UNIONCOUNTY
north carolina

Invitation for Bid No. 2023-027

SCADA Master Plan Implementation Telemetry System & RTU Replacement

ADDENDUM No. 002

ISSUE DATE: November 21, 2022

Responding Offerors on this project are hereby notified that this Addendum shall be made a part of the above named IFB document.

The following items add to, modify, and/or clarify the IFB documents and shall have the full force and effect of the original Documents. This Addendum shall be acknowledged by the Offeror in the IFB document.

This Addendum provides responses to questions received from interested offerors during the non-mandatory pre-bid conference on November 15, 2022, and through email submissions.

I. CLARIFICATIONS

Ad 2-1. Question 1: Due to the complexity and the amount of detail information to be reviewed and provided for bidding, and due to the upcoming Holiday Season, we would respectfully request that the County would consider changing the Bids Due Date to January 15, 2023.

Answer 2-1: Bid Due Date is Thursday, December 15, 2022 at 2:00 PM local time and Question Deadline is December 6, 2022 by 5:00 PM EST.

Ad 2-2. Question 2: Please provide an Excel File version of the Summary Scope Table for the RTU Sites as shown on the Plan Sheet: GEN-G-0-005 GENERAL SEQUENCE OF CONSTRUCTION AND CONSTRAINTS II.pdf

Answer 2-2: See attached Excel file entitled Addendum No. 2 Item Ad 2-2 Worksheet in GEN-G-0-005.xlsx.

Respectfully submitted,
HDR Engineering, Inc. of the Carolinas

Billy Fox
Project Manager

LINE #	FACILITY ID	FACILITY NAME
1	BPS-4	Highway 75
2	BPS-10	Olive Branch Pump Station
3	BPS-11	Watkins Road Pump Station
4	BPS-13	74 Pump Station (Hwy 74 E)
5	BPS-14	880 Zone Booster Station
6	GOVT-CTR	UCPW SCADA Govt Center (Sec Data Svr)
7	OPS-CTR	Operations Center (Pri Data Svr)
8	SPS-1	Parkwood
9	SPS-2	Stonebridge
10	SPS-3	Olde Sycamore 4
11	SPS-4	Highclere
12	SPS-7	Weddington Preserve
13	SPS-8	Falls at Weddington
14	SPS-11	Atherton
15	SPS-12	Stevens Mill Station 2
16	SPS-13	Forest Park
17	SPS-15	Helmsville
18	SPS-16	Green Meadows
19	SPS-17	Suburban Estates 2
20	SPS-18	Suburban Estates 3
21	SPS-19	Woodfern
22	SPS-20	Poplin Road
23	SPS-25	Eastside Pump Station 2

24	SPS-26	Meadows 1
25	SPS-27	Meadows 2
26	SPS-28	Community Park
27	SPS-29	Loxdale Farms
28	SPS-30	Unionville
29	SPS-31	Magnolia Ridge
30	SPS-32	Waxhaw (2125) aka Rone Branch
31	SPS-36	Jackson Ridge
32	SPS-38	Old Hickory
33	SPS-39	Operations Center
34	SPS-40	Funderburk Road
35	SPS-41	Hunley Creek
36	SPS-43	Porter Ridge
37	SPS-45	Crane Valley
38	SPS-46	Sandalwood
39	SPS-47	Eastside Pump Station 3
40	SPS-48	Eastside Pump Station 1

41	SPS-64	Sun Valley Place
42	SPS-65	Drayton Hall
43	SPS-66	Fieldstone
44	SPS-67	Marvin Ridge
45	SPS-70	Western Union School
46	SPS-73	Mineral Springs
47	SPS-74	Tarkhill
48	SPS-75	Millbridge
49	SPS-76	JAARS
50	SPS-78	Tallwood
51	SPS-79	Olde Sycamore 3
52	SPS-80	Olde Sycamore 1
53	SPS-81	Olde Sycamore 2
54	SPS-83	Five Stones Church
55	SPS-85	Millbridge 7B
56	SPS-86	Oldenburg
57	WT-1 / BPS-12	New Stallings Tank & Pump Station
58	WT-2	Hwy 74 Stallings Tank (Old Stallings)
59	WT-3	Northwest Tank (Hwy 218)
60	WT-4	Indian Trail Tank

61	WT-5	Marshville Tank (Hwy 74 East)
62	WT-6	Sims Road 1
63	WT-7	Austin Road Tank- E-4467
64	WT-8	Weddington Tank
65	WT-9	Sims Road 2
66	WT-10	Wingate Tank
67	WWTP-1 (RTU1)	Crooked Creek
68	WWTP-1 (RTU3 Gen)	Crooked Creek
69	WWTP-3 (RTU7)	Grassy Branch 1
70	WWTP-5	Tallwood
71	WWTP-6 (RTU6)	Olde Sycamore
72	TBD	Waxhaw Gravity Interceptor PS
73	SPS-72	12-Mile Creek WRF Diversion

SUMMARY SCOPE
Demo existing abandoned pump control panel. Install new RTU in same location as existing pump control panel. Demo existing DFS RTU.
Demo existing DFS RTU. Install new RTU in same location as existing. New power monitor panel.
Demo existing DFS RTU. Install new RTU in same location as existing. New power monitor panel.
Demo existing DFS RTU. Install new RTU in same location as existing. Relocate building alarm panel to accommodate new RTU. New power monitor panel.
Replace process in existing PLC panel. Remove subpanel in existing DFS RTU panel and replace with new subpanel with communication equipment.
Modify the network to add cellular modem and antenna.
Modify the network to add cellular modem and antenna.
New RTU and antenna with rain hood on modular stand. New power monitor and intrinscally safe barrier panels. Demo exsiting DFS RTU.
New RTU and antenna mounted on existing equipment rack. Relocate existing electrical equipment and modify rack to accommodate new RTU. Demo existing DFS RTU.
New RTU and antenna with rain hood on modular stand. New intrinscally safe barrier panels. Demo exsiting DFS RTU.
New RTU and antenna mounted on existing equipment rack. Relocate existing electrical equipment to accommodate new RTU. Demo existing DFS RTU. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.
New RTU and antenna mounted on existing equipment rack. Relocate existing electrical equipment and instrumentation to accommodate new RTU. Field modify existing pump control panel to remove the existing DFS RTU and associated wiring.
New RTU and antenna mounted on existing equipment rack. New power monitor panel. Relocate existing electrical equipment and instrumentaton and modify rack to accommodate new RTU. Field modify existing pump control panel to remove the existing DFS RTU and associated wiring.
New RTU and antenna mounted on existing equipment rack. New power monitor panel. Relocate existing electrical equipment and instrumentaton and modify rack to accommodate new RTU. Field modify existing pump control panel to remove the existing DFS RTU and associated wiring.
Full demo of existing electrical equipment rack. New equipment rack and shelter. New electrical equipment, pump control panel, intrinsically safe barrier panel, power montior enclosure, float and pump junction boxes, and RTU with antenna. Temporary bypass pumping for extended outage.
Field modify existing pump control panel to remove existing DFS RTU and install new RTU, operator interface terminal, and antenna. Temporary bypass pumping for extended outage.
Field modify existing pump control panel to remove existing DFS RTU and install new RTU, operator interface terminal, and antenna. Temporary bypass pumping for extended outage.
New RTU and antenna with rain hood on modular stand. New power monitor and control power transformer. Demo existing autodialer and enclosure.
Install new RTU and antenna on new equipment rack installed by pump station rehab project.
New RTU and antenna with rain hood on modular stand. New power monitor and intrisically safe barrier panels. Demo existing DFS RTU. Demo abandoned autodialer.
New RTU and antenna with rain hood on modular stand. New power monitor and intrisically safe barrier panels. Demo existing DFS RTU. Demo abandoned autodialer.
Demo existing RTU and replace with new RTU and antenna. Install new RTU in same location as existing. New power monitor and intrinscally safe barrier panels.

Full demo of existing fence, electrical equipment rack, and antenna tower. Install new fencing, equipment rack and shelter. New electrical equipment, pump control panel, intrinsically safe barrier panel, power montior enclosure, float and pump junction boxes, and RTU with antenna. No bypass piping. Pump and haul for extended outage.

Full demo of existing electrical equipment rack and antenna tower. New equipment rack and shelter. New electrical equipment, pump control panel, intrinsically safe barrier panel, power montior enclosure, float and pump junction boxes, and RTU with antenna. No bypass piping. Pump and haul for extended outage.

New RTU and antenna mounted on existing equipment rack. Extend existing shelter pad and roof, and extend existing equipment rack to accommodate additional equipment. Relocate existing electrical equipment to accommodate new RTU. Field modify existing pump control panel to remove the existing DFS RTU and associated wiring.

New RTU with rainhood and antenna on existing equipment rack. New power monitor and intrisincally safe barrier panels. Modify existing rack to accommodate new equipment. Demo existing DFS RTU.

New RTU and antenna on existing equipment rack. Modify existing rack and relocate existing electrical equipment to accommodate new RTU. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.

New RTU and antenna with rain hood on modular stand. New power monitor and intrinscally safe barrier panels. Demo exsiting DFS RTU.

New RTU and antenna with rain hood on modular stand. New power monitor and intrinscally safe barrier panels. Demo exsiting DFS RTU and antenna tower.

Install new RTU and antenna on new equipment rack installed by pump station rehab project.

New RTU and antenna on modular stand. New power monitor and intrinscally safe barrier panels. New equipment rack and shelter. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.

Full demo of existing electrical equipment rack and antenna tower. Install new fencing, equipment rack and shelter. New electrical equipment, pump control panel, intrinsically safe barrier panel, power montior enclosure, float and pump junction boxes, and RTU with antenna. Temporary bypass pumping for extended outage.

New RTU and antenna with rain hood on modular stand. New power monitor and intrinscally safe barrier panels. Demo exsiting DFS RTU and antenna tower.

New RTU and antenna with rain hood on modular stand. New power monitor and intrinscally safe barrier panels. Demo exsiting DFS RTU.

New RTU and antenna with rain hood on modular stand. New power monitor and intrinscally safe barrier panels. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.

Full demo of existing electrical equipment rack and antenna tower. New equipment rack and shelter. New electrical equipment, pump control panel, intrinsically safe barrier panel, power montior enclosure, float and pump junction boxes, and RTU with antenna. Temporary bypass pumping for extended outage.

Demo existing RTU and replace with new RTU and antenna. Install new RTU in same location as existing. New power monitor and intrinscally safe barrier panels.

Demo existing RTU and replace with new RTU and antenna. Install new RTU in same location as existing. New power monitor and intrinscally safe barrier panels.

New RTU and antenna on existing equipment stand. New power monitor and intrinscally safe barrier panels. Relocate existing electrical equipment to accommodate new RTU. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.

Full demo of existing electrical equipment rack and antenna tower. New equipment rack and shelter. New electrical equipment, pump control panel, intrinsically safe barrier panel, power montior enclosure, float and pump junction boxes, and RTU with antenna. Temporary bypass pumping for extended outage.

New RTU and antenna with rain hood on modular stand. New power monitor panel. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.

New RTU on existing equipment rack with antenna. New power monitor panel. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.

New RTU on existing equipment rack with antenna. New power monitor panel. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.

New RTU on new equipment rack. Replace shelter roof such that roof fully extends over new RTU. New power monitor panel. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.

New RTU wallmounted in existing structure. New power monitor panel. Field modify the existing DFS RTU and associated wiring.

Field modify existing pump control panel to remove existing DFS RTU and install new RTU, operator interface terminal, and antenna. Temporary bypass pumping for extended outage.

New RTU and antenna with rain hood on modular stand. New power monitor and intrinscally safe barrier panels. Demo exsiting DFS RTU.

Demo existing RTU and replace with new RTU and antenna. Install new RTU in same location as existing. New power monitor and intrinscally safe barrier panels.

New RTU on existing equipment rack. Modify existing equipment rack to accommodate new RTU. Demo existing antenna tower. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.

New RTU and antenna with rain hood on modular stand. New power monitor and intrinscally safe barrier panels. Demo exsiting DFS RTU.

New RTU and antenna with rain hood on modular stand. New power monitor and intrinscally safe barrier panels. Demo exsiting DFS RTU.

New RTU on existing equipment rack. Modify existing equipment rack to accommodate new RTU. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.

New RTU on new equipment rack. Extend existing equipment rack to accommodate new RTU. Replace existing shelter roof such that new roof extends over new RTU.. New power monitor panel. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.

New RTU on existing equipment rack. New power monitor enclosure. Field modify the existing pump control panel to remove the existing DFS RTU and associated wiring.

Demo existing RTU and replace with new RTU and antenna. Install new RTU in same location as existing.

Full demo of existing electrical equipment rack. New equipment rack and shelter. New electrical equipment, isntrument panel, and RTU with antenna.

Demo existing RTU and replace with new RTU and antenna. Install new RTU in same location as existing.

New RTU and antenna with rain hood on modular stand. Field modify existing instrument panel to remove existing DFS RTU and associated wiring.

Full demo of existing electrical equipment rack. New equipment rack and shelter. New electrical equipment, isntrument panel, and RTU with antenna. Demo existing DFS RTU and antenna tower.

Full demo of existing electrical equipment rack. New equipment rack and shelter. New electrical equipment, isntrument panel, and RTU with antenna. Replace generator. Demo existing DFS RTU.

New RTU on existing equipment rack. New shelter over existing equipment rack. Demo existing DFS RTU.

New RTU wallmounted in existing structure. Demo existing DFS RTU.

Demo Existing RTU and replace with new RTU and antenna. Install new RTU in same location as existing.

Modify network at control building to add firewall and cellular modem with antenna. Modify site fiber optic network patching to create logical ring. Field modify RTU11 to replace network switch with managed switch that supports ring topology. Field modify PLC-RAS to replace network swithc with matching managed switch that supports ring topology. Modify VTScada to remove data connection to existing DFS Hyperserver and migrate to new PLCs. Change protocol connections to RTU11 and PLC-RAS from Modbus TCP to Ethernet I/P. Demo existing DFS RTU1 and install new RTU in the same location. Once all DFS RTU's replaced on site, demo existing DFS Hyperservers and associated enclosure.

Demo existing DFS RTU and install new RTU in the same location.

Demo existing DFS RTU on left side of door in equipment room and install new RTU in the same location. Field modify DFS RTU on right side of door and reuse as termination panel.

New equipment rack, shelter, RTU with antenna. Migrate PLC and OIT from existing Main Control Panel to New RTU, reprogram to meet current standard. Extend wire from Main Control Panel to New RTU. Retrofit existing DFS RTU9 into termination panel.

Demo existing DFS RTUs and install new RTU in the same location.

MODEM CONFIGURATION	Column2	Column3
Single Radio, Single Sim Activated		
Dual Radio, Dual Sim Activated		
Dual Radio, Dual Sim Activated		
Dual Radio, Dual Sim Activated		
Dual Radio, Dual Sim Activated		
Single Radio, Single Sim Activated		
Single Radio, Single Sim Activated		
Dual Radio, Dual Sim Activated		
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Single Radio, Single Sim Activated		
Dual Radio, Dual Sim Activated		
Dual Radio, Dual Sim Activated		
Single Radio, Single Sim Activated		

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Single Radio, Single Sim Activated

Single Radio, Single Sim Activated

Single Radio, Single Sim Activated

Single Radio, Single Sim Activated

Dual Radio, Dual Sim Activated

Single Radio, Single Sim Activated

Single Radio, Single Sim Activated

Single Radio, Single Sim Activated

Single Radio, Single Sim Activated

Single Radio, Single Sim Activated

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Single Radio, Single Sim Activated

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Single Radio, Single Sim Activated

Dual Radio, Dual Sim Activated

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TBD
TBD