

EXHIBIT 4



Manga Ebbe
Construction Program Manager
City of Hallandale Beach
630 NW 2nd Street
Hallandale Beach, FL 33009
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Arcadis U.S., Inc.
150 S Pine Island Road
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United States
Phone: 954 761 3460
www.arcadis.com

Date: February 10, 2026

Subject: **Proposal – PLC Programming and HMI, Network Router, and Cell Modem Configuration Services for Remote Monitoring and Control System Upgrades at 20 Remote Sites**

FL Engineering License #7917
FL Geology License #GB564

Dear Mr. Ebbe,

In accordance with RFP # FY 2024-2025-14, Consultant Competitive Negotiation Act (CCNA) Continuing Professional Architectural and Engineering Services, the following scope of services is provided by Arcadis U.S., Inc. (CONSULTANT) as requested by the City of Hallandale Beach (CITY) to provide telemetry programming and configuration services for several of the CITY's water, wastewater, and stormwater facilities.

Project Background

The CITY owns and operates twenty-six (26) remote sites that are comprised of water, wastewater, and irrigation and stormwater facilities. These are unmanned facilities which have limited remote monitoring from the CITY's water treatment plant (WTP), using a proprietary radio telemetry system. The telemetry system hardware and communication services are provided by a third party and consists of remote telemetry units (RTUs) with integral radios and pole mounted radio antennas at each site. Each remote site's radio telemetry system integrates into the WTP's (central site) Supervisory Control and Data Acquisition (SCADA) system for remote monitoring of the sites. The SCADA system at the WTP is primarily used for monitoring, control, and automation of the equipment and water treatment processes in the plant.

On June 30, 2021, the CITY issued Purchase Order (P.O.) No. 20210834-00 authorizing the CONSULTANT to provide professional services to develop a control system design, and develop design documents to modernize, upgrade, standardize, and improve the reliability of instrumentation, controls, and automation at the remote sites. These design documents were incorporated into the facility upgrade contracts for implementation at each remote site. Services authorized under P.O. No. 202108834-00 also included the design of a telemetry system as well as assisting the City to procure cellular and network hardware and establish cellular service from a reliable service provider to transition from the proprietary and expensive radio telemetry system to a less expensive but reliable communication medium.

When P.O. No. 202108834-00 was issued in June 2021, the remote sites were under various phases of design and construction to upgrade the facilities and expand capacity. At present, four (4) of the five (5) stormwater and irrigation site upgrades are complete. Seven (7) lift station facility upgrades are scheduled to be completed between June and September 2026, and another six (6) of the lift stations are scheduled to be completed between February and May 2027. Another three (3) of the remote sites (the beach tower elevated tank,

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Well No. 8, and I-95 storm water pump station) are scheduled to be completed by June 2026. Two (2) of the remote sites, Well No.9 and Lift Station 8, were cut over from the old proprietary telemetry system to the new system in January 2026 under PO # 20251099-00 issued to CONSULTANT. Two (2) of the remaining four (4) remote sites are scheduled to be cut over to the new system by the plant maintenance staff, and the remaining two (2) are either decommissioned or not in service.

At the time P.O. No. 202108834 was issued in June 2021, it was premature to develop and finalize the scope of work for performing programmable logic controller (PLC) Programming, SCADA human machine interface (HMI) configuration, and network routers and cell modems configuration services for all remote sites. Therefore, these services were broken into two phases. The first phase of work was performed under P.O. No. 20251099, under which CONSULTANT provided professional services to transition two critical remote sites (Well No.9 and Lift Station 8) to the new telemetry system.

This proposal is for the second phase of work to provide professional services to transition twenty (20) remote sites to the new telemetry system. Based on the facility upgrade completion schedule mentioned above, CONSULTANT is scheduled to provide professional services for the transition of fourteen (14) remote sites to the new system by the end of 2026, and another six (6) remote sites by August 2027. A table showing the names of the twenty (20) remote sites with the anticipated time schedule for completion of facility upgrade work and transition from old to new telemetry system is provided as Attachment 1.

Project Objectives

The intent of this project, as described herein, is to facilitate the CITY's transition from an old and antiquated control system and expensive and proprietary telemetry system to a modern, reliable, user friendly, and less expensive control system and telemetry system. Outlined in the Scope of Work described herein are the professional engineering services required to perform PLC programming, HMI software configuration for the SCADA system and Operator Interface Terminals (OIT), network router configuration, cellular modem configuration, and startup services for the twenty (20) remote sites and the headend SCADA system at the WTP.

Project Scope of Work

The CONSULTANT shall furnish professional engineering services to perform required PLC programming, OIT and HMI configuration, network router configuration, and cellular modem configuration services at twenty (20) remote sites and at the WTP and startup services for monitoring and control of the sites locally at the site and remotely from the WTP. The CONSULTANT will coordinate with the CITY, finalize equipment layout, and color schemes, and develop HMI graphics for the OITs at each remote site. The OITs will be configured for user login with passwords. The CONSULTANT will review PLC programs and HMI screens with the CITY in workshops and incorporate comments received from the CITY. The required professional engineering services will include checkout, testing, startup, and commissioning of the new remote monitoring and control system using the new cellular service. The professional engineering services also include supplying electronic copies of all PLC programs and configured HMI software.

The Scope of Work also includes project management efforts including staffing, budget, and schedule management, invoicing, and meetings and reporting (as detailed in the following subsections). The services will cover general project management throughout the project duration to include oversight and coordination of the CONSULTANT's efforts in executing the project internally and with the CITY.

The remote sites are divided into three groups based on their facility upgrade completion schedule as shown on the Attachment 1 at the end of this proposal. The work required to implement PLC programming, SCADA and OIT HMI, and the new telemetry system at the remote sites in each group will be performed two sites at a time in one week, including testing and startup if possible.

1.1 Project Management

Project management activities specific to this project include the following:

- Provision, monitoring and updating of schedule of services being provided. The initial project schedule will be provided in MS Project format at Project Kickoff and updated as necessary throughout the project.
- Preparation for and facilitation of one (3-hour) Project Kickoff meeting.
- Preparation for and facilitation of up to 24 (1-hour) monthly design progress reporting and invoicing meetings.
- Development and issuance of monthly invoices for the duration of the project.

1.2 PLC Programming and HMI configuration of Remote Sites

CONSULTANT will provide PLC programming for manual and automatic control of the equipment, and HMI software configuration that will run on the new OITs at the twenty (20) Remote Sites. The CONSULTANT will program the PLCs with required safety interlocks for equipment shutdowns, generating alarms, data collection, and interface the PLCs with the new routers and cellular modems for remote communication. The programming and configuration work includes configuring the cellular modem and router at each site and establishing remote communication between each remote site and the WTP using the drivers in the VTSCADA HMI software.

The CONSULTANT will perform PLC programming and HMI software configuration inhouse at the CONSULTANT's office. The PLC programs and configured HMI software will be brought to the remote sites and downloaded to the PLC and OIT prior to testing and startup of each remote site.

1.3 Configure Existing HMI Software at the Water Treatment Plant

The CONSULTANT will provide professional services required to configure the existing VTSCADA HMI software at the WTP for remote monitoring and control of the sites from the plant. The HMI software will be fully configured to display processes along with equipment statuses, events, alarms, process variables, as well as generate reports. The work will include downloading the configured HMI graphics to the existing VTSCADA servers, programming and setting up cellular modems, establishing communication with remote sites, and developing required reports. In addition, the CONSULTANT will configure security measures for the portion of SCADA HMI at the WTP that communicate with the twenty (20) remote sites.

The CONSULTANT will perform HMI software configuration inhouse at the CONSULTANT's office. The configured HMI software will be brought to WTP and downloaded to the existing SCADA servers prior to the testing of SCADA HMI at the plant.

1.4 Configure and Set Up Network Switch

The CONSULTANT will expand the layer three network switch configuration at the WTP with stringent security measures to integrate the twenty (20) remote sites into the existing plant wide VTSCADA system. This will include

coordinating with the CITY IT department and enabling communication between the SCADA network switch and telemetry system router, as well as the network switch and SCADA servers at the plant.

1.5 System Checkout, Startup, and Commissioning

At each remote site, the CONSULTANT will upload the PLC program, upload the configured HMI software and perform field test and startup of the PLC programs and OIT HMI graphics configuration jointly with the CITY. Following the field test and startup of each site, the CONSULTANT will conduct a seven (7) day Integrated System Test (IST) to verify all software programs are functioning as intended. Completion of the seven (7) day IST without any functional failures will constitute acceptance of the respective remote site's monitoring and control system by the CITY. After the successful completion of the IST, for a period of three months, the CONSULTANT will remotely access the control system at the sites, when necessary, and fine tune and optimize PLC programs and HMI software configuration.

1.6 Operators and Maintenance Staff Training

The CONSULTANT will provide a training session for the maintenance staff who are responsible for maintaining the PLCs, OITs, SCADA system, and Telemetry system. The maintenance staff's training will include details of how the system is configured, the structure of the newly developed SCADA headend HMI software (at the plant and at the remote sites), security settings, and end users login/logout settings. The maintenance staff's training will also include router and cellular modem configuration and settings.

Deliverables

1. A copy of the fully developed and tested PLC programs and configured HMI software on an electronic medium; CONSULTANT will keep a backup copy for three (3) years that will be available to the CITY upon request.
2. A copy of the cellular modem and router configuration files on an electronic medium; CONSULTANT will keep a backup copy for three (3) years that will be available to the CITY upon request.

Project Assumptions

The following are the assumptions made in the creation of this scope of work and the budget for this Project. Should the work of the Project exceed these assumptions, the CONSULTANT may request additional fees. Any change to the above scope of work, fee or schedule, will not be made without the prior written authorization of the CITY.

- The CITY will provide the CONSULTANT with any available documentation required to adequately perform the Scope of Work.
- For remote sites under facility upgrade construction, the PLC and OIT HMI software licenses will be acquired through the construction contract or directly by the CITY and furnished to the CONSULTANT.
- The CITY will provide the CONSULTANT the PLC programs and configured OIT software for the remote sites that are finished with facility upgrade construction and ready for cutover to new telemetry system. If any site requires a new PLC, the CITY will provide new PLC to the CONSULTANT.

- Existing SCADA HMI software licenses at the WTP have enough tags available for configuration of additional IO points and database and the additional HMI screens required for the remote sites will not exceed the screen limit of the licenses of the existing HMI software.
- The CITY will provide process and equipment operating parameters, setpoints, and existing system specific safety interlock information to the CONSULTANT prior to starting PLC programming and HMI configuration.
- The CITY will provide the CONSULTANT with access to the remote sites and the WTP for carrying out the required work as well as staff authorized to operate equipment at the site(s) to test and start-up the completed work.
- With the exception of the project kick-off meeting in Task 3.1, all project meetings are anticipated to be held virtually.
- The CITY's SCADA system maintenance staff will provide hands-on training sessions to the operators on how to use the new HMI to monitor and control the day-to-day operations of the remote sites from the WTP.

Budget

The table below includes a breakdown of the proposed lump-sum compensation for the project, distributed by task. This price includes all labor associated with PLC programming and HMI configuration, router and cellular modem configuration, project management, and expenses anticipated to be incurred by the CONSULTANT for the completion of the Scope of Work tasks outlined above. This budget assumes that the CITY will have the remaining facility upgrade projects completed within twenty-four (24) months, starting from January 1st, 2026, and ready for control system programming and configuration. If the design and construction duration exceeds twenty-four (24) months, the CONSULTANT will coordinate with the CITY for additional compensation related to escalation, additional coordination, and project management time. The CONSULTANT proposes to invoice for the services monthly based upon percentage complete by task.

Task	Task Description	Sub Total
1.1	Project Management	\$64,920.00
1.2	PLC Programming and HMI Configuration (Remote Sites)	\$186,705.00
1.3	HMI Configuration at Water Treatment Plant	\$144,585.00
1.4	Expand Layer 3 Network Switch to add 20 sites	\$74,925.00
1.5	Testing, Start up, Commissioning	\$219,195.00
1.6	Operators and Maintenance Staff Training	\$6,840.00
Grand Total		\$697,170.00

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City of Hallandale Beach Public Works
February 10, 2026

We thank you for providing us the opportunity to continue to assist the CITY on this Project and we look forward to working with you. Please contact me if you have any questions or require further information.

Sincerely,
Arcadis U.S., Inc.

Leah Richter

Leah Richter, P.E.
Vice President
Email: leah.richter@arcadis.com
Telephone: 954-525-2499

CC: Alfonso Lopez (CITY)
Arthur Bides (Arcadis)
Joseph Chiriyankandath (Arcadis)

Attachments:

Attachment 1 - Site Names and Groupings for Programming and Configuration
Attachment 2 – Work Break Down Fee Schedule

This proposal and its contents shall not be duplicated, used or disclosed — in whole or in part — for any purpose other than to evaluate the proposal. This proposal is not intended to be binding or form the terms of a contract. The scope and price of this proposal will be superseded by the contract. If this proposal is accepted and a contract is awarded to Arcadis as a result of — or in connection with — the submission of this proposal, Arcadis and/or the client shall have the right to make appropriate revisions of its terms, including scope and price, for purposes of the contract. Further, client shall have the right to duplicate, use or disclose the data contained in this proposal only to the extent provided in the resulting contract.

Attachment 1

Site Name, Site Number, Grouping, and Completion schedule of Facility Upgrade

Group 1 sites slated for transitioning from old to new Telemetry upon phase-2 notice to proceed				
No.	Site Name	Site Type	Site No.	Completed by
1	14 th Avenue North PS	Storm Water PS	181	Complete
2	14 th Avenue South PS	Storm Water PS	182	Complete
3	210 South West PS	Storm Water PS	184	Complete
4	Control Gate Structure	Storm Water Gate	186	Complete
5	Beach Triplex PS	Wastewater Lift Station	3	2/28/2026
6	I-95 Pump Station	Storm Water PS	17	6/30/2026
7	Beach Tower Elevated Tank	Tank	101	6/30/2026
8	Well No. 8	Well	103	6/30/2026
Group 2 sites slated for transitioning from old to new Telemetry starting October 2026				
No.	Site Name	Site Type	Site No.	Completed by
1	Sunset East PS	Wastewater Lift Station	10	7/30/2026
2	Holiday Drive	Wastewater Lift Station	11	7/30/2026
3	Sunset West PS	Wastewater Lift Station	15	7/30/2026
4	Atlantic Shore PS	Wastewater Lift Station	5	8/30/2026
5	NE 12 th Avenue PS	Wastewater Lift Station	6	8/30/2026
6	Three Islands PS	Wastewater Lift Station	4	9/30/2026
Group 3 sites slated for transitioning from old to new Telemetry starting May 2027				
No.	Site Name	Site Type	Site No.	Completed by
1	Egret PS	Wastewater Lift Station	1	1/30/2027
2	South West 4 th Avenue PS	Wastewater Lift Station	12	3/30/2027
3	South West 8 th Avenue PS	Wastewater Lift Station	13	3/30/2027
4	Northwest 10 th Terrace PS	Wastewater Lift Station	14	4/30/2027
5	Foster Road PS	Wastewater Lift Station	9	4/30/2027
6	North East 4 th Court PS	Wastewater Lift Station	7	6/30/2027

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Attachment 2

Attachment 2 Work Break Down Fee Schedule PLC Programming and HMI, Network Router, and Cell Modem Configuration Services for Remote Monitoring and Control System Upgrades at 20 Remote Sites															
Task No.	Description	TASK					CATEGORIES (Arcadis)								
		Project Manager	Director, Engineering	Senior Engineer	Engineer	Support Specialist	Total Hours	Labor Fee	Project Manager	Director, Engineering	Senior Engineer	Engineer	Support Specialist	Total Hours	Labor Fee
1.1	Project Management	96	80	0	0	120	296	\$ 64,920.00							
1.2	PLC Programming and HMI configuration of Remote Sites	12	101	351	316	0	780	\$ 186,705.00							
1.3	Configure Existing HMI Software at the Water Treatment Plant	12	101	251	232	0	596	\$ 144,585.00							
1.4	Configure and Set Up Network Switch	8	41	195	40	0	284	\$ 74,925.00							
1.5	System Checkout, Startup, and Commissioning	0	259	395	172	0	826	\$ 219,195.00							
1.6	Maintenance Staff Training	0	8	16	0	0	24	\$ 6,840.00							
	Total Hours	128	590	1208	760	120									
	Billing Rates - 2025 Contract (\$/hr)	\$270.00	\$315.00	\$270.00	\$180.00	\$115.00	\$2,806.00	\$ 697,170.00							

**REQUEST FOR PROPOSALS (RFP) # FY 2024-2025-14
CONSULTANT COMPETITIVE NEGOTIATION ACT (CCNA) CONTINUING PROFESSIONAL
ARCHITECTURAL AND ENGINEERING SERVICES AND OTHER SERVICES**

- a. The Project Manager will contact the awarded Firm for the submittal of Exhibit B - Hourly Billing Rates, after the City Commission approves the award of Contract. The awarded Firm must submit Exhibit B – Hourly Billing Rates for Task Orders within five (5) business days of request.**
- b. There is a maximum rate cap of \$325 per hour per individual billing rate.**
- c. Exhibit B will be a part of the awarded Firm’s Agreement and will be utilized for the term of the Agreement by Project Managers when verifying Work Authorization costs and invoices.

Name of Proposing Firm: Arcadis U.S., Inc

Role/Position		Hourly Billing Rate for Initial 5 Year Term
Architectural Design		
1.1	Principal Architect	\$
1.2	Senior Project Architect	\$
1.3	Construction Cost Estimating	\$
1.4	Project Architect	\$
1.5	CADD Technician	\$
1.6	Administrative Staff	\$
Civil Engineering		
2.1	Associate, Engineering	\$
2.2	Director, Engineering	\$315
2.3	Project Manager	\$ 270
2.4	Project Engineer	\$220
2.5	Engineer	\$180
2.6	Junior Engineer	\$145
2.7	Senior CADD Tech Manager	\$165
2.8	CADD Technician	\$130
2.9	Permit Administrator	\$ 130
Coastal/Marine Engineering		
3.1	Associate, Engineering	\$
3.2	Director, Engineering	\$
3.3	Project Manager	\$
3.4	Project Engineer	\$
3.5	Engineer	\$
3.6	Junior Engineer	\$
3.7	Senior CADD Tech Manager	\$
3.8	CADD Technician	\$
3.9	Permit Administrator	\$
Construction and Project Management / Construction Engineering and Inspection (CEI) Services		
4.1	Associate, Construction	\$
4.2	Construction Management Director	\$
4.3	Construction Manager	\$ 240
4.4	Senior Inspector	\$ 140
4.5	Inspector	\$ 125
4.6	Construction Coordinator	\$ 120

EXHIBIT B – HOURLY BILLING RATES

Electrical Engineering		
5.1	Associate, Engineering	\$
5.2	Director, Engineering	\$ 315
5.3	Project Manager	\$ 270
5.4	Project Engineer	\$ 220
5.5	Engineer	\$ 180
5.6	Junior Engineer	\$ 145
5.7	Senior CADD Tech Manager	\$ 165
5.8	CADD Technician	\$ 130
5.9	Permit Administrator	\$ 130

Engineering Services		
6.1	Associate, Engineering	\$
6.2	Director, Engineering	\$
6.3	Project Manager	\$
6.4	Project Engineer	\$
6.5	Engineer	\$
6.6	Junior Engineer	\$
6.7	Senior CADD Tech Manager	\$
6.8	CADD Technician	\$
6.9	Permit Administrator	\$

Environmental Engineering		
7.1	Associate, Engineering	\$
7.2	Director, Engineering	\$
7.3	Project Manager	\$
7.4	Project Engineer	\$
7.5	Engineer	\$
7.6	Junior Engineer	\$
7.7	Senior CADD Tech Manager	\$
7.8	CADD Technician	\$
7.9	Permit Administrator	\$

Geotechnical		
8.1	Associate, Engineering	\$
8.2	Engineer	\$
8.3	Driller	\$
8.4	Project Manager	\$
8.5	Project Engineer	\$
8.6	Junior Engineer	\$
8.7	Staff Geologist	\$
8.8	Permit Administrator	\$

Landscape Architecture		
9.1	Associate, Landscape Architect	\$
9.2	Senior, Landscape Architect	\$
9.3	Environmental Administrator	\$
9.4	Environmental Specialist	\$
9.5	Landscape CADD Technician	\$
9.6	Environmental Assistant	\$

EXHIBIT B – HOURLY BILLING RATES

9.7	Landscape Inspector/Arborist	\$
9.8	Landscape Designer	\$
9.9	Landscape Site Plan Reviewer	\$

Material Testing		
10.1	Senior Engineer	\$
10.2	Engineer	\$
10.3	CADD Technician	\$
10.4	Environmental Scientist	\$
10.5	Project Manager	\$
10.6	Testing Technician	\$
10.7	Survey Technician	\$

Mechanical Engineering		
11.1	Associate, Engineering	\$
11.2	Director, Engineering	\$
11.3	Project Manager	\$
11.4	Project Engineer	\$
11.5	Engineer	\$
11.6	Junior Engineer	\$
11.7	Senior CADD Tech Manager	\$
11.8	CADD Technician	\$
11.9	Permit Administrator	\$

Plumbing Engineering		
12.1	Associate, Engineering	\$
12.2	Director, Engineering	\$
12.3	Project Manager	\$
12.4	Project Engineer	\$
12.5	Engineer	\$
12.6	Junior Engineer	\$
12.7	Senior CADD Tech Manager	\$
12.8	CADD Technician	\$
12.9	Permit Administrator	\$

Surveying		
13.1	Associate, Surveying	\$
13.2	Senior Registered Surveyor	\$
13.3	Survey Crew	\$
13.4	Registered Surveyor	\$
13.5	Survey Coordinator	\$
13.6	CADD Technician	\$
13.7	3D Laser Scanner	\$
13.8	Hydrographic Survey Crew	\$
13.9	G.P.S. Survey Crew	\$
13.10	Sub-meter G.P.S.	\$
13.11	Soft Dig (per hole)	\$
13.12	Utility Locates (per hour)	\$

EXHIBIT B – HOURLY BILLING RATES

Transportation / Transit / Traffic Engineering		
14.1	Engineer	\$
14.2	Project Engineer	\$
14.3	Project Manager	\$
14.4	Field Services Technician	\$
14.5	Environmental Specialist	\$
14.6	CADD Technician	\$
14.7	GIS Technician	\$
14.8	Environmental Assistant	\$
14.9	Surveyor	\$
14.10	Construction Manager	\$
14.11	Inspector	\$
14.12	Graphic Designer	\$

Water / Wastewater / Stormwater Engineering		
15.1	Senior Engineer	\$ 270
15.2	Associate Engineer	\$
15.3	Director, Engineer	\$ 315
15.4	Project Manager	\$ 270
15.5	Project Engineer	\$ 220
15.6	Engineer	\$ 180
15.7	Junior Engineer	\$ 145
15.8	Support Specialist	\$ 115
15.9	Permit Administrator	\$ 130
15.10	Inspector	\$ 125

Name of Firm as it appears on Sunbiz: Arcadis U.S., Inc.

Firm's FEI#/EIN#: 57-0373224

Print Name of Authorized Officer of the Firm per Sunbiz: Melissa L. Pomales, P.E., ENV-SP

Print Title of Authorized Officer of the Firm per Sunbiz: Senior Vice President

Signature of Authorized Officer of the Firm per Sunbiz: 

Date: 1/27/2026