. To the extent that the terms of the Agreement is in conflict with the terms of K.S.A. § 72-1146 or K.S.A. § 72-1147, the terms of K.S.A. § 72-1146 and K.S.A. § 72-1147 shall prevail.

11. If you are a political subdivision of the State of Kentucky and your end-of-term option is the purchase of all Equipment for $1.00 or $101.00, the following applies: You represent to us that you have in connection with the Agreement given all notices to and obtained all consents from the state local debt officer (or in the case of a school district, the chief state school officer) required by applicable law.

12. If you are a school district of the State of Missouri and your end-of-term option is the purchase of all Equipment for $1.00 or $101.00, the following applies: You represent to us that Payments under the Agreement will be paid from the capital outlay fund, and that sufficient funds necessary to make Payments required under the Agreement have been appropriated to the capital outlay fund for the fiscal year that includes the commencement date of the Agreement.

13. If you are a political subdivision of the State of Nevada, the following applies: You represent to us that, to the extent required by applicable law (a) the Agreement has been approved by the Executive Director of the Nevada Tax Commission, (b) the Agreement was approved by resolution of your governing body, and such resolution was approved by two-thirds of the members of such governing body, and (c) the resolution approving the Agreement was in form that complies with Nevada Revised Statues Section 350.087, including the required findings of fact, and was published in accordance with the requirements of Section 350.087. To the extent required by applicable law, you agree to update your plan for capital improvements in accordance with the requirements of Nevada Revised Statutes Section 350.091.

14. If you are a school district of the State of New Jersey, the following applies: You represent to us that (a) you have complied with all rules and regulations of the New Jersey State Board of Education applicable to the leasing of the Financed Items under the Agreement, (b) you have complied with and will continue to comply with all rules and regulations related to New Jersey Statute 18A:18A-4.6, (c) you are not entering into the Agreement to finance maintenance, guarantees, or verification of guarantees of energy conservation measures, and (d) you will not except out the Agreement from any budget or tax levy limitation otherwise provided by law.

15. If you are a political subdivision of the State of New York, the following applies: The Agreement shall be deemed executory only to the extent of monies appropriated and available for the purpose of the Agreement, and no liability on account hereof shall be incurred by you beyond the amount of such monies. The Agreement is not your general obligation. Neither your full faith and credit nor your taxing power are pledged to the payment of any amount due or to become due under the Agreement. It is understood that neither the Agreement nor any representation by any public employee or officer created any legal or moral obligation to appropriate or make monies available for the purposes of the Agreement.

16. If you are a political subdivision of the State of Oklahoma, the following applies: The Agreement will terminate at the end of each fiscal year unless you and we ratify the renewal thereof, and any such termination will be treated as a non-appropriation under the Non-Appropriation or Renewal paragraph of the Agreement.

17. If you are a political subdivision of the Commonwealth of Pennsylvania, the following applies: You represent to us that you have complied with the Pennsylvania Local Government Unit Debt Act, Pa. Cons. Stat. tit. 53, Sections 8001 to 8049 (including filing of debt statement and advertisement of proposed financing) in connection with the Agreement.

18. If you are a political subdivision of the State of South Dakota, the following applies: You represent to us that the Agreement has been approved by the requisite number of members of your governing body. If you are a school district, you represent and covenant to us that all Payments under the Agreement will be paid from your capital outlay fund and that you have not received any petitions from your voters requesting voter approval of the Agreement, and the time for filing such petitions has expired.

19. If you are a political subdivision of the State of Texas, the following applies: In accordance with Subtitle F, Title 10, Chapter 2274 of the Texas Government Code (the "Firearms Non-Discrimination Act"), we hereby verify that (a) neither we nor any of our affiliates that are included in the definition of "Company" contained in the Firearms Non-Discrimination Act (each, an "Affiliate") have a practice, policy, guidance or other directive that discriminates against a firearm entity or firearm trade association, and (b) neither we nor any of our Affiliates will discriminate during the term of the Agreement against a firearm entity or firearm trade association. Terms used without definition in this paragraph have the meanings given in the Firearms Non-Discrimination Act.

20. If you are a school district in the State of West Virginia, the following applies: Any action, suit or proceeding arising out of or relating to the Agreement shall be tried in the West Virginia Court of Claims, and we hereby consent to the jurisdiction and venue in such court. You will have no obligation to pay any taxes associated with the use, ownership or acquisition of the Equipment unless the use, ownership or acquisition of the Equipment is determined by final non-appealable judicial order to be subject to taxation, in which event you shall, to the extent permitted by applicable law, pay such taxes. If you receive notice from any taxing authority alleging that the Equipment is subject to property taxes, you will (a) give prompt written notice to us, (b) contest such allegations by proper proceedings, and (c) to the extent permitted by applicable law, and without prejudice to the position that the Equipment should be exempt from all property taxes, establish reserves for the payment of such taxes as required by general accepted accounting principles. We understand that you do not waive the benefit of any statute of limitations governing the time in which we may bring suit against you under the Agreement. You will not be obligated to pay any attorneys' fees incurred by us in connection with any suit, action, proceeding or other exercise of remedies under the Agreement absent a final, non-appealable order of a court of competent jurisdiction awarding attorneys' fees to us. We agree not to repossess the Equipment following a default or non-appropriation under the Agreement without giving seven (7) days prior written notice to you. Following the repossession or return of the Equipment as a result of a default or non-appropriation, you will have the right to acquire or lease similar property without restriction. We understand that the Agreement is a public record under the West Virginia Freedom of Information Act.

By signing this Addendum, Customer acknowledges the applicable changes noted above are incorporated by reference into the Agreement. In all other respects, the terms and conditions of the Agreement remain in full force and effect and remain binding on Customer. Customer has caused this Addendum to be executed by its duly-authorized officer as of the date below.

U.S. Bank Equipment Finance	**COUNTY OF UNION**
Lessor	Customer
	X
Signature	Signature
Title Date	Title Date

NOTE: CAPITALIZED TERMS IN THIS DOCUMENT ARE DEFINED AS IN THE AGREEMENT, UNLESS SPECIFICALLY STATED OTHERWISE.

EQUIPMENT FINANCE

PRE-AUDIT CERTIFICATION ADDENDUM (NORTH CAROLINA)

AGREEMENT

Addendum to Agreement # 2825859, dated , between County of Union, as Customer and U.S. Bank Equipment Finance, a division of U.S. Bank National Association ("U.S. Bank Equipment Finance"), as Lessor. The words you and your refer to Customer. The words we, us and our refer to Lessor.

The parties wish to amend the above-referenced Agreement by adding the following language to page 1 of the Agreement:

> You represent, warrant and covenant for our benefit that you have reviewed this Agreement with legal counsel regarding the need to obtain approval of the Local Government Commission, and if determined that such approval is needed, have so obtained such approval. If such approval is not needed, a finance officer for you hereby certifies that this Agreement has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act or the School Budget and Fiscal Control Act, whichever is applicable.

By signing this Addendum, Customer acknowledges the above changes to page 1 of the Agreement and authorizes Lessor to make such changes. In all other respects, the terms and conditions of the Agreement remain in full force and effect and remain binding on Customer. Customer has caused this Addendum to be executed by its duly-authorized finance officer as of the date above.

County of Union

Customer

X

Signature

Name

Finance Officer

Title

NOTE: A FACSIMILE OF THIS DOCUMENT WITH SIGNATURE SHALL BE CONSIDERED TO BE AN ORIGINAL. CAPITALIZED TERMS IN THIS DOCUMENT ARE DEFINED AS IN THE AGREEMENT, UNLESS SPECIFICALLY STATED OTHERWISE.

usbank®
EQUIPMENT FINANCE

AGREEMENT NO.

REQUEST FOR CERTIFICATE OF INSURANCE (EQUIPMENT)

THIS FORM IS PROVIDED FOR THE CUSTOMER TO APPROVE AND FORWARD TO ITS INSURERS.

*****PLEASE FILL IN YOUR INSURANCE INFORMATION*****

Insurable Value: _____

TO: Customer's Insurance Agent

Name of Agency: _____

Address: _____

_____

Phone: _____

Fax: _____

Description of Item(s) to be insured:

_____

_____

_____

_____

_____

We have entered into an Agreement with U.S. Bank Equipment Finance for item(s) described above. This is a "NET" Agreement and we are responsible for the insurance. The insurance policy must be for the full original cost and include a provision for the following requirements:

1. COMPREHENSIVE GENERAL LIABILITY/PROPERTY DAMAGE COVERAGE:

2. **PLEASE SHOW AS LENDER'S LOSS PAYEE ON THE CERTIFICATE OF INSURANCE:**

U.S. Bank Equipment Finance **AND/OR ITS ASSIGNS**
1310 Madrid Street
Marshall, MN 56258

3. Fax a copy of the revised Certificate of Insurance to 800.328.9092, referencing Agreement # as soon as possible.

I authorize the above agent to immediately place the insurance coverage required for the described item(s). Please issue a binder of insurance to the above-named **Lender's Loss Payee** by return mail and replace it with the original insurance policy or endorsement within thirty (30) days. Please be sure that the Agreement number referenced above is included somewhere on the documentation package.

The certificate of insurance should indicate the following: "It is agreed that U.S. Bank Equipment Finance will be notified, in writing, ten (10) days prior to any modification or cancellation of the conditions of this policy."

County of Union
Customer

X
Signature

Title Date

IMPORTANT: Insurance Agent please send this completed form and COI to: Equipment Finance Insurance Group either by fax at 800.328.9092 or e-mail them to EF.Insurance.Group@usbank.com

NOTE: SIGNER OF THIS DOCUMENT MUST BE SAME AS ON THE AGREEMENT. A FACSIMILE OF THIS DOCUMENT WITH SIGNATURE SHALL BE CONSIDERED TO BE AN ORIGINAL. CAPITALIZED TERMS IN THIS DOCUMENT ARE DEFINED AS IN THE AGREEMENT, UNLESS SPECIFICALLY STATED OTHERWISE.

usbank EQUIPMENT FINANCE

State & Local Government Lease Agreement

APPLICATION NO.	AGREEMENT NO.
2825859	

Send Account Inquiries to: 1310 Madrid Street, Suite 101 • Marshall, MN 56258 • Phone: (800) 328-5371 • Fax: (800) 328-9092
Send Payments to: P.O. Box 790448 • St. Louis, MO 63179-0448

The words "**Lessee**," "**you**" and "**your**" refer to **Customer**. The words "**Lessor**," "**we**," "**us**" and "**our**" refer to **U.S. Bank Equipment Finance, a division of U.S. Bank National Association** ("**U.S. Bank Equipment Finance**").

CUSTOMER INFORMATION

FULL LEGAL NAME			STREET ADDRESS	
COUNTY OF UNION			500 N. MAIN STREET SUITE 700	
CITY	STATE	ZIP	PHONE	FAX
MONROE	NC	28112		
BILLING NAME (IF DIFFERENT FROM ABOVE)			BILLING STREET ADDRESS	
COUNTY OF UNION			500 N. MAIN STREET SUITE 700	
CITY	STATE	ZIP	E-MAIL	

EQUIPMENT LOCATION (IF DIFFERENT FROM ABOVE)

SUPPLIER INFORMATION

FULL LEGAL NAME			STREET ADDRESS	
SHARP BUSINESS SYSTEMS			4404 STUART ANDREW BLVD	
CITY	STATE	ZIP	PHONE	FAX
CHARLOTTE	NC	28217	704-523-3333	

EQUIPMENT DESCRIPTION

MAKE/MODEL/ACCESSORIES — SERIAL NO.

together with all replacements, parts, repairs, additions, and accessions incorporated therein or attached thereto and any and all proceeds of the foregoing, including, without limitation, insurance recoveries.

☒ See attached Schedule A

TERM AND PAYMENT INFORMATION

36 Payments* of $ 13,770.00 *If you are exempt from sales tax, attach your certificate.* **plus applicable taxes*

The payment ("Payment") period is monthly unless otherwise indicated.

END OF TERM OPTIONS

You may choose one of the following options, which you may exercise at the end of the term, provided that no event of default, non-appropriation or nonrenewal under this Agreement, as applicable, has occurred and is continuing. If no box is checked and initialed, Fair Market Value will be your end of term option. Fair Market Value means the value of the Equipment in continued use. If the selected purchase option for this Agreement is $1.00, unless otherwise required by law, upon your acceptance of the Equipment, title to the Equipment shall be in your name, subject to our interest under this Agreement.

☒ Purchase all of the Equipment for its Fair Market Value, renew this Agreement, or return the Equipment. ____ Customer's Initials

☐ Purchase all of the Equipment for $1.00. ____ Customer's Initials

LESSOR ACCEPTANCE

U.S. Bank Equipment Finance

LESSOR — SIGNATURE — TITLE — DATED

CUSTOMER ACCEPTANCE

BY SIGNING BELOW OR AUTHENTICATING AN ELECTRONIC RECORD HEREOF, YOU CERTIFY THAT YOU HAVE REVIEWED AND DO AGREE TO ALL TERMS AND CONDITIONS OF THIS AGREEMENT ON THIS PAGE AND ON PAGES 2 AND 3 ATTACHED HERETO.

COUNTY OF UNION — X — SIGNATURE — TITLE — DATED

CUSTOMER (as referenced above)

FEDERAL TAX I.D. # — PRINT NAME

DELIVERY & ACCEPTANCE CERTIFICATE

You certify and acknowledge that all of the Equipment listed above: 1) has been received, installed and inspected; and 2) is fully operational and unconditionally accepted. Upon you signing below, your promises in this Agreement will be irrevocable and unconditional in all respects. You understand and agree that we have paid for the purchase of the Equipment from Supplier and you may contact Supplier for any warranty rights, which we transfer to you for the term of this Agreement (or until you default).

COUNTY OF UNION — X — SIGNATURE — TITLE — ACCEPTANCE DATE

CUSTOMER (as referenced above)

TERMS AND CONDITIONS *(Continued on Page 3)*

1. **AGREEMENT:** You agree to lease from us the goods ("Equipment") and, if applicable, finance certain software, software license(s), software components and/or professional services in connection with software (collectively, the "Financed Items," which are included in the word "Equipment" unless separately stated) from software licensor(s) and/or supplier(s) (collectively, the "Supplier"), all as described in this Agreement and in any attached schedule, addendum or amendment hereto ("Agreement"). You agree to all of the terms and conditions contained in this Agreement, which, with the acceptance certification, is the entire agreement between you and us regarding the Equipment and which supersedes any purchase order, invoice, request for proposal, response or other related document. This Agreement becomes valid upon execution by us. The term shall start on the date we pay Supplier. The first Payment is due 30 days after the start of this Agreement and each Payment thereafter shall be due on the same day of each month (the "Scheduled Due Date") unless a different due date is mutually agreed to by us and you. If the parties agree to adjust the Payment due date (an "Adjusted Due Date"), in addition to all Payments and other amounts due hereunder, you will pay an interim payment in an amount equal to 1/30th of the Payment, multiplied by the number of days between the Scheduled Due Date and the Adjusted Due Date. If any provision of this Agreement is declared unenforceable, the other provisions herein shall remain in full force and effect to the fullest extent permitted by law.

2. **REPRESENTATIONS AND WARRANTIES OF CUSTOMER:** You hereby represent and warrant to us that: (i) you have been duly authorized under the Constitution and laws of the applicable jurisdiction and by a resolution or other authority of your governing body to execute and deliver this Agreement and to carry out your obligations hereunder; (ii) all legal requirements have been met, and procedures have been followed, including public bidding, in order to ensure the enforceability of this Agreement; (iii) this Agreement is in compliance with all laws applicable to you, including any debt limitations or limitations on interest rates or finance charges; (iv) the Equipment will be used by you only for your essential governmental or proprietary functions of you consistent with the scope of your authority, will not be used in a trade or business of any person or entity, by the federal government or for any personal, family or household use, and your need for the Equipment is not expected to diminish during the term of this Agreement; (v) you have funds available to pay Payments until the end of your current appropriation period, and you intend to request funds to make Payments in each appropriation period from now until the end of the term of this Agreement; and (vi) your exact legal name is as set forth on page one of this Agreement.

3. **INITIAL TERM AND RENEWAL TERM(S):** The term of this Agreement consists of an initial term beginning on the date we pay Supplier and ending at the end of your fiscal year in which we pay Supplier, and a series of renewal terms, each co-extensive with your fiscal year. Except to the extent required by applicable law, if you do not exercise your right to terminate this Agreement under paragraph 6 as of the end of any fiscal year, this Agreement will be deemed automatically renewed for the next succeeding renewal term. An election by you to terminate this Agreement under paragraph 6 is not a default. Notwithstanding anything herein to the contrary, if we cancel this Agreement following a default by you, we may require that you pay the unpaid balance of Payments under this Agreement through the end of your then-current fiscal year, but we may not require you to pay future Payments due beyond that fiscal year or the anticipated residual value of the Equipment. If we sell the Equipment following a default by you, you will not be responsible for a deficiency, except to the extent of our costs of repossession, moving, storage, repair and sale, and our attorneys' fees and costs.

4. **SUPPLEMENTS; SEPARATE FINANCINGS:** To the extent applicable, in the event that the parties hereafter mutually agree to execute and deliver any supplement or schedule ("Supplement") under this Agreement, such Supplement, as it incorporates the terms and conditions of this Agreement, shall be a separate financing distinct from this Agreement or other Supplements thereto. Without limiting the foregoing, upon the occurrence of an event of default or a non-appropriation event with respect to this Agreement or a Supplement (each, a separate "Contract"), as applicable, we shall have the rights and remedies specified in this Agreement with respect to the Equipment financed and the Payments payable under such Contract, and we shall have no rights or remedies with respect to Equipment financed or Payments payable under any other Contract unless an event of default or non-appropriation event has also occurred under such other Contract.

5. **OWNERSHIP; PAYMENTS; TAXES AND FEES:** Except as expressly stated herein, we own the Equipment, excluding any Financed Items. Ownership of any Financed Items shall remain with Supplier thereof. Subject to paragraph 6, you will pay all Payments, as adjusted, when due, without notice or demand and without abatement, set-off, counterclaim or deduction of any amount whatsoever. If any part of a Payment is more than 5 days late, you agree to pay a late charge of 10% of the Payment which is late or, if less, the maximum charge allowed by law. The Payment may be adjusted proportionately upward or downward: (i) if the shipping charges or taxes differ from the estimate given to you; and/or (ii) to comply with the tax laws of the state in which the Equipment is located. You shall pay all applicable taxes, assessments and penalties related to this Agreement, whether levied or assessed on this Agreement, on us (except on our income) or you, or on the Equipment, its lease, sale, ownership, possession, use or operation. If we pay any taxes or other expenses that are owed hereunder, you agree to reimburse us when we request. You agree to pay us a yearly processing fee of up to $50 for personal property taxes we pay related to the Equipment. You agree to pay us a fee of up to $50 for filing and/or searching costs required under the Uniform Commercial Code ("UCC") or other laws. You agree to pay us an origination fee of up to $125 for all closing costs. We may apply all sums received from you to any amounts due and owed to us under the terms of this Agreement. If for any reason your check is returned for insufficient funds, you will pay us a service charge of $30 or, if less, the maximum charge allowed by law. We may make a profit on any fees, estimated tax payments and other charges paid under this Agreement.

6. **NON-APPROPRIATION OR RENEWAL:** If either sufficient funds are not appropriated to make Payments or any other amounts due under this Agreement or (to the extent required by applicable law) this Agreement is not renewed either automatically or by mutual ratification, this Agreement shall terminate and you shall not be obligated to make Payments under this Agreement beyond the then-current fiscal year for which funds have been appropriated. Upon such an event, you shall, no later than the end of the fiscal year for which Payments have been appropriated or the term of this Agreement has been renewed, deliver possession of the Equipment to us. If you fail to deliver possession of the Equipment to us, the termination shall nevertheless be effective but you shall be responsible, to the extent permitted by law and legally available funds, for the payment of damages in an amount equal to the portion of Payments thereafter coming due that is attributable to the number of days after the termination during which you fail to deliver possession and for any other loss suffered by us as a result of your failure to deliver possession as required. You shall notify us in writing within seven days after (i) your failure to appropriate funds sufficient for the payment of the Payments or (ii) to the extent required by applicable law, (a) this Agreement is not renewed or (b) this Agreement is renewed by you (in which event this Agreement shall be mutually ratified and renewed), provided that your failure to give any such notice under clause (i) or (ii) of this sentence shall not operate to extend this Agreement or result in any liability to you.

7. **EQUIPMENT; SECURITY INTEREST:** At your expense, you shall keep the Equipment: (i) in good repair, condition and working order, in compliance with applicable laws, ordinances and manufacturers' and regulatory standards; (ii) free and clear of all liens and claims other than liens and claims under this Agreement; and (iii) at your address shown on page 1 of this Agreement, and you agree not to move the Equipment unless we agree in writing. To the extent permitted by law, you grant us a security interest in the Equipment to secure all amounts you owe us under this Agreement and any supplements hereto. You authorize and ratify our filing of any financing statement(s) to show our interest.

8. **INSURANCE; COLLATERAL PROTECTION; RISK OF LOSS; LOSS OR DAMAGE:** You agree to keep the Equipment fully insured against all risk, with us named as lender's loss payee, in an amount not less than the full replacement value of the Equipment until this Agreement is terminated. You also agree to maintain commercial general liability insurance with such coverage and from such insurance carrier as shall be satisfactory to us and to include us as an additional insured on the policy. You will provide written notice to us within 10 days of any modification or cancellation of your insurance policy(s). You agree to provide us certificates or other evidence of insurance acceptable to us. If you do not provide us with acceptable evidence of property insurance within 30 days after the start of this Agreement, we may, at our sole discretion, charge you a monthly property damage surcharge of up to .0035 of the Equipment cost as a result of our credit risk and administrative and other costs, as would be further described on a letter from us to you. We may make a profit on this program. NOTHING IN THIS PARAGRAPH WILL RELIEVE YOU OF RESPONSIBILITY FOR LIABILITY INSURANCE ON THE EQUIPMENT. As between you and us, and to the extent permitted by law and legally available funds, you are responsible for and shall bear the risk of loss for, shall pay directly, and shall defend against any and all claims, liabilities, proceedings, actions, expenses, damages or losses arising under or related to the Equipment, including, but not limited to, the possession, ownership, lease, use or operation thereof, except that you shall not bear the risk of loss of, nor pay for, any claims, liabilities, proceedings, actions, expenses, damages or losses that arise directly from events occurring after you have surrendered possession of the Equipment in accordance with the terms of this Agreement to us or that arise directly from our gross negligence or willful misconduct. You are responsible for any loss, theft, destruction or damage to the Equipment ("Loss"), regardless of cause, whether or not insured. You agree to promptly notify us in writing of any Loss. If a Loss occurs and we have not otherwise agreed in writing, you will promptly pay to us the unpaid balance of this Agreement, including any future Payments to the end of the term plus the anticipated residual value of the Equipment, both discounted to present value at 2%. Any proceeds of insurance will be paid to us and credited against the Loss. You authorize us to sign on your behalf and appoint us as your attorney-in-fact to endorse in your name any insurance drafts or checks issued due to a Loss.

9. **ASSIGNMENT: YOU SHALL NOT SELL, TRANSFER, ASSIGN, ENCUMBER, PLEDGE OR SUBLEASE THE EQUIPMENT OR THIS AGREEMENT, without our prior written consent.** You shall not consolidate or merge with or into any other entity, distribute, sell or dispose of all or any substantial portion of your assets other than in the ordinary course of business, without our prior written consent, and the surviving, or successor entity or the transferee of such assets, as the case may be, shall assume all of your obligations under this Agreement by a written instrument acceptable to us. No event shall occur which causes or results in a transfer of majority ownership of you while any obligations are outstanding hereunder. We may sell, assign, or transfer this Agreement without notice to or consent from you, and you waive any right you may have to such notice or consent. You agree that if we sell, assign or transfer this Agreement, our assignee will have the same rights and benefits that we have now and will not have to perform any of our obligations. **You agree that our assignee will not be subject to any claims, defenses, or offsets that you may have against us.** This Agreement shall be binding on and inure to the benefit of the parties hereto and their respective successors and assigns.

10. **DEFAULT AND REMEDIES:** You will be in default if: (i) you do not pay any Payment or other sum due to us under this Agreement when due or you fail to perform in accordance with the covenants, terms and conditions of this Agreement; (ii) you make or have made any false statement or misrepresentation to us; or (iii) you dissolve, liquidate, terminate your existence or are in bankruptcy. If you are ever in default, at our option, we can cancel this Agreement and require that you pay the unpaid balance of this Agreement, including any future Payments to the end of term plus the anticipated residual value of the Equipment, both discounted to present value at 2%. We may recover default interest on any unpaid amount at the rate of 12% per year. Concurrently and cumulatively, we may also use any remedies available to us under the UCC and any other law and we may require that you immediately stop using any Financed Items. If we take possession of the Equipment, you agree to pay the costs of repossession, moving, storage, repair and sale. The net proceeds of the sale of any Equipment will be credited against what you owe us under this Agreement and you will be responsible for any deficiency. In the event of any enforcement of our rights under this Agreement after a default by you, you agree to pay our costs and expenses, including reasonable attorneys' fees and collection agency fee. WE SHALL NOT BE RESPONSIBLE TO PAY YOU ANY CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES FOR ANY DEFAULT, ACT OR OMISSION BY ANYONE. Any delay or failure to enforce our rights under this Agreement will not prevent us from enforcing any rights at a later time. You agree that this Agreement is a "Finance Lease" as defined by Article 2A of the UCC and your rights and remedies are governed exclusively by this Agreement. You waive all rights under sections 2A-508 through 522 of the UCC. If interest is charged or collected in excess of the maximum lawful rate, we will refund such excess to you, which will be your sole remedy. In the event that legal proceedings relating to this Agreement (other than our enforcement of this Agreement after a default by you) are commenced in any court or before any other tribunal of competent jurisdiction, the legal fees and other reasonable costs and expenses of the prevailing party shall be paid by the non-prevailing party on demand of the prevailing party.

11. **INSPECTIONS AND REPORTS:** We have the right, at any reasonable time, to inspect the Equipment and any documents relating to its installation, use, maintenance and repair. Within 30 days after our request (or such longer period as provided herein), you will deliver all requested information which we deem reasonably necessary to determine your current financial condition and faithful performance of the terms hereof, including the appropriation of funds to pay amounts due under this Agreement. This may include compiled, reviewed or audited annual financial statements within 120 days after your fiscal year end, all in reasonable detail without any qualification or exception deemed material by us. Unless otherwise accepted by us, each financial statement shall be prepared in accordance with generally accepted accounting principles consistently applied and shall fairly and accurately present your financial condition and results of operations for the period to which it pertains.

12. **END OF TERM:** Unless the purchase option is $1.00, you agree to send us written notice at least 30 days before the end of the final renewal term that you want to purchase or return the Equipment, and you agree to so purchase or return the Equipment not later than the end of the final renewal term. If you fail to so purchase or return the Equipment at or before the end of the final renewal term, you shall be a holdover tenant with respect to this Agreement and the Equipment, and this Agreement shall renew on a month-to-month basis under the same terms hereof until the Equipment has been purchased or returned. You shall continue making Payments and paying all other amounts due until the Equipment is purchased or returned. As long as you have given us the required written notice, if you do not purchase the Equipment, you will return all of the Equipment to a location we specify, at your expense, in retail re-saleable condition, full working order and complete repair. YOU ARE SOLELY RESPONSIBLE FOR REMOVING ANY DATA THAT MAY RESIDE IN THE EQUIPMENT, INCLUDING BUT NOT LIMITED TO HARD DRIVES, DISK DRIVES OR ANY OTHER FORM OF MEMORY.

13. **MISCELLANEOUS:** Unless otherwise stated in an addendum hereto, the parties agree that: (i) this Agreement and any related documents hereto may be authenticated by electronic means; (ii) the "original" of this Agreement shall be the copy that bears your manual, facsimile, scanned or electronic signature and that also bears our manually or electronically signed signature and is held or controlled by us; and (iii) to the extent this Agreement constitutes chattel paper (as defined by the UCC), a security interest may only be created in the original. You agree not to raise as a defense to the enforcement of this Agreement or any related documents that you or we executed or authenticated such documents by electronic or digital means or that you used facsimile or other electronic means to transmit your signature on such documents. Notwithstanding anything to the contrary herein, we reserve the right to require you to sign this Agreement or any related documents hereto manually and to send to us the manually signed, duly executed documents via overnight courier on the same day that you send us the facsimile, scanned or electronic transmission of the documents. You agree to execute any further documents that we may request to carry out the intents and purposes of this Agreement. Whenever our consent is required, we may withhold or condition such consent in our sole discretion, except as otherwise expressly stated herein. From time to time, Supplier may extend to us payment terms for Equipment financed under this Agreement that are more favorable than what has been quoted to you or the general public, and we may provide Supplier information regarding this Agreement if Supplier has assigned or referred it to us. All notices shall be mailed or delivered by facsimile transmission or overnight courier to the respective parties at the addresses shown on this Agreement or such other address as a party may provide in writing from time to time. By providing us with a telephone number for a cellular phone or other wireless device, including a number that you later convert to a cellular number, you are expressly consenting to receiving communications, including but not limited to prerecorded or artificial voice message calls, text messages, and calls made by an automatic telephone dialing system, from us and our affiliates and agents at that number. This express consent applies to each such telephone number that you provide to us now or in the future and permits such calls for non-marketing purposes. Calls and messages may incur access fees from your cellular provider. You authorize us to make non-material amendments (including completing and conforming the description of the Equipment) on any document in connection with this Agreement. Unless stated otherwise herein, all other modifications to this Agreement must be in writing and signed by each party or in a duly authenticated electronic record. This Agreement may not be modified by course of performance. Any provision in this Agreement requiring you to pay amounts due under this Agreement upon the occurrence of a default, failure to appropriate funds or failure to renew this Agreement is hereby amended to limit such requirement to the extent permitted by law and legally available funds.

14. **WARRANTY DISCLAIMERS:** WE ARE LEASING THE EQUIPMENT TO YOU "AS-IS." YOU HAVE SELECTED SUPPLIER AND THE EQUIPMENT BASED UPON YOUR OWN JUDGMENT. WE DO NOT TAKE RESPONSIBILITY FOR THE INSTALLATION OR PERFORMANCE OF THE EQUIPMENT. SUPPLIER IS NOT AN AGENT OF OURS AND WE ARE NOT AN AGENT OF SUPPLIER, AND NOTHING SUPPLIER STATES OR DOES CAN AFFECT YOUR OBLIGATIONS HEREUNDER. **YOU WILL MAKE ALL PAYMENTS UNDER THIS AGREEMENT REGARDLESS OF ANY CLAIM OR COMPLAINT AGAINST ANY SUPPLIER, LICENSOR OR MANUFACTURER, AND ANY FAILURE OF A SERVICE PROVIDER TO PROVIDE SERVICES WILL NOT EXCUSE YOUR OBLIGATIONS TO US UNDER THIS AGREEMENT. WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, OF, AND TAKE ABSOLUTELY NO RESPONSIBILITY FOR, MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, CONDITION, QUALITY, ADEQUACY, TITLE, DATA ACCURACY, SYSTEM INTEGRATION, FUNCTION, DEFECTS, INFRINGEMENT OR ANY OTHER ISSUE IN REGARD TO THE EQUIPMENT, ANY ASSOCIATED SOFTWARE AND ANY FINANCED ITEMS.** SO LONG AS YOU ARE NOT IN DEFAULT UNDER THIS AGREEMENT, WE ASSIGN TO YOU ANY WARRANTIES IN THE EQUIPMENT GIVEN TO US.

15. **LAW; JURY WAIVER:** This Agreement will be governed by and construed in accordance with the law of the state in which you are located. You consent to jurisdiction and venue of any state or federal court in such state and waive the defense of inconvenient forum. For any action arising out of or relating to this Agreement or the Equipment, **BOTH PARTIES WAIVE ALL RIGHTS TO A TRIAL BY JURY**.

SHARP
SHARP BUSINESS SYSTEMS

CUSTOMER CARE MAINTENANCE AGREEMENT

ACCOUNT ID# | SALES REP: | ACCOUNT ID# | START DATE:

CUSTOMER BILL TO INFORMATION

COMPANY NAME: **County of Union**
ADDRESS: **500 N. Main St. Suite 700**
CITY: **Monroe** | STATE: **NC** | ZIP CODE: **28112**
BILLING CONTACT: **Anne Murphy**
PHONE:
EMAIL ADDRESS: Anne.Murphy@unioncountync.gov
POOL CONTRACT NUMBER | GROUP IDENTIFIER
AUTHORIZING CONTRACT NUMBER (GSA/SOURCEWELL/STATE,ETC.)
PURCHASE ORDER NUMBER

CUSTOMER LOCATION

COMPANY NAME: **County of Union**
ADDRESS
CITY | STATE | ZIP CODE
SERVICE CONTACT | PHONE
EMAIL ADDRESS
METER CONTACT | PHONE
EMAIL ADDRESS
MICAS CONTACT | PHONE
EMAIL ADDRESS

DETAIL OF CHARGES

TOTAL BASE		METER ALLOWANCE			EXCESS CHARGE
$0.00 Monthly		B/W 1	0	Quarterly	0.00450
		COLOR 1	0	Quarterly	0.00400
		B/W 2	0	Quarterly	0.01510
TERM	POOL	COLOR 2	0	Quarterly	0.08850
36	SELECT	MICR	0	Quarterly	0.06000

AGREEMENT ENTITLEMENT

Labor	Parts	Drums	B Toner	C Toner	Staples
YES	YES	YES	YES	YES	NO

Connect Shield
YES

ADD TO MASTER POOL

EQUIPMENT COVERED

Model	Serial #	ID #	BW Start Meter	Color Start Meter	Physical Location
		SEE SCHEDULE A			

CONNECT SHIELD DIGITAL CONNECTIVITY SUPPORT OPTION

SCOPE OF STANDARD INSTALLATION

Sharp Business Systems Responsibilities:
- Identification of needed configuration modifications
- Delivery and Installation of all system components/software
- Complete assembly & testing of purchased components
- Configure system for specific network architecture
- Connection of system to an active network port
- Generation of server and up to 5 workstation printer test pages
- Training of Client IT support on PC print driver setup
- Provide Unlimited Help Desk Support for covered devices

Client Responsibilities:
- Provide complete and accurate site survey
- Must have IT Administrative support available during install
- Ensure compatible and updated OS on all workstations/servers
- All servers/storage fully backed up prior to install procedures
- Create all print queues as applicable
- Provide live network drops at each system location
- Provide static IP address for each system as required
- Provide appropriate network cables/cabling

Services Included During Installation and Life of Agreement
- All items listed above under heading of Sharp Business Systems Responsibilities
- Complete coverage of Print Controller and NIC Card including firmware updates
- Server/PC driver install, reinstallation and updates
- Vendor specific utilities installation, reinstallation and updates
- Adding users to fax and scan modules
- Level I support & diagnostics to be performed by Sharp Help Desk. The Help Desk will determine if on-site support is required and within the scope of this agreement.

AUTHORIZATION

Comments:

X	I have read and understand our obligations under the terms and conditions stated herein, and on the reverse side thereof, as the only agreement pertaining to the equipment hereunder. No other agreements apply unless expressly noted on the face of this agreement or in the contracts specified above. I understand all meter counts are based on 8.5 X 11 (minumum) single sided images unless otherwise noted.
	Customer has declined maintenance coverage at this time. The customer understands obtaining maintenance coverage later may incur charges in addition to the normal maintenance charges and has been informed as to the current time and material billing rates.

THIS AGREEMENT SHALL NOT BE EFFECTIVE UNLESS SIGNED BY THE CUSTOMER AND SBS CONTRACT MANAGEMENT Maintenance Agreement contracts are non-refundable, non-transferable, and non-cancelable. Price does not include applicable taxes. Sharp Business Systems is a division of Sharp Electronics Corporation.

Sharp Authorization | DATE

AUTHORIZED CUSTOMER PRINTED NAME

AUTHORIZED CUSTOMER SIGNATURE | DATE

CUSTOMER CARE MAINTENANCE AGREEMENT TERMS AND CONDITIONS

1. GENERAL SCOPE OF COVERAGE
This Agreement covers both the labor and the material for adjustments, repair and replacements of parts ("Maintenance") as required by normal use of the equipment identified on the front page of this Agreement ("Equipment"). Maintenance does not cover charges for installation, relocating or de-installation of the Equipment. Service necessary to repair damage to the Equipment caused by misuse, abuse, negligence, attachment of unauthorized components, accessories or parts, use of substandard facsimile (thermal) paper or substandard supplies, other causes beyond the control of SBS or such causes which would void the Equipments' warranty are not covered by this Agreement. Any such repairs identified in the proceeding sentence shall be separately billed to customer and may lead to the termination of this Agreement. In addition, SBS may terminate this Agreement if the equipment is modified, damaged, altered or serviced by personnel other than the SBS Authorized Personnel, or if parts, accessories or components not meeting machine specifications are added to the Equipment. Maintenance shall not cover charges for repairs needed as a result of Customer or third party modifications to software or hardware.

2. MAINTENANCE VISITS
Maintenance visits will be made during standard weekday business hours at the address shown on the first page of this Agreement. Maintenance visits requested for holidays, weekends or after standard business hours may result in additional charges for travel and labor pursuant to SBS's standard overtime rates in effect at the time of the Maintenance visit. SBS will not connect, disconnect, repair or otherwise service non-Sharp approved attachments, components or accessories. Customer is responsible for disconnecting and reconnecting non-Sharp approved attachments, components or accessories. Maintenance performed during a Maintenance visit includes lubrication and cleaning of the Equipment and the adjustment, repair or replacement of parts described below.

3. REPAIR AND REPLACEMENT OF PARTS
All parts necessary to the operation of the Equipment requiring replacement due to normal wear and tear, subject to the general scope of coverage, will be furnished free of charge during a service call.

4. MAJOR REPAIRS AND UPGRADES Major repairs resulting from misuse of the product, overall failure of the Equipment resulting from the normal end of life cycle of the Equipment and other repairs requiring more than customary repair and part replacements ("Overhaul") shall not be considered covered Maintenance. Should, in the opinion of SBS, an Overhaul be necessary for the Equipment to be in working condition, SBS will submit to the Customer an estimate of needed repairs and their additional cost. If the Customer does not authorize such Overhaul, SBS may, at its option, discontinue Maintenance of the Equipment under this Agreement. Thereafter, SBS may make service available on a "Per Call" basis based upon SBS's standard rates in effect at the time of service.

5. USE OF SBS SUPPLIES
Customer is not obligated to use SBS approved supplies under this Agreement. If, however, the Customer uses other than SBS approved supplies (other than paper) and such supplies result, in SBS's reasonable judgment, additional Maintenance, then SBS may, at its option, assess a surcharge or terminate this Agreement. If SBS terminates this Agreement, SBS may make service available on a "Per Call" basis based upon SBS's standard rates in effect at the time of service.

6. SUPPLIES
Supplies selected, if any, on the front of this Agreement ("Supplies"), shall be included under this Agreement. SBS will provide such selected Supplies to the Customer based upon normal yields. Supplies provided are for use with the Equipment covered by this Agreement only and are not for resale or for use with other equipment. If the Customer's usage of the Supplies exceeds the normal yields for the Equipment being serviced, SBS will invoice and the Customer agrees to pay, for the excess supplies at SBS's current retail prices then in effect. SBS reserves the right to charge for supplies and freight. Normal yield is defined as the published industry standard yield for the product model covered under this Agreement.

7. ELECTRICAL REQUIREMENTS In order to insure optimum performance of the Equipment, Customer must comply with all Sharp required electrical specifications, including but not limited to use of designated circuit and outlets and required voltage requirements. These power standards are required by UL and/or local safety regulations.

8. CHARGES The initial charge for Maintenance under this Agreement is non-refundable and shall be the amount set forth on the first page of this Agreement. The annual maintenance charge with respect to any renewal term will be the charge in effect at the time of term renewal. Customer shall be charged according to the payment cycle indicated on the front page of this Agreement. Customer shall pay all charges within ten (10) days of the date of the SBS invoice. Past due amounts shall accrue interest at a rate not to exceed 1.5% per month. If any Equipment which is subject to this Agreement, or any renewal hereof, is moved to a new SBS service territory, SBS shall have the option of charging the Customer an amount equal to the difference in the published maintenance charges between the current SBS service territory and that of the new SBS service territory (on a pro rata basis). If such equipment is moved beyond any SBS service territory, SBS reserves the right to cancel this Agreement, upon written notice to the Customer, or SBS may charge (and Customer hereby agrees to pay) a fair and reasonable upcharge for continued service. In so doing SBS may take into account the distance to Customer's new location and SBS published rates for SBS's "time and materials", "Per Call" service. SBS reserves the right to increase and/or otherwise modify its service rates and services on each anniversary date of this Agreement. A fuel surcharge may be imposed when fuel prices exceed 10% of the cost of fuel at the execution of this agreement.

9. METER READINGS Customer is obligated to provide meter reading(s) in a timely manner upon request. If the Customer fails or refuses to provide the meter reading in a timely manner, SBS may estimate the meter based upon historical meter readings. The estimated meter will then be applied in the same manner as if the meter had been supplied by the Customer and the Customer agrees to pay any overage charges that may result from the estimated meter reading. A monthly service fee may be assessed if Customer elects for non-participation in the SBS meter collection automation software.

10. TERM This Agreement shall become effective upon SBS's receipt from Customer of the initial non-refundable maintenance charge, as set forth on the first page of this Agreement, or for such Customers that are to be billed in arrears, upon the date indicated in the "Start Date" portion of the first page of this Agreement. The term of this Agreement shall be as specified on the face page of this Agreement. This Agreement shall automatically renew for additional one year periods unless either party provides the other sixty (60) days written notice of termination prior to the end of the initial term, or any renewal term hereunder. In the event that Customer reaches or exceeds the allowance, as specified on the first page of this Agreement, prior to the expiration of the initial term, or any renewal term under this Agreement, Customer hereby agrees to pay SBS the SBS excess meter rate then in effect and same shall apply to all of Customer's excess meter amounts, through the end of the term of this Agreement. For this Agreements (not CPC leases) either party shall have the right during any renewal term, or during any second or third term of a multi-term agreement (if applicable) to terminate this Agreement upon sixty (60) days prior written notice to the other.

11. EVENT OF DEFAULT AND TERMINATION The Customer's failure to pay any amount due under this Agreement, or breach of any other obligation herein shall constitute an Event of Default. Upon an Event of Default, SBS may, in its discretion take any one or more of the following actions: (i) cease performing all Maintenance or any other services under this Agreement; (ii) furnish Maintenance or service upon a prepaid, "Per Call" basis; and/or (iii) terminate this Agreement. Customer shall be obligated to pay any amounts due and owing to SBS within (10) ten days of the expiration or termination of this Agreement. Customer, upon payment of all such amounts due, shall thereafter have no further liability or obligation to SBS whatsoever for any further fees or expenses arising hereunder. In the event SBS terminates this Agreement because of the breach of Customer, SBS shall be entitled to payment for work in progress plus reimbursement for out-of-pocket expenses.

12. INDEMNITY Customer shall indemnify, save and hold SBS, its affiliates, officers, directors, shareholders, employees, agents and representatives and its and their successors and assigns ("SBS Parties") harmless from and against any liability, loss, cost, expense or damage whatsoever caused by reason of any breach of this Agreement by Customer or by reason of any injury, whether to body, property or business or to any other person by reason of any act, neglect, omission or default by Customer or Customers' employees, agents, vendors, contractors or representatives. Customer shall defend, at its sole and absolute cost, any action to which this indemnity shall apply. In the event Customer fails to defend such action SBS may do so and recover from Customer in addition, all costs and expenses, including, attorneys' fees in connection therewith. SBS shall be entitled to recover from Customer all costs and expenses, including without limitation, attorneys' fees and disbursement, incurred by SBS in connection with actions taken by SBS or its representatives (i) to enforce any provision of this Agreement; (ii) to effect any payments or collections provided for herein; (iii) to institute, maintain, preserve, enforce and foreclose on SBS's security interest in or lien on the goods, whether through judicial proceedings or otherwise; or (iv) to defend or prosecute any actions or proceedings arising out of or relating to any SBS transactions with Customer. The foregoing provisions of this paragraph 12 shall survive the termination or expiration of this Agreement to the extent permitted by Law.

13. ENTIRE AGREEMENT This constitutes the entire Agreement between the parties relating to the subject matter hereof. Any modification to this Agreement must be in writing and signed by both parties.

14. SUCESSORS AND ASSIGNS; TERMINATION Neither party may assign this Agreement or any of its rights or obligations hereunder, without the prior written approval of the other party, which will not be unreasonably withheld, except that either party may assign its obligations and rights to a wholly owned subsidiary, parent corporation, or entity under the same ownership, operation or control.

15. SEVERABILITY If any provision in this Agreement is held invalid or unenforceable by a body of competent jurisdiction, such provision will be construed, limited or, if necessary, severed to the extent necessary to eliminate such invalidity or unenforceability. The Parties agree to negotiate in good faith a valid, enforceable substitute provision that most nearly affects the Parties' original intent in entering into this Agreement or to provide an equitable adjustment in the event no such provision can be added. The other provisions of this Agreement shall remain in full force and effect.

16. COUNTERPARTS AND ELECTRONIC SIGNATURES This Agreement may be executed in several counterparts, each of which shall be deemed to be an original and all of which together shall constitute one Agreement binding on all parties hereto, notwithstanding, that all the parties have not signed the same counterpart. A faxed or electronic signature of this Agreement bearing authorized signatures may be treated as an original.

17. WAIVER OF JURY TRIAL ALL PARTIES HERETO IRREVOCABLY WAIVE THE RIGHT TO TRIAL BY JURY

18. JURISDICTION All parties hereby consent to the exclusive jurisdiction of the Federal Courts located in Essex County, New Jersey and the State Courts located in Bergen County, New Jersey in any proceeding arising out of or relating to this Agreement.

19. LIMITATION OF LIABILITY To the extent permitted by Law, in no event shall SBS be liable to Customer for any special, incidental, consequential, or indirect damages, loss of business profits, business interruption, loss of business information arising out of the inability to use the Equipment. The Customer acknowledges that the Maintenance provided by SBS is for the mechanical maintenance of the Equipment only, and that this Agreement does not cover any software, networking or any other connectivity or functionality maintenance, services or support.

20. FORCE MAJEURE SBS shall not be liable to Customer for any failure or delay caused by events beyond SBS's control, including, without limitation, Customer's failure to furnish necessary information; sabotage; failure or delays in transportation or communication; boycotts; embargoes; failures or substitutions of equipment; labor disputes; accidents; shortages of labor, fuel, raw materials, machinery, or equipment; technical failures; fire; storm; flood; earthquake; explosion; acts of the public enemy; war; insurrection; riot; public disorder; epidemic; quarantine restrictions; acts of God; acts of any government or any quasi-governmental authority, instrumentality or agency.

21. NO WARRANTY SBS DISCLAIMS ALL WARRANTIES, EXPESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, TECHNICAL COMPATABILTY, FITNESS FOR USE, OR FITNESS FOR A PARTICULAR PURPOSE.

22. INSURANCE If the Customer is leasing the equipment, the Customer shall obtain and maintain, at its own expense, insurance relating to claims for injury and/or property damage (including commercial general liability insurance) based on its use of the equipment, goods and machinery.
(rev010220) USA-SEC-2020-SBS-00001

TERMS & CONDITIONS SPECIFIC TO CONNECT SHIELD COVERAGE

A. All applicable Terms and Conditions of the Customer Care Maintenance Agreement are in force on the Connect Shield Optional Support Agreement

B. Customer is advised to contact SBS prior to updating or changing any application software or operating system.

C. Additional loading of other drivers, utilities, security updates, anti-virus or other programs to existing workstations/servers that causes SBS supported products to malfunction is not covered under this agreement and will be billed at the current hourly rate. We do not guarantee that our products and software drivers will be compatible with updated application or operating system software.

D. Proprietary application support may be provided on a billable best effort basis. This effort is based upon SBS experience, customer experience and the ability to openly contact proprietary software vendor's support. SBS makes no representation of ability to support proprietary software. Any vendor support charges would be the responsibility of the customer. SBS support for this will be billed at the current hourly rate.

E. It is the responsibility of the client to perform all necessary backups on the PC or Network prior to any installation or update. SBS bears no responsibility for any damages, data or productivity loss from said PC or Network Devices.

F. Network systems are highly volatile and carry no warranty for any work performed.

G. LIMITATION OF LIABILITY: SBS assumes no liability as an insurer and shall not be held accountable to client for failure to perform its obligations due to circumstances beyond the control of SBS. Such circumstances shall include, but not be limited to, any acts or omissions of any government or government authority, natural disaster, act of a public enemy, acts of terrorism, riot, sabotage, disputes or differences with workmen, power failure, delays in transportation or deliveries of supplies or materials, acts of God, or any events that are reasonably beyond the control of SBS.

H. CONFIDENTIALITY: All disks, tapes, processes, reports and information of any nature that are made available by the Client or that become available to SBS by virtue of this agreement shall be held in strict confidence by SBS. Any such confidential disclosure that is provided or such confidential information that becomes available to SBS will be held in the strictest confidence in compliance with this agreement.
(rev052219) USA-SEC-2019-SBS-00001

SCHEDULE A County of Union App#2825859

Sharp Equipment	Location	Pool	Serial Number	ID Number	BW Meter	COLOR Meter
MXM3071	Government Center	1				
MXM3071	Government Center	1				
MX6071	Agriculture Center	1				
MX-B427PW	DSS	2				
MX-B427PW	Cane Creek Park	2				
MX-B427PW	Government Center	2				
MX-B427PW	DSS	2				
MX-B427PW	DSS	2				
MX-B427PW	Sheriff's Office	2				
MX-B427PW	Government Center	2				
MX-C407P	Monroe Library	2				
MX-B427PW	Government Center	2				
MX-B427PW	Government Center	2				
MX-C407P	Monroe Library	2				
MX-B427PW	Agriculture Center	2				
MX-B427PW	Government Center	2				
MX-C407P	Monroe Library	2				
MX-B427PW	Sheriff's Office	2				
MX-C407P	Indian Trail Library	2				
MX-B427PW	Animal Shelter	2				
MX-B427PW	Sheriff's Office	2				
MX-C407P	Indian Trail Library	2				
MX-B427PW	Cane Creek Park	2				
MX-C407P	Monroe Library	2				
MX-C407P	Monroe Library	2				
MX-B376W	Government Center	2				
MX-B376W	Utility Operations Center	2				
MX-B376W	Trailer	2				
MX-C407P	Monroe Library	2				
MX-C407P	Marshville-Library	2				
MX-C407P	Board of Elections	2				
MX3071	Government Center	1				
MX3071	Government Center	1				
MX3071	Cooperative Extension	1				
MX3071	Operations Center	1				
MX3071	Government Center	1				
MX6071	DSS	1				
MX-C304W	DSS	2				
MX-C304W	DSS	2				
MX-C304W	Board of Commissioners	2				
MX3071	DSS	1				
MX3071	DSS	1				
MX3071	DSS	1				
MX3071	DSS	1				
MX3071	DSS	1				
MX6071	DSS	1				
MX3071	DSS	1				
MX3071	DSS	1				
MX6071	DSS	1				
MX3071	DSS	1				
MX6071	DSS	1				
MX4071	DSS	1				
MX3071	DSS	1				
MX3071	DSS	1				
MX3071	DSS	1				
MX6071	DSS	1				

MX3071	DSS	1				
MX3071	DSS	1				
MX3071	DSS	1				
MX7081	DSS	1				
MX4071	DSS	1				
MX4071	DSS	1				
MX6071	DSS	1				
MX3071	DSS	1				
MX3071	DSS	1				
MX3071	12 mile WWTP	1				
MX3071	Monroe-Main Library	1				
MX3071	Monroe-Main Library	1				
MXM3071	Government Center	1				
MXM3071	Government Center	1				
MXM3071	Sheriff's Office	1				
MX4071	Government Center	1				
MX3071	Government Center	1				
MXM3071	Government Center	1				
MX4071	Government Center	1				
MX4071	Cane Creek Park	1				
MX4071	Government Center	1				
MX4071	Government Center	1				
MX3071	Government Center	1				
MX4071	Sheriff's Office	1				
MX3071	Sheriff's Office	1				
MX6071	Government Center	1				
MX3071	Government Center	1				
MX4071	Sheriff's Office	1				
MX6071	Sheriff's Office	1				
MX3071	Indian Trail Library	1				
MX6071	Monroe-Main Library	1				
MX3071	Government Center	1				
MX6071	Government Center	1				
MX4071	Government Center	1				
MX3071	Jail - Main	1				
MX3071	Jail - Main	1				
MX6071	Jail - Main	1				
MX4071	Transportation/Nutrition/Garage	1				
MX3071	Indian Trail Library	1				
MX3071	Waxhaw-Library	1				
MX3071	Indian Trail Library	1				
MX3071	Government Center	1				
MX3071	Government Center	1				
MX3071	Monroe-Main Library	1				
MX3071	Jail - Main	1				
MX3071	Utility Operations Center	1				
MX3071	Government Center	1				
MX3071	Judicial Center	1				
MX4071	Government Center	1				
MX3071	Sheriff's Office	1				
MX3071	Monroe-Main Library	1				
MX3071	Government Center	1				
MX3071	Animal Shelter	1				
MX3071	Monroe-Main Library	1				
MX3071	Judicial Center	1				
MX3071	Monroe-Main Library	1				
MX3071	Sheriff's Office	1				
MX4071	Government Center	1				
MX3071	Monroe-Main Library	1				

MX3071	Sheriff's Office	1				
MX3071	Government Center	1				
MX3071	Government Center	1				
MX3071	Indian Trail-Sheriff's Office	1				
MX3071	Government Center	1				
MX3071	Marshville-Library	1				
MX3071	Government Center	1				
MX-B467P	Government Center	2				
MX-B427PW	Government Center	2				
MX-C407P	Monroe Library	2				
MX-B427PW	DSS	2				
MX-B427PW	Sheriff's Office	2				
MX-B557P	Government Center	2				
MX-B427PW	DSS	2				
MX-B427PW	DSS	2				
MX-B427PW	DSS

MX-B376W	Government Center	2				
MX-B376W	Government Center	2				
MX-B376W	Judicial Center	2				
MX-B376W	Government Center	2				
MX-B376W	Government Center	2				
MX-B376W	DSS	2				
MX-B376W	Government Center	2				
MXM3071	Government Center	1				
MX-B376W	DSS	2				
MX-B376W	Government Center	2				
MX-B376W	Judicial Center	2				
MX-B376W	County Garage	2				
MX-B376W	Animal Shelter	2				
MX-B376W	Sheriff's Office	2				
MX-B376W	Sheriff's Office	2				
MX-C304W	Marshville-Library	2				
MX-C304W	Waxhaw-Library	2				
MX-B376W	Sheriff's Office	2				
MX3071	County Landfill	1				
MX-B376W	Crooked Creek WWTP	2				
MX-C407P	Utility Operations Center	2				
MX-C407P	Jail - Main	2				
MX-C407P	Jail - Main	2				
MX-C407P	DSS	2				
MX-C407P	DSS	2				
MX-C407P	Transportation/Nutrition/Garage	2				
MX-C407P	Government Center	2				
MX-C507P	Government Center	2				
MX-C407P	Government Center	2				
MX-C407P	Government Center	2				
MX-C407P	Trailer	2				
MX-C407P	Sheriff's Office	2				
MX-C407P	Government Center	2				
MX-C407P	DSS	2				
MX-C507P	Government Center	2				
MX-C407P	Government Center	2				
MX-C407P	Government Center	2				
MX-C407P	Government Center	2				
MX-C407P	Government Center	2				
MX-C407P	County Landfill	2				
MX-C407P	Sheriff's Office	2				
MX-C407P	Monroe Library	2				
MX-C407P	Indian Trail Library	2				
MX-C407P	Cane Creek Park	2				
MX-C407P	Indian Trail-Sheriff's Office	2				
MX3071	Sign Shop	1				
MX3071	Government Center	1				
MXM3071	Board of Elections	1				
HPLJM610DN	Jail - Main	MICR				
HPLJM610DN		MICR				

This Schedule A is to be attached to and becomes part of the Agreement dated _____ by and between the undersigned and Sharp Electronics Corporation through its Sharp Business Systems Division.

This Schedule A is hereby verified as correct by the undersigned Customer, who acknowledges receipt of copy.

County of Union _____ _____ _____

Customer Signature Title Date

Union County, NC

Staff Report

Union County Government Center
500 North Main Street
Monroe, North Carolina
www.unioncountync.gov

File #: 21-443 **Agenda Date:** 11/15/2021 **Agenda #:**

TITLE:

Purchase of Real Property

INFORMATION CONTACT:

Brian Matthews, Assistant County Manager, (704) 292-2597

ACTION REQUESTED:

(i) Authorize the purchase of real property located at 5301 Friendly Baptist Church Road and 0 Friendly Baptist Church Road (Union County Tax Parcels #08231002C and #08231002B) in the amount of $140,000; and (ii) authorize the County Manager to execute all necessary contracts and documentation to effectuate such purchase.

BACKGROUND:

This agenda item is for the purchase of two adjacent parcels of property located on or near 5301 Friendly Baptist Church Road (Tax Parcel #08231002C and #08231002B). The property, once purchased, may be used associated with remediation of an environmental health issue or any other lawful purpose.

FINANCIAL IMPACT:

$140,000

ADDITIONAL SIGNATURES ADDENDUM
[Consult "Guidelines" (Form 3G) for guidance in completing this form]
NOTE: This form should not be used to add new parties after a contract has been formed

Property Address: **0 Friendly Baptist Church Road and 5301 Friendly Baptist Church Road**

This ADDITIONAL SIGNATURES ADDENDUM is attached to and made a part of the following named document including any addendum listed here (*describe form and addendum by name*):

OFFER TO PURCHASE AND CONTRACT - VACANT LOT/LAND Document").

The number of parties who need to sign the Document exceed the space provided in the Document. The sole purpose of this Addendum is to provide additional spaces for the identification and signature of the Document by all necessary parties.

By signing this Addendum, each of the additional parties named below acknowledges receipt of the Document and agrees to be bound by all the terms, conditions and/or other provisions contained in the Document.

THE NORTH CAROLINA ASSOCIATION OF REALTORS®, INC. AND THE NORTH CAROLINA BAR ASSOCIATION MAKE NO REPRESENTATION AS TO THE LEGAL VALIDITY OR ADEQUACY OF ANY PROVISION OF THIS FORM IN ANY SPECIFIC TRANSACTION.

Party Name **Sonya M. Primo** ☒ Buyer ☐ Seller ☐ Other: _____
Signature: Sonya M. Primo Date: 11-7-2021

Party Name (print) **Majoriko Primo** ☐ Buyer ☒ Seller ☐ Other: _____
Signature: _____ Date: 11-7-2021

Party Name (print): **Tracey Dean Medlin** ☐ Buyer ☒ Seller ☐ Other: _____
Signature: _____ Date: 11-7-21

Party Name (print): **Yurytzi Devon Medlin** ☐ Buyer ☒ Seller ☐ Other _____
Signature: _____ Date: 11-7-21

Party Name (print): **Stuart Douglas Medlin** ☐ Buyer ☒ Seller ☐ Other _____
Signature: _____ Date: 11-7-21

Party Name (print): **Tony Lee Medlin** ☐ Buyer ☒ Seller ☐ Other: _____
Signature: _____ Date: 11-7-21

Party Name (print): _____ ☐ Buyer ☐ Seller ☐ Other: _____
Signature: _____ Date: _____

Entity Party Name (print): Estate of Emma Rowell Medlin
By: _____ 11-7-2021 Sonya Medlin Primo / Executor
Signature of authorized representative Date Print name and title

☐ Buyer ☐ Seller ☐ Other: _____
Entity Party Name (print): _____
By: _____
Signature of authorized representative Date Print name and title

☐ Buyer ☐ Seller ☐ Other: _____

This form jointly approved by:
North Carolina Bar Association
North Carolina Association of REALTORS®, Inc.
REALTOR®
EQUAL HOUSING OPPORTUNITY
STANDARD FORM 3-T
Revised 7/2020
© 7/2020

OFFER TO PURCHASE AND CONTRACT - VACANT LOT/LAND
[Consult "Guidelines" (Form 12G) for guidance in completing this form]

NOTE: This contract is intended for unimproved real property that Buyer will purchase only for personal use and does not have immediate plans to subdivide. It should not be used to sell property that is being subdivided unless the property has been platted, properly approved and recorded with the register of deeds as of the date of the contract. If Seller is Buyer's builder and the sale involves the construction of a new single family dwelling prior to closing, use the standard Offer to Purchase and Contract—New Construction (Form 800-T) or, if the construction is completed, use the Offer to Purchase and Contract (Form 2-T) with the New Construction Addendum (Form 2A3-T).

For valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, Buyer offers to purchase and Seller upon acceptance agrees to sell and convey the Property on the terms and conditions of this Offer To Purchase and Contract and any addendum or modification made in accordance with its terms (together the "Contract").

1. **TERMS AND DEFINITIONS**: The terms listed below shall have the respective meaning given them as set forth adjacent to each term.

(a) "**Seller**": **Sonya M. Primo as Executor of the Estate of Emma Rowell Medlin; Sonya M. Primo and spouse Maioriko Primo;**
Tracey Dean Medlin and spouse, Yurytzi Devon Medlin; Stuart Douglas Medlin, and Tony Lee Medlin

(b) "**Buyer**": **Union County, a body politic**

(c) "**Property**": The Property shall include all that real estate described below together with all appurtenances thereto including the

NOTE: If the Property will include a manufactured (mobile) home(s), Buyer and Seller should consider including the Manufactured (Mobile) Home provision in the Additional Provisions Addendum (Standard Form 2A11-T) with this offer.

improvements located thereon.
Street Address: **0 Friendly Baptist Church Rd and 5301 Friendly Baptist Church Rd**
City: Zip **Indian Trail, NC 28079**
County: **UNION,** **North Carolina**

NOTE: Governmental authority over taxes, zoning, school districts, utilities and mail delivery may differ from address shown.

Legal Description: (Complete *ALL* applicable)
Plat Reference: Lot/Unit_____, Block/Section _____, Subdivision/Condominium _____
_____, as shown on Plat Book/Slide _____ at Page(s) _____

This form jointly approved by:
North Carolina Bar Association
STANDARD FORM 12-T
Revised 7/2021

The PIN/PID or other identification number of the Property is: **08-231-002C & 08-2321-002B**
Other description:

Some or all of the Property may be described in Deed Book _____ at Page _____
(d) "**Purchase Price**":

$ **140,000.00**	paid in U.S. Dollars upon the following terms:
N/A	BY DUE DILIGENCE FEE made payable and delivered to Seller by the Effective Date by ❑ cash ❑ personal check ❑ official bank check ❑ wire transfer ❑ electronic transfer (*specify payment service*: _____)
$ **N/A**	BY INITIAL EARNEST MONEY DEPOSIT made payable and delivered to Escrow Agent named in Paragraph 1(f) by ❑ cash ❑ personal check ❑ official bank check ❑ wire transfer, ❑ electronic transfer, EITHER ❑ by the Effective Date OR ❑ within five (5) days of the Effective Date of this Contract.
$ **N/A**	BY (ADDITIONAL) EARNEST MONEY DEPOSIT made payable and delivered to Escrow Agent named in Paragraph 1(f) no later than 5 p.m. on _____, ***TIME BEING OF THE ESSENCE*** by ❑ cash ❑ official bank check ❑ wire transfer ❑ electronic transfer
$ **N/A**	BY ASSUMPTION of the unpaid principal balance and all obligations of Seller on the existing loan(s) secured by a deed of trust on the Property in accordance with the attached Loan Assumption Addendum (Standard Form 2A6-T).
$ **N/A**	BY SELLER FINANCING in accordance with the attached Seller Financing Addendum (Standard Form 2A5-T).
$ **140,000.00**	BALANCE of the Purchase Price in cash at Settlement (some or all of which may be paid with the proceeds of a new loan)

If the parties agree that Buyer will pay any fee or deposit described above by electronic transfer, Seller agrees to cooperate in effecting such transfer, including the establishment of any necessary account and providing any necessary information to Buyer, provided, however, Buyer shall be responsible for additional costs, if any, associated with such transfer.

Should Buyer fail to deliver either the Due Diligence Fee or any Initial Earnest Money Deposit by their due dates, or should any check or other funds paid by Buyer be dishonored, for any reason, by the institution upon which the payment is drawn, Buyer shall have one (1) banking day after written notice to deliver cash, official bank check, wire transfer or electronic transfer to the payee. In the event Buyer does not timely deliver the required funds, Seller shall have the right to terminate this Contract upon written notice to Buyer, and Seller shall be entitled to recover the Due Diligence Fee together with all Earnest Money Deposit paid or to be paid in the future. In addition, Seller may be entitled to recover reasonable attorney fees and court costs. See paragraph 20 for a party's right to attorneys' fees incurred in collecting the Earnest Money Deposit or Due Diligence Fee.

(e) "**Earnest Money Deposit**": The Initial Earnest Money Deposit, the Additional Earnest Money Deposit and any other earnest monies paid or required to be paid in connection with this transaction, collectively the "Earnest Money Deposit", shall be deposited promptly and held in escrow by Escrow Agent until Closing, at which time it will be credited to Buyer, or until this Contract is otherwise terminated. In the event: (1) this offer is not accepted; or (2) a condition of any resulting contract is not satisfied, then the Earnest Money Deposit shall be refunded to Buyer. See paragraph 20 for a party's right to the Earnest Money Deposit, and attorneys' fees incurred in collecting the Earnest Money Deposit, in the event of breach of this Contract by the other party.

(f) "**Escrow Agent**" (insert name): N/A
Buyer and Seller consent to disclosure by the Escrow Agent of any material facts pertaining to the Earnest Money Deposit to the parties to this transaction, their real estate agent(s) and Buyer's lender(s).

NOTE: In the event of a dispute between Seller and Buyer over the disposition of the Earnest Money Deposit held in escrow, a licensed real estate broker ("Broker") is required by state law (and Escrow Agent, if not a Broker, hereby agrees) to retain the Earnest Money Deposit in the Escrow Agent's trust or escrow account until Escrow Agent has obtained a written release from the parties consenting to its disposition or until disbursement is ordered by a court of competent jurisdiction. Alternatively, if a Broker or an attorney licensed to practice law in North Carolina ("Attorney") is holding the Earnest Money Deposit, the Broker or Attorney may deposit the disputed monies with the appropriate clerk of court in accordance with the provisions of N.C.G.S. §93A-12.

THE PARTIES AGREE THAT A REAL ESTATE BROKERAGE FIRM ACTING AS ESCROW AGENT MAY PLACE THE EARNEST MONEY DEPOSIT IN AN INTEREST BEARING TRUST ACCOUNT AND THAT ANY INTEREST EARNED THEREON SHALL BE DISBURSED TO THE ESCROW AGENT MONTHLY IN CONSIDERATION OF THE EXPENSES INCURRED BY MAINTAINING SUCH ACCOUNT AND RECORDS ASSOCIATED THEREWITH.

(g) "**Effective Date**": The date that: (1) the last one of Buyer and Seller has signed or initialed this offer or the final counteroffer, if any, and (2) such signing or initialing is communicated to the party making the offer or counteroffer, as the case may be. The parties acknowledge and agree that the initials lines at the bottom of each page of this Contract are merely evidence of their having reviewed the terms of each page, and that the complete execution of such initials lines shall not be a condition of the effectiveness of this Agreement.

(h) "**Due Diligence**": Buyer's opportunity to investigate the Property and the transaction contemplated by this Contract, including but not necessarily limited to the matters described in Paragraph 2 below, to decide whether Buyer, in Buyer's sole discretion, will proceed with or terminate the transaction.

(i) **"Due Diligence Fee"**: A negotiated amount, if any, paid by Buyer to Seller with this Contract for Buyer's right to terminate the Contract for any reason or no reason during the Due Diligence Period. It shall be the property of Seller upon the Effective Date and shall be a credit to Buyer at Closing. The Due Diligence Fee shall be non-refundable except in the event of a material breach of this Contract by Seller, or if this Contract is terminated under Paragraph 20(b) or as otherwise provided in any addendum hereto. Buyer and Seller each expressly waive any right that they may have to deny the right to conduct Due Diligence or to assert any defense as to the enforceability of this Contract based on the absence or alleged insufficiency of any Due Diligence Fee, it being the intent of the parties to create a legally binding contract for the purchase and sale of the Property without regard to the existence or amount of any Due Diligence Fee. See paragraph 20 for a party's right to attorneys' fees incurred in collecting the Due Diligence Fee.

(j) "**Due Diligence Period**": The period beginning on the Effective Date and extending through 5:00 p.m. on
N/A ***TIME BEING OF THE ESSENCE***.
(k) "**Settlement**": The proper execution and delivery to the closing attorney of all documents necessary to complete the transaction contemplated by this Contract, including the deed, settlement statement, deed of trust and other loan or conveyance documents, and the closing attorney's receipt of all funds necessary to complete such transaction

(l) **"Settlement Date":** The parties agree that Settlement will take place on **November 15, 2021** (the "Settlement Date"), unless otherwise agreed in writing, at a time and place designated by Buyer.

NOTE: See paragraph 9, **DELAY IN SETTLEMENT/CLOSING** for conditions under which Settlement may be delayed.

(m) **"Closing"**: The completion of the legal process which results in the transfer of title to the Property from Seller to Buyer, which includes the following steps: (1) the Settlement (defined above); (2) the completion of a satisfactory title update to the Property following the Settlement; (3) the closing attorney's receipt of authorization to disburse all necessary funds; and (4) recordation in the appropriate county registry of the deed(s) and deed(s) of trust, if any, which shall take place as soon as reasonably possible for the closing attorney after Settlement. Upon Closing, the proceeds of sale shall be disbursed by the closing attorney in accordance with the settlement statement and the provisions of Chapter 45A of the North Carolina General Statutes. If the title update should

00 **WARNING:** The North Carolina State Bar has determined that the performance of most acts and services required for a closing

reveal unexpected liens, encumbrances or other title defects, or if the closing attorney is not authorized to disburse all necessary funds, then the Closing shall be suspended and the Settlement deemed delayed under Paragraph 9 (Delay in Settlement/Closing).
(n) **"Special Assessments"**: A charge against the Property by a governmental authority in addition to ad valorem taxes and recurring governmental service fees levied with such taxes, or by an owners' association in addition to any regular assessment (dues), either of which may be a lien against the Property.

2. **BUYER'S DUE DILIGENCE PROCESS**:

(a) **Loan**: Buyer, at Buyer's expense, shall be entitled to pursue qualification for and approval of the Loan if any.

NOTE: Buyer's obligation to purchase the Property is not contingent on obtaining a Loan. Therefore, Buyer is advised to consult with Buyer's lender prior to signing this offer to assure that the Due Diligence Period allows sufficient time for the appraisal to be completed and for Buyer's lender to provide Buyer sufficient information to decide whether to proceed with or terminate the transaction.

materially comply with any of Seller's obligations under paragraph 6 of this Contract or for any other reason permitted under the terms of this Contract or North Carolina law.

(b) **Property Investigation**: Buyer or Buyer's agents or representatives, at Buyer's expense, shall be entitled to conduct all desired tests, surveys, appraisals, investigations, examinations and inspections of the Property as Buyer deems appropriate, including but NOT limited to the following:

(i) Soil And Environmental: Reports to determine whether the soil is suitable for Buyer's intended use and whether there is any environmental contamination, law, rule or regulation that may prohibit, restrict or limit Buyer's intended use.
(ii) **Septic/Sewer System**: Any applicable investigation(s) to determine: (1) the condition of an existing sewage system, (2) the costs and expenses to install a sewage system approved by an existing Improvement Permit, (3) the availability and expense to connect to a public or community sewer system, and/or (4) whether an Improvement Permit or written evaluation may be obtained from the County Health Department for a suitable ground absorption sewage system.
(iii) **Water**: Any applicable investigation(s) to determine: (1) the condition of an existing private drinking water well, (2) the costs and expenses to install a private drinking water well approved by an existing Construction Permit, (3) the availability, costs and expenses to connect to a public or community water system, or a shared private well, and/or (4) whether a Construction Permit may be obtained from the County Health Department for a private drinking water well.
(iv) **Review of Documents**: Review of the Declaration of Restrictive Covenants, Bylaws, Articles of Incorporation, Rules and Regulations, and other governing documents of any applicable owners' association and/or subdivision. If the Property is subject to regulation by an owners' association, it is recommended that Buyer review the completed Owners' Association And Addendum (Standard Form 2A12-T) provided by Seller prior to signing this offer. It is also recommended that the Buyer determine if the owners' association or its management company charges fees for providing information required by Buyer's lender or confirming restrictive covenant compliance.
(v) **Appraisals**: An appraisal of the Property
(vi) **Survey**: A survey to determine whether the property is suitable for Buyer's intended use and the location of easements, setbacks, property boundaries and other issues which may or may not constitute title defects.
(vii) **Zoning and Governmental Regulation**: Investigation of current or proposed zoning or other governmental regulation that may affect Buyer's intended use of the Property, adjacent land uses, planned or proposed road construction, and school attendance zones.
(viii) **Flood Hazard**: Investigation of potential flood hazards on the Property, and/or any requirement to purchase flood insurance in order to obtain the Loan.

(ix) **Utilities and Access:** Availability, quality, and obligations for maintenance of utilities including electric, gas, communication services, storm water management, and means of access to the Property and amenities.

(x) **Streets/Roads**: Investigation of the status of the street/road upon which the Property fronts as well as any other street/road used to access the Property, including: (1) whether any street(s)/road(s) are public or private, (2) whether any street(s)/road(s) designated as public are accepted for maintenance by the State of NC or any municipality, or (3) if private or not accepted for public maintenance, the consequences and responsibility for maintenance and the existence, terms and funding of any maintenance agreements.

NOTE: NC General Statutes Section 136-102.6(f) (the "Statute") requires that under circumstances described in the Statute, a buyer must be provided a subdivision streets disclosure statement prior to entering into an agreement to buy subdivided property described in the Statute. If Buyer or Seller are uncertain whether the sale of the Property described in this Contract is subject to the Statute, consult a NC real estate attorney.

(xi) **Sale/Lease of Existing Property**: As noted in paragraph 3(b), this Contract is not conditioned upon the sale/lease or closing of other property owned by Buyer. Therefore, if Buyer must sell or lease other real property in order to qualify for a new loan or to otherwise complete the purchase of the Property, Buyer should seek to close on Buyer's other property prior to the end of the Due Diligence Period or be reasonably satisfied that closing on Buyer's other property will take place prior to the Settlement Date of this Contract.

(xii) **Special Assessments**: Investigation of the existence of Special Assessments that may be under consideration by a governmental authority or an owners' association.

(c) **Buyer's Obligation to Repair Damage**: Buyer shall, at Buyer's expense, promptly repair any damage to the Property resulting from any activities of Buyer and Buyer's agents and contractors, but Buyer shall not be responsible for any damage caused by accepted practices applicable to any N.C. licensed professional performing reasonable appraisals, tests, surveys, examinations and inspections of the Property. This repair obligation shall survive any termination of this Contract.

(d) **Indemnity**: Buyer will indemnify and hold Seller harmless from all loss, damage, claims, suits or costs, which shall arise out of any contract, agreement, or injury to any person or property as a result of any activities of Buyer and Buyer's agents and contractors relating to the Property except for any loss, damage, claim, suit or cost arising out of pre-existing conditions of the Property and/or out of Seller's negligence or willful acts or omissions. This indemnity shall survive this Contract and any termination hereof.

(e) **Buyer's Right to Terminate:** Provided that Buyer has delivered any agreed-upon Due Diligence Fee, Buyer shall have the right to terminate this Contract for any reason or no reason, by delivering to Seller written notice of termination (the "Termination Notice") during the Due Diligence Period (or any agreed-upon written extension of the Due Diligence Period), ***TIME BEING OF THE ESSENCE***. If Buyer timely delivers the Termination Notice, this Contract shall be terminated and the Earnest Money Deposit shall be refunded to Buyer.

(f) **CLOSING SHALL CONSTITUTE ACCEPTANCE OF THE PROPERTY IN ITS THEN EXISTING CONDITION UNLESS PROVISION IS OTHERWISE MADE IN WRITING.**

3. **BUYER REPRESENTATIONS**:

(a) **Funds to complete purchase:**

❑ (*Check if applicable*) Cash. Buyer intends to pay cash in order to purchase the Property and does not intend to obtain a loan or funds from sources other than Buyer's own assets. Verification of cash available for Settlement is ❑ is not ❑ attached.

NOTE: If Buyer does not intend to obtain a new loan(s) and/or funds from sources other than Buyer's own assets, Seller is advised, prior to signing this offer, to obtain documentation from Buyer which demonstrates that Buyer will be able to close on

OR:

❑ (*Check if applicable*) Loan(s)/Other Funds: Buyer intends to obtain a loan(s) and/or other funds to purchase the Property from the following sources (*check all applicable sources*):

❑ First Mortgage Loan:

Buyer intends to obtain a first mortgage loan of the following type in order to purchase the Property: ❑ Conventional ❑ USDA ❑ Other type: _____

_____

in the principal amount of _____.

❑ Second Mortgage Loan:

Buyer intends to obtain a second mortgage loan of the following type in order to purchase the Property: _____

❑ Other funds:

Buyer intends to obtain funds from the following other source(s) in order to purchase the Property: _____

_____

_____



(b) **Other Property**: Buyer ❑ DOES ❑ DOES NOT have to sell or lease other real property in order to qualify for a new loan or to complete the purchase. *(Complete the following only if Buyer DOES have to sell or lease other real property:)*

Other Property Address: _____

❑ (*Check if applicable*) Buyer's other property IS under contract as of the date of this offer, and a copy of the contract has either been previously provided to Seller or accompanies this offer. *(Buyer may mark out any confidential information, such as the purchase price and the buyer's identity, prior to providing a copy of the contract to Seller.)* Failure to provide a copy of the contract shall not prevent this offer from becoming a binding contract; however, SELLER IS STRONGLY ENCOURAGED TO OBTAIN AND REVIEW THE CONTRACT ON BUYER'S PROPERTY PRIOR TO ACCEPTING THIS OFFER.

❑ (*Check if applicable*) Buyer's other property IS NOT under contract as of the date of this offer. Buyer's property (*check only ONE of the following options*):

❑ is listed with and actively marketed by a licensed real estate broker.

❑ will be listed with and actively marketed by a licensed real estate broker.

NOTE: This Contract is NOT conditioned upon the sale/lease or closing of Buyer's other property. If the parties agree to make this Contract conditioned on a sale/lease or closing of Buyer's other property, an appropriate contingency addendum should be drafted by a North Carolina real estate attorney and added to this Contract.

❑ Buyer is attempting to sell/lease the Buyer's Property without the assistance of a licensed real estate broker.

(c) **Performance of Buyer's Financial Obligations**: To the best of Buyer's knowledge, there are no other circumstances or conditions existing as of the date of this offer that would prohibit Buyer from performing Buyer's financial obligations in accordance with this Contract, except as may be specifically set forth herein.

4. **BUYER OBLIGATIONS**:

(a) **Responsibility for Special Assessments**: Buyer shall take title subject to all Special Assessments that may be approved following Settlement.

(b) **Responsibility for Certain Costs**: Buyer shall be responsible for all costs with respect to:

(i) any loan obtained by Buyer, including charges by an owners association and/or management company as agent of an owners' association for providing information required by Buyer's lender;
(ii) charges required by an owners' association declaration to be paid by Buyer for Buyer's future use and enjoyment of the Property, including, without limitation, working capital contributions, membership fees, or charges for Buyer's use of the common elements and/or services provided to Buyer, such as "move-in fees";
(iii) determining restrictive covenant compliance;
(iv) appraisal;
(v) title search;
(vi) title insurance;

(vii) any fees charged by the closing attorney for the preparation of the Closing Disclosure, Seller Disclosure and any other settlement statement;
(viii) recording the deed; and
(ix) preparation and recording of all instruments required to secure the balance of the Purchase Price unpaid at Settlement.

(c) **Authorization to Disclose Information**: Buyer authorizes the Buyer's lender(s), the parties' real estate agent(s) and closing attorney: (1) to provide this Contract to any appraiser employed by Buyer or by Buyer's lender(s); and (2) to release and disclose any buyer's closing disclosure, settlement statement and/or disbursement summary, or any information therein, to the parties to this transaction, their real estate agent(s) and Buyer's lender(s).

5. **SELLER REPRESENTATIONS**:

(a) **Ownership**: Seller represents that Seller:

❑ has owned the Property for at least one year.
❑ has owned the Property for less than one year.
❑ does not yet own the Property.

(b) **Owners' Association(s) and Dues**: To best of Seller's knowledge, ownership of the Property ❑ subjects ❑ does not subject Buyer to regulation by one or more owners' association(s) and governing documents, which impose various mandatory covenants, conditions and restrictions upon the Property and Buyer's enjoyment thereof, including but not limited to obligations to pay regular assessments (dues) and Special Assessments. If there is an owners' association, then an Owners' Association Disclosure and Addendum For Properties Exempt from Residential Property Disclosure Statement (Standard Form 2A12-T) shall be completed by Seller, at Seller's expense, and must be attached as an addendum to this Contract.

(c) **Sewage System Permit:** (❑ Applicable ❑ Not Applicable) Seller warrants that the sewage system described in the Improvement Permit attached hereto has been installed, which representation survives Closing, but makes no further representations as to the system.

(d) **Private Drinking Water Well Permit**: (❑ Applicable ❑ Not Applicable) Seller warrants that a private drinking water well has been installed, which representation survives Closing, but makes no further representations as to the well. (If well installed after July 1, 2008, attach Improvement Permit hereto.

6 . **SELLER OBLIGATIONS**:

(a) **Evidence of Title, Payoff Statement(s)** and Non Foreign Status:

(i) Seller agrees to use best efforts to provide to the closing attorney as soon as reasonably possible after the Effective Date, copies of all title information in possession of or available to Seller, including but not limited to: title insurance policies, attorney's opinions on title, surveys, covenants, deeds, notes and deeds of trust, leases, and easements relating to the Property.
(ii) Seller shall provide to the closing attorney all information needed to obtain a written payoff statement from any lender(s) regarding any security interest in the Property as soon as reasonably possible after the Effective Date, and Seller designates the closing attorney as Seller's agent with express authority to request and obtain on Seller's behalf payoff statements and/or short-pay statements from any such lender(s).

(iii) If Seller is not a foreign person as defined by the Foreign Investment in Real Property Tax Act, Seller shall also provide to the closing attorney a non-foreign status affidavit (pursuant to the Foreign Investment in Real Property Tax Act). In the event Seller shall not provide a non-foreign status affidavit, Seller acknowledges that there may be withholding as provided by the Internal Revenue Code.

(b) **Authorization to Disclose Information**: Seller authorizes: (1) any attorney presently or previously representing Seller to release and disclose any title insurance policy in such attorney's file to Buyer and both Buyer's and Seller's agents and attorneys; (2) the Property's title insurer or its agent to release and disclose all materials in the Property's title insurer's (or title insurer's agent's) file to Buyer and both Buyer's and Seller's agents and attorneys, and (3) the closing attorney to release and disclose any seller's closing disclosure, settlement statement and/or disbursement summary, or any information therein, to the parties to this transaction, their real estate agent(s) and Buyer's lender(s).

(c) **Access to Property**: Seller shall provide reasonable access to the Property through the earlier of Closing or possession by Buyer, including, but not limited to, allowing the Buyer and/or Buyer's agents or representatives an opportunity to (i) conduct Due Diligence, (ii) verify the satisfactory completion of negotiated repairs/improvements, and (iii) conduct a final walk-through inspection of the Property. Seller's obligation includes providing existing utilities operating at Seller's cost including any connections and de-winterizing. To the extent applicable, Seller shall also be responsible for timely clearing that portion of the Property required by the County to perform tests, inspections and/or evaluations to determine the suitability of the Property for a sewage system and/or private drinking water well.

NOTE: See WARNING in paragraph 2 above for limitation on Buyer's right to terminate this Contract as a result of Buyer's continued investigation of the Property following the expiration of the Due Diligence Period.

(d) **Removal of Seller's Property**: Seller shall remove from the Property, by the date possession is delivered, (i) all personal property which is not a part of the purchase and (ii) unless otherwise agreed, all garbage and debris.

(e) **Affidavit And Indemnification Agreement**: Seller shall furnish at Settlement an affidavit(s) and indemnification agreement(s) in form satisfactory to Buyer and Buyer's title insurer, if any, executed by Seller and any person or entity who has performed or furnished labor, services, materials or rental equipment to the Property within 120 days prior to the date of Settlement and who may be entitled to claim a lien against the Property as described in N.C.G.S. §44A-8 verifying that each such person or entity has been paid in full and agreeing to indemnify Buyer, Buyer's lender(s) and Buyer's title insurer against all loss from any cause or claim arising therefrom.

(f) **Designation of Lien Agent, Payment and Satisfaction of Liens**: If required by N.C.G.S. §44A-11.1, Seller shall have designated a Lien Agent, and Seller shall deliver to Buyer as soon as reasonably possible a copy of the appointment of Lien Agent. All deeds of trust, deferred ad valorem taxes, liens and other charges against the Property, not assumed by Buyer, must be paid and satisfied by Seller prior to or at Settlement such that cancellation may be promptly obtained following Closing. Seller shall remain obligated to obtain any such cancellations following Closing.

(g) **Good Title, Legal Access**: Seller shall execute and deliver a GENERAL WARRANTY DEED for the Property in recordable form no later than Settlement, which shall convey fee simple marketable and insurable title, without exception for mechanics' liens,
and free of any other liens, encumbrances or defects, including those which would be revealed by a current and accurate survey of the Property, except: ad valorem taxes for the current year (prorated through the date of Settlement); utility easements and unviolated covenants, conditions or restrictions that do not materially affect the value of the Property; and such other liens,

NOTE: Buyer's failure to conduct a survey or examine title of the Property prior to the expiration of the Due Diligence Period does not relieve the Seller of their obligation to deliver good title under this paragraph.

encumbrances or defects as may be assumed or specifically approved by Buyer in writing. The Property must have legal access to a public right of way.

NOTE: If any sale of the Property may be a "short sale," consideration should be given to attaching a Short Sale Addendum (Standard Form 2A14-T) as an addendum to this Contract.

(h) **Deed, Taxes, and Fees**: Seller shall pay for preparation of a deed and all other documents necessary to perform Seller's obligations under this Contract, and for state and county excise taxes, and any deferred, discounted or rollback taxes, and local conveyance fees required by law. The deed is to be made to: _____
_____.

(i) **Agreement to Pay Buyer Expenses**: Seller shall pay at Settlement **$0.00** toward any of Buyer's expenses associated with the purchase of the Property, at the discretion of Buyer and/or lender, if any, including any FHA/VA lender and inspection costs that Buyer is not permitted to pay.

(j) **Owners' Association Fees/Charges**: Seller shall pay: (i) any fees required for confirming Seller's account payment information on owners' association dues or assessments for payment or proration; (ii) any fees imposed by an owners' association and/or a management company as agent of the owners' association in connection with the transaction contemplated by this Contract other than those fees required to be paid by Buyer under paragraph 4(b) above; and (iii) fees incurred by Seller in completing the Residential Property and Owners' Association Disclosure Statement, and resale or other certificates related to a proposed sale of the Property.

(k) **Payment of Special Assessments**: Seller shall pay, in full at Settlement, all Special Assessments that are approved prior to Settlement, whether payable in a lump sum or future installments, provided that the amount thereof can be reasonably determined or estimated. The payment of such estimated amount shall be the final payment between the Parties.

(l) **Late Listing Penalties**: All property tax late listing penalties, if any, shall be paid by Seller.

(m) **Owners' Association Disclosure and Condominium Resale Statement Addendum** (Standard Form 2A12-T): If applicable, Seller shall provide the completed Owners' Association Disclosure and Condominium Resale Statement Addendum to Buyer on or before the Effective Date.

(n) **Seller's Breach of Contract**: See paragraph 20 for Buyer's remedies in the event of breach of this Contract.

7. **PRORATIONS AND ADJUSTMENTS:** Unless otherwise agreed, the following items shall be prorated, with Seller responsible for the prorated amounts of any taxes and dues through the date of Settlement, and Seller entitled to the amount of prorated rents through the date of Settlement, and either adjusted between the parties or paid at Settlement:
(a) **Taxes on Real Property:** Ad valorem taxes and recurring governmental service fees levied with such taxes on real property shall be prorated on a calendar year basis;

(b) **Rents**: Rents, if any, for the Property;

(c) **Dues**: Owners' association regular assessments (dues) and other like charges.

8. **RISK OF LOSS/CONDITION OF PROPERTY AT CLOSING**: The risk of loss or damage by fire or other casualty prior to Closing shall be upon Seller. Seller is advised not to cancel existing insurance on the Property until after confirming recordation of the deed.

Buyer's obligation to complete the transaction contemplated by this Contract shall be contingent upon the Property being in substantially the same or better condition at Closing as on the date of this offer, reasonable wear and tear excepted. If the Property is not in substantially the same or better condition at Closing as on the date of this offer, reasonable wear and tear excepted, Buyer may terminate this Contract by written notice delivered to Seller and the Earnest Money Deposit shall be refunded to Buyer. If the Property is not in such condition and Buyer does NOT elect to terminate this Contract, Buyer shall be entitled to receive, in addition to the Property, the proceeds of any insurance claim filed by Seller on account of any damage or destruction to the Property.

9. **DELAY IN SETTLEMENT/CLOSING**: This paragraph shall apply if one party is ready, willing and able to complete Settlement on the Settlement Date ("Non-Delaying Party") but it is not possible for the other party to complete Settlement by the Settlement Date ("Delaying Party"). In such event, the Delaying Party shall be entitled to a delay in Settlement and shall give as much notice as possible to the Non-Delaying Party and closing attorney. If the Delaying Party fails to complete Settlement and Closing within seven (7) days of the Settlement Date (including any amended Settlement Date agreed to in writing by the parties), then the Delaying Party shall be in breach and the Non-Delaying Party may terminate this Contract and shall be entitled to enforce any remedies available to such party under this Contract for the breach.

10. **POSSESSION**: Unless otherwise provided herein, possession, including all means of access to the Property (keys, codes including security codes, gate openers, electronic devices, etc.) shall be delivered at Closing as defined in Paragraph 1(m). No alterations, excavations, tree or vegetation removal or other such activities may be done before possession is delivered

11. **ADDENDA:** CHECK ALL STANDARD ADDENDA THAT MAY BE A PART OF THIS CONTRACT, IF ANY, AND ATTACH HERETO. ITEMIZE ALL OTHER ADDENDA TO THIS CONTRACT, IF ANY, AND ATTACH HERETO.

- ❑ Additional Provisions Addendum (Form 2A11-T)
- ❑ Additional Signatures Addendum (Form 3-T)
- ❑ Back-Up Contract Addendum (Form 2A1-T)
- ❑ Loan Assumption Addendum (Form 2A6-T)
- ❑ Owners' Association Disclosure Addendum (Form 2A12-T)
- ❑ Seller Financing Addendum (Form 2A5-T)
- ❑ Short Sale Addendum (Form 2A14-T)

❑ Identify other attorney or party drafted addenda: **Seller to open estate for Emma Rowell Medlin, Deceased and publish 1st Notice to Creditors;**
Buyer: Subject to approval of Union County Board of County Commissioners.

NOTE: UNDER NORTH CAROLINA LAW, REAL ESTATE BROKERS ARE NOT PERMITTED TO DRAFT ADDENDA TO THIS CONTRACT.

12. **ASSIGNMENTS**: This Contract may not be assigned without the written consent of all parties except in connection with a tax-deferred exchange, but if assigned by agreement, then this Contract shall be binding on the assignee and assignee's heirs and successors.

13. **TAX-DEFERRED EXCHANGE**: In the event Buyer or Seller desires to effect a tax-deferred exchange in connection with the conveyance of the Property, Buyer and Seller agree to cooperate in effecting such exchange; provided, however, that the exchanging party shall be responsible for all additional costs associated with such exchange, and provided further, that a non-exchanging party shall not assume any additional liability with respect to such tax-deferred exchange. Buyer and Seller shall execute such additional documents, including assignment of this Contract in connection therewith, at no cost to the non-exchanging party, as shall be required to give effect to this provision.

14. **PARTIES**: This Contract shall be binding upon and shall inure to the benefit of Buyer and Seller and their respective heirs, successors and assigns. As used herein, words in the singular include the plural and the masculine includes the feminine and neuter genders, as appropriate.

15. **SURVIVAL:** If any provision herein contained which by its nature and effect is required to be observed, kept or performed after the Closing, it shall survive the Closing and remain binding upon and for the benefit of the parties hereto until fully observed, kept or performed.

16. **ENTIRE AGREEMENT**: This Contract contains the entire agreement of the parties and there are no representations, inducements or other provisions other than those expressed herein. All changes, additions or deletions hereto must be in writing and signed by all parties. Nothing contained herein shall alter any agreement between a REALTOR® or broker and Seller or Buyer as contained in any listing agreement, buyer agency agreement, or any other agency agreement between them.

17. **CONDUCT OF TRANSACTION**: The parties agree that any action between them relating to the transaction contemplated by this Contract may be conducted by electronic means, including the signing of this Contract by one or more of them and any notice or communication given in connection with this Contract. Any written notice or communication may be transmitted to any mailing address, e-mail address or fax number set forth in the "Notice Information" section below. Any notice or communication to be given to a party herein, any fee, deposit of other payment to be delivered to a party herein, may be given to the party or to such party's agent. Delivery of any notice to a party via means of electronic transmission shall be deemed complete at such time as the sender performs the final act to send such transmission, in a form capable of being processed by the receiving party's system, to any electronic address provided for such party in the "Notice Information" section below. Seller and Buyer agree that the "Notice Information" and "Acknowledgment of Receipt of Monies" sections below shall not constitute a material part of this Contract, and that the addition or modification of any information therein shall not constitute a rejection of an offer or the creation of a counteroffer.

18. **EXECUTION**: This Contract may be signed in multiple originals or counterparts, all of which together constitute one and the same instrument.

19. **COMPUTATION OF DAYS/TIME OF DAY**: Unless otherwise provided, for purposes of this Contract, the term "days" shall mean consecutive calendar days, including Saturdays, Sundays, and holidays, whether federal, state, local or religious. For the purposes of calculating days, the count of "days" shall begin on the day following the day upon which any act or notice as provided in this Contract was required to be performed or made. Any reference to a date or time of day shall refer to the date and/or time of day in the State of
North Carolina.

20. **REMEDIES:**

(a) **Breach by Buyer**: In the event of material breach of this Contract by Buyer, any Earnest Money Deposit shall be paid to Seller. The payment of any Earnest Money Deposit and any Due Diligence Fee to Seller (without regard to their respective amounts, including zero) together shall serve as liquidated damages ("Liquidated Damages") and as Seller's sole and exclusive remedy for such breach, but without limiting Seller's rights under Paragraphs 2(d) and 2(e) for damage to the Property. It is acknowledged by the parties that the amount of the Liquidated Damages is compensatory and not punitive, such amount being a reasonable estimation of the actual loss that Seller would incur as a result of a breach of this Contract by Buyer. The payment to Seller of the Liquidated Damages shall not constitute a penalty or forfeiture but actual compensation for Seller's anticipated loss, both parties acknowledging the difficulty determining Seller's actual damages for such breach.

(b) **Breach by Seller**: In the event of material breach of this Contract by Seller, if Buyer elects to terminate this Contract as a result of such breach, then the Earnest Money Deposit and the Due Diligence Fee shall be refunded to Buyer and Seller shall reimburse to Buyer the reasonable costs actually incurred by Buyer in connection with Buyer's Due Diligence ("Due Diligence Costs"). This provision shall not affect any other remedies available to Buyer.

(c) **Attorneys' Fees**: If legal proceedings are brought by Buyer or Seller against the other to collect the Earnest Money Deposit, Due Diligence Fee, or Due Diligence Costs, the parties agree that a party shall be entitled to recover reasonable attorneys' fees to the extent permitted under N.C. Gen. Stat. § 6-21.2. The parties acknowledge and agree that the terms of this Contract with respect to entitlement to the Earnest Money Deposit, Due Diligence Fee, or Due Diligence Costs each constitute an "evidence of indebtedness" pursuant to N.C. Gen. Stat. § 6-21.2.

NOTE: A party seeking recovery of attorneys' fees under N.C. Gen. Stat. § 6-21.2 must first give written notice to the other party that they have five (5) days from the mailing of the notice to pay the outstanding amount(s) without the attorneys' fees.

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THE NORTH CAROLINA ASSOCIATION OF REALTORS®, INC. AND THE NORTH CAROLINA BAR ASSOCIATION MAKE NO REPRESENTATION AS TO THE LEGAL VALIDITY OR ADEQUACY OF ANY PROVISION OF THIS FORM IN ANY SPECIFIC TRANSACTION. IF YOU DO NOT UNDERSTAND THIS FORM OR FEEL THAT IT DOES NOT PROVIDE FOR YOUR LEGAL NEEDS, YOU SHOULD CONSULT A NORTH CAROLINA REAL ESTATE ATTORNEY BEFORE YOU SIGN IT.

This offer shall become a binding contract on the Effective Date. Unless specifically provided otherwise, Buyer's failure to timely deliver any fee, deposit or other payment provided for herein shall not prevent this offer from becoming a binding contract, provided that any such failure shall give Seller certain rights to terminate the contract as described herein or as otherwise permitted by law.

Date: _____	Date: _____
Buyer: _____	Seller : _____
Date: _____	Date: _____
Buyer: _____	Seller: _____
Entity Buyer: **Union County, a Body Politic** (Name of LLC/Corporation/Partnership/Trust/etc.)	Entity Seller: **Estate of Emma Rowell Medlin**
By: _____	By: Sonya Medlin Primo
Name: **Mark Watson**	Name: **Sonya Medlin Primo**
Title: **County Manager**	Title: **Executor**
Date: _____	Date: 11-7-2021

WIRE FRAUD WARNING

TO BUYERS: BEFORE SENDING ANY WIRE, YOU SHOULD CALL THE CLOSING ATTORNEY'S OFFICE TO VERIFY THE INSTRUCTIONS. IF YOU RECEIVE WIRING INSTRUCTIONS FOR A DIFFERENT BANK, BRANCH, LOCATION, ACCOUNT NAME OR ACCOUNT NUMBER, THEY SHOULD BE PRESUMED FRAUDULENT. DO NOT SEND ANY FUNDS AND CONTACT THE CLOSING ATTORNEY'S OFFICE IMMEDIATELY.

TO SELLERS: IF YOUR PROCEEDS WILL BE WIRED, IT IS RECOMMENDED THAT YOU PROVIDE WIRING INSTRUCTIONS AT CLOSING IN WRITING IN THE PRESENCE OF THE ATTORNEY. IF YOU ARE UNABLE TO ATTEND CLOSING, YOU MAY BE REQUIRED TO SEND AN ORIGINAL NOTARIZED DIRECTIVE TO THE CLOSING ATTORNEY'S OFFICE CONTAINING THE WIRING INSTRUCTIONS. THIS MAY BE SENT WITH THE DEED, LIEN WAIVER AND TAX FORMS. IF THESE DOCUMENTS ARE BEING PREPARED FOR YOU BY THE CLOSING ATTORNEY, AT A MINIMUM, YOU SHOULD CALL THE CLOSING ATTORNEY'S OFFICE TO PROVIDE THE WIRE INSTRUCTIONS. THE WIRE INSTRUCTIONS SHOULD BE VERIFIED OVER THE TELEPHONE VIA A CALL TO YOU ENTERED BY THE CLOSING ATTORNEY'S OFFICE TO ENSURE THAT THEY ARE NOT FROM A FRAUDULENT SOURCE.

WHETHER YOU ARE A BUYER OR A SELLER, YOU SHOULD CALL THE CLOSING ATTORNEY'S OFFICE AT A NUMBER THAT IS INDEPENDENTLY OBTAINED. TO ENSURE THAT YOUR CONTACT IS LEGITIMATE, YOU SHOULD NOT RELY ON A PHONE NUMBER IN AN EMAIL FROM THE CLOSING ATTORNEY'S OFFICE, YOUR REAL ESTATE AGENT OR ANYONE ELSE.

NOTICE INFORMATION

NOTE: INSERT AT LEAST ONE ADDRESS AND/OR ELECTRONIC DELIVERY ADDRESS EACH PARTY AND AGENT APPROVES FOR THE RECEIPT OF ANY NOTICE CONTEMPLATED BY THIS CONTRACT. INSERT "N/A" FOR ANY

WHICH ARE NOT APPROVED.

BUYER NOTICE ADDRESS:

Mailing Address:
Richard G. Long, Jr.,, Attorney
Perry, Bundy, Plyler & Long, LLP
316 N Hayne St
Monroe NC 28112
704/289-2519

Buyer Fax #: **704/282-0105**

Buyer E-mail**: rlong@perrybundylaw.com**

SELLER NOTICE ADDRESS:

Mailing Address:
Sonya M. Primo
10905 Park Rd
Charlotte NC 28226
704/989-0083

Seller Fax #:

Seller E-mail: **tiggerboo98@yahoo.com**

CONFIRMATION OF AGENCY/NOTICE ADDRESSES

Selling Firm Name:
Acting as ❑ Buyer's Agent ❑ Seller's (sub)Agent ❑ Dual Agent

Firm License#:

Mailing Address:

Individual Selling Agent:
❑ Acting as a Designated Dual Agent (check only if applicable)

Selling Agent License#:

Selling Agent Phone#:

Selling Agent Fax#:

Selling Agent E-mail:

Listing Firm Name:
Acting as ❑ Seller's Agent ❑ Dual Agent

Firm License#:

Mailing Address:

Individual Listing Agent:
❑ Acting as a Designated Dual Agent (check only if applicable)

Listing Agent License#:

Listing Agent Phone#:

Listing Agent Fax#:

Listing Agent E-mail:

Time: _____ ❒ AM ❒ PM

By: _____
(Signature)

_____
(Print name)