

Onancock Drinking Water

Town of Onancock

Onancock, Virginia

Construction and Financial Assistance

Permit: GW0049200

Operation Permit: 3001620

Matt Spuck

Town Manager

Town of Onancock

Office (757) 787-3363

Email: Matt.Spuck@Onancock.com

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Need Statement:

Small water systems like ours do not have the budget to keep up with tools designed for safety, upkeep of critical alarms, equipment, or even equipment as simple as fire hydrants.

Onancock is a vibrant town and is becoming more so. Utility locates are a normal part of our staff's daily responsibilities. Currently, we are responsible for the drinking water distribution system. Locating PVC pipe below the surface is challenging without the correct tool. The tool our staff uses presently is a Witch's Stick (sadly, that is no joke). You are more aware than most of the importance of an accurate Miss Utility Locate. In the past three months, our Witch's Stick has failed us, and contractors not responsible for the drinking water were digging in the wrong location. Breaking a water line near chemical tanks or electricity can be dangerous.

The tool that allows us to accurately locate subsurface PVC mains and supply lines is Ground Penetrating Radar (GPR). This tool is not just a convenience, but a necessity for our team to accurately locate water pipes of all materials and mark a dig site safely. Without it, we risk not only the efficiency of our operations but also the safety of our water system.

Onancock has three well pumps (7, 8, & 9). Recently, we had a power surge of pump 9, which blew the submersible pump. We needed to replace 220 feet of casing and the submersible pump. Two pumps need evaluation as a result of this accident. The first is the age of the pumps, which cannot withstand a surge like that from the transformer. With only three wells (and # 8 is only a supplemental well), we cannot risk pump seven suffering the same fate as nine did without dramatically affecting the drinking water for 1,200 residents, a 54-bed hospital, and a bushy dialysis center.

More importantly, this was discovered when Systems East Inc. (our trusted electrical and switch contractor) evaluated the damage caused by the power surge and the subsequent damage. They discovered that the electrical and switch panel had been undersized since the well was installed in 2005. When investigating the issue with the surge at #9, they realized that the service panel for the water tower had been undersized since the pumps we installed in 2005.

The impact of the panel shutting down could be catastrophic. It could cause misreading in water levels and pressure, which could lead to severe disruptions in our subgrade distribution system as well as connections at the meter or house level. This is a risk we cannot afford to take.

The Town works very closely with the Onancock Volunteer Fire Department. Each year, the Chief presents me with a list of hydrants that need immediate attention and those that need some attention. The most recent list shows 14 hydrants needing real attention and dozens more needing repair, turning, or other such attention. We recently had an insurance company evaluate the condition of our hydrants, and from 1 to 10, we rated them as five. Keep in mind that the score affects every structure's fire insurance rate.

Objectives:

The objectives of the proposed projects are:

- To provide the most appropriate tools to locate underground utilities.
- To replace the panel in the water tower to ensure it is right-sized for our current and future capacity.
- To replace the pump and casing on a unit susceptible to everyday occurrences like power surges.
- To replace a portion of fire hydrants, increasing structural safety and reducing fire insurance rates.

Expected Results and Benefits:

These are unseen benefits. They include accurately locating underground utilities, protecting other contractors, and reducing the likelihood of system leaks.

Proper controls control everything from water level to pressure, valve operations and safety measures, and even emergency notification. Without the correctly sized panels, these systems are in jeopardy.

The pump and casing in #7 will eventually fail, as #9 did. Replacing this is good preventive maintenance, for which we need financial support.

Onancock is one of the very few towns that has fire hydrants. Accidents happen, aging and rust happen, valves become inoperable, and other mechanical issues exist. If you, your friends, or your family needed proper flow from a hydrant, it is a standard expectation that it would be there. Let's do the same for our families.

Approach:

Onancock has become accomplished with project management and federal procurement protocols. We use project management software, staff assignment, and best practices to accomplish projects on time and on budget.

Town of Onancock - DWSRF Grant Application – 05-02-2024

Key Personnel

The Town of Onancock project will involve public partners. The key organizations currently involved in the development of the docking and attenuator project are as follows:

Key Organizations	Contact	Role
Town of Onancock 15 North Street Onancock, VA 23417	Matt Spuck Matt.Spuck@Onancock.com	Town Manager
	Debbie Caton Debbie.Caton@onancock.com (757)787-3363	Director of Administration
Onancock Water Operator	Victor Talbot 757-693-7093	Water Technician

Estimated Costs and Budget:

Description	Unit Cost	Extended Cost
LMX100-Utility Locator	\$18,197	\$18,197
System East Panel Replace	\$37,977	\$37,977
Replace #7 Casing and Pump	\$21,664	\$21,664
Hydrants (8)	\$21,431	\$171,448
	Grand Total	\$249,286

Match and Partnerships:

Town of Onancock – The Town of Onancock has adequate resources to meet the required match, if any.



Eastcom Associates, Inc.
 185 Industrial Pkwy, Suite G
 Branchburg, NJ 08876
 Phone: (908) 722-7774
 Fax: (908) 722-9299
www.EastcomAssoc.com

QUOTATION



Quote # VA041224MN
 Date: 4/12/2024

Company: Town of Onancock
 15 North Street
 Onancock, VA 23417

Attn: Matt Spuck
 Phone: (757) 787-3363
 Email: Matt.Spuck@Onancock.com

Qty	Part No.	Description	Unit Price	Amount
1	100-10-0150	Sensors & Software LMX100	\$17,767.00	\$ 17,767.00
		<i>Includes:</i> - 250MHz Ultra Wide Band Antenna - 8" High Resolution, Touch Screen Display - 12V Battery and Battery Box - Rugged, Lightweight, Rough Terrain Cart w/12" Wheels - Screen Capture and GPS Data Collection - DynaQ - Spatial Filtering Software		
1	500-80-0022	Sensors & Software Online GPR Training Course Coupon (SensoftU)	INCLUDED	INCLUDED
		Shipping Charges		\$430.00
		On-Site Equipment Training		INCLUDED
		Optional Accessories		
	100-60-0059	Soft Case for LMX100 Display	\$211.00	\$ -
	100-60-0066	Hard Case for LMX100 Display	\$511.00	\$ -
		Quote Total		\$ 18,197.00

Sales Tax: For Shipments to NJ or NY, Add Applicable Local Sales Tax

Payment Terms: Net 30 Days (w/approval), ACH, or Credit Card. 3% Service Charge added to Credit Card Transactions.

Delivery: 1 - 2 Weeks

Freight: Ground Insured Freight Charges Prepaid and Added

Quote Validity: 30 Days

Thank you for your interest in our products and the opportunity to provide this quotation.
 Please contact us with any questions or to place an order.

Prepared By: Mark Norris



Service Proposal

Job Name: Onancock Watertower Troubleshooting
 Date: 4/9/2024
 Proposal #: S24-006-002(R2)

Attn: Victor Talbot Phone: 7573870217
 Company: Town of Onancock E-mail: vtalbot@onancock.com
 Address: 15 North Street
 City & Zip: Onancock, VA 23417

SYSTEMS EAST INC.
 30 Basil Sawyer Drive
 Hampton VA 23666
 Phone (757)766-8400
 Fax (757) 766-7494
 [Document Rev 6-2-2020]

Description of Work
 Build and replace control panel using the previous design.
 Install autodialer and configure to specified signals (Note: There is a 400\$/year charge, the first year is included in the quote for cellular service for the autodialer, a sim card is not required)

Manufacturer	Part Number	Description	Qty	UNIT PRICE	EXT PRICE
Racoman	VSS-8C	Verbatim Autodialer-8 Channel	1	\$5,214.29	\$5,214.29
Racoman	BCELL-VTNE-NE	Cellular Communications Package	1	\$2,964.29	\$2,964.29
SEI	Control Panel	Custom Built SEI Control Panel	1	\$18,214.51	\$18,214.51
				\$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
				\$0.00	\$0.00
				Total	\$26,393.08

Labor Services		HOURS	UNIT PRICE	EXT PRICE
PROJECT MANAGEMENT (.5 hr min)		12	\$150.00	\$1,800.00
ENGINEERING & DESIGN		20	\$150.00	\$3,000.00
PROGRAMMING & MODIFICATIONS (PLC, SCADA, VFD, RTU ETC)		0	\$150.00	\$0.00
FIELD TECHNICIAN/SHOP QC/SHOP TEST		32	\$125.00	\$4,000.00
CAD LABOR		0	\$65.00	\$0.00
ELECTRICAL CREW (2x PERSONS)		0	\$140.00	\$0.00
ELECTRICAL SUPERVISOR		0	\$125.00	\$0.00
ELECTRICAL JOURNEYMAN		0	\$95.00	\$0.00
ELECTRICAL HELPER		0	\$45.00	\$0.00
PANEL FABRICATION (SHOP)		40	\$60.00	\$2,400.00
ADMINISTRATIVE, SUBMITTALS O&M MANUALS		4	\$48.00	\$192.00
ADMINISTRATIVE & PURCHASING (.5 hr min)		4	\$48.00	\$192.00

Travel Charges		Unit	UNIT PRICE	EXT PRICE	
VEHICLE MILEAGE EXPENSE		Milles-	0	\$0.85	\$0.00
TRAVEL EXPENSE (HOTEL ACCOMMODATIONS)		Days-	0	\$105.00	\$0.00
TRAVEL EXPENSE (MEALS)		Days-	0	\$75.00	\$0.00

Manufacturer	Model	Equipment Rental	# days	UNIT PRICE	EXT PRICE
			0	\$0.00	\$0.00
			0	\$0.00	\$0.00

If you should have any questions or concerns regarding this proposal, please contact our office.

MATERIAL COST	\$26,393.08
LABOR COST	\$11,584.00
TRAVEL CHARGES	\$0.00
EQUIPMENT RETAIL	\$0.00
SHIPPING	\$0.00
SUBTOTAL	\$37,977.08
MATERIAL SALES TAX	\$0.00
PROPOSAL TOTAL	\$37,977.08

Thank you,
 Andrew Gillikin
 Project Manager

Customer Signature: _____ Date: _____

Bundick Well & Pump Co., Inc.
 P.O. Box 15
 Painter, VA 23420

Quotation

Quote Number
6375

Quote Date
Jan 9, 2024

757-442-5555

Quoted to:

Town of Onancock
 15 North Street
 Onancock, VA 23417

787-3363

Customer ID	Good Thru	Payment Terms	Sales Rep
Town of Onancock	2/8/24	Net Due	

Description	Amount
RE: Water Tower	
Installing a new 15 HP, 3 phase, 460 volt Goulds 5 stage pump (Just like what was there before) with a new 4" check valve.	14,868.00
Installing 7, 21' lengths of 4" galvanized steel T & C pipe.	6,796.00

Quotes for sewage systems are contingent on health dept approval of proposed system.

Subtotal	21,664.00
Sales Tax	
Total	21,664.00



COST WORKSHEET

Date: August 10, 2023
 PCO #: 001
 Owner Name: Town Of Onancock
 Owner Contract No. _____
 Garney Project No. _____

Subject: Carnival Grounds Improvements
Description:

Cut existing PVC water main to install a ductile Iron tee, gate valve, and fire hydrant.
 Removal of existing roadway, installation of compacted subgrade, installation of 2.5" base mix asphalt, and 1.5" surface mix asphalt to a width of 14' for a length of 350 linear feet along Jefferson St.

Time Extension:

LABOR						
Crew Description	Classification	Quantity	Composite Hourly Rate	Hours Each	Extension	Totals
Les Carr's Crew - Hydrant Install	Superintendent	1	\$ 160.00	8.0	\$ 1,280.00	
Les Carr's Crew - Hydrant Install	Field Engineer	1	\$ 115.00	8.0	\$ 920.00	
Les Carr's Crew - Hydrant Install	Equipment Operator 1	3	\$ 87.40	8.0	\$ 2,097.60	
Les Carr's Crew - Hydrant Install	Laborer 1	2	\$ 62.20	8.0	\$ 995.20	
Les Carr's Crew - Hydrant Install	Pipelayer 1	1	\$ 73.80	8.0	\$ 590.40	
Admin	Project Engineer	1	\$ 115.00	40.0	\$ 4,600.00	
Admin	Project Manager	1	\$ 157.00	40.0	\$ 6,280.00	
			\$ -		\$ -	
Les Carr's Crew - Road Widening Subgrade Install	Superintendent	1	\$ 160.00	8.0	\$ 1,280.00	
Les Carr's Crew - Road Widening Subgrade Install	Field Engineer	1	\$ 115.00	8.0	\$ 920.00	
Les Carr's Crew - Road Widening Subgrade Install	Equipment Operator 1	3	\$ 87.40	10.0	\$ 2,622.00	
Les Carr's Crew - Road Widening Subgrade Install	Laborer 1	2	\$ 62.20	10.0	\$ 1,244.00	
Les Carr's Crew - Road Widening Subgrade Install	Pipelayer 1	1	\$ 73.80	10.0	\$ 738.00	
			\$ -		\$ -	
			\$ -		\$ -	
Labor Subtotal						\$ 23,567.20

EQUIPMENT						
Description	Quantity	FHWA Hourly Rate	Hours Each	Extension	Totals	
Caterpillar 325F L	1	\$ 145.72	24.0	\$ 3,497.21		
Caterpillar 315C (disc. 2008)	1	\$ 114.25	24.0	\$ 2,742.07		
Deere 624L	1	\$ 90.14	24.0	\$ 2,163.43		
Caterpillar 272D2	1	\$ 77.84	16.0	\$ 1,245.49		
Hamm 3205PB	1	\$ 88.92	16.0	\$ 1,422.73		
		\$ -		\$ -		
		\$ -		\$ -		
Equipment Subtotal						\$ 11,070.93

SUBCONTRACTOR						
Description	Quantity	Unit	Unit Price	Extension	Totals	
Asphalt Paving - 2.5" Base Mix	87.0	Tons	\$ 143.17	\$ 12,450.05		
Asphalt Paving - 1.5" Surface Mix	52.2	Tons	\$ 174.59	\$ 9,109.39		
Traffic Control	3.0	Days	\$ 2,500.00	\$ 7,500.00		
Hourly Trucking and Haul Off	51.85185185	CY	\$ 21.00	\$ 1,088.89		
				\$ -		
				\$ -		
Subcontractor Subtotal						\$ 30,148.33

MATERIALS						
Description	Quantity	Unit	Unit Price	Tax	Extension	Totals
6" DI MJ Tee	1	EA	\$ 164.30	\$ 9.86	\$ 174.16	
6" PVC Megalug Kits (C900)	2	EA	\$ 69.43	\$ 4.17	\$ 147.19	
6" DI Megalug Kits	8	EA	\$ 61.91	\$ 3.71	\$ 525.00	
6" DI MJ Sleeve	2	EA	\$ 13.88	\$ 0.83	\$ 29.43	
6" MJ Gate Valve OL	1	EA	\$ 1,243.93	\$ 74.64	\$ 1,318.57	
MJ Fire Hydrant Assembly - 3.5'	1	EA	\$ 3,161.21	\$ 189.67	\$ 3,350.88	
6" DIP	20	LF	\$ 32.23	\$ 1.93	\$ 683.28	
S7 Stone	2	Tons	\$ 44.50	\$ 2.67	\$ 75.47	
Concrete	1	LS	\$ 200.00	\$ 12.00	\$ 212.00	
				\$ -	\$ -	
				\$ -	\$ -	
21A Subgrade - Road Widening	95	Tons	\$ 42.60	\$ 2.56	\$ 4,308.22	
				\$ -	\$ -	
Material Subtotal						\$ 10,824.18

SUMMARY							
Description	Quantity	Unit	Subtotal	Markup %	Markup Extension	Subtotal Plus Markup	Totals
LABOR	1	LS	\$ 23,567.20	15%	\$ 3,535.08	\$ 27,102.28	
EQUIPMENT	1	LS	\$ 11,070.93	15%	\$ 1,660.64	\$ 12,731.57	
SUBCONTRACTOR	1	LS	\$ 30,148.33	15%	\$ 4,522.25	\$ 34,670.58	
MATERIALS	1	LS	\$ 10,824.18	15%	\$ 1,623.63	\$ 12,447.81	
Summary Subtotal							\$ 86,952.24

21,436

Needs Immediate Attention

Needs Attention

Location	Condition	Needs Painting	Needs Seals & Caps	Needs digging out?	Other
Corner Hermitage Road	Good				
Waste Water Main	Out of Service				Turned wrong direction
19170 Greenwood Road	Needs attention	Yes	Yes		
15 Chandler Street	Good				Not on station map
14 Lake Street	Good				
4 Lake Street	Good				
3 Kerr Street	Good				
43 North Street	Good				
14 Kerr Street	Good				
28 Kerr Street	Good				
36 Kerr Street	Needs attention			Yes	
48 Kerr Street	Good				
21 Jackson Street	Good				
60 Kerr Street	Good				
70 Kerr Street	Good				
Corner Kerr St/Pine St	Good				
82 Kerr Street	Good				
23 Boundry Avenue	Needs attention			Yes	
8 School Street	Needs attention				Rotate Hydrant
10 Cross Street	Good				
40 Boundry Avenue	Good				
10 Church Street	Needs attention		Yes	Yes	
Pine St/Church Street	Needs attention		Yes	Yes	
Pine St/Watson Street	Good				
11 Watson Street	Needs attention	Yes	Yes		
4 Boundry Street	Needs attention			Yes	
13 Boundry Avenue	Good				
3 Boundry Ave	Good				
200 Market Street	Needs attention		Yes		
End of Hall Street	Good				
Market St/Hall Street	Needs attention		Yes		
Eastern Shore Printers	Needs attention		Yes		
Market St/Hartman Ave	Good				
Jacob Street	Good				
Jacob Street Apartment	Good				
Market Street Grill	Good				
132 Market Street	Good				
124 Market Street	Good				
7 Hill Street	Needs attention				Turn to face road
8 Hill St	Good				
Corner Hill St/Division St	Needs attention				Road sign in way
27 Hill Street	Needs attention				5 inch cap won't come off
60 Hill St/West Road	Needs attention				5 inch cap broke
35 Hill St	Good				
45 Hill St	Good				
1st on Liberty St (from Hill St)	Needs attention	Yes			No nut on 5 inch cap
2nd on Liberty St (from Hill St)	Good				
26 Liberty Street	Good				
20 Liberty Street	Needs attention		Yes		
13 Liberty Street	Needs attention		Yes		
Liberty St/Sturgis St	Needs attention		Yes		
23 Sturgis Street	Good				
42 Ames Street	Needs attention		Yes		
Meadville Dr/Ames St	Good				
13 Ames Street	Needs attention		Yes	Yes	
Meadville Dr/Division St	Needs attention		Yes		
Meadville Dr/Mt. Prospect	Good				
Mt. Prospect/White St	Needs attention	Yes	Yes		
Bagwell Ave/White St	Good				
Onancock School	Good				

3 College Ave	Good			
5 Holly Street	Good			
22 Holly Street	Good			
5 Johnson Street	Good			
5 Joynes Street	Good			
7 Johnson Street	Good			
17 Johnson Street	Good			
14 Justis Street	Needs attention			New Hydrant needed
6 Justis Street	Needs attention		Yes	
104 Market St	Needs attention		Yes	
Market St/Marshall St	Needs attention		Yes	
1 Onancock St	Good			
4 Onancock St	Good			
97 Market St	Needs attention		Yes	
Market St/Lee St	Needs attention		Yes	
3 Lee St	Good			
Market St/Lilliston Ave	Needs attention		Yes	
71 Market Street	Good			
48 Market Street	Good			
33 Market Street	Needs attention			Turn to face road
12 Market Street	Good			
Mt. Prospect/Market Street	Good			
Fish House	Good			
23 King Street	Needs attention		Yes	
31 King Street	Needs attention		Yes	
Parker St/King Street	Good			
6 Riley Street	Good			
28 North Street	Good			
7 Jackson Street	Needs attention		Yes	
8 Marhsall Street	Good			